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## Non-Proliferation and WMD Debate: The Relevance to South Asia

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### Introduction

The 2013 session of the United Nations General Assembly has commenced in New York, as per the usual schedule in New York. On the first day of the General Debate all eyes were focused on the Presidents of the United States and Iran, and the softening of postures by both sides on the nuclear dispute, the West's suspicion that Iran is aiming at nuclear weapon acquisition which President Hassan Rohani has denied. Still, as the session develops the debate will gain traction. For any breakthrough in terms of global non-proliferation, the existing regime will need tweaking. That would involve Pakistan and India, two countries in South Asia with fast growing nuclear arsenals, who are looking for appropriate seats at the global negotiating table – as 'recognised nuclear powers', which are being denied them.

### Historical Background

We shall begin our substantive discussions by defining our key terms: 'Nuclear Proliferation' refers to the spread of nuclear weapons, fissile material and related technology to states which do

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not possess them. Technically, as per the Non-Proliferation Treaty (NPT) that we will examine later, it applies to the acquisition of such capabilities by any country other than the five recognised Nuclear Weapon States (NWS), i.e., the United States, the Soviet Union (now Russia), the United Kingdom, France and China, those that had tested their weapons before 1968. Sometimes scholars call its spread from country to country as ‘horizontal proliferation’, as distinct from qualitative improvement of weaponry or acquiring greater numbers of the same, called ‘vertical proliferation’. They argue both are destabilising.<sup>2</sup>

## **Nuclear Weapons**

A nuclear weapon is an explosive device that derives its destructive force from nuclear reactions of a fission variety or a combination of fission and fusion. Fission weapons are commonly known as atom-bombs. In such weapons a mass of fissile material, enriched uranium or plutonium, is assembled into a supercritical mass to start a series of exponentially growing nuclear chain reaction. The most common other-basic-type of nuclear weapon produces large quantum of energy in nuclear fusion reactions. Such fusion weapons are known as thermonuclear weapons, or more colloquially as hydrogen bombs. These are considered more difficult to produce than those of the fissile kind.

Long-distance nuclear weapons are deliverable on Intercontinental Ballistic Missiles (ICBMs). These are strategic weapons. Submarine Launched Ballistic Missiles (SLBMs) can be launched from under the seas. These can also be strategic. Besides, smaller nuclear devices are known as tactical, theatre or battlefield weapons. Their production is destabilising as they imply the possibilities of an actual nuclear conflict, since the damage they will inflict will be limited and it may be felt that these would not invite massive retaliation.

## **Weapons of Mass Destruction**

A weapon of mass destruction (WMD) on the other hand is one that can kill and bring significant harm to a large number of humans and/or cause great damage to man-made structures (e.g., buildings), natural structures (e.g., mountains) or the biosphere in general. The scope and application of the term has evolved and been disputed, often signifying, more politically than technically. Coined in reference to aerial bombing with chemical explosives, it has come to denote large-scale weaponry of other technologies, such as chemical, biological, radiological and nuclear. During the Cold War it was at times used synonymously with nuclear weapons. As in

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<sup>2</sup> For an elaboration of the argument, see Iftekhar Ahmed Chowdhury, “Non-Proliferation Versus Disarmament: A Destabilising Dichotomy”, ISAS Working Paper No. 94, 21 October 2009, <http://www.isas.nus.edu.sg>

early-2000, in the West the fear of asymmetrical war grew, it acquired somewhat sharper connotation.

The most-widely used definition of WMD now is that of nuclear, biological or chemical weapons (NBC) although there is no treaty or customary international law that offers an authoritative definition. For the general purposes of national defence, the US code defines a WMD as: “Any weapon or device that is intended, or has the capability, to cause death or serious bodily injury to a significant number of people, through the release dissemination or impact of: toxic or poisonous chemicals, or their precursors, a disease organism, radiation or radioactivity.” For the purposes of the prevention of nuclear proliferation, the US Code defines WMD as “chemical, biological and nuclear weapons, and chemical, biological, and nuclear materials used in the manufacture of such weapons”.

