

RESEARCH ARTICLES

CREDIBLE MINIMUM NUCLEAR DETERRENCE IN SOUTH ASIA

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Abstract

The concept of Credible Minimum Deterrence has no definition and seems problematic in nature given its context of the Indo-Pakistan nuclear relationship. Though Pakistan does not aim, and cannot afford, to indulge in a nuclear arms race with India, it cannot be contended that a nuclear arms race does not exist between the two states. Quest for “credible minimum nuclear deterrence” may not be a finite goal as it is a dynamic concept itself, and even within either state, there is no consensus on what can be quantified as a credible minimum nuclear deterrent. In fact, the value of the concept possibly lies more in what it conceals rather than what it reveals—providing yet more space for both sides to hide behind terms that are ambiguous. There have been many constructive suggestions on moving forward on a bilateral level which could be pursued—beginning with the clarification of basic nuclear concepts. It is argued here that both states should engage in a sustained nuclear dialogue that goes beyond rudimentary risk reduction measures.

Key words: Credible, Minimum, Deterrence, South Asia.

India and Pakistan, born in a state of hostility, have fought four wars over the region of Kashmir in 1948, 1965, 1971 and 1999. The belligerent nature of relations between the two countries has meant that while they have existed next to each other they did so without any meaningful communication at the strategic level. The nuclear tests in 1998 gave a jolt to this apathy and acted as a catalyst for the two states to initiate a dialogue on the nuclear issue. However, since the nuclear tests in 1998, India and Pakistan have experienced several serious crises, the latest being the 2008 terrorist attacks in Mumbai, after which the long hiatus in their inter-state relations only ended in 2010. Since then; regional activities vis-à-vis the war on terror have taken the center stage for Pakistan. It remains debatable whether India and Pakistan are undergoing a “vigorous,”¹ “gradual”² or a “slow motion”³ nuclear

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¹ Sumit Ganguly and Devin T. Hagerty, *Fearful Asymmetry: India-Pakistan Crises in the Shadow of Nuclear Weapons* (New Delhi: Oxford University Press, 2005), 1.

arms race. China continues to be the number one challenge for India in the long term,⁴ and is viewed by the majority in India as having a near alliance relationship with Pakistan.⁵ It appears that India's lead in this respect vis-à-vis Pakistan will continue to expand. How this would impact the deterrence relationship between the two South Asian nations is something that is not predictable at this stage.

This article argues that India and Pakistan should engage in a sustained nuclear dialogue that goes beyond the hitherto limited and rudimentary risk reduction objective and also highlights some problem areas that restrain the two states from engaging more substantially on the issue. In the absence of clear and continuous nuclear dialogue between India and Pakistan (with possible input from China) that seeks to clarify basic concepts, the stability of the deterrence relationship may be undermined. Further, it is also argued here that nuclear proliferation is given legitimacy under the policy cover of "credible minimum nuclear deterrence" which is an inherently contradictory and ambiguous concept and there is no consensus whatsoever on what this term means either between, or within, Pakistan and India. An attempt to define this in real terms may remain elusive. Placing less emphasis on this policy may be beneficial in moving forward and even providing more space for addressing other pressing security issues in the region.

Indeed, the nuclear weapons' sphere has undergone a "modest revolution"⁶ since 1998 and the international community has had to accept the presence of nuclear weapons in this region as a *fait accompli*. Therefore nuclear arms control may not be a feasible option in South Asia for the foreseeable future as the two nuclear arsenals appear set to experience a continued qualitative and quantitative expansion. The implication of this is that India and Pakistan will have to rely on other methods of maintaining the stability of nuclear deterrence such as improving communication through greater

² Bhumitra Chakma, *Strategic Dynamics and Nuclear Weapons Proliferation in South Asia* (Bern: European University Studies, Peter Lang, 2004), 253.

³ Arpit Rajain, *Nuclear Deterrence in Southern Asia China, India and Pakistan* (New Delhi: Sage Publications, 2005), 30.

⁴ John W. Garver, "Sino-Indian Security Relations" in *Routledge Handbook of Asian Security Studies*, ed. Ganguly, Scobell and Liow (New York: Routledge, 2010).

