

India and the NPT

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Abstract: India's nuclear development has been accompanied by a dual track strategy of developing and building weapons while criticising the non-proliferation regime as discriminatory and simultaneously making public statements and proposals in favour of nuclear disarmament. But with international progress likely on aspects of nuclear disarmament over the next few months, India will be in the spotlight at the forthcoming 2010 Non-Proliferation Treaty (NPT) Review Conference to help move the disarmament and non-proliferation agenda forward. This article proposes that India meet this challenge by announcing specific commitments on permanently ending nuclear testing and plutonium production for weapons by a set date. In the course of reaching this conclusion, the article traces the history of India's role in the development of the international non-proliferation regime, its proposals on disarmament, and also its relationship with the United States with respect to India's nuclear development and ambitions.

Introduction

The Nuclear Non-Proliferation Treaty (NPT) will be reviewed in 2010 in accordance with the five-year schedule established by the treaty when it came into existence in 1970.¹ The next Review Conference is notable for a number of reasons. It is the first such conference to be held after the year 2000 in which the American government's attitude towards the treaty, arms control, and nuclear disarmament will be one of enthusiastic support at the highest levels, with a desire for substantial progress. It is also the first such meeting following the momentous US–India nuclear agreement, which has arguably exploded at least a part of the philosophical foundation on which the treaty is based.²

India's decision, more than three decades ago, not to sign the treaty and to exercise a nuclear weapons option has had profound consequences, which are still reverberating in debates over the future of the non-proliferation regime. While India has received the benefits of an increased sense of external security and world attention that accrue to all countries with nuclear weapons, it has paid dearly for its decision to proliferate. In addition to the economic burden of maintaining and securing a nuclear arsenal, India suffered decades-long cut-offs of nuclear-related trade that significantly slowed its nuclear power development and affected adversely other aspects of its high-technology sector.

Although the recent US–India nuclear agreement provides formal resignation by the United States and the Nuclear Suppliers Group (NSG) to the reality of India's nuc-

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lear weapon status, India is still not being treated as a Nuclear-Weapon State (NSW) under the NPT. Its relationship to the treaty is, therefore, still a subject of international dialogue and discussion, and the outcome of such discussions can have a profound effect on the international non-proliferation regime, especially as the regime is considered to be in some degree of trouble. In this article, we trace the history of India's nuclear development and its relationship to the treaty, and suggest what steps India might take to strengthen the non-proliferation regime and its own standing among the nuclear nations of the world.

India's nuclear history

India's interest in nuclear technology has a history comparable in length to that of the West. Dr. Homi Bhabha, who received a PhD in nuclear physics from Cambridge in 1935, proposed the establishment of a nuclear research institute in India in 1944, more than three years before Independence and a year before the first US nuclear test at Alamogordo.³ The institute was formally established at the end of 1945 in Mumbai, with Bhabha as its director. India's first Atomic Energy Act was enacted in 1948 (two years after that of the United States) leading to the creation of the Indian Atomic Energy Commission (IAEC). Bhabha was undoubtedly interested in nuclear weapons from the start, but his interest did not become manifest until a few years later, when a new laboratory called the Atomic Energy Establishment, Trombay (AEET) was established (later to be known as the 'Indian Los Alamos' and the Bhabha Atomic Research Centre [BARC]).⁴

But the public face of India on the issue of atomic weapons and war was not that of Bhabha. Mahatma Gandhi's attitude was publicly expressed in 1947 at an Inter-Asian Relations Conference held in Delhi, which some consider to be the origin of the Non-Aligned Movement (NAM) that was formally launched at Bandung in 1955. At the Delhi meeting, Gandhi spoke about what he called 'the message of Asia'. That message, he said:

... is not to be learned through Western (glasses) or by imitating the atom bomb. The West is pining for wisdom. It is despairing of atom bombs, because atom bombs mean utter destruction, not merely of the West, but of the whole world... It is up to you to tell the world of its wickedness and sin – that is the heritage your teachers and my teachers have taught Asia.⁵

Gandhi's peroration was not reflected by Nehru, who took a more pragmatic approach to Western technology. In 1948, he declared:

We must develop this atomic energy quite apart from war – indeed, I think we must develop it for the purpose of using it for peaceful purposes.... Of course, if we are compelled as a nation to use it for other purposes, possibly no pious sentiments of any of us will stop this nation from using it that way.⁶

Nehru's statement foreshadowed India's dual track nuclear programme, which accelerated greatly when the AEET was established in 1954 followed by the Indian Department of Atomic Energy, with Bhabha as Secretary. According to Raja Ramanna, who was hired by Bhabha and ultimately became director of the nuclear weapons programme, Bhabha told him:

We must have the capability. We should first prove ourselves and then talk of Gandhi, non-violence and a world without nuclear weapons.⁷

That India could make nuclear weapons was occasionally verbally displayed. In 1960, the Westinghouse representative, Kenneth Nichols, attended a meeting with Nehru and Bhabha during which Nehru asked Bhabha if he could develop an atomic bomb. Assured that Bhabha could, Nehru then asked how long it would take. Bhabha estimated that a year would be needed, at which point Nehru said: 'Well, don't do it until I tell you'.⁸

Bhabha's scientific and international activities made him part of an international nuclear 'brotherhood' marked by insider government connections, overwhelming belief in the future of nuclear energy, and the desire to push their individual governments to fund development of the technology at home and abroad when possible. Such development was proceeding slowly in the United States until the first overt evidence of undesired proliferation, namely the USSR's first nuclear test in 1949.