## **Non-Proliferation Treaties**

While the cornerstone of nuclear disarmament and non-proliferation effort remains the Non-Proliferation Treaty of 1968, this was preceded by other modest efforts made earlier. Before we address the NPT let us briefly look at some other such initiatives. These began after the 1962 Cuban Missile Crisis took the world to the brink of a nuclear war. Two of the earliest such treaties were the Limited Test Ban Treaty (LTBT), an agreement that prohibited nuclear test explosions in the atmosphere, under water, or in space, signed in 1963 by the US, the UK, and the Union of Soviet Socialist Republics (USSR), and the 1972 Biological Weapons Convention, a superpower treaty that banned biological weapons and provided for the destruction of existing stockpiles. The 1972 convention was the first and only example since 1945 of the disarmament of an entire category of weapons. Meantime, negotiation on a Comprehensive Test Ban Treaty (CTBT) was continuing. In 1974 the superpowers signed the Threshold Test Ban Treaty (TTBT) which limited nuclear tests to explosive yields of less than 150 kilotons. But the TTBT did not prevent the superpowers from developing nuclear warheads with power exceeding 150 kilotons. In 1976 the superpowers signed the Peaceful Nuclear Explosions Treaty (PNET) which banned the so-called peaceful nuclear testing.

The NPT, which was negotiated in 1968 and entered into force in 1970, rests on three pillars – horizontal non-proliferation; vertical non-proliferation and nuclear disarmament; and the peaceful uses of nuclear energy. The following needs to be explained: Acquisition of capabilities by new states, or state-to-state spread of nuclear weapons is known as ‘horizontal proliferation’, whereas improvement of existing arsenals, usually undertaken by NWS, is known as ‘vertical proliferation’. The earlier-generation of nuclear powers see the former as more destabilising, while others argue that the latter is more immoral and dangerous, as it enhances the propensity to use by appearing to be able to limit collateral damage due to greater precision in targeting.

Because the US has not developed any newer weapons since 1992, they have evolved a programme to check reliability and maintenance of nuclear arsenals without testing, known as ‘stockpile stewardship’. Since the need for testing was eliminated, this would normally draw the US close to CTBT. But under the Bush Administration, a new programme was introduced known as the ‘reliable replacement warhead’, to expand on ‘stockpile stewardship’ and seek to enable the development of newer weapons within 18 months, and construct newer designs within four months – without testing but using computer simulations, thus remaining largely within the letter, but not the spirit, of non-proliferation norms.

The signatories were of two kinds – first those who possessed nuclear weapons at the time of signing, the five NWS, and those who did not, the Non Nuclear Weapon States (NNWS). The NNWS were to forego acquisition in return for assistance in developing the capacity to use nuclear energy for peaceful purposes. The NWS were to accord such support, and at the same time seriously pursue nuclear disarmament, starting with a cessation of tests. The CTBT complemented it in 1996. The NPT, to be reviewed every five years, was indefinitely extended in 1995. The next Review is due in 2015.

What was to be a partnership between the NWS and NNWS soured quickly. The NNWS saw the NPT as “discriminatory”, and tilted against them. The NWS did not keep their word in engaging in serious negotiations for disarmament. They did not assist in the transfer of knowledge for peaceful uses of nuclear energy (mostly for fear that it could be used for proliferation by some countries). Also they did not provide any structured and binding assurances, apart from some individual commitments, that they would not use or threaten to use nuclear weapons against the NNWS.

## **Reduction of Nuclear Weapons**

While it is true that the actual number of weapons, of which 130,000 to 140,000 were built, were eventually reduced to 25,000 or so, still enough to blow up the planet many times over, the chasm of misunderstanding between the two groups did not close. Indeed some countries such as India, Pakistan and North Korea acquired the capability overtly and Israel covertly, Iran began its ‘peaceful’ nuclear programme with such zeal as to arouse considerable Western suspicion. A number of Gulf countries including Saudi Arabia and the United Arab Emirates suddenly began to evince keen interest in ‘peaceful nuclear power’, not much unlike the Iranian mode.

