# A Strategic Shift in Indo-Pak Nuclear Strategy: Implications for Regional Stability

# Dr. Rizwana Abbasi\*

#### Abstract

This study re-evaluates nuclear deterrence concepts and strategies of India and Pakistan in the transformed regional environment. This paper primarily focuses on evaluating the two states' transformative progression and steady transition into their nuclear strategies and postures. It addresses the following questions: How did the two states' distinct directions guide them to formulate their doctrines and strategies? How far have the changing security dynamics and emerging doctrinal structures made India and Pakistan more or less secure? How would transformation from land to seabased deterrence affect the regional stability in South Asia? The paper finds that nuclear deterrence in South Asia apparently has stabilised the region but peace was precariously maintained because the two states did not rationally demonstrate strategic responsibility to induce permanent peace and preclude the probability of war. The introduction of new technologies and states' transformation from land to sea-based deterrence has further aggravated arms race and raised questions on regional strategic stability.

Keywords: Deterrence, Strategic Stability, Sea-based Deterrence, TNWs, Deterrence Theory, Region-centric Deterrence, Kargil War, Nuclear Weapons, South Asia.

# Introduction

There are three driving forces of change in the international security order, viz., the super powers, technological revolution and geopolitical inflection points. The end of World War II, for instance, witnessed the innovation of nuclear weapons along with their delivery means, which indeed redefined the character of warfare<sup>1</sup>. In this context,

<sup>\*</sup> The author is an assistant professor in the Department of Strategic and Nuclear Studies at the National Defense University, Islamabad.

Brodie rightly asserts that 'thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose.<sup>2</sup> On a similar note, Robert J. Art contends that 'balance in the nuclear age is the power to hurt not the power to defeat'.<sup>3</sup> Thomas C. Shelling reminded us that '[v]ictory is no longer a prerequisite for hurting the enemy'<sup>4</sup> which later modified and constrained states' behaviour towards a more rational direction.

The above notions contextualize to what we now refer to as 'Deterrence Theory.'<sup>5</sup> Deterrence is generally understood as an ability to dissuade a state from embarking upon a course of action prejudicial to one's vital security interests, based on demonstrative capability. Specifically speaking, the *nuclear deterrence theory*, as propounded by Brodie,<sup>6</sup> which is grounded in political realism, enriches our thought process to comprehend the potential character of nuclear weapons. The elements attached to deterrence theory are the 'perception of the level of threat or conflict, the assumption of rationality, the concept of retaliatory threat, and concept of unacceptable damage, concept of credibility and deterrence stability.'<sup>7</sup> The introduction of nuclear weapons by the US, later their use during the World War II and further proliferation of these weapons generated extensive debates in the political and academic circles on the concept of deterrence. American think tanks such as RAND and leading scholars Brodie,<sup>8</sup> Shelling<sup>9</sup> and Wohlstetter<sup>10</sup> made substantial contribution

<sup>&</sup>lt;sup>1</sup> Andrew F. Krepinevich, 'Cyber warfare: A Nuclear Option,' *Center for Strategic and Budgetary Assessments*, 2012, 7.

<sup>&</sup>lt;sup>2</sup> Bernard Brodie ed. *Absolute Weapons: Atomic Power and World Order* (New York, Harcourt, Brace, 1946), 76.

<sup>&</sup>lt;sup>3</sup> Robert J. Art, 'Between Assured Destruction and Nuclear Victory,' in Russell Hardin et.al., eds. *Nuclear Deterrence: Ethics and Strategy* (Chicago: University of Chicago Press), 127.

<sup>&</sup>lt;sup>4</sup> Thomas C. Shelling, *Arms and Influence* (New Haven, Conn.: Yale University Press, 1966), 22.

<sup>&</sup>lt;sup>5</sup> Bernard Brodie, op.cit.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Patrick M. Morgan, *Deterrence Now* (Cambridge: Cambridge University Press, 2003), 8.

<sup>&</sup>lt;sup>8</sup> Bernard Brodie, op.cit.

<sup>&</sup>lt;sup>9</sup> Thomas Schelling, *The Strategy of Conflict* (Oxford University Press, reprinted in 1960).

to understanding this phenomenon. Thus, the deterrence concept was widely discussed in the US strategic thinking, which helped both the US and the erstwhile Soviet Union to recognize their military plans, manage nuclear weapons, military budgets, weapons employment and arms negotiations. Later Kenneth Waltz (a leading neo-realist) and Scott Sagan (a leading liberal but a prominent pessimist in non-proliferation community) generated a conceptual debate on nuclear proliferation respectively as 'more may be better<sup>11</sup> and 'more may be worse.'<sup>12</sup> Waltz highlights that 'strategies bring ends and means together' and that 'deterrence is achieved not through the ability to defend but through the ability to punish.<sup>13</sup> It is essential to note that deterrence strategies relate to the military postures and means to transmit them out that a state deploys to generate the level of deterrence. Morgan argues that 'deterrence theory is the underlying principle on which the strategy rests.<sup>14</sup> There is a strong perception that nuclear use and non-use probabilities, nuclear forces' behaviour and their safety, elites' behaviour and rational approaches are attached to the doctrinal structure of a state which rest with its strategic objectives and goals in the comity of nations. It is important to note that the '[n]uclear doctrines and strategies are peacetime contemplation about how military forces will be used in war, the preparation that result from it in terms of the type of the weapons acquired, the kind of force postures that are adopted, and training given to those who use these weapons.<sup>15</sup>

Waltz strongly argues that 'states are the principal actors in the anarchic environment and that relative power among states is the critical factor that determines differences in their behaviour.'<sup>16</sup> Thus, classical realists argue that states seek to maximize the power - which encourages

<sup>&</sup>lt;sup>10</sup> Albert Wohlstetter, 'The Delicate Balance of Terror,' *Foreign Affairs Journal*, 37, no.2, Jan 1959, 211-234.

<sup>&</sup>lt;sup>11</sup> Kenneth Waltz, 'More May be Better,' in Scott Sagan and Waltz, eds. *The Spread of Nuclear Weapons: A debate Renewed* (New York: W. W. Norton Company, Inc, 2<sup>nd</sup> ed., 2003).

<sup>&</sup>lt;sup>12</sup> Scott Sagan, 'More May be Worse'.

<sup>&</sup>lt;sup>13</sup> Ibid., 5.

<sup>&</sup>lt;sup>14</sup> Patrick M. Morgan, op.cit., 8

<sup>&</sup>lt;sup>15</sup> Raiesh Raiagopalan, *The Second Strike: Argument About Nuclear War in South* Asia (Delhi: Penguin Books India, 2005), 12.

<sup>&</sup>lt;sup>16</sup> Kenneth N. Waltz, *Theory of International Politics* (New York: Random House, 1979).

more offensive and revisionist policies.<sup>17</sup> Neo-realist scholars posit a different position within realism which says that the states' primary goal is to ensure their own security - 'which encourages more defensive strategies to protect the status quo.<sup>18</sup> Taking guidance from realists' interpretations, the present author reckons that nuclear deterrence in South Asia is linked to these different categories of states: for example, Indian policy is based on Cumulative Gandhian and Nehruvian philosophy, that is - 'Greater India' -[rise of India as a great power - maximization of power and expansionism].<sup>19</sup> Realism helps us understand how Nehru had envisioned the slogan of a 'Greater India,' which for him 'would play a greater-power role in world affairs commensurate with its size and power potential.<sup>20</sup> Thus, India's nuclear policy making was originated from distinct values attributed to the possession of nuclear weapons: its historic rivalry with China and Pakistan, ambitions for maximisation of power, country's prestige, recognition and standing in the international community to achieve a great power status, to have a principal role to construct, orient and regulate regional and to some extent global security order. On the contrary, Pakistan's nuclear objective was not to seek changes in the regional and global securitisation process and structure but to maximise its own national security against perceived threat, primarily from India.<sup>21</sup> Pakistan's behaviour, it can be argued as a matter of corollary, was proactive without any regional or global influences of its own. These patterns of behaviour of the two states help establish the major argument of this study.

