

**JOURNAL OF
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India-Pakistan Candidacy for NSG

Zafar Nawaz Jaspal

North Korean Nuclear Strategy: A Deterrence Quagmire for Korean Peninsula

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Dynamics of Deterrence & Strategic Equilibrium in South Asia

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Maqbool Aslam Lashari

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Strategic Vision Institute (SVI)

Strategic Vision Institute (SVI) is an autonomous, multidisciplinary and non-partisan institution established in January 2013. The SVI aims to project strategic foresight on issues of national and international import through dispassionate, impartial and independent research, analyses and studies.

Journal of Security and Strategic Analyses (JSSA) is a bi-annual premier research publication of the SVI. It would primarily focus on the contemporary issues of security and strategic studies with a multi-disciplinary perspective.

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CONTACT DETAILS
Tel: +92-51-8434973-75
Fax: +92-51-8431583
Web: www.thesvi.org
E-mail: info@thesvi.org, editor@thesvi.org
Address: Please see the SVI website.

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Abbreviations

ABM	Anti-Ballistic Missile
ADIZ	Air Defence Identification Zone
ASEAN	Association of South East Asia Nations
BMD	Ballistic Missile Defence
DPS	Democratic Party of Japan
CARs	Central Asian Republics
CASA	Central Asia South Asia
CNRA	Committee on Nuclear Regulatory Activities
CPEC	China-Pakistan Economic Corridor
CSD	Cold Start Doctrine
CTBT	Comprehensive Test Ban Treaty
DBT	Design Basis Threat
DPRK	Democratic People's Republic of Korea
EAS	East Asia Summit
EEZ	Exclusive Economic Zone
EIA	Energy Information Administration
ETIM	East Turkestan Islamic Movement
FU	First Use
GW	Giga-Watt
IAEA	International Atomic Energy Agency
ICBM	Inter-Continental Ballistic Missile
INSA	Indian Naval Ship
IS	Islamic State
KAMD	Korean Air and Missile Defense
KANNUP	Karachi Nuclear Power Plant
LPD	Liberal Democratic Party
LYSR	Low Yield Short Range
MAD	Mutual Assured Destruction
MIRVs	Multiple Independently Targetable Re-entry Vehicles
MoU	Memorandum of Understanding

MTCR	Missile Technology Control Regime
NATO	North Atlantic Treaty Organization
NFU	No First Use
NISAS	Nuclear Security Action Plan
NNPR	Nuclear Non-Proliferation Regime
NNWS	Non-Nuclear Weapon State
NPT	Nuclear Non-Proliferation Treaty
NRA	National Regulatory Authority
NRECC	National Radiation Emergency Coordination Centre
NSAs	Non-State Actors
NSG	Nuclear Supplier Group
NSS	Nuclear Security Summit
NURESC	Nuclear and Radiological Emergency Support Centre
NUG	National Unity Government
NWS	Nuclear Weapons State
PALs	Permissive Action Links
PCENS	Pakistan Centre of Excellence for Nuclear Security
PNE	Peaceful Nuclear Explosion
QCG	Quadrilateral Coordination Group
ROK	Republic of Korea
SLBM	Submarine Launched Ballistic Missile
SLOC	Sea Line of Communications
SSBN	Sub-Surface Ballistic Nuclear (Submarine)
SSRC	Syrian Scientific Research Centre
TAPI	Turkmenistan-Afghanistan-Pakistan-India
THAAD	Terminal High Altitude Area Defense
UNGA	United Nations General Assembly
UNSC	United Nations Security Council
WOT	War on Terror
ZAC	Zangger Committee

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Preface

Staying cognizant of the role of policy research and analysis in contemporary security and strategic studies, the Strategic Vision Institute (SVI) brings together the second volume of its premier publication: *Journal of Security and Strategic Analyses (JSSA)*. It aims to serve as a primary source of discussion and formulation of academic research on the current political, strategic and security discourse. *JSSA* envisages presenting an impartial and unbiased account that will help decision makers adopt an independent and objective approach during the decision making process.

JSSA is envisioned to instill an independent thinking and scholarship that supports national and human security and fundamental freedom. The major areas covered in the research papers in this volume reflect upon a rapidly changing international security environment and primarily focus on the proliferation of weapons of mass destruction and non-proliferation/counter proliferation policy, deterrence and strategic stability. Some papers focus on strategy, statecraft, crisis management, regional security, conflict management and resolution, intelligence and the emerging spectrum of new and complex security and strategic threats. Some others cover areas like internal ethnic, sectarian and religious conflicts, governance failure, and resources mismanagement.

This issue of *JSSA* presents comprehensive and measured assessments by an eminent group of academic and professional researchers. The authors examine various facets of international strategic and security scenarios and provide coherent evaluations. It is believed that this issue will be a source of valuable information with practical relevance to policy leaders and practitioners interested in the relevant fields. The approach adopted by the authors has been both academic and policy oriented in both, historical and contemporary perspectives. Special emphasis has been laid on presenting well researched analytical narratives, substantiated with appropriate facts, figures and sources which lend authenticity to the views presented by the authors.

One of the research papers included in the journal gives a detailed analysis of the current Nuclear Supplier Group (NSG) debate that is going on in the national and international politico-diplomatic circles. It deliberates upon the possibility of India and Pakistan getting a membership for this nuclear cartel. The quest for prestige and status has been identified as one of the major driving forces behind India's aspiration, while search for non-discriminatory policy and equality happens to motivate Pakistan and those supported the criteria-based approach. It, however, could prove to be quite challenging to achieve their objectives given the nuclear renaissance and recent trends in global politics. It also highlights the expected economic and strategic dividends that New Delhi is eyeing if it gets the membership. While closely scrutinizing all the dynamics and trends, the author establishes that both India and Pakistan might encounter tough resistance in getting the membership of NSG in the near future as many members of the Group seem determined to prevent non-NPT members' entry into the Group without first agreeing on a criterion. The article presents an in-depth analysis of the whole situation which the readers are going to find very informative and useful.

The next paper addresses another very significant yet less known area and talks about the North Korean nuclear weapons development and its nuclear strategy. The author believes that North Korea deliberately intends on keeping the element of ambiguity alive as it plays a central role in its deterrent force development. This article attempts to predict the conceptual essentials of minimum deterrence for North Korea and maintains that there are multiple nuclear strategies that a country can explore but all of which will have definite implications. Going by the essentials of minimum deterrence, if North Korea retains the modest number, curbs on more nuclear weapons tests, stays defensive and restrains from using its deterrent forces, then this could be consistent with the general prescription of minimum deterrence, and might help it not to look offensive. However, if North Korea, in its embryonic stages of deterrent force development,

increases its nuclear arsenal, miniaturizes nuclear weapons, develops sophisticated delivery systems, acquires an assured second-strike capability (nuclear submarine); it would appear to be more offensive as it is not consistent with what is conceptualized as minimum deterrence. So whichever nuclear strategy is eventually adopted by North Korea, it will have direct implications for North Korea in general and the Korean peninsula in particular. This research article will surely help in building a more clear understanding about the nuclear aims, ambitions and security needs of North Korea and will facilitate devising appropriate diplomatic and strategic responses to it in real time.

Another paper highlights the significance and relevance of nuclear weapons in the post Cold War era and maintains that these weapons may not necessarily have a military utility today but still serve the purpose of deterrence and peace. Applying this to the South Asian context, one can witness that both Pakistan and India have been adopting various measures to strengthen their deterrent postures. However the nuclear and conventional asymmetries are growing in South Asia which may be especially compelling Pakistan to increase its reliance on nuclear weapons. The author elaborates on the dynamics of deterrence and strategic equilibrium in the region where the readers will find an interesting scenario building, indicative of regional disequilibrium and strategic instability in the South Asian region.

This volume also contains a very useful research based analysis that shares a Pakistani perspective on Indo-Japanese nuclear energy cooperation. It explains how the Indo-Japanese nuclear deal could be a destabilizing factor for the South Asian region and especially for Pakistan. It also suggests that the Indo-US nuclear deal cannot be fully realized unless India makes efforts to materialize its deal with “nuclear allergic” Japan. The author posits that Japan had always been a nuclear repellent state but the Indo-US nuclear deal exerts pressure on Japan to sign a simultaneous nuclear energy deal with India, in which case it would be detrimental for Pakistan. The author has also employed figures and tables to make the debate more authentic and credible. The readers will find it a good resource material for the future study on this subject.

Another paper focuses on the interface between nuclear safety and security regime. An effort has been made to highlight the conflict areas that could create problems in achieving synergy between the two interrelated nuclear areas. Nuclear safety and security culture has been considered central to creating a sustainable regime for the safe, and secure operational environment for nuclear power industry. Differences have been highlighted along with the areas of achieving synergy within the two cultures, in order to create a comprehensive picture of nuclear safety and security.

A very significant issue of Afghan peace process is also part of this volume where the author has attempted to find out the probable benefits for Pakistan if the stalled peace process somehow resumes and culminates successfully. The article also highlights various impediments that are hindering the progress on the peace efforts and suggests ways, and means through which the stakeholders could work out an effective strategy to neutralize the negatively impeding factors. This paper makes very instructive, useful and bold suggestions for the Pakistani decision-making echelons and other stakeholders on how to improve mutual perceptions and policy to promote peace and development in Afghanistan and its bordering regions with Pakistan. The paper will help enhance a general understanding of the Afghan quagmire, why peace is an absolute imperative in the region and Pakistan's attendant quest to bring peace in Afghanistan.

India's aspirations to become a major power have led it to strive for a hegemonic takeover of Indian Ocean. One of the research papers exclusively looks at the Indian ambitions to achieve a great power status and how this desire may make it come into direct clash with China. The author believes that it is India's ambitious objective to pre-empt China's rise particularly towards the Indian Ocean and the Persian Gulf that explains the rapid expansion of the Indian naval military capability and security alignments with the US and the West in the region and nuclearization of the Indian Ocean. Therefore, India is keen on building new alliances all over the globe. The study provides an analysis of India's sea based aspirations and connections in the Indian Ocean and

maintains that augmented Indian influence in the Indian Ocean will be perilous for Pakistan's national security interests.

SVI has favored and stood up for the promotion of strategic culture with firm roots in extensive research and scholarship. It aims to generate an autonomous and rich debate on issues that specifically carry vital importance for Pakistan, peace and development in the region and international harmony so that the intellectual input could be better utilized in the decision making process. Additionally, it is hoped that the narrative should reach out to a larger audience where the voice could be heard and registered in the national and international policy circles. *JSSA* also seeks to be a major contributor in bringing out effective counter narratives to any prevalent policy discourse that acts against the security and strategic interests of Pakistan, and threatens regional stability and international security.

JSSA conforms to the standard HEC guidelines/rules of publication and seeks to maintain the general quality of the contributions as per the international standard. It aspires to become a top ranking HEC recognized journal. The quality aspect remains and will always be the prime concern at the SVI, supplemented by careful selection of the manuscripts wherein the readers will be able to find a collection of well written, academically sound and policy oriented research papers that have attempted to methodically examine various strategic and security issues in detail. It is being hoped that the readers will be able to benefit from the analyses presented in this issue. SVI plans to bring out subsequent volumes of *JSSA* on a regular basis and is looking forward to receiving high quality manuscripts exclusively written for *JSSA*. It looks for readers' comments and observations not only to improve its quality but also utility in the policy, and academic circles.

RESEARCH PAPERS

India-Pakistan Candidacy for NSG

Zafar Nawaz Jaspal*

Abstract

The trends reveal that both India and Pakistan might encounter tough resistance in getting the membership of NSG in the near future. Many members of the Group seem determined to thwart non-NPT members attempt to join the Group without a criteria-based approach. Nevertheless, New Delhi has robustly been lobbying with the intense support of Washington and its like-minded countries since 2010 to get a 'special treatment' by the NSG members. Simultaneously, Islamabad is equally determined to join the NSG.

Key words: Nuclear, Supplier, Recipient, Horizontal Proliferation, Criteria-based, Plenary, Peaceful use.

The Nuclear Supplier Group's (NSG) plenary meeting in Seoul on June 23-24, 2016 was remarkable for Group's future outlook, operation and credibility. The 48 members had seriously deliberated to increase the membership of the cartel that controls nuclear exports. The increasing of the membership of the Group seems a cumbersome process due to the trends in the global politics and distinct characteristics of the new aspirants i.e. India and Pakistan. The members ended up balancing between the political necessities and the norms based equitable non-discriminatory criteria. Though, they attempted to resolve this balancing puzzle, yet failed to create a consensus. Both the Great Powers' politics and mantra in support of the principal of universality or criteria-based approach resulted in a status quo during the June 2016 NSG plenary meeting.

*The author is an Associate Professor at the School of Politics and International Relations, Quaid-i-Azam University, Islamabad.

The nuclear renaissance and trends in global politics signify the probability of change in the current membership of the NSG in the near future. India and Pakistan had formally applied for the membership in May 2016.¹ Both states realize that inclusion in the Group not only enhances their prestige or status in the global politics but also legitimizes their import and export of nuclear material for peaceful application. Hence, economic dividends of the NSG membership are equally important for Islamabad and New Delhi.

Paradoxically, keeping India and Pakistan out of the Group that was created around the year 1975, presents a complex situation. At the same time allowing the NSG membership to non-NPT states could undermine the NSG's objectives. The change in the membership of NSG would affect the credibility of the Group. Therefore, the current members of the NSG are obliged to chalk out an intelligent cum judicious strategy to entertain the applications of both India and Pakistan. This study is an attempt to answer two interlinked questions. Why it is important to grant the membership of NSG to India and Pakistan? What is the realistic stratagem to treat both India and Pakistan candidacy for the NSG?

The study is divided into four sections. The first section contains discussion on the background of NSG, its administrative procedures and requirements to join the NSG. The second section deliberates on India's endeavour to join the club. The third section examines Pakistan's attempt for entry into the club. The fourth section underscores the significance of criteria-based approach.

Managing Nuclear Technology

Since the very beginning of nuclear age, the dual use characteristic of the nuclear technology has been the primary concern of the nuclear

¹“Pakistan applies for accession to NSG,” *The Express Tribune*, May 21, 2016.

supplier countries.² The probability of the manipulation of nuclear technology for the military purposes kept the technologically advanced nuclear nations from transferring nuclear material and know-how to the less-developed nations. Conversely, the technologically advanced nations desire to benefit from the export of nuclear related items. The monetary benefits of nuclear technology gradually led to the emergence of a nuclear commercial lobby within the technologically advanced nations. The commercial feature of nuclear technology not only resulted in the advent of the national nuclear legislation, but also ensue both international nuclear trade regulatory arrangements and nuclear supplier nations' cartel. Precisely, these arrangements created a Nuclear Non-Proliferation Regime (NNPR) i.e, 'an integrated network of treaties and other standard-setting arrangements, which provide a comprehensive framework for the behaviour of States, international organizations and other actors in the nuclear area'.³

Presently, the NSG monitors and regulates nuclear trade between/among the nuclear supplier and recipient nations. It equally accommodates the concerns of nuclear arms control and disarmament advocates. Nevertheless, the nuclear non-proliferation objective of the NNPR has permanently created the split of states into two blocs — the Nuclear Weapon States and non-nuclear weapon states. The nuclear weapon states (NWS)—the United States, the Russian Federation, Britain, France and China—are permitted to maintain and modernize their weapons. Precisely, NWS have a legitimate right to defend themselves with nuclear weapons. Simultaneously, it is illegitimate for Non-Nuclear Weapon States (NNWS) party to the NPT to possess

²The United Nations General Assembly unanimously adopted Resolution 1 on January 24, 1946, and established an Atomic Energy Commission. The main objective of the Commission was to halt the proliferation of nuclear weapons. "Establishment of a Commission to deal with the problem raised by the discovery of Atomic Energy", Resolutions Adopted on the Reports of the First Committee, January 24, 1946. <http://daccess-dds-n.un.org/doc/RESOLUTION/GEN/NR0/032/52/IMG/NR003252.pdf?OpenElement>

³John Simpson and Darryl Howlett, "The NPT Renewal Conference Stumbling toward 1995," *International Security*, Vol. 19, No. 1(Summer 1994), pp. 43-44.

nuclear weapons for their national security. Therefore, the nuclear supplier states ensure before transferring nuclear technology and material to the recipient states that the latter should not exploit the dual-use feature of nuclear technology for developing nuclear weapons. For the prevention of military use of nuclear technology various international institutions and voluntary groups were established.

Although, the critics of NNPR opine that the constructs of the regime obstruct the processes of denuclearization,⁴ yet one cannot deny the fundamental role of International Atomic Energy Agency (IAEA) in the prevention of horizontal nuclear weapons proliferation. Importantly, it does not only regulate and facilitate transfer of nuclear technology for peaceful use, but also provides and lays safeguards apparatus at the recipient states' nuclear facilities to check the misapplication of nuclear technology. In addition, voluntary groups also assist IAEA in preventing the misuse of nuclear technology. For instance, Zangger Committee (ZAC), also known as 'NPT Exporters Committee', was established in 1971. It was an informal and not legally binding Committee. The objective of the ZAC was to regulate nuclear exports and to strengthen the IAEA safeguards.⁵

NSG: Establishment

The NSG was created as a voluntary cartel in 1975 on the behest of the United States. The cartel was established in response to India's May 18, 1974, Peaceful Nuclear Explosion (PNE), codenamed "Smiling Buddha". India violated its agreement with IAEA by using a Canadian-Supplied Reactor (CIRUS) spent-fuel for making plutonium. The violation of peaceful nuclear use assurances by New Delhi resulted in adoption of stringent measures by nuclear supplier nations to prevent the horizontal proliferation". The PNE sent shockwaves across the world.

⁴A review of nuclear weapon history reveals that the nuclear weapon states always guard their nuclear weapons and gang up against the horizontal nuclear weapons proliferation. Zafar Nawaz Jaspal, "Future of FMCT: assessing the prospects and constraints," *Strategic Studies*, Vol. XXX, No. 1 & 2, Spring & Summer 2010, pp. 46-71.

⁵Currently, 38 states are member to the ZAC, for further details see, "Zangger Committee (ZAC)," *The Nuclear Threat Initiative (NTI)*, August 8, 2015, <http://www.nti.org/treaties-and-regimes/zangger-committee-zac/>

Meetings spearheaded by the US and the UK, and backed by Moscow, set up the 'London Club', later renamed the NSG, in 1975.”⁶ Thus, the initial objective of the NSG was to impede its members from assisting India in making nuclear weapons. Strangely, today, United States wishes to make India its full-fledged member.

Since the entry into force in 1978, the NSG members have been transferring nuclear material and technology to the parties of Nuclear Non-Proliferation Treaty (NPT), who are observing comprehensive IAEA safeguards and adhering to the NSG export guidelines. India and Pakistan keep a few of their nuclear facilities unsafeguarded to mature their nuclear weapons programs. Consequently, the NSG members adopted denial approach against both India and Pakistan. The former's nuclear program was not affected due to its close relations with the former Soviet Union. Moscow assisted New Delhi in developing its nuclear infrastructure.

The NSG members imposed sanctions against Pakistan without any logical justifications in 1970s. The sanctions not only undermined Pakistan's infant nuclear power programme, but also obstructed its access to dual-use high technology. Certainly, the suspension of the Canadian assistance to Karachi nuclear power plant in 1974 and quashing of France-Pakistan reprocessing deal in 1978 were stern blows to the nascent nuclear industry of Pakistan. The constructive outcome of the denial approach was the progress in Pakistan's nuclear industry.

The NSG embargo obliged both India and Pakistan to invest in their indigenous nuclear industry. So, today, both are nuclear weapons states as well as successfully managing their civil nuclear industry for boosting agriculture yield, treating patient in hospitals and above all operating nuclear power plants. Importantly, India's geo-strategic significance in United States strategic calculation resulted in Indo-US civil nuclear cooperation in 2005. This cooperation has made a positive contribution to the Indian nuclear industry.

⁶G. Parthasarathy, “Failed NSG bid: China is a formidable adversary,” *Mail Today*, July 5, 2016, <http://www.dailyo.in/politics/nsg-nina-xi-jinping-npt-pakistan-nuclear-weapons-programme/story/1/11562.html>, accessed on July 20, 2016.

Conversely, it severely undermined the credibility of the NSG. The NSG members denied similar treatment to Pakistan but it continues its nuclear cooperation for peaceful use with China under the 'grand-father' clause of international law.

Today, India and Pakistan are states with nuclear arms and both having ambitious indigenous civilian nuclear energy programs. They make virtually every listed item needed for equipping nuclear reactors. Therefore, both New Delhi and Islamabad applied for the NSG membership to enter the global market as nuclear supplier states.

Neither India nor Pakistan is party to the NPT and thereby both states do not qualify to be a member of NSG, nor as a recipient of nuclear material and technology from the group. This rule, however, was evaded in September 2008 to accommodate India. The NSG members made an amendment in the trade laws of the Group and granted a special waiver to India.⁷ The granting of an exceptional waiver to India under American influence and short-term economic and geopolitical interests by the members of NSG was in conflict with the objectives of the cartel. "This trade waiver has allowed New Delhi to vertically proliferate and destabilise the region".⁸ The special treatment extended to India has largely undermined the credibility of NSG.

NSG: Administrative Procedures⁹

The member states of NSG have voluntarily agreed to coordinate their export controls governing transfers of civilian nuclear material and nuclear-related equipment and technology to non-nuclear-

⁷It was reported that 'during the first NSG meeting on August 21-22, 2008, was inconclusive, with China leading countries with reservations - primarily Austria, Switzerland, Norway, Ireland and New Zealand. A fortnight later, following direct intervention by President Bush, China relented and the NSG ended sanctions on September 6, 2008.'

⁸Waseem Qutab, "What India's NSG application does not say?" *The News International*, July 20, 2016, <https://www.thenews.com.pk/print/136214-What-Indias-NSG-application-does-not-say>, accessed on July 20, 2016.

⁹This section was already published in my article, i.e. Zafar Nawaz Jaspal, "Indo-US Nuclear Deal: Altering Global Nuclear Order," *Strategic Studies*, Vol: XXVII, Nos. 2 & 3 Summer & Autumn 2008.

weapon states. All NSG decisions are made by consensus. The NSG has two sets of guidelines listing the specific nuclear materials, equipment, and technologies that are subject to export controls. The NSG Guidelines require that importing states provide assurances to NSG members that the proposed deals would not contribute to the creation of nuclear weapons. Potential recipients are also expected to have physical security measures in place to prevent theft or unauthorized use of their imports and to promise that nuclear materials and information will not be transferred to a third party without the explicit permission of the original exporter.¹⁰ In addition, final destinations for any transfer must have IAEA safeguards in place. The IAEA is charged with verifying that NNWS are not illicitly pursuing nuclear weapons. IAEA safeguards to prevent nuclear material or technology from being stolen or misappropriated for weapons include inspections, remote monitoring, seals, and other measures.

The guidelines are comprised of two parts, each of which was created in response to a significant proliferation event that highlighted shortcomings in the then existing export control systems. Part I lists materials and technology designed specifically for nuclear use. These include fissile materials, nuclear reactors and equipment, and reprocessing and enrichment equipment. First published in 1978, Part I responded to India's diversion of nuclear imports for supposedly peaceful purposes to conduct a nuclear explosion in 1974. Part II identifies dual-use goods, which are non-nuclear items with legitimate civilian applications that can also be used to develop weapons. Machine tools and lasers are two types of dual-use goods. NSG members adopted Part II in 1992 after discovering how close Iraq came to realizing its nuclear weapons ambitions by illicitly employing dual-use imports in a covert nuclear weapons program before the 1991 Persian Gulf War. Moreover, since 1992 the NSG has not allowed nuclear trade with non-NPT states. In December 2002, in response to the threat of nuclear terrorism, the NSG agreed to strengthen its guidelines in an attempt to prevent and counter the threat of diversion of nuclear exports to nuclear terrorism. In 2004 meeting, NSG members adopted a 'catch-all' mechanism, which authorizes members to block any export suspected

¹⁰“Report,” *Arms Control Today*, June 2004.

to be destined to a nuclear weapons program even if the export does not appear on one of the control lists. To be eligible for importing Part I items from an NSG member, states must have comprehensive IAEA safeguards covering all their nuclear activities and facilities. In the case of Part II goods, IAEA safeguards are only required for the specific nuclear activity or facility that the import is destined for.

NSG: Membership Requirements

The NSG did not have any fixed or rigid criteria for the membership of a club till the end of Cold War. The members deliberated seriously in the 1990s to chalk out requirements imperative for entry into the club. In this context, the first formal plenary meeting was held in Warsaw in 1992. During the subsequent 1993 Lucerne Plenary, the participating members of the NSG adopted the first procedural Arrangement. According to this, the membership criteria were:

- a. Membership of the NSG initially consists of the countries adhering to the Nuclear Supplier Guidelines (INFCIRC/254/Rev. 1, Part 1 and 2) and fully participating in the Plenary Meeting in Lucerne in 1993.
- b. Countries other than those referred to in paragraph 1 (a) may be invited to join the NSG by a consensus decision of its members. Consensus may be achieved intersessionally by the Chair through regular channels.
- c. While it is understood that prospective members would, as a rule, adhere to INFCIRC/254/Rev. 1 in its entirety before being considered for membership, it would also be possible to invite adherents to part 1 of INFCIRC/254/Rev. 1 to participate in Plenary Meetings prior to their adherence to Part 2. Until these countries have adhered to Part 2, they will only take part as observers in Plenary Meeting discussions on issues related to Part 2.¹¹

¹¹G. Balachandran, Reshmi Kazi and Kapil Patil, "Membership Expansion in the Nuclear Suppliers Group," Special Feature, Institute for Defence Studies and Analysis, New Delhi, June 22, 2016, http://www.idsa.in/specialfeature/membership-nuclear-suppliers-group_gbalachandran_220616, accessed on August 2, 2016.

The NSG members had further stringent membership criteria during their May 10-11, 2001 Aspen, Colorado, United States Plenary meeting. According to it, the requirements are the following:

- The candidate ought to have the ability to supply items (including items in transit) covered by the Annexes to Parts 1 and 2 of the NSG Guidelines;
- It's adherence to the Guidelines and action in accordance with them;
- The applicant should abide by the enforcement of a legally based domestic export control system which gives effect to the commitment to act in accordance with the Guidelines;
- The NSG aspirants express adherence to one or more of the NPT, the Treaties of Pelindaba, Rarotonga, Tlatelolco, Bangkok, Semipalatinsk or an equivalent international nuclear non-proliferation agreement, and full compliance with the obligations of such agreement(s);
- The applying state's support of international efforts towards non-proliferation of Weapons of Mass Destruction and of their delivery vehicles.

The Aspen Plenary also defined what it meant by adherence thus:

“To be eligible to become a new NSG Participating Government, a government must have adhered to the Guidelines for the Export of Nuclear Material, Equipment and Technology, and the Guidelines for Transfers of Nuclear Related Dual-Use Equipment, Materials, Software and Related Technology. Such adherence is accomplished by sending an official communication to the Director-General of the IAEA stating that the government will act in accordance with the Guidelines. This communication is to be intended for publication in the INFCIRC series.”¹²

¹²“Nuclear Suppliers Group,” *Civil Services Mentor Magazine*, June 2016, <http://iasexamportal.com/civilservices/magazine/csm/june-2016/nuclear-suppliers-group>, accessed on August 2, 2016.

Importantly, the NSG is neither an international treaty nor replica of NPT. Its scope, intent and functionality are different from that of the NPT. It is a group of “nuclear supplier countries that seeks to contribute to non-proliferation of nuclear weapons through implementation of two sets of Guidelines for nuclear exports and nuclear-related exports.” Indeed, its intent to contribute to non-proliferation of nuclear weapons is consistent with the objectives of the nuclear non-proliferation regime. Therefore, “the purpose of the NSG is to support the NPT. The NSG has supported the NPT in the past by tightening export controls. If this remains the primary purpose of the NSG in the future, then new NSG applicants need only to tighten up their export controls to NSG standards to gain entry.”¹³ Supporting NPT objectives does not make it an implicit necessity for the candidates of NSG membership to be a party to NPT. Therefore, “NPT membership is not a requirement for membership in the NSG, but “adherence” is a “factor” in INFCIRC/539, and many participants would favour India making binding legal commitments—including to NPT Articles I and VI and to the Comprehensive Nuclear Test Ban Treaty—that would bring India closer to the global non-proliferation mainstream.”¹⁴

NSG Membership: India's Endeavour

Since the beginning of the 21st century, the Nuclear Non-Proliferation Regime (NNPR) has been facing serious challenges due to the transformation in the global politics. The United States determination to sustain its sole super power stature in the global politics resulted in its Containment of China/Pivot to Asia/Rebalancing Strategies. The strategic outlook of the Washington has enhanced India's significance in the former's foreign and strategic policy. Consequently, the Indo-US Strategic partnership has been cemented. The strategic partnership obliges Washington to assist Indian nuclear and space

¹³Michael Krepon, “Club Membership,” *Arms Control Wonk*, June 26, 2016, <http://www.armscontrolwonk.com/archive/1201515/club-membership>, accessed on June 28, 2016.

¹⁴Mark Hibbs, “India's quest for NSG Membership,” *Nuclear Intelligence Weekly*, July 8, 2016, <http://carnegieendowment.org/2016/07/08/india-s-quest-for-nsg-membership-pub-64070>, accessed on July 13, 2016.

industry. The Washington and Delhi nuclear cooperation required amendment in both the United States Foreign Assistance Act of 1954 and NSG trade rules. The adjustments were made in both to facilitate and legitimize the Washington and New Delhi nuclear trade.¹⁵

India received a special treatment by NSG in 2008. Since then, it has been under the impression that it would always be treated individually or granted special status by the members of the NSG. Therefore, without taking into account the current trends in the global strategic environment, India's bid for NSG membership in May 2016 failed to receive a favourable response from the participating members of the club in the 2016 NSG Seoul Plenary meeting. Despite the failure in Seoul, Premier Narendra Modi has been lobbying with the support of the United States to erase obstacles, which hinder New Delhi's entrance into the NSG. According to Mark Hibbs, "The US, close allies, and India collaborated toward the goal of admitting India into several multilateral export control regimes, an important objective for India after years of being frozen out of international nuclear trade. The plan called for India to first join the Missile Technology Control Regime (MTCR), then the NSG, and finally the control arrangements for conventional and chemical weapon."¹⁶ India secured the membership of MTCR in June 2016.¹⁷ The June 2016 plenary meeting for the Group in Seoul couldn't yield any positive results for India as no decision on its membership had taken place.¹⁸ Presently, New Delhi is vigorously endeavouring to join

¹⁵ Zafar Nawaz Jaspal, "Indo-US Nuclear Deal: Altering Global Nuclear Order.

¹⁶ Mark Hibbs, "India's quest for NSG Membership".

¹⁷ As of today, the MTCR has 35 members: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, India, Italy, Ireland, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Republic of Korea, the Russian Federation, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, and the United States of America. "Chairs' statement on the accession of the Republic of India to the Missile Technology Control Regime (MTCR)," The Hague, Luxembourg, Paris, June 27, 2016, file:///Users/drzafarnawazjaspal/Downloads/160627-chairs-statement-on-india.pdf, accessed on July 24, 2016.

¹⁸ Baqir Sajjad Syed, "US Likely to Push for India's Entry in NSG in October", *Dawn*, July 30, 2016, <http://www.dawn.com/news/1274178/us-likely-to-push-for-indias-entry-in-nsg-in->

the Nuclear Supplier Group.

The membership of the NSG seems very vital for the Premier Modi's government because the membership of the group would allow New Delhi to trade in nuclear materials and technology with the rest of the world. "India feels that NSG membership will enable it to become an international player in nuclear commerce, as it will not only be able to access the latest nuclear technology, but will be in a position to supply its indigenous technology."¹⁹ Perhaps, it would be an economic venture. In strategic parlance, however, the membership would eradicate the last remnants of 'the pariah status that was imposed following the first nuclear tests in Pokhran in 1974, and reinforced after the Pokhran II tests in 1998.' Aroon Purie opined that: "If the civil nuclear agreement between India and the US in 2005 was the first step towards ending the ostracism, becoming a full member of the NSG would make India an integral part of the global nuclear club." The full membership of the Group certainly boosts India's political stature in the global politics in general and underscores its nuclear program's credibility in particular. Ashok Sajjanhar argued, "as India's international political, economic, military and strategic profile and clout increases, India would like to move into the category of international rule-creating nations rather than stay in the ranks of rule-adhering nations. For this, it is essential that India gets due recognition and a place on the NSG high table."²⁰

India's NSG membership endeavours to attain explicit objectives which are political, economic and diplomatic. External Affairs Minister Sushma Swaraj pointed out: "We got waiver in 2008 but we are pursuing

october?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+da
wn-news+(Dawn+News)

¹⁹K S Venkatachalam, "Will China ever allow India to be part of the Nuclear Suppliers Group?" *The Express Tribune*, July 8, 2016, <http://blogs.tribune.com.pk/story/36213/will-china-ever-allow-india-to-be-part-of-the-nuclear-suppliers-group/>, accessed on July 15, 2016.

²⁰Ashok Sajjanhar, "Why is NSG Membership important for India?" *IDSA Comment*, June 21, 2016, http://www.idsa.in/idsacomments/why-is-nsg-membership-important-for-india_asajjanhar_210616, accessed on July 28, 2016.

to become a member of NSG because there is a difference between sitting inside the room and sitting outside it. We are outside the room despite the waiver we got. When you are in, you are a part of the decision making process.”²¹ However, one cannot underestimate that membership of the NSG would facilitate New Delhi in modernizing its nuclear industry. The advancement of the Indian nuclear industry certainly boosts the modernization process of India's nuclear arsenal.

Prime Minister Modi had toured many countries, including United States to muster support for India's Nuclear Supplier Group membership application endorsement during the first half of June 2016. New Delhi claimed that: “India's participation in the NSG would strengthen international efforts to prevent the proliferation of nuclear weapons.” Moreover, the Indian diplomats claim, “without NSG membership India faces supply-chain interruptions for nuclear projects, and cannot meet climate change commitments, irrespective of whether these claims are true, they are extraneous to the NSG's export control and non-proliferation missions.”²² The review of NSG June 2016 plenary meeting at Seoul, South Korea, reveals that some members of the Group are not convinced by India's unjustified declarations.