The delay in progress regarding the goals of the treaty led to complications as it afforded time for some to effect acquisitions, and thereafter claim their place at the table as formally recognised NWS. While the current NWS were chary of granting their wish, these countries, India and Pakistan, are militarily too powerful to be ignored or to have any global regime developed

without their positive assent and indeed explicit support. Washington's current pivot to Asia is designed to link up with India in terms of security arrangements, though the Indians are not entirely willing. Pakistan is also a stated ally of the US. But if US President Barack Obama wants to make any headway with the NPT, as he has said he wants to, it would be extremely important to integrate India and Pakistan into the global non-proliferation regime. The big seemingly irresolvable question is in what capacity, as formally recognised nuclear weapon state or as a non-nuclear weapon state?

The problem of Israel remains. As Iran's substantive discussions with the West begin in Geneva in October, questions on why Israel should not be subjected to non-proliferation regime are bound to arise. Actually Iran's deep underground site called Fordo is hardened to be immune to Israeli attacks, and unless Israel disarms, it is difficult to see how Iran can dismantle this silo, which would surely be a major Western demand.<sup>3</sup> Another facility, buried deep under earth and concrete, is the one at Natanz.

## **Comprehensive Test Ban Treaty**

As stated earlier the CTBT complements the NPT. There are three main reasons why a country would want to test its nuclear weapons. First, if it has acquired the weapon for the first time, it may deem necessary to announce this fact to the rest of the world, so that any potential adversary can take note and be deterred. Second, if it is already an NWS, then the test would largely be focused on improving the weaponry in terms of kill-power, precision, deliverability and survival under a situation. Finally, a country may test to seek recognition and prestige as a higher power, and thereby stake its claim to play a greater role in shaping global affairs in consonance with its perceived national self-interest.

These are powerful incentives. The only way to wean away states from these would be to counter each of the above through the creation of norms and legislations and also a strong negative public opinion with the aid of the civil society, academics, and experts among others. For instance with regard to the first point, testing may induce or provoke the potential adversary to

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<sup>3</sup> The progress of the Iran-West nuclear negotiations, due to recommence in Geneva in mid-October 2013, would be critical for global disarmament. Apart from Fordo and Natanz, Iran would also be called upon to destroy a multi-billion dollar heavy-water reactor nearing completion at Arak. It is a potential source of plutonium (There is also a uranium conversion facility at Esfahan). Also Iran would be asked to reduce its 18,000 spinning centrifuges. But Iran would demand comparable returns. One would be the reduction of the West's sanctions that have halved its oil revenues. The other would be the resolution of the Israeli nuclear question (As to a pre-emptive strike by Israel, experts agree that it will be difficult given the distance, number of targets, and Israeli capabilities). This again is linked to Palestine. So there is this great risk of going round in circles. This is so despite the iteration that the Supreme Leader of Iran, Ayatollah Khamenei, has said about any Iranian position being tempered by 'heroic flexibility'.

follow suit rather than submit to awe, as it happened in the case of Pakistan vis-à-vis India. Secondly, getting the powers to realise that seeking qualitative improvements can lead to a race in the area where each would strive for a higher level of superiority as between the US and the USSR during the Cold War era, and currently among the US, China and India. Finally, and this is a major challenge, to create an international climate, whereby both new acquisitions and qualitative improvements would attract international opprobrium, backed by practical steps to deny them advantages, such as seats at significant tables including the United Nations Security Council, unless the states display sufficient conformity with the generally agreed norms, whether they are formal signatories to the relevant agreements or not.

