

South Asian Nuclear Thresholds: Repercussions of Cold Start Doctrine and Tactical Nuclear Weapons

*Malik Qasim Mustafa**

Abstract

It can be argued that the overt nuclearisation of South Asia has averted a major military confrontation between India and Pakistan. However, it is difficult to ascertain whether nuclear weapons would totally eliminate chances of a future conventional war escalating into a nuclear exchange. The deep-rooted territorial disputes, water disputes, terrorism, role of non-state actors, and the growing Indian nuclear and conventional capabilities can still cause a major conflict in South Asia. India, using its threat sensitivities as a pretext to punish Pakistan, could launch a limited offensive under its aggressive Cold Start Doctrine (CSD), and can cross Pakistan's nuclear thresholds. Pakistan, being sensitive to Indian hostility and its conventional superiority, could stop any Indian offensive by retaliating with tactical nuclear weapons (TNWs). Therefore, such mutual crossing of nuclear thresholds could escalate into an all-out nuclear war, which could eventually result in a nuclear winter in South Asia, with catastrophic global consequences. In this regard, this paper tries to find answers to the question that what would be the repercussions of CSD and TNWs on South Asian nuclear thresholds? And what are the prospects of avoiding a nuclear war in South Asia? Finally, the study urges that the technological and doctrinal advancement in nuclear weapons in South Asia should be aimed at ensuring strategic stability, not war fighting.

Keywords: Nuclear thresholds; nuclear war; Cold Start Doctrine; Tactical Nuclear Weapons; conventional asymmetry

* Malik Qasim Mustafa is a Senior Research Fellow at the Institute of Strategic Studies, Islamabad.

Introduction

In South Asia, two rival nuclear neighbours, India and Pakistan, are burdened with the legacy of their troubled past, ideological hostilities, territorial disputes, water disputes, and terrorism. India, being the larger adversary, has always tried to dominate this region by coercing its smaller neighbour, Pakistan. Despite fighting wars and facing numerous eyeball-to-eyeball military confrontations, both states are in a constant military competition to address their insecurities vis-à-vis each other. This hostility has made the region even more volatile, and it can trigger a limited conflict, which could escalate into a full-scale nuclear exchange. There are risks that India, citing its insecurities and its declared intent to “teach Pakistan a lesson,” may launch a limited military offensive under its CSD. Meanwhile Pakistan, being sensitive to the Indian conventional superiority and its hostile intentions, could retaliate with all possible means, including its TNWs, to stop Indian military offensive. The use of nuclear weapons, at any level, would have devastating consequences for this region, and could spiral into a more deadly strategic exchange. Eventually, this crossing of nuclear thresholds could lead to an all-out nuclear war between India and Pakistan, with catastrophic consequences for the entire region.

The main theme and argument of this study is based on a notion that the offensive CSD, also known as Proactive Strategy, and India’s relentless efforts to invigorate its offensive capabilities, clearly indicate its hostile intentions towards Pakistan; whereas development of TNWs by Pakistan is viewed as a direct response to counter CSD for a matching response to India’s limited offensive intentions.¹ Pakistan also views its TNWs capability as a “weapon of peace,” because it can deter any Indian offensive by ensuring massive destruction of its advancing battle groups.² This notion underlines that any violation of Pakistan’s nuclear thresholds can result in catastrophic consequences, even at tactical levels, and can lead to a reciprocal strategic response from both sides. Thus the development of offensive CSD and defensive TNWs has further lowered the South Asian nuclear thresholds where there is no room for miscalculating each other’s redlines. Therefore, any misadventure in terms of a limited conflict could escalate into an all-out nuclear war.

South Asian Nuclear Thresholds: Repercussions of Cold Start Doctrine and Tactical Nuclear Weapons

The available literature on CSD and TNWs mainly identifies their operational and technical aspects; overall impact on the regional deterrence stability; and lessons and relevance drawn for South Asia from US and Russian TNWs experience. In order to maintain ambiguity, South Asian nuclear thresholds have not been discussed openly by India and Pakistan; as a result, significant literature with direct references to CSD and TNWs is not available. Swaran Singh and Gurmeet Kanwal have analysed the developments in Indian nuclear doctrine.³ Paolo Cottaramusino and Murizio Martellini have given an overview of Pakistan's initial nuclear thresholds. Although these thresholds are old and lack relevance to the present day realities, these references will be used in this study to better understand the impact of CSD and TNWs.⁴ Peter R. Lavoy and Bruno Tertaris have talked about South Asian nuclear weapons postures and contested the ambiguity of Pakistan's initial nuclear thresholds.⁵ Michael Krepon has argued that the evolving nuclear postures of India and Pakistan will exacerbate security dilemmas.⁶ Shashank Joshi, Walter C. Ladwig III, and Feroz Hassan Khan have analysed CSD and TNWs and their implications for strategic stability.⁷ However, very rudimentary information is available as a direct reference to the operationalisation of the CSD and TNWs in a battlefield/ limited-war scenario and its impact on the existing South Asian nuclear thresholds. Therefore, this study has made an attempt to contribute to the existing literature by addressing some of these gaps. The study, by assuming that CSD and TNWs are operational options available to India and Pakistan, will test existing South Asian nuclear thresholds under a hypothetical near-future capability scenario. These scenarios will help to understand the operationalisation of CSD and TNWs in a limited/full-scale war, that how CSD and TNWs will play out if deterrence fails. It will also highlight the impact on existing nuclear thresholds in this region. This effort will contribute to the existing literature to focus academic debate on future implications of CSD and TNWs.

In order to address main questions, the study is divided into three sections. The first section will give an overview of the South Asian nuclear thresholds. The second will identify the impact of CSD and TNWs on existing nuclear thresholds by drawing a hypothetical near-future capability scenario of India-Pakistan. The final section will list

some recommendations, based on prospects of avoiding a nuclear war in the region.