The NSG membership 'appears to have emerged as the single most critical foreign policy priority for the Modi Government.' Therefore, Prime Minister Narendra Modi's whirlwind foreign trips' failure to ensure smooth entry of India in NSG is a big setback for his foreign policy agenda. Conversely, the denial of special treatment to India would contribute definitely in restoring the credibility of the NSG. Since 2008, India has been enjoying the exceptional treatment by the Group due to its cementing strategic partnership with the United States. “For years, the United States has sought to bend the rules for India's nuclear

²¹“English Rendering of Annual Press Conference by External Affairs Minister,” Ministry of External Affairs, Government of India, June 19, 2016. http://www.mea.gov.in/media-briefings.htm?dtl/26955/English_Rendering_of_Annual_Press_Conference_by_External_Affairs_Minister_June_19_2016, accessed on July 26, 2016.

²²Mark Hibbs, “India's quest for NSG Membership”.

program to maintain India's cooperation on trade and to counter China's growing influence. In 2008, President George W. Bush signed a civilian nuclear deal with India that allowed it to trade in nuclear materials.”²³ Washington's twisting of Nuclear Non-proliferation regimes rules/norms in favour of India has increased the fragility of the regime and also created conducive environment for India's nuclear program advancement.

Presently, India enjoys President Obama's strong support in its bid to join the group. Notably, President Obama first expressed support for India's membership in the NSG in November 2010 joint statement with Prime Minister Manmohan Singh. Since then, he has been lobbying for India to win membership through a special exception. Nevertheless, the trends in the international politics and debates on the nuclear non-proliferation regime indicate that India may not receive the special or exceptional treatment in securing NSG membership. India's application for the NSG membership and United States plea to treat it as a special case were immensely debated in the international media prior to the group meeting on June 9, 2016 in Vienna, Austria. The debate confirms that special treatment of one state and discriminatory approach against the others would be perilous for NSG in particular and Nuclear Non-proliferation regime in general.

Although Obama Administration had immensely lobbied for India's NSG membership, yet a few Congressmen at the Capitol Hill did express their serious reservations on India's nuclear non-proliferation record. They seem disturbed due to New Delhi's non-compliance of nuclear related commitments with Washington since the entry into force of Indo-US Nuclear Deal in 2008. For instance, Senator Markey's statement in the US Senate hearing on May 24, 2016, was quite revealing. He pointed out that: “since 2008 when (we) also gave them an exemption, India has continued to produce fissile material for its nuclear weapons programme virtually un-checked. At that time Pakistan warned us that the deal would increase the chances of the nuclear arms race

²³The Editorial Board, “No Exceptions for a Nuclear India”, *The New York Times*, June 4, 2016.

in South Asia.”²⁴ The continuity of vertical nuclear proliferation in South Asia and absence of arms control arrangement between India and Pakistan, endorses Senator Markey's proclamation in the Senate of United States.

The general impression is that India lost its chance to become a full-fledged member of NSG in June 2016. Many Indians, however, seem optimistic about the club membership, especially after India's entry into the MTCR. Ashok Sajjanhar opined: “India became a Member of the MTCR on 7 June 2016. All 34 members of MTCR are members of the NSG. India is hence assured of support of these 34 members in its quest for NSG membership.”²⁵ Notably, China applied for MTCR membership in 2004. Many states questioned its missile proliferation record and thereby it failed to join MTCR. India would use its MTCR membership in softening China's stance at NSG. In simple words, New Delhi would support Beijing's bid for MTCR and in return the latter will facilitate the former's entry into the nuclear supplier's club by renouncing its strident opposition on special treatment of India by the participating members of NSG.

Pakistan's Calculated Bid

Pakistan formally applied for the NSG membership on May 18, 2016. Perhaps, Pakistan's move to join NSG surprised both India and the United States. Since its bid for membership, Islamabad has been lobbying for the support of like-minded states. In this context, it also sent letters to US officials and lawmakers, urging them to support its bid for joining the NSG. Due to its visible tilt towards New Delhi, Washington asked Pakistan 'to put its case before all 48 members of the Group, instead of seeking individual endorsements for joining the NSG’²⁶. The response of Washington to Islamabad reflects chill in bilateral relations as well as continuity of former's opposition to latter's nuclear weapon program.

²⁴ Quoted in Anwar Iqbal, “India joining NSG will escalate nuclear race in South Asia: US senator,” *Dawn*, May 26, 2016.

²⁵ Ashok Sajjanhar, “Why is NSG Membership important for India?”

²⁶ Anwar Iqbal, US asks Pakistan to seek NSG's acceptance, not individual endorsements,” *Dawn*, June 11, 2016.

Perhaps, "Washington's consistent opposition to Pakistan's membership of the NSG is part of its campaign against our nuclear weapons programme, which it wants Islamabad to unilaterally freeze despite the threat to our security posed by the growing Indian conventional and nuclear arsenal, which the US has itself facilitated by the 2008 waiver."²⁷

Importantly, Pakistan instead of asking for favour or special treatment has maintained a principled stance on NSG membership. It is demanding non-discriminatory criteria for non-NPT states for entry into the NSG. It accentuates that an equitable criteria-based or norm-based approach ought to be adopted for the membership of non-NPT nuclear weapon states. More explicitly, Islamabad has been advocating that the norms and rules applied to give membership to India should also apply to all new entrants to the NSG. Many members have appreciated Pakistan's principled stance. Therefore, they have supported Islamabad's attempt to become a member of the group.

Islamabad is cognizant to the fact that without having a criteria-based approach, Pakistan would be permanently in a disadvantageous position. It would be vulnerable to supply-chain interruptions for nuclear projects. Moreover, NSG operates on the basis of consensus. Once India becomes the member of NSG, it would be in a position, as a member, to permanently block the entry of Pakistan in the Group by using the consensus clause. In simple words, it would veto the attempt of Pakistan to join the NSG. Therefore, the Advisor to Prime Minister on Foreign Affairs, Sartaj Aziz, categorically stated that "Pakistan is opposed to yet another country-specific exemption from NSG rules to grant membership to India, as this would further compound the already fragile strategic stability environment in South Asia, would further undermine the credibility of NSG, and weaken the non-proliferation regime."²⁸ Hence, Pakistan is determined to prevent the special treatment of India by the NSG.

²⁷Zamir Akram, "The NSG after Seoul," *The Express Tribune*, July 5, 2016.

²⁸"Trenchant Critique: Pakistan Opposes US-India Nuclear Deal," *The Express Tribune*, January 28, 2015, <http://tribune.com.pk/story/828765/trenchant-critique-pakistan-opposes-us-india-nuclear-deal/> also see, Pakistan Criticizes India's

Importantly, Islamabad's application to join the Group not only subverted the smooth entry of India in the NSG with the support of the United States, but also created a legitimate right of Pakistan to be a member of the Group. Islamabad maintains that it possesses “the expertise, manpower, infrastructure and the ability to supply NSG controlled items, goods and services for a full range of nuclear applications for peaceful uses.” Moreover, it has successfully institutionalized the safety and security of its nuclear program. According to the Pakistan national statement at 2014 NSS these steps include;

- Establishment of Pakistan Centre of Excellence for Nuclear Security (PCENS) with a potential to grow into a regional and international hub with the support of the IAEA;
- The establishment of a National Institute of Safety and Security (NISAS) under Pakistan Nuclear Regulatory Authority (PNRA) in 2014. The School was inaugurated by IAEA Director General, Yukiya Amano;
- Pakistan initiated its Nuclear Security Action Plan (NSAP) in 2006, with a renewal after every five years. Recently under its NSAP, Pakistan has revised safety parameters of nuclear power plants following the Fukushima accident;
- Pakistan has also installed a Nuclear Security Cooperation Programme (NSCP) at fifteen nuclear medical centres and upgraded measures are underway at eight more.
- To enhance radiological safety, the country has established a Nuclear and Radiological Emergency Support Centre (NURESC) and a National Radiation Emergency Coordination Centre (NRECC) as well.
- The newly established National Detection Architecture deploys special nuclear material sensors at important entry

Inclusion in Nuclear Suppliers Group, *New York Times*, January 28, 2015, <http://www.nytimes.com/2015/01/28/world/asia/pakistan-criticizes-indias-inclusion-in-nuclear-suppliers-group.html>

and exit locations to prevent illicit trafficking of nuclear related materials.²⁹

The primary objective of the NSG is to prevent the horizontal proliferation. Therefore the candidate for the Club membership ought to demonstrate its sincere efforts to foil horizontal proliferation. Since September 2004, Islamabad has been implementing United Nations Security Council (UNSC) Resolution 1540. The Resolution keeps States “from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery.”³⁰ It has created “extensive legal obligations for states to take measures against proliferation of weapons of mass destruction through controls over their employees and sites etc.”³¹ Pakistan was one of the states which immediately acted on a supplication of the UNSC Resolution 1540. It responded by legislating and executing *Pakistan Export Control on Goods, Technologies, Material and Equipment Related to Nuclear and Biological Weapons and their Delivery System Act, 2004* (Export Control Act 2014) in April 2004. The Export Control Act 2014 is consistent with the NSG 'Non-Proliferation Principle', adopted in 1994, “whereby a supplier, notwithstanding other provisions in the NSG Guidelines, authorises a transfer only when satisfied that the transfer would not contribute to the proliferation of nuclear weapons.”³²

Pakistan's National Command Authority Act was legislated and enacted in March 2010. Its statement of objectives refers:

Whereas, it is necessary and expedient to establish an Authority for complete command and control over research, development, production and use of nuclear

²⁹“Pakistan National Statement at Nuclear Security Summit,” *Ministry of Foreign Affairs*, March 26, 2014, <http://www.mofa.gov.pk/zahidan/pr-details.php?prID=1846>

³⁰Resolution 1540 (2004), United Nations Security Council, April 28, 2004, <http://www.ipu.org/splz-e/civ1540/1540.pdf>, accessed on August 3, 2016.

³¹ Ahmer Bilal Soofi, “International law & foreign policy,” *Dawn*, July 25, 2016.

³²“About the NSG,” <http://www.nuclearsuppliersgroup.org/en/about-us>, accessed on August 2, 2016.

and space technologies and other related applications in various fields and to provide for the safety and security of all personnel, facilities, information, installations or organizations and other activities or matter connected therewith or ancillary thereto.³³

The national laws legislated by the Parliament and executed by the Government of Pakistan manifest Islamabad's seriousness for the implementation of the Resolution 1540, adherence to NP, i.e, prevention of horizontal proliferation and above all compliance to the NSG export laws. These developments have enhanced Pakistan's nuclear material and facilities safety and security apparatus and changed the perceptions of international community about Pakistan's nuclear program. Consequently, the international community during the recent Nuclear Security Summit held in Washington on March 31 and April 1, 2016, also acclaimed (NSS) Pakistan's genuineness with its binding legal commitments to thwart the misapplication of both nuclear technology and materials.

The membership of the NSG would ensure political, diplomatic, economical and technological benefits for Pakistan. Therefore, instead of impeding India's entry into the club, Islamabad needs to lobby for its own membership to seek investment for its nuclear power sector. Coincidentally, the prevalent global political environment is conducive for Pakistan's petitioning for the club membership. It is because many members of NSG are convinced that granting a special treatment to India would not only tarnish immensely the credibility of the club, but also destabilize the strategic environment of South Asia. Second, despite being a non-NPT state, Pakistan's nuclear policies are consistent with the key provisions of the Treaty that apply to nuclear weapon states. Third, despite nuclear related sanctions, Pakistan honoured its contracts with the IAEA. For instance, Pakistan was sanctioned after India's peaceful nuclear explosion of 1974; it voluntarily continued its IAEA safeguards on Karachi Nuclear Power Plant. Fourth, it maintains impeccable safety

³³“The National Command Authority Act 2010,” *The Gazette of Pakistan*, Registered No. M-302/L-7646, Islamabad, March 11, 2010.

and security record. Hence, during ensuing period, till the next plenary in Switzerland in 2017 or the interim meeting(s) before the end of 2016, Islamabad ought to engage with all the members of the NSG and intelligently plead its case for the membership of the club.

Criteria-based Approach

The NSG membership has gradually increased since 1970s. The membership of the Club was generally granted to a candidate that ensures that it would reinforce the objectives and purposes of the NSG. The puzzling factor is that NSG members write and rewrite the procedures or rules of the Club. The record of these procedures reveals that NSG members adopted occasionally a flexible approach while scrutinizing the applications of a new aspirant of the Club membership. Though the technical capacity of a candidate is taken seriously, yet the regional and international strategic environment equally play a decisive role in the decision-making process of the Club. Therefore, today, India instead of declaring its firm support for the full, complete and effective implementation of the NPT has been using its September 2008 NSG waiver to justify its application. The statement on Civil Nuclear Cooperation with India states that “desire to contribute to the effectiveness and integrity of the global non-proliferation regime, and to the widest possible implementation of the provisions and objectives of the Treaty on the Non-Proliferation of Nuclear Weapons.”³⁴

New Delhi has been insisting that 2008 NSG waiver is enough to establish its right to join the club. Conversely, the opponents of India have been demanding the criteria-based rule. Michael Krepon opined: “The notion of a criteria-based approach to new membership resonated with enough NSG members to give Beijing – which dislikes doing it alone – the company it sought. India advocated a merit-based approach, but this begged the question of how to measure merit. Standards are

³⁴“Communication dated 10 September 2008 received from the Permanent Mission of Germany to the Agency regarding a “Statement on Civil Nuclear Cooperation with India,” INFCIRC/734, September 19, 2008, <https://www.iaea.org/sites/default/files/publications/documents/infcircs/2008/infcirc734c.pdf>, accessed on August 2, 2016.

needed to assess merit, whether they are called criteria or not.”³⁵ Nevertheless, both India and Pakistan failed to get the membership of the Club because 2016 Seoul communiqué demands the full, complete and effective implementation of the NPT. In 2008 the former secured the waiver because 2008 NSG communiqué speaks of contribution to the provisions and objectives of the NPT.

The Chinese principled stance, i.e., only party to NPT is qualified to be the member of the NSG is viewed in New Delhi and Washington a major roadblock, which had hindered India from becoming the Group member. Importantly, the 48 members of NSG have signed the NPT, either as nuclear weapons states or as non-nuclear weapons states. Whereas; India is not a party to the NPT. That's why; in addition to China, 11 other members of the Group including New Zealand, Turkey, South Africa, Austria, etc. also opposed the US move to include India in the 48-nation NSG. Consequently, on June 24, 2016 during the NSG plenary meeting “the discussions centred on the issue of criteria for membership of nuclear weapon states not party to the NPT, such as India, Pakistan and Israel.”³⁶

China has been keeping a firm stance on the subject of the NSG membership. On May 13, 2016, Chinese Ministry of Foreign Affairs spokes-person Lu Kang stated that NPT membership is a necessary qualification for membership. He added, 'Not only India, but also many other non-NPT members have voiced their aspirations to join the NSG.' Many NSG members, including China, believe that this matter shall be fully discussed and then decided based on consensus among all NSG members in accordance with the rules of procedure of the NSG. The recent reports reveal that China has shown flexibility on its stance by announcing that it is against the exception being granted to India and may favour a criteria-based approach to address the question of all non-NPT states being granted membership to NSG.

³⁵Michael Krepon, “Club Membership,” *Arms Control Wonk*, June 26, 2016, <http://www.armscontrolwonk.com/archive/1201515/club-membership>, accessed on June 28, 2016.

³⁶Zamir Akram, “The NSG after Seoul”, *The Express Tribune*, July 05, 2016.

India promised in 2008, to undertake certain non-proliferation initiatives in reciprocity of NSG waiver, i.e., exemption from full scope safeguards agreement with the IAEA as “a condition for the future supply of Trigger List items to any non-nuclear-weapon State. This decision ensured that only NPT parties and other states with full-scope safeguards agreements could benefit from nuclear transfers.” The review of New Delhi's nuclear policy reveals that India had not honoured its promise with NSG during the last eight years. Daryl G. Kimball pointed out that: “The NSG waiver for India was granted in return for several Indian non-proliferation 'commitments and actions', including maintaining its nuclear test moratorium, supporting negotiations to halt fissile material production for weapons, and developing a plan to separate its civilian and nuclear sectors.” New Delhi did not fully separate its civilian and military nuclear reactors till the writing of these lines. It neither observed moratorium on fissile material production for weapons use nor signed Comprehensive Test Ban Treaty (CTBT). Moreover, it did not adhere to the limited IAEA Additional Protocol. India's noncompliance attitude not only upset a few NSG members, but also weakened its case for the NSG membership. Therefore, they expressed their reservations over India's application to join the Group.

New Delhi instead of honouring its 2008 promised non-proliferation commitments, has been blaming and condemning both Beijing and Islamabad for blocking India's entry into the NSG. It was reported that: “frustrated and angry Indians are demanding that we punish China, boycott their goods, and join forces with the US to take on China and other such remedies.” Moreover, India has been trying to cash its strategic partnership with United States and thereby it has been publicizing Indo-Pacific strategy to check Chinese role in the

³⁷Mark Hibbs, “Toward a Nuclear Suppliers Group Policy for States Not Party to the NPT,” Carnegie Endowment for International Peace, February 12, 2016, http://carnegieendowment.org/files/2-3-16_Hibbs_NSg_final_CTG.pdf, July 16, 2016.

³⁸*Arms Control Today*, June 2016.

Manoj Joshi, “India's Abortive NSG Bid and the Kautilyan Lessons it Needs to Learn” *The Wire*, June 26, 2016, <http://thewire.in/46014/indias-abortive-nsg-bid-and-the-kautilyan-lessons-it-needs-to-learn/>, accessed on July 25, 2016.

Indian Ocean in general and South East Asia in particular. Despite these tactics, New Delhi has failed to quash criteria-based approach advocated by a few members for the non-NPT candidates for entry into the NSG.

Conclusion

The general perception is that NSG effectively pursued its objectives. The IAEA comprehensive safeguards at the nuclear facilities of the non-nuclear weapon states prevented the horizontal proliferation of nuclear weapons. Conversely, many argued that NSG achievements record is not appreciable. It failed to prevent the horizontal proliferation due to its preferential treatment of favourites. The political and economic objectives overwhelm the norms in the context of NSG treatment of India on the behest of United States in September 2008, which dented the credibility of the Group.

India and Pakistan have the infrastructure capable of producing highly enriched uranium and plutonium for both peaceful and non-peaceful nuclear uses. Both New Delhi and Islamabad are capable of assisting many developing states to advance their nuclear infrastructure for the peaceful use of nuclear technology. Many states had already benefited from Pakistan's Centre of Excellence for Nuclear Security. New Delhi had assisted a few developing states with their nuclear infrastructure for peaceful use of the technology. Therefore, the club members stress that India and Pakistan ought to adhere to the NSG guidelines. Indeed, the existent adherence is only possible, if both join the NSG as members. So, granting of the NSG membership to New Delhi and Islamabad would be in the interest of both NSG and lesser-developed states.

To conclude, both New Delhi and Islamabad remain optimistic about the membership of NSG in the near future. It's because, instead of rejecting their applications for membership of the group, the members of NSG have shelved the matter for future deliberations. Therefore, New Delhi has steadily been contacting the opposing forces in the NSG. New Delhi had already approached Beijing for its supports, which has been maintaining a principle stance in the group. Hence, Islamabad needs to

vigorously continue its diplomatic efforts for its own entry into the NSG and for recognition by the international community as a legitimate and responsible nuclear power.

North Korean Nuclear Strategy: A Deterrence Quagmire for Korean Peninsula

Zafar Khan*

Abstract

Although North Korea has already tested nuclear weapons capability for four times and plans to do more as it passes through the embryonic stages of its nuclear weapons development program, not much is known about North Korea's nuclear strategy. It is shrouded with greater ambiguity as ambiguity rules and plays a central role in its nuclear weapons program. In the absence of North Korea's policy document and institutionalization of its nuclear policy, it is not clear what nuclear strategy North Korea would opt for and why. Therefore, one expects many speculative interpretations on the evolving nuclear strategy of North Korea. This article attempts to predict the conceptual essentials of minimum deterrence that North Korea would follow. But under the pretext of minimum deterrence it would have multiple options to opt for one or more than one type of nuclear strategies. However, each of these nuclear strategies would have strategic implications for North Korea in general and the Korean peninsula in particular. Conceptually, the essentials of minimum deterrence predict that if North Korea retains the modest number, curbs on more nuclear weapons tests, stays defensive and restrains from using

*Dr. Zafar Khan (Ph.D. Strategic Studies, University of Hull, UK) authors the book *Pakistan's Nuclear Policy: a Minimum Credible Deterrence* (London and New York: Routledge, 2015). Currently, he serves as an Assistant Professor at the Department of Strategic Studies, National Defence University, Islamabad.

Its deterrent forces, then this could be consistent with minimum deterrence perceived here. However, if North Korea, in its embryonic stages of deterrent force development, increases its deterrent forces, miniaturizes nuclear weapons, develops sophisticated delivery systems, acquires an assured second-strike capability (nuclear submarine) and appears to be more offensive, then this may not be consistent with what is conceptualized here as minimum deterrence. Apparently, as the article concludes, North Korea is in active pursuit of the latter than the former and it might cross the essential contours of minimum deterrence conceived here, which in turn would have dire security implications for the Korean Peninsula.

Key words: North Korea, Essentials of Minimum Deterrence, Nuclear Strategy, Korean Peninsula

Introduction

It has been more than two decades that the North Korean nuclear quagmire continues to persist. In the early 1990s, the Democratic People's Republic of Korea (DPRK) threatened to withdraw from the Non-Proliferation Treaty (NPT) to address their self-proclaimed “a legitimate self-defence measure”¹. North Korea withdrew from the NPT in 2003 indicating that it had already given a three month advanced notice a decade ago putting a greater pressure on the non-proliferation regime. This remains a challenge for the NPT observing North Korea quitting the NPT without a particular mechanism for punishment which in turn shows the weakness within the existing structure of the NPT despite its life-time extension in 1995 and increasing membership up to 190 states. The US and other major powers, party to the NPT and at the same time party to a Six-Party Talk failed to stop North Korea from acquiring nuclear weapons capability which North Korea tested in 2006,

¹The Korean Central News Agency (KCNA), January 10, 2003.

2009, 2013 and very recently in 2016 that North Korea claims it to be the test of Hydrogen Bomb.²

In addition to these successful nuclear weapons tests, North Korea also plans to increase the number of nuclear weapons. With the increased number of nuclear weapons, North Korea would require to test various combinations of delivery systems, which could include short, medium and long ranges of missiles. North Korea claims to have acquired missile capability that could not only hit the US bases in the East Asian region, but could also threaten to hit the US homeland. North Korea claims to have conducted a long range missile that it has been testing for long.³

Besides these strategic force developments, the DPRK is rapidly obtaining other deterrence capabilities such as the KN-08 Transporter Erector Launcher, anti-ship cruise missile modelled on the Russian KH-35 Uran, the Nodong MRBMs build on SCUD technology, deterrence force miniaturization, Submarine Launched Ballistic Missile (SLBM) for second strike capability, Inter-Continental Ballistic Missile (ICBM) and cyber technology.⁴

Although the DPRK is in the embryonic stages of its strategic force development program, the deterrence force acquisition seems rapid and assertive. North Korean acquisition of nuclear weapons along with its increasing missile capabilities could have greater security implications on the Korean Peninsula. As the DPRK continues to threaten to use nuclear weapons, the Korean Peninsula remains a nuclear “flash-point”⁵. Both the US and its close ally the Republic of

²BBC News: “North Korea Nuclear: State Claim first Hydrogen Bomb Test,” *BBC News*, January 06, 2016, accessed at: <http://www.bbc.com/news/world-asia-35240012> (April 05, 2016).

³“North Korea's Missile Program,” *BBC News*, February 07, 2016, accessed at: <http://www.bbc.com/news/world-asia-17399847> (April 5, 2016).

⁴Richard Weiz, “The South Korean-US Nuclear Alliance: Steadfast and Changing,” *The Korean Journal of Defense Analysis*, 27(3), (September 2015), pp. 401-402.

⁵The phrase “nuclear flash point” is used by the US President Bill Clinton in 2000 during in the context of India-Pakistan inter-state strategic rivalry over the Kashmir issue after the nuclear weapons tests in 1998. See, Jubith Miller & James Risen, “A Nuclear War Feared Possible over Kashmir,” *The New York Times*, (August 08,

Korea (ROK) are expected to understand the evolving nuclear strategy of the DPRK in order to prevent the nuclear Armageddon. On the one hand, it is important to understand what kind of nuclear strategy the DPRK would opt for and why, but on the other hand it is equally essential to understand its broad based nuclear policy after its nuclear weapons tests to comprehend better the DPRK's nuclear related issues and the challenges they may pose to the security and strategic stability of the Korean Peninsula.

The DPRK's nuclear strategy is shrouded deeply by ambiguity. There is no North Korean official documentation that could explain substantially its nuclear policy. It is not clear whether or not the DPRK would opt for minimum deterrence by keeping its strategic forces small; whether these deterrence forces would be used for political or military purposes; how, where and when they could use nuclear weapons; whether they opt for the First Use (FU) or No-First Use (NFU) doctrinal option; what would be their deterrence operational force posture – that is, will the DPRK choose for counter-value or counter-force targeting; will they rely on the third party role at the time of conflict or they could increase over-reliance on their own nuclear weapons; and whether these deterrence forces are for defensive purposes or they could be deployed forward for offensive strategy. These are some of the important questions with regard to broader contours of nuclear strategy a nuclear weapons state needs to strategize in order to prevent accidental or inadvertent nuclear weapons use.

Despite the DPRK open testing of nuclear weapons in four different times and years, there is an absence of substantial clarity on its nuclear strategy. It may not be wrong to presume that the DPRK does have nuclear strategy. Despite the level of ambiguity it practices when it comes to its evolving nuclear strategy, it does not mean the DPRK would not have command and control system and a strategy for its deterrence forces. The Waltzian logic on the developing states is that the states in possession of nuclear weapons would be rational and responsible

2000), accessed at: <http://partners.nytimes.com/library/world/global/080800india-pakistan.html> (September 29, 2015).

towards taking good care of their weapons given the nuclear learning from the predecessors during the classic nuclear age between the Soviet Union (Russia) and the US and they would not let lose their nuclear weapons either to fall in the wrong hands or be accidentally used during the conflict. However, the Saganian conceptual logic casts quite a pessimistic picture that these developing states in possession of nuclear weapons may not be much more rational and responsible and there exists a danger of the nuclear weapons use during both peace and conflict time.⁶

Until the DPRK officially declares its nuclear policy, the contemporary scholarship would have different interpretations. Some would argue that it acquired nuclear weapons for protection of the regime; others may presume that North Korea would strategize use of its nuclear weapons for blackmailing purposes and materialize them as a bargaining chip for diplomatic and economic gains; still others would say that the DPRK could opt for a *catalytic* nuclear strategy in which it could use the third party to resolve the issue because of the fear of the use of nuclear weapons and/or it could opt for an *asymmetric* nuclear strategy where North Korea due to increasing conventional force asymmetry between the DPRK and ROK-US could possibly opt for a first use doctrinal posture to deter the conventional stronger side. Each of these possible options for nuclear strategy would have their own strategic implications for the Korean Peninsula.

In addition to a brief discussion of various nuclear policy options available for North Korea after it acquired and tested its nuclear weapons capability, this paper particularly focuses on the implications of North Korean strategic capabilities on the Northeast Asian region where North Korea confronts South Korea, Japan and the US forces. As North Korea borders with the two established nuclear weapons states; that is, China and Russia, North Korean evolving strategic capabilities would have implications for both nuclear and non-nuclear weapons states.

⁶For interesting analysis on this unwinnable debate see, Scott D. Sagan and Kenneth N. Waltz, “*The Spread of Nuclear Weapons: A Debate Renewed*,” (New York: W.W. Norton & Company, 2003).

The US and its allies and partners would be very carefully and diligently dealing with North Korea's increasing strategic capabilities. They would need to craft a strategy to convince both China and Russia to play crucial role in terms of making the North understand the value and danger associated with nuclear weapons. Also, they would try to prevent the possibility of low intensity war escalating to a nuclear level. Force in any way may not be a viable solution in this regard. Alternative strategies would need to be implemented to avert the possibility of accidental wars in the Korean Peninsula. Before we analyze the implications of North Korea evolving strategic force capabilities, it is important to understand North Korea's options for various combinations of nuclear strategy it would opt for and why. Moreover, why could each of these nuclear strategy options have strategic implications for North Korea in general and for the Korean Peninsula in particular?

North Korea's Options for Nuclear Strategy

There is no hard and fast deliberation that one nuclear weapon state gets strictly follows to one particular nuclear strategy while ignores others. Nuclear weapon states adopt various combinations of nuclear strategies in accordance with the changed strategic environment. During the Cold War period, the US adopted a series of alternative nuclear strategies such as massive retaliation and flexible response from time to time, though the central theme of deterrence remained intact. Other smaller nuclear weapons states practiced various sets of nuclear strategies depending on the strategic circumstances they faced. As part of nuclear learning, North Korea may not necessarily adopt any single form of nuclear strategy, but it could have more than one sets of nuclear strategy to begin with. However, the basic ingredients of these nuclear strategies could stay the same. For example, North Korea might pose its nuclear weapons for war-fighting/military purposes (offensive strategy) showing itself to be irrational and that it could threaten to use nuclear weapons any time of its own choosing in order to meet its economic and diplomatic goals, but it could revert and use its nuclear weapons for political purposes (defensive strategy) without endangering the strategic stability of the Korean Peninsula. The types of nuclear strategies North Korea might adopt depends on if the strategic

demanding a concessionary nuclear strategy, catalytic strategy, asymmetric strategy, or strategy based on assured retaliation. However, each one could have its own strategic repercussions for North Korea.

Concessionary Nuclear Strategy

In a severe economic crisis, with Russian and Chinese no longer interested in providing a greater economic assistance in the way the DPRK could expect, the increase of military muscles and desire for the acquisition of nuclear weapons would prove to be a political tool kit for the North Korean regime for its masses in order to gain domestic concession which in turn would aim at survival of the DPRK's political regime. The concessionary strategy associated with the acquisition of nuclear weapons at the domestic front is to please and satisfy the masses with the power-muscles of nuclear weapons. The message to the North Koreans was clear that the nuclear weapons would protect them from a complete disaster, though they could starve and not eat three times a day. Ultimately, the strategy at the domestic level was to ensure the survivability of the regime.⁷

Given the success of concessionary nuclear strategy at the domestic level, the DPRK's nuclear leadership may formulate the similar type of strategy at the regional level to seek economic benefits. Therefore, North Korea would craft a concessionary nuclear strategy to extract food, aid and energy requirements for its starving masses that have already suffered because of the international economic sanctions. North Korea could show its irrationality and present bellicose rhetoric to use nuclear weapons against the US and its close allies and partners in the Northeast region. While using nuclear weapons as a bargaining chip, North Korea has become quite successful in this type of strategy extracting economic assistance for its masses and regime survival. As long as this strategy works, North Korea would continue to act irresponsibly without necessarily using its nuclear weapons. For success of this strategy, someone has to listen to the North Koreans in terms of meeting its economic demands.

⁷See, Mun Suk Ahn, "What is the Root Cause of the North Korean Nuclear Program," *Asian Affairs: An American Review*, 38(4), pp. 175-187.

to make someone listen to North Korea for concessionary purposes as part of its nuclear strategy, North Korea would communicate and deliver the message clearly across the Korean Peninsula that it would either conduct missile or go for another nuclear weapon test.

In addition, North Korea would use its nuclear weapons as a bargaining chip to gain strategic benefits from the US, e.g., trade. The DPRK would demand the US to disengage its security commitment in East Asian region; remove its nuclear umbrella from South Korea; withdraw its military forces from the Korean Peninsula; and develop a US-DPRK strategic relationship as an equalizer to ROK-US alliance⁸. Also, North Korea would demand the light water nuclear reactors as part of the DPRK's concessionary strategy. The ROK-US would have two options. One, they could either ignore what North Korean signals. Second, they could put severe economic sanctions and pursue China to play its diplomatic and political role in prohibiting North Korea from conducting more missile and nuclear tests. Concessionary nuclear strategy may provide North Korea some short term economic and political benefits, but it can prove to be dangerous in the long term as the major powers may get weary of North Korean madness strategy and provide no more concessions. Failure of which could cause the DPRK's over reliance on the third party intervention, which Vipin Narang names it "catalytic nuclear strategy"⁹. However, this type of nuclear strategy has got implications for North Korea.

Catalytic Nuclear Strategy/the third party option

Catalytic nuclear strategy would require a third party intervention in order to avert the nuclear crisis and meet the demands of the states that practice this type of strategy. A nuclear weapon state in practice of catalytic strategy would threaten to use its nuclear weapons against the adversary in order to draw attention of a third party whose interest in that particular region is sufficiently very high, which in turn would desire

⁸For an interesting piece on this perspective see, Jonathan D. Pollack, "North Korea's Nuclear Weapons Development: Implications for Future Policy," (Spring 2010), Proliferation Paper, Security Studies Center.

⁹Vipin Narang, "*Nuclear Strategy in the Modern Era: Regional Powers and International Conflict*," (Princeton: Princeton University Press, 2014), pp. 13-54.

the de-escalation¹⁰. A third party with greater economic and strategic interests would likely to intervene in order to de-escalate the crisis. It may be argued that a state practicing catalytic nuclear strategy might never gamble if it were sure that the third party would not intervene. Arguably, the state in practice of this type of strategy believes that the third party's stake in the region is high and it would intervene timely to avert the crisis designed for seeking economic and political objectives.

A few nuclear weapons would suffice to attract the third party attention to the crisis because of the fear of a conflict escalating to nuclear levels¹¹. North Korea has practiced this type of strategy in terms of materializing the Chinese patronage to intervene, believing that nuclear escalation would not be in the security and economic interest of China and that China would intervene to assist the DPRK stay alive. Narang states, "One possible North Korean strategy, therefore, is the catalytic posture, whereby it employs the threat of further nuclear breakout to ensure the patronage of Beijing against (particularly) the United States."¹² While playing out the catalytic nuclear strategy, North Korea secures high confidence against the stronger opposition in the form of ROK-US alliance. North Korea keeps a strong belief that "catalytic strategy is necessary to ensure that Beijing protects it – at least diplomatically – against the United States."¹³ However, there is no guarantee that the third party would make a timely intervention to the interest of North Korea and the absence of the assured patronage

¹⁰For interesting analysis on this see, Vipin Narang, "Nuclear Strategies of Emerging Nuclear Powers: North Korea and Iran," *Washington Quarterly*, 38(1), (Spring 2015), pp. 75-77. For more details see, Narang, "*Nuclear Strategy in the Modern Era: Regional Powers and International Conflict*," (Princeton: Princeton University Press, 2014).