As of now, just over 2,000 nuclear tests have been conducted by eight countries, some in the atmosphere, some underground, and others underwater. In the past, radioactive elements from the tests not only polluted the atmosphere but also led to direct casualties, as in the case of a Japanese sea-craft ironically named “Lucky Boat”, which was not at all lucky when its entire crew was killed by a fall-out in 1954 from a hydrogen bomb test in the Pacific. The then Indian Prime Minister Jawaharlal Nehru, floated a proposal for a “standstill” agreement a few weeks after the incident. Indeed, it was he who had made “the earliest and the most notable public calls for a cessation of testing”.<sup>4</sup> As a result of such moral pressures, eventually a Partial Test Ban Treaty (PTBT) was agreed upon banning tests in the atmosphere, underwater and in the outer space. It was flawed in that it allowed for underground tests, which continued for decades, and seemed to address the problems of only ‘horizontal proliferation;’ in line with the wishes of the big powers.

When the NPT was extended indefinitely in 1995, the CTBT was the result of the ‘package deal’ connected with the extension. I was a Vice-Chair of the first Bureau of the Organization created to oversee the CTBT. Unfortunately it could not enter into force for want of requisite number of ratifications. While 180 countries had signed the Treaty, of the required 44 states, 35 ratified it, and nine did not. Three did not become signatories at all. Pressure for ratification, including on the US, are growing. Pakistan has now said it will sign and ratify the CTBT if India does so. The consequences of inaction are becoming starker. Hans Blix, the well known Disarmament expert has said: “The (WMD) Commission believes that a US decision to ratify the CTBT would strongly influence other countries to follow suit. It would decidedly improve the chances of entry into force of the treaty and would have more positive ramifications for arms control and disarmament than any other single measure. The US should reconsider its position and proceed to ratify the Treaty. Only the CTBT offers the prospect of a permanent and legally binding commitment to end nuclear testing”.

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<sup>4</sup> Keith A. Hansen, *The Comprehensive Nuclear Test Ban Treaty: An Insider's Perspective* (Stanford, Stanford University Press, California, 2006) p. 5.

## **Fissile Material Cut-Off Treaty**

Currently the 65-member Conference on Disarmament in Geneva (CD), which apart from the CTBT has not had much to show for in activity, is grappling with the issue of the Fissile Material Cut-Off Treaty (FMCT). Its purpose is to prohibit the further production of fissile material for nuclear weapons or other explosive devices. On 27 September 1993 the then US President Bill Clinton, called for such a multilateral convention. In December the same year, the UN General Assembly adopted Resolution 48/751 calling for the negotiation of a “non-discriminatory, multilateral and international effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices”. In Geneva, the CD decided to establish a committee for such negotiations, but no substantive talks have taken place. But fearing such a Treaty cannot be effectively verified, the US cast the sole negative vote in the UNGA First Committee in 2004 against a resolution in this regard. Later, in April 2009, Obama reversed the decision, and in May that year the CD established the FMCT Negotiating Committee.

However since then, Pakistan has single-handedly blocked the CD from implementing its agreed programme of work with regard to the FMCT. Decisions in the CD are by consensus and any member has a veto. Pakistan has argued that an FMCT should clearly and comprehensively deal with the issue of asymmetry of existing fissile material stocks (between India and Pakistan). Even though existing stocks may be at near-par, Pakistan contends that India’s ability to procure from the Nuclear Suppliers Group (NSG), which the US spearheaded, is the ‘game-changer’.<sup>5</sup> This means India can use the NSG material for civilian purposes and divert its pre-existing stocks towards weapons production. This will give India a clear advantage over Pakistan, till such time Pakistan is accorded similar NSG facilities. It is, of course possible that the negotiations can be moved out of the CD into the UNGA itself, which will pose understandable difficulty for the Pakistani position.