⁵ Gen. Dipanker Banerjee (retd), "Addressing Nuclear Dangers: Confidence Building between India-China-Pakistan," *India Review*, Institute of Peace and Conflict Studies (IPCS), New Delhi, 9:3, (2010): 354.

⁶ Peter R. Lavoy, "South Asia," in *Arms Control Cooperative Security in a Changing Environment*, ed. Jeffrey A. Larsen (Colorado: Lynne Rienner Publishers, 2002), 241. According to Lavoy, after the tests in 1998, the subsequent steps each state has taken to expand and improve operational readiness makes the elimination of nuclear weapons in South Asia a futile goal. The important issues now are safety and security of weapons and strategic stability. The United States is now encouraging both states "to exploit the deterrence value of nuclear weapons."

transparency of doctrines in the context of minimizing nuclear risks. Moreover, it would also be useful to expand “the political space around strategic stability”⁷ by trust building and facilitating policy-level engagement on the concept and reality of strategic stability.

Stability is at the heart of nuclear deterrence and one of the ways in which this stability can be compromised is by the development of superior capabilities on one side through a process of vertical proliferation. It is generally accepted that a nuclear balance is achieved when “the attacked side can reply to the aggressor in kind and thus deter the attack from the outset.”⁸ The implication is that both sides should have a sound second strike capability that is apparent and which deters the other from initiating a nuclear strike thereby creating a stable nuclear deterrence relationship. It is apparent that India and Pakistan have not yet achieved what might be described as a reliable second strike capability as envisioned in the “triad” concept despite wanting to do so. Since neither has a clear decapitating first strike capability, possibly a mere rudimentary second strike capability may be assumed for both. The lack of associated second strike capabilities undermines the prospects for arms control in South Asia. Moreover, even if second strike capabilities were in place there are a number of factors in the Indo-Pakistani context that are likely to prevent any serious arms control talks between them. Among these beside six decades of animosity and distrust are the existing territorial disputes, India’s standing as an emerging global power and its geostrategic competition with China.⁹

The concept of “credible minimum nuclear deterrence,” which both India and Pakistan have declared to be their optimum nuclear ambition, lacks a clear consensus in terms of both definition and implications. Buzan defined minimum deterrence as “a secure second strike force of sufficient size to make threats of Assured Destruction credible.”¹⁰ Bundy, when reflecting on the Cuban missile crisis, made the case that, “even if one Soviet weapon landed on an American target, we would all be losers.”¹¹ Lebow and Stein argue that, “too much deterrence...can fuel an arms race that makes both sides less rather

⁷ Shaun Gregory and Maria Sultan, “Towards Strategic Stability in South Asia,” *Contemporary South Asia* 14:2, (2005): 140.

⁸ Yehoshafat Harkabi, *Nuclear War and Nuclear Peace* (New Brunswick: Transaction Pub., 2008), 191.

⁹ David M. Malone and Rohan Mukerjee, “India and China: Conflict and Cooperation,” *Survival* 52, no.1 (February-March 2010).

¹⁰ Barry Buzan, *Strategic Studies: Military Technology and International Relations* (London: Macmillan, 1987), 193.

¹¹ “Retrospective on the Cuban Missile Crisis,” Atlanta Ga. Participants Dean Rusk, McGeorge Bundy, Edwin Martin, Donald Wilson, and Richard E. Neustadt, January 22, 1983.

than more secure and provoke the aggression that it is designed to prevent.”¹² Baylis supports the case for minimum deterrence on the grounds that fewer weapons deployed “in a less threatening manner” are less dangerous in terms of accidents and are less provocative.¹³ He argues that such a situation is “finite” and does away with a nuclear arms race, assists the economy and helps to maintain the traditional role of nuclear weapons.¹⁴ Thus conceptually, it is a matter of debate as to what credible and minimum deterrence would actually constitute in a nuclear deterrence relationship. Should the mere presence of a few nuclear weapons and delivery systems constitute a minimum deterrent, or would “credible minimum deterrence” necessitate an arsenal that is constantly being quantitatively and qualitatively upgraded in line with perceived improvements in an opponent’s capabilities?