¹¹Shane Smith, "North Korea's Evolving Nuclear Strategy," (August 2015), US-Korea Institute at SAIS, accessed at <http://38north.org/2015/08/nukefuture082415/> (September 20, 2015).

¹²Narang, "Nuclear Strategies of Emerging Nuclear Powers: North Korea and Iran", p. 84.

¹³*Ibid.*, p. 84.

intervention at the time of crisis would make this strategy risky. This could increase the chances of inadvertent use of nuclear weapons.¹⁴

Asymmetric Nuclear Strategy/the First Use of Nuclear Weapons

Nuclear weapon states adopt this type of nuclear strategy to offset the conventional superiority of their adversary in terms of using their nuclear weapons without waiting for their enemy to use nuclear weapon first. It is basically to avert the conventional imbalance with the increasing reliance on nuclear weapons. Being frustrated by the sheer absence of the third party patronage, North Korea could adopt the asymmetric strategy to be the first to use nuclear weapons. North Korea could become more assertive when this type of strategy would make North Korea rely on nuclear weapons use as a war-fighting instrument. With this type of nuclear strategy, North Korea would confront certain challenges. One, this would make North Korea increase the number of its warheads along with the delivery systems, which in turn would put tremendous pressure on the centralized command and control system important for both safety and security of nuclear weapons and deterrence stability. Two, given the increasing pressure on the command and control system, North Korea would opt for pre-delegation of their deterrent forces which could increase the chances of an accidental nuclear use causing dire security implications on the Korean Peninsula. Three, this type of strategy may not become consistent with the minimum deterrence that initially could be conceptualized by North Korea since it would go for more warheads and delivery systems as it finds itself frustrated and deprived of the third party patronage. Four, this could ultimately increase the chances of arms race in the East Asian region. In addition, this strategy would need North Korea to make stronger and complex command and control system, which may not be

¹⁴See, Paul Kapur, *“Dangerous Deterrence: Nuclear Weapons Proliferation and Conflict in South Asia,”* (California: Stanford University Press, 2007).

For a speculative but interesting analysis see, Peter Hayes & Roger Cavazos, “North Korea's Nuclear Force Roadmap: Hard Choices,” NAUTILUS Institute for Security and Sustainability, March 2015, accessed at: <http://nautilus.org/napsnet/napsnet-special-reports/north-koreas-nuclear-force-roadmap-hard-choices/> (September 28, 2015).

completely possible for North Korea given its economic and technological backwardness. In order to make its asymmetric deterrence forces credible, it would need to acquire second-strike capability, which would be more expensive and that in turn would encourage North Korea to use nuclear weapons at the early stages of conflict.¹⁶ However, it is not clear how, where and when North Korea would use nuclear weapons. North Korea's security leadership has yet to be transparent on the use of nuclear weapons for first strike especially when it chooses to adopt the asymmetric nuclear strategy.

There could be some possible scenarios that North Korea could use nuclear weapons, though each of these presumed scenarios may hold ambiguities. The drastic domestic upheaval, a radical deteriorating relationship between China and the DPRK, and the creation and spread of rebel forces within North Korea that could not only threaten the regime, but also the safety and security of nuclear weapons; North Korea expects the ROK-US forces exploiting this chaotic situation and getting hold of the North Korean nuclear weapons before they fall in the wrong hands. In such a scenario, North Korea would be in tremendous strategic pressure to use nuclear weapons in the early stages of the conflict.¹⁷ If North Korea faces disadvantages with this type of strategy with potential implications for the survivability of its regime in general and peace and security of the Korean Peninsula in particular, then North Korea could opt for an assured retaliation nuclear strategy.

Assured Retaliation Nuclear Strategy/the option to strike after

The assured retaliation strategy demands that nuclear weapon states likely not opt for first use option, but to strike after it is hit. It has direct deterring effects against the threats of nuclear attacks and coercions.¹⁸ However, it is not clear whether or not a nuclear weapon

¹⁶Smith, "North Korea's Evolving Nuclear Strategy," pp.11-12.

¹⁷For interesting analysis see, Hyeongpil Ham & Jaehak Lee, "North Korea's Nuclear Decision-making and Plausible Scenarios," *The Korean Journal of Defense Analysis*, 25(3), (September 2013), pp. 399-413.

¹⁸Narang, "Nuclear Strategies of Emerging Nuclear Powers: North Korea and Iran", p. 77.

state in practice of assured retaliation would retaliate with nuclear weapons after being hit by advanced conventional forces.¹⁹ For example, the US advanced conventional force capability has created a dilemma for nuclear weapon states, say; China and North Korea whether they could sustain this type of strategy that supports the no-first use nuclear strategy. Despite the debate in China in practice of retaliatory nuclear strategy that they would at some point depart from no-first use nuclear option,²⁰ Chinese official White Paper still claims to have NFU option supporting assured retaliation strategy.²¹ India also follows assured retaliation strategy claiming minimum deterrence after it tested nuclear weapons in 1998.²² It may not be necessary that a nuclear weapons state practicing nuclear retaliatory strategy would follow the NFU option. The United States followed Massive Retaliation nuclear strategy during the early stages of Cold War against its adversary. It continued to keep the

¹⁹Andrew Futter & Benjamin Zala, "Advanced US Conventional Weapons and Nuclear Advancement: Why the Obama Plan Won't Work," *The Non-Proliferation Review*, 20(1), pp. 107-122.

²⁰General Pan proposed some hypothetical possibilities China could use nuclear weapons: 1) if Washington uses tactical nuclear bomb against China's military assets in conflict at Taiwan; 2) If Washington uses conventional weapons to attack China's Inter-Continental Ballistic Missile (ICBM) silos or its nuclear infrastructure; and 3) if Washington successfully launches a limited nuclear attack against China. See, Pan Zhenqiang, "On China's No-First Use of Nuclear Weapons," *Pugwash Online*, November 26, 2002.

²¹See China's Official White Paper on China's Military Strategy, The State Council Information Office of the People's Republic of China (May 2015), http://www.chinadaily.com.cn/china/2015-05/26/content_20820628.htm (accessed June 25, 2015).

²²Swaran Singh, "India's Nuclear Doctrine: Ten Years since the Kargil Conflict," in Bhumitra Chakma (ed.), *"The Politics of Nuclear Weapons in South Asia,"* (Aldershot: Ashgate, 2011), pp. 57-74. For other interesting readings on India's nuclear policy see, Ashley Tellis, *"India's Emerging Nuclear Posture: Between Recessed Deterrent and Ready Arsenal,"* (Santa Monica: RAND, 2001); George Perkovich, *"India's Nuclear Bomb: The Impact on Global Proliferation",* (Berkeley, CA: University of California Press, 1999); Rajesh Basrur, *"Minimum Deterrence and India's Nuclear Security",* (California: Stanford University Press, 2006); Bharat Karnad, *India's Nuclear Policy,* (Westport CT: Praeger, 2008); K. Sundarji, *"Blind Men of Hindustan: India-Pak Nuclear War",* (New Delhi: UBS Publishers, 1993).

first use nuclear option, but it required the US to acquire multiple types of warheads and delivery systems.²³

The assured retaliation nuclear strategy would require North Korea to acquire a second-strike capability. The credibility and survivability of nuclear forces are important as part of this type of nuclear posture. The acquisition of second-strike capability can be in two forms. One, a nuclear weapons state acquires a sea-based deterrence (nuclear submarine) for achieving a classic form of assured retaliatory capability. Two, it could practice strategies of concealment, dispersal, hardening of silos, deception etc. in order to achieve survivability of its deterrence forces to strike back. North Korea in practices of these tactics for survivability of its nuclear forces could seek a second-strike capability without necessarily going for a nuclear submarine. North Korea may largely be practicing these deterrent tactics for survivability of its forces most possibly at its North side of the country so that the ROK-US may not hit these forces because of the fear of its adverse effects on Russia and China bordering with North Korea.²⁴

Implications of North Korean Strategic Capabilities

North Korea could adopt these important nuclear strategies gradually as it matures its nuclear weapons program. It can also have the combination of one or two types of nuclear strategies to meet its political and diplomatic goals. In addition to these strategic implications of each nuclear strategy North Korea adopts, it would expect a ROK-US strategic response. First, the increased number of North Korean deterrent forces with various delivery systems would put a strategic pressure on the South Korea to counter the emerging threat emitting out of the North Korean missiles productions. South Korea would have two options. One, withdraw from the NPT and go nuclear because of the serious threats from North Korean deterrent forces. Two, to rely on the

²³For an excellent historical reading on nuclear strategy see, Freedman, “*The Evolution of Nuclear Strategy*”, pp. 79-86.

²⁴Smith, “North Korea's Evolving Nuclear Strategy”, p. 20. However, there is not concrete evidence to this in terms of satellite images.

consistent nuclear security guarantee the US provides as part of its broader strategy of extended deterrence. On the first point, the US would urge South Korea not to acquire nuclear weapons as other US allies and partners would follow suit to meet their security interests, which in turn could affect the US extended deterrence policy and its broader perspective of international non-proliferation efforts as part of the NPT. On the second point, the US would be pleased to provide South Korea with defensive conventional force capability. Also, the US would continue to station its military forces in South Korea for deterrence purposes as part of its security commitment to South Korea.

Second, although South Korea has been developing the Korean Air and Missile Defense (KAMD) as part of Ballistic Missile Defense system, this may not be sufficiently controlled by the South Koreans alone.²⁵ The US involvement and assistantship would be required for making the BMD system successful. In addition to this, the US has also emplaced Aegis Missile Defense System to protect South Korea from incoming North Korean cruise missiles. Also, the ROK-US discuss on the possible deployment of the US Terminal High Altitude Area Defense (THAAD) system which could intercept the short, medium and intermediate ballistic missiles during the terminal stages.²⁶ However, North Korea, Russia, and China have already pressed South Korea not to accept THAAD as this BMD system would particularly threaten the Chinese and Russian security interests. Although the US has already deployed THAAD in Hawaii and Guam Islands to intercept the incoming North Korean missiles possibly tipped with both conventional and nuclear warheads, THAAD system has the 'hit and kill' capability through sophisticated 'kinetic energy'

²⁵Richard Weitz, "The South Korean-US Nuclear Alliance: Steadfast and Chancing", *The Korean Journal of Defense Analysis*, 27 (3), September 2015, pp. 401-415.

²⁶Ibid. p. 407.

²⁷See, John Power, "Russia: Korean THAAD Deployment is a Security Threat,": *The Diplomat*, April 02, 2015, accessed at: <http://thediplomat.com/2015/04/russia-korean-thaad-deployment-is-a-security-threat/> (28 September 2015); Clint Richard, "X-Band and THAAD as Good as Anti-China Trilateral Defense Agreement?", *The Diplomat*, October 24, 2014, accessed at: <http://thediplomat.com/2014/10/x-band-and-thaad-as-good-as-anti-china-trilateral-defense-agreement/> (28 September 2015).

mechanism which could hit and kill the incoming short, medium and intermediate range ballistic missiles without creating the danger of exploding the warheads in the air risking contamination. The recent North Korean nuclear and missile tests have made the US and South Korea to revisit the possibility of ultimately deploying the THAAD system in South Korea to intercept the incoming North Korean ballistic missiles.

Third, there are increased ROK-US joint military exercises from time to time to provide a deterring signalling to North Korea. After the recent North Korean nuclear and missile tests, both the US and South Korea conducted a huge military exercise. These exercises included advanced and modernized conventional forces to deter the possible low-intensity threats. But, North Korea has already exploited 'the gray areas' such as the episode of the sinking of the South Korea's *Cheonan* warship and the DPRK border shelling, which in turn undermines the ROK-US deterrence credibility.²⁸ To counter the emerging threats emitting at the low-intensity conflict, the US would keenly be interested to strengthen its extended deterrence for its allies and partners in Asia. The US continues to assist South Korea with modernized conventional forces to deter North Korea's missile threats. Very recently, there has been a three-day discussion on Table-Top Exercise (TTX) and they have conducted Track 1.5 deterrence dialogue.²⁹ Along with these drills, there are proposals for the production of Electromagnetic Pulse (EMP) weapons and other sophisticated conventional forces to contain the low-intensity conflict at the Korean-Peninsula.³⁰

²⁸See, "Van Jackson, "Raindrops Keep Falling on My Nuclear Umbrella", *Foreign Policy*, May 18, 2015, accessed at, <http://foreignpolicy.com/2015/05/18/raindrops-keep-falling-on-my-nuclear-umbrella-us-japan-south-north-korea/> (28 September 2015).

²⁹Oh Seok-min, "S. Korea, US to Stage Deterrence Drill against N. Korea," *Yonhap News*, February 10, 2015, <http://english.yonhapnews.co.kr/national/2015/02/10/25/0301000000AEN20150210002500315F.html> (September 28, 2015).

³⁰Patrick M. Cronin, "Time to Actively Deter North Korea", *The Diplomat*, June 25, 2014, accessed at: <http://thediplomat.com/2014/06/time-to-actively-deter-north-korea/> (September 28, 2015).

The implications of North Korea going nuclear and its adoption of various combinations of nuclear strategies are huge on the security architecture of Korean Peninsula.

Conclusion

Since very little is known about North Korean nuclear strategy in the wake of its nuclear weapons tests in multiple times, we would expect many speculative interpretations to predict about North Korea's adoption of various combinations of nuclear strategies. However, it can be argued that North Korea may not adopt such a policy that has not been practiced by either the major or smaller nuclear weapons states. There is a lot of nuclear learning for North Korea to opt for the strategy it chooses to do so depending much on the prevailing strategic environment. Each of these nuclear strategies, North Korea opts for, would have implications for North Korea in general and the Korean

Since North Korea has tested its nuclear weapons for four times, it is essential to institutionalize its nuclear weapons with stronger command and control to avoid the accidental use of nuclear weapons. Proper institutionalization of North Korean nuclear weapons program would prevent their deterrence forces and their related materials from falling in the wrong hands. Both China and Russia are close allies of North Korea and can assist North Korea towards this essential part of nuclear development program. Institutionalization of nuclear weapons program would help North Korea craft a better strategy in terms of using its nuclear weapons for political rather than military purposes. One can then predict well the kind of nuclear strategy North Korea would opt for and why. North Korea has the option to follow minimum deterrence and declare its program for defensive rather than offensive purposes.

The essentials of minimum deterrence predict that if North Korea retains the modest number, curbs on more nuclear weapons tests, stays defensive and restrains from using its deterrent forces, then this could be consistent with minimum deterrence. However, if North Korea, in its embryonic stages of deterrent force development, increases its deterrent forces, miniaturizes nuclear weapons, develops sophisticated

delivery systems, acquires an assured second-strike capability (nuclear submarine) and appears to be more offensive, then this may go beyond the general conceptualization of minimum deterrence. Apparently, North Korea is in active pursuit of the latter than the former and it might cross the essential contours of minimum deterrence, which in turn would have dire security implications for the Korean Peninsula.

As part of strategic implications of North Korean evolving nuclear capabilities, North Korea would put strategic pressures on South Korea and Japan to rethink their legitimate security interest in the region. That said, they could think of acquiring their own nuclear weapons for deterrence purposes. Given the increasing threats of North Korea with its missiles and nuclear weapons tests, it appears that it would trigger arms race in the region. Both South Korea and Japan, for example, could desire to acquire their own nuclear weapons capabilities since both of these states have the economic and technological wherewithal. They can quickly acquire nuclear weapons in a short period of time. However, the US as a patronage of nuclear security umbrella on its allies and partners may not allow both South Korea and Japan to acquire their own nuclear weapons as this would challenge the US self-proclaimed normative posture towards international non-proliferation regime. Also, the US would desire to maintain its own power projection being a superpower, thereby, would not allow its close allies and partners to acquire their own nuclear weapons which in turn may affect the spirit of the US extended deterrence. In addition, there can be more military exercises between the US and its Asian allies to provide a deterrence signalling to the North so that it does not pursue the offensive strategy and likely remains deterred. The US has recently conducted huge military exercises with the South Korea. The US conducts such types of military and naval exercises as part of its deterrence signalling strategy to deter the North from even taking the low-intensity aggression.

Dynamics of Deterrence & Strategic Equilibrium in South Asia

Shams uz Zaman*

Abstract

In the post Cold War era, nuclear weapons have again gained significance. Nuclear weapons have no military utility but serve the purpose of deterrence and peace. Their utility is conditional to their non-usage. Possession of nuclear weapons can only become worthwhile for a state if these weapons are effectively crafted in the national security and defence policy. In South Asia, India and Pakistan have adopted various measures to strengthen their deterrence postures. To understand the growing risks in the region, it is imperative to be cognizant of the trends and development in deterrent equation pivoting around physical capabilities, involving quantification, and psychological stresses, involving posturing and signalling. In South Asia, nuclear and conventional asymmetries are growing compelling Pakistan to increase its reliance on nuclear weapons to maintain regional strategic equilibrium. This situation may lead to regional arms race if these trends continue to flourish.

Key words: Deterrence, Nuclear, South Asia, Strategic Stability, Doctrine.

Introduction

The threat of use of force towards achieving political objectives has been a persistent phenomenon since the history of warfare that can be traced back to human existence. Prior to nuclear age, the nature of force used against each other, more or less, remained the same and was considered

*The author is an academic and independent research scholar.

superior owing to factors like quantity, quality, military training and superior tactics/strategy etc. Invention of gunpowder was a revolutionary step in the nature of warfare. Wars, which primarily were fought with the help of primitive weapons like crossbows, swords javelins and chariots, suddenly became more decisive and casualty heavy due to destructive nature of the gunpowder. However, nuclear weapons changed the face and nature of warfare. It was the absolute destructive power of nuclear weapons that prompted one of the most influential nuclear strategists to come up with a magnificent quote, "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."¹ The destructive nature of nuclear weapons, as displayed at the end of the World War II, not only was extremely annihilative in nature but for the first time a threat to the existence of human civilization. It was this reason which deemed nuclear weapons not for war fighting but rather political weapons which serve no other purpose except to deter an aggression by a powerful adversary.² It, therefore, becomes imperative to understand the nature of nuclear weapons and their purpose in constituting an effective deterrence strategy.

Conceptualizing Strategy and Deterrence

Strategy has wide application in today's world almost in all the major fields including business, telecommunications, education, economy etc. and of course military. However, the term in this paper would be discussed entirely from the military point of view. According to Liddell Hart, strategy is "the art of distributing and applying military means to

¹Bernard Brodie, "The Development of Nuclear Strategy", *International Security*, Vol. 2, No. 4, (Spring 1978), p. 65.

²George Perkovich, "Put Nuclear Weapons on the Agenda", *Bulletin of the Atomic Scientists*, Vol. 47, No. 5, June 1991, p 22. See also: Scott D. Sagan and Kenneth N. Waltz, *Spread of Nuclear Weapons – A Debate Renewed* (New York: W. W. Norton & Company, Inc, 2003), pp. 4-9, 12-17.

fulfil the ends of policy”³ while as per Colin S. Gray, “Military strategy is the direction and use of force and the threat of use of force for the purposes of policy as decided by politics”⁴. According to Encyclopaedia Britannica, Strategy is the science or art of employing all the means (i.e., military, economic and other) towards achieving the objects of war.⁵ It pivots around three focal quotients which are “ends or objectives, ways or concepts, and means or resources”.⁶

Deterrence although is an old concept but in modern times, development of nuclear weapons has fundamentally changed the concept due to their capability to annihilate the entire human civilization. The most effective form of deterrence thus has been identified as the nuclear deterrence. Deterrence, forming the core of the national security strategy, is a complex phenomenon but put in simple terms it means the anticipated punitive cost of aggression or an extremely undesirable action which seemingly could provoke an adversary to retaliate in a manner thus outweighing any presumed benefits. Deterrence is directly proportional to the punitive cost, implying the higher the cost, the more stable and robust it would be. In case the perceived cost of retaliation becomes acceptable, deterrence equation would be extremely unstable, risking a failure. Deterrence thus becomes a matter of perception and has psychological as well as physical manifestations which are proportional to the adversaries' known and demonstrated capabilities actually possessed in real time.⁷ An effective and credible deterrence would entail certain quantification in tangible

³B. H. Liddell Hart, *Strategy: Second Revised Edition* (New York: Penguin Books, 1991), p. 321.

⁴Colin S. Gray, *The Strategy Bridge: Theory for Practice* (Oxford: Oxford University Press, 2010), p. 262.

⁵Eliot A. Cohen, “Strategy”, *Encyclopædia Britannica*, undated, <http://www.britannica.com/EBchecked/topic/568259/strategy>

⁶David Jablonsky, “Why is Strategy Difficult?,” in *Volume I: Theory of War and Strategy*, ed. J. Boone Bartholomees, Jr., (Pennsylvania, Strategic Studies Institute, 2008), p. 3.

⁷K. Subrahmanyam, *Nuclear Myths and Realities* (New Jersey: Humanities Press Inc, 1982), p. 52.

terms before adopting psychological means to dissuade an adversary from adopting a course of action which involves grave risk or necessitates aggression.⁸

Deterrence is fundamentally different from compellence. In compellence the threat of force is aimed at convincing the other side to comply with the coercer's demands and to act according to notified set of propositions while deterrence is used by coercer to discourage the opponent or adversary from adopting a particular course of action. Compellence is usually regarded as an offensive policy and is employed under circumstances envisaging defiance by a state thus presenting it with one or more set of options, while deterrence is mostly a defensive policy used against an adversary by threatening it with an unacceptable cost.⁹ Deterrence can only be stable if it is premised on mutual vulnerabilities. States in possession of adequate capabilities to inflict huge destruction onto an adversary thus present a model of stable deterrence. However, in case either of the state enjoys an overwhelming advantageous position due to extremely superior strategic forces or has successfully established a fortress of defence to make it immune from the adversary's missiles and strategic bombers' strike capabilities, the deterrence equation would be extremely unstable,¹⁰ and tilted in favour of the stronger state thus encouraging it to resort to compellence or nuclear blackmail. Deterrence has been defined and categorized into various types and forms but debating on these types is beyond the scope

⁸ Andre Beaufre, *Deterrence and Strategy* (London: Faber and Faber, 1965), pp. 24-25.

⁹ Gary Schaub Jr., "Deterrence, Compellence and Prospect Theory", *Political Psychology*, Vol. 25, No. 3, Special Issue, (June 2004), pp. 389-390.

¹⁰ John Newhouse, "The Missile Defence Debate – To Deploy or Not to Deploy", *Foreign Affairs*, Vol. 80, No. 4, July/August 2001, <http://www.foreignaffairs.com/articles/57057/john-newhouse/the-missile-defense-debate> See also: Russ Wellen, "Missile Defence is not the only Weapons System that Undermines Nuclear Deterrence", *Foreign Policy in Focus*, September 23, 2014, <http://fpif.org/missile-defense-isnt-weapons-system-undermines-nuclear-deterrence/>

of this paper.¹¹ However, there is a need to know about two of its main categories.

Main Variants of Deterrence

Fundamentally there are two main variants in the theory of nuclear deterrence. The first is based on the threat of punishment, called as “deterrence by punishment” while the other based on the concept of defence and is known as “deterrence by denial”.¹² Deterrence by punishment is comparatively simple and premised on the retaliatory or the punitive cost. A retaliatory cost that amounts to an “assured destruction” would deter any rational adversary from aggression and if this destructive capability is possessed bilaterally, it would be known as 'Mutual Assured Destruction' (MAD). Deterrence by denial is comparatively a complex phenomenon which is based on the assumption that deterrence might eventually fail and thus an elaborate system of defence capable of withstanding a nuclear strike will have to be developed which could convince the enemy that its aggression would meet a certain failure. This elaborate defensive mechanism would entail a national defence against a nuclear attack, robust command and control system capable of withstanding a nuclear strike, a nuclear war fighting capability and strategic forces to carryout warfare under nuclear environments,¹³ which consequently becomes an extremely difficult task. In South Asia, deterrence of India and Pakistan is premised on the concept of retaliation and punishment rather than denial.

¹¹Due to involvement of psychological, economic, geographical, social, ideological and military factors in forming up a Deterrence, it has been categorized by various scholars in different like for example offensive, defensive, active, passive, general, specific, immediate, total, direct, indirect, positive, negative, extended, absolute, relative, existential, finite and further into types like Type 1, Type 2 and Type 3 etc.

¹²Arpit Rajan, *Nuclear Deterrence in South Asia – China, India and Pakistan* (New Delhi: Sage Publications India Pvt Ltd, 2005), pp. 60-65.

¹³Ibid.

Deterrence and Strategic Stability in South Asia

Stability in a region means absence of factors which could trigger or lead to war. Whenever such factor emerges, situation in a region would lead towards instability. Strategic stability implies that due to mutual vulnerability of strategic forces on both the sides, neither side feels compelled to initiate a nuclear first strike on the shared assumption that showing restraint, even in a crisis, is far more advantageous than striking first.¹⁴ This concept was classically demonstrated during the Cold War era once the US and Soviet Union, despite possessing thousands of nuclear warheads, didn't actually adopt the 'nuclear first strike' strategy against each other which entails a decapitating nuclear strike against an adversary thus annihilating its capability to retaliate back. Consequently, both states remained vulnerable to each other's nuclear strike forces which discouraged either side from striking first. Subsequently, many scholars considered possession of an 'assured second strike' capability imperative to the strategic stability in a bilateral deterrence equation.¹⁵ Prior to development of nuclear weapons, deterrent and war fighting capabilities were used in synonymous terms. However, in the nuclear age, deterrent principally refers to the possession of nuclear weapons by a state along with the delivery means.¹⁶ In the context of South Asia both India and Pakistan lack an assured 2nd strike capability thus ensuing stability in the region. India nevertheless is vigorously pursuing a 2nd strike capability, along with Ballistic Missile Defence (BMD) shield, which would profoundly alter the power equilibrium in favour of India that will ultimately drive the region towards an unending arms competition.

¹⁴Elbridge Colby, "Defining Strategic Stability: Reconciling Stability and Deterrence", in *Strategic Stability: Contending Interpretations*, (ed.), Elbridge Colby and Michael S. Gerson, (Pennsylvania, Strategic Studies Institute, 2013), p. 48.

¹⁵Michael S. Gerson, "The Origins of Strategic Stability: The United States and the Threat of Surprise Attack", in *Strategic Stability: Contending Interpretations*, (ed.), Elbridge Colby and Michael S. Gerson, (Pennsylvania, Strategic Studies Institute, 2013), p. 35.

¹⁶Zafar Iqbal Cheema, *Indian Nuclear Deterrence: Its Evolution, Development and Implications for South Asian Security* (Karachi: Oxford University Press, 2010), pp. 317-318.

Main Elements of Deterrence Strategy of South Asian Rivals

According to the Realist school of thought, all states perform the same functions while striving to survive and prosper in the competitive global environments. States formulate their policies on the rationale of costs and benefits calculations, despite the fact that sometimes their choices defy the logic of rationality.¹⁷ The formulation of national purpose is subscribed to Grand National Policy which mainly pivots around the Grand National Security Policy and Defence Strategy. Since the advent of nuclear weapons, states possessing the nuclear weapons capability usually premise their national defence strategy on the notion of deterrence. Nuclear weapons do not serve the purpose of war fighting weapons but rather have political utility. Although, nuclear policy, nuclear doctrine and nuclear posture are often used in synonymous terms as these have very fine differences however. The strategy of deterrence, which has taken the pivotal role in defining the national defence policy, has following key components:

- **Nuclear Policy:** At state level, policy is usually defined as broad contours of a deliberated and well thought out course of action involving effective utilization of all conceivable facets (political, diplomatic, military, economic and academic etc.) resultantly contributing towards the national purpose or objective. Nuclear policy entails principles about how to employ the nuclear capabilities to achieve the Grand National Purpose or state's objective which may range from using it for peaceful purposes or to developing nuclear warheads and considering their possible employment.¹⁸ Nuclear policy components could therefore include generation of nuclear power, using nuclear technology in the fields of research, medicine and agriculture, manufacturing the nuclear weapons, using these for defence and deterrence,

¹⁷John J. Mearsheimer, "Reckless States and Realism", *International Relations*, Vol. 23, No. 2, 2009, pp. 241-243.

¹⁸Charles D. Ferguson, William J. Perry and Brent Scowcroft, "U.S. Nuclear Weapons Policy", *Council on Foreign Relations*, Independent Task Force Report No. 62, 2009, xiv-xvi, 7-8, 14-21.

- contemplating their employment in situations which threaten territorial integrity and sovereignty, adopting measures to prevent nuclear proliferation, ensuring safety and security of nuclear installations and materials etc. In case of India and Pakistan, both the South Asian nuclear rivals have premised their nuclear weapons policy on the notion of credible minimum deterrence, aiming at maintaining a minimal capability of inflicting an unacceptable damage over the adversary. However, in recent times Indian exponential growth in the stocks of fissile materials illustrates that India is gradually moving away from minimum deterrence to a policy of Assured Destruction.¹⁹ During the Cold War, the US and USSR also founded their nuclear policies on the principle of an Assured Destruction capability. Nuclear policy also identifies that whether a state envisages use of nuclear weapons for retaliation only or striking first.
- **Nuclear Doctrine:** Doctrines are promulgated theoretical guidelines for employment of a capability or ideology which may be theological, political, military or strategic.²⁰ Nuclear doctrine consequently provides guidelines with regards to deployment, employment and circumstances necessitating the possible use of nuclear forces. Main purpose of nuclear doctrine is to influence adversary's perceptions and deter it by demonstrating the will to use nuclear weapons under certain given circumstances. It may also be aimed at reassuring the allies and extending over them a protection of nuclear umbrella against a collective opponent.²¹ A nuclear doctrine could exist on a written paper, as has been the case in India and United States, or could be embedded within the statements of political or military leaders as has been seen in case of Pakistan. Nuclear doctrines also decide on the occasions and patterns when states might contemplate the use of nuclear forces, i.e. either massively or for limited strike.²²

¹⁹Baqir Sajjad Syed, "Broadest deterrence capability to be kept", *Dawn*, September 10, 2015, <http://www.dawn.com/news/1206051>

²⁰Zafar Cheema, *Indian Nuclear Deterrence*, pp. 316-317.

²¹*Ibid*, p. 318.

²²For a detailed and interesting discussion on nuclear doctrines in South Asia please see: Scott D. Sagan, "The Evolution of Pakistani and Indian Nuclear Doctrine", in

- Pakistan's nuclear doctrine, for example, is India centric and premised on 'first use but as a last resort'. While Indian nuclear doctrine, on the other hand, promises a conditional 'no-first use'²³ and massive retaliation.²⁴ However, nuclear doctrines just provide underlying principles formulated during peace to serve the purpose of deterrence and therefore may or may not be followed during war.²⁵
- **Nuclear Strategy:** Strategy implies employment of all available means and capabilities in a deliberated plan towards an identified goal or policy while military strategy essentially involves planning and directing military operations for fighting wars without actually going to war. War itself is tactical but its consequences fall in the domain of strategy.²⁶ Although nuclear weapons are essentially for deterrence and not for war fighting, yet nuclear war fighting plans paradoxically become essential and critical part of the nuclear strategy, which primarily are aimed at preventing the nuclear war rather than fighting it. Nuclear Strategy therefore encompasses maintaining and deployment of available nuclear forces, according to multiple contingencies, to demonstrate the will and intent of using the nuclear capability with a purpose of deterring the adversary from committing aggression or dissuade her from adopting a course of action constituting a grave national

Inside Nuclear South Asia (ed.), Scott D. Sagan, (New Delhi: Cambridge University Press India Pvt. Ltd., 2011), pp. 222-254.

²³Shams uz Zaman, "Myth of Indian 'nuclear no first use'", *Nation*, December 22, 2012, p. 7.

²⁴Ali Ahmed, "India, Nuclear Weapons and 'Massive Retaliation': The Impossibility of Limitation", *Institute of Peace and Conflict Studies*, IPCS Debate # 4135, October 8, 2013, <http://www.ipcs.org/article/india/ipcs-debate-india-nuclear-weapons-and-massive-retaliation-the-impossibility-4135.html>

²⁵Bharat Karnad for example has cited that during the 2001 escalation, Indian government had postured for a pre-emptive nuclear strike. Likewise, Herman Kahn stated that, "No first use' stops just where war begins". For details see: Bharat Karnad, *India's Nuclear Policy* (Connecticut: Praeger Security International, 2008), pp. 110-111. Also: Naeem Salik, *Genesis of South Asian Nuclear Deterrence* (Karachi: Oxford University Press, 2010), pp. 226-229.

²⁶Colin S Gray, *Modern Strategy* (New York: Oxford University Press, 1999), pp. 17-19.

- threat to the defender.²⁷ Nuclear strategy tends to be highly classified including nuclear targeting plans, nuclear warhead sizes, delivery means (both for counter value and counter force warheads), forces to be armed with nuclear weapons and the battle locations of these weapons etc.
- **Nuclear Posture:** Nuclear posture is the state of readiness of one's nuclear forces in terms of readiness, launch and strike. The less the time involved in the launch of a nuclear strike, the more is the readiness of the state of launch and consequently more offensive is the nuclear posture of a state. Despite the lack of consensus on the states' intent to acquire nuclear weapons,²⁸ these fundamentally serve the purpose of deterrence and self-defence.²⁹ While some states and organizations have adopted pre-emptive nuclear doctrines,³⁰ these have primarily been justified under the logic of self-defence posture in a quest to deter the adversary from making preparations to strike first.³¹ Mainly there exist three broad nuclear postures, the first, 'Launch on Warning' (LoW) is the highest form of readiness in which nuclear weapons are kept at hair trigger alert to be fired on the warning of a possible nuclear attack. The second posture of 'Retaliatory Launch Only After Detonation' (RLOAD), also known as Launch Under Attack, involves retaliating only after

²⁷Shams uz Zaman, "Stockpiling nuclear weapons", *Nation*, June 29, 2013, p. 6.