The beginning of 'Atoms for Peace'

The subsequent Soviet nuclear build-up alarmed J. Robert Oppenheimer, who was chairing an advisory panel that had been tasked, via a request by President Truman, to review ideas on nuclear arms control. The Oppenheimer panel's report was delivered after President Eisenhower took office. It concluded that the large increase in production of fissile material had made it virtually impossible to verify a nuclear disarmament agreement because of uncertainty in accounting for all the material produced.

Seeing no immediate path to verifiable nuclear disarmament, the Oppenheimer panel warned that there was significant danger of the Soviets developing a knockout blow capability in the succeeding few years, and that until the United States had a sufficiently robust defensive and offensive capability, the danger would persist. At the same time, it felt that negotiated efforts to end the arms race were important and that public support for such efforts would come if people were told of the dangers they otherwise faced. The panel's main recommendations were threefold: first, to publicly discuss the coming crisis; second, to release information on the extent of the US arsenal and its rate of weapons manufacture in order to both inform the public and to dissuade the Soviets from thinking that they might already have a knockout blow capability; and third, to begin negotiations with the Soviets on an arms control measure, limiting each side's weapons stockpile and delivery vehicles.⁹

But Eisenhower, who was planning a large nuclear build-up and a greater reliance on nuclear weapons, was concerned that a public description of the peril facing the American people would increase anxiety without providing a solution to the threat. His response to this dilemma was to propose creation of a uranium bank, with contributions by both the United States and the USSR, to be administered by an International Atomic Energy Agency (IAEA), and to lay out a vision of peaceful applications of nuclear energy.¹⁰ Thus, on December 8, 1953, Eisenhower gave a speech before the United Nations in which he combined a long qualitative and quantitative description of the destructive power of the United States nuclear arsenal with a much shorter description of his vision of the international fuel bank, IAEA, and applications of the peaceful atom.¹¹

Thanks, in part, to a well-organised public relations campaign, public opinion was galvanised by Eisenhower's proposal. In response, the US Congress enacted the Atomic Energy Act of 1954, which provided American industry with wider access to US government nuclear materials and data. This was the beginning of what came to be known as the 'Atoms for Peace' programme.

Atoms for Peace was seen by many in the US government and private industry to be the umbrella under which the vision of a US-dominated world nuclear market

would be realised. Under *Atoms for Peace*, the United States proceeded to sign agreements for cooperation with numerous countries that resulted in the sales of large numbers of research reactors and participation of large numbers of foreign nuclear scientists and engineers in US-approved nuclear research projects. Many nuclear scientists in countries that later became of proliferation concern received training in the United States or with US funding. The first country to sign an agreement for cooperation was Turkey and the second Israel.¹² But India was not far behind.

Following the passage of the 1954 Act, the United States proposed a UN Conference on the Peaceful Uses of Atomic Energy. It took place in Geneva in August 1955, and was presided over by Dr. Homi Bhabha. It was the largest scientific meeting ever held until then, with an estimated 2,500 participants. The atmosphere was euphoric and much information, previously held secret, was shared in public sessions. French scientists revealed the process of plutonium extraction and the United States declassified significant amounts of data and technology. Subsequent to the meeting, the United States agreed to sell India 10 tonnes of heavy water for a research reactor that would be provided by Canada. There were no safeguards associated with the sale, only the stated requirement of peaceful use.

Establishment of the IAEA: India's role

In bilateral discussions prior to the Geneva meeting, the Soviets had agreed to support the creation of the Atomic Energy Agency and even pledged to contribute a small amount of fissile material to it. But they had no intention, contrary to Eisenhower's hope, of digging deeply into their stockpile of fissile material to make the 'bank' anything other than a symbolic shell. They used the Geneva meeting to announce their cooperation with the United States and others in forming the agency.

The countries interested in the agency met in 1956 in Geneva and the organisation's statutes were, after a month of rancorous debate, adopted in the fall of that year. The agency, now officially named the IAEA, was to have powers of safeguards and inspection.

One of the main points of contention during the negotiations had to do with whether the IAEA would have the power to control plutonium stocks, that is to fix the amount of plutonium each country would be allowed to keep for safeguarded civil uses. The United States favoured this while India, joined by the Soviet Union, opposed it. A Swiss/French proposal was offered and adopted that basically gave India and all other nuclear countries what most of them wanted—complete retention of all plutonium made in the country.¹³

Another issue was whether safeguards and inspections would apply to natural uranium as well as enriched uranium. The United States favoured it; the Indians did not. The Indian position prevailed.

Regardless of concerns over safeguards, the United States proceeded to provide research reactors and materials to dozens of countries in the hope of establishing a leg up on what was assumed to be future competition for the sale of nuclear power stations.

Atoms for Peace and the Indian weapon programme

Did *Atoms for Peace* advance the Indian interest in nuclear weapons? The timetable for Indian weapons was surely advanced by: (1) The participation of more than a thousand Indian scientists between 1955 and 1974 in US nuclear energy research projects; (2) The sale of US heavy water to India in the 1960s that was used in the

unsafeguarded CIRUS reactor that produced plutonium for India's first nuclear explosion; (3) Design work for the Trombay reprocessing facility provided by Vitro International, a US company; and (4) US assistance in the building and fuelling of the Tarapur reactors. As Homi Sethna, former Chairman of the IAEA and a major architect of India's nuclear weapons programme, once wrote:

I can say with confidence that the initial cooperation agreement itself has been the bedrock on which our nuclear programme has been built.¹⁴

It took four years after Eisenhower's speech for the IAEA to be formally created. By that time, the international fuel bank idea had withered and the agency's role became limited to technical support and administration of a safeguards system of inspectors and materials accounting to detect any diversion for military use of materials in declared facilities. Much discussion of the safeguards system took place over a period of time and India was a prime player. As indicated earlier, India, via Bhabha, not only established the principle that countries could keep the plutonium they produced, but also that the safeguards would not apply to source material. The Indian interest in having a weapons option was evident. At a 1956 Conference drafting the IAEA statute, Bhabha said:

We stand on the brink of a dangerous era sharply dividing the world into atomic 'haves' and 'have-nots' dominated by the Agency.¹⁵

He made it clear that India would not be a 'have-not' forever under such a divided world. His remarks undoubtedly contributed to Eisenhower administration officials putting India on the list of countries likely to go nuclear at some point.