However, the important point to note here is that the Indian establishment, along with most Indian analysts, seems to have little respect for the concept of minimum deterrence and questions whether a credible minimum deterrent would be capable of dissuading nuclear blackmail and second-strike nuclear retaliation. They argue instead that the history and logic of nuclear weapons shows little respect for minimalists.¹⁵ This has also been tied into the argument that China is building up naval forces both in the Pacific and the Indian Ocean and its increasing number of bases encircling India, need to be countered.¹⁶

Although the South Asian situation is different from the nuclear stand-off during the Cold War, there is no consensus within India and Pakistan or between the two countries on what the concept of “credible minimum deterrence” actually constitutes. Pakistan needs to maintain a “minimum credible nuclear deterrence” against a larger country, India, whose nuclear capabilities are expanding at a much faster rate than its own. For its part India needs to maintain a “minimum credible nuclear deterrence” against Pakistan and China, and may eventually seek to maintain an arsenal somewhat on a par with the “senior” nuclear states in tandem with its emerging status as a global power.

¹² Richard N. Lebow and J.G.Stein, *We All Lost the Cold War* (Princeton: Princeton University Press, 1994), 368.

¹³ John Baylis, “The Search for a Third Way,” in *Alternative Nuclear Futures Role of Nuclear Weapons in the Post-Cold War World*, ed. Baylis and O’Neil (Oxford: Oxford University Press, 2000), 79.

¹⁴ Ibid.

¹⁵ See example in Ramesh Thakur, “The South Asian Nuclear Challenge,” in *Alternative Nuclear Futures Role of Nuclear Weapons in the Post-Cold War World*, ed. Baylis and O’Neil (Oxford: Oxford University Press, 2000), 122.

¹⁶ Guy Arnold, “India in the New South Asia: Strategic Military and Economic Concerns in the Age of Nuclear Diplomacy; China, India and International Economic Order,” *Round Table*, 2011, 561.

While Pakistan does not aim, and cannot afford, to indulge in a nuclear arms race with India, it cannot be argued that there is no quantitative arms race between the two states because the numbers of warheads and the quantity of fissile material is growing on both sides in line with their respective calculations vis-à-vis “minimum credible nuclear deterrence.” The nuclear arms race in South Asia is not purely a quantitative matter and encompasses a qualitative dimension where the nuclear weapons and delivery systems on both sides are improving in quality as well. Indeed, the qualitative aspect is arguably the most dangerous for strategic stability. For example, weapons that are particularly suited for second strike retaliation contribute to stability because they merely contribute to invulnerability through such measures as the hardening of missile sites, the improvement of early warning devices, the development of submarine-based systems, and the perfection of solid-fuel to enable rapid missile launch.¹⁷ Of course, the specific context in which technical advancements are made will determine whether stability is strengthened or undermined.

Pakistani analysts have pointed out that to maintain a credible and minimum nuclear deterrent Islamabad will have to keep pace with technological advances in the opponent’s anti-ballistic missile systems. Matinuddin argues that, “the defender’s capability of intercepting hostile aircraft and missiles must also be taken into consideration when determining how many weapons could be expected to penetrate the enemy’s air space [and] minimum deterrence, therefore, cannot remain static, but must keep pace with the technological advances in enemy anti-ballistic missile systems.”¹⁸ Thus if India is categorized as “a status quo” power—as opposed to Pakistan which is often referred to as a “revisionist” state because of its adventures in Kashmir—and actively pursues the acquisition and deployment of a Ballistic Missile Defence System (BMD), it would only strengthen stability and make India’s deterrent more credible. However, such an increase in the credibility of one state’s arsenal is likely to increase the sense of insecurity felt by other countries notably Pakistan.

Pakistan appears to be consistently endeavouring to keep up with India in terms of nuclear weapons development and this explains why its bomb-making infrastructure is growing and why Islamabad wants to stall negotiations on a Fissile Material Cut-off Treaty (FMCT) at the Conference on Disarmament in Geneva. Islamabad’s stance on global arms control treaties is inevitably tied to India and Pakistan will only consider signing up to agreements that India becomes a party to. That India does not appear ready to

¹⁷ Yehoshafat Harkabi, *Nuclear War and Nuclear Peace* (New Brunswick: Transaction Publishers, USA, 2008), 192.