²⁸Scott D. Sagan, "Why Do States Build Nuclear Weapons?: Three Models in Search of a Bomb", *International Security*, Vol. 21, No. 3, (Winter, 1996-1997), pp. 54-55.

²⁹Sagan, "Evolution of Pakistani and Indian Nuclear Doctrine", in *Inside Nuclear South Asia* (ed.), pp. 244. See also: Haider Nizamani, "Defence or deterrence?", *Dawn.com*, May 13, 2009, <http://www.dawn.com/news/464042/defence-or-deterrence>

³⁰Walter Pincus, "Pentagon Revises Nuclear Strike Plan", *The Washington Post*, September 11, 2005, <http://www.washingtonpost.com/wp-dyn/content/article/2005/09/10/AR2005091001053.html>

³¹Ian Traynor, "Pre-emptive nuclear strike a key option, Nato told", *The Guardian*, January 22, 2008, <http://www.theguardian.com/world/2008/jan/22/nato.nuclear>

- detonation of the adversary's nuclear weapons has actually taken place.³² Finally, in the Launch on Order posture, nuclear weapons are kept in ready state to be launched on authorization regardless of an impending nuclear attack or warning.³³ Nuclear posture is also established by the type of nuclear command and control system followed in a state. Pakistan and India both have developed an assertive nuclear command and control mechanism, which implies that the decision to use nuclear weapons rests with the highest decision making body in the central or federal government. Pakistan is known to have kept the nuclear weapons in very low alert levels and not in ready to fire state.³⁴ Pakistan has also introduced a two men rule with regards to nuclear codes and three men rule for authentication before launching the nuclear weapons, if ever such stage is reached.³⁵ In past India was also known to have been following a similar policy which has now been changed. India is known to have kept some portion of its nuclear armed missiles in alerted and ready to fire state.³⁶
- **Nuclear Force Structure:** In deterrence strategy, the nuclear force structure is developed according to the perceived threat perceptions. Nuclear force structure must be dynamic enough to cater for the unprecedented eventualities and threats which a state may envisage in future extreme circumstances as well. Nuclear force structure is primarily the state's capability to respond with the nuclear weapons once the nuclear threshold is crossed by an adversary.

³² Alan Philips and Steven Starr, "Change Launch on Warning Policy", *Center for Arms Control, Energy and Environmental Studies, Moscow*, Opinion, April 5, 2006, <http://www.armscontrol.ru/pubs/en/change-low.pdf>

³³ Bruno Tertrais, "Pakistan's Nuclear and WMD Programmes: Status, Evolution and Risks," *SIPRI.ORG, EU Non-Proliferation Consortium*, Non-Proliferation Papers, No. 19, July 2012, pp. 5, <http://www.sipri.org/research/disarmament/eu-consortium/publications/Nonproliferation-paper-19>

³⁴ Ibid.

³⁵ Tertrais, "Pakistan's Nuclear and WMD Programmes", *sipri.org*, p. 14.

³⁶ Vipin Narang, "Five Myth's about India's Nuclear Posture", *The Washington Quarterly*, Vol. 36, Issue, 3, (2013), pp. 148-150.

A particular nuclear force structure is adopted according to the state's nuclear doctrine and strategy.³⁷ Different nuclear force structures are needed for counter value and counter force targeting and would also vary according to the nature of the threat perceived from different nuclear rivals.³⁸ Nuclear forces in principle includes the stocks of available fissile material which could readily be utilized for manufacturing the fissile cores of nuclear warheads, the total number of operational warheads on the state's nuclear inventory, the available delivery means to include nuclear capable missiles (all types), aircrafts, bombers, submarines and other naval platforms etc.³⁹ Both India and Pakistan maintain missiles as primary and aircraft as secondary delivery means for nuclear weapons. India is also developing an assured 2nd strike nuclear capability through naval platforms while Pakistan has also established a Naval Strategic Force Command for this purpose.⁴⁰

- **Nuclear Thresholds:** Also known as nuclear redlines or unacceptable limits which if transgressed by an adversary, risks invoking nuclear retaliation. Nuclear thresholds are always kept vague and ambiguous. If these are too obvious, an adversary could either get encouraged to initiate a conflict short of crossing these redlines or launch a pre-emptive nuclear strike when it anticipates crossing these thresholds and an evident nuclear redline would bereave the defender of its flexibility and options.⁴¹ Likewise if nuclear thresholds are kept too high it would call for an

³⁷Gurmeet Kanwal, "India's Nuclear Force Structure", *Strategic Analysis*, Vol. XXIV, No. 6, September 2000, <http://www.idsa-india.org/an-sept2-00.html>

³⁸Erik Gartzke, Jeffery M. Kaplow and Rupal N. Mehta, "The Determinants of Nuclear Force Structure", *Journal of Conflict Resolution*, Vol. 58, No. 3, pp. 484-492.

³⁹U.S. Department of Defence, "Fact Sheet on U.S. Nuclear Force Structure under the New START Treaty", unclassified and undated, <http://www.defense.gov/documents/Fact-Sheet-on-US-Nuclear-Force-Structure-under-the-New-START-Treaty.pdf>

⁴⁰Feroz H. Khan and Mansoor Ahmed, "Pakistan, MIRVs, and Counterforce Targeting", in Michael Krepon, Travis Wheeler and Shane Mason, ed., *The Lure & Pitfalls of MIRVs* (Washington: Stimson Center, May 2016), p. 156.

⁴¹Sagan, "Evolution of Pakistani and Indian Nuclear Doctrine", in *Inside Nuclear South Asia* (ed.), p. 228.

unwarranted brinkmanship whilst too low redlines could encourage the adversary to adopt a posture of pre-emptive or decapitating strikes. While some Pakistani officials have declared few vague spatial, military, economic and political thresholds, Indian thresholds are relatively clearer which even includes retaliating to nuclear, chemical and biological attacks and any perceived nuclear threat thereof.⁴²

Proportionality and Rationality in South Asian Deterrence

A complex problem in the deterrence equation in South Asia arises from the doctrinal mismatch. While Indian no first use clause is conditional and dubious, retaliating massively to one odd Pakistani Low Yield Short Range (LYSR) nuclear warhead, possibly on Indian mechanized forces in Pakistani territory, would be disproportionate and imprudent.⁴³ Such complications in the deterrence equation have thus become extremely problematic due to inherent risk of serious miscalculations. Because nuclear weapons are not meant for war fighting but for deterrence, therefore employing, only one, even against an aggressor is likely to be regarded as an act of insanity and irrationality by the international community. There are no guarantees that in retaliation to such a strike the response would be proportional and not massive. There are no clear answers as to whether India will respond to a LYSR Pakistani tactical nuclear strike massively or proportionately? And do Pakistan and India have same understanding of the term proportional?⁴⁴ Would both states

⁴²Peter Levoy, "Islamabad's Nuclear Posture: Its Premises and Implementation" in Henry D. Sokolski (ed.), *Pakistan's Nuclear Future: Worries Beyond War*, (Carlisle Barracks, PA, Strategic Studies Institute, 2008), pp. 136.

⁴³Raja Menon, "A mismatch of nuclear doctrines", *The Hindu*, January 22, 2014, <http://www.thehindu.com/opinion/op-ed/a-mismatch-of-nuclear-doctrines/article5602609.ece>

⁴⁴For detailed discussion on the issue see: Bhumitra Chakma, *Pakistan's Nuclear Weapons* (New York: Routledge, 2009), pp. 55-56. Also: Michael Krepon, "Massive Retaliation", *Arms Control Wonk*, April 1, 2014, <http://krepon.armscontrolwonk.com/archive/4099/massive-retaliation-2> Also: Abhijit Iyer Mitra, "Massive Retaliation", *South Asian Voices*, April 16, 2014, <http://southasianvoices.org/massive-retaliation/>

slip towards fighting a nuclear war in an action reaction syndrome? India also has developed LYSR nuclear weapons besides subscribing to fighting a conventional war after a nuclear strike,⁴⁵ yet it has not officially distanced itself from the massive retaliation condition even after a sub-kilo ton nuclear strike, despite the fact that few Indian academics have termed this posture as irrational.⁴⁶

Deterrence from Minimal to Assured Destruction

The concept of minimum deterrence or minimal deterrence is premised on the notion of possessing minimum numbers of warheads considered essential to inflict level of damage deemed unacceptable even in return for a victory.⁴⁷ States aiming to maintain a posture of minimal deterrence are highly unlikely to increase the number of nuclear warheads beyond the numbers considered imperative for inflicting unacceptable damage. On the contrary, the concept of assured destruction is founded on the notion of conducting a massive strike in a manner which ensures that the victim state cease to exist as a viable entity. Assured destruction is a more dynamic concept depending on multiple factors including the adversary's geographical size, industrial and population centres, its nuclear strike forces and posture and defensive mechanism against nuclear attack like BMD shield and protective shelters etc. Indian deterrence posture is gradually shifting from credible minimum to assured destruction,⁴⁸ which has prompted Pakistan to increase the

⁴⁵Zahir Kazmi, "SRBMs Deterrence and Regional Stability in South Asia: A Case Study of Nasr and Prahaar", *Regional Studies*, Institute of Regional Studies (IRS), Vol. XXX, No. 4, (Autumn 2012). Also: Bharat Karnad, *Nuclear Weapons and Indian Security* (New Delhi: Macmillan India, Ltd, 2006), pp. 670-676.

⁴⁶Raja Menon, "A mismatch of nuclear doctrines", *The Hindu*, January 22, 2014.

⁴⁷Norman C. Freund, "Nuclear Deterrence: The Rationality of Irrational", *International Journal on World Peace*, Vol. 4, No. 3, (Jul – Sep 1987), p. 75. See also: Chakma, *Pakistan's Nuclear Weapons*, pp. 48-50.

⁴⁸Michael Krepon, "Whatever Happened to Minimum Credible Deterrence?", *Arms Control Wonk*, January 6, 2014,

<http://krepon.armscontrolwonk.com/archive/3996/what-ever-happened-to-minimum-credible-deterrence> See also: Amit R. Saksena, "The Paradox of India's 'Credible Minimum Deterrence'", *The Diplomat*, August 6, 2014, <http://thediplomat.com/2014/08/the-paradox-of-indias-credible-minimum-deterrence/>

number of warheads, thus denying psychological advantage to India. This may also prompt Pakistan to adopt an Assured Destruction policy that will ultimately initiate another arms race in the region.

The Issue of Credibility

Credibility in nuclear deterrence is dependent on numerous factors like geographical size, nuclear strike capabilities of the adversary, other rivals within and outside the region and Grand National Policy etc. As a yardstick, to effectively deter another nuclear rival, a mix of nuclear warheads for counterforce and counter value targeting would be needed. The yield of these warheads would also depend on multiple factors like for example possessing 2 – 3 warheads of 10 KT against a counter-value target, could at times be more effective form of deterrence instead of a megaton warhead. However in principle, the deterrent value of thermonuclear weapons is considered to be far more potent and effective than the fission based warheads.⁴⁹

It is not clear how much number of nuclear warheads would be deemed by India and Pakistan as essential for credibility. There is no measurable yardstick which could ascertain the destruction level as unacceptable for either of the adversaries. Some western scholars like McGeorge Bundy believed that even a modest nuclear inventory totalling up to the yield of one Hydrogen Bomb (approximately 50 Kilo Ton [KT] or above),⁵⁰ would serve the purpose and a nuclear force comprising of approximately 500 KT yield would be more than enough as its use must be termed as “a disaster beyond history”.⁵¹ Yet there are others, like Robert McNamara, who held different views

⁴⁹Kurt Guthe, “Nuclear Weapons Acquisition and Deterrence”, in *Understanding Deterrence* (ed.), Keith B. Payne(New York: Routledge, 2013), pp. 109-112.

⁵⁰Carey Sublette, Sub Section 4.4 “Elements of Thermonuclear Weapon Design”, of Section 4.0 Engineering and Design of Nuclear Weapons, in Nuclear Weapons Freely Asked Questions (NWFAQ), *Nuclear Weapons Archive – A Guide to Nuclear Weapons*, <http://www.nuclearweaponarchive.org/Nwfaq/Nfaq4-4.html#Nfaq4.4>

⁵¹McGeorge Bundy, “To Cap the Volcano”, *Foreign Affairs*, Vol. 48, No. 1, October 1969, <http://www.foreignaffairs.com/articles/24098/mcgeorge-bundy/to-cap-the-volcano>

on this issue and considered a nuclear force of no less than 200 to 300 Mega Tons (MT) as an effective deterrence against an adversary like USSR.⁵²

However, the yardstick for maintaining effective deterrence would be different against smaller and bigger states. To deter a small state, it is assumed that, nuclear weapons of different sizes equalling to 1 MT would be sufficient, while a force comprising of nuclear warheads totalling up to 4 MT should be able to deter a bigger state.⁵³ The effectiveness of deterrent would be different in case of India and Pakistan due to their size and geography. According to Robert McNamara, a force which could cause destruction of one-fifth to one fourth (20% - 25%) of the total population and half of the industry would deter an adversary by inflicting a blow of an assured destruction.⁵⁴ McNamara's estimates although didn't include the counter-force targets. Thus taking 'assured destruction capability' as a yardstick for maintaining the minimum credibility of deterrence, it can be argued that in the South Asian context, a total of 1 MT (i.e., 100 warheads of 10 KT each or 50 warheads of 20 KT each) would constitute as a minimum deterrence and might only suffice in extremely low risk situations. For larger states or high risk situations, the minimum deterrence could possibly be established by maintaining an arsenal of nuclear weapons combining up to a total yield of approximate 4 MT (as a rough estimate this could mean 400 x 10 KT or 200 x 20 KT warheads).⁵⁵

However, in the South Asian context, India has started to develop BMD capabilities which could undermine the deterrent value of nuclear weapons for Pakistan. Therefore, the concept of minimal deterrence originally conceived almost two decades ago may become redundant due to credibility issues. Thus if India deploys a BMD shield and radically increases its number of nuclear warheads, for Pakistan a

⁵²General K. Sundarji, *Blind men of Hindustan* (New Delhi: UBS Publishers' Distributors Ltd, 1995), pp. 66-67.

⁵³Ibid, p. 67.

⁵⁴Ibid, p. 66.

⁵⁵Ibid, p 67.

credible minimum deterrence would entail strategic warheads (for counter-force and counter-value targets), MIRVs (Multiple Independently targetable Re-entry Vehicle) mounted on missiles to neutralize BMD and an assured second strike capability to restore the concept of mutual vulnerability ensuing stability. Under such high risk environments to deter a larger rival a smaller nuclear weapon state may need an inventory totalling up to 8 - 10 MT.

Command and Control Systems: Command is usually referred to as assigning of tasks and missions to the subordinate forces while control implies “monitoring and laying down certain constraints on their functioning through doctrine, standard operating procedures, software and equipment.”⁵⁶ A robust command and control system is built with purpose to withstand a decapitating or nuclear first strike which thus enhances the deterrent value.⁵⁷ The deterrent forces would be credible only if the adversary believes that a nuclear pre-emptive or first strike would still fail to completely eliminate the retaliatory nuclear forces, and sufficient quantity would still be available to strike back and inflict unacceptable damage. A decapitating nuclear strike, which according to some analysts is a distinct possibility in South Asia,⁵⁸ is usually aimed at severing the communications between commanders and the deployed locations of the weapons, eliminating the central leadership possessing authorization for nuclear strike and destroying the deployed nuclear weapons before these could be launched.⁵⁹

To counter this danger it would be essential to build a multi-layered communication network, well dispersed weapon deployment locations, adequate survivable nuclear forces and protective nuclear shelters for the commanders and leadership which have to authorize the nuclear strike. Nuclear command could be based on assertive, also known as central/positive control model, or delegative, also known as

⁵⁶Lt. Gen Pran Pahwa, *Command and Control of Indian Nuclear Forces* (New Delhi: Knowledge World, 2002), p. 4.

⁵⁷*Ibid*, p. 5.

⁵⁸Brigadier Nair, *Nuclear India*, pp. 54, 86.

⁵⁹Gen Pran Pahwa, *Command and Control of Indian Nuclear Forces*, p. 9.

negative control model. In central command model the vulnerability of the nuclear forces and commanders become obvious with an inherent risk of 'use these or lose these', while in delegative command model there are higher risks of accidental or unauthorized use. Therefore, to cater for such problems Pakistan has introduced different kinds of Permissive Action Links (PALs) and fail-safe mechanisms. PALs usually are cryptographic single or divided codes distributed among several operators to prevent unauthorized launch whereas fail-safe is a mechanism or a device which is triggered in case of a failure and thus causes the nuclear device to fail in a manner that it is considered safe.⁶⁰ Although not enough information is available on Indian nuclear command and control structure, nuclear weapons are under safe custody despite concerns raised in the west from time to time.

Strengthening Deterrence or Regional Arms Race?

Keeping deterrence stable without indulging into an arms race is an extremely challenging task. This may require some policy, doctrinal, strategic, force postural and structural obligations to serve as an effective mechanism towards preventing war. Pakistan, being the smaller state, would have to have a nuclear force and command structure quantified in proportionality to the size of Indian nuclear forces, military doctrines and Anti-ballistic Missile (ABM) capabilities. Since the overt nuclearization of South Asia, Indian military has introduced the concept of limited war under the nuclear umbrella, known as "Cold Start Doctrine (CSD)", which is likely to be put to test if the nuclear asymmetries grow beyond proportion between India

⁶⁰For more details on PALs and Fail-Safe, please see: *Columbia University*, "Permissive Action Links", updated September 2, 2009, <https://www.cs.columbia.edu/~smb/nsam-160/pal.html> and: *MrReid.org*, "What Does "Fail-Safe" Mean?", November 20, 2014, <http://wordpress.mrreid.org/2014/11/20/what-does-fail-safe-mean/>. Also: Stephen Shenfield, "Nuclear command and control: from fail-safe to fail-deadly." Review of *The Command and Control of Nuclear Forces* by Paul J. Bracken (Connecticut: Yale University Press, 1985), *stephenshenfield.net*, May 5, 2012, <http://stephenshenfield.net/themes/war-and-disarmament/nuclear-weapons/114-nuclear-command-and-control-from-fail-safe-to-fail-deadly>

and Pakistan.⁶¹ A nuclear triad of several hundred warheads along with a rudimentary BMD capability would presumably give India a false sense of superiority thus prompting aggression.⁶² In retrospect, a limited conflict between the two countries is likely to become more plausible with high possibility of spinning into a full scale war. Pakistan therefore, would be obliged to have a sizable nuclear inventory to pose a credible threat to Indian aggressive designs.

Deterrence is not simply about the number of nuclear warheads. The credibility of deterrence also rests upon a demonstrated capability, the delivery means and a communication of will to use the capability. In South Asia, the nuclear rivals have adopted various measures to strengthen the deterrence both in psychological and physical dimensions.⁶³ Some of these steps not only pose risk for nuclear arms race, but have also altered the deterrence equation in the region, thus perpetuating regional instability. Some of the latest developments in shifting nature of deterrence in South Asia include:

- **A Quest for Superior Nuclear Forces:** India desires to maintain the superiority of nuclear forces by enlarging the size of nuclear inventory, maintaining a nuclear arsenal having a mix of tactical, mid-range and thermonuclear warheads, planning to mount MIRVs on the missiles along with a nuclear war fighting strategy.⁶⁴ Deployment of MIRVs would have an extremely destabilizing impact and would entail entering into a nuclear and missile arms race.⁶⁵ Scholars have observed that Indian quest to develop ICBMs, MIRVs on these and deployment of BMD shield could seriously undermine the nuclear deterrence in South Asia besides

⁶¹Walter C. Ladwig III, "A Cold Start for Hot Wars?", *International Security*, Vol. 32, No. 3, (Winter 2007/08), pp. 158-159.

⁶²Zaman, "Undermining S. Asian Nuke Deterrence – II", *Pakistan Observer*, 2012.

⁶³Karnad, *India's Nuclear Policy*, p. 90. See also: Brigadier Vijai K. Nair, *Nuclear India* (New Delhi: Lancer International, 1992), p. 97.

⁶⁴Shams uz Zaman, "The Missile Race in South Asia", *Counterpunch*, May 29, 2015, <http://www.counterpunch.org/2015/05/29/the-missile-race-in-south-asia/>

⁶⁵Hubert H. Humphrey, "II. An End to Nuclear Gamesmanship", *Bulletin of Atomic Scientists*, Vol. XXVIII, No. 3, March 1972, p. 14.

risking a nuclear arms race.⁶⁶ For Pakistan to follow such course would be financially unfeasible and prohibitive in foreseeable future. Pakistan on the other hand maintains a deterrence posture premised on the principle of minimalism. The path to maintain and ensure nuclear superiority over an adversary is nevertheless a slippery slope which could affect perceptions of other states in the region thus leading to a strategic arms race.⁶⁷ Owing to these Indian developments, risk of nuclear arms race in South Asia remains fairly high.

- **Maintaining Nuclear Triad:** India aims at developing a nuclear triad thus acquiring the capability to deliver nuclear warheads using multiple platforms (like ground based missiles, aircraft and naval submarines). The purpose is to acquire a capability of conducting a nuclear strike in retaliation to nuclear first strike. Such a capability can give India a false sense of security that may lead them towards undermining the credibility of Pakistan's nuclear deterrent. For example Bharat Karnad argued that Pakistani nuclear threat is serious but not credible because an unacceptable cost of the Indian retaliatory strike would self-deter Pakistan from crossing the nuclear Rubicon.⁶⁸ Implying that India can afford to lose a few cities but as a consequence of a retaliatory strike, Pakistan would cease to exist as a viable state. Karnad and others conservatives believe that, Pakistani leadership, after anticipating the unacceptable level of damage, fear and caution would prevent them from considering the employment of nuclear weapons as a last resort. Such defective assumptions on part of Indian military planners would encourage

⁶⁶Zachary Keck, "Asia's Coming Nuclear Arms Race", *The Diplomat*, June 18, 2014, <http://thediplomat.com/2014/06/asias-coming-nuclear-arms-race/> See also: Shams uz Zaman, "Say no to nuclear arms race", *Nation*, October 25, 2013, p. 7.

⁶⁷Jonathan Samuel Lockwood, *The Soviet view of U.S. Strategic Doctrine: Implications for Decision Making* (New York: National Strategy Information Center, Inc, 1985), pp. 127-129.

⁶⁸Karnad, *India's Nuclear Policy*, pp. 96, 113. See also: Jonas Schneider, "A Nuclear Deal for Pakistan?", *Center for Security Studies (CSS) Analyses*, No. 187, March 2016, p. 3, <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/CSSAnalyse-187-EN.pdf>

them to consider the option of waging limited war against Pakistan. As a consequence of such thinking, Pakistan is feeling obliged to proportionally increase the size of its nuclear arsenal as a necessity rather than choice.

- **Assured Second Strike Capability:** India is on a path of acquiring an assured second strike nuclear capability through a large size nuclear inventory along with multiple delivery means including SSBNs and advanced nuclear and missiles capabilities citing threat from China and Pakistan as a pretext.⁶⁹ An assured second strike entails striking back with nuclear weapons after absorbing the nuclear first strike or a retaliatory nuclear strike which can be attained through dispersion of nuclear forces, maintaining a retaliatory capability at sea based platforms (both floating and submerged) and deploying silo based nuclear missiles in hardened concrete structures. The problem with the naval vessels (submerged or floating) is that nuclear weapons deployed on these platforms have to be kept in ready to fire state at the sole discretion of the submarine/local commanders.⁷⁰ This delegative command model is thus riskier, unstable and provocative risking unauthorized use of nuclear weapons. Such a deployment could push other states to place their weapons on hair-trigger alert thus adding to the risk of miscalculation and accidental use of nuclear weapons, leading to instability. Indian SSBNs would by design have a delegative nuclear command structure. A second strike capability coupled with deploy BMD shield, even at a rudimentary stage, would ostensibly provide India with a false sense of security thus resulting in erroneous perceptions of achieving a decisive nuclear superiority vis-à-vis Pakistan.⁷¹ As a consequence

⁶⁹Saira Bano, "Assessing India's Nuclear Capabilities", *International Policy Digest*, December 22, 2014, <http://intpolicydigest.org/2014/12/22/assessing-india-s-nuclear-capabilities/>

⁷⁰Peter Reydt, "Britain: No Central control over nuclear arsenal", *World Socialist Web Site (WSWS)*, November 27, 2007, <http://www.wsws.org/en/articles/2007/11/nuc1-n24.html>

⁷¹James Dao, "The Nation; Please Do Not Disturb Us With Bombs", *The New York Times*, February 11, 2001, <http://www.nytimes.com/2001/02/11/weekinreview/the-nation-please-do-not-disturb-us-with-bombs.html>

Pakistan would be compelled to take appropriate measures thus possibly triggering an arms race.

- **Full Spectrum Deterrence:** Due to Indian belief of fighting a limited war under the nuclear umbrella, through their proactive CSD, Pakistan has tried to plug the existing space by adopting “full spectrum” deterrence after inducting LYSR nuclear capable missiles. However, implications of counter-force weapons are disputed by scholars. Some have attributed that these have a stabilizing effect,⁷² while others regard these as de-stabilizers for the strategic environment.⁷³ Regardless of the effects, these weapons still remain for deterrence purpose and not nuclear war fighting. This is evident from the fact that NATO, the and even Russia still maintains both types of nuclear weapons, tactical and strategic, on their inventories which only reflects the importance of these weapons in deterrence equation.
- **Ambiguous Nuclear Thresholds:** Definitely laid out geographical redlines or clearly elucidated nuclear thresholds can motivate an adversary to take calculated risks or an endeavour to conduct limited war below the proclaimed nuclear thresholds especially in a troubled region. Unfortunately future course of battles can never be predicted precisely which consequently could lead to unintended and dangerous consequences. Therefore, keeping the nuclear thresholds vague mostly helps in discouraging the opponent from undertaking calculated risk while struggling to precisely identify the actual circumstances which could compel the enemy to launch the nuclear strike.⁷⁴ Pakistan's ambiguous nuclear thresholds have helped in deterring India from launching an aggression which is expected to be the case in future as well.

⁷²Mansoor Ahmed, “Why Pakistan needs tactical nuclear weapons?”, *Weekly Pulse*, May 6, 2011, <http://www.weeklypulse.org/details.aspx?contentID=563&storylist=9>

⁷³William C. Potter, “Next Step in Nuclear Disarmament: The Challenge of Tactical Nuclear Weapons”, *James Martin Center for Non-Proliferation Studies (CNS)*, paper prepared for seminar on nuclear disarmament at Kyoto Japan, December 2-5, 1996, available at: http://cns.miiis.edu/reports/pot_japn.htm

⁷⁴Happymon Jacob, “A precarious Indo-Pak nuclear balance”, *The Hindu*, January 30, 2012, <http://www.thehindu.com/opinion/lead/a-precarious-indopak-nuclear-balance/article2832290.ece>

- **Anti-Ballistic Missile Defence Shield:** Another radical but slightly ineffectual and expensive way to strengthen the nuclear deterrence is the deployment of the BMD shield that could block or limit the incoming missiles thus reducing the cost of destruction from unacceptable to acceptable levels. This option, however, is extremely costly and partially successful due to complex technical issues and effective counter measures available to evade the defensive shield.⁷⁵ Indian quest for the BMD would become prelude to a new nuclear arms race which apparently is brewing in South Asia thus becoming a highly destabilizing factor for the region and global stability as had been seen in during the Cold War era.⁷⁶
- **Incompatible Nuclear Doctrines:** Nuclear doctrine promulgates the circumstances under which the nuclear capabilities would be employed. In South Asia after the induction of LYSR nuclear weapons, nuclear doctrines of India and Pakistan have become incompatible.⁷⁷ An ambiguous nuclear doctrine although adds to the deterrence value, especially for the weaker state,⁷⁸ but also holds risks for miscalculations. For example, in case of Pakistan, the LYSR nuclear warheads are now the 'last resort' defence option instead of strategic nuclear weapons. At the same time Indian massive retaliation to a sub-kilo ton device would be disproportionate and irrational. Indian nuclear doctrine also

⁷⁵Kingston Reif, "Does missile defense work?", *Bulletin of the Atomic Scientists*, February 8, 2013, <http://thebulletin.org/does-missile-defense-work>. See also: David Willman, "\$40-Billion Missile Defence System Proves Unreliable", *Los Angeles Times*, June 15, 2014, <http://www.latimes.com/nation/la-na-missile-defense-20140615-story.html#page=1>

⁷⁶Igor Ivanov, "The Missile-Defense Mistake: Undermining Strategic Stability and the ABM Treaty", *Foreign Affairs*, Vol. 79, No. 5, September/October 2000, <http://www.foreignaffairs.com/articles/56428/igor-ivanov/the-missile-defense-mistake-undermining-strategic-stability-and->

⁷⁷Menon, "A mismatch of nuclear doctrines", *The Hindu*, January 22, 2014.

⁷⁸Rifaat Hussain, "Nuclear Doctrines in South Asia", *South Asian Strategic Stability Unit (SASSU)*, SASSU Research Report No. 4, December 2005, p. 12.

⁷⁹Col G. G. Pamidi, *Possibility of Nuclear War in Asia: An Indian Perspective* (New Delhi: Vij Books India Pvt Ltd, 2012), pp. 99-102.

mentions a dubious no first use clause which actually has become meaningless due to conditions attached to it.⁸⁰

- **Nuclear Postures:** Pakistan maintains a defensive nuclear posture keeping the option of striking first if there be a grave threat to its national security or existence. This posture helps in deterring an adversary from initiating hostilities or showing nuclear brinkmanship. The posture of striking first as a last resort must not be confused with an offensive nuclear posture which is fundamentally different from an offensive posture involving nuclear readiness, force structures and deployment patterns.⁸¹ India also maintains a similar kind of posture with more readiness for pre-emptive or retaliatory strikes.
- **Nuclear War Fighting Strategy:** Development of LYSR weapons by India and Pakistan, coupled with exercises conducted by India for nuclear warfare indicates the changing mood in South Asia. Although, to strengthen deterrence it becomes imperative for states to devise nuclear war fighting strategy; it paradoxically contradicts the basic purpose of nuclear weapons that these are not weapons of war but weapons of peace serving only political purpose of deterring war.⁸² In wake of the LYSR nuclear capable missiles and nuclear war fighting exercises many scholars fear that the risks of nuclear war breaking out in South Asia are increasing.
- **Calculated Irrationality:** States are considered rational actors in global arena which formulate their policies on the cost-benefit calculus. The rationality-irrationality paradox has also a critical value in establishing the credibility of deterrence. War is considered as irrational and states, being rational, are expected to

⁸⁰Like for example Indian 'No First Use' is neither applicable to states which have nuclear weapons or are allies of the nuclear weapon states. For example see: Shams uz Zaman, "Myth of Indian 'nuclear no first use'", *The Nation*, December 22, 2012, p. 7.

⁸¹Hans M. Kristensen and Matthew McKinzie, "De-alerting nuclear forces", *Bulletin of the Atomic Scientists*, June 19, 2013, <http://thebulletin.org/de-alerting-nuclear-forces>

⁸²Eli Jacobs, "Warfighting vs. Deterrence: A False Distinction", *Center for Strategic & International Studies (CSIS)*, September 12, 2011, <http://csis.org/blog/warfighting-vs-deterrence-false-distinction>

avoid it. Likewise unleashing the destructive power of the nuclear weapons is equally irrational. Therefore, once a state threatens to initiate war, the defender tends to prevent it either by displaying the will to employ nuclear weapons which thus constitutes a calculated level of irrationality.⁸³ However, such warnings risk encouraging the potential aggressor to launch pre-emptive strikes which could result in a nuclear exchange. Therefore, doctrines like Cold Start by India have increased the risks of nuclear war in South Asia.

Is the Deterrence Equation Stable in South Asia?

After the nuclearization of South Asia, it became apparent that the scope for a conventional war no more existed. It was a setback for the huge Indian military machine which desperately sought relevance for their conventional role under the pretext of CSD. Conventional war between the nuclear rivals is an extremely dangerous proposition involving risk of miscalculations and accidents. By increasing its nuclear warheads, developing the BMD shield, mounting MIRVs on missiles and acquiring second strike capability, India is striving to tilt the power equilibrium profoundly in its favour. Commissioning of INS Arihant and testing a hypersonic interceptor missile, Ashwin, illustrates this dismal reality.⁸⁴ As a consequence strategic stability and deterrence equation is gradually eroding in South Asia and the scenario poses a serious national security threat for Pakistan. As a countermeasure, Pakistan has already restricted the space of limited war by adopting a posture of full spectrum deterrence. Acquiring a second strike capability remains an expensive

⁸³Freund, "Nuclear Deterrence: The Rationality of Irrational", pp. 75-77, 79. See also: Patrick M. Morgan, *Deterrence Now* (United Kingdom: Cambridge University Press, 2003), pp. 44-45, 54-58.

⁸⁴Manu Pubby, "India's first nuclear submarine INS Arihant ready for operations, passes deep sea tests", *The Economic Times*, February 23, 2016, <http://economictimes.indiatimes.com/news/defence/indias-first-nuclear-submarine-ins-arihant-ready-for-operations-passes-deep-sea-tests/articleshow/51098650.cms>. See also: Hemant Kumar Rout, "India successfully test fires interceptor missile", *The New Indian Express*, May 15, 2016, <http://www.newindianexpress.com/states/odisha/India-successfully-test-fires-interceptor-missile/2016/05/15/article3434079.ece>.

option for Pakistan but if the asymmetries continue to grow, Pakistan will have to consider this expensive proposition in future. Unresolved disputes like Kashmir in South Asia continue to project it as a nuclear flashpoint for the rest of the world. If the international community fails to harness Indian ambitions, this unfortunately would be the precursor to a nuclear arms race in the region.

Conclusion

Strategic stability in South Asia unfortunately remains in a fragile state. India being a stronger economic power can enjoy the luxury of spending extravagantly on the conventional defence which substantiates its hegemonic agenda in the region. Pakistan cannot follow this perilous path due to fragile economic situation. Increased reliance on the nuclear deterrence and denying any space for a limited conflict has thus become the fundamental pillar of Pakistan's national security and defence policy. This is reflective from denial of space for conventional or limited war by developing LYSR nuclear warheads. To maintain balance and stability in the region, Pakistan has a few affordable options available to address the growing conventional and strategic asymmetries in the region. Relying on nuclear deterrence, without indulging in regional arms race, remains one of the cost effective option. However, it would be a challenging task to walk over this line of avoiding an arms race while remaining subscribed to the principle of minimalism. Nuclear weapons are likely to exist in future and till the time general global disarmament doesn't become a norm, nuclear deterrence would serve as a mechanism to enforce peace in South Asia. However, the Indian aspirations to dominate the region by developing and acquiring newest kinds of high-tech weapons and BMD shield could become a destabilizing factor involving risks of miscalculation and accidents possibly leading to war between the South Asian nuclear rivals. The need therefore is to bilaterally resolve the existing disputes through negotiations which exist as a stumbling block between peace and stability.