There is no dearth of literature on South Asian nuclear policies and deterrence strategies. Nevertheless, this study attempts to go further and make fresh assessment of Indo-Pak nuclear policies and doctrinal structure considering and evaluating the two states' distinct direction in the changed international security environment. This study reassesses the nuclear

<sup>&</sup>lt;sup>17</sup> Peter R. Lavoy, Scott D. Sagan and James J. Wirtz, eds. *Planning the Unthinkable* (New York: Cornell University, 2000).

<sup>&</sup>lt;sup>18</sup> Sagan, 'The Origins of Military Doctrine and Command and Control Systems,' in Lavoy, Sagan and Wirtz eds. *Planning the Unthinkable*, (New York: Cornell University Press, 2000), 23.

<sup>&</sup>lt;sup>19</sup> For more details on Nehruvian strategic thinking see Zafar Iqbal Cheema, *Indian Nuclear Deterrence: Its Evolution, development and Implications for South Asian Security* (Karachi: Oxford University Press, 2010), 498.

<sup>&</sup>lt;sup>20</sup> Jawarlal Nehru, *The Discovery of India* (London: Meridian books, 1945), 35-40. cited in Zafar Cheema, *Indian Nuclear Deterrence:* op.cit., 498.

<sup>&</sup>lt;sup>21</sup> More detail on this perspective is deployed in the later part of this study.

doctrines and their impact on the probability of war in South Asia. The central argument in this study is that the strategic transformation in *Region-Centric* deterrence of South Asia has increased the probability of war, thereby, undermining the regional peace and strategic stability. Within this debate, the present study answers the following key questions: *How have the two states' distinct directions guided them to formulate their doctrines and strategies? How far would the changing security dynamics and emerging doctrinal structures make India and Pakistan more or less safer? How would transformation from land to sea-based deterrence affect the regional stability in South Asia? How would India and Pakistan contain conflicts and hostilities in the contemporary environment? How can the two states accomplish or institute a strong security mechanism in South Asia, maximise deterrence stability and minimise the resort to nuclear option?* 

# **Translating Indo-Pakistan Deterrence concept into Doctrines and Strategies**

The deterrence theory suggests that Strategic Equilibrium preserves peace and maintains stability. When deterrence achieves stability, uncertainty decreases, the security dilemma<sup>22</sup> diminishes and peace becomes possible. States behave rationally, asymmetry goes down and graphs for high cost of war and nuclear threshold rise upward, consequently, the probability of war decreases. In this context, states take rational and calculated decisions to maximise their strategic gains and minimise losses. Contrary to this, when deterrence becomes unstable, the nuclear threshold declines and the probability of failure of deterrence and war increases. Peace then becomes precarious and chances of nuclear employment increase. The second scenario is worrisome for us in South Asia. Based on the aforementioned debate, the ensuing section evaluates how the two states' distinct directions have guided them to translate the deterrence concept into their doctrines and strategies?

<sup>&</sup>lt;sup>22</sup> Security Dilemma refers to the predicament that emerges between two states where any security initiative of state A is perceives as threat by state B resultantly, it creates action-reaction syndrome between states A and B. See John Herz, 'Idealist internationalism and the security dilemma,' *World Politics*, vol. 2, Issue, 2, Jan 1950, 157–180.

### Indian Doctrinal Policy

On the doctrinal policy, very powerful and clear statements came out from the Indian side not long after the 1998 tests. The Indian Premier said, '[w]e will have a policy of minimum deterrence. We have stated that we will not be the first to use nuclear weapons. There remains no basis for their use against countries which do not have nuclear weapons.'<sup>23</sup> Later Prime Minister (PM) Vajpayee reiterated forcefully in the Indian Parliament: 'we have announced our intentions to maintain a minimum nuclear deterrence' but one that is *credible*.<sup>24</sup>

India formally compiled and announced its draft Indian Nuclear Doctrine (IND) on 17 Aug 1999. The major features of IND were transparent but some parts were kept deliberately ambiguous and are still under a big question mark. For example, India tried to lay down the 'broad principles for the development, deployment and employment of India's nuclear forces.<sup>25</sup> Based on the 'Greater India' philosophy, India emphasized the **normative posture** in its draft nuclear doctrine. For example, the draft doctrine highlights that nuclear weapons possess 'the gravest threat to humanity, peace and stability in the international system.<sup>26</sup>

The IND displayed that India's nuclear weapons would be used primarily in 'retaliation to a nuclear attack'. The fundamental 'aim of these weapons is to deter the use and threat of use of nuclear weapons against India' (para 2.4). IND says, India will 'not be the first to use nuclear weapons,' and it would 'not use nuclear weapons against countries that did not possess nuclear weapons' (Indian rational approach - based on normative spirit and non-violent notion) or were not aligned to countries that possessed nuclear weapons. The doctrine declared that India maintains 'operationally prepared nuclear forces' (para 2.6a) with the 'capability to shift from peace time deployment to fully employable forces in the shortest possible time' (para 3.2). The most controversial and worrisome part of this

<sup>&</sup>lt;sup>23</sup> Raiesh Raiagopalan, op.cit., 73.

<sup>&</sup>lt;sup>24</sup> PM statement in the Parliament on 'Bilateral Talks with the United States (December 15, 1998), cited in Raiesh Raiagopalan, op.cit., 73.

<sup>&</sup>lt;sup>25</sup> Draft Report of Nation Security Advisory Board on Indian Nuclear Doctrine: http://mea.gov.in/in-focus-article.htm?18916/Draft+Report+of+National+ Security+Advisory+Board+on+Indian+Nuclear+Doctrine

<sup>(</sup>accessed October 1, 2014).

<sup>&</sup>lt;sup>26</sup> Ibid.

doctrine was the Indian emphasis on **nuclear triad**, which says that the Indian forces will place nuclear devices in de-mated and de-alerted form, which can be assembled fast if and when required. It states, the nuclear forces 'will be based on a triad of aircraft, mobile land based missiles and sea-based assets' (para 3.1).

The draft IND was later operationalized in January 2003 that outlined explicitly important areas (revised version – with number of caveats attached) of nuclear doctrine and its operational arrangements. First, it vigorously reinforces Indian policy of a *credible minimum deterrence* (CMD). Second, it maintains a *no- first-use posture* - nuclear weapons will only be used in retaliation to a nuclear attack on Indian Territory or Indian forces. Third, it highlights that nuclear retaliation should be '*massive*' so as to inflict unacceptable damage to an adversary. Fourth, it highlights a *political control over nuclear weaponsuse* through the Nuclear Command Authority (NCA), comprising of the political council and the executive council. It means that only the political council (civil leadership) can authorize nuclear weapons' use. Later, India dropped the controversial clause on its triad from the 2003 IND to allay the regional and global criticism and pressure.

#### Assessment

What are the strengths and problems attached to the Indian announced nuclear doctrinal policy and how effectively it translates the deterrence concepts into practice?