¹⁸ General retired Kamal Matinuddin, *The Nuclearization of South Asia* (Karachi: Oxford University Press, 2002), 175.

sign and ratify the Comprehensive Test Ban Treaty (CTBT) or FMCT, which Pakistan is actively opposing at the Conference on Disarmament, is demonstrative of the hurdles in this area.¹⁹

Shortly after the two states became overt nuclear powers in 1998, in an interview with *India Today*, the US Deputy Secretary of State, Strobe Talbot, highlighted the challenge vis-à-vis both states espousing credible minimum deterrence when he stated that:

The [Indian] Prime Minister on several occasions used the phrase “credible minimum deterrence.” Now the two adjectives, credible and minimum, need to be reconciled. It needs to be credible in order to deter. But it needs to be minimum in order not to provoke a devastating and expensive arms race.²⁰

Two and half years later the Bush administration appeared to move away from this type of assessment when, on September 22, 2001, the United States lifted nuclear sanctions on both India and Pakistan due to the competing priorities of conducting business with India, maybe also to contain China, while Pakistan as an ally was also crucial in conducting Operation Enduring Freedom in Afghanistan and as a frontline state in the “war on terror.” The US-India strategic partnership followed soon afterwards which appeared to send a signal to India that it should determine its own maximalist, or minimalist, approach to nuclear deterrence.

From the time when the United States imposed sanctions on both India and Pakistan after the nuclear tests of May 1998, to the time that its policies started to change after sanctions were lifted in September 2001, Washington had a policy of urging both states to abide by a “restraint regime.” The United States also continued to probe India on what it meant by minimum deterrence and how this might be defined in terms of warhead numbers. American Ambassador to India, Richard Celeste, asked: “How many warheads does India need to have a minimum nuclear deterrent?”²¹

Indian nuclear policy has been heavily influenced by strategic planner K. Subramanyam who has stated that:

Minimum deterrence is not a numerical definition, but a strategic approach. If a country is in a position to have a survivable

¹⁹ M. Krepon, “Looking Back: The 1998 Indian & Pakistani Nuclear Tests,” *Arms Control Today*, May 2008.

²⁰ Quoted in Peter R. Lavoy, “South Asia” in *Arms Control Cooperative Security in a Changing Environment*, ed. Jeffrey A. Larsen (Colorado: Lynne Rienner Publishers, 2002), 251.

²¹ The US Ambassador to India Richard Celeste’s statement reported in Indian national daily. See K.V. Krishnaswamy, “Celeste Defends Demand on Deterrence,” *Hindu*, January 23, 1999.

arsenal, which is seen as capable of exacting an unacceptable penalty in retaliation, it has a minimum deterrence (as) opposed to an open-ended one aimed at matching the adversary's arsenal in numerical terms.²²

This argument has been challenged by others including Tellis who feels that, "what the policy makers are attempting to suggest through their claims that deterrence is not about numbers is merely that the number of nuclear weapons judged to be essential to the Indian security is not something they are willing to disclose to their own body politics, to their adversaries, or to any other interested interlocutors, including the United States."²³

Searching Regional Credible Minimum Deterrent

India

Some Indian observers have not only affirmed that credible minimum deterrence must be based on warhead numbers; they have offered calculations for how many would be sufficient to make the concept workable. For example, Sibal has argued that "for deterrence to be credible, it has, ultimately to be based on numbers."²⁴ However, the government of India has sought to deny this argument stating that it is not "expansive or aggressive... [but merely trying] to deter present and future threats," and that it has even explicitly accepted nuclear inferiority vis-à-vis China.²⁵ However this is negated by more recent analysis where China is part of the equation and analysts are of the view that "as long as arsenals remain in the low hundreds" for all three states it does "not make much difference."²⁶ It is also acknowledged that China has a relatively small arsenal though it has dabbled with the conception of "limited deterrence."²⁷

Generally there is a lack of consensus among Indian analysts on what the size of the Indian arsenal should be. General K. Sunderji is of the view that for dealing with nuclear Pakistan, India merely needs "up to 1 MTE (say, 50 x 20 kt weapons). Even for deterring a large country one is most unlikely to

²² K. Subrahmanyam, "Not a Numbers Game: Minimum Cost of N-Deterrence," *Times of India*, December 7, 1998.