The Indo-Japanese Nuclear Energy Cooperation: A Perspective from Pakistan

Ahmad Rashid Malik*

Abstract

The benefits of the Indo-US nuclear cooperation agreement specifically for India would not be fully realized until Japan gives a clear go ahead by cooperating with India in the nuclear field. The process of the Indo-Japan nuclear cooperation was started after 2008. India has to comply with a number of conditions, however, before a deal could be struck with the nuclear-allergic Japan. The issue is sensitive and entails many complications. So far, India has been reluctant somewhat to oblige Japan with all necessary pre-conditions. If signed, the cooperation could be having drastic implications for the nuclear disarmament and non-proliferation efforts in South Asia and could severely discriminate Pakistan which also needs nuclear energy to uplift its economy.

Key words: Energy, Comprehensive Test Ban Treaty, Non-Proliferation Treaty, War on Terror, Nuclear Suppliers Group, International Atomic Energy Agency.

Introduction

This paper makes an attempt to analyse the Indo-Japanese nuclear cooperation leading them to conclude a treaty by allowing Japan to supply nuclear power components and plants to India. Nuclear talks have been taking place between the two countries since 2010.

*The author holds a doctorate from La Trobe University, Melbourne, Australia. He is former Fellow of the Japan Foundation in Tokyo, and the Korea Foundation at Yonsei University, Seoul, Republic of Korea. He is an expert on Pakistan-Japan relations.

If the agreement is signed, this would set the first example under which a non-signatory to the Non-Proliferation Treaty (NPT) and Comprehensive Test Ban Treaty (CTBT), India, would be assisted by Japan under a specific waiver. Japan expects that the deal would boost Japanese exports after two decades of stagflation of its economy. The paper argues that the agreement would severely affect the non-nuclear principles of Japan adopted in the 1960s and would be in non-compliance with agreed recommendation 12 from the 1995 NPTREC 'Principles and Objectives' as well as NPT Article III.2.¹ As explained in this paper, anti-nuclear norms set forth by Japan in 1967, 1974, and 1998 are contrary to the objectives of on-going Indo-Japan nuclear talks. Keeping these contrary developments in purview, the paper provides an analysis of the prospective Indo-Japan nuclear cooperation with reference to Pakistan's concerns.

Backdrop

Japan is the only country in the world that has experienced the devastating effects of nuclear attacks. This has not been forgotten by Japan over the past seven decades after the dropping of the atomic bombs on Hiroshima and Nagasaki on 6 and 9 August 1945 respectively that killed between 80,000 to 140,000 people and 100,000 more were seriously injured.² As a victim of nuclear holocaust, Japan championed anti-nuclear movement worldwide.

¹12. New supply arrangements for the transfer of source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to non-nuclear-weapon States should require, as a necessary precondition, acceptance of the Agency's full-scope safeguards and internationally legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices.

[http://www.un.org/disarmament/WMD/Nuclear/1995-](http://www.un.org/disarmament/WMD/Nuclear/1995-NPT/pdf/NPT_CONF199501.pdf)

NPT/pdf/NPT_CONF199501.pdf NPT, III.2: 2. Each State Party to the Treaty undertakes not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this Article.

²Hiroshima & Nagasaki Remembered. <http://www.hiroshima-remembered.com/>

When the People's Republic of China detonated a nuclear device in October 1964, Japan dismissed the idea that nuclear China was a threat to other Asian neighbours.³ Using the Chinese logic, Japanese Prime Minister Eisaku Sato said to US President Lyndon Johnson in January 1965 that if the Chinese Communists had nuclear weapons, the Japanese should also have them. Johnson thought that public might not permit for that in Japan but the younger generation should be educated for achieving that end.⁴ Understanding Japanese intentions, Johnson asked Japan to sign the NPT, which Japan ratified in 1976.

The three non-nuclear principles (*Hikaku San Gensoku*) of non-possession, non-manufacturing, and non-introduction into Japanese territory were formulated in 1967 and the House of Representatives of the Diet under Prime Minister Sato formally adopted these principles in 1971. On the other hand, the compelling factor behind acceptance of these principles had been the US occupation of Okinawa Island. It was believed that the US army possessed nuclear weapons and material and had them placed in Okinawa. Japan wanted that the United States should not carry out any nuclear activity on the soil of Japan and hence adopted these principles.⁵ The US Government has acknowledged that nuclear weapons were stored on Okinawa during the Cold War.⁶

After Japan's voluntary self-restriction regarding non-nuclearization, India became the first country in 1974, which openly had defied these principles by conducting nuclear tests within three years of the adoption of this principle by Japan. An upset Japan, quickly rushed to pass sanctions against India. Unlike the Chinese nuclear case, Japan

³John Welfield, 'Japan and Nuclear China', *Canberra Paper on Strategic and Defence*, no. 9 (Canberra: Australian National University, 1970), p. 12.

⁴Kurt M. Campbell, Robert J. Einhorn, & Mitchell Reiss, *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*. (Washington: Brookings Institution Press 2004), pp. 228–230.

⁵Based on discussion with Professor Takenori Horimoto, Contemporary South Asian Studies, Shobi University, Saitama-Ken, Japan, on August 17, 2010.

⁶Jesse Johnson, "In first, U.S. admits nuclear weapons were stored in Okinawa during Cold War", *The Japan Times* (Tokyo), February 20, 2016.

however, took harsh measures against the Indian detonation. Within five days of the explosion, Japanese Diet criticized India's action as most regrettable.⁷ Japanese Foreign Ministry reaffirmed the importance they attached to prevent nuclear proliferation.⁸ Above all, Japan realized that the NPT was undermined. Japanese public and media vehemently opposed the Indian nuclear test.⁹

Similarly, Japan equally opposed Indian and Pakistani nuclear tests conducted in May 1998 and levelled economic sanctions against them because these tests defied Japan's anti-nuclear principles adopted in 1967. Although Japan cooperated with Pakistan in various areas of mutual interests during 1974-98 but doubts were there about clandestine nuclear activities of Pakistan in the 1990s. However, during 1998-2005 Japan condemned both India and Pakistan for nuclear testing and imposed economic sanctions aimed at not offering new loans to them. Showing anger Japanese Empress Michiko cancelled her visit to India scheduled in September 1998. However, economic sanctions were later removed after Prime Minister Junichiro Koizumi visited Pakistan and India in April-May 2005. Japan's removal of sanctions was linked to support United States' efforts to 'War on Terror' (WoT). Within that period, Indo-US nuclear deal was struck on 18 June 2005. Koizumi paved the way for this deal by removing sanctions against India, and also against Pakistan. Japanese remained somewhat indecisive soon after the Indo-US nuclear deal of 2005. They did not enthusiastically welcome the deal.¹⁰ Japan for the first time positively nodded the Indo-US nuclear deal when basic guidelines were changed at the International Atomic Energy Agency (IAEA) meeting held in August 2008. Since then there has been enhanced high-level strategic exchanges between Japan and India. Japan decided not to oppose the US-India

⁷*Foreign Affairs Pakistan* (Islamabad: Research Directorate, Ministry of Foreign Affairs, n.d.), p. 44.

⁸Joint Press Statement issued at the end of the official visit of the Minister of State for Defence & Foreign Affairs, Aziz Ahmad, to Japan on 6-11 December 1971 in *Joint Communiqués 1947-1976* (Islamabad: Ministry of Foreign Affairs, 1998), p. 341-42.

⁹See Ahmad Rashid Malik, *Pakistan-Japan Relations: Continuity and Change in Economic Relations and Security Interests* (London: Routledge 2008), pp. 83-86.

¹⁰Ahmad Rashid Malik, 'Japan's Reaction to Indo-US Nuclear Deal', *The Nation* (Islamabad), April 6, 2006.

nuclear deal at a meeting of the 45-member Nuclear Suppliers Group (NSG) held at the end of August 2008.¹¹ Therefore, norms set forth in 1967, 1974, and 1998 were completely contrasted to the explanations put forward in 2008.

Commercialization of Japanese nuclear thinking also works. Given the fact that burgeoning Indian economy needs to generate more electricity, Japanese companies intend to take their share in Indian nuclear market instead of leaving it to the other sellers namely; the United States, Canada, South Korea, France, Russia, Great Britain, Mongolia, Kazakhstan, Argentine, and Namibia. At present, there are over 20 nuclear power reactors in India. This makes India the 12th largest producer of nuclear energy in the world and the third after South Korea and Japan in Asia.¹² It is expected that the Indian nuclear market electricity generation would grow to US\$ 100 billion by 2030. Hence Japan is of the view that it should not be left out in this multi-billion lucrative business. India has devised a strategy to build a nuclear capacity of 63,000 MW by 2030.¹³ This makes Indian nuclear industry crucial for Japanese commercial interests. Japanese transnationals, namely Hitachi, Toshiba, and Mitsubishi Heavy Industries have been eyeing the Indian nuclear market.

For India, the deal with Japan would be essential because of the following two reasons:

- An Indo-Japan civil nuclear pact is crucial for the American and French companies to source reactor vessels from the Japan Steel Works (JSW). India finds deal with Japan is crucial for the importation of necessary parts to be used by the American and French firms and because the US nuclear corporations namely; GE and Westinghouse are now owned by Japanese companies such as Hitachi and Toshiba.

¹¹ Ahmad Rashid Malik, 'Supporting Nuclearisation'. *The Nation* (Islamabad), August 24, 2008.

¹² World Nuclear Association, quoted by Juan Pablo Fuentes, 'Japan's nuclear crisis will alter global energy mix', *Moody's Analytics*, April 5, 2011.

¹³ Takenori Horimoto, 'The Japan-India nuclear Agreement: Enhancing bilateral relations?' in *Asia-Pacific Bulletin* (Honolulu: East West Centre), no. 107, April 2011.

- Additionally, the deal would be successful because it would make an end to Japan's anti-Indian nuclear policy adopted after 1974 and 1998. Japan, however, would keep criticising nuclear policies of North Korea, Iran, and Pakistan.

Japan's Nuclear Potentials

Japan attempted to develop its own indigenously developed nuclear program during World War II. For instance, during the 1930s, Japan developed a vast program for nuclear research. Japanese nuclear scientists cooperated with German and American nuclear scientists. Dr Yoshio Nishina of the Riken Institute, for instance, was involved in developing nuclear power into weapons. Japanese noble laureate physicist Bunsaku Arakatsu was another notable name in the field of nuclear research. Both were Albert Einstein's contemporaries. The Japanese-German clandestine cooperation in uranium was intercepted by the Americans just prior to the end of World War II.¹⁴ The defeat in war put an end to the Japanese nuclear program. Report suggested that just prior to the end of World War II, Japan wanted to detonate a nuclear experiment in Hungnam, north-eastern Korea, on 12 August 1945, but Communist forces occupied the area.¹⁵

After defeat, United States did not allow Japan to work on nuclear program. The destruction of Hiroshima and Nagasaki and nuclear shield provided by the United States led Japan to champion the cause of non-nuclearization. Given historical scenario, nothing could be clearly stated about Japan's nuclear weapons program. A larger and 'credible' ambiguity has been maintained. Given useable uranium reactors in Japan, it can produce as many as 2000 nuclear bombs.¹⁶

¹⁴“World War II: German Nuclear Transfers to Japan”, <http://histclo.com/essay/war/ww2/cou/ger/weap/wmd/nuc/gn-ajt.html> & Los Angeles Times (California), June 1, 1997.

¹⁵Zbynek Zeman, & Rainer Karlsch, *Uranium Matters: Central European Uranium in International Politics, 1900-1960*. (Central European University Press, 2008), p.

15. Taken from <http://en.wikipedia.org/wiki/Japanese_nuclear_weapon_program>, accessed September 17, 2013.

¹⁶Pankaj Mishra, 'Nuclear power: India shouldn't buy what Japan is trying to sell', *The Japan Times* (Tokyo), November 8, 2013.

Japan is completely energy-deficit country and imports 84 percent of its energy requirements.¹⁷ Japan's nuclear power plants got a boost following the Middle East Oil Shock in 1973. Japan's total energy generation is 243 GW (243,000 MW), lowered down from 282 GW (282,000 MW) after 2011. Japan has built around 54 nuclear power plants. Japan's nuclear industry remained domestically focused but began to export nuclear power plants by the 1990s. Companies such as Mitsubishi, Hitachi, and Toshiba made alliances with foreign collaborators. According to the World Nuclear Association, Japan was ranked as the 13th largest producer of nuclear energy and 2nd largest in Asia after South Korea in 2010.¹⁸ The following 54 nuclear reactors provided 46,148 MW¹⁹ of electricity, generating around 31 percent power to Japanese industries and consumers until February 2011. These nuclear power plants were:

¹⁷*World Nuclear Association*, 'Nuclear Power in Japan', October 28, 2013.
<<http://www.world-nuclear.org/info/Country-Profiles/Countries-G-N/Japan/>>,
accessed November 7, 2013.

¹⁸*World Nuclear Association*<<http://world-nuclear.org/info/Current-and-Future-Generation/Nuclear-Power-in-the-World-Today/>>, accessed November 7, 2013.

¹⁹The Federation of Electricity Power Corporation of Japan
<http://www.fepc.or.jp/english/nuclear/power_generation/plants/>, accessed
December 10, 2013.

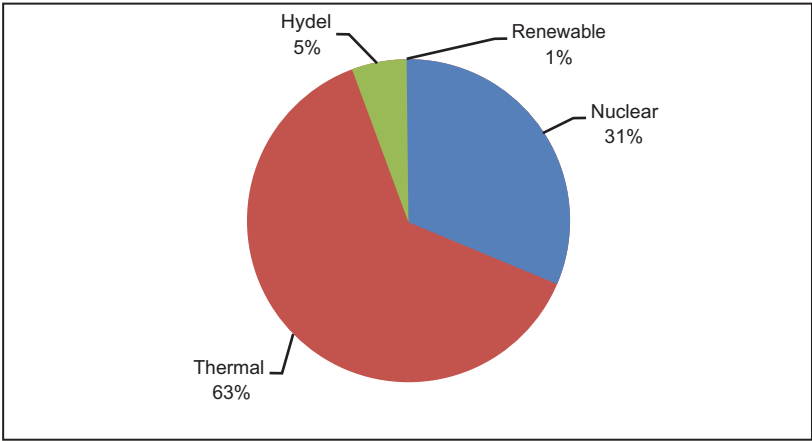
Table 1: Japan's Nuclear Power Plants

Sites	Number Plants
Higashidori	1
Onagawa	3
Fukushima Daiichi	6
Fukushima Daini	4
Tokai	1
Hamaoka	3
Ohi	4
Ikata	3
Sendai	2
Genkai	4
Shimane	2
Takahama	4
Mihama	3
Tsuruga	2
Shika	2
KashiwazakiKariwa	7
Tomari	3
Total Installed Capacity	46,148 MW

Source: Japan Atomic Industrial Forum (JAIF).

As stated above, Japan heavily reliant on nuclear energy prior to the Fukushima disaster, exceeding to 31 percent. At the same time, Japan generated 63 percent energy from thermal sources, whereas hydro power constituted only 5 percent of energy generation and renewables consisted mere 1 percent in its total generation capacity.

Figure 1: Japan’s Energy Mix



Source: Japan Agency for Natural Resources and Energy.

However, Japan’s nuclear safety had remained questionable. Over a dozen of nuclear incidents occurred in Japan during 1978-2011. These incidents occurred at the following sites:

Table 2: Japan’s Nuclear Incidents

Year	Incident
1978	Fukushima Daiichi Plant
1981	Tsuruga Nuclear Power Plant
1995	Monju Nuclear Power Plant
1997	Tokaimura
1999	Fukui Prefecture
1999	Tokai fuel fabrication facility
2000	Tokyo Electric Power Co
2002	Tokyo Electric Power Company’s
2002	Onagawa Nuclear Power Station
2004	Mihama-3 station
2006	Fukushima Daiichi Plant
2007	Kashiwazaki-Kariwa Nuclear Power Plant
2011	Fukushima Daiichi Plant

Following the deadly tsunami and an earthquake of 9.2 magnitude on 11 March 2011 in north-eastern Japan, nuclear plant meltdown at Fukushima questioned the safety of Japan's nuclear power plants. By March 2011, nuclear plants produced by 44.6 GW power. Officially, Japan announced around 19,000 deaths by tsunami. Over 140,000 people were evacuated from 20 km radius of the Fukushima Daiichi power plant. In October 2011 the government published a White Paper proposing that 'Japan's dependency on nuclear energy will be reduced as much as possible in the medium-range and long-range future'.²⁰ However, by May 2012 Japan shutdown all of its nuclear power plants but later restarted few of them. They were once again shutdown with the closing of the Kansai Electric Power plant on 15 September 2013.²¹ With the shutting down of the entire nuclear plants in Japan, the country has been relying on the import of gas and oil to meet the deficiency. The use of oil import has increased along with trade deficit. Environmentally, carbon-dioxide omissions level has also increased due to use of oil for generation. Japan now is the only state among G-8 countries without any nuclear energy.

The future of Japan's nuclear power reactors is uncertain under the Liberal Democratic Party (LDP) government, while the opposition Democratic Party of Japan (DPJ) plans to shut down all nuclear reactors by 2030. Fukushima was the last of nuclear safety culture in Japan that caused unprecedented havoc. Nevertheless, the Abe Government is still at a point where it is 'unrealistic and irresponsible' to completely phase out the entire nuclear energy. He, however, pointed out that reliance on nuclear energy could be reduced.²² It is still not clear that if Japan would adopt a zero-nuclear energy policy in future or not. The Fukushima plant has not been cleaned yet and radioactive leakage still affects the environment and people. Under this situation Japan needs to review and rethink its supply of nuclear technology to India.

²⁰*Bloomberg Business Week*, October 27, 2011.

<<http://www.businessweek.com/news/2011-10-27/nuclear-promotion-dropped-in-japan-energy-policy-after-fukushima.html>>, accessed November 7, 2013.

²¹*Asahi Shimbun* (Tokyo), September 15, 2013.

²²*The Japan Times* (Tokyo), November 1, 2013.

India's Nuclear Market

India's total power generation is 225 GW (225,000 MW). The country started commissioning its nuclear power plants by 1969. So far twenty nuclear power plants have been built and four are under construction including some for military purposes with a total installed capacity of 4780 MW. These are located at the following sites:

Table 3: India's Nuclear Power Plants

1. Tarapur Atomic Power Station (TAPS), Maharashtra
2. Tarapur Atomic Power Station (TAPS), Maharashtra
3. Tarapur Atomic Power Station (TAPS), Maharashtra
4. Tarapur Atomic Power Station (TAPS), Maharashtra
5. Rajasthan Atomic Power Station (RAPS), Rajasthan
6. Rajasthan Atomic Power Station (RAPS), Rajasthan
7. Rajasthan Atomic Power Station (RAPS), Rajasthan
8. Rajasthan Atomic Power Station (RAPS), Rajasthan
9. Rajasthan Atomic Power Station (RAPS), Rajasthan
10. Rajasthan Atomic Power Station (RAPS), Rajasthan
11. Madras Atomic Power Station (MAPS), Tamilnadu
12. Madras Atomic Power Station (MAPS), Tamilnadu
13. Kaiga Generating Station (KGS), Karnataka

²³<http://www.power-technology.com/projects/kaiga-station/> and <http://nuclear-energy.net/situation/nuclear-power-india.html>

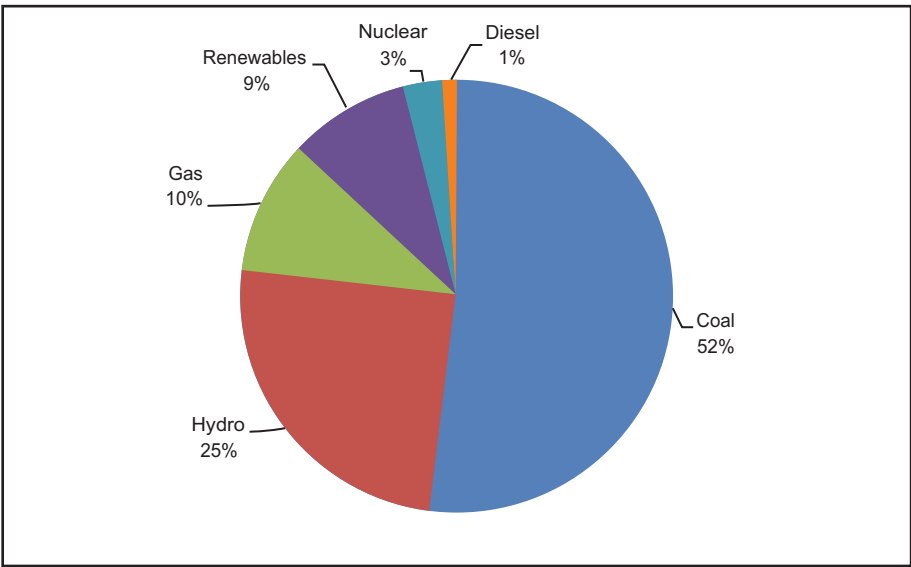
14. Kaiga Generating Station (KGS), Karnataka
15. Kaiga Generating Station (KGS), Karnataka
16. Kaiga Generating Station (KGS), Karnataka
17. Narora Atomic Power Station (NAPS), Uttarpradesh
18. Narora Atomic Power Station (NAPS), Uttarpradesh
19. Kakrapar Atomic Power Station (KAPS), Gujarat
20. Kakrapar Atomic Power Station (KAPS), Gujarat
Total Installed Capacity 4780 MW

Source: Compiled by the author using multiple references.

Unlike Japan, India heavily depends on coal energy for power generation, which constitutes 52 percent of its energy mix. The second largest source of its energy production is hydro generation i.e., 25 percent. The use of India's thermal energy is only 11 percent. Renewables constitute 9 percent of India's energy mix. India produces 3 percent nuclear energy out of its energy mix.²⁴

²⁴India Natural Resources Defence Council. Also see International Energy Agency, *World Energy Outlook: Special Report*, p. 62.
http://www.worldenergyoutlook.org/media/weowebiste/2015/IndiaEnergyOutlook_WEO2015.pdf

Figure 2: India's Energy Mix



Source: India Natural Resources Defence Council.

India intends to produce 25 percent of energy through nuclear power by 2050 that will increase its nuclear generation capacity to 63,000 MW by 2032.²⁵ Presently, most of Indian nuclear reactors are small with indigenous technology but it intends to build large reactors with foreign assistance and cooperation. For this purpose, India has been signing agreements with foreign countries for the supply of nuclear plants. The Indo-American nuclear agreement, initiated in 2005, was the first step towards creating a foundation for cooperation in nuclear energy for India. After India-specific waivers were adopted by the IAEA in 2008, other countries in the world have also started cooperating with India including Japan.

The foremost factor behind the Indo-Japanese nuclear cooperation is the increasing strength of 'Indian economy'. The second factor is the 'Sino-Pakistan-North Korean nexus'.

²⁵World Nuclear Association, 'Country Profiles', <http://www.world-nuclear.org/information-library/country-profiles/countries-g-n/india.aspx> See also Dr Rajaram Panda, 'India and Japan: Exploring Strategic Potentials', *Journal of Defence Studies*, vol 4, no. 4, (October 2010), p. 100.

The third factor is to 'counter China'. So the India-Japanese collaboration will counter and balance the power in the region *vis-a-vis* China, Pakistan, and North Korea. India-US deal was another factor, which has been viewed by European powers and Australia as a 'stabilising' factor. So Japan follows US suit in South Asia by bringing India to centre-stage. Moreover, Japanese companies are eager to take their share of Indian nuclear market for trade. It is uneasy for other companies pursuing nuclear projects in India without Japan's participation. For Japan, it is the best way of overcoming its domestic recession.²⁶

The Nuclear Talks

Soon after the Indo-American nuclear deal, Japan started considering the extension of nuclear cooperation to India. The Tokyo-based Japan's Forum for International Relations in its 29th Policy Recommendations namely 'India's Leap Forward and Japan', suggested extending Japan's cooperation in nuclear field to India in its report in September 2007. However, none was drawn from the anti-nuclear lobby. Similar to US-India nuclear deal, recommendations were India-specific. Japan realised that it should extend economic relations to India through East Asia networking. Trade and investment with India should seek new initiatives and Japanese corporations should adopt business models for India. Japan should extensively explore Indian information technology industry and its human resources, and should cooperate with India in its nuclear energy market for peaceful purposes.²⁷

The reasons put forward in these recommendations were that many countries have been entering into nuclear agreements with India and its growing industry needs more energy. Kazakhstan, Namibia, Mongolia, Argentina and Canada clinched nuclear deals with India. Also talks for cooperation with Australia and South Korea have been underway.

²⁶Prakash Pillai, 'Factors determining Indo-Japan Relationship: Civil Nuclear Cooperation', in *Issue Brief*, Centre for Air Power Studies, September 29, 2010, pp. 2-3.

²⁷The Japan Forum for International Relations, *The 29th Policy Recommendations: India's Leap Forward and Japan* (Tokyo: The Japan Forum for International Relations), September 2007, pp. 18.

Manufacturing of components for nuclear reactors such as control rods, stainless steel, alloy fabrication titanium, zirconium based alloys, heat exchanges, steam generators, and large capacity turbo generators are still beyond the capacity of Indian industry. Hence the support of Japan was needed. To reduce global warming, India needs to convert to nuclear energy, the report suggested. The recommendations mentioned that 'Japan's technology and expertise in generating and ensuring the safety of nuclear power is among the best in the world, so it is in excellent position to cooperate with India in these areas'.²⁹ However, the post-Fukushima nuclear position of Japan was just contrary to this claim and it appeared that Japan possesses the worst type of nuclear safety policy to regulate its nuclear reactors. Policy recommendations suggested that Japan must cooperate with India in this field because there is political significance of this cooperation and also because India lacks resources to generate energy. Besides dealing with global warming, there is a need to cooperate in science and technology and contribution to be made by Japanese corporations in the nuclear field. Policy recommendations appreciated India's "disarmament" and "non-proliferation" policy. Recommendations, however, did not mention about Japanese reactions and sanctions drawn against India in 1974 and 1998. Such events were not part of the report. The report urged 'the Japanese Government to carefully consider policy measures that would be effective, while at the same time, cooperating with India on this issue and calling on countries regardless of possession of nuclear weapons, NPT's original objectives, and nuclear disarmament'.³⁰

In order to strike a nuclear deal, visits of Japanese Prime Ministers Yoshiro Mori and Junichiro Koizumi to India in August 2000 and April 2005 respectively were the turning points in giving the idea of global partnership between the two countries.³¹

²⁸D. Gnanagurunathan, 'India-Japan Civil Nuclear Cooperation Agreement: A Saga of Interests Eclipsing Ideals', *Mainstream*, Vol. Ixviii, No. 49, November 2010, p. 2.

²⁹The Japan Forum for International Relations.

³⁰*Ibid*, p. 19.

³¹Dr Rajaram Panda, 'India and Japan: Exploring Strategic Potentials', *Journal of Defence Studies*, vol 4, no. 4, (October 2010), p. 91.

Some understanding was built with the regime of the Democratic Party of Japan (DPJ) during 2009-12. In December 2009, South Korea won a bid of US\$ 40 billion in the Middle East and it also signed a nuclear deal with India, therefore, Japan also decided to compete with South Korea in emerging global nuclear market.³² Prime Ministers of both Japan and India have met several times since 2006. It was roughly the same time when Prime Minister Shinzo Abe and Foreign Minister Taro Aso floated the idea of the *Arc of Freedom and Democracy* that was not well taken by other Asians because they thought that the idea was similar to Japan's wartime politico-military philosophy of the "Greater East Asia Co-Prosperity Sphere". The idea was instantly dropped but the initiative of the civilian nuclear cooperation continued to grow.

So far eight summits have been held up to 2013 in Tokyo and New Delhi where they discussed comprehensive strategic partnership. They also meet at other fora such as the G-20 Summits, East Asia Summits (EAS), and Association of South East Asian Nations (ASEAN) to enhance their strategic cooperation. Former Indian Prime Minister Dr. Manmohan Singh met with Prime Minister Ikeda Hatoyama in April 2010 in Washington on the sidelines of the Nuclear Security Summit to discuss possibilities of nuclear cooperation. The ice-breaking decision, however, was taken at the side of G-20 Summit in Toronto, Canada, on 26 June 2010, where for the first time, Manmohan Singh and Japanese counterpart Naoto Kan discussed global security situation and also agreed on the need to deepening of bilateral ties.

Further, as soon as Japan lost its economic position to China in June 2010, it desperately went ahead for nuclear negotiations with India at least to save its political face if not economic one. Japan also wanted to become an equal partner to that of the United States, which has signed a nuclear deal with India. This was also the first strategic dimension Japan and India discovered in order to contain China. Later on this issue became an important agenda point at the Prime Minister-level annual

³²D. Gnanagurunathan, 'India-Japan Civil Nuclear Cooperation Agreement: A Saga of Interests Eclipsing Ideals', *Mainstream*, Vol. lxviii, No. 49, November 2010, p. 3.

talks between India and Japan. However, much more delicate discussions were held at the Working Group-level between the two countries to chalk out details about the prospective agreement.

So far a number of rounds of talks were held between the two countries. On 28 June 2010, India and Japan commenced first round of negotiation on core issues between the two in Tokyo where India was represented by Joint Secretary Gautam Bambawale from Ministry of External Affairs of India, while Deputy-Director General Mitsuru Kitano of the Japanese Ministry of Foreign Affairs led the Japanese side. The second round of discussion was held on 21 August 2010 in New Delhi, where Japanese Foreign Minister Katsuya Okada met Indian Minister for External Affairs, S.M. Krishna. Japan insisted on India's signing of NPT/CTBT but India insisted on its moratorium.³³ Given the fact that India has not signed the NPT/CTBT, its moratorium raised many questions. Okada said that Japan would cut-off deal with India if it will conduct a nuclear testing again.³⁴ If tension with Pakistan or China escalates, India may begin with another nuclear testing. Some Indian scientists have also been calling for new testing in the wake of the failed nuclear tests in 1998.³⁵ It is difficult for Japan to make sure that no more testing will be carried out by India.

Talks were put on hold after the Fukushima meltdown. Another round of talks was resumed in November 2011, eight months after the Fukushima disaster. Nuclear Energy Working Groups were formed. The biggest obstacle is that India is not a signatory to the NPT. India emphasized that its non-proliferation record was enough. Japan insisted on NPT to be signed by India and asked that India could neither use the technologies and equipment for military purposes nor transfer them to a third party. This was also the key principle in US-India nuclear energy cooperation.³⁶

³³*The Hindu* (Chennai), October 10, 2010

³⁴*BBC News* (London), August 22, 2010.

³⁵Yukifumi Takeuchi, 'Facing the risks of India's nuclear exemption', *Asahi Shimbun* (Tokyo), March 11, 2012.

³⁶*People's Daily Online* (Beijing), October 28, 2010.

The fourth round of talks was held on 3 September 2013. The Indian side was led by Bambawale, and Joint Secretary, Disarmament and Internal Security, D. B. Venkatesh Verma. The Japanese side was led by Makita Shimokawa, Deputy Director General, Southeast and Southwest Asian Affairs Department and Special Representative in charge of the Japan-India Nuclear Energy Cooperation Agreement, Ministry of Foreign Affairs.³⁷ Japan once again insisted on India's signing of the NPT but India reiterated on its moratorium. As no consensus was evolved between them, they decided to speed up talks.³⁸ At the same time, Japan's National Regulatory Authority (NRA) has prepared new safety guidelines to prevent natural disaster or terrorist activities. India also reviewed the post-Fukushima situation and its implications for nuclear cooperation with Japan.³⁹ Therefore, both countries have been pursuing nuclear negotiations and discussing possibilities and constraints of nuclear cooperation but without any tangible outcome yet. A Memorandum of Understanding (MoU) was signed on 12 December 2015 in New Delhi during Prime Minister Abe's official visit to India. However, certain technical and legal issues must be resolved before a final agreement could be signed.⁴⁰

Besides doubts about India's unilateral moratorium on nuclear testing and constant refusal to sign the NPT/CTBT, many more objections also surfaced:

1. Given the Indian refusal to declare moratorium on fissile material production, cooperation in the Fissile Material Cut-off Treaty (FMCT) talks is questionable.
2. It is impossible to strictly separate civilian and military nuclear facilities.
3. The use of uranium could lead to proliferation.
4. Safeguards protocol could hardly work in awkward situations.
5. India has a proliferation record. The nomination of two Indian

³⁷ *The New Indian Express* (Chennai), September 19, 2013.

³⁸ *Global Post* (Beijing), October 10, 2013.

³⁹ *Deccan Herald* (Bangalore), September 19, 2013)

⁴⁰ World Nuclear News (WNN), December 14, 2015.

firms, Goel Scientific Glass Works and Garg Scientific Glass Industries, clandestinely supplied prohibited material to the Syrian Scientific Research Centre (SSRC) for proliferation of chemical weapons technology.⁴¹

6. The 1974 nuclear test also poses a concern about India's proliferation tendencies.

Assessment

There is a criticism prevailing against Japan's extending nuclear cooperation to India. By signing the deal, Japan would lose its strength in global anti-nuclear community. One fails to understand Japan's 'wisdom' behind extending nuclear cooperation to India. People angrily reacted to the deal in Japan. Both the Hiroshima and Nagasaki Peace Declarations in 2013 on the anniversary of the nuclear bombings on Japan mentioned the Indo-Japan agreement as a departure from Japan's long standing policy to respect NPT and promote nuclear disarmament internationally.⁴² The Nagasaki Declaration deplored that 'Japan's cooperation with India would also provide North Korea, which withdrew from the NPT and is committed to nuclear development, with an excuse to justify its actions, hindering efforts toward the denuclearization of the Korean Peninsula'.⁴³ Echoing similar concerns, Hiroshima's mayor lamented in his statement that the Indo-Japan agreement is likely to hinder nuclear weapons abolition. Over 335 civil groups in Japan issued a statement saying that they were outraged by decisions of the government of Japan and India who were going ahead with negotiations for a nuclear cooperation agreement.⁴⁴ Keeping this in view, the Indo-Japanese nuclear cooperation would also affect the South Asian nuclear dynamics that will further fuel the nuclear arms race between India and

Pakistan and would provide an ultimate legitimacy for India's nuclear test in the future. Therefore, Indo-Japan nuclear agreement would contribute to destabilize the Asian continent by promoting the ill-conceived strategy of India and Japan against China.