**Firstly**, in the doctrinal draft, India emphasized a normative posture calling nuclear weapons the gravest threat to humanity, peace and stability. But it failed to highlight clearly whether 'possession of nuclear weapons was going to contribute or diminish that gravest threat to humanity.'<sup>27</sup> India established this argument in its IND based on its notion of 'Greater India' vision (maximization of power and equal sharein the global politics) and to address international apprehensions and pressure through a soft power approach to maximize its political influence.

**Secondly**, it was realistically helpful for India to adopt the minimum deterrence posture. Hypothetically speaking, the deterrence theory explains that minimum deterrence is attractive because it aims at achieving limited

<sup>&</sup>lt;sup>27</sup> "Draft Report of Nation Security Advisory Board on Indian Nuclear Doctrine" op.cit.

goals, and, command and control structure and armament is fairly easy to manage under this policy. It is more controlled in its nature, which constraints states' behaviour and restraints the arms race. In this context, India sought to preserve its image internationally by demonstrating its normative and judicious approach to preserve its 'Greater India' legacy. On the contrary, India has not pondered on the term 'minimum' as to how much is sufficient distinctively towards China and Pakistan (in terms of number of arsenals and forces) to maintain its credible minimum level of deterrence. India vaguely highlighted that CMD would be based on the notion that India had to maintain 'sufficient, survivable and operationally prepared nuclear forces, with robust command and control system, and effective intelligence and early warning capabilities.<sup>28</sup> It clearly shows that survivability refers to assured second strike capability whereas second strike demands a **nuclear triad** which India had already highlighted in the 1999 IND. India vaguely explained that the actual size of the components, deployment and employment was to be decided in the light of strategic environment, technological imperatives, and needs of national security. Cheema explores the contradictory nature of IND and poses the question 'is it not akin or close to a doctrine of flexible response than minimum deterrence?'29

**Thirdly**, India has reviewed the no-first use (NFU) policy in two ways: the word, *'anywhere'* has been included to the provision: 'nuclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere' which means even beyond the Indian borders. Another point of significance is that it states: 'in the event of a major attack against India, or Indian forces anywhere with biological or chemical weapons, India will retain the option of retaliating with nuclear weapons.'<sup>30</sup>Question here arises; the NFU policy is just a declaratory statement with no legal legitimacy and binding obligations attached to it. Indian notion on **massive retaliation** with nuclear weapons to inflict unacceptable damage on the aggressor fails to specify an actual threat in the

<sup>&</sup>lt;sup>28</sup> Article 2.6 of the Indian DND; Draft Report of Nation Security Advisory Board on Indian Nuclear Doctrine".

<sup>&</sup>lt;sup>29</sup> Cheema, op.cit., 513.

<sup>&</sup>lt;sup>30</sup> 'Cabinet Committee in Security Reviews Progress in Operationalizing India's Nuclear Doctrine', http://pib.nic.in/archieve/lreleng/lyr2003/rjan2003/04012003/r040120033.html. (accessed November 15, 2014).

contemporary times as is highlighted below in this study. Theoretically, it makes logical sense that massive retaliation is affixed to a second strike capability and NFU policy. Practically, Indian nuclear policy is a strategic puzzle and has enormous ambiguity that demands more transparency whether it would employ a counter-value or a counter-force strategy. Indeed India has not clarified its position whether it would adopt a launch-on-warning (LOW) or a launch-under-attack (LUA) posture for its nuclear force.

It has been noted through various accounts that the Indian nuclear forces are still ostensibly kept de-alerted and de-mated, which would disqualify LOW or LUA strategies. Many observers have reported this belief that India maintains all of its nuclear forces in a disassembled and certainly de-mated form. Pakistani officials and academicians assume that there will be a considerable time between an attack and an order to retaliate because it will be many hours before the various components of India's nuclear forces can be brought together and mated for delivery.<sup>31</sup> Ashley Tellis highlighted the Indian nuclear posture as 'limited in size, separated in disposition, and centralized on command.'<sup>32</sup> Contrary to this, Viping Narang nullifies this hypothesis calling it a myth<sup>33</sup> in the present changed environment.

The IND declares 'no first use against non-nuclear countries', though this pledge may be surrendered if the Indian territory or forces are attacked with chemical or biological weapons. For example, India has not clarified its position with regard to using weapons in response to biological or chemical attack coming from a non-nuclear state? Chari states that policy in response to chemical and biological weapons ('weapons of not mass destruction but weapons of disruption'<sup>34</sup>) seems under a questions mark as to how a 'major attack' with biological and chemical weapons can be identified. What is 'major' and what is 'minor' is [controversial] and debatable.'<sup>35</sup> Who will identify the actual attacker in a short time – whether it is a nuclear or a non-nuclear weapon state? This NFU phenomenon is too

<sup>&</sup>lt;sup>31</sup> Author's personal observations and discussions with various experts.

<sup>&</sup>lt;sup>32</sup> Asley Tellis, *India's, Emerging Nuclear Posture: Between Recessed Deterrence* and Ready Arsenals (Rand Corporation, 2001), 367.

<sup>&</sup>lt;sup>33</sup> Viping Narang, *The Washington Quarterly*, Summer, 2013, 148.

<sup>&</sup>lt;sup>34</sup> P. R Chari, "India's Nuclear Doctrine: Stirring of Change," Carnegie Endowment for International Peace: http://carnegieendowment.org/2014/06/04/india-s-

nuclear-doctrine-stirrings-of-change (accessed October, 2014), 5.

<sup>&</sup>lt;sup>35</sup> Ibid.

vague and demands more transparency and clarity from the Indian establishment.

Arguably, the preferred choice for Indian scientific and political elites (who played an important role in the nuclear development process) was to adopt NFU posture for two reasons: first based on its normative, nonviolence and 'greater India notion' approach through which it wanted to communicate a message to the world that it is a more civilised citizen of this world; the second compulsion was based on India's considered vulnerability and doubts in its survivability to absorb a Chinese retaliatory blow. This is why, Indian strategists highlighted back in 2002 that the NFU is related to an assured second strike capability and that the survivability of second strike capability can only be achieved through completion of the third leg of their triad. In light of this rationale, India kept modernising its triad in the last decade. Here India is working against the notion of the deterrence theory, instead of preventing probability of war it reduces the nuclear threshold and increases the probability of employment of nonconventional weapons.

The Indian doctrine also refers that 'it maintains a robust command and control system' and there are certain provisions in it. For example, it highlights that the 'nuclear weapons shall be tightly controlled and released for use at the highest political level.<sup>36</sup> Theoretically, Indian strong political and democratic credentials immensely support Indian rationale on nuclear use and non-use policy. There is more space for negotiations, rationality and calculated decision (based on cost-benefit analysis) when nukes are under civilian control. The doctrine also highlights that 'For effective employment, the unity of command and control of nuclear forces including dual capable delivery systems shall be ensured.<sup>37</sup> A Command, Control, Communications, Computers, Information & Intelligence (C4I2) system is not beyond India's long-term potential. India later further translated its C4I2 system under the National Command Authority (NCA). The Indian NCA has the authority to operationalize the doctrine and Indian civilian establishment is an oversight body on the NCA. On top of the NCA is the Cabinet Committee on Security (CCS) which is headed by the Indian PM along with defence, finance and external affairs minister (members). Under

<sup>&</sup>lt;sup>36</sup> Indian DND: 'Cabinet Committee in Security Reviews Progress in Operationalizing India's Nuclear Doctrine'.