²³ Ashley J. Tellis, *India's Emerging Nuclear Posture: Between Recessed Deterrent and Ready Arsenal* (California, USA: RAND, 2001), 382.

²⁴ Kapil Sibal, "Toy Gun Security: Flaws in India's Nuclear Deterrence," *Times of India*, January 13, 1999.

²⁵ "Deterrence to be Evaluated Time to Time: Govt," *Economic Times*, December 17, 1998. Also, Manoj Joshi, "India Must Have Survivable N-Arsenal," *Times of India*, April 30, 2000.

²⁶ Gen. Dipanker Banerjee (ret'd), "Addressing Nuclear Dangers," 357.

²⁷ Rajesh Basrur, "Two Decades of Minimum Deterrence in South Asia: A Comparative Framework," *India Review*, 9:3 (2010): 305.

require more than 4 MTE.”²⁸ Jaswant Singh states that, “the question of an arsenal larger than that of country X or Y (is) a non-question.”²⁹ Vijay Nair seems to have worked out in depth what India requires in terms of nuclear weapons by identifying exactly what India needs to target in Pakistan as well as China:

The ideal configuration of warhead numbers and yield would be two strikes of one megaton each for metropolitan centers and port facilities; two strikes of 15 kt each for battlefield targets; one strike with a yield of between 200 and 500 kt each for dams; one strike of 20 to 50 kt each for military airfields; and one strike each of 15kt for strategic communication centers.³⁰

This, according to Nair, would amount to about an overall Indian arsenal of 132 weapons of varying size.³¹ General V.N. Sharma, former Indian Army Chief of Staff, suggests that “around 50 bombs should do...going the whole hog.”³² Singh alternatively argues that:

It is difficult to visualise an arsenal with anything more than a double-digit quantum of warheads...it may be prudent to even plan on the basis of a lower end figure of say 2-3 dozen nuclear warheads to the end of 10-15 years...deterrence decay factors will lead to the requirements of a smaller arsenal rather than a larger one.³³

Bharat Karnad has estimated that India needs a nuclear force of well over 300 weapons by the year 2030, most of which must be high-yield thermonuclear weapons.³⁴ According to Perkovich, because India feels it is ahead of Pakistan with regards to warhead yields and numbers and also because it is not expecting a serious competition with China in the near future, Delhi is not going to speed up its warhead production too seriously and may settle for 150 or so weapons for the time being.³⁵

²⁸ K. Sunderji, “Nuclear Deterrence: Doctrine for India - Part 1,” *Trishul* 5:2 (December 1992): 48. Sunderji has also later stated that he feels that “a low estimate of 90 weapons and an upper estimate of 135 weapons would be reasonable” because due to opacity and mobility a maximum number would survive. See Sudarji, “Imperatives of Indian Minimum Nuclear Deterrence,” *Agni*, 2:1 (May 1996).

²⁹ “India Not to Engage in a N-Arms Race: Jaswant,” *Hindu*, November 29, 1999.

³⁰ Vijai Nair, *Nuclear India* (New Delhi: Lancer International, 1992), 170.

³¹ *Ibid.*, 181.

³² Raj Chengappa and Manoj Joshi, “Future Fire,” *India Today*, May 25, 1998, 23.

³³ Jasjit Singh, *A Nuclear Strategy for India* (New Delhi: Knowledge World, 1998), 315.

³⁴ Bharat Karnad, “A Thermonuclear Deterrent,” in *India's Nuclear Deterrent Pokhran II and Beyond*, ed. Amitabh Mattoo (New Delhi: Haranand Publications Pvt. Ltd., 1999), 143.

³⁵ George Perkovich, “South Asia: A Bomb is Born,” *Newsweek*, January 24, 2000.