⁴¹Momin Iftikhar, "Proliferation and India", *Nation* (Islamabad), February 15, 2011.

⁴²DiaNuke.org < <http://www.dianuke.org/why-the-india-japan-nuclear-agreement-is-a-bad-idea/> >, accessed December 9, 2013.

⁴³Ibid.

⁴⁴Ibid.

The leading newspaper of Japan *Asahi Shimbun* made the point that the Japanese Government should ask India to sign the NPT and CTBT before offering it a nuclear deal.⁴⁵ The paper said that 'a nuclear cooperation agreement between Japan and India would further undermine the effectiveness and relevance of the NPT system'.⁴⁶ *The Japan Times* advised the Government to rethink over nuclear cooperation with India.⁴⁷ India has no comprehensive safeguard agreement with the IAEA, which could allow the IAEA to inspect nuclear-related equipment and fissile materials in a signatory nation and requires it to provide relevant data.⁴⁸ India also wants Japan to ensure that the potential agreement would not affect India's nuclear program. Commenting on the MoU, *The Japan Times* advised that Japan should avoid nuclear risk deal with India.⁴⁹ The paper further said that the 'Japanese government needs to ensure a clear mechanism to prevent India from using the technology provided by Japan to enhance its nuclear weapons capabilities'.⁵⁰ An Indo-Japan nuclear agreement would be the final seal of approval for a nuclear weapons state outside the NPT.⁵¹

⁴⁵ *Asahi Shimbun* (Tokyo), May 25, 2013.

⁴⁶ Ibid.

⁴⁷ *The Japan Times* (Tokyo), June 3, 2013.

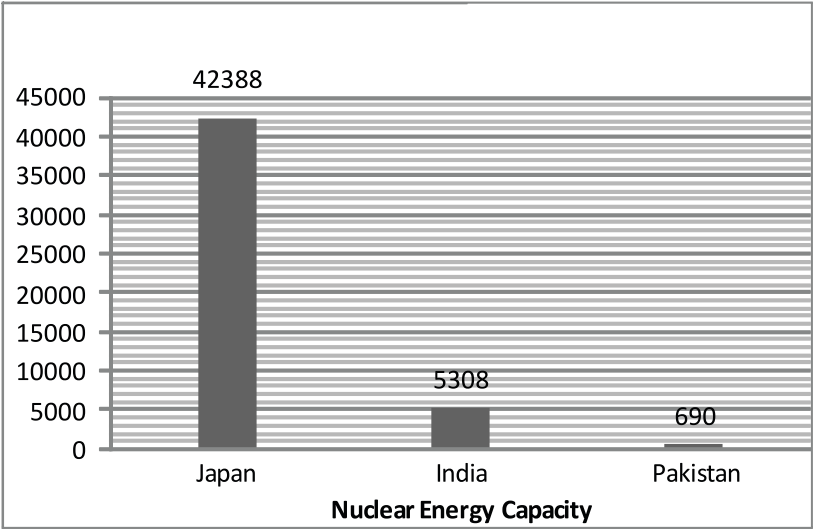
⁴⁸ Ibid.

⁴⁹ *The Japan Times* (Tokyo), December 16, 2015.

⁵⁰ Ibid.

⁵¹ See Kumar Sundaram, "Seventy Years After Hiroshima, Will an India-Japan Nuclear Deal Set Back Global Nonproliferation Efforts?", <http://www.truth-out.org/speakout/item/33994-seventy-years-after-hiroshima-will-an-india-japan-nuclear-deal-set-back-global-nonproliferation-efforts>. Accessed February 8, 2016.

Figure 3: Nuclear Energy Capacity of Japan, India, & Pakistan



Source: “Nuclear Share of Electricity Generation in 2015”. International Atomic Energy Commission (IAEA)
<https://www.iaea.org/PRIS/WorldStatistics/NuclearShareofElectricityGeneration.aspx>

Table 4: Nuclear Power Plants and Capacity Percentage to Power Generation

Country	Number of Reactors	Percentage Share
Japan	43	0.5
India	21	3.5
Pakistan	3	4.4

Source: “Nuclear Share of Electricity Generation in 2015”, International Atomic Energy Commission (IAEA)
<https://www.iaea.org/PRIS/WorldStatistics/NuclearShareofElectricityGeneration.aspx>

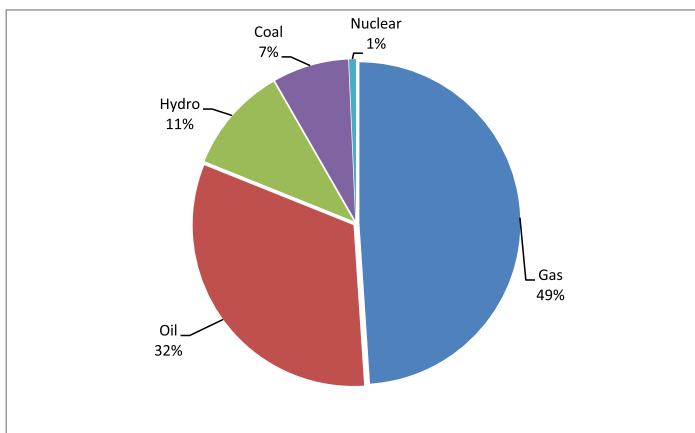
According to the 2015 IAEA data, there are 43 nuclear reactors in Japan, 21 in India, and 3 in Pakistan. Japan shut down all its nuclear

power plants after Fukushima in 2011 and only one nuclear power plant at Sendai was restarted in 2015.⁵² Therefore, the percentage share of Japan's nuclear energy generation has drastically decreased to 0.5 percentage of the total generation capacity.

The Pakistan's Perspective

Pakistan faces enormous energy crisis both for its consumers and industry. Shortage of electricity, particularly in summer peak, leads to load-shedding and closure of industrial plants. The Government has been making concerted efforts to obtaining energy from multiple sources such as the CASA 1000, the Turkmenistan-Afghanistan-Pakistan-India gas pipeline (TAPI), and Iran-Pakistan gas pipeline (IP). Government also wants to enhance local nuclear generated energy. The present nuclear-based energy production is 690 MW or just 4 percent of Pakistan's energy mix. The country aims at generating 3880 MW by 2017 thus increasing nuclear capacity to 4605 MW. At the moment, the country produces around 49 percent energy from gas. The oil-based energy production is the second largest source i.e. 32 percent. Hydro is the most economical generation of energy with only 11% of production in Pakistan. The coal-based energy production is around 7 percent, which is likely to increase in the near future. Therefore, nuclear energy could play a crucial role in generating energy in Pakistan (see Figure below).

Figure 4: Pakistan's Energy Mix



Source: Pakistan Water & Power Development Authority.

⁵²*The Guardian* (London), August 11, 2015.

Table 5: Pakistan's Nuclear Power Plants

KANUPP-Karachi 125	
Chashma 300	—I
Chashma 300	—II
Total Capacity 725 MW	

Source: World Energy Association, 'Nuclear power in Pakistan'. <www.world-nuclear.org/info/Country-Profiles/Countries-O-S/Pakistan/>. The capacity of KANUPP has reduced to 80 MW. *Jang* (Rawalpindi), January 6, 2013.

Table 6: Pakistan's Proposed Nuclear Power Plants

Chashma—III 340
Chashma—IV 340
Chashma-V 1000
Karachi Coastal-I 1100
Karachi Coastal-II 1100
Total Capacity MW 3880

Source: Ibid.

On the contrary, Japan does not cooperate with Pakistan on its civil nuclear energy program. The biggest impact of the changed Japanese anti-nuclear policy was the invention of 'discrimination' in its policy for the first time. Earlier, Japan has exercised a complete anti-nuclear indiscrimination particularly towards India, Pakistan, Democratic Peoples Republic of Korea, and Iran. Therefore, the Indo-Japan nuclear cooperation would have serious implications for non-proliferation.

The NPT system is designed to limit the membership of the Nuclear Club to the five original nuclear powers (United States, Russia, Britain, France and China), while requiring them to make serious efforts toward nuclear disarmament.⁵³ Other countries are allowed to receive foreign nuclear technology for peaceful use in return for refraining from possessing nuclear arms.⁵⁴ In this context, the Indo-Japanese nuclear cooperation has been intending to weaken the NPT system because India is non-signatory to the NPT and CTBT. As a champion of NPT, how Japan would be viewed after it signed deal with India? In 2008, in response to prodding by the United

States, which wanted to export nuclear power technology to India, the NSG, including Japan, approved an exception to the non-proliferation principles to allow India to receive nuclear power technology from other nations.⁵⁵ This was how Japan itself has given a dent to its non-nuclear principles.

On the other hand, Japan has a weak nuclear plants safety system. Around a dozen of incidents have taken place including the Fukushima incident in 2011. Japan itself is in the process of developing a nuclear plants safety culture, which however will take a very long time. Similarly, India experienced around six nuclear plants incidents since 1987. Incidentally, Pakistan has a track record of nuclear safety and it faced only a single but minor incident at the Karachi Nuclear Power Plant (KANUPP), assisted by Canada, when it imposed a seven-hour emergency after heavy water leaked from a feeder pipe to the reactor in October 2011.⁵⁶ The leakage took place during a routine maintenance shut down, and the emergency was lifted seven hours later, after the affected area was isolated. There was no exposure to radiation.⁵⁷

⁵³ Arms Control Association, "Nuclear Nonproliferation Treaty (NPT)" <<https://www.armscontrol.org/documents/npt>

⁵⁴ *Asahi Shimbun*, (Tokyo) May 25, 2013.

⁵⁵ Ibid.

⁵⁶ *The Nation* (Islamabad), October 21, 2011.

⁵⁷ *Dawn* (Islamabad), October 20, 2011.

These incidents suggested that Pakistan has a better nuclear plants' safety culture than Japan and India. But yet Pakistan faced the consequences of India's nuclear blast in 1974 that led Great Britain and France to cancel their nuclear power plants cooperation with Pakistan too. So did a cooperative plan with the Soviet Union was ended. It is China that has assisted Pakistan in installing nuclear power plants at Chashma (Chashma-I & II) and installing two more (Chashma III & IV), and two at Karachi (Coastal II & III).⁵⁸

Similar to India, Japan may consider cooperating with Pakistan in generating nuclear power to meet the growing demand of industry and consumers. During President Asif Ali Zardari's visit to Tokyo in 2011, Pakistan asked Japan to offer similar treatment to Pakistan,⁵⁹ which Japan offered to India but Japan showed some hesitation in this regard.

With KANUPP to be decommissioned by 2019 and to meet the growing electricity shortage, Pakistan intends to generate 40,000MW electricity by 2050.⁶⁰ The Pakistan Atomic Energy Commission (PAEC) has been planning to build KANUPP II and III to produce 2000 MW electricity with indigenous technology. China has been cooperating with Pakistan in these projects. Prime Minister Nawaz Sharif performed the groundbreaking ceremony of both these plants in November 2013 to produce 2,200MW electricity.⁶¹

⁵⁸World Nuclear Association, "Nuclear Power in Pakistan", <<http://www.world-nuclear.org/information-library/country-profiles/countries-o-s/pakistan.aspx>>

⁵⁹*The Express Tribune* (Islamabad), February 21, 2011.

⁶⁰*Dawn* (Islamabad), September 17, 2015.

⁶¹*Ibid*, November 27, 2013.

Conclusion

The present Indo-Japanese relations hinges on nuclear cooperation but the two could not evolve an agreed legal framework for cooperation in the past ten years. Fukushima meltdown added additional worries as Japan itself faces nuclear energy safety problems and entails many complications. The question of the Indo-Japan nuclear cooperation is a political and diplomatic stumbling block. Japan should refrain from commercialising its nuclear export, which has serious implications against the non-proliferation regime too. It should provide non-nuclear energy options to India and should focus on the long-term implications for its nuclear cooperation with India within the Asia-Pacific non-nuclear context. In this whole spectrum, the Indo-Japanese nuclear cooperation would have implications for Pakistan.

Interface of Nuclear Safety and Security: Synergies and Conflict Areas between Nuclear Safety and Security Culture

Saman Choudary*

Abstract

This paper is focused on the interface between nuclear safety and security regime. An effort is being made to highlight the conflict areas that could create problems in achieving synergy between the two interrelated areas. Nuclear safety and security culture has been considered central to creating a sustainable regime for the safe and secure operational environment of nuclear power industry. Differences have been highlighted along with the areas of achieving synergy within the two cultures, in order to create a comprehensive picture of safety and security culture.

Key words: Nuclear Safety, Non-State Actors, Security Culture.

Introduction

The radiological releases from a nuclear accident, either due to system failure or nuclear security event, have always provided the rationale for ensuring safety and security. Accordingly, the states have taken actions to establish and implement a nuclear safety and security framework, at the nuclear power installations, in order to cater for the issues of safety and security. The two nuclear accidents at Three Mile Island and Chernobyl served as a catalyst to revitalize the safety enhancement efforts in the domain of nuclear safety.¹ However, no serious efforts have been made in the realm of nuclear

*The author holds an M.Phil degree in Strategic and Nuclear Studies from National Defence University, Islamabad.

¹Gerd Rosenkranz, "Nuclear Power-Myth and Reality: The Risks and Prospects of Nuclear Power", *Heinrich Bol Stiftung Nuclear Issues Paper*, No. 1 (February 2006).

security, as regulatory bodies lacked an impetus, to work upon nuclear security measures.

The nuclear community has always been more focused towards developing and implementing safety related measures. Ostensibly, lack of nuclear security measures highlights the risk of nuclear terrorism by Non-State Actors (NSAs). The wide consequences of 9/11 terrorist attack in the US, alarmed the international community, with the renewed risks of attacks on nuclear installations and a nuclear sabotage or theft.²

The entry of IS (Da'esh) in international terrorism list, and terrorist attacks around the globe highlights the need to reinforce safety and security mechanisms at nuclear facilities because the terrorist groups with deadly ideological motivation might attempt to carry out nuclear terrorism.³ Additionally, the occurrence of Fukushima accident has highlighted the necessity of protecting safety features of a nuclear power plant.⁴ The tragedy of 9/11 and Fukushima accident despite being two independent variables necessitate to correlate two ends of the spectrum of threat to address the security domain in relation to safety.

Nuclear safety has a well-established international regime, while nuclear security is in its initial phase of development having sparse set of regulatory requirements and guidance publications.⁵ In order to create a comprehensive picture of safety and security, for the safe and secure working of nuclear power plants, there is a vital need to work upon the interface between nuclear safety and security, with an

²Jim Riccio, "Risky Business: The Probability and Consequences of a Nuclear Accident", *Greenpeace*, (March 2008), p.3.

<http://www.greenpeace.org/usa/Global/usa/report/2008/3/risky-business-the-probabilit-2.pdf> (accessed October 5, 2015).

³A Report by the International Nuclear Safety Group (INSAG-24), "The Interface between Nuclear Safety and Security at Nuclear Power Plants", IAEA, Vienna (2010); p. 4.

⁴Duyeon Kim and Jungmin Kang, "Where Nuclear Safety and Security Meet", *Bulletin of The Atomic Scientists* 68, no.1 (May 2013),

<http://thebulletin.org/2012/january/where-nuclear-safety-and-security-meet> (accessed October 5, 2015).

⁵See, IAEA, "The Interface between Nuclear Safety and Security at Nuclear Power Plants", 4.

aim of safety and security obligations reinforcing each other. A combined approach for dealing with natural hazards and terrorist attacks is needed to be developed and implemented that could in fact enhance one another.

This paper deliberates upon the interface between nuclear safety and security area. An effort is being made to highlight the conflict areas that could create problems in achieving synergy between nuclear safety and security domain. Nuclear safety and security culture has been taken as a focal dimension to create a sustainable regime for the safe and secure working of nuclear power industry. Differences have been highlighted along with the areas of achieving synergy within the two cultures in order to create a comprehensive picture of safety and security work culture.

Nuclear Safety and Security Interface

First of all, it is important to comprehend the terms nuclear safety and security before moving on to the subject of safety and security interface. Nuclear safety is characterized as “the achievement of proper operating conditions, prevention of accidents or mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation hazards”.⁶ The protection of people and environment from the harmful effects of ionizing radiation is the ultimate objective of safety.⁷ The restriction of likelihood of events that could result into radioactive releases and could harm the public and environment is the base of nuclear safety.⁸ It provides freedom from physical harm, unreasonable risk and environmental damage that could occur due to operation of a nuclear power plant.⁹

Nuclear safety could also be understood in another way that it is mainly concerned with the risks originating from the system (nuclear

⁶The Committee on Nuclear Regulatory Activities (CNRA) report “The Regulatory Goal of Assuring Nuclear Safety”, OECD NEA (2008), p. 11.

⁷“IAEA Safety Standards for Protecting People and the Environment: Fundamental Safety Principles,” Safety Fundamentals No. SF-1, *International Atomic Energy Agency*, Vienna, 2006, 4.

⁸Rasa Ptasekaite, “The Role of the Regulator: Nuclear Safety and Nuclear Safety Culture”, *International School of Nuclear Law*, Montpellier, 2011.

⁹See, “The Regulatory Goal of Assuring Nuclear Safety”, 11.

power plant) and impacting the environment.¹⁰ It is occupied with the unintentional behaviour or system failures yielding the accidental risk. It focuses on the unintended events resulting into radiological releases from the authorized activities thus relating to the intrinsic problems and hazards of the system.¹¹ Safety measures encompass all those actions, taken for the prevention of incidents and arrangements being emplaced, in order to mitigate the consequences of the incidents, if they were to occur.¹² On the other hand, nuclear security is defined as “the prevention and detection of, and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities”.¹³ It deals with the risks originating from the environment and potentially impacting the system. It is mainly concerned with the deliberate attacks causing the malicious risk.¹⁴ Nuclear security involves the dimension of a terrorist attack or a malicious act that is focused on the sabotage of a nuclear facility or theft of nuclear or radioactive material, and ensures the restriction of the likelihood of such an event. The measures designed for the prevention and detection of, and in turn generating response to, the theft of nuclear or radioactive material, sabotage and other malicious acts, illicit trafficking and unauthorized transfer, collectively constitute the security measures.¹⁵

The nuclear safety and security spheres take into account different events.¹⁶ The safety evaluations are based on the risks that originate from the unintended events set in motion by natural occurrences, hardware failures or internal interruptions and human errors.

¹⁰Christian Raspotnig and Andreas Opdahla, “Comparing risk identification techniques for safety and security requirements”, *The Journal of Systems and Software* 86, no.4 (April 2013):1124.

¹¹“Safety of Nuclear Plants”, *World Nuclear Association*, accessed October 7, 2015, <http://www.world-nuclear.org/info/safety-and-security/safety-of-plants/safety-of-nuclear-power-reactors/>

¹²Incidents involve initiating events, accident precursors, near misses, accidents and unauthorized acts.

¹³Ibid.

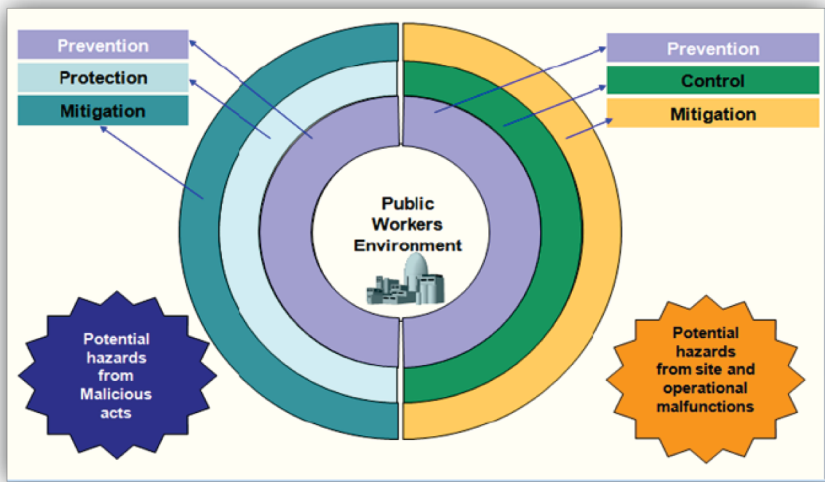
¹⁴Raspotnig and Opdahla, “Comparing risk identification techniques for safety and security requirements”, 1124.

¹⁵International Atomic Energy Agency, “IAEA Safety Glossary.”

¹⁶“The Interface between Nuclear Safety and Security at Nuclear Power Plants”, *International Atomic Energy Agency*, 2010, 4.

Whereas, security assessments take into consideration the risks or events arising from the malicious acts, carried out intentionally for the theft or sabotage and causing harm through circumventing of protective measures. But at the same time, nuclear safety and security share many common elements and both strive to protect the plant and limiting the risks, with the fundamental objective of protecting, the people, society and environment from radioactive material and associated facilities.¹⁷ Many mutual links exist between nuclear safety and security and both subjects should be treated as interrelated, mutually fortifying each other. Both are implemented through the common philosophy of defence-in-depth, having similar layers of protection that are prevention, control or protection and mitigation. For a more clear understanding of the interface between safety and security, see figure 1 given below.

Figure 1: Interface of Nuclear Safety and Security



Source: Anwar Habib, “Nuclear Safety and Security Culture in Pakistan” (Presentation, Pakistan Nuclear Regulatory Authority, Islamabad, <http://slidegur.com/doc/1359472/nuclear-safety-and-security-culture-in-pakistan> accessed October 8, 2015).

¹⁷Ibid., 4.

Nuclear Safety and Security Synergies

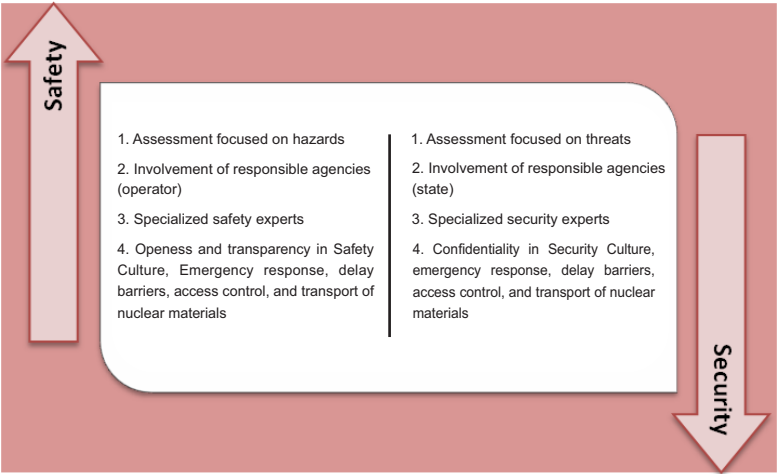
As the terrorist attacks of 9/11 highlighted the risks that NSAs pose to international security, it is all the more crucial to strategize connections between the safety and security – with a focus on synergizing safety and security measures. Safety and security measures are needed to be designed and implemented in an integrated manner.

Here an effort has been made to outline the contradictory areas between the two fields, while highlighting the common grounds at the same time before focusing on the nuclear safety and security culture. The grounds of nuclear safety and security are based on different paradigms; incorporating assessments focused towards hazard and threat assessment, with varying level of involvement of responsible agencies, and, specialized safety and security experts working in isolation, within discreet environment.¹⁸ Albeit the realms of nuclear safety and security overlap at many points but at the same time, both realms have contradictory requirements. These contradictory requirements can be seen in the areas of culture, emergency response, delay barriers, access control, and transport of nuclear materials¹⁹ (see figure 2).

¹⁸Global Nuclear safety and Security Network, Coordination, “Interface and Synergy between Safety and Security”, International Atomic Energy Agency, <https://gnssn.iaea.org/Pages/SynergySafetySecurity.aspx> (accessed October 11, 2015).

¹⁹Sonal Gandhi and Jungmin Kang, “Nuclear Safety and Nuclear Security Synergy”, *Annals of Nuclear Energy* 60, (June 2013):358.

Figure 2: Contradictory Areas between Nuclear safety and Security



Within these areas, confidentiality is requisite for achieving security while having more delay barriers, limited access, secure areas and secure transportation without an intention to make the local population aware. Whereas, transparency and openness is mandatory for attaining safe operating conditions, with full access to all locations, lesser delay barriers for carrying out emergency response and usage of safety indicators, to create public awareness regarding transportation of nuclear material.

Even though contradictory requirements do exist in the realms of nuclear safety and security but these realms also share *common grounds* in the areas of operating principles, routine testing and maintenance programs, operating experience feedback, legal and regulatory framework, training and education.²⁰

The areas in which synergy between safety and security could be enhanced include: legal and regulatory framework, responsibility, design concepts and criteria, graded approach, operating principles, emergency response, and training and education²¹ (see figure 3).

²⁰Shokr, A.M., “Synergy between Nuclear Safety and Security for Research Reactors” (Presentation, Safety of Research Reactors, Vienna, 2012).

²¹See, “The Nuclear Safety and Nuclear Security Synergy”, 358.

Figure 3: Areas in which synergy between nuclear safety and security could be enhanced



A well-articulated legislative and regulatory framework is complimentary for ensuring effective oversight and implementation of nuclear safety and security at the same time. The regulatory body should be focused towards ensuring equivalent commitment of the facility managers concerning nuclear safety and security. The regulatory body should work towards achieving a strong safety-security culture with the help of selective competence, and human and financial resources. Within the sphere of responsible agencies for ensuring safety and security, synergy between safety and security could be enhanced by further state involvement in ensuring the safety of the site and not just security alone.

It can be noted that the design concepts that include defense-in-depth, single failure criteria, redundancy and diversity, fail safe criteria, passive systems being applied to nuclear safety are also equally applicable to nuclear security. Henceforth, these safety designs and systems can potentially reinforce protection against

malicious acts and could equally provide the fortifying layers against Design Basis Threat (DBT).²²

In the safety domain graded approach is applied to ensure that all the safety requirements are followed in stringent terms, so in the similar fashion, the graded approach could also be applied to the security. Synergy in the operating principles for safety and security could be achieved in the areas of testing and maintenance, operation experience feedback, sharing of best practices, periodic review, and operating procedures, leading to more coordinated and harmonized operations of safety and security systems.

The radiological emergency plan ensued for a hazard should address malicious acts being committed against the nuclear facility. Excessive efforts have been made on formulation of emergency plans in the area of safety. In the same way, after taking into account the worst possible scenario, efforts should be made to emplace emergency response procedures for security related emergency.

For both safety and security personnel, adequate periodic trainings should be given, in order to provide each distinct group, a deeper understanding of the complementary roles and responsibilities. Both safety and security personnel should be trained adequately to understand and resolve the conflicting issues, in order to achieve the overriding aim of ensuring public safety.

Interface of Nuclear Safety and Security Culture

Nuclear safety and security culture gained paramount importance after the Chernobyl accident and growing frequency of terrorist attacks. These incidents have highlighted the importance of organizational issues and human factors.²³

²²Design Basis Threat (DBT) is a description of the attributes and characteristics of potential insider and/or external adversaries who might attempt unauthorized removal of nuclear material or sabotage against which a physical protection system is designed and evaluated.

²³Giustino Manna, "Human and Organizational Factors in Nuclear Installations: Analysis of available models and identification of R&D issues", JRC Scientific and Technical Reports, 2007, <http://iet.jrc.ec.europa.eu/senuf/sites/safelife.jrc.ec.europa.eu.senuf/files/files/documents/eur-23226.pdf> (accessed October 15, 2015).

Management, organization, and, shared assumptions and beliefs can significantly affect the overall working of safety critical organizations.²⁴ Organizational Culture²⁵ acts as a key ingredient in overall success of an organization and can positively influence human performance as well as safety and security performance of operating installations.²⁶ Safety culture is defined as “the assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance”.²⁷ While, nuclear security culture is defined as “the assembly of characteristics, attitudes, and behaviour of individuals, organizations and institutions which serves as a means to support and enhance nuclear security”.²⁸

The fundamental objective of safety and security culture is to limit the risk originating from the radioactive material and associated facilities and is based on common principles of questioning attitude, rigorous and prudent approaches, as well as effective communication and open two way communication. Both safety and security culture are subsets of the overall organizational or professional culture that can drastically alter the presiding culture of an operating power plant (see figure 4). Safety and security cultures need to reinforce each other rather than having ascendancy over the other.

²⁴Teemu Reimana, Pia Oedewalda, and Carl Rollenhagenb, “Characteristics of organizational culture at the maintenance units of two Nordic nuclear power plants”, *Reliability Engineering and System Safety* 89, (2005):331.

²⁵Organizational culture can be defined as the shared basic assumptions that are developed in an organization as it learns and copes with problems. The basic assumptions that have worked well enough to be considered valid are taught to new members of the organization as the correct way to perceive, think, act, and feel. Culture is the sum total of a group's learning. Culture is for the group what character and personality are for the individual.

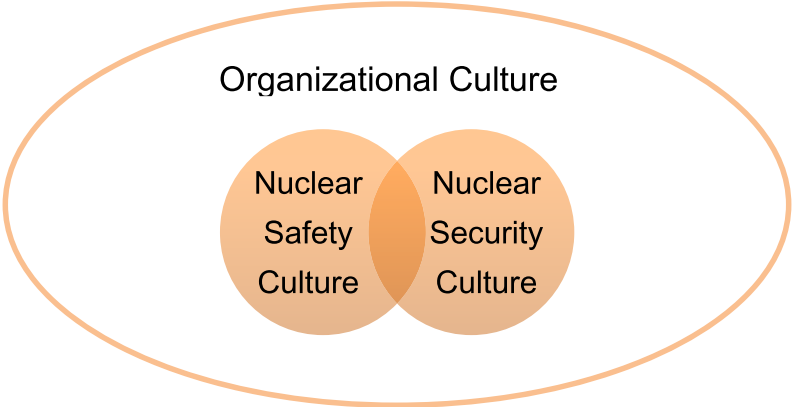
²⁶“Principles for Strong Nuclear Safety Culture”, *INPO*, November 2004, http://www.nrc.gov/about-nrc/regulatory/enforcement/INPO_PrinciplesSafetyCulture.pdf (accessed October 21, 2015).

²⁷“IAEA Safety Standards for Protecting People and the Environment: The Management System for Facilities and Activities”, Safety Requirements No. GS-R-3, International Atomic Energy Agency, Vienna, 2006.

²⁸Igor Khripunov, “A culture of security: Focus for the next Nuclear Security Summit?”, *Bulletin of Atomic Scientists*, (June 2015), <http://thebulletin.org/culture-security-focus-next-nuclear-security-summit8428> (accessed October 23, 2015).

The organization (Nuclear Facility) has to foster an approach that integrates safety and security in a mutually supporting manner as they share the common objective of limiting the risk.

Figure 4: Synergy of Nuclear Safety and Security Culture



Source: Anwar Habib, “Nuclear Safety and Security Culture in Pakistan” (Presentation, Pakistan Nuclear Regulatory Authority, Islamabad, <http://slidegur.com/doc/1359472/nuclear-safety-and-security-culture-in-pakistan> accessed October 8, 2015).

Similarities and Differences between Safety and Security Culture

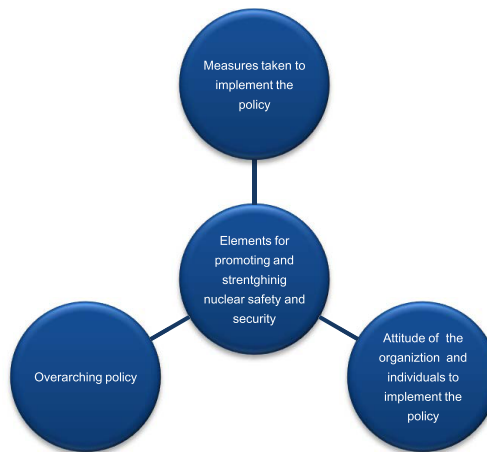
Nuclear safety and security culture dwells upon the similar principles, organizations and elements that are involved within the implantation of these two.²⁹ The three neutral elements that can be utilized for promoting and strengthening safety and security within an organization (nuclear power plant) include: overarching policy; measures taken to implement the policy; and attitude of the organization and individuals to implement the policy³⁰ (see figure 5). If a proper management system is developed to follow the safety and security policy that embodies an

²⁹Denis Winter, “Security Culture in the Nuclear Field”, in *Nuclear Security Culture: From National Best Practices to International Standards*, I. Khripunov et al. (Eds.) (Amsterdam: IOS Press, 2005), 70.

³⁰Anwar Habib, “Nuclear Safety and Security Culture in Pakistan” (Presentation, Pakistan Nuclear Regulatory Authority, Islamabad, <http://slidegur.com/doc/1359472/nuclear-safety-and-security-culture-in-pakistan> accessed October 8, 2015).

inclusive approach, and the top managers and the organizational personal are committed for the implementation of those policies in coherence, than a jointly sustainable safety and security culture can be developed, that can live side-by-side with each other.