Overview of the South Asian Nuclear Thresholds

In the South Asian context, the India-Pakistan nuclear thresholds, like their nuclear doctrines, are either deliberately left ambiguous or so vague that they do not draw really precise redlines. Paradoxically, India, when it initially outlined its draft nuclear doctrine of Credible Minimum Deterrence (CMD) with a No-First Use (NFU) posture in 1999, highlighted that it has the right to respond with counter measures against any threat of use of nuclear weapons and can even punitively retaliate with nuclear weapons to “inflict damage unacceptable to the aggressor,” if India or its forces were attacked with nuclear weapons.⁸ Later in 2003, the Indian Cabinet Committee on Security (CCS) while revising and officially declaring its open-ended CMD doctrine maintained that: “Nuclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere.”⁹ The CCS also explained that the response to first strike would be massive and unacceptable. However, India failed to maintain its earlier strict NFU policy by declaring that in the event of a biological and chemical attack against India or its forces anywhere, it would retaliate with nuclear weapons.¹⁰ By making CMD a dynamic concept, India has made its doctrine ambiguous and vague, because it has not defined any upper limit of nuclear warheads for the term “minimum” in its nuclear doctrine. India has been constantly adding to its nuclear and missile arsenals and it is even developing the naval leg of its nuclear triad. Furthermore, after the Indo-US nuclear deal, India would be able to develop more nuclear warheads. Therefore, the Indian CMD by no means can be considered minimum.

Since the failure of India’s 2001 “Operation Parakram,”¹¹ India has embarked upon a campaign to acquire a status of maritime and continental entity.¹² India also wants to punish Pakistan through a limited war, and as a result, without taking into account deterrence stability dynamics, it has been constantly advancing its nuclear weapons capability and investing heavily in its military modernisation drive. As Singh pointed out that from 2004-09, India, without revising or debating

its nuclear doctrine, has operationalised its nuclear deterrence.¹³ This reflects that instead of focusing on deterrence and conventional stability in South Asia, India is more focused on deterrence instability and conventional imbalance, especially after the introduction of CSD. However, Indian officials and nuclear experts have now started a debate to review CMD doctrine by raising concerns about India's NFU posture, credibility of massive retaliation response, and use of nuclear weapons against chemical or biological attack.¹⁴ Before the 2014 Indian elections, exploiting this criticism as an opportunity, the Bharatiya Janata Party (BJP) made a commitment in its Party Manifesto to review and update Indian CMD doctrine in accordance with existing realities.¹⁵ Any revision of the Indian CMD doctrine by the BJP's Government is still awaited, and it is likely that India may shift away from its NFU posture. In principle, in its 2003 CMD, India did not fully adhere to its NFU posture, and in the future an explicit deviation from this posture could undermine deterrence-based stability in the region.

On the other hand, Pakistan's nuclear capability is India-centric, and its vaguely known nuclear thresholds are derived out of its war-prone past with India, the nuclear weapons capabilities of India, and its growing conventional disparities vis-à-vis India. Pakistan's nuclear thresholds are not formally declared, but they are mainly articulated in official policy statements. Pakistan even opted for nuclear capability due to its India-centric security approach, as in 1974, then-Prime Minister of Pakistan Zulfikar Ali Bhutto said, "Ultimately, if our backs are to the wall and we have no option, in that event this decision about going nuclear will have to be taken."¹⁶ Such a policy was later accepted as an inherent policy choice for Pakistan in pre-test times.¹⁷ Later, in the early hours of May 28, 1998, in the anticipation of an Indian attack on its nuclear installations, Pakistan clearly warned India of swift and massive retaliation with unforeseen consequences.¹⁸

Soon after the 1998 nuclear tests, Pakistan made it clear that its nuclear capability is meant for self-defence, not for any offensive purposes.¹⁹ Pakistan's Prime Minister Nawaz Sharif further clarified that "these weapons are to deter aggression, whether nuclear or conventional."²⁰ In 2002, Pakistan's ex-President General Pervez Musharraf highlighted the possibility of using nuclear weapons as a last

resort if Pakistan is threatened with extinction.²¹ Pakistani leadership made its intentions clear that it will use these weapons first. However, they continued to enjoy the advantage of ambiguity, as Zafar Khan pointed out that "...it is not clear that when, where, or how" Pakistan would use its nuclear weapons.²²

In addition to official policy statements, the most-cited open-source estimate of Pakistan's nuclear thresholds is the report of two Italian experts, Paolo Cotta-Ramusino and Murizio Martellini. They stated that "Pakistani nuclear weapons will be used, according to Gen. Kidwai, only 'if the very existence of Pakistan as a state is at stake.'"²³ The Italian experts further added that "Gen. Kidwai explained it as following:

Nuclear weapons are aimed solely at India. In case that deterrence fails, they will be used if

- a. India attacks Pakistan and conquers a large part of its territory (space threshold)
- b. India destroys a large part either of land or air forces (military threshold)
- c. India proceeds to the economic strangling of Pakistan (economic threshold [which includes a naval blockade and stopping of the water of the Indus river])
- d. India pushes Pakistan into political destabilisation or creates a large scale internal subversion in Pakistan (domestic destabilisation [considered as distinct possibilities])."²⁴

However, these claims were later denied by Gen. Kidwai, to enhance ambiguity on these grounds that "there cannot be concrete redlines for the use of nuclear weapons."²⁵ Most recently, maintaining that ambiguity, Gen. (ret.) Kidwai in conversation with Peter Levoy at the Carnegie International Nuclear Policy Conference on March 23, 2015, clearly outlined that the development of TNWs has closed the doors of war being used as an instrument of policy and have blocked the avenues of conventional war by others, by strengthening Pakistan's deterrence capabilities.²⁶ He argued that the enemy was trying to find a space in Pakistan's nuclear weapons inventory to launch a conventional war under a perception that Pakistan would not

South Asian Nuclear Thresholds: Repercussions of Cold Start Doctrine and Tactical Nuclear Weapons

pick up the courage to use its strategic or operational level nuclear weapons. He termed this gap as an absence of complete spectrum of deterrence, but TNWs have filled that gap and completed Pakistan's "full-spectrum deterrence" capability.²⁷ This indicates that Pakistan has clearly deterred its enemy at all levels, including the tactical one. This also reflects the ambiguity of Pakistan's nuclear thresholds, that the enemy will remain uncertain even at tactical level.