When China defeated India in a border war in 1962, the Jana Sangh Party (later to morph into the Bharatiya Janata Party) became the first political party in India to call for the construction of nuclear weapons. However, Nehru's death two years later in May 1964 brought Lal Bahadur Shastri, a public opponent of nuclear weapons, to the position of prime minister. But Indian bomb proponents were unfazed. China's first missile test in October 1964 motivated Bhabha to make a radio address arguing the need for a nuclear deterrent. The Lok Sabha debated for two days a Jana Sangh motion to manufacture nuclear weapons, but the vote ended up almost evenly split. Bhabha then advised Shastri to accept a 'compromise'—the pursuit of a 'peaceful nuclear explosive' capacity. Shastri gave in.

The origin of the NPT: India's role

As the nuclear build-up of the United States and USSR proceeded during the 1950s, concerns about proliferation began growing. Ireland had taken the lead, beginning in 1958, in sponsoring a series of UN Resolutions designed originally to study the dangers of proliferation and then to prevent it. The motivation for Ireland was contained in its first such resolution, which stated that:

... an increase in the number of states possessing nuclear weapons would increase international tensions and make disarmament more difficult.¹⁶

Most nations abstained on a vote for the original resolution, but Ireland persisted, helped by events such as the first French test in 1960, which raised alarms about

nuclear research activities in other industrialised and industrialising countries, including Germany, Italy, Sweden, Switzerland, Israel, and India. In 1961, the UN General Assembly unanimously approved an Irish resolution calling on all states, particularly the nuclear powers, to conclude an international agreement to refrain from transfer or acquisition of nuclear weapons.

The United States and USSR were initially supportive of Ireland, but as the resolutions became more refined, support kept shifting due to language that would make it difficult for the United States to base nuclear weapons in other countries and to create a multilateral nuclear force (MLF) in Europe. The latter was assumed by the United States as being needed to prevent Germany from going nuclear itself. But the USSR was totally opposed to any possibility that Germans could be in command of nuclear weapons. It would tolerate US nuclear weapons in west Europe as long as the United States maintained command and control over them. Ultimately, and in part because the MLF was also problematic for some NATO members, the United States agreed to drop the MLF in return for Soviet support in negotiating the NPT.

Thus, the 18-nation Disarmament Committee (ENDC), which included India, convened in Italy in July 1965 to begin negotiating the NPT. On the first day, the gauntlet was thrown down by the nuclear non-haves. They wanted progress on disarmament. Non-proliferation strictures were viewed by the Indian delegate, VC Trivedi, as analogous to the case of a 17th century Indian emperor who banned drinking while being a drunkard. The eight non-aligned countries in the ENDC stated that they would support an NPT only if it was coupled to 'tangible steps to halt the nuclear arms race and to limit, reduce, and eliminate stocks of nuclear weapons and their means of delivery'.¹⁷

India came to this issue with impressive historical credentials. Nehru had proposed an end to nuclear testing in 1954 and India was a signatory to the Partial Test Ban Treaty (PTBT) of 1963.

But India's position on the NPT was probably set in concrete when it became clear that the treaty would recognise as NWS only those countries that had exploded a nuclear device prior to January 1, 1967. That meant China would be included and India excluded. India was not the only country troubled by the discriminatory structure of the treaty. It was natural on the part of any non-weapon state to at least demand a requirement of disarmament on the part of recognised weapon states in return for a commitment to maintain non-weapon status. Thus, as the NPT was negotiated, it became clear that no treaty would emerge unless two grand bargains were struck.

First, non-weapon states would pledge to remain as such, provided the five weapon states agreed to ultimately disarm. This was incorporated as Article VI of the treaty, which states:

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

While there is no nuclear arms race between the United States and Russia as there was during the Cold War, proposals for weapon modernisation are extant, and modernisation of the Chinese and Pakistani arsenals is reportedly occurring.

Second, the non-weapon states would agree in principle to be subject to safeguards, provided they were assured of not having their nuclear development adversely

affected. That is, non-weapon states had ‘the inalienable right’ to develop nuclear technology and had full access to such technology in accord with Articles I and II (the respective basic requirements on weapon states not to assist non-weapon states to proliferate and on non-weapon states to not manufacture nuclear weapons). This was incorporated into the treaty as Article IV, which states:

- (1) Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.
- (2) All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also cooperate in contributing alone or together with other States or international organisations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of Non-Nuclear-Weapon States (NNWS) Party to the Treaty, with due consideration for the needs of the developing areas of the world.

The inclusion of Article IV was critical in obtaining support of non-weapon states for the treaty. Of particular concern to the United States and USSR was their desire to prevent Germany from becoming a nuclear power post-Second World War. German leaders, like Konrad Adenauer and Franz Josef Strauss, had nuclear ambitions, and Germany approached the NPT negotiations with scepticism. German negotiators wanted to assure that the treaty would not prevent Germany from at least having a ‘just-under-the-threshold’ nuclear development programme.¹⁸ Thus, Article IV allowed for such development to include enrichment and reprocessing technology, thereby bringing the manufacture of nuclear weapon materials within legal reach of any state. This fitted with Indian nuclear ambitions and was accordingly supported by India.