<sup>&</sup>lt;sup>37</sup> Ibid.

the NCA is the tri-service Strategic Forces Command (SFC - which is in charge of military command and control over nuclear forces) which rests under the command of Chief of Defence Staff (designation yet to be operationalized). The role of the SFC is significant as it looks at the operational plans and maintains credible strategic posture on a high degree of preparedness and alertness based on C4I2. The Indian strong political oversight and continued democratic process indeed adds considerable value to its nuclear programme. This is indisputably, a positive side of the Indian nuclear policy.

## Pakistan's Doctrinal Policy (1999)

Pakistan has not yet published its official nuclear doctrine or policy of employment. Pakistan's doctrinal announcements demonstrate some clear features of its doctrinal policy which came out in response to the Indian document released by the National Security Advisory Board (NSAB) in 1999.<sup>38</sup> Based on itsproactive approach, Pakistan defined its doctrine to address the conventional asymmetric strategic balance and the existential threat from India to its security and survival as a nation. Therefore, it is believed that Pakistan's nuclear policy is directed to address nuclear as well as conventional threat coming from India. This policy was articulated in the light of its historical experiences with India.

The major features of Pakistan's doctrine are highlighted below: *first*, credible minimum deterrence; *second*, first-use (FU) posture; *third*, reliable command, control, communication, computerization and intelligence network (C4I); *fourth*, massive retaliation; *fifth*, Nuclear Weapons will be used as a last resort, especially when the survival of the state is at stake.

In the wake of the nuclear tests of 1998, Pakistan announced NCA, the prime objective of which was to have an oversight on nuclear development, employment and C4I. The NCA is the uppermost decision-making institution which initiates policy, regulates and controls Pakistan's nuclear weapons capability including deployment and employment if deemed necessary. It has two committees – Employment Control Committee (ECC) and Deployment Control Committee (DCC). The committees function separately for formulating employment and

<sup>&</sup>lt;sup>38</sup> Michael Krepon, 'Pakistan's Nuclear Strategy and Deterrence Stability' in Michael and Julia Thomson eds. *Deterrence Stability: Escalation Control in South Asia* (DC: Stimson, 2013), 41-64.

development strategies respectively. The Strategic Plans Division (SPD) offers oversight to its routine tasks under the NCA which deals with C4I2 of nuclear weapons and serves as the secretariat of the NCA.

### Assessment

The features of Pakistan's doctrinal policy have been extracted and traced from various statements made by the top leadership on different occasions:<sup>39</sup>

Then PM Nawaz Sharif said on 20 May 1999: While maintaining nuclear deterrence Pakistan is acutely conscious of the risks and responsibilities arising from the possession of nuclear weapons. We are adopting appropriate measures to put in place an effective command and control system. We are opposed to nuclear arms race, and we are sensitive to international non-proliferation concerns... Nuclear restraint, stabilization and minimum credible nuclear deterrence constitute the basic elements of Pakistan's nuclear policy.<sup>40</sup>

He further said, '[o]ur (Pakistan's) strategic programme is for national defence and deterrence [purposes]. We have not and will never pursue an aggressive nuclear posturing or misadventure. At the same time, we will take all necessary measures to ensure the reliability and credibility of our minimum nuclear deterrence.<sup>41</sup> Indeed, based on proactive approach, Pakistan announced *'minimum nuclear deterrence.'* For example, PM Nawaz Sharif highlighted, 'nuclear restraints stabilization and minimum credible deterrence constitute the basic elements of Pakistan's nuclear policy...<sup>42</sup> Since Pakistan was at a vulnerable stage in conventional deterrence, thus, it opted for nuclear *first-use* policy to thwart Indian conventional as well as nuclear threat. Pakistan has no larger aim other than security, thus, considering its weak economy and smaller size, the state

<sup>&</sup>lt;sup>39</sup> Agha Shahi, Zulfiqar Ali Khan and Abdul Sattar, 'Securing Nuclear Peace,' *News International*, October 5, 1990.

<sup>&</sup>lt;sup>40</sup> Remarks of the Prime Minister of Pakistan, Nawaz Sharif on Nuclear Policies and the CTBT, *National Defence College, Islamabad*, May 20, 1999.

<sup>&</sup>lt;sup>41</sup> Opening Remarks by the Prime Minister at the National Command Authority, July 14, 2011.

<sup>&</sup>lt;sup>42</sup> Remarks of Prime Minister Nawaz Sharif on 'Nuclear Policies and the CTBT', NDU, Islamabad, May 20, 1999.

elites considered the minimum nuclear deterrence a relevant and attractive option.

It is interesting to note here that the Pakistani establishment also tried to quantify the minimum deterrence when Samar Mubarak Mund told the Dawn newspaper that 60 - 70 nuclear warheads would serve Pakistan's purpose to address the external threat from India.<sup>43</sup> Indeed, considering geographical proximity with India and Indian global aspirations and goals in view, Pakistan realized that a small number of arsenals would serve the purpose - depending on counter-force or counter-value targets. Since, orientation of Pakistan's nuclear weapons programme is defensive, and it is a small state, small number of weapons and short range missile was not only cost-effective but a rational approach - which reinforced Pakistan's objectives. Cheema rightly points out that 'numerical equilibrium of nuclear forces is not essential for minimum nuclear deterrence, but the credible capability to deliver unacceptable damage ensures deterrence.<sup>44</sup> Moreover, with regard to numerical competition, former president Gen. Pervez Musharraf confirmed that 'Pakistan does not want to direct its resources towards the race of weapons of mass destruction.<sup>45</sup> Presumably. considering its limited capability and weak economy in view, Pakistan thought of keeping minimum armaments, thereby adopting a non-escalatory nature of its nuclear doctrine because Pakistan did not have plentiful available options. Waltz's assertion appears to hold ground when he says that it is easy to handle a small number of arsenals and easy to institutionalize them in the context of command and control system.<sup>46</sup> Therefore, Pakistan adopted a rational attitude considering the fact that a small nuclear force and arsenal can demonstrate adequate deterrent capability against a much larger India. Thus, Pakistan started pondering on, credibility, survivability and rationality as determinants of its deterrent capability.

Pakistan went further and clarified the term *minimum* highlighting that the level of existential threat and changing strategic environment in the prevailing circumstance will determine the number of its forces and size of arsenals. In order to maintain a high level of nuclear threshold, Pakistan

<sup>&</sup>lt;sup>43</sup> Quoted in Bhumitra Chakma, 'Pakistan's Nuclear Doctrine and Command and Control System: Dilemma of Small Nuclear Forces in Second Atomic Age,' *Security Challenges*, vol. 2, no. 2, July 2006, 122.

<sup>&</sup>lt;sup>44</sup> Cheema, op.cit., 526.

<sup>&</sup>lt;sup>45</sup> Hashmi, Nuclear Deterrence Vital to Security, *Dawn*, June 2001.