Another important study to vaguely determine Pakistan's nuclear thresholds was done by a former Pakistan Air Force (PAF) officer Air Commodore Tariq Mahmud Ashraf. He highlighted the following possible nuclear retaliation parameters:

- "First-use of nuclear weapon by India against Pakistan.
- Penetration of Indian forces beyond a certain defined line or crossing of a river.
- Imminent capture of an important Pakistani city like Lahore or Sialkot.
- Destruction of Pakistan's conventional armed forces or other assets beyond an acceptable level.
- Attack on strategic targets like dams or nuclear installations like Tarbela, Mangla, Kahuta, Chashma etc.
- Imposition of blockade on Pakistan to an extent that it strangulates the continued transportation of vital supplies and adversely affects the war-waging stamina of the country.
- Indian crossing of Line of Control (LoC) to a level that it threatens Pakistan's control over Azad Kashmir."²⁸

The two sets of Pakistan's nuclear thresholds identified above seem identical except some clarity and the addition of new parameters. Many nuclear experts have tried to remove ambiguities surrounding these nuclear thresholds, which seem credible, but are still ambiguous and vague enough to retain an element of uncertainty in the adversary's mind.²⁹ There is a consensus on space threshold; many believe that the penetration of Indian forces from 50-100 kilometers into Pakistani territory could result in a nuclear response, as Pakistan's major urban centers and lines of communications are within that range.³⁰ In response

to Indian strike or preemptive attack on strategic or conventional assets, Pakistan's response is already clear. However, this requires survivability of Pakistan's nuclear assets and an assured second strike capability. While economic and domestic destabilisation thresholds are complex to identify as final lines, recent proofs of involvement of Indian spy agency Research and Analysis Wing (RAW) in internally destabilising Pakistan may not invoke such retaliation.³¹

Pakistan's nuclear thresholds clarify that the primary objective is to safeguard territorial integrity by deterring any nuclear and conventional blackmail leading to an attack from India. Therefore, Pakistan has deliberately left its nuclear thresholds ambiguous to keep India uncertain in launching a conventional offensive. Lavoy has favoured this ambiguity, that to deter an overwhelming Indian conventional military attack requires uncertainty, that how far India can press Pakistan in a battle.³² Pakistan's non-adherence to the NFU posture has been aimed at deterring India that any conventional attack could be retaliated with nuclear weapons. This supports the earlier argument of nuclear weapons averting the chances of a major war between India and Pakistan in the past. Despite India's conventional superiority, it has never crossed Pakistan's redlines, and the first-use policy has worked in Pakistan's favour. This approach worked during the 2001-2002 military standoff and in the 2008 Mumbai incident.

In recent years, especially after the Indo-US nuclear deal and India's strategic partnership with the US, India has been able to make technological advancements in its nuclear and conventional capabilities. Furthermore, India's future nuclear and conventional projections have put an enormous pressure on existing Pakistani nuclear thresholds. Lavoy believes that such projections "could threaten the survivability of Pakistan's strategic deterrence."³³ Therefore, Pakistan has also kept its options open to ensure survivability of its strategic assets, to deter India from crossing Pakistan's nuclear thresholds, and reinforce strategic stability. Pakistan is also making technological advancements in its nuclear deterrent capability to deter all forms of the Indian aggression.³⁴ As a result, Pakistan, like India, has made its CMD posture more dynamic, and not static. In March 2015, to strengthen this assumption, Pakistan has successfully conducted the test of its Shaheen-III missile,

with a range of 2,750 kilometers, which covers the entire India and completes the fundamental requirements of the credibility of its deterrence capability.³⁵

Pakistan has always avoided a nuclear arms race and proposed a strategic restraint regime to strengthen strategic stability in this region.³⁶ Pakistani statements imply that the threat of the first-use option will be employed as last resort, even as it strengthens its nuclear deterrence to counter Indian threat. However, the emerging reality tells us that both states have made advancements in their nuclear weapons' domain; have developed their nuclear doctrines; institutionalised their nuclear command and control structures; improved their nuclear delivery systems; and vaguely identified their nuclear thresholds. Here a question arises whether after the CSD and TNWs these South Asian nuclear thresholds still remain convincing enough to deter India and Pakistan from using nuclear weapons against each other.

Repercussions of CSD and TNWs on South Asian Nuclear Thresholds

The main aim of the 2004 Indian CSD is to wage a limited offensive war without crossing Pakistan's nuclear threshold.³⁷ In 2011, Pakistan, in order to counter CSD, tested a battlefield-use nuclear capable missile NASR (Hatf-IX).³⁸ These developments negatively impact existing South Asian nuclear thresholds, as they can turn the weapon of 'last resort' into a weapon of an "early resort."