Figure 5: Neutral elements that can be utilized for the promoting and strengthening safety and security

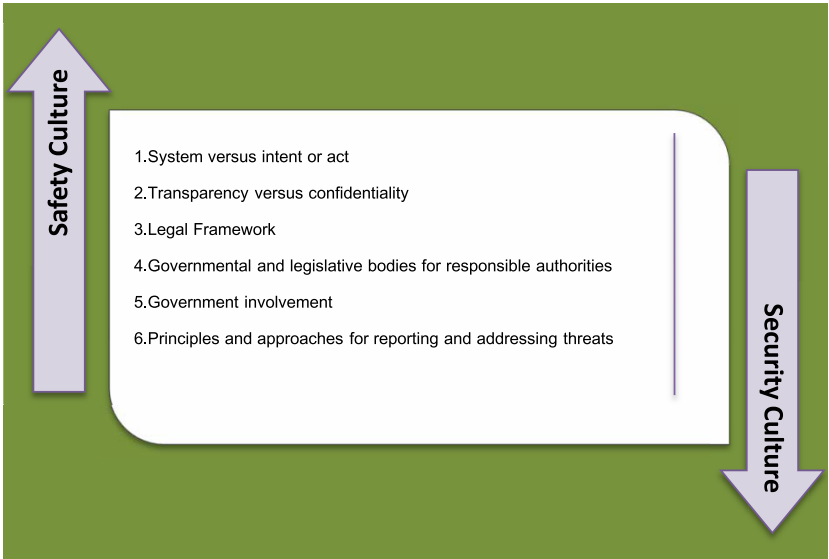


However, there will surely be occasions where there are differences between safety and security requirements. The areas where safety culture differs from security culture have been identified with an aim to work upon to reduce the differences and promoting synergy between the two domains. These areas include: system versus intent or act, transparency versus confidentiality, legal framework, different Governmental and legislative bodies for responsible authorities, government involvement,³¹ different principles and approaches for reporting and addressing threats³² (see figure 6).

³¹See Denis Winter, “Security Culture in the Nuclear Field”, in *Nuclear Security Culture: From National Best Practices to International Standards*, 70.

³²See Igor Khripunov, “A culture of security: Focus for the next Nuclear Security Summit?”.

Figure 6: Conflict areas between nuclear safety and security culture



The first major difference that exists within these two cultures is that both cultures handle different aspects; in terms of human behavioural aspect, the safety culture works upon the risk of human error and equipment failure; while the security culture revolves around the risk of deliberate acts and specifically factors in the inadvertent behaviour focused to cause harm.³³ Even though nuclear safety and security both deal with the risk of inadvertent human error, but security in particular, places an additional watch on the deliberate acts specifically intended to cause harm.³⁴

As security deals with the deliberate acts, therefore security culture necessitates different attitudes and behaviour, such as confidentiality of

³³Igor Khripunov, Nuclear Security Culture: The Case of Russia” (Presentation, Conference on Managing Nuclear Material Stockpiles in the 21st Century, Oslo, Norway, <https://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&cad=rja&uact=8&ved=0CEEQFjAFahUKEwiL7LTuvdXIAhUJVhQKHd6AAD0&url=http%3A%2F%2Fwww.nrpa.no%2Fosloconference%2FIgor-Khripunov-NSC-presentation.ppt&usg=AFQjCNErUoa07Bhh-AvYs5FuGZU5G-gk-g&bvm=bv.105814755,d.d24>, accessed October 23, 2015).

³⁴“Nuclear Security Culture: Implementing Guide”, IAEA Nuclear Security, No. 7, *International Atomic Energy Agency*, Vienna, 2008, 5.

information and efforts to deter malicious acts, as compared to the safety culture.³⁵ While safety culture works upon the principles of openness and transparency and requires individuals to share information with others. The communities involved within the safety and security culture have distinctive attitudes.³⁶ Individuals within the safety culture are required to demonstrate a prudent, strictly vigilant questioning attitude and to actively share information with others, exhibiting an overriding concern for transparency and dialogue.³⁷ By contrast, within the security culture, individuals are required to react swiftly, to communicate information only to certain authorized people and a certain group of people hold special responsibility for applying it, with a requirement of protection of some confidential information.³⁸

Nuclear security culture is instituted upon a solid legal framework in form of 2005 Amendment to the 1980 Convention on the Physical Protection of Nuclear Material³⁹ and 2004 Code of Conduct on the Safety and Security of Radioactive Sources⁴⁰ but on the other side nuclear safety culture is not endowed with a legal framework even though it has a well-developed safety regime.⁴¹ Within the context of approaches being followed to address the safety and security risks, the safety culture very critically follows the systematic approach for dealing with the safety risk but in the realm of security culture, it clearly lacks within the perusal and development of systematic approaches for addressing security threats.⁴² The concept and application of safety culture only remains limited to the system safety, lacking any if at all attention to the radioactive sources.

³⁵Ibid.

³⁶See Denis Winter, “Security Culture in the Nuclear Field”, in *Nuclear Security Culture: From National Best Practices to International Standards*, 72.

³⁷See IAEA, “Nuclear Security Culture: Implementing Guide”, 6.

³⁸See Denis Winter, “Security Culture in the Nuclear Field”, in *Nuclear Security Culture: From National Best Practices to International Standards*, 72.

³⁹This amendment within the convention calls upon the individual governments to be accountable for the implementation of security culture but it is yet to be ratified.

⁴⁰This non-binding code of conduct urges every state to promote a culture of safety and security regarding radioactive sources.

⁴¹See Igor Khripunov, “A culture of security: Focus for the next Nuclear Security Summit?”.

⁴²Ibid.

The fields of safety and security are regulated and managed by different authorities having different structures and supervisory power and same framework is being followed for safety and security culture.⁴³ The regulatory authorities that deal with safety and security are located in different organizations, and have diverse kind of regulatory power.⁴⁴ The domains of safety and security culture have differing degrees of government involvement, both on the organizational level and individual level. The embodiment of security culture requires extensive state intervention due to the very reason of confidentiality requirements and distinctive division of responsibility.⁴⁵ State is responsible for security culture, while operator is exclusively responsible for safety culture that institutes variability in the level of commitment. Numerous government departments are concerned with security culture. Particularly, various oversight bodies have selective roles to play in protecting nuclear materials, nuclear facilities (reactors), and the transport of nuclear and radiological materials.⁴⁶

The levels upon which safety and security personnel are trained, largely differs. The security personnel are trained on a general basis while the safety personnel have a more specified training regarding the safety systems.⁴⁷ Unique role is played by the individuals in both cultures; the safety personnel have a more questioning attitude as compared to the security personnel, as the security personnel are obligated to practice confidentiality regarding the protection of sensitive information that could compromise the safety of radiological materials, nuclear facilities, and transport of nuclear materials.

security culture should be sought and developed. Moreover, all potential mechanisms should be conceived and emplaced to provide for continual interchange between the two cultures.

⁴³Ibid.

⁴⁴See IAEA, "Nuclear Security Culture: Implementing Guide", 6.

⁴⁵See Denis Winter, "Security Culture in the Nuclear Field", in *Nuclear Security Culture: From National Best Practices to International Standards*, 72.

⁴⁶See, Sonal Gandhi and Jungmin Kang, "Nuclear Safety and Nuclear Security Synergy", 358.

⁴⁷Ibid., 360.

As security culture is in its initial phase of development, attention is needed to be focused on this realm. Importantly, security culture must not exist in vacuum and it should incorporate inputs from the domain of safety culture, while the experts in both fields should not work in isolation.⁴⁸ A co-ordination mechanism should be developed at the legislative, regulatory, and operator level that can efficiently help in flourishing the management system, leadership behaviour and personal behaviour.⁴⁹ As many individuals are part of both the security and safety cultures, in order to develop a sustainable safety and security culture, combined trainings should be given to the safety and security personnel so that each group can develop a better understanding of the given roles and responsibilities.

For the constant development and maturation of security culture, operating experience feedback (learning experiences from the safety incidences) and best practices from the realm of safety culture, should be integrated and instilled within the security culture. It is critical that the nuclear managers should effectively work upon instilling the right habits and traits in the safety and security personnel for the optimal overlap of safety and security culture.

Conclusion

The objective of safety and security is identical in assuring the safety of public and environment as it is not possible to be safe when not secure. More similarities exist in nuclear safety and nuclear security nexus, even though, differences and specific requirements of each domain could no doubt lead to conflicts and communication problems in relation to the implementation of relevant activities.

However, this conflict could be potentially managed by proper coordination of methods, approaches and operating practices, with their

⁴⁸See Igor Khripunov, “A culture of security: Focus for the next Nuclear Security Summit?”.

⁴⁹“Nexus between Nuclear Safety and Nuclear Security” (Presentation, Developing a Comprehensive Security Culture Chemical, Biological, Radiological and Nuclear (CBRN) Threat and Responses, Vienna, Austria, 2013, <http://vienna.io.gov.hu/download/0/26/80000/Nexus%20Safety%20Security%20includ%20culture%20%20.pdf>, October 25, 2015).

implementation in such a manner that does not compromise safety over the other and vice versa.

In order to move into the future, characterized by a complex threat environment, international community should focus on organizational culture with an aim to create a sustainable safety and security regime for the nuclear power generation sector. It is prudent to identify the links between safety and security culture, in form of similarities and differences, for the purpose of development of a mutually reinforcing safety and security culture.

As far as the contradictory requirements and areas are concerned, proper consultation and coordination mechanisms should be organized between regulatory bodies and safety and security personnel for avoiding communication problems and conflicts. Nuclear plant safety and security of personnel should be coordinated in a way to efficiently understand and resolve the conflicting issues that could emerge during the implementation of safety and security culture policy. In essence, efforts are required by the nuclear power industry, not to just implant strong safety and security culture attributes but also to foster interactions between the two, with an overriding aim of ensuring public safety.

Afghan Peace Process: Prospects and Challenges for Pakistan

S. Sadia Kazmi*

Abstract

Pakistan has taken the much needed initiative to bring about peace and stability in the conflict ridden Afghanistan. The 2+2+1 peace talks have been made possible with the dedicated efforts and commitment by Pakistan that managed to bring Afghan Taliban to the negotiating table with the Afghan government, along with ensuring China's and US' role as the observer in the peace talks. This very fact is reflective of the significance of this issue not just for Afghanistan but for the whole region and beyond. Because of the several inherent fault lines one cannot be sure of the success or sustainability of the process since it is embroiled in a number of challenges. However, Pakistan believes that with concerted efforts and dedication, this can be made possible. Since this objective, if materialized, holds great dividends for Pakistan, it is wholeheartedly committed to its success and to meet the challenges head on.

Key words: Afghan Peace Process, Murree Talks, Pakistan's Mediatory Role, Afghan Owned and Afghan Led Peace Process, Regional Peace and Stability.

Introduction

The Murree talks¹ initiative for the sole purpose of bringing peace in Afghanistan has been a crucial moment in deciding the future pattern of security not only in the region, but closely hinges to it is the security at

*The author is Director Academics, Policy and Programs and a Senior Research Associate at the Strategic Vision Institute, Islamabad.

¹Zahid Hussain, "Analysis: Cautious Optimism after Murree Talks", *Dawn*, July 9, 2015, accessed October 1, 2015, <http://www.dawn.com/news/1193272>.

the global front too. This is the very reason that the representatives of the United States (US) and China are also part of these talks, while Pakistan being a moderator/facilitator has a golden opportunity not only to come across as a responsible state, fully committed to the implementation of peace inside Afghanistan, but also between Afghanistan and Pakistan. The negotiations between Afghan government and Afghan Taliban made a breakthrough, which became possible with the help of Pakistan. Therefore, Pakistan could cash in on this opportunity and try to win back the trust of Afghanistan, secure its North Western borders, revisit its political, economic and social equation with Afghanistan, and try to mitigate or balance out India's stronghold in Afghanistan. In order to achieve these objectives, Pakistan is still striving hard to make sure that it remains an Afghan led and Afghan owned peace process² with least dictation or involvement by another party, and should be culminated with the mutual satisfaction of Afghan and Taliban leadership, notwithstanding the suspension of talks between the parties. However, it is not going to be a walk in the park for Afghan leaders, Taliban or Pakistan, as there are several impediments which have the potential to stall the process and each party needs to be watchful of such elements. This paper is an attempt at scrutinizing the main aims and objectives of these talks, the probable prospects of peace it promises and the dividends that Pakistan is going to reap if the talks are culminated successfully. The fact that the peace talks have direct implications for Pakistan provides a sufficient rationale to carry out a detailed study on this subject. It is an ongoing issue with several possibilities that might emerge at any time with positive or negative repercussions for Pakistan. The paper substantially attempts to

²Tahir Khan, "China Commends Pakistan Brokered Afghan Peace Process", *The Express Tribune*, August 15, 2015, accessed September 22, 2015, <http://tribune.com.pk/story/938639/china-commends-pakistan-brokered-afghan-peace-process/>

decipher those probabilities while the analysis of various dimensions of this whole episode will be of great help to the policy makers in Pakistan and Afghanistan.

The Developments So Far

The “Afghan Peace Process” or “Murree talks”³ were initiated on July 7, 2015 after a 14 year long deadlock between Afghan Taliban and Afghan Government.⁴ The main leadership that attended the talks was the Deputy Foreign Minister Hekmat Khalil Karzai who represented Afghan government and Mullah Abbas Durrani who led the Afghan Taliban along with other representative belonging to Taliban's Qatar office and main political Shura, while Pakistan served as a mediator represented by Aizaz Chaudhry, the Foreign Secretary of Pakistan.⁵ It was the extensive diplomatic effort by Pakistan that made the talks possible and for which Pakistan has been lauded by the US as well. Since Pakistan aspires to project itself as a peace loving country,⁶ it believes that peace in Afghanistan is closely linked to peace in Pakistan and ultimately to the regional and global peace. At the same time Pakistan's Foreign Office is committed to strictly keeping it an Afghan led and Afghan owned peace process without any involvement, interference, or unnecessary influence by any third party.⁷

³“Second Round of Afghan Peace Talks in Murree on Friday: report”, *Pakistan Today*, July 29, 2015, accessed August 3, 2015, <http://www.pakistantoday.com.pk/2015/07/29/national/second-round-of-afghan-peace-talks-in-murree-on-friday-report/>

⁴Suraya Raiszada, “Pakistan Says Afghan govt., Taliban Peace Talks Successful”, *The Kabul Times*, August 13, 2015, accessed August 20, 2015, <http://thekabultimes.gov.af/index.php/opinions/politics/7367-pakistan-says-afghan-govt-taliban-peace-talks-successful.html>

⁵Baqir Sajjad Syed, “Afghan govt., Taliban Agree to Build Trust”, *DAWN*, July 9, 2015, accessed August 4, 2015, <http://www.dawn.com/news/1193306>

⁶“US Lauds Pakistan for Facilitating Murree Talks”, *Express Tribune*, July 23, 2015, accessed July 25, 2015, <http://tribune.com.pk/story/925130/us-lauds-pakistan-for-facilitating-murree-talks/>

⁷Mateen Haider, “First Round Of Afghan Govt, Taliban Dialogue Concludes in Murree”, *Dawn*, July 8, 2015, accessed July 13, 2015, <http://www.dawn.com/news/1192941>

The first round of peace talks were held in Murree, Pakistan during the Islamic month of Ramazan⁸ in a very positive environment. The reports claim that the overall atmosphere remained genial⁹ and both sides openly discussed their outstanding issues making sure they firmly put their point across. The meeting lasted until the wee hours of Sehri.¹⁰ Taliban demanded a definite time frame for the complete withdrawal of foreign troops, release of Taliban who were held as prisoners, Afghan Constitution to be amended, the removal of Taliban leader's names from the US sanctions list, and to install an interim government till the new representative government is legally elected.¹¹ Accept for one demand about the interim government, all the other demands made by Taliban were cordially accepted to be considered by Afghan government officials.¹² Another aspect of these talks is the presence of two major powers China and the US as observer states¹³ highlighting the significance of this process not just for the regional states but also for the global actors as well. However, another important fact to keep in mind is

⁸Mateen Haider, "First Round of Afghan govt., Taliban Dialogue Concludes in Murree", *Dawn*, July 8, 2015, accessed July 13, 2015, <http://www.dawn.com/news/1192941>

⁹Syeda Mamoonah Rubab, "An 'Ice-Breaker' in Murree", *The Friday Times*, July 10, 2015, accessed July 20, 2015, <http://www.thefridaytimes.com/tft/an-ice-breaker-in-murree/>

¹⁰"Kabul Plans Detailed Taliban Talks on Ending Bloodshed", *Dawn*, July 9, 2015, accessed August 4, 2015, <http://www.dawn.com/news/1193392>

¹¹Tahir Khan, "Mullah Omar's Approval Could Formalize Afghan Reconciliation", *The Express Tribune*, July 17, 2015, accessed September 14, 2015, <http://tribune.com.pk/story/922758/mullah-omars-approval-could-formalise-afghan-reconciliation/>

¹²Tahir Khan, "Kabul Amenable to All But One Taliban Demand", *The Express Tribune*, March 2, 2016, accessed May 12, 2016, <http://tribune.com.pk/story/1057491/kabul-amenable-to-all-but-one-taliban-demands/>

¹³Joseph Goldstein and Mujib Mashal, "Afghan Officials and Taliban Meet in Possible Step Towards Peace Talks", *The New York Times*, July 7, 2015, accessed August 10, 2015, http://www.nytimes.com/2015/07/08/world/asia/taliban-leaders-are-said-to-meet-with-afghan-officials.html?_r=0

that some factions inside Afghanistan are still against these talks. At the same time, the cross border terrorist activities¹⁴ did continue to pose threats and hindrances in the way of smooth progress on the peace process.¹⁵

Shortly after the negotiations had taken place, the Afghan Taliban disavowed the peace process especially owing to the news of the death of their leader Mullah Omar was made public.¹⁶ Nonetheless Pakistan did not give up on the prospects of having peace in Afghanistan and is actively pursuing to bring the parties back on the negotiating table. Though it is proving quite daunting with each passing day where the killing of Mullah Mansoor and the deteriorating trend in Pak-Afghan relations are serving to be the major impediments. Initially it was decided that the next round of talks would be scheduled in four to six weeks into winters,¹⁷ but no concrete progress on that could be achieved. The situation has considerably changed after the killing of Mullah Akhtar Mansoor in a US drone strike in Pakistan's Baluchistan province on 21st May 2016.¹⁸ There have been mixed views about the fledgling fate of peace process after his demise. On one hand, considering the fact that he has been against the peace talks,

¹⁴“Badaber Attack”, *Dawn*, September 19, 2015, accessed October 1, 2015, <http://www.dawn.com/news/1207887>

¹⁵John Lee Anderson, “The Fall of Kunduz”, *The New Yorker*, October 6, 2015, accessed October 8, 2015, <http://www.newyorker.com/news/news-desk/the-fall-of-kunduz>

¹⁶Kay Johnson, “Taliban Disavows Afghan Peace Talks After Leader Declared Dead”, *Reuters*, July 30, 2015, accessed August 3, 2015, <http://www.reuters.com/article/2015/07/30/us-afghanistan-taliban-fighting-idUSKCN0Q40DW20150730>

¹⁷“Winter could Revive Afghan Peace Talks” *Daily Outlook Afghanistan*, October 14, 2015, accessed October 14, 2015, <http://www.outlookafghanistan.net/assets/epaper/October%2014,%202015/Front%20Page.pdf>

¹⁸Shereena Qazi, “Afghan's Taliban Mullah Mansoor 'Killed in US Strike’”, *AlJazeera*, May 23, 2016, accessed May 26, 2016, <http://www.aljazeera.com/news/2016/05/taliban-leader-killed-drone-strike-160521204020111.html>

it was largely being speculated that his demise would have a positive impact on the peace process but the talks have so far foundered.¹⁹ On the other hand, Pakistan has voiced its concern over the killing of Mullah Mansoor which according to its National Security Advisor, Mr. Sartaj Aziz, instead of helping has only scuttled the progress.²⁰ However, Pakistan is still hopeful about the revival of peace process. Mr. Sartaj Aziz stated that even though the insurgency has increased in Afghanistan after the initiation of first round of peace talks, the ultimate solution still resides in the resumption of talks.²¹

Prospects for Pakistan

Even though the peace talks between Afghan government and Taliban started off on a positive note, yet the process has suddenly come to a standstill. These talks could bring major benefits to Pakistan, provided the Pakistani leadership could optimally make use of the situation. The geographical contiguity, ideological similarities, cultural affinity with Afghanistan and now the diplomatic position which Pakistan has been able to establish for itself as a facilitator in the peace talks, naturally provides Pakistan with an ideal opportunity to reinforce its standing in the regional politics. Some of the probable benefits Pakistan can achieve are as follows:

a) Peaceful Neighbor:

Since its inception, Pakistan has been dealing with a hostile neighbor India in the East. While Pakistan's relations vis-à-vis other South Asian states have generally been cordial, India has taken up the major share of Pakistan's policy orientation. The biggest chunk of financial budget

¹⁹ Ahmad Shah Karimi, "Afghan Peace Process After Mullah Mansoor!", *The Daily Afghanistan*, May 24, 2016, accessed May 29, 2016, http://www.outlookafghanistan.net/topics.php?post_id=15335

²⁰ Kamran Yousaf, "Afghanistan, Pakistan Discuss Fate of Peace Process After Mansour's Death", *Express Tribune*, May 30, 2016, accessed June 3, 2016, <http://tribune.com.pk/story/1112851/afghanistan-pakistan-discuss-fate-peace-process-mansours-death/>

²¹ Mateen Haider, "Efforts Underway to Revive Stalled Afghan Peace Talks", *Dawn*, September 15, 2015, accessed September 23, 2015, <http://www.dawn.com/news/1207149>

goes into defence sector²² in order to fortify the country's defence against much bigger and militarily strong eastern neighbor. In this backdrop, Pakistan cannot afford to alienate another neighbor on its western border. Allowing antagonistic elements to prosper in Afghanistan, while already being engaged with India, would be suicidal for Pakistan. Hence, Pakistan's first and foremost concern is to have a peaceful neighbor at its western border without any internal weaknesses that could directly have negative repercussions for Pakistan. It is believed that peace in Afghanistan guarantees peace in Pakistan. If an understanding is reached between Afghan Taliban and Afghan government, this will curtail the growth of terrorism not only within Afghanistan but will also keep it away from spreading on towards Pakistan. This can ensure better security for Pakistan's north western border along Afghanistan. Therefore a peaceful Afghanistan is in the best interest of Pakistan.

b) Creating Pakistan's Positive Image:

Pakistan is keen on improving and enhancing its positive image in the region as well as worldwide. It wants to appear as a responsible state fully committed for peace development in the region. Pakistan's intensive efforts as a mediator for these talks have already garnered quite a lot of appreciation at the international front.²³ The whole development shows Pakistan in a positive light where its international standing has increased manifold and chances of it being taken seriously on the important issues has also been further augmented. Along with bringing dignity to Pakistan, it has also highlighted the fact that peace in Afghanistan is not possible without Pakistan's involvement. Pakistan has been able to exert its position as a central player which could rein in violence and endorse peace. So these peace talks have brought an immense opportunity for Pakistan to improve its international reputation as a 'Peace promoter'.

²²Baqir Sajjad Syed, "Defence Budget Raised by 11.6pc to Rs. 781 billion", *Dawn*, June 6, 2015, accessed September 3, 2015, <http://www.dawn.com/news/1186510>

²³"Peace, Development in Afghanistan: UN Appreciates Pakistan's Contributions", *Business Recorder*, November 5, 2015, accessed on January 18, 2016, <http://www.brecorder.com/general-news/172/1246713/?tmpl=component&print=1&layout=default&page=>

c) Rebuilding Mutual Trust:

The Murree meeting clearly demonstrated Pakistan's genuine intentions to bring stability in Afghanistan. This should be duly acknowledged by the Afghan leadership too. Both the sides need to reevaluate each other's motives and let the trust build between them. Pakistan can convince Afghanistan to have open channels of cooperation and information sharing with each other. The trust building will not only help the two sides to adopt result oriented approach towards building peace in the region but will also be instrumental in making the two sides look out for each other's interests. This could be achieved by having more confidence building measures and making sure they are positively implemented and followed through.

d) Mitigate India's Influence:

It is crucial for Pakistan to counter and neutralize India's influence in Afghanistan. Owing to the historical closeness that former Afghan President Hamid Karzai enjoyed with India,²⁴ the Indian fast growing influence in Afghanistan was expected. India has been providing developmental and economic aid²⁵ to Afghanistan with an aim to exert its military influence²⁶ and to seek a much bigger political role in Afghanistan. That Indian trained Afghan militants causing unrest in Pakistan is also a matter of grave concern for Pakistan.²⁷ All of these factors pose a direct challenge to Pakistan's security as well as to its

²⁴Suhasini Haidar, "Controversial Afghan-Pak Intelligence MoU 'Does Not Remain', Says Hamid Karzai", *The Hindu*, September 4, 2015, accessed September 15, 2015, <http://www.thehindu.com/opinion/interview/interview-with-former-afghanistan-president-hamid-karzai/article7612242.ece>

²⁵Rajeev Agarwal, "Post 2014 Afghanistan: Policy Options for India and Iran", *IPCS Issue Brief* 247 (2014): 5 accessed October 3, 2015, IB247-ColAgarwal-Afg.pdf

²⁶Sandeep Dikshit, "India Helping in Having Our Own Army", *The Hindu*, December 14, 2013, accessed September 4, 2015, <http://www.thehindu.com/news/national/india-helping-in-having-our-own-army-karzai/article5458705.ece>

²⁷Zahid Gishkori, "RAW Behind Terrorist Activities in Pakistan: Foreign Secretary", *The Express Tribune*, May 14, 2015, accessed September 12, 2015, <http://tribune.com.pk/story/886198/raw-behind-terrorist-activities-in-pakistan-foreign-secretary/>

interests in Afghanistan. By promoting and facilitating the peace process, Pakistan is hoping to diminish and undermine India's relevance for Afghanistan. The aim is to reclaim the lost trust through working for the interests of both Afghanistan and Pakistan, while ultimately being able to convince Afghanistan to sideline India.

Pakistan also seeks to engage Afghanistan in an interdependent relationship based on mutually beneficial economic linkages.

e)Eradicating Terrorism/ Enabling Economic Prosperity/ Strengthening of Defence and National Security:

Although the possibility of economic prosperity, eradication of terrorism and fortification of national security not solely hinge upon peace in Afghanistan, nonetheless instability in Afghanistan surely makes the biggest part of turbulence for Pakistan in these areas. Despite the fact that Pakistan has actively been involved in fighting against terrorism as a front line ally of the US, it remains to be the most infected with the menace of various forms of terrorism. Unfortunately 'Terrorism' is not a new phenomenon for Pakistan, who has been grappling with this challenge long before the 9/11 attacks took place and made the concept of terrorism known worldwide. For Pakistan, however, it was the Afghan war in late 1970s and Pakistan's active role in it that brought a number of challenges among which the religious extremism, mushrooming of Madrassahs, the zest for Jihad, introduction of Kalashnikov, influx of Afghan refugees and the drug culture are some of the major factors that have pulled Pakistan into a quagmire of social, political and economic, as well as security problems. The proliferation of these tendencies from Afghanistan across the border into Pakistan was further easily facilitated because of the porous nature of Pak-Afghan border. When after the collapse of Soviet Union, the Afghan Mujahideen were left without a patronage of the US, which had deserted them, the disgruntled and displaced Afghans in the aftermath of the war, not only found refuge on the Pakistani side along the border where the locals were naturally sympathetic towards them for their cultural, linguistic, ethnic and religious similarities, but they also became an easy target to be exploited

by the anti-Pakistan forces to carry out the act of violence and sabotage, and fueling other already existing sectarian and ethnic crisis in Pakistan.

Later on in 2001, in the aftermath of 9/11 attacks, once again Pakistan found itself in a pretty much same situation, i.e., hired to serve the US' interests in the region, at the cost of sustaining uncountable casualties and once again left alone to deal with even more intensive wave of terrorism, coupled with the economic challenge of accommodating the displaced Afghan refugees. Pakistan's participation in the US' led fights on Afghan soil, has served to damage its equation with Afghanistan and has flared up hostilities and distrust to a great deal.

However, once Pakistan's efforts in the ongoing Afghan peace process are recognized by the Afghan government and Afghan Taliban, the peace process will be able to proceed more positively and Pakistan will find prospects for peace on its own soil too. First and foremost, Pakistan will be able to send the refugees back to Afghanistan, resulting in a huge economic relief. Not just that but this financial respite may allow Pakistan to invest in its social sector which is in deplorable condition. Similarly with the help of Afghan government, mutually acceptable and prudent framework could be devised to collectively counter the threat of terrorism more effectively. By minimizing the internal and external vulnerabilities, Pakistan will be in a better position to ensure its national security.

Impediments

Despite all the above mentioned probable benefits, the Afghan peace process is highly prone to glitches and impediments. Some have already negatively affected further improvement on the talks, as the next round of negotiations after being postponed a couple of times, has still not been materialized. Following are some of the factors which could stall the progress on the talks.

a) The Killings of Taliban Leadership

The role of leadership in any kind of negotiations among the belligerents cannot be ruled out anywhere, therefore, the continued counter-terrorism actions against the Taliban's main leadership is the first and foremost impediment for development of Afghanistan peace process. Even though Mullah Mansoor's tenure of leadership could not prove to be of much help with regards to any positive developments on the peace talks, his death has apparently given an even harder blow to the already fledging peace process. The hopes of resuming peace talks were stashed once the new Taliban leader Mullah Haibatullah replaced Mullah Mansoor after latter's death in a counter-terrorism action by the US drone attack. One reason why peace might prove to be daunting is the way Mullah Mansoor was killed. This would only fortify the Afghan Taliban's resolve that the US and all the other stakeholders in the Quadrilateral Coordination Group (QCG) of Afghanistan, are out to hunt Afghan Taliban down. The deeply ingrained skepticism within Afghan Taliban about the possibility of their inclusion in the peace process and the distrust that they have against the sincerity of QCG's intentions to bring peace in Afghanistan could further be deepened. This may provoke them to continue their fight and struggle against the pro-peace actors. This could very well be the reason that Haibatullah Akhonzada was immediately appointed as the new leader by Taliban Rahbari Shura²⁸, with the main aim to avoid leadership battle and to continue the hardliner policies of their predecessors Mullah Mansoor and Mullah Umer. This is also to be kept in mind that Mullah Mansoor was able to consolidate power for himself among the Afghan Taliban by staunchly refusing to be part of the peace process²⁹. Such an approach is still seen as crucial in winning the trust and support of Taliban. Hence Haibatullah Akhonzada is more likely to adopt the same hard-line stance as his

²⁸Sune Engle Rasmussen and Jon Boone, "Afghan Taliban Appoint Mullah Haibatullah Akhonzada as New Leader", *The Guardian*, May 25, 2016, accessed May 29, 2016, <https://www.theguardian.com/world/2016/may/25/taliban-new-leader-death-confirm-mullah-mansoor-haibatullah-akhonzada>

²⁹Abdul Ahad Bahrami, "The Aftermath of Mullah Mansoor's Killing", *The Daily Afghanistan*, May 25, 2016, accessed May 29, 2016, http://www.outlookafghanistan.net/topics.php?post_id=15347

predecessors. The element of avenging Mullah Mansoor's killing could override new leadership's agenda,³⁰ consequently putting a deadlock to the peace process. The Taliban are already blaming Afghan government and Pakistan for the death of their leader and will probably not show any ready willingness to join any peace talks backed by Pakistan.³¹

The news of Mullah Omar's death also brought direct ramifications for the peace process as one can see that it put a sudden stop to the peace talks. Just as his alleged approval³² of the peace talks back in July gave momentum and paved way for the peace process, his death brought adverse impact especially on the prospects for the process, Afghan Taliban and consequently on Pakistan, as well as on the region. The biggest and most obvious repercussion was the rift within the Afghan Taliban, who, in the aftermath of Mullah Omar's demise, found themselves unable to agree upon a mutually consensual leadership and felt to have been left without an overarching cause that could keep them united. It was only after much dissent and continued rift among the various ranks of Taliban that Mullah Mansoor was appointed as the new Taliban leader, who grappled mostly to keep the Taliban united.³³

One of the credits which could be given to Mullah Omar is that he was successful in keeping the internal fissures among the Taliban at bay. After his death, the Afghan Taliban became more vulnerable to

³⁰Tahir Ali, "Haibatullah's Challenges", *The Friday Times*, June 3, 2016, accessed June 18, 2016, <http://www.thefridaytimes.com/tft/haibatullahs-challenges/>

³¹Abdul Ahad Bahrami, "The Aftermath of Mullah Mansoor's Killing", *The Daily Afghanistan*, May 25, 2016, accessed May 29, 2016, http://www.outlookafghanistan.net/topics.php?post_id=15347

³²"Taliban Leader Mullah Omar Hails Peace Talks to End Afghanistan War", *The Guardian*, July 15, 2015, accessed September 20, 2015, <http://www.theguardian.com/world/2015/jul/15/taliban-leader-mullah-omar-hails-peace-talks-to-end-afghanistan-war>

³³"New Taliban Leader Calls for Unity in Ranks in First Audio Message", *Dawn*, August 1, 2015, accessed March 4, 2016, [http://www.dawn.com/news/1197807/new-taliban-leader-calls-for-unity-in-ranks-in-first-audio-message?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+dawn-news+\(Dawn+News\)](http://www.dawn.com/news/1197807/new-taliban-leader-calls-for-unity-in-ranks-in-first-audio-message?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+dawn-news+(Dawn+News))

internal divisions, as one could witness the differing opinions among Taliban which surfaced with regards to the selection of new leader. Despite the fact that Mullah Mansoor being the new leader was able to earn appreciation and trust of the wider percentage of Taliban, he still faced opposition from within the Taliban ranks. His brutal oppression of rival groups further alienated some Taliban members who in some cases found to have joined the Islamic State (IS).³⁴ These internally divided Taliban did not seem too keen on resuming peace talks until and unless their more pressing issue of having a mutually accepted leadership for them is first addressed and amicably resolved among them. Even if that is achieved, there was no guarantee that the new leadership would be as eager to continue with the talks as their predecessor, as became evident later on by Mullah Mansoor's strong opposition to the peace talks.³⁵

Another factor that cannot be ignored is the fact that these Taliban have long been fighting a war which they consider sacred and that carries a supreme status for them. The anti-Afghan government agenda is part of the noble cause for them where "Jihad" becomes a justified option. They may still want to carry on with Jihad against the government as was evident from the takeover of Kunduz by the Taliban.³⁶ Even though initially Mullah Mansoor was widely being understood as pragmatic and someone who believed in the importance of talks over fights, the world saw even more aggressive face of Taliban under his leadership where in October 2015 they overran northern city of Kunduz and in November next month, southern province of Helmand, capturing the city

³⁴Michael E. Miller, "The New Taliban Leader Whose Shadow Hangs Over Afghan Peace Talks", *The Washington Post*, January 10, 2016, accessed on March 14, 2016, https://www.washingtonpost.com/world/asia_pacific/the-new-taliban-leader-whose-shadow-hangs-over-afghan-peace-talks/2016/01/10/b1da123e-b56d-11e5-8abc-d09392edc612_story.html

³⁵"Taliban Leader Mansoor: Man of War Not Peace Talks", *Dawn*, May 22, 2016, accessed May 26, 2016, <http://tribune.com.pk/story/1107902/taliban-leader-mansoor-man-war-not-peace-talks/>

³⁶"Taliban Takeover in Kunduz Echoes Islamic State Rout of Mosul", *Express Tribune*, September 30, 2015, accessed October 3, 2015, <http://tribune.com.pk/story/964918/taliban-takeover-in-kunduz-echoes-islamic-state-rout-of-mosul/>

of Sangin, only to be later regained by the Afghan forces.³⁷ The fact remains that there is a large number of disgruntled members within Taliban, who, in the absence of any leader of Mullah Omar's stature, might feel compelled to offer allegiance to the IS militants in Afghanistan owing to IS' global Jihadi agenda, as it may allow the Afghan Taliban to pursue Jihad against the Afghan government. Hence all the efforts that have so far been made to bring Taliban and Afghan leadership together could prove nil. Instead, the Afghan government and security forces might have to deal with a greater menace: a united Afghan Taliban and IS front.

b) Skepticism and Distrust between Afghanistan and Pakistan:

Even though both Pakistan and Afghanistan have been claiming to share good friendly relations, the fact that these relations have largely been marred by a long history of distrust and suspicions dating back to 1947,³⁸ makes it a very complicated puzzle. These feelings of distrust are also attributed to the porous nature of border between them which provides easy and unchecked movement of various non-state actors to and from the either side. The role of Pakistan during Soviet invasion of Afghanistan was although aimed at helping the Afghan struggle against the foreign occupation; it is also viewed as instrumental in promoting the Jihadi culture in the region especially in Afghanistan. Even today Afghanistan remains skeptical of Pakistan's motives and finds it hard to break away from this mindset, as can be inferred from President Ashraf Ghani's statement in a conference in Doha where he openly declared that Pakistan has been waging an undeclared war in Afghanistan for

³⁷Michael E. Miller, "The New Taliban Leader Whose Shadow Hangs Over Afghan Peace Talks", *The Washington Post*, January 10, 2016, accessed on March 14, 2016, https://www.washingtonpost.com/world/asia_pacific/the-new-taliban-leader-whose-shadow-hangs-over-afghan-peace-talks/2016/01/10/b1da123e-b56d-11e5-8abc-d09392edc612_story.html

³⁸Tehseena Usman, "Trust Deficit in Pak-Afghan Relations and Its Implications: A Historical Perspective (1947-2001)", *The Dialogue*, Vol. VIII (3), September 2013, p.305. accessed September 18, 2015, http://www.qurtuba.edu.pk/thedialogue/The%20Dialogue/8_3/Dialogue_July_September2013_303-326.pdf

the past 14 years.³⁹ The misgivings are present on both sides. Pakistan has strong reasons to believe that Afghan leadership is highly under Indian influence and therefore increasingly becoming hostile towards Pakistan. While Afghanistan blames Pakistan for disrupting democratic process and causing civil unrest in the country and extending support to Afghan Taliban against the Afghan government. Pakistan is also seen as supporting Afghan Taliban to keep a check on growing Indian influence in Afghanistan as well as to use them as a counter against IS lest it spills over across the porous border into Pakistan. Hence Pakistan's commitment to curb the "sanctuaries" is highly suspected by the Afghan officials,⁴⁰ while Pakistan constantly feels insecure by the diplomatic and political leverage given to India by Afghan government. This skepticism and distrust is further aggravated by the former Afghan President Hamid Karzai's regular anti-Pakistan statements⁴¹ which are increasingly becoming popular among Afghan nationals. This state of distrust can greatly affect and disrupt the progress on peace talks if not dealt with properly.

c) The India Factor:

It is no hidden secret that India has always been trying to inflict damages to Pakistan. The intended political and diplomatic isolation of Pakistan has been the prime objective of India since forever. Same thought process is driving India's policy vis-à-vis Afghanistan. Other than strengthening relations with Afghanistan for the purpose of expanding its own region-wide economic and diplomatic influence, India also seeks to acquire permanent presence there so that it could work against Pakistan's interest inside Afghanistan.