<sup>&</sup>lt;sup>46</sup> Sagan and Waltz, op.cit.

also called for upgrading the conventional capability.<sup>47</sup> Pakistan believed that nuclear forces could be relatively modest which would provide grounded survivability.<sup>48</sup> Therefore, Pakistan's ambassador to the Conference on Disarmament (CD) promised 'restraint in weaponization.<sup>49</sup>

Pakistani officials later indicated that they have adopted a massive retaliation<sup>50</sup> posture. Gen. Musharraf stated during the 2001-2 border standoff, 'we do not want war. But if war is thrust upon us, we would respond with full might, and give a befitting reply.<sup>51</sup> Presumably, Pakistan adopted the massive retaliation stand to enhance the credibility of its small arsenals. Nonetheless, Pakistan chose the strategy of 'Deliberate Ambiguity' on its first-use policy. On the first-use policy, Stephen P. Cohen calls it an "option-enhancing policy."<sup>52</sup> Pakistan from the outset has not clarified its position when and where this country would employ non-conventional weapons as a first policy option. Hypothetically, '[t]o credibly threaten a first-use [nuclear or conventional], this posture must be largely transparent about capabilities, deployment patterns, and conditions of use.<sup>53</sup> Nevertheless, Pakistan opted for deliberate ambiguity to maximize its deterrent value as is in the case of US or other nuclear weapon states. Pakistan highlighted mainly four areas (red lines) as was announced by the former Director General SPD. Pakistan has first use policy but it will employ nuclear weapons only if:

- (1) India attacks Pakistan and conquers a large part of its territory (space threshold);
- (2) India destroys a large part either of its land or air forces (military threshold);
- (3) India proceeds to economic strangling of Pakistan (economic threshold);

<sup>&</sup>lt;sup>47</sup> Raiesh Raiagopalan, op.cit, 49.

<sup>&</sup>lt;sup>48</sup> Ibid.

<sup>&</sup>lt;sup>49</sup> Munir Akram, address at the special session of CD, June 2, 1998.

<sup>&</sup>lt;sup>50</sup> Quoted in Bhumitra Chakma, op.cit., 124

<sup>&</sup>lt;sup>51</sup> Pervaiz Musharraf's address to the Nation, Quoted in Bhumitra Chakma, op.cit., 124.

<sup>&</sup>lt;sup>52</sup> Quoted in Mohd. Aminul Karim, 'Is Nuclear Deterrence Workable at the Brink Time in South Asia and Beyond?,' *The Korean Journal of Defense* Analysis, March 2014, 38.

<sup>&</sup>lt;sup>53</sup> Viping Narang, 'Posturing for Peace,' *International Security*, vol. 34, no. 3, Winter 2009/10, 44.

(4) India pushes Pakistan into political destabilization (internal stability threshold).<sup>54</sup>

Realists guide us here to understand that a status quo state (which is mainly concerned about maximization of its security) will adopt first-use of non-conventional weapons if the adversary's conventional superiority is threatening its security (the pre-emption strategy). Hypothetically, such states may adopt limited strike options. Schelling says that such actions will initiate limited wars, wars in which limited uses of unconventional weapons occurred into a 'competition of risk-taking, characterized not so much by tests of force as by test of nerves.'<sup>55</sup> Pakistan's first use policy is guided by and based on Indian conventional superiority. It creates more pressure on a larger adversary, and is a cost-effective option for the weaker state - Pakistan.

There also lies enormous uncertainty in Pakistan's nuclear doctrine, as I call it *strategy of deliberate ambiguity* or Pakistan's **Unclear Nuclear Doctrine**. Most of the Pakistani experts believe that deliberate ambiguity serves this country's purpose and enhances deterrent value.<sup>56</sup> Theoretically, the FU is a more aggressive doctrinal policy in nature. For example, any kind of miscalculation and accident may encourage Pakistan towards prompt use of nukes. Introduction of Low-yield or Tactical Nuclear Weapons (TNWs) had exposed new unavoidable accidental dimensions (discussed below in detail). Who will order, when and how will Pakistan employ nuclear weapons is not sufficiently clear, this is what I refer to as **Strategic Singularity**.

# **Transforming Nature of Deterrence: New Technologies, New Realities and New Challenges**

#### Introduction of Low-Yield or TNWs

The hypothesis that the two nuclear weapon states do not fight war was nullified when the limited - Kargil War (1999) broke out between India and Pakistan. This conflict ushered a new dimension in the paradigm of nuclear deterrence – the notion of **stability-instability paradox** and emergence of

<sup>&</sup>lt;sup>54</sup> Quoted in, Zafar Iqbal Cheema, 'Pakistan', in Hans Born, Bates Gill and Heiner Hanggi eds. *Governing the Bomb* (Karachi: Oxford University Press, 2010), 202.

<sup>&</sup>lt;sup>55</sup> Thomas Schelling, Arms and Influence (New Haven: Yale University, 1966), 94.

<sup>&</sup>lt;sup>56</sup> Author's personal interaction with different experts in Islamabad.

the Indian Cold Start Doctrine,<sup>57</sup> the strategy of Pro-Active Operations, and the construct of Two Front War. As a result of the Indian crafting of the Cold Start Doctrine (an offensive strategy of limited war to achieve limited objectives in so short a time that Pakistan is denied the opportunity to climb the escalation ladder), Pakistan searched for a re-balancing strategy to address Indian aggression, brinkmanship or punitive actions. Pakistan chose to adopt TNWs, into its arsenals, presumably to 'enhance its defensive-offensive capability<sup>'58</sup> based on its security maximization model. This helped Pakistan to maintain its full spectrum deterrence to counter Indian threat and offensive operations at all the levels of the escalation ladder and to plug holes in its deterrence capability. It was confirmed when in April 2011 Pakistan test fired the Hatf-IX - Nasr missile with a range of 60 kilometres (km), which is capable of carrying both conventional and nuclear warheads with high accuracy.<sup>59</sup> Pakistan has tested this missile numerous times since then. On March 2, 2012, Pakistan tested another short-range nuclear capable missile, Hatf II - Abdali, which has a range of 180 km. Two months later, Pakistan again conducted another Hatf-IX series missile test, which ostensibly demonstrates the delivery system's growing relevance to Pakistan's arsenal. Pakistan has presumably achieved an operational level capability to integrate these weapons systems into its centralized command and control system, and to deploy them under the supervision of the NCA.<sup>60</sup> Pakistan announced that low-yield weapons provide "an operational level capability to Pakistan's Strategic Forces, additional to the strategic and tactical level capability, which Pakistan already possesses."<sup>61</sup> Lt. Gen. (retd.) Kidwai occasionally refers to the

<sup>&</sup>lt;sup>57</sup> For more details on CSD see Christopher Clary and Viping Narang, 'Doctrine, Capabilities, and (In)Stability in South Asia,' in Krepon and Thompson eds. *Deterrence Stability*, 93-106.

<sup>&</sup>lt;sup>58</sup> Zulfqar Khan and Rizwana Abbasi, op.cit., 496-497.

<sup>&</sup>lt;sup>59</sup> 'Pakistan test fires nuclear-capable missile,' *Dawn*, February 11, 2013, http://dawn.com/2013/02/11/pakistan-conducts-successful-test-of-hatf-ix-nasr/ (accessed April 25, 2013).

<sup>&</sup>lt;sup>60</sup> Zulfqar Khan and Rizwana Abbasi, op.cit., 495-497.

<sup>&</sup>lt;sup>61</sup> Inter-Services Public Relations, Press Release No. PR34/2012-ISPR, March 5, 2012.

http://www.ispr.gov.pk/front/main.asp?o=t-press\_release&date=2012/3/5.