Nuclear experts widely believe that the development of CSD and TNWs could destabilise the deterrence between India and Pakistan. Ladwig has asserted that a breakdown in deterrence could result in the potential use of nuclear weapons.³⁹ Lavoy has pointed out that India's growing conventional and nuclear capabilities could threaten the survivability of Pakistan's strategic deterrence.⁴⁰ Joeck has affirmed that both sides have been preparing for war, and, "it may be the first time nuclear weapons are used in conflict since 1945."⁴¹ Krepon has argued that the continuous efforts by India and Pakistan to diversify their nuclear weapon capabilities have made deterrence stability more difficult.⁴² It can be argued that when India failed to coerce Pakistan in 2001-02, it started

to increase its focus on CSD. In 2009, the former Indian Army Chief General Deepak Kapoor threatened Pakistan that “a limited war under a nuclear overhang is still very much a reality at least in the Indian subcontinent.”⁴³ This is evident from 2004-2010 estimates that India conducted around 10 major military exercises to complement its CSD, and the total number of its military exercises has grown at an alarming rate in recent years.⁴⁴ This offensive intention was reaffirmed in 2014, when the Indian National Security Advisor Ajit Doval stressed that India has to be ready for a “Two Front War.”⁴⁵ In September 2015, the current Indian Army Chief General Dalbir Singh also stated that “a very high level of operational preparedness at all times has become part of India’s strategy as there is a recognition that the swift, short nature of future wars is likely to offer limited warning time.”⁴⁶

Pakistan has repeatedly justified its security concerns against its growing conventional asymmetry vis-à-vis India; India’s Ballistic Missile Defence (BMD); India’s efforts to materialise its limited offensive CSD to punish Pakistan; and India’s growing nuclear and strategic partnership with major global powers. Therefore, the option available to Pakistan was to develop the TNWs capability for use at the battlefield level and thus lower its nuclear thresholds. Pakistan did this to ensure its survival and to maintain stability in the region. Furthermore, these developments are not the final ones, as India and Pakistan are constantly involved in a technological competition to modernise their respective capabilities. In order to understand the repercussions of existing or future developments on South Asian nuclear thresholds, a hypothetically near-future capability scenario is presented below.

Assuming that in the near future India has operationalised its CSD around 70-80 per cent, and it has reduced its eight Independent Battle Groups’ (IBGs) mobilisation time from one month to 120-144 hours, with a possible delay in an actual battlefield environment. To achieve its limited objectives without crossing Pakistan’s nuclear thresholds, India has also reduced its penetration plan into Pakistani territory from 50-80 to 30-60 kilometers. A modern Indian Air Force (IAF) and the Indian Navy (IN) is also ready to support such offensives on a very short notice. The IN is also in early trials phase of sea-based deterrent capability, but it is not fully confident that it will be able to deliver it in the time of crisis.

South Asian Nuclear Thresholds: Repercussions of Cold Start Doctrine and Tactical Nuclear Weapons

The Indian BMD system is partially able to defend its capital and one nuclear weapons site to ensure survival of its key strategic assets in case of a Pakistani first strike. India, anticipating a TNWs use by Pakistan during the offensive, has also drawn up plans to strike and degrade Pakistan's conventional and strategic capability.

The Pakistani side, with its advanced intelligence and surveillance capabilities, is well aware of Indian intentions. Pakistan has also mastered the art of developing miniaturised nuclear weapons, and has produced enough warheads to meet its battlefield level requirements at multiple levels. Pakistan, in response to Indian BMD, carried out many successful tests of its various missile systems, especially Nasr and Shaheen-III missiles. It has already handed over nuclear capable missiles to its Strategic Force Commands (SFC). Pakistan's Nuclear Command Authority (NCA) has carried out many simulations, and has trained its military and operational commanders on how to maintain communication lines intact at the time of crisis, and how to ensure safety, security, survivability, mobility, and inadvertent use of nuclear weapons. Pakistan has also equipped its naval, land, and air forces with its stealth cruise missiles Babur and Raad. The navy has already started working on a second-strike capability and the initial task of the Pakistan's Naval SFC is to ensure survivability of some of Pakistan's nuclear capability to ensure a crude second-strike capability. Pakistan Air Force (PAF), equipped with nuclear-capable Raad, has enough strength to strike Indian air defence system and compete with IAF superiority.⁴⁷ Pakistan Army and PAF, after a closely coordinated combat operation experience from their war against terrorism, are now in a much better position to thwart any Indian offensive at multiple levels.

Under this near-future capability scenario, it has been theorised that a major act committed by any terrorist group or non-state actors can give the Indian political and military leadership a justification to launch a limited war under its CSD. However, this time, such an action could be repulsed by Pakistan's TNWs. Khan has already viewed TNWs as "another layer of deterrence," which will make an Indian advance as costly as possible.⁴⁸ Therefore, under this scenario, if India still decides to launch an offensive towards Pakistan and tests its CSD, it could further lower the existing Pakistani nuclear thresholds. India could lose the

element of surprise at the early stage of mobilisation due to active intelligence and advanced aerial reconnaissance capabilities of Pakistan. The growing role of media and social media, and fear of expected consequences among civil society in India could help inform Pakistan that the Indian threat is imminent. Based on this scenario the study presents the following three assumptions:

- *An early use assumption:* After a major terrorist attack in India, the intelligence information of mobilisation of eight IBGs and their expected deployment along the Pakistani border could compel Pakistan to prepare its conventional and strategic force command. Pakistan could never underestimate a limited objective-oriented CSD, and therefore crossing of any Indian IBG into Pakistani territory would be considered as a threat to Pakistan's survival. Pakistan Army and PAF will try to hold and engage India's first offensive. A simultaneous crossing of eight Indian IBGs across the international border, and when Pakistan feels that it cannot hold them long enough, it could use TNWs by considering "pouring cold water on Cold Start."⁴⁹ This signifies that Pakistan considers an Indian offensive as a major conventional aggression, and it will retaliate with TNWs at an early stage. This will communicate to India that if it further threatened Pakistan's existence it could retaliate with even more TNWs. This also signifies that India has not launched this offensive with a limited intention as it is also prepared to punitively retaliate with nuclear weapons if its armed forces are attacked with nuclear weapons. There are greater fears that detonation of a TNWs at a battlefield level could trigger a strategic response from India and even a retaliatory strategic nuclear strike from Pakistan. This will eventually result in an all-out nuclear war, which will lead the subcontinent into total destruction.
- *Mid-stage-use scenario:* The second possible scenario of TNWs use could be a mid-stage-use scenario. Keeping in mind the objectives of not escalating into a nuclear war, Pakistan could initially retaliate with its conventional strength until its armed forces' strength is degraded considerably by massive Indian