Pakistan

There has been comparatively little debate generated on the requirements of credible minimum deterrence in Pakistan because of the *de facto* “closed loop” of military thinking and decision-making on nuclear issues in that country during periods of both civilian and military rule.³⁶ The most recent cited example in the nuclear context is the vetoing by the Pakistan military of President Zardari’s plan to reduce the nuclear readiness as a good will gesture to India.³⁷ As its stated policy Pakistan has vowed to develop its nuclear missiles and related strategic capability to maintain the minimum credible deterrence vis-à-vis India which it views as embarked on major programmes for nuclear weapons, missiles, anti-missiles and conventional arms acquisition and development.³⁸ This is also viewed as backdrop for the asymmetrical escalation posture that Pakistan seems to have adopted in that it fully integrated nuclear weapons into its military forces, credibly threatening first use of nuclear weapons if Pakistan’s territorial integrity was breached³⁹ and is also read within Pakistan as having successfully deterred India during several crises.

Pakistan’s strategic deterrence strategy is reported to be based around five core elements: an effective conventional fighting force; a minimum nuclear deterrence doctrine; an adequate stockpile of nuclear weapons and delivery systems; survivable strategic forces, and robust strategic command and control.⁴⁰ Obviously, the shorter the period of time that Pakistan’s conventional military forces—notably the Pakistan Army and Air Force—could hold out in a war, the quicker the NCA would be ordered to deploy and possibly use nuclear weapons.⁴¹

The optimum size of any nuclear force required by Pakistan is a question that several observers have sought to address. Jones has made a series of calculations and concluded that even though Pakistan will target cities, this type of targeting policy does not guarantee the country’s survival as an

³⁶ Shaun Gregory, “Nuclear Command and Control in Pakistan,” *Defense and Security Analysis*, 23:3, 317.

³⁷ Stephen P. Cohen, “Coping with a Failing Pakistan,” *NOREF Policy Brief*, no.1 (February 2011): 3.

³⁸ Explanation of Vote by Ambassador Munir Akram, Permanent Representative of Pakistan to the United Nations, on the Security Council Resolution on “Non-Proliferation of Weapons of Mass Destruction,” April 28, 2004.

³⁹ Vipin Narang, “Posturing for Peace? Pakistan’s Nuclear Postures and South Asian Stability,” *International Security* 34, no. 3 (2010): 56.

⁴⁰ Peter Lavoy, “Islamabad’s Nuclear Posture: Its Premises and Implementation,” in *Pakistan’s Nuclear Future Worries beyond War*, ed. Henry Sokolski (US: US Army War College, 2008), 131.

⁴¹ *Ibid.*, 133.

independent country because under some circumstances India may opt to attack and pay the price.⁴² The calculations made by Jones are as follows:

To be able to kill 50 percent of India's population might require 100 times the number of weapons it now has...seven-fold difference in population...seven times the number of weapons that India could readily deliver...and increase its current stockpile by about seven times. Increases of this magnitude are out of the question, as they would require proportionate increases in Pakistan's ability to produce fissile material, as well as similar increases in its missile forces.⁴³

Jones further calculates that if Pakistan wanted to destroy six Indian ground force divisions (nine weapons per division) and the aircraft on 10 airfields (three weapons per airfield), Pakistan would need to use 84 weapons. Keeping its current stockpile in reserve to threaten Indian cities, the extra 84 weapons would require at least a doubling of Pakistan's current stockpile. Thus, he concludes that Pakistan's "current nuclear forces have serious limitations with regard to the range of situations where they could successfully protect Pakistan's independent existence."⁴⁴

Despite this type of independent analysis it remains unclear how the "minimum" deterrent is characterized by the military and strategic enclave in Pakistan which is responsible for decision-making on nuclear and military issues. Pakistan has officially adopted the same style of diplomatic language and policy as India leaving things open-ended and undefined, and keeping in view what India does with its own nuclear and conventional arsenal. However, it is safe to assume that Pakistan will steadily, but probably more slowly, endeavour to acquire a second strike capability. This planned capability is unlikely to be as ambitious as India's, at least to begin with, which is based on a triad. In the long term Pakistan may want to maximize its second strike options keeping in view a number of evolving factors including budgetary issues and Indian strategic acquisitions and developments. According to Joeck, "it is incumbent on India's and Pakistan's political leaders to address the dangers associated with their recent arms developments forthrightly. The logic of minimum deterrence is insufficient to ensure that war is avoided."⁴⁵

Thus credible minimum deterrence is a rather unwieldy concept where a combination of the two words "credible" and "minimum" complicates the implication that "less may be better." The fact that the concept has different

⁴² Gregory S. Jone, *Pakistan's 'Minimum Deterrent' Nuclear Force Requirements* (Carlisle, USA: Strategic Studies Institute, 2008), 96.