Indian Army's Cold Start doctrine and notes that the intent of Pakistan's short-range systems is to "Pour cold water on Cold Start."<sup>62</sup>

Pakistan has highlighted that these weapons will be used as a last resort. Thus, the last resort, FU policy and introduction of TNWs build an additional strategic puzzle into Pakistan's above highlighted doctrinal policy. More so, this prompted the author to use another term for TNW as **Operational Singularity** – i.e., a tactical weapon being controlled at a grand strategic level for fruition of operational gains in support of field commanders. What is the purpose of these battlefield weapons? Has Pakistan opted for the prompt use of non-conventional weapons? Has Pakistan opted for a more delegative command system? Hypothetically speaking, under these scenarios, Pakistan has to place its weapons on high alert and under the field commanders. When and how Pakistan will exactly use these low-yield weapons is not sufficiently clear because Pakistan has not made any announcement on this under the notion of deliberate ambiguity. It seems that TNWs have created more space for *flexible* response and counter-force targeting options. There are reservations at the global level that if Pakistan delegates these weapons to field commanders to use these low range missiles during a crisis situation - this will create risk of prompt employment.<sup>63</sup> Fitzpatrick says, '[p]re-delegation can lead to unauthorised use.<sup>64</sup> Chansoria believes 'no matter how carefully Pakistan has thought through its command and control structure, the delegation of authority to the field commanders creates [enormous] risks.<sup>65</sup> Western scholars believe that the Nasr missile has lowered 'the threshold for nuclear use'66 and the 'introduction of battlefield-use nuclear weapons adds a destabilising element.<sup>67</sup> Whereas Pakistani officials and observers maintain that the introduction of TNWs has increased the nuclear threshold and that

<sup>&</sup>lt;sup>62</sup> The author has heard this occasionally during interactive session and roundtable discussions held in Pakistan.

<sup>&</sup>lt;sup>63</sup> P. R. Chari, op.cit.

<sup>&</sup>lt;sup>64</sup> Mark Fitzpatrick, 'Terrorism isn't Pakistan's Gravest Nuclear Danger,' *Express Tribune* May 7, 2014.

<sup>&</sup>lt;sup>65</sup> Monika Chansoria, 'Pakistan's Tactical Nukes Threaten Stability in South Asia,' *Foreign Policy*, May 5, 2014, 2.

http://southasia.foreignpolicy.com/posts/2014/05/05/pakistan\_s\_tactical\_nukes\_t hreaten\_stability\_in\_south\_asia

<sup>66</sup> Ibid.

<sup>&</sup>lt;sup>67</sup> Ibid.

Pakistan does not intend to pre-deploy or delegate these weapons to the field commanders.<sup>68</sup>

The argument holds that nuclear learning in Pakistan has rapidly enhanced, the TNWs have taken Pakistan's stress away in terms of Indian brinkmanship, bullying, punitive action and any kind of major aggression – in the conventional realm. Opinion is sharply divided, even amongst Pakistani academicians that Pakistan may behave irrationally or employ these weapons (*in definitive patterns of behavioural rationality*). This study argues that rationality relates to the states' preferences. Sometimes, one state's rational act is irrational act for the adversarial state. Thus, it is very hard to judge Pakistan's preferences under enormous pressure and during a war like situation. Apparently, it seems that Pakistan's strategy will be to make a highly calculated move during war like situations. However, in response to any irrational ad irresponsible Indian move, risks attached to TNWs cannot be discounted.

India reportedly seems to employ massive retaliation in response to a nuclear attack (even low-yield), anywhere, within or outside its territory at any level. Nevertheless, India's possession of the capability to institute a graduated response with its short-range nuclear capable missiles such as short range Prithvi, Dhanush and Prahaar cannot be discounted. Chari confirms that introduction of new technologies such as low-yield weapons demonstrate the 'insufficiency of India's no-first-use policy to deter Pakistan's destabilizing strategy.' He says, Pakistan could go to the extent of deploying its short-range missile without being concerned that India would target it with its own nuclear missiles. He says that according to the Indian doctrine, 'any level of nuclear attack will invite massive retaliation is too extreme to gain much credibility.<sup>69</sup> Indeed Indian massive response to low-yield attacks raises a big question mark as Chari says that TNWs have strained the regional deterrence stability.<sup>70</sup> He believes that Pakistan 'would also be enabled to counter any offensive operation India might contemplate against Pakistan in response to another Mumbai-style terrorist attack.<sup>71</sup> In a volatile region where terrorism and extremism is deeply grounded, it seems that the nuclear weapons are becoming a major threat. Chari highlights a

<sup>&</sup>lt;sup>68</sup> Author's interaction with the relevant officials based in Islamabad.

<sup>69</sup> Chari, op.cit.

<sup>&</sup>lt;sup>70</sup> Ibid., 4

<sup>&</sup>lt;sup>71</sup> Ibid.

new spectrum of threats between these two states, 'ranging from border incursion to sub-conventional warfare, cross border terrorism and militancy.'<sup>72</sup> He believes that 'nuclear weapons provide no defence against these dangers.'<sup>73</sup>

Thus, it goes without saying that new technologies into South Asian arsenals would make peace more uneasy if not too difficult, thereby creating high risks of nuclear exchange. However, use of TNWs in the battlefield from any side carries the potential to escalate the dynamics of conflict perilously – thus, leaving the high prospects of nuclear exchange. An irrational and hasty decision – release of TNWs – initiated at the lower level of command may trigger retaliation at a strategic level from the other side. It can be suggested that, TNWs would only induce *caution* and result in a *stalemate* thereby giving an opportunity to both sides' policymakers to act *rationally* even during peace times.<sup>74</sup> A state's irrational move at any level would escalate the tensions thus, increasing 'the prospect of a full spectrum war, and, therefore, in a heightened state of tension and complexities of the South Asian region, it would be difficult, if not impossible, to reverse.<sup>75</sup>

The two sides need to distinguish between nuclear and a conventional war and continue to enhance their nuclear learning. Understanding on this contradiction must be established as low-yield weapons have introduced an entirely new dimension where the use of these weapons would escalate towards catastrophic ends.

#### Strategic Shift towards Sea-Based Deterrence

How could transformation from land to sea-based deterrence affect the regional stability in South Asia? Hypothetically, a survivable NFU posture is incomplete without establishing a triad capability. Practically, it is a daring engineering task to achieve a sea-based deterrence capability altogether from submarine design to testing the delivery vehicle to operate it. It is a highly expensive and challenging task to align the submarine or nuclear powered ballistic missile carrying submarine (SSBNs) operation with the C4I system under constraints and a restricted environment. In

<sup>&</sup>lt;sup>72</sup> Ibid., 2

<sup>73</sup> Ibid.

<sup>&</sup>lt;sup>74</sup> Zulfqar Khan and Rizwana Abbasi, op.cit.

<sup>&</sup>lt;sup>75</sup> Ibid.

South Asia, this seems a highly ambitious undertaking which will further complicate the regional strategic environment.

India initiated its triad at least three decades ago. As highlighted above, India deliberately left its doctrine open ended in 1999 and later 2003 to complete its triad. On Indian triad developments, the serious issue emerged when George W. Bush's administration forced 'the [Nuclear Supplier Group - NSG] to revise its guidelines in order to accommodate the new US policy towards India that reverses more than a quarter of a century of US declaratory policy.<sup>76</sup> India, a non-NPT party state was given NSG Waiver to finalize the Indo-US nuclear deal. In light of this deal, India did not place its eight nuclear reactors under the IAEA full-scope safeguards, and thus, was not entitled to enjoy the benefits of the NPT membership and was subjected to the NSG rules that forbid nuclear cooperation with states that have unsafeguarded facilities. Contrary to this, India was offered full privileges to divert its nuclear material to finalize its underway triad.