South Asian Nuclear Thresholds: Repercussions of Cold Start Doctrine and Tactical Nuclear Weapons

conventional capability. In this scenario, Pakistan could use TNWs during the middle of a conflict - when it would feel that conventional option was exhausted and India would not be deterred through these means. Pakistan would like to maintain enough strength not only to counter a first strike but also to inflict unacceptable damage to India. It is imperative that Pakistan will never surrender to the Indian CSD, and it will not even wait until all its military capacity is degraded. This makes it clear that under this scenario the last resort will turn into a mid-conflict resort option

- *All-out war scenario:* There could be other possibilities too, such as Indian preemptive or nuclear first strike against Pakistan's counterforce and counter value targets. Especially, as Clary asserts, when the bigger adversary knows that he cannot subdue his smaller adversary through a conventional conflict, it could escalate into nuclear weapon use.⁵⁰ This possibility will directly invoke "full-spectrum deterrence" by Pakistani side.⁵¹ This will involve a direct nuclear exchange among South Asian nuclear rivals, and as a result the whole South Asian community will suffer a long-term nuclear winter. According to a study done in 2007 at Rutgers, the University of Colorado-Boulder, and University of California, Los Angeles (UCLA), a nuclear war between India and Pakistan with 100 Hiroshima-size weapons could kill more than 20 million people as a direct result, and rest of the hundreds of millions would die from hunger and radiations in the following years.⁵²

The above arguments and some possible scenarios of nuclear weapons use point towards the fact that CSD and development of TNWs have significantly changed existing South Asian nuclear thresholds. These developments have brought nuclear thresholds to a new level, where there is no room for miscalculating each other's redlines. It has brought the South Asian nuclear deterrence to a point where only an irrational player could take a risk to wage a limited war, leading to a nuclear exchange. However, due to the existing and evolving capabilities, maintaining a stable deterrent between India and Pakistan has become

very complex. Therefore, there is a need to focus on nuclear war avoidance options in this region.

Prospects of Avoiding a Nuclear War in South Asia

International nuclear experts believe that the world has entered into a “Second Nuclear Age,” where maintaining a strategic stability between rising nuclear powers has become complex.⁵³ According to Krepon, “deterrence between India and Pakistan is becoming less stable with the passage of time and the increase in nuclear weapon capabilities.”⁵⁴ Although the deterrence equation in South Asia has witnessed some major military confrontation in the past, the recent advancement in India-Pakistan deterrence postures has enhanced the chances of nuclear war. Here, some pertinent questions arise as to how it is possible to maintain strength without indulging into an arms competition; promote stability without confronting with each other; reduce tensions to avoid conflicts; and deter conflicts at all levels.

In this region, if one views the nuclear weapons as an equaliser against its powerful adversary, then the other views its overwhelming conventional strength as a tool to punish its smaller neighbour. It therefore seems improbable to achieve a consensus on stabilising their deterrence relations. However, in order to serve the larger interests of the South Asian community, maintaining peace and security and ensuring socio-economic prosperity, it requires mutually agreed practical steps by India and Pakistan to avoid the likelihood of a limited war leading to a nuclear war in this region. In this regard, the study proposes following recommendations:

- *Normalisation of relations*: The first important step is to enhance mutual confidence and trust by normalising India-Pakistan troubled relations. Under the existence of deep-rooted ideological hostility, mistrust, territorial disputes, and water issues, India and Pakistan cannot achieve the objectives of lasting peace in the region. Krepon argues that “India and Pakistan have not addressed basic issues in disputes, nor have they agreed to set them aside.”⁵⁵ Therefore, a normal India-Pakistan relationship is a key to restore peace in this region.

South Asian Nuclear Thresholds: Repercussions of Cold Start Doctrine and Tactical Nuclear Weapons

- *A need to re-visit past efforts:* To ensure peace and security of this region, Pakistan has always proposed many measures and proposals to reduce bilateral tensions. Some of these proposals include a Nuclear Weapons Free Zone (NWFZ), nuclear Confidence Building Measures (CBMs), and establishment of Strategic Restraint Regime.⁵⁶ However, India never accepted these measures. India is deliberately making this region unstable and war-prone which is equally dangerous for its own masses. Therefore, it is imperative that India responds to Pakistan's overtures to promote regional peace and security by maintaining a stable deterrence. Khan's proposal of Strategic Restraint Regime 2.0 could help to reduce such tensions and ensure stability in this region.⁵⁷ Furthermore, resumption of the Composite Dialogue Process can also help to understand these emerging realities, and can help to identify new measures for regional peace. Otherwise Pakistan would continue to invest in full-spectrum nuclear deterrence and make it more robust to deal with all forms of possible Indian aggression.
- *A peaceful defensive only, doctrinal shift, and creation of an arms control regime:* Both states should mutually embark upon advanced nuclear confidence building mechanisms such as transformation of defensive and aggressive doctrines into peaceful and defensive ones; maintenance of clearly defined minimum deterrence postures to avoid nuclear arms race; and negotiations to develop a framework for arms control. At present, these steps might sound too unrealistic for both South Asian nuclear rivals, but India and Pakistan must develop such measures to act as responsible nuclear states, ensure strategic stability, and work for a lasting peace.
- *Matching conventional imbalance:* The growing conventional imbalance between Pakistan and India represents a frightening scenario of a nuclear deterrence breakdown. Clary has pointed out that this growing conventional imbalance could give Indian leadership confidence to go against Pakistan, and this could escalate into nuclear weapon use.⁵⁸ India is the 9th biggest defense

spender in the world; the biggest in the South Asia region; and it has started to spend around \$100 billion under its 15 years (2012-2027) Long Term Integrated Perspective Plan (LTIPP) to modernise its armed forces.⁵⁹ The current pace of Indian huge investments on its military modernisation drive will further widen this conventional asymmetry and eventually have negative implications for this region. Therefore, maintaining a conventional balance is a prerequisite to avoid the chances of nuclear war in this region. Although it seems difficult, but a bilateral initiative to maintain a conventional force balance could only materialise when India and Pakistan enjoy a normalised relationship and have a desire to reduce tensions by addressing their deep-rooted issues. Furthermore, major arms supplier nations should adopt a moral approach, namely, that in order to help avoid a nuclear war in South Asia, they will not provide India with such weapon systems which increase conventional asymmetry, and which are detrimental to regional peace.