Article IV has resulted in all kinds of proliferation grief, the most recent of which is the Iranian nuclear programme, which, ironically, Germany has taken a leading role in trying to stop. Iran, a state-party to the NPT, claims that its nuclear enrichment programme is within the rights of states under NPT’s Article IV.

Attempts to mitigate the boost to proliferation created by Article IV have included the formation of supplier agreements to restrict trade in enrichment and reprocessing technologies, a move that has been criticised by India and other non-weapon states as a violation of Article IV. Further, the recently concluded G-8 Conference resulted in an agreement by the participants that they would not transfer any enrichment or reprocessing technology to states that were not state-parties to the NPT, a move that has been denounced by some in India as a violation of the spirit of the US–India nuclear agreement and the NSG’s unqualified endorsement of that agreement. However, it is likely that the G-8 position will be presented as a proposal for the NSG to adopt.

Another issue concerning nuclear development in the NPT negotiations relates to so-called ‘peaceful nuclear explosions’ (PNE). At that moment in time, the United States and USSR were still in thrall to the possibility that nuclear explosions could have civilian benefits, even though all existing evidence indicated otherwise. Nonetheless, some non-weapon states, India included, insisted on a provision in the NPT explicitly allowing for PNEs. But the obvious dangers, not to mention the negation of the basic point of the NPT that would stem from allowing non-weapon states to carry out their

own explosions, resulted in an agreement that PNEs would require approval and would be carried out by the weapon states, with appropriate data delivered to the state that requested the test. This was incorporated into the treaty as Article V. No country has taken advantage of this article since its inception, and the United States and Russia have since independently concluded that nuclear explosions hold no advantages over conventional ones for peaceful purposes.

However, despite the incorporation of Articles IV, V, and VI, India refused to sign the treaty, joining China as a non-signer. China also did not sign the PTBT. In a statement to the then Indian Parliament, Prime Minister Indira Gandhi said:

India's refusal to sign the NPT was based on enlightened self-interest and the considerations of national security... nuclear weapon powers insist on their right to continue to manufacture more nuclear weapons.¹⁹

She then stated that 'the Government of India does not propose to manufacture nuclear weapons'.²⁰ She did not, however, say anything about PNEs, which is what India claimed to have carried out in 1974, until bomb designer and promoter Raja Ramanna gave the game away in 1997 when he admitted that:

A bomb is a bomb... there was nothing peaceful about it. I just want to make clear that the test was not all that peaceful.²¹

India's dual strategy

The Indian policy of working on weapons while calling for disarmament continued through succeeding governments, sometimes with imaginative proposals attached. In 1988, Rajiv Gandhi proposed that nuclear disarmament proceed in timed stages with a year certain for reaching 'zero' (2010 in this case). While this proposal went nowhere, the notion of forcing the NWS to do something on a timetable was a deft counter to the pressures on India to sign the NPT or accept full scope safeguards.

A salient example of such pressure occurred after the 1974 nuclear test. The latter was the first example of a weapon being manufactured using materials diverted from a civilian programme. It should be noted that it was not the first example of one country, wittingly or unwittingly, aiding another to get the bomb. The United States wittingly aided the United Kingdom's weapon programme after the Second World War, the USSR wittingly aided the Chinese programme, and France wittingly provided Israel with production plants, equipment, and nuclear test data for Israel's first nuclear weapons in the late 1950s and early 1960s.

India's first nuclear test and reactions abroad

The 1974 Indian test was carried out using plutonium separated from the spent fuel of the Canadian-supplied reactor CIRUS in which US-supplied heavy water was the moderator. Both the reactor and the moderator had been sold to India under contracts that specified 'peaceful use'. When it became apparent to US intelligence that India intended to build a nuclear explosive device using the purchased equipment and materials, an aide-memoir was delivered in October 1970 stating that if any materials sold by the United States to India were used for explosive purposes, it would be considered a violation of the terms of sale.²² Without admitting what they were doing, the Indians took the position that a PNE device was not a weapon and met a legal restriction of 'peaceful use'.

The subsequent nuclear test four years later was met with diverse reactions internationally. France sent a congratulatory message, and in the United States, the Ford administration, represented by Secretary of State Henry Kissinger, issued a benign message that was neither congratulatory nor condemnatory. But the arms controllers in the US Congress were not amused, and bills were introduced in the 94th Congress to tighten nuclear export controls under the Atomic Energy Act. For various reasons, none of these bills was enacted. The election of President Jimmy Carter in 1976, who had made non-proliferation a prominent element of his campaign, along with a strongly Democratic Congress made the passage of non-proliferation legislation more feasible. John Glenn, the former astronaut, brought new leadership to the issue in the Senate and the House of Representatives had strong leadership on the issue in the persons of Jonathan Bingham and Clement Zablocki.

The Nuclear Non-Proliferation Act of 1978 and its effect on India

The nature of Congressional rules made it easier for the US House of Representatives to pass a non-proliferation bill because one cannot filibuster a bill in the House, that is, kill it by employing unlimited debate. Filibusters can be applied in the Senate and require 60 votes to stop debate, so a minority of senators can prevent the passage of a bill. Thus, the Senate was the natural place for most lobbying activity by the nuclear industry to kill legislation it did not like. When a new non-proliferation bill was introduced in the Senate in 1977, the industry lobbyists tried to paint it as an anti-nuclear measure. Unfortunately for them, the bill was sponsored by two moderates and high-technology advocates, Republican Charles Percy and Democrat John Glenn. Senator Glenn, who was widely considered a national hero without ideological biases, shepherded the bill through the Senate and substantially altered its content and structure through his own amendments. The bill was also shaped by congressional testimony, negotiations with the Carter administration (which had its own ideas as to such legislation), and detailed reviews by three Senate committees, which had jurisdiction over its content. Opponents of the bill tried to render it innocuous on the Senate floor via amendments, but the most damaging amendments were defeated and the Senate passed it in February 1978.