## **Chemical Weapons Convention**

The other main WMD, chemical weapons, is addressed by the Chemical Weapons Convention (CWC). It was drafted in 1992 and signed in 1993. Currently 189 States are party to the CWC which came into force in 1997. It is administered by the Organization for the Prohibition of Chemical Weapons (OPCW). Seven UN States are not party. These are Angola, Egypt, Israel, Myanmar, North Korea, South Sudan and Syria. Israel and Myanmar have signed but not ratified the convention. On 14 September 2013 Syria deposited its instrument of accession to the treaty,

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<sup>5</sup> For a study of *burgeoning* India-US relations, see John Pomfret, ‘Obama welcomes Singh, hails India’s leadership role in Asia’, *Washington Post*, 25 November 2009.

and agreed to provisional application pending its entry into force effective 14 October 2013 (So the accession of Syria takes effect that day). The main obligation under the Treaty is the prohibition of use and production of chemical weapons, as well as the destruction of all existing stockpiles. The OPCW verifies the destruction activities. As of January 2013, around 78% of the declared stockpiles have been destroyed. The Convention also has provisions for systematic evaluation of chemical and military plants, as well as for the investigations of allegations of use and production of chemical weapons based on intelligence of other parties. However, only the UN Security Council can authorise the use of force against a state that resorts to the use of chemical weapons.

The total stockpile of chemical weapons in early 2010 was about 30,308 tons. But before the destruction activities began, a total of 71,315 tonnes and 8.67 million munitions and containers and 70 production facilities were declared to the OPCW. By May 2012, 50,619 tonnes or 71.10% of declared chemical weapons were destroyed. It is believed Albania, South Korea, and India have completed this operation. Russia, and the US, the largest possessors, are said to have completed 57% and 90% respectively (the deadline set for both countries, April 2012, was not met). Libya has destroyed 54% of the stockpile and Iraq, which joined the Convention in 2009, is yet to commence it (though most were destroyed under UN reduction programme in 1991). As of the end of March 2012, all 70 declared facilities have been deactivated. Destruction is a costly process and the US programme may cost as much as US\$ 60 billion in total. The UN Security Council has recently adopted a unanimous resolution calling for the destruction of Syrian facilities (even though there are no punitive measures appended for non-compliance)

Why should chemical weapons be considered immoral, and are they worse than other forms of WMD? Perhaps chemical warfare is considered immoral because those under attack in conventional warfare can surrender and escape further harm. The same option does not exist with a chemical attack. The gas may be colourless and odourless, and so the victims may not even know what hit them. Also the long-term after-effects place them in a more reprehensible category. There could be genetic mutilation in survivors and their off-springs. In Halabja, long after the Saddam attack, a study found raised incidence of childhood leukemia and lymphomas. But if moral comparison is to be made, other WMDs like nuclear weapons can cause the same effects. More have been killed by conventional weapons than any other kind. Chemical weapons cost less, and because they balance military asymmetries, sometimes 'poorer' states resort to them. In reality, however reprehensible chemical weapons may be, and they are, other weapons of mass killings too cannot be placed on any higher moral ground.<sup>6</sup>

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<sup>6</sup> This argument is powerfully made by Andy Ho, in 'The 'immorality' of Chemical Weapons', *The Straits Times*, 19 September 2013.



## UNSC Resolution 1540 and the Middle East

The adoption of the UN Security Council Resolution 1540 in April 2004 was a response to the growing threat that non-state actors might acquire and use WMD. It is a legally binding document that requires all states to implement domestic legislation to prevent non-state actors from manufacturing, acquiring, or transporting WMD within or from their territory. All states were required to submit a report on implementation to a Committee. UNSC Resolution 1540 is critical to the Middle East, because one-third of the states there possess some WMD capability or are said to have related research programmes. Although every state in the region has submitted an initial report to the 1540 Committee, these vary dramatically in terms of quality and comprehensiveness. Some do not also address critical obligations notably in the border control and trafficking domains.