The NSG members in search of their geostrategic interests (realist guided disposition) and trade expansion, exempted India from the existing rules freeing it from the constraints associated with its status, which proves the realists' interpretations as relevant. After this deal, the *INS Arihant*, the first SSBN in the Indian Naval inventory was revealed publicly in 2009. Since activating its light water reactor (LWR) in August 2013, the *Arihant* had undergone sea trials in 2013 and awaits eventual operational deployment. India claims that the sea leg of its triad includes the Sagarika K-15 Submarine Launched Ballistic Missile (SLBM) for its *Arihant*, SSBN. The K-15 class missiles are being augmented with the nuclear – capable 350 km Dhanush ship-launched ballistic missile as well. These 'K' class cruise missiles are predominantly significant for India's nuclear deterrent arsenal because they provide India with a much more idyllic and invulnerable second-strike capability, transforming the balance of power in India's favour.

Additionally, India plans to include three additional SSBNs to its naval fleet between 2015 - 2025. For example, the Indian navy is already working on AKULA II Class Russian nuclear submarines – which is renamed as *INS Chakra*. The follow up version of these submarines is

 <sup>&</sup>lt;sup>76</sup> Carranza, "Can the NPT Survive?", *Contemporary Security Policy*, vol. 27, no. 3, December 2006, 489.

http://www.contemporarysecuritypolicy.org/assets/CSP-27-3-Carranza.pdf

predicted to carry 3500 km missile with multiple warheads and the ultimate aim is to arm these submarines with three stage 5, 500 km Agni V. It is believed that Russia has assisted India in establishing its nuclear reactor for *INS Arihant*.

Some argue that India still has a long way to go 'to push this first vessel into a deterrent patrol and even longer to attain a credible and [survivable] sea-based deterrent force.<sup>77</sup> There are observations that India's ability to actually launch nuclear-capable ballistic missiles from submarine platforms is still under a question mark. The K-15 still requires submarinebased testing and adaptation - its January 2013 test launch was conducted from an underwater pontoon.<sup>78</sup> The problem is with K-15 range of 700 km; this limited range is under a question mark. This K class missile can reach Karachi and may not hit the capitals of Pakistan or China. Thus, it appears that this K class missile has a limited value on sea-based deterrence at this stage. Unquestionably, India does not intend to abandon this programme and is working on K- 4 SLBM with maximum range of 3,500 km, which will enable the submarine to operate from a longer distance to be within the striking distance of the target.<sup>79</sup> This confirms the escalatory and aggressive nature of the Indian doctrine - which goes beyond its credible minimum and security maximization notion.

India currently holds five land-based nuclear capable ballistic missiles systems. These go from the short range Prithvi I to the long range ICBM Agni V. Between 2015-20, India's strategic nuclear missile force will include Agni III and Agni IV missile and these may be equipped with warheads. It is possible that these two systems will be designed to carry multiple independently re-entry vehicles (MIRVs), to beat any enemy. India is on an ambitious plan to acquire a Ballistic Missile Defence (BMD) system (the system consists of two types of interceptor missiles: "Prithvi air defence (PAD)" and "advance air defence (AAD)". It is safe to argue here that in order to undermine the regional strategic balance, by creating nuclear asymmetry, India has increased the superiority in strategic deterrence. India's nuclear deterrence incontrovertibly has become far more robust by achieving the third leg of its triad. Unquestionably, these developments have undermined regional deterrence stability, the regional balance,

<sup>&</sup>lt;sup>77</sup> Subramanian, 'The Emerging Sea-Based Nuclear Deterrence Capabilities,' op.cit., 220-227.

<sup>&</sup>lt;sup>78</sup> Viping Narang, op.cit.

<sup>&</sup>lt;sup>79</sup> Subramanian, op.cit., 220-227.

triggered and aggravated a new arms race. These developments have threatened the regional balance, thereby undermining the regional and global security structure.

*Pakistan's response to re-establish the deterrence stability:* For realists, the international conditions of anarchy force states' elites, even if they are relatively satisfied with the status quo today, to be prepared to protect their future security interests. Indeed, it is safe to argue that states will behave ruthlessly towards maximization and protection of their interests within the constraints of their material power capabilities (such as economy and military capabilities). Arguably, in response to the Indian developments on maritime deterrence, Pakistan would likely try to rebalance the strategic stability. Apparently, Pakistan due to resource constraints is lagging behind in acquiring the third leg of its deterrence (seabased capability) in the near future.

Discussions are underway for Pakistan's option to adopt a no-first-use policy.<sup>80</sup> In addition, the establishment of the Headquarters of the Naval Strategic Force Command (NSFC) by Pakistan shows that it has considered seriously the existence of a sea-based nuclear deterrent.<sup>81</sup> The military's Inter Services Public Relations acknowledged that NSFC "will perform a pivotal role in development and employment of the Naval Strategic Force,". This shows that Army – the central pillar of strategic command, has assigned a role to navy. Usman Shabbir, an analyst of the Pakistan Military Consortium think tank said 'Pakistan has been working on its sea-based deterrent for some time. Pakistan has developed cruise missile – the Babur – with a range of 700 km, which has the submarine launch capabilities.'<sup>82</sup> Presumably, Pakistan may deploy its cruise missile, the Babur on a conventional submarine; to do that it has to overcome the hurdle of miniaturising the nuclear warheads to fit into the missile. Pakistan has been working on fresh built Khalid class submarines into its strategic force but

<sup>&</sup>lt;sup>80</sup> Shireen Mazari, address at a Conference, 'Emerging Strategic Architecture of South Asia,' National Defence University, Islamabad, May 6, 2014.

<sup>&</sup>lt;sup>81</sup> 'Pakistan Acknowledges Sea-Based Nuclear Deterrent,' *Defence News*, May 23, 2012,

http://www.defensenews.com/article/20120523/DEFREG03/305230004/Pakista n-Acknowledges-Sea-Based-Nuclear-Deterrent (accessed October 1, 2014).

<sup>&</sup>lt;sup>82</sup> Quoted in 'Pakistan Acknowledges Sea-Based Nuclear Deterrent'.

significant hurdles still remain.<sup>83</sup> Specifically, missile tubes have to be modified and to handle the nuclear capable Babur cruise missile, the navy needs to be integrated into the country's existing [C3]<sup>84</sup> system which seems a huge and costly undertaking. This will represent an engineering difficulty and may undermine confidence in the weapons' efficacy if nuclear tests are not conducted.

Knowing the fact that conventional submarines have exceptional limitations for fulfilling this capability, it will reduce Pakistan's options, no other than going for nuclear powered submarines. Thus, many observers hold that 'Pakistan can acquire nuclear powered submarines from friendly countries, or [develop these submarines] indigenously.<sup>85</sup> In this case also constraints appear to rule out the possibility and even create hurdles for the indigenous programme in the foreseeable future.<sup>86</sup>

However, other analysts doubt that the Pakistan Navy can afford to undertake the responsibility of the nation's second-strike capability in the near future. For example, the former Australian defence attaché to Islamabad Brian Cloughley stated that "Pakistan's current submarine fleet is not adequate in numbers [although well-trained] to be able to undertake detection and effective interdiction of the Indian fleet, given its size which is increasing, even if slowly," Cloughley further highlighted, "conversion of the present assets to take Babur is not only costly but a most regrettable diversion of budget allocation." However, Cloughley is still certain that Pakistan does not require such a capability. "[Pakistan] has plenty of nuclear-capable SSMs and strike aircraft, and does not need a Navy-oriented second-strike capability."<sup>87</sup>

It seems that Pakistan's highest priority will be to modernize its programme for future military advantage considering the adversary's capability in view. Arguably, apparently, sooner or later, Pakistan will acquire the sea-based deterrent capability, thereby retaining its nuclear firstuse option in practice. If Pakistan strikes first at any level and India's response is massive, then Pakistan's high priority would be to build a

86 Ibid.

<sup>&</sup>lt;sup>83</sup> Shane Mason, 'From Dyad to Triad: What India's Nuclear Developments Mean for Pakistan,' *James martin Centre for Non-proliferation Studies* (August 22, 2012), http://www.isn.ethz.ch/Digital-Library/Articles/Detail/?id=152229 (accessed October 1, 2014).