- *Alternative approach to address issues of terrorism:* Topychkanov believes that India's patience and threshold drops with each terrorist attack in India.⁶⁰ The growing role of terrorist groups and non-state actors has not only disrupted regional cooperation, but it has become a potential triggering point for a conflict between Pakistan and India. As Krepon has argued, "terrorist acts have effectively nullified efforts by Indian and Pakistani leaders to improve relations."⁶¹ Instead of fighting a war, India and Pakistan should focus on alternative peaceful approaches at a bilateral level to tackle this major irritant. Like other regional states, Pakistan itself has been hit by terrorism, as from 2003-2015, more than 64,000 people have been killed by acts of terrorism.⁶² Pakistan Foreign Office and armed forces are fully determined to end Indian involvement in acts of subversion and terrorism in Pakistan. In a Press release on May 6, 2015, the Inter Services Public Relations (ISPR) stated that the armed forces have enough evidence that the Indian intelligence agency Research and Analysis Wing (RAW) is "whipping up terrorism" in Pakistan.⁶³ On September 12, 2015, Pakistan's Advisor to Prime Minister on National Security, Sartaj Aziz, clearly stated,

“not (only is) India interfering in Pakistan’s internal matters; it is also supporting terrorism in our country.”⁶⁴ On October 2, 2015, Mr. Aziz said that dossiers containing proof of Indian involvement in terrorist activities in Pakistan have been handed over to the United Nations Secretary General Ban Ki Moon by the Permanent Representative of Pakistan to the UN, Maliha Lodhi.⁶⁵

- Due to conflicting geo-political approaches, South Asian states have so far failed to utilise their common regional framework for cooperation against terrorism. India and Pakistan should meet at all levels to address the issues of terrorism to avert escalation.

Conclusion

The study concludes that it is an inherent right of a state to safeguard its national security interests and territorial integrity. Pakistan, in an effort to stabilise South Asian nuclear deterrence and to counter its insecurities vis-à-vis India’s growing conventional capabilities under its CSD has developed its TNWs capability. However, India’s intent for a limited offensive to “teach Pakistan a lesson” and related strategies will not only destabilise South Asian nuclear deterrence, but also compel Pakistan to continue to enhance its defensive strength. Such doctrinal and technological developments will undermine South Asian nuclear deterrence and existing nuclear thresholds, and will increase the chances of limited war between India and Pakistan. A nuclear war will imperil South Asia as a whole. It is therefore suggested that India and Pakistan should aim their technological and doctrinal advancement in nuclear weapons at ensuring strategic stability, not at fighting a war.

Notes and References

1. “Pakistan Needs Short-Range ‘Tactical’ Nuclear Weapons to Deter India,” *The Express Tribune*, March 24, 2015, <http://tribune.com.pk/story/858106/pakistan-needs-short-range-tactical-nuclear-weapons-to-deter-india/>

2. “Pakistan Test Fires Hataf IX (NASR),” *The News International*, May 29, 2012, <http://www.thenews.com.pk/article-51543-Pakistan-test-fires-Hatf-IX-%28NASR%29->

3. Swaran Singh, "India's Nuclear Doctrine: 10 Years since the Kargil Conflict," in Bhumitra Chakma, ed., *The Politics of Nuclear Weapons in South Asia* (Ashgate Publishing Limited, England: 2011), Gurmeet Kanwal, "India's Nuclear Doctrine: Reviewing NFU and Massive Retaliation," *Institute of Peace and Conflict Studies*, New Delhi, January 7, 2015, <http://www.ipcs.org/article/india/indias-nuclear-doctrine-reviewing-nfu-and-massive-retaliation-4798.html>
4. Paolo Cotta-Ramusino and Murizio Martellini, "Nuclear Safety, Nuclear Stability, and Nuclear Strategy in Pakistan," January 21, 2002, <http://www.centrovolta.it/landau/2002/01/21/NuclearsafetyNuclearStabilityAndNuclearStrategy.aspx>
5. Peter R. Lavoy, "Islamabad's Nuclear Posture: Its Premises and Implementation," in Henry D. Sokoliski, ed., *Pakistan's Nuclear Future: Worries Beyond War* (Carlisle, PA: Strategic Studies Institute: 2008), Bruno Tertaris, "Pakistan's Nuclear and WMD Programmes: Status Evolution, and Risks," *EU Non-Proliferation Consortium*, Non-Proliferation Papers, No.19, July 2012.
6. Michael Krepon, et. al., "Deterrence Instability and Nuclear Weapons in South Asia," *Stimson Center*, Monograph, April 12, 2015, <http://www.stimson.org/books-reports/deterrence-instability-nuclear-weapons-in-south-asia/>
7. Shashank Joshi, "India's Military Instrument: A doctrine Stillborn," *The Journal of Strategic Studies*, Vol. 36, No. 4, 2013, Walter C. Ladwig III, "A Cold Start for Hot Wars: The Indian Army's New Limited War Doctrine," *International Security*, Vol. 32, No. 3, Winter 2007-08, 158-190, and, Feroz Hassan Khan, *Eating Grass: The Making of the Pakistani Bomb* (Stanford University Press, California: 2012), 396.
8. "Draft Report of National Security Advisory Board on Indian Nuclear Doctrine," *Ministry of External Affairs, Government of India*, access date, April 15, 2015, <http://mea.gov.in/in-focus-article.htm?18916/Draft+Report+of+National+Security+Advisory+Board+on+Indian+Nuclear+Doctrine>
9. "Cabinet Committee on Security Reviews Progress in Operationalizing India's Nuclear Doctrine," *Press Information Bureau, Government of India*,