Generally adherence to non-proliferation treaties and related instruments varies greatly in the Middle East. For instance, Israel has not joined the NPT and many states in the region are yet to sign or ratify the CTBT. It is noteworthy that at a disarmament meeting during the current UN General Assembly session in New York, the new Iranian President Hassan Rohani called upon Israel to join the NPT<sup>7</sup> (Israel is already said to have 100-200 nuclear warheads).<sup>8</sup> While he did not link this to Iran's nuclear policy on that occasion, it should surprise no one if the subject should resurface over the next three to four months, the time-line that the Iranian President has mentioned for the completion of nuclear issue negotiations with the West.

Apart from political reasons, non-adherence to international instruments is sometimes also owed to administrative and legislative inertia. Middle Eastern regional organisations like the Arab League and the Gulf Cooperation Council could potentially play a significant role in strengthening the non-proliferation and nuclear safety and security regimes by encouraging members to adhere to them and also in some cases by organising technical assistance (by also hiring third parties for the purpose). Both regional organisations could specifically assist in monitoring the implementation of UNSC Resolution 1540. Wider regional adherence to these obligations would also create building blocks for the creation of a zone free of nuclear weapons and other WMD in the region.<sup>9</sup>

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<sup>7</sup> 'Iran calls on Israel to join the nuclear pact', *The Straits Times*, 27 September 2013.

<sup>8</sup> 'Bringing Iran back into the fold', *The Straits Times*, 30 September 2013.

<sup>9</sup> The Nuclear Weapon Free Zone, as defined and recognised in the UN, is an agreement, with mechanisms of verification and control of its obligations, whereby a group of nations ban the development, use or deployment of nuclear weapons in a given area. There are nine of them: Tlatelolco (covering Latin America and Caribbean), sea-bed (covering all sea and ocean floors), Raretonga (covering South Pacific), Bangkok (covering the ASEAN countries), Mongolia (covering that state); Semei (covering Central Asia), and Pelindaba (covering Africa). There is nothing yet that covers India, Pakistan, North Korea, Israel, Iran, Egypt, or Saudi Arabia.

## Future Prospects and Relevance to South Asia

So, in a world full of such dangerous munitions, what is to be done? First, the institutions such as the UN, the CD, the organisations overseeing major disarmament and non-proliferation conventions must be strengthened and further empowered. Working methods must be revamped. Existing treaties such the NPT need to be ‘rebalanced’ to remove perceived inequities between powers. An agreed method must be found to accommodate, in particular, India and Pakistan. In other words, changing times must be recognised. Established global norms must be seen to protect the weak (it is not lost on the world that no nuclear-weapon state has been attacked!). If some states have nuclear weapons and WMDs, others will want them also. This is simple but incontrovertible logic. Myanmar, for instance, on the fringes of South Asia, is yet to destroy its chemical weapons. This fact has elevated the wariness of its neighbours. The political levels for negotiations on the FMCT must be raised. It must find its way on the agenda of any serious talks between India and Pakistan,

The international community must move forward from the doctrine of deterrence to a culture of peace. It will imply a shift from the mathematical calculations of quantitative destructive powers to moral standards that would signify humanity’s graduation to a higher level of civilisation. This would also imply that countries desist from acquiring aggressive conventional weapons. For instance vis-à-vis the Iran-US scenario, the building by the US of a new ‘bunker-buster’ munition, called the ‘Massive Ordnance Penetrator’, packing a weight of 18,000 kg that can reportedly smash through 20 metres of concrete before exploding (obviously meant for Fordo or Natanz facilities), could persuade Iran to harden facilities even further, thus enhancing second-strike capabilities, an unnecessarily destabilising development. We need to bear in mind at all times that a lightly armed world will not necessarily be a more peaceful place than a heavily-armed one.<sup>10</sup> So a change of mind-set is required. The time for action has come.<sup>11</sup> We must act before it is gone, or we shall be left to rue our inaction.

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<sup>10</sup> This idea is lucidly developed by the great International Relations theorist Hedley Bull in his tome *The Anarchical Society: A Study of Order in World Politics*, (London, The Macmillan Press Ltd, 1977), p. 238

<sup>11</sup> Many see President Obama’s shift of focus of negotiation to international for a in positive light in this regard.