The bill was given the official title 'The Nuclear Non-Proliferation Act of 1978' (now usually referred to as the NNPA) and sent to the House for action. The House, thanks to the leadership of Representatives Bingham and Zablocki, accepted the NNPA as a substitute for a non-proliferation bill that the House had passed months earlier and so the NNPA was sent to President Carter for his signature. He signed it into law on March 8, 1978.²³

The NNPA had three major elements. It called for the president to seek the establishment of an International Nuclear Fuel Authority that would have been the realisation in law of Eisenhower's fuel bank idea; it also called for the president to seek the establishment of a new programme of international cooperation on non-nuclear, non-fossil, energy development that would complement and balance the extreme focus of US energy policy on nuclear energy under Atoms for Peace, particularly for developing countries; and it amended the Atomic Energy Act to require new criteria for US nuclear exports and nuclear cooperation agreements with other countries. It was this latter element of the law that adversely affected nuclear trade with India.

While the new criteria did not require non-weapon states to sign the NPT in order to be eligible for nuclear trade with the United States, it did require adherence to full scope safeguards. India, of course, had unsafeguarded facilities and materials, and was

unwilling to allow safeguards to be applied to them. The law contained a narrow 18–24-month window to allow President Carter, unless blocked by a vote of Congress, to grandfather two shipments of nuclear fuel for the Tarapur reactors while attempting to persuade India to satisfy the new export criteria. Congress failed to block the shipments, but only one of them was sent. The Carter administration had received intelligence information suggesting that India was preparing another nuclear test. No further test occurred until 1998, but it has been revealed that the plutonium ‘pit’ for at least one of the five Indian tests in 1998 was manufactured in 1981.²⁴ Yogi Aggarwal, an Indian journalist, had reported in 1981 that 12 kg of plutonium had been prepared by a team at BARC for machining into an explosive core,²⁵ just around the time when the second fuel shipment for Tarapur was cancelled.

The 18–24 month window in the NNPA closed without India’s acquiescence to full scope safeguards, making India ineligible for nuclear trade with the United States. In the short term India could turn to other suppliers and did so, occasionally with the help of the US state department. But that avenue was also closed when the full scope safeguards criterion was adopted by the NSG in 1991, and recognised by the UN General Assembly the following year. India’s opposition to the NPT, whether principled or pragmatic, was placing it in nuclear isolation, but there was no thought being given to abandon the weapon programme, which had progressed to the point where nuclear tests were needed to verify the workability of new designs.

The Comprehensive Test Ban Treaty, the NPT indefinite extension, and India’s decision to test again

For the Indian bomb lobby, the urgency of testing became even more acute as a result of the Clinton administration’s plan to change the status of the NPT. The treaty, which came into effect on January 1, 1970, required a vote on whether to extend it beyond January 1, 1995. The Clinton administration decided to use the 1995 NPT Review and Extension Conference to extend the treaty not just for another fixed period but indefinitely. In return for such a vote by the state-parties, the weapon states, led by the United States, agreed in a formal statement—the 1995 Principles and Objectives for Nuclear Non-Proliferation and Disarmament—to pursue ‘systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons’.²⁶ A concrete manifestation of this was the proposed adoption of a Comprehensive Test Ban Treaty (CTBT), to be negotiated in the UN Conference on Disarmament (CD).

The CD operates by consensus, thus one country (e.g. India) could block any decision from being taken, and India, while a co-sponsor of the 1993 resolution calling for negotiations for a CTBT, was opposed to a CTBT that did not carry with it a timetable for nuclear disarmament as proposed by Rajiv Gandhi in 1988.²⁷

To get around Indian objections, a UN parliamentary move was made by Belgium and Australia that placed consideration of the CTBT in the General Assembly, which operates by majority rule. The CTBT was approved by a vote of 158-3. India still had an ability to block the CTBT because of an agreement among the treaty’s proponents that all ‘nuclear capable’ states had to sign and ratify the treaty for it to go into effect. It was felt that the United States could pressure Israel into signing and that Pakistan would sign if India did. Thus, it appeared conceivable that India could end up having sole responsibility for making a universal CTBT unachievable, resulting in great pressure on India to sign. Indeed, India had made the first proposal calling for a ban on all testing in

1954 and had issued a statement in 1994 supporting the treaty. China's detonation of a nuclear test, four days after the vote in May 1995, extending the NPT indefinitely, created in the minds of the Indian bomb lobby a perfect trifecta, threatening Indian security: a China with tested nuclear weapons and all the privileges accorded to a permanent member of the UN Security Council (UNSC); an NPT that relegates India permanently to second tier 'non-weapon' status; and a forthcoming CTBT that could prevent India from testing new weapons designed to be delivered by Prithvi and Agni missiles.²⁸

In any case, the ploy by the weapon states on the CTBT worked and the NPT was extended indefinitely. This placed India in a seemingly permanent, bizarre position as a state with nuclear weapons while being defined as a non-weapon state, and without the benefits accorded to either weapon states or non-weapon states under the treaty. India's fears that it would be placed under worldwide pressure to sign the CTBT if only it and Pakistan were outliers were misplaced as the US Senate voted to not ratify the treaty in 1996. But those fears drove a desire to conduct a group of nuclear tests before CTBT pressures became politically difficult to resist. At the same time, however, India attempted to maintain a consistent public position on nuclear disarmament.