⁴³ *Ibid.*, 98.

⁴⁴ *Ibid.*, 97.

⁴⁵ Neil Joeck, "Nuclear Relations in South Asia," in *Repairing the Regime: Preventing Spread of Weapons of Mass Destruction*, ed. Joseph Cirincione (Washington DC: Carnegie Endowment for International Peace, 2000), 144.

connotations and implications for different audiences adds to the complexity. The concept is used as a blank term by the Indian and Pakistani governments which, in reality, seem to be following rather more of a “maximum” approach so that in the event of war they are not only well equipped but well prepared. The value of the concept, then, lies more in what it conceals rather than what it reveals, providing yet more space for both sides to hide behind terms that are ambiguous, rather than sharing more information with the other.

Indeed, it could be argued that the vagueness of the term is a major source of instability in the Indo-Pakistani nuclear deterrence relationship. To remove some of the risks a more precise and mutually agreed definition of what constitutes “minimum” could potentially stabilize the situation. This would require increased dialogue between the two states which, as already discussed, has been sporadic and rather limited in aim in the nuclear sphere. The aims as spelt out at the Lahore Summit have not been followed with regards to the nuclear dialogue. In addition to differences in interpretation of what constitutes a minimum deterrent, risks are also evident from the different calculations related to whom these states are seeking to deter. This, in turn, leads to different interests related to the type of arms control that is required. Whereas India so far seems to be merely interested in risk reduction, Pakistan is interested in restraining the speed at which India’s nuclear capabilities are developing. In the absence of sustained and systematic communication between India and Pakistan on their respective positions and perspectives it has not been possible for them to explore avenues that might help to advance the interests of both states.

Finding Common Ground

The above section flags some relevant nuclear factors that contribute to the stagnation of nuclear détente between the two states. This concept of “credible minimum nuclear deterrence” is used to fuel uncertainty and instability in nuclear proliferation in the region in tandem with the continued opacity of the nuclear weapons programmes in the post-1998 nuclear test era. Other factors, such as Kashmir and terrorism also affect the bilateral relationship between the two states and were there to be substantive movement on these issues, the nuclear issues would benefit radically.⁴⁶

At the micro level measures such as missile test notifications, which could be extended to include observers from the other side to be present during some tests, may help to remove some anxieties. Another option could be for both states to decide upon the size and shape of a corridor along the border area to be declared as being free of nuclear weapon deployments. Such

⁴⁶ “Optimism and Obstacles in India-Pakistan Peace Talks,” *Peace Brief* 98, United States Institute of Peace (USIP), Washington DC., USA, July 15, 2011.

an agreement could be monitored using satellite imagery and, at a later stage, the two states could consider establishing a joint monitoring system whereby each state sees what the other one does. It should be mentioned that no technical measures exist to verify the non-deployment of nuclear weapons. Therefore, should such an agreement arise where the two sides agree to areas of non-deployment it would largely have to be based on trust, at least in the initial phases, and so may carry some acceptability for both states.

Several Indian analysts support the view that some kind of measures can be worked out between India and Pakistan that go beyond small “frivolous” little Confidence Building Measures (CBMs) like missile warning. These could include reducing the three strike Corps to two; up-grading the non-targeting lists; agreeing to create more transparency within doctrines; a Non First Use pact between the two states; taking out the short range missiles like Prithvi and Hatf from the arsenal of the two countries; making Nuclear Risk Reduction Centres and de-alerting and de-mating the weapons systems.⁴⁷

In fact, a number of senior Indian strategists believe that though arms control in the multilateral context has died out, it is workable between India and Pakistan in the nuclear context since it is a military strategy of what is possible. These approaches could help to improve communication between India and Pakistan which could lead to greater stability in their deterrence relationship. Recognizing the differences in approach to nuclear CBMs in India and Pakistan and finding ways to work around them is likely to be the key to realizing effective nuclear CBMs in South Asia and consequently for achieving greater stability in nuclear deterrence.