Press Release, January 4, 2003, <http://pib.nic.in/archieve/lreng/1yr2003/rjan2003/04012003/r040120033.html>

10. Ibid.

11. The coercive Indian Operation Parakram was launched against Pakistan in December 2001, to retaliate December 2001 attack on Indian parliament. This military standoff ended in October 2002 without yielding any positive results for India. See, Gurmeet Kanwal, "Lost Opportunities in Operation Parakram," *Indian Defence Review*, Internet Edition, December 13, 2011, <http://www.indiandefencereview.com/spotlights/lost-opportunities-in-operation-parakram/>

12. "Annual Report 2004-2005," *Ministry of Defence, Government of India*, <http://mod.nic.in/writereaddata/MOD-English2005.pdf>

13. Swaran Singh, "India's Nuclear Doctrine: 10 Years since the Kargil Conflict," op. cit.

14. Gurmeet Kanwal, "India's Nuclear Doctrine: Reviewing NFU and Massive Retaliation," op. cit.

15. "Bharatiya Janata Party: Election Manifesto 2014," *Bharatiya Janata Party*, <http://www.bjp.org/manifesto2014>

16. Bhutto's famous quote has been cited by many experts in their work and they cite the main sources as, Pakistan Times, December 27, 1974, "Timeline of Nuclear Developments," *The Nuclear World*, <http://thenuclearworld.org/2011/12/25/timeline-of-nuclear-developments/>

17. Swaran Singh, "India's Nuclear Doctrine: 10 Years since the Kargil Conflict," op. cit., 77.

18. Press Statement by the Government of Pakistan issued in the early hours of May 28, 1998, Pakistan Mission to the United Nations, New York, May 28, 1998.

19. Soon after the 1998 nuclear tests, Pakistan's then Foreign Minister, Gohar Auyb Khan, and Foreign Secretary Shamshad Ahmad made these statements. For further details see, Johan Ward Anderson and Kamran Khan,

“Pakistan Declares Intention to Use Arms in Self-Defence,” *The Washington Post*, May 30, 1998, www.washingtonpost.com/wp-srv/inatl/longterm/southasia/stories/nuclear053098.htm

20. Statement by H.E. Mr. Muhammad Nawaz Shrif, Prime Minister of Pakistan, on May 28, 1998, Pakistan Mission to the United Nations, New York, May 28, 1998.

21. “Musharraf Ready to use Nuclear Arms,” *The Guardian*, April 6, 2002, <http://www.theguardian.com/world/2002/apr/06/pakistan.rorymccarthy>

22. Zafar Khan, Pakistan’s Nuclear First-Use Doctrine: Obsessions and Obstacles,” *Contemporary Security Policy*, 36: 1, February 19, 2015, <http://www.tandfonline.com/doi/abs/10.1080/13523260.2015.1012349>

23. Paolo Cotta-Ramusino and Murizio Martellini, “Nuclear Safety, Nuclear Stability, and Nuclear Strategy in Pakistan,” op. cit.

24. Ibid.

25. Zafar Khan, Pakistan’s Nuclear First-Use Doctrine: Obsessions and Obstacles,” op. cit.

26. “Transcript of a conversation with Gen. Khalid Kidwai,” in Carnegie International Nuclear Policy Conference, *Carnegie*, March 23, 2015, <http://carnegieendowment.org/files/03-230315carnegieKIDWAI.pdf>

27. Ibid.

28. Tariq Mahmud Ashraf, *Aerospace Power: The Emerging Strategic Dimension* (Pakistan Air Force Book Club, Peshawar: 2002), 152-153.

29. For further detail see the work of, Peter R. Lavoy, “Islamabad’s Nuclear Posture: Its Premises and Implementation,” op. cit. Bruno Tertaris, “Pakistan’s Nuclear and WMD Programmes: Status, Evolution, and Risks,” op. cit. Tariq Mahmud Ashraf, *Aerospace Power: The Emerging Strategic Dimension*, op. cit., and, Swaran Singh, “India’s Nuclear Doctrine: 10 Years Since the Kargil Conflict,” op. cit., 77.

30. Bruno Tertaris, "Pakistan's Nuclear and WMD Programmes: Status, Evolution, and Risks," op. cit.
31. "India Helping Terrorists In Pakistan: Khawaja Asif," *Dawn*, January 13, 2015, <http://www.dawn.com/news/1156571>, "Out in the Open: Army Accuses RAW of Fueling Terror," *The Express Tribune*, May 6, 2015, <http://tribune.com.pk/story/881650/out-in-the-open-army-accuses-raw-of-fuelling-terror/>
32. Peter R. Lavoy, "Islamabad's Nuclear Posture: Its Premises and Implementation," op. cit., 129.
33. Ibid.
34. "Pakistan-Nuclear," *Federation of American Scientists, Pakistan Special Weapons News: 1999*, <http://fas.org/news/pakistan/1999/991125-pak1.htm>
35. "Pakistan Conducts Successful Test Launch of Shaheen-III Missile," *The Express Tribune*, March 9, 2015, <http://tribune.com.pk/story/850293/pakistan-conducts-successful-test-launch-of-shaheen-iii-missile/>
36. Bruno Tertaris, "Pakistan's Nuclear and WMD Programmes: Status, Evolution, and Risks," op. cit.
37. Shashank Joshi, "India's Military Instrument: A doctrine Stillborn," op. cit.
38. *Inter Services Public Relations (ISPR), Press Release, No. PR94/2011-ISPR*, April 19, 2011, access date, April 19, 2015, https://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=1721
39. Walter C. Ladwig III, "A Cold Start for Hot Wars: The Indian Army's New Limited War Doctrine," op. cit.
40. Peter R. Lavoy, "Islamabad's Nuclear Posture: Its Premises and Implementation," op. cit.
41. Neil Joeck, "Prospects for Limited War and Nuclear Use in South Asia," in, Michael Krepon and Julia Thompson, ed., *Deterrence Stability and Escalation Control in South Asia* (Stimson, Washington DC; 2013), 211.