India's position on nuclear disarmament at the International Court of Justice

In 1993, the International Court of Justice (ICJ) received a request from the World Health Organisation (WHO) for an advisory opinion as to whether the threat or use of nuclear weapons was illegal because the effect of nuclear war was so detrimental to the environment and to health. After the WHO request was rejected on the grounds that the WHO had no legal capacity to make such a request, the General Assembly presented a reworded question to the ICJ in December 1994. The question was formally accepted by the ICJ in January 1995. On June 20, 1995, India presented a written brief to the ICJ, which contained a number of interesting statements.²⁹ In particular:

- (1) Nuclear weapons cannot be used in self defence...nuclear weapons cause such destruction which far exceeds the measure of proportionality and the object of destruction necessary and relevant to the attainment of military objectives.
- (2) The use or threat of use of nuclear weapons [is] not justified by international law under any circumstances.
- (3) The use of nuclear weapons in response to attack by a conventional weapon would patently violate the principle of proportionality but also a nuclear response to nuclear attack...would violate the principle of discrimination, humanity, environmental security, and probably the principle of neutrality as such an attack would not distinguish between combatants and non-combatants... causing civilian casualties, ravaging the environment and contaminating the territory of neighbouring and distant neutral countries.
- (4) Since the production and manufacture of nuclear weapons can only be with the objective of their use, it must follow that if the use of such weapons itself is illegal under international law, then their production and manufacture cannot under any circumstances be considered as permitted. Besides, the manufacture and stockpiling of nuclear weapons would constitute a threat of their eventual use.

Despite this unequivocal stance against the manufacture and use of nuclear weapons by the government of India (and others), the ICJ, by a split vote of 8-7, issued the following statement:

The threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law. However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self defence, in which the very survival of a State would be at stake.

Also, the court unanimously found that:

There exists an obligation to pursue in faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.

Thus, Article VI of the NPT was given solid legally binding support by the ICJ, and this court ruling comported with India's submitted brief.

India's 1998 tests

Its strong position on nuclear disarmament notwithstanding, India conducted a group of five nuclear tests in May 1998 and Pakistan followed suit with six tests two weeks later. The tests by both were widely denounced. The UN Security Council passed UNSC Resolution 1172 calling on India and Pakistan to adopt a series of steps to de-escalate tensions between them and to ultimately become state-parties to the NPT as NNWS. But the tests placed both countries even more firmly outside the NPT orbit. If India was to play a role in international affairs on the same level as its Chinese rival, it would have to do so from outside the NPT or get the treaty amended to admit India as a NWS (a virtual impossibility under current NPT rules).

However, the tests had the desired result from an Indian perspective, especially after it became clear that the US sanctions automatically triggered by the tests would not be sustained (they were loosened almost immediately and were withdrawn soon after the 9/11 attacks). India's voice on the CTBT and on a proposed fissile material cut-off treaty (FMCT) was amplified by the tests, particularly since the George W. Bush administration itself downgraded US support for both efforts on the claim of inability to verify compliance.

India and the 13 practical steps towards disarmament

India did not attend the 2000 NPT Review Conference that took place prior to the advent of the Bush administration. The Conference endorsed the '13 practical steps toward nuclear disarmament'.³⁰ These steps included a call for signature and ratification of the CTBT and negotiations towards achieving an FMCT within five years. While the conference was taking place, India's then External Affairs Minister Jaswant Singh issued a statement to the Indian Parliament referencing the conference and reiterating India's position that it cannot join the NPT as a non-weapon state. While claiming that the NWS in the NPT were in violation of their commitments under the treaty, Singh said that India's policies were 'consistent with the key provisions of NPT

that apply to nuclear weapon states', in particular Articles I (no weapons transfers or weapons-related assistance); Article III (safeguards on exports); and Article VI (negotiations on nuclear disarmament).³¹

Singh's statement can still be made today. But it omits a key distinction between India and the five original weapon states: the latter have abjured any further nuclear tests (without hedging), and at least four of them are no longer producing plutonium for weapons. The fifth, China, is also believed to have halted plutonium production for weapons. Nor are the five weapon states engaged in a nuclear arms race. India, on its part, is still in the mode of building a 'credible minimum deterrent', which suggests an arms race with Pakistan and perhaps a simultaneous effort to reach some kind of parity with China.

The US–India nuclear agreement

After the Bush administration came into office in January 2001, it vindicated Singh's complaints about the weapon states by repudiating the 13 practical steps. It was also mostly responsible for the failure of the 2005 NPT Review Conference to adopt a final declaration. But in the wake of 9/11, it removed the remaining trade sanctions on India stemming from the 1998 tests and radically changed the US–India nuclear relationship by working with Prime Minister Manmohan Singh to forge a new nuclear agreement for cooperation. The agreement, which was preceded by a needed change in US law no longer requiring India to adhere to full scope safeguards, was approved by both the US Congress and the Indian Parliament after the NSG agreed to exempt India from its rule requiring full scope safeguards for nuclear trade with non-weapon states. The agreement provides for separation of India's military and civilian facilities, allows India to reserve all its indigenous uranium for its weapons programme, and gives India the sole authority for determining which future facilities will be safeguarded. While the NSG went to great pains to say that its endorsement of the agreement was not to be taken as a precedent for nuclear trade with other outliers of the treaty, many observers believe that the non-proliferation regime has been damaged by the agreement. The latter was pithily summarised in an editorial in *The Times of India* on August 20, 2007. The editorial said:

Why is this deal important? Because for the first time, someone has decided to let India have its cake and eat it too. You stay out of the NPT, keep your weapons, refuse full scope safeguards, and yet get to conduct nuclear commerce in a system that is dead against such a formulation. That's the bottom line of this deal.