It is maybe even significant for India and Pakistan to engage in a macro level discussion taking into account the general role of nuclear weaponry in South Asia in the future. India has held the position consistently, both before and after 1998 that it is not prepared to talk about arms control or disarmament at the regional level unless there is significant progress on arms control and disarmament at the global level. Pakistan, on the other hand, has long had an India-centric approach predicating all global and regional arms control proposals upon India’s policy and behaviour. It has put forward regional proposals and advocated potential regional solutions to nuclear proliferation which India has rejected. Consequently, the two states have different views when it comes to the possibility of achieving progress on arms control at the regional level. The involvement of China in this regard may be particularly useful especially as Chinese scholars urge China to take an approach that fosters peaceful co-existence more than national sovereignty; the two states carry out joint military exercises and India has used its defence

⁴⁷ Based on author’s interviews with several senior Indian strategists including Air Commodore Jasjit Singh (retd); Rear Admiral Raja Menon (retd); Brigadier Gurmeet Kanwal (retd).

budget in the recent past to aid China's combat of Severe Acute Respiratory Syndrome (SARS).⁴⁸

The opacity surrounding the nuclear weapons programmes of India and Pakistan also acts as an impediment to arms control efforts in the region. Lavoy is of the view that, "nuclear opacity impeded Pakistani and Indian efforts to openly propose, negotiate, and accept nuclear arms control agreements, even though that condition might have enabled policymakers to formulate measures in private that would be politically unpopular if publicized."⁴⁹ Consequently, although opaque nuclear proliferation may have constrained the arms race between India and Pakistan, it has also inhibited Indian and Pakistani leaders from cultivating domestic support for arms control. The absence of such support, and the absence of any meaningful dialogue between the two states on nuclear issues, also helps to explain the non-communication situation where the chances of nuclear arms control proposals recede further. While espousing this concept publicly India and Pakistan in reality appear to have an open-ended agenda for their respective nuclear arsenals with both sides working towards a "credible" second strike capability. Moreover the nuclear arsenals in both states, as illustrated in this article, are undergoing a quantitative and qualitative improvement.

The "strategic enclaves" comprise the nuclear establishment and the defence organizations. This enclave is more significant in India and Pakistan than the military complex alone because of its "high-leverage technological systems" (nuclear weapon systems) and its political and economic support from the state, as well as the "minimal accountability" to the state with regard to decisions.⁵⁰ Unlike the military, which in India has been subservient to civilians and civilian control, the strategic enclave is the only entity that fully understands India's strategic capabilities and this is what makes it "a force to reckon with."⁵¹ However, on both sides of the border the determination and definition of credible minimum is arbitrarily judged by these enclaves in actual terms, with little if any, domestic accountability.

Finally, there does not appear to be substantial change in the rationales of the leading five nuclear states to retain and continue developing their nuclear arsenals despite the current "global zero agenda." Similarly, there has been no change in the rationales of India and Pakistan to stop developing their nuclear arsenals; instead the dictates of deterrence force them to continue weapons' development. The inherent mistrust and hostility that exists between

⁴⁸ Shen Dingli, "Building China-India Reconciliation," *Asian Perspective* 34, no. 4 (2010): 143.

⁴⁹ Peter R. Lavoy, "South Asia," 245.

⁵⁰ *Ibid.*, 233.

⁵¹ T. V. Satyamurthy, "India's Post-Colonial Nuclear Estate," *Radical Science* 14, (1984): 106-116.

India and Pakistan is also largely responsible for their aversion to any discussion of nuclear arms control.

Given India's global nuclear ambitions, Delhi is averse to any arms control discussions and this means that regionally-motivated Pakistan may continue seeking to catch up with the growing but globally-oriented Indian deterrent. According to Indian experts, nuclear arms control between the two states is possible but "India has to first assure Pakistan that it is prepared to come to a nuclear arms control agreement first and Pakistan must assure India that it is not seeking parity but balance."⁵² If both states are unable to clarify basic concepts, and or to engage in a systemic discussion of them, then the past experience will persist and there will be little or no movement forward towards a better managed and more stable nuclear deterrence relationship. ■

⁵² Author's interview with a senior Indian defence analyst and author.