42. Michael Krepon, et. al., “Deterrence Instability and Nuclear Weapons in South Asia,” op. cit., 11.

43. “Indian Army Chief Statement on Two Front War Jingoistic: Pakistan,” *Top News*, December 31, 2009, <http://www.topnews.in/indian-army-chiefs-statement-twofront-war-jingoistic-pakistan-2248876>, “Indian Army Chief Remarks Reflect Offensive Nuclear Doctrine,” *Top News*, November 24, 2009, <http://www.topnews.in/indian-army-chiefs-remarks-reflect-offensive-nuclear-doctrine-pakistan-2239643>

44. A wide range of open-source information is available on Indian military exercises in recent years, for further information see, Masood Ur Rehman Khattak, “Indian Military’s Cold Start Doctrine: Capabilities, Limitations, and Possible Response from Pakistan,” *SASSI, Research Paper No. 32*, March 2011, “Indian Joint Military Exercises with Various Countries in 2013,” <http://swapsushias.blogspot.com/2013/01/indias-joint-military-exercises-with.html#.VTSShCGqqko>, “India Participated in 80 Joint Military Exercises in 4 Years,” *Brahmand*, August 3, 2011, <http://www.brahmand.com/news/India-participated-in-80-joint-military-exercises-in-4-yrs/7673/1/10.html>.

45. Indian National Security Advisor, Ajit Davol, in his statement has stressed for India’s readiness to fight two front wars with its two nuclear neighbors, namely China and Pakistan. For further details see, “India Has to be Ready for Two Front War: NSA Ajit Doval,” *The Hindustan Times*, November 23, 2014, <http://www.hindustantimes.com/india-news/india-s-future-security-threats/article1-1288902.aspx>

46. “Indian Army Chief Says Military Ready for Short Swift War,” *Dawn*, September 2, 2015, <http://www.dawn.com/news/1204371>

47. Feroz Hassan Khan, *Eating Grass: The Making of the Pakistani Bomb*, op. cit., 396.

48. Ibid.

49. General Khalid Kidwai statement cited in, Shashank Joshi, “Pakistan’s Tactical Nuclear Nightmare: Déjà Vu,” *The Washington Quarterly*, 36: 3, Summer, 2013, 162.

*South Asian Nuclear Thresholds: Repercussions of Cold Start Doctrine and
Tactical Nuclear Weapons*

50. Christopher Clary, "Deterrence Stability and the Conventional Balance of Forces in South Asia," in Michael Krepon and Julia Thompson, ed., *Deterrence Stability and Escalation Control in South Asia*, op. cit.

51. "NCA Stress Full Spectrum Deterrence," *Dawn*, September 6, 2013, <http://www.dawn.com/news/1040865/nca-stresses-full-spectrum-deterrence>

52. "Nuclear Darkness, Global Climate Change, & Nuclear Famine: The Deadly Consequences of Nuclear War, <http://www.nucleardarkness.org/warconsequences/fivemilliontonsofsmoke/>

53. Gregory D. Koblentz, "Strategic Stability in the Second Nuclear Age," *Council on Foreign Relations (CFR), Special Report No. 17*, November 2014.

54. Michael Krepon, et. al., "Deterrence Instability and Nuclear Weapons in South Asia," op. cit., 11.

55. Michael Krepon, et. al., "Deterrence Instability and Nuclear Weapons in South Asia," op. cit.

56. For a detailed analysis see, Malik Qasim Mustafa, "CTBT: A Critical Evaluation from A Pakistani Perspective," *Strategic Studies*, Vol. 33, No. 3&4, Autumn & Winter, 2013. 41-63.

57. Feroz Hassan Khan, "Strategic Restraint Regime 2.0," in Michael Krepon and Julia Thompson, eds., *Deterrence Stability and Escalation Control in South Asia*, op. cit.

58. Christopher Clary, "Deterrence Stability and the Conventional Balance of Forces in South Asia," op. cit., 135.

59. For further details see, The 15 Countries with the Highest Military Expenditure in 2013," *SIPRI*, http://www.sipri.org/googlemaps/milex_top_15_2013_exp_map.html, Military Balance 2013," *International Institute for Strategic Studies (IISS)*, and "The Indian Armed Forces Long-Term Integrated Perspective Plan (2012-2027)," *VAYU: Aero Space and Defence Review*, http://www.vayuaerospace.in/images1/Indian_Armed_Forces_Long-Term_Integrated_Perspective_P.pdf

60. Peter Topychkanov, "The South Asian Standoff," in, Alexi Arbatov and Vladimir Dvorkin, ed., Trans., by, Natalia Bubnova, *Nuclear Reset: Arms Reduction and Non-Proliferation* (Carnegie Moscow Center, Moscow: 2012), 117-142.

61. Michael Krepon, et. al., "Deterrence Instability and Nuclear Weapons in South Asia," op. cit.

62. This total number includes 20,289 civilians, 6,138 security forces personnel, and 30937 terrorist/ insurgents. For further details see, "Fatalities in Terrorist Violence in Pakistan 2003-2015," *South Asia Terrorism Portal (SATP)*, <http://www.satp.org/satporgtp/countries/pakistan/database/casualties.htm>

63 "RAW Instigating Terrorism, says Army," *Dawn*, May 6, 2015, <http://www.dawn.com/news/1180243>

64 "India's Role in Promoting Terror in Pakistan no secret, Sartaj Aziz," *Dawn*, September 12, 2015, <http://www.dawn.com/news/1206571>

65. "Dossier on Indian Sponsored Terror in Pakistan Handed over to UN: Sartaj Aziz," *The New*, October 2, 2015, <http://www.thenews.com.pk/article-199353-Dossiers-on-Indian-sponsored-terror-in-Pakistan-handed-over-to-UN:-Sartaj-Aziz>