Supporters of the agreement in the United States (and some opponents of the agreement in India) argue that India's weapon programme has been 'capped' because of the restriction on nuclear testing, the early shutdown of the CIRUS plutonium production reactor, and the decision to allow safeguards on specified facilities. But India can test any time it wishes, does not need CIRUS any longer for plutonium production, can block any FMCT proposal it does not like in the CD, and its entire breeder reactor programme is exempted from safeguards under the agreement. The fact that the agreement facilitate India's ability to reserve all its indigenous uranium for its weapon programme and one can only conclude that the Indian weapon programme has not been compromised in the least by the agreement.

Of course, the agreement does not guarantee sales of nuclear materials, equipment, or technology. Indeed, some Indian political leaders have expressed dismay at

the recent G-8 decision to restrict trade in enrichment and reprocessing technology to NPT parties, which is in keeping with what has been US policy for over 30 years despite an unfortunately worded recent statement by Hillary Clinton that seemed to suggest the Obama administration was not opposed to such technology transfers to India. Her statement was probably meant to refer to the question of India reprocessing United States supplied nuclear fuel under safeguards, rather than the transfer of technology. The G-8 decision, and the fact that another Indian nuclear test would almost certainly end any nuclear cooperation means that India has not quite shot its way into the nuclear club. Part of the reason has to do with Iran. The more that outliers from the NPT receive relief from nuclear export restrictions, the more difficult it becomes to argue against Iran's claim of legitimacy for its nuclear activities under Article IV of the NPT.

India and the 2010 NPT Review Conference

Despite clear and repeated evidence that India will never become a state-party to the NPT except as a NWS, hope apparently springs eternal in the minds of some advocates of disarmament. In the third session of the Preparatory Committee (Prepcom) for the 2010 NPT Review Conference, the chairman, Boniface G. Chidyansiku of Zimbabwe, proposed a set of recommendations for the state-parties to consider when the Review Conference takes place in May 2010. There was insufficient time for the Prepcom to obtain consensus on the Chairman's text (which went through two revisions of his original proposal), so the Prepcom adopted a purely procedural report instead. However, all three drafts contained a statement endorsing universalisation of the NPT and reinforcing the content of UNSC 1172. If this appears at the 2010 meeting, India, who will attend the meeting, will undoubtedly reply as Jaswant Singh did in 2000 or will disdainfully ignore it.

Perhaps less ignored will be the progress likely to be noted on the extension of the Strategic Arms Reduction Treaty (START) agreement between the United States and Russia with further cuts in their nuclear arsenals, and on the CTBT, whose ratification is strongly supported by the Obama administration. But India has already made its response to pressures for it to sign a CTBT by issuing statements in March 2009 from the foreign secretary Shiv Shankar Menon and the former foreign secretary Shyam Saran to the effect that India will not sign a CTBT that did not, in India's view, actively contribute to nuclear disarmament in a credible timeframe.³²

More generally, the 2010 meeting will be noteworthy for a return to the notion of practical steps towards nuclear disarmament. A modified version of the '13 steps' adopted in 2000 is expected to be approved. In response to this, India can be expected to once again call for a nuclear weapons convention to put the world on a nuclear-weapons-free path. India will be able to point out that its statements to the IJC in 1995 and its call for a timetable for reaching 'zero' in 1988 go further than the almost universally referenced published statements on nuclear disarmament authored by Henry Kissinger, George Shultz, William Perry and Sam Nunn.³³

The attention given to the Kissinger et al. statements calling for establishing a goal of 'zero' stems not only from the personal prominence of the authors, but also the surprise that after spending so many years supporting a robust nuclear weapons arsenal in the face of Article VI (a glaring exception being the Shultz-at-Reykjavik 'Let's do it' anecdote),³⁴ this quartet of former cold warriors has decided that the United States should mean what it says when it signs an international agreement containing a disarmament

clause. Of course, it would have been better if they had not waited until the threat of proliferation had grown so large and the non-proliferation regime grown so weak, leading to fears of nuclear terrorism; and, to be sure, as a group they have not endorsed going to 'zero' any time soon. But they have endorsed ratifying the CTBT (of the four, only Perry and Nunn were in favour of its ratification when it came before the Senate in 1996), further weapon reductions, and other important measures. Their support for nuclear disarmament helps lower the political barriers to further progress in the United States and they deserve credit for their welcome initiative.

Whither the NPT and India's role

The failure to make the NPT universal, the reinforcement of that failure by the indefinite extension of the treaty in 1995, and the inability to prevent or effectively punish cheating is at the root of the non-proliferation regime's difficulties. The fact that three out of the four outliers from the NPT (India, Pakistan, and Israel) lie in two of the most volatile regions in the world, and the fourth (North Korea) has been threatened a number of times by a weapon state (the United States) makes their outlier status understandable, even as it makes for a more dangerous world for others.