<sup>&</sup>lt;sup>84</sup> Ibid.

<sup>85</sup> Ibid.

<sup>&</sup>lt;sup>87</sup> 'Pakistan Acknowledges Sea-Based Nuclear Deterrent'

survivable capability to absorb the Indian blow. In this case, the Ra'ad cruise missile can also become the main weapon system of the Naval strategic force command (NSFC). It remains yet unclear whether the sea launched cruise missile (SLCM) is to be deployed on surface ship or on submarines. The latter appears less likely as no open source gives any account of Pakistan having conducted underwater missile test launches.

At present India and Pakistan's sea-based deterrence have significant hurdles and shortcomings in terms of survivability and command and control.<sup>88</sup> These countries' rudimentary sea-based nuclear weapon-delivery capabilities have not enhanced deterrence stability. They are likely to worsen deterrence stability as they are inducted.<sup>89</sup> Nevertheless, technological advancements and nuclear learning is expanding at a fast pace; these two states are likely to move on thereby addressing their technical hurdles.

The argument concludes here that the two states' nuclear policies, doctrines and force structures are based on their distinct direction - national goals, regional security environment and their aspirations. The large state is focused on survivable second strike capability to match with China (the dyad cannot be ruled out from the South Asian security complex) to maintain its material power position on the regional and global level. Thus, Indo-China power competition deepens the security dilemma between India and Pakistan. It is because the Indian minimum posture towards China is no longer 'minimum' toward Pakistan. Thus, Pakistan has to create balance and match its' adversary's capability to increase the deterrent value.

# How can Deterrence be Stabilized and Peace Preserved in South Asia?

Realistically speaking, conflicting interests and the distinct aspirations of the two states are likely to incentivize further arms developments and prompt aggression, the tension thereby increasing the prospects of escalation to an undesirable level. Indeed, advancements in nuclear delivery mechanisms do not stabilize peace and thereby contribute to the possibility of escalation of these states' insecurities. There is no doubt that nuclear

<sup>&</sup>lt;sup>88</sup> Dinshaw Mistry, 'Missile Proliferation and Deterrence Stability in South Asia' in Krepon and Thompson, eds. *Deterrence Stability*, op.cit., 131. <sup>89</sup> Ibid., 130

weapons will continue to play a role in the national security policy of these two states as these weapons did maintain a fragile peace and prevented the outbreak of a conventional or total war.

The Kashmir issue is the most complicated conflict, which may trigger any kind of aggression and routine border skirmishes may convert into a future limited war leading to the possibility of a nuclear exchange. Besides Kashmir, the second important dimension is terrorism and extremism which redefined the threat spectrum, complicating the regional security situation and deepening mistrust after the terrorists attack on Indian parliament (2001) and later Mumbai (2008), which India blames Pakistan for. The doctrines of the two states are not transparent enough with their deliberate ambiguity which increases the likelihood of war and undermines the prospects of war prevention. The ingredients attached to these doctrines carry the potential to escalate rapidly upward on the ladder of conflict. Thus, the two states need to bring more transparency, thereby reducing the risk of accidents while retaining effective command and control systems. This will help the two states to achieve the true spirit of deterrence theory – which is - stable deterrence and secure peace. The two states need to build stable political relationship and enhance deterrence stability and mitigate their mistrust while promoting trade and building cooperation where it is possible. The two states should focus on devising diplomatic means for the settlement of the bilateral disputes especially Kashmir. Both the states need to clearly establish understanding that neither the use of total force is feasible nor the concept of total victory is achievable in the nuclear domain as was guided by deterrence theory.

Presumably, the attitude of the two states is a fundamental problem, which further intensifies their differences. It is urgent that the two states increase efforts to institute peace by exploring areas of commonalities and learn from each other's good experiences, capabilities and practices.

Why could peace not be preserved up to this date? First, the two states could not induce the true spirit of the deterrence theory or effectively translate this theory into practice. Second, India is a revisionist and ambitious state in this region; it does not seem to be interested in resolving the territorial disputes. Thirdly, neither of the states seems to understand the escalation theory, the concept of limited war or the consequences of the employment of nukes. It is an urgent necessity that the two states take responsibility to avoid adventurism. Several options are available to reduce the risks of an arms race spinning out of control in the subcontinent. Short of major arms draw downs, the most effective course of action would be multilateral nuclear risk reduction measures that allow better communication and clearer understanding between India and Pakistan with the involvement of China.

Political and military elites in these countries need to grasp the true consequences of employment of nuclear weapons in their conflicts-prone region. They need to establish training centres on escalation and nuclear use and non-use understanding to generate public awareness.

Both India and Pakistan should talk about their future peace and not wars and devise strategies to avoid uncertainty that could lead to a fateful conflict – by following a path of **doctrinal clarity** for the good of the people of both the states. Both need to introduce an early escalation control strategy and measures such as mature early warning systems, nuclear signalling, and direct communication mechanism for military to military and political to political establishments. Both the states should behave as mature nuclear weapon states and induce highly rational behaviour in their strategic actions. Both the states need to take a lead into global responsibilities to preserve peace and promote stability and eventually work towards strengthening of global non-proliferation institutional norms.

## Conclusion

India and Pakistan's experience shows that nuclear deterrence in South Asia apparently has stabilised the region but the peace has been precariously maintained because the two states have not rationally demonstrated strategic responsibility to induce permanent peace and preclude the probability of war. The two new nuclear weapon states have failed to translate deterrence theory into strategy effectively to achieve secure peace as the two Cold War actors did. Thus, the new nuclear states' behaviour goes contrary to the deterrence theory's fundamental notion in South Asia and is based on and directed by their distinct directions and goals. The chances therefore of a limited war seem high with increased risks of escalation in the absence of an escalation control strategy. Within such a scary environment the introduction of new technologies and Indian shift from land to sea based deterrence has aggravated the arms race and raised further questions on regional strategic stability. The two states' nuclear doctrines are flawed, uncertain and ambiguous and promote high probability of war.

India and Pakistan should become conscious that they cannot avoid serious and unavoidable risks of nuclear war until they rationalise and economize their military plans under some budgetary regime deciding how much is adequate for deployment and arms control mechanism. They have to realize that nuclear 'weapons serve no military purpose whatsoever. They are totally useless – except only to deter one's opponent from using them.'<sup>90</sup> They need to realize that there is no victory in nuclear war, 'a nuclear war can only be controlled and won if one side consciously chose to lose the war, an event as unlikely in the future as it has been rare or non-existent in the past.'<sup>91</sup> 'It is not necessary to win a nuclear war in order to deter it; one has only to ensure that both are likely to lose it.'<sup>92</sup> The low-yield weapons have introduced new dimensions and new risks, hence, conventional wisdom suggests that the two states should focus on defusing and managing the conflict before it escalates to unthinkable level.■

<sup>&</sup>lt;sup>90</sup> Robert J. Art, op.cit., 122-123.

<sup>&</sup>lt;sup>91</sup> Ibid.

<sup>&</sup>lt;sup>92</sup> Ibid.