Some Indian observers have pointed out that if the NPT had been negotiated five years later or if India had been able to explode its first device five years earlier, then India would have been accepted into the NPT as a weapon state. But Pakistan might have remained an outlier in that case as well. And no Arab state was likely to accede to the treaty if Israel had been admitted as a weapon state. It has been suggested that when it became apparent to the United States during the waning days of the Lyndon Johnson administration that Israel would not sign the NPT, thus threatening a collapse of the fledgling non-proliferation regime, a tacit agreement was struck, formalised later in a secret communication between Richard Nixon and Golda Meir, that Israel would not declare its intention to not sign the treaty nor would it publicly admit to its nuclear weapon status. That deception allowed nations who were unaware of Israel's nuclear status to sign the NPT when otherwise they might not have.³⁵

The failure of universalisation has resulted in alternative proposals for a new world nuclear order. One proposal would formally recognise the nuclear programmes of the outliers of the NPT without admitting them to the treaty as weapon states, but committing them to act like NPT weapon states on non-proliferation matters. The US-India nuclear agreement comes close to doing this in India's case, but does not commit India to do what the five weapon states have done in terms of their current commitment to indefinite moratoria on testing and on the production of fissile materials for weapons. But the evident reluctance of the NSG to consider the Indian arrangement as a model for Pakistan or Israel, let alone North Korea, shows the limitations of this approach.

Another alternative is to ignore universalisation of the NPT and focus on universal compliance with norms articulated via the treaty, the NSG, and the IAEA, backed up by United Nations or other sanctions. This is, in fact, what the non-proliferation regime has evolved into. It may not be able to stop a state which is a determined proliferator, but it can slow its progress towards the bomb by enabling cooperation among like-minded nations, regardless of their nuclear status, to prevent nuclear weapons technology from falling into the proliferator's hands. An example of such cooperation is the passage of UNSC 1540, which imposes binding obligations on all states to establish domestic controls to prevent the proliferation of nuclear, chemical, and biological

weapons, and calls for promoting universal adherence to existing international treaties. These tools are also critical for preventing proliferation to sub-national groups.

While it is too early to predict the future course of the NPT, especially without knowing the outcome of the 2010 Review Conference, the recognition of tight linkage between the principles of non-proliferation and nuclear disarmament on the part of the weapon states is to be welcomed as a positive sign for the treaty's longevity and effectiveness. India's support for the non-discriminatory application of those principles and its corresponding criticism of the manner in which those principles have been carried out by the weapon states thus far have been trenchant. But India also has a responsibility to show the world that its four-decade-long incisive rhetoric on disarmament is backed up by concrete deeds in its backyard beyond calling for an international convention. It is a burden, but a reasonable one for a nation with world leadership ambitions. It is not an exaggeration to say that at a time when the non-proliferation regime is under stress by virtue of the spread of nuclear technology to more countries, including some whose commitment to non-proliferation may be less than robust, the actions of India can have a profound effect on the direction and pace of nuclear disarmament and non-proliferation progress. It is an opportunity for Indian leadership in an area where leadership has too often been lacking. The Indian focus on timetables for disarmament by others should at least be accompanied by a timetable for itself; a near-term date by which India will agree to a permanent moratorium on testing and on plutonium production for weapons.

Notes

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3. See <http://nuclearweaponarchive.org/India/Bhabha.html>
4. Ibid.
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6. Nuclear Weapons Archive Report, 'India's Nuclear Weapons Program, The Beginning: 1944-1960', at <http://nuclearweaponarchive.org/India/IndiaOrigin.html>
7. R. Chengappa, *Weapons of Peace*, HarperCollins Publishers, India, 2000, p. 82.
8. G. Perkovich, *India's Nuclear Bomb: the Impact on Global Proliferation*, University of California Press, Berkeley, CA, 1999, p. 36.
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10. See Leonard Weiss, 'Atoms for Peace', *Bulletin of Atomic Scientists*, 59(6), November 2003, pp. 34-44.
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12. L. Weiss, 'Atoms for Peace', no. 10.
13. G. Perkovich, no. 8, p. 28.
14. H. Sethna, 'Opening the Door to Nuclear Development', in J. Pilat, R. Pendley and C. Ebinger (eds.), *Atoms for Peace: An Analysis After Thirty Years*, Westview Press, Boulder, CO, 1985, p. 102.
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16. See 'Irish Draft Resolution Introduced in the First Committee of the General Assembly: Further Dissemination of Nuclear Weapons, October 17, 1958', in *Documents on Disarmament, 1945-1959*, Govt. Printing Office, Washington, DC, 1960, pp. 1185-1186.

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18. M. Kuntzel, 'Germany and the Origin and History of the NPT', at <http://www10.antenna.nl/wise/index.html?http://www10.antenna.nl/wise/beyondbomb/1-2.html>
19. Quoted in A. Ghose, 'Negotiating the CTBT: India's Security Concerns and Nuclear Disarmament', *Journal of International Affairs*, 51(1), Summer 1997, at http://www.indianembassy.org/policy/CTBT/ctbt_ghose.htm
20. Ibid.
21. Raja Ramanna, speaking to the Press Trust of India, October 10, 1997, at <http://nuclearweaponarchive.org/India/IndiaSmiling.html>
22. US Aide Memoir to the Indian Atomic Energy Commission, November 16, 1970; declassified by Louis V. Nosenzo at the request of Senator John Glenn on September 19, 1980.
23. The NNPA is formally referred to as P.L. 95-242. For its text, see <http://www.nti.org/db/china/engdocs/nnpa1978.htm>
24. Reported by A.S. Gill in a seminar at Stanford University, 'The Science and Politics of Testing in India', June 4, 2009.
25. Cited by G. Perkovich, no. 8, p. 228.
26. See http://www.fas.org/nuke/control/npt/text/prin_obj.htm
27. See Rajiv Gandhi, 'A World Free of Nuclear Weapons', speech before the UN General Assembly, June 9, 1988, at <http://www.indianembassy.org/policy/Disarmament/disarm15.htm>
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32. See IANS dispatch of March 30, 2009, at http://www.thaindian.com/newsportal/uncategorized/india-links-ctbt-with-disarmament_100173358.html
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