³⁹Parveen Swami, "Ashraf Ghani Slams Pakistan for Waging 'Undeclared War'", *The Indian Express*, June 2, 2015, accessed October 3, 2015, <http://indianexpress.com/article/world/asia/ashraf-ghani-slams-pakistan-for-waging-undeclared-war/>

⁴⁰"Pakistan Failed Afghan Peace Initiative: Ghani", *The Nation*, July 10, 2016, accessed on July 12, 2016, <http://nation.com.pk/national/10-Jul-2016/pakistan-failed-afghan-peace-initiatives-ghani>

⁴¹S. Rahman, "Karzai-India Nexus Against Pakistan", *The News*, June 21, 2015, accessed September 9, 2015, <http://www.thenews.com.pk/Todays-News-2-324854-Karzai-India-nexus-against-Pakistan>

India is also helping Afghanistan with developing its military force.⁴² Pakistan has a genuine fear that India's presence in Afghanistan has the potential to encircle Pakistan from two sides which means that it will have to deal with India on two fronts. Indian RAW is also active in providing training and logistics to anti-Pakistan terrorist elements in Afghanistan and sending them across the border into Pakistan.⁴³ The aim is not only to export terrorism but also to keep Pakistani security forces engaged at the border hence weakening the defence capacity by forcing it to disperse along the internal and external security issues. India also has vile designs against the ongoing peace process. A Pakistan, embroiled in its own internal security problems, will not be in a position to extend diplomatic support to any other country nor will it be seen by the others as a preferred choice as a promoter for regional peace. Hence the Indian presence in Afghanistan and Afghan government's callousness towards Pakistan's concerns, is a major stumbling block and highly detrimental to the peace process.

d) The Emerging Estrangement between Pakistan and Afghanistan:

The acrimonious element in Pak-Afghan relations is nothing new. The trust deficit between the two has a long history. While the porous nature of border is a constant source of trouble, the Indian factor makes the equation even more volatile. Nonetheless Pakistan recently had been able to garner worldwide approval for facilitating and playing an instrumental role in Afghan peace process. Yet once again the relations seem to have suffered a severe setback.

Afghan President Ashraf Ghani during his interview with BBC issued a statement that relations between Pakistan and Afghanistan are not brotherly but like two states.⁴⁴ This rhetoric appeared at a

⁴²Sandeep Dikshit, "India Helping in Having Our Own Army: Karzai", *The Hindu*, December 14, 2013, accessed September 4, 2015, <http://www.thehindu.com/news/national/india-helping-in-having-our-own-army-karzai/article5458705.ece>

⁴³Ahmad Rashid Malik, "Exposing Raw", *The Nation*, June 3, 2015, accessed October 9, 2015, <http://nation.com.pk/columns/03-Jun-2015/exposing-raw>

⁴⁴Arshad Saheen, "Ghani Says Pak-Afghan Ties Not Brotherly", *The Express Tribune*, September 29, 2015, accessed October 1, 2015, <http://tribune.com.pk/story/964171/ghani-says-pak-afghan-ties-not-brotherly/>

time when the relations between the two neighbors were already highly tense. Both sides actively got involved in condemning and accusing each other for supporting and sponsoring recent terrorist attacks in Pakistan and Afghanistan. In such an environment where regional security is already in a state of doldrums, such proclamations are not void of severe regional implications.

First and foremost an expected shift in the mindset has not been realized. President Ghani is generally seen by Pakistan as less vindictive than his predecessor Hamid Karzai. He comes across as a person who seemed willing to recognize that terrorism is not just endemic to Pakistan. He appeared ready to take measures against the non-state actors operating from his country. However, the statement on BBC left no place for any doubt that Pakistan needs a reality check on its perception of Afghan leadership. This new stance means that the distrust has crept back in between the two or may be was never completely gone. Chief Executive Abdullah Abudllah implicated Pakistan at United Nations General Assembly (UNGA) with regards to takeover of Kunduz by Taliban further strengthens this argument.⁴⁵ On July 10, 2016 President Ashraf Ghani once again resorted to using allegations against Pakistan at the NATO summit,⁴⁶ claiming that the present stalemate in the peace process is largely because of the soft corner Pakistan has for Taliban since it keeps discriminating between good and bad Taliban, instead of viewing them all as detrimental to the peace process, Afghanistan, and the region. Such statements irrespective of their credibility are sure to adversely affect any efforts towards improvement of bilateral relations between Afghanistan and Pakistan.

⁴⁵“Islamabad Says Taliban Takeover of Kunduz Unacceptable”, *The Express Tribune*, October 1, 2015, accessed October 3, 2015, <http://tribune.com.pk/story/965466/islamabad-says-taliban-takeover-of-kunduz-unacceptable/>

⁴⁶Baqir Sajjad Syed, “FO Asks Kabul to Stop Blame Game, Seeks Cooperation”, *Dawn*, July 10, 2016, accessed July 13, 2016, [http://www.dawn.com/news/1269876/fo-asks-kabul-to-stop-blame-game-seeks-cooperation?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+dawn-news+\(Dawn+News\)](http://www.dawn.com/news/1269876/fo-asks-kabul-to-stop-blame-game-seeks-cooperation?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+dawn-news+(Dawn+News))

Pakistan's ambition to serve as a regional peacemaker and a facilitator between Taliban and Afghan government has suffered a hard blow. It appears that all the hard work by Pakistan to initiate Afghan peace process has been forgotten and multiplied by zero. Sentiments are equally hurt on both sides. Pakistan cannot take Badhaber attack lightly; the tragedy of Peshawar school attack can never be forgotten. The need is to further accelerate the joint approach towards curbing terrorist outfits instead of disowning each other at this crucial time. Getting bitter and exhibiting suspicions about each other's sincerity will only allow the hostile elements to take advantage of the situation. Both sides need to consider this aspect and act wisely.

e) The Internal Problems of Afghanistan: Tension in Unity Government, Fragile Economy, Corruption, and Appalling Security Situation

It is hard to expect any substantial progress on the peace process when the negotiating parties are facing internal schism. The Afghan Taliban have already been struggling with this problem while on the state level too, the political structure of Afghanistan is grappling with ever present and recurring rifts emerging from within. It was for this purpose that on 21st September 2014, the rival Afghan Presidential candidates Ashraf Ghani and Mohammad Abdullah signed a unity government deal⁴⁷ with the help of US Secretary of State John Kerry, aiming to have a new government based on power sharing structure. This National Unity Government (NUG) was agreed upon so that the prevailing problems of weak economy, failing security, and internal political upheavals such as corruption and internal rifts could be amicably addressed. But a major clause of the deal which suggested that the amendments would be introduced to the constitution within two years under which Chief Executive Abdullah Abudllah could formally take charge of the prime minister, is still awaiting materialization. This has made the smooth working of unity government to pass through several bottlenecks and

⁴⁷“Afghan Presidential Contenders Sign Unity Deal”, *BBC News*, September 21, 2015, accessed April 2, 2015, <http://www.bbc.com/news/world-asia-29299088>

consequently the political, economic, and security situation in Afghanistan has continuously been on a decline. Such weaknesses provide ideal opportunity to the ill meaning elements that are always on the lookout for a chance to exploit the situation in their favor. The Afghan Taliban are constantly gaining strength and putting up a strong front against the Afghan government. In the absence of political cohesion within the unity government, it is unlikely that a collective and dedicated effort would be set aside for the peace process. This is why the US Secretary of the State John Kerry recently paid a surprise visit to Kabul⁴⁸ and stressed upon the need for the continuation of the unity government to avoid any further political crisis. The precarious security situation is evident from the fact that shortly after his visit, two explosions from rockets hit the diplomatic zone.⁴⁹ Not only the NUG has failed to bring any organization within its ranks, but has also been unsuccessful in keeping effective control/equation with Afghan Taliban. The NUG is also believed to be embroiled with ethno-regional biases which are putting its authenticity and credibility into question. Such instances offer distraction in the way of peace process which loses its importance for the stakeholders when they are already occupied with pursuing their own vested interests in the state polity. For the peace talks to be successful, more importantly, to be resumed, it is important that the dissenting politicians should leave their differences aside for the greater interest of everyone.

f) Need for Diplomatic Eloquence:

Sometimes even the most well thought out and careful statements turn out to be the major faux pas as has been the case with the recently issued statement by Prime Minister's senior aide Sartaj Aziz, the "confession"

⁴⁸“John Kerry Paid Surprise Visit to Kabul to Ease Tension Over Afghan Unity Pact”, *The Guardian*, April 9, 2016, accessed April 12, 2016, <http://www.theguardian.com/world/2016/apr/09/john-kerry-afghanistan-coalition-government-unity>

⁴⁹Toby Chopra, “Explosions Hit Afghan Capital Kabul After Kerry Visit”, *Reuters*, April 9, 2016, accessed April 15, 2016, <http://www.reuters.com/article/us-afghanistan-blast-idUSKCN0X60R4>

that Pakistan has been providing refuge to Taliban Leadership.⁵⁰ While Pakistan is quite actively playing the role of a facilitator in the Afghan Peace Process, demonstrating utmost commitment and dedication to the restoration of peace and stability in the region, at the same time it is trying its best to utilize this opportunity to convince the world of its 'zero-tolerance' against terrorism and its abettors. The previously maintained policy of 'denial' against the presence of Afghan Taliban on Pakistani soil has been part of Pakistan's well known and often reiterated "Afghan Taliban policy". This particular stance also makes up for an important component of state's National Security since it helped Pakistan garner some level of trust and confidence regarding its genuine intentions to snuff out all terrorist elements and insurgent groups. However, it will not be incorrect to say that this policy almost faced a jarring setback owing to the recent 'public admittance' by Sartaj Aziz about the presence of Afghan Taliban leadership in Pakistan where they have been 'officially' provided 'safe haven' by the government inclusive of necessary emergency and medical facilities.⁵¹

One can't help but feel a sense of shock and confusion as to why there was a need for such rhetoric and what made a high profile serving official to issue such a statement at a time when the odds against the success of ongoing Afghan peace process are already quite high. It is believed that rhetoric of any kind, be it a verbal or a written statement, is central to politics. Even in the time of physical engagement, combat or war between the states, a parallel course of rhetoric is always a useful technique to ensure and fortify one's own position. In fact 'rhetorical maneuvering' is considered critical for the success in political disputes. Therefore, diplomatic policies in form of verbal and written statements are an essential activity that states are constantly engaged with since it is a never ending process. The major purpose behind indulging in this act at the state level is to ascertain the national security objectives,

⁵⁰ Abubaker Siddique, "Aziz Admits Pakistan Housing Afghan Taliban Leaders", *Dawn*, March 3, 2016, accessed May 18, 2016, <http://www.dawn.com/news/1243093>

⁵¹ "Afghan Taliban Leadership in Pakistan, Admits Aziz", *Dawn*, March 3, 2016, accessed May 26, 2016, <http://tribune.com.pk/story/1058595/afghan-taliban-leadership-is-in-pakistan-admits-aziz/>

hence it should always be in line and consistent with the state's national security. These are the basic guidelines and the usual practice known to all in the policy making echelons and it is expected of them that they adopt a careful disposition in speech and action, which unfortunately was lacking in this particular case.

One is left to wonder if that was an effort to make Pakistan appear “in control” of the peace process. If so, what kind of influence or control does Pakistan have over Taliban leaders where the political process has more often been in favor of Afghan Taliban who seem to be in control and have been using their influence against Pakistan in full advantage, most of the time sabotaging the peace efforts. It also makes one contemplate as to why thus far Pakistan has not been able to strongly influence the Afghan Taliban insurgents despite having the capability to do so as per Sartaj Aziz.

Also it is to be kept in mind that there are rifts within the Taliban leadership and there is a big number which is either opposing or not ready to be part of the peace process. It is that particular faction within Taliban leadership which Pakistan needs to have some control over otherwise it does not merit a bragging. Pakistan is already an unfortunate victim of malevolent propaganda having been accused of and tagged as “Taliban sympathizer” by the ill meaning neighboring and Western states. Unfortunately the government has failed to come up with any response to it. There is a need for a strong rhetorical rebuttal rather than the meek admittance of these accusations just for the sake of coming across as “influential”. Despite claiming to have influence over a key actor in the Afghan peace process, the progression has been facing major hiccups. This could very well prove to be counterproductive, raising valid suspicions about the government's sincerity to the peace process. Hence the policy makers need to be extra cautious when issuing any statement be it a fact or otherwise, keeping in mind that it should never be made at the cost of hurting Pakistan's reputation. There must have gone in a lot of thinking before this statement was finally issued but it further presses for the dire need for a language focused mechanism

aimed at effective political influence, without which any political or diplomatic efforts would only be partially accoutered.

Likely Scenarios

Since the process has been left in lurch for now, it could be difficult to predict any future scenarios with a degree of certainty. However, generally speaking there could be two likely scenarios with regard to the future of the talks. One can stay positive about the talks since they had been able to bring the two adversarial Afghan sides together on the same table, something which was never witnessed before. But, there is still a long way ahead before the two sides could make substantial progress on the peace process. Primarily, there is a need for strong political will and seriousness on both the sides. So, one possibility is that the process will surely move forward despite all the odds put together, including, fragmentation within the Taliban, the ongoing downward spiral in Pak-Afghan relations, India's hostile designs to stall the process etc. But in this scenario the progress will continue no matter how slow and will take a long time to ultimately reach its successful conclusion. It will slowly but surely improve the security situation in the region.

The second likely scenario could be that the anti-peace talks faction of Taliban will be able to hack the whole process and put a complete end to any further progress. There is a considerable number of Taliban who are not in favor of the talks with the Afghan government and who also view Pakistan's efforts as some sort of ruse, hence are quite skeptical. In such a case the talks do not hold any future and will be doomed to failure. Closely linked with this is another factor that the Afghan government finds most of the demands put forward by the Taliban, as unacceptable. There hasn't been much flexibility in the stance of Taliban who have been quite rigidly claiming their right. The hard positions never help in achieving a compromise. The capturing of Kunduz by Taliban also shows that they want to keep exploring the military option to gain strong position in the negotiation process. The need here is to show certain flexibility in accommodating other's point of view so that a mutually

agreed solution could be reached. These are the lingering issues which need more dedication from both sides.

Recommendations and Conclusion

The success of this process lies in the logical and pragmatic decision-making by all the stakeholders including especially Pakistan. Although Pakistan is playing the role of a moderator and facilitator ensuring that it stays an Afghan owned and Afghan led peace process, this very fact makes the biggest responsibility fall on the shoulders of Pakistani leadership. There are certain objectives that a facilitator has to follow through. The prime objective of the moderator is to keep a close eye on the development of the process, paving the way and maneuver the discussion so that it keeps moving towards a successful culmination or at least closest to the required objective, intervene when there is a likelihood of emotions getting heightened, and most of all to keep the process flowing in order to avoid a complete deadlock. It is inevitable to face hiccups in the negotiation process and peace efforts. However, the most active part is actually played by the facilitator without directly influencing the outcome and developments. As a facilitator Pakistan should carry out continuous consultation with the stakeholders while making best use of its good offices, utilizing its political and diplomatic machinery. Therefore, the ultimate goal that Pakistan has to achieve is to convince the stakeholders to keep the negotiation lines open.

In order to achieve this objective, Pakistan will need to win back the lost trust of Afghan government. In the present scenario, it will not serve any side to indulge in the blame game. Also Pakistan needs to be more cautious and needs to take rhetoric coming from Ashraf Ghani and Abdullah Abdullah very seriously. This is not to suggest that Pakistan should exhibit an equally toxic gesture. For instance if one evaluates Ashraf Ghani's statement that Pakistan and Afghanistan never shared brotherly relations⁵² in literal sense then a brotherly relations might

⁵² Arshad Saheen, "Ghani Says Pak-Afghan Ties Not Brotherly", *The Express Tribune*, September 29, 2015, accessed April 12, 2016, <http://tribune.com.pk/story/964171/ghani-says-pak-afghan-ties-not-brotherly/>

still have some margin for compassion and compromise, otherwise in state to state relations usually a realistic approach centered on pursuing one's own interests at the expense of the other is a preferred and justified line of action. Afghanistan surely would not provoke Pakistan to adopt a 'non-brotherly' stance and act apathetically towards millions of Afghan refugees settled on Pakistani soil. Hence Afghanistan should probably revisit its present approach while Pakistan definitely should demand a rational explanation of this statement from Afghanistan or take an initiative to clear the air out and win the trust back, as no side can afford to lose the other. Pakistan should also try to identify and make public all the possible factors which might have caused this 180 degrees change in Ashraf Ghani's behavior.

Having said all that, it is true that Pakistan needs to do some self-analysis too. Does the distinction between good and bad Taliban really work for Pakistan's national interests? It is clear that officially Pakistan has maintained that it will never allow, sponsor, and abet terrorism anywhere in any form. Then why did the peace efforts which started off on a positive trajectory seems to be ending up in skepticism? What really went wrong? It is convenient and sometimes logical too to put blame on India but this can't work every time. Both sides need to learn to take responsibility of their actions. While Pakistan needs to be more stringent when it comes to its position on Taliban and Haqqani group, Afghanistan should also stop putting all the blame on Pakistan and refrain from issuing irrational and irresponsible statements at international forums. Why should such sentiments be broadcasted and highlighted when the exploiters are waiting to get a chance to further spoil the situation? This might be seen by them as an open invitation to intercede and spew out anti-Pakistan sentiments in Kabul. Would not such assertions jeopardize the regional security situation? Afghanistan should seriously consider whether it can afford to pursue this whimsical and impulsive diplomacy.

As George Simmel very aptly put it in 1955 that International society is 'sewn together' by cross cutting conflicts.⁵³ Hence clashes are inevitable but how to recover from them and handle the situation amicably is the real test of nerves. The only solution to resolve distrust is through mutual concerted efforts. Also if the anti-dialogue factors in Afghanistan are not dealt with properly, the sustainability and progress on the peace process cannot be guaranteed. The future of the peace in Afghanistan will remain bleak with adverse effect for Pakistan too. A strong political will is required on both sides of the border, more on Afghan side to let the trust be cultivated. Otherwise all the stakeholders could be in for a long haul without much hope for the efforts to materialize successfully.

⁵³Lewis A. Coser, *The Functions of Social Conflict*, (New York: Routledge, 1956), p. 80.

India's Quest for Hegemony in the Indian Ocean

Sidra Khan*

Abstract

With India believing Indian Ocean as the Indian lake, Pakistan cannot stay oblivious to the advancements occurring in the region due to its India centric threat perception. Indian strategists today use a term “Modi Doctrine for the Indo-Pacific region”. The purpose of this doctrine is to project that Indian interests lie not only in the Western Pacific but also in the Indian Ocean region. Indian policy makers support the idea that India is not just a South Asian nation rather it is an international power that can manage the ascent of China in the global politics. Additionally, India continues to proceed with its anti-Pakistan arrangements and countering its vital nexus with China. Driven by extraordinary force development goals and competition with China, India is extending its naval military capability and security connections throughout the Indian Ocean. India is keen on building new alliances all over the globe. This study provides an analysis of India's sea based aspirations and arrangements in the Indian Ocean and finds that augmented Indian power in the Indian Ocean will be perilous for Pakistan's national security interests.

Key words: Indian Ocean, Hegemony, Security, Sea Line of Communications, Second Strike Capability.

Introduction

Geologically, India exercises sufficient control over Indian Ocean and carries the potential to turn into a dictating power in the region over the

*The author works for the Strategic Vision Institute, Islamabad.

long run. India considers that supremacy over Indian Ocean is a fundamental part of India's desire to achieve a great power status, as it has gigantic population, an enormous military/maritime power, and is making rapid progress to be one of the world's biggest economies. Many Indians think that India ought to be the sole authority in the Indian Ocean as the ocean and the state share the same nomenclature.¹

During the colonial period, India was the focus of British Empire² and following the huge gap of sixty years since independence, India is now gradually trying to develop itself as the major power of the world. Its ever growing worldwide financial and military force is driving it to look towards an extended strategic role in the region on the world stage. Indian Prime Minister Modi's government sees control over the Indian Ocean as fundamental to keeping the strategic circle of India over unfriendly powers.³

C. Raja Mohan in his article "Revealed: India's Master Plan for the Indian Ocean" has expressed as to how India views Indian prominence in the Indian Ocean region fundamental to its global power ambition, which is also India's long-term aspiration.⁴ In any case, most Indians would unequivocally dismiss the thought that India has any hegemonic desire in the Indian Ocean. They rather consider India as a well-disposed

¹David Brewster, "An Indian Sphere of Influence in the Indian Ocean?", *Security Challenges*, (Spring 2010):p.2, accessed at: <http://www.regionalsecurity.org.au/Resources/Documents/vol6no3Brewster.pdf> (June 16, 2016).

²David Brewster, "India's ocean: the story of India's bid for regional leadership", (New York: Routledge, 2014), p.1.

³David Brewster, "Modi builds India's sphere of influence in the Indian", *The Interpreter*, March 17, 2015, accessed at: <http://www.lowyinterpreter.org/post/2015/03/17/Modi-builds-Indias-sphere-of-influence-in-the-Indian-Ocean.aspx> (June 19, 2016).

⁴C. Raja Mohan, "Revealed: India's Master Plan for the Indian Ocean", *The National Interest*, accessed at: <http://nationalinterest.org/blog/the-buzz/revealed-indias-master-plan-the-indian-ocean-13198> (June 16, 2016).

police man that can manage security to the region and keep the undesirable external powers at bay.

The Indian Ocean was given its name by old and medieval geographers not because of Indian mariners ruled it but rather in light of the fact that it gave pathway to mariners from the Arabian Peninsula and from different nations towards the coast of India and to its wealth.⁵ India's yearnings to be a dominant power in the Indian Ocean can be traced back to the US' verdict in 2005 by the Bush administration to make India a global power and a strategic stabilizer against China's ascent.⁶ In the course of the most recent decade or so, India has effectively introduced itself as a cooperative security supplier in the Indian Ocean. However, India additionally has a tendency to have a hierarchical view of the global framework, which might have negative consequential results for the region. The rise of India as a noteworthy monetary and military power now can possibly change the whole character of the Indian Ocean. In the event of India being successful in its aspirations, it will be a historical achievement where a littoral state will be the dominating force for the first time.

There is also a critical probability that the Indian Ocean will turn into a theater of keen importance for world powers due to disagreements between India and China, the two rising powers of Asia. India's goal to emerge as a major power in the Indian Ocean may not be compatible with China's key objectives particularly, which indeed is to secure its Sea Line of Communications (SLOC) to the Middle East.⁷ It is believed that Indian Ocean is going to be the focal point of security dilemma in which any action by China and India to improve their own security will create greater insecurity for the others. The US, which has been the

⁵Asif Ezdi, "India's string of pearls"; The News, March 23, 2015, accessed at : <https://www.thenews.com.pk/print/30802-indias-string-of-pearls> (June 16,2016).

⁶Ibid.

⁷S.A.K. Madanayaka, "China, India and the Balance of Power in South Asia: with Reference to Sri Lanka's Position" Department of Economics, University of Kelaniya, (Spring 2016): p.12, accessed at: [http://repository.kln.ac.lk/xmlui/bitstream/handle/123456789/12069/journal1%20\(1\).196-199.pdf?sequence=1](http://repository.kln.ac.lk/xmlui/bitstream/handle/123456789/12069/journal1%20(1).196-199.pdf?sequence=1) (June 18, 2016).

transcendent force in the Indian Ocean and will probably remain so for the coming decades, will progressively influence the balance between the two rising forces. The tussle between these three powers, both inside and outside the Indian Ocean will determine the strategic stability in Indian Ocean in the near future.

Maritime rivalry with China has been a vital component in driving India's key desires in the Indian Ocean. While the Indian Navy's quick targets include countering Pakistan and achieving control over India's selective maritime zone, China's potential to extend maritime force into the Indian Ocean has turned into its main long term wellspring of concern. In the course of most recent decade, India has extended its security associations with numerous states throughout the Indian Ocean, with specific spotlight on the choke points of the Mozambique Channel in the southwest Indian Ocean, the Persian Gulf in the northwest and the Malacca Strait in the upper east.⁸

The progressions in financial approaches, political mindset, and effective discretion have empowered India's articulation towards its desire for ruling the Indian Ocean. Besides, its maritime development has likewise been bolstered by the globalization.⁹ Moreover, the enhancing Indo-US relationship since 9/11 has empowered India to jump forward; establishing more friendly economic, political and security association with the US in the Indian Ocean and additionally in Asia Pacific region. India also wishes to fortify its regional/worldwide status, owing to its huge populace, the economic development and strategic force modernization. Therefore, it highlights the attributes of being the largest democratic government, secularism, rapid improvement/modernization and peaceful concurrence as the reasons. However, above mentioned Indian

⁸David Michel and Russell Sticklor, "Indian Ocean Rising: Maritime security and policy Changes", *Stimson Centre*, (Spring 2008): pp .12-16, accessed at: https://www.stimson.org/sites/default/files/file-attachments/IOR_chapter1_1.pdf (June 17, 2016).

⁹A. Z. Hilali, Cold War Politics of Superpowers in South Asia, *The Dialogue*, accessed at: http://www.qurtuba.edu.pk/thedialogue/The%20Dialogue/1_2/4_Mr.%20Hilali.pdf (June 19,2016).

attributes are challenged widely by a range of variables; the population explosion, the ethnic, religious and federal level tribulations, immense human security issues and the rise of China at one end and arch rival Pakistan on the other end of the power struggle. With a specific goal to accomplish its great power policy and huge financial development, it considers Indian Ocean as exceptionally basic and essential to its national interests.¹⁰

India's Security Concern in Indian Ocean

Since India enjoys a focal position in the Indian Ocean due to its large naval force in the region, this reality has a significant impact on India's maritime security environment. According to K .M Oannikar, "India's life line is packed within the Indian Ocean, India's sovereignty relies upon the autonomy of the water surface and no mechanical advancement, no business development, and no stable political structure is feasible for India unless her shores are secured".¹¹

A recent report by India's Defence Ministry stated, "India's geostrategic location is present both in mainland Asia and additionally in the Indian Ocean locale."¹² From India's point of view, key security contemplations incorporate an easy access to the Indian Ocean for the navies of the world's most powerful states; the huge Islamic populaces around the coastline of the Ocean and in its neighbourhood; the oil abundance of the Persian Gulf; the proliferation of conventional military force and atomic weapons among the region's states; the significance of major straits for Indian Ocean security; and the historical inclination of mainland Asians

¹⁰Khalid Chandio "Major Powers' Interests in Indian Ocean: Challenges and Options for Pakistan" *Islamabad Policy Research Institute*, (Autumn 2014): pp. 3-4, accessed at: <http://www.ipripak.org/major-powers-interests-in-indian-ocean-challenges-and-options-for-pakistan/#sthash.g81TVhok.dpbs> (June 17, 2016)

¹¹*Foreign Policy Research Centre New Delhi*, "India-Nepal Relations", (Autumn 2009): p.9, accessed at: <http://www.fprc.in/Pragya-NEPAL-19.pdf> (June 17, 2016).

¹²Donald L Berlin, "India in the Indian Ocean", *Naval War College Review*, (Spring 2006): pp. 8-10, accessed at: <https://www.usnwc.edu/getattachment/cc7b0300-af3a-47be-99c4-4dd3cb9c801a/India-in-the-Indian-Ocean---Berlin,-Donald-L-> (June 18, 2016).

Geographically, India thinks that its security will be best guaranteed by improving its security perimeter that includes the Indian Ocean as well. No doubt, New Delhi sees the Indian Ocean as its own territory, the world's only area and sea named after a solitary state. That helps India pose a dominating role in the region.¹³ It is similar to what the US set out to do in North America and the Western Hemisphere at an early time during the US rise of power.¹⁴ The US' foreign policy all through the nineteenth century had only one significant objective: accomplishing authority in the Western half of the globe.¹⁵

Majority of the Indians believe that the security perimeter of India ought to reach from the Strait of Malacca to the Strait of Hormuz and from the African coast to the Australian Western coast.¹⁶ For some Indians, the emphasis is on the Northern Indian Ocean, yet for others the domain incorporates even the Indian Ocean shorelines of Antarctica.¹⁷ An Indian researcher claims that a rising India will attempt to set up its dominance simply like the other rising forces have done subsequent to Napoleonic times, with long haul objective of accomplishing dominant power status.¹⁸ Moreover, with the US endowment, Modi Government now has the boldness to project itself as a challenger to China's advancements into the Indian Ocean and hedge the long-standing dispute on Sino-Indian border rivalry.

¹³Azra Naeem, "The Honeymoon Is Over: Maldives as a Growing Security Threat in the Indian Ocean", *Irish Studies in International Affairs*, (Spring 2015): pp. 99-119.

¹⁴George. Friedman, "The Geopolitics of the United States, Part 1: The Inevitable Empire", Stratfor, (2016): p.4, accessed at: <https://www.stratfor.com/analysis/geopolitics-united-states-part-1-inevitable-empire> (June 18, 2016).

¹⁵*Ibid.*, p. 3.

¹⁶Fatima, Qamar, and Asma Jamshed. "The Political and Economic Significance of Indian Ocean: An Analysis." *South Asian Studies*, (Spring 2015): pp. 19-20, accessed at: http://pu.edu.pk/images/journal/csas/PDF/5%20Qamir%20Fatima_30_2.pdf (June 18, 2016)

¹⁷"India to commission third research station in Antarctica," *The Hindu*, November 7, 2011, accessed at: <http://www.thehindu.com/sci-tech/science/india-to-commission-third-research-station-in-antarctica/article2606767.ece> (18 June, 2016).

¹⁸David Brewster, "*India's ocean: the story of India's bid for regional leadership*", (New York: Routledge, 2014), p.1

Nonetheless, during Modi's visit to Indian Ocean states, he has carefully avoided both naming China and Gwadar port to enhance better relations with the other littoral states.¹⁹

India's uneasiness about the threats postured by Pakistan in the Indian Ocean, is one of the significant worries of the region. India's naval doctrine highlights that the developing fundamentalist religious/jhadi militancy is going to influence the general security environment in the Indian Ocean Region.²⁰ In the same vein, Lal Krishna Advani, senior leader of BJP proclaimed that the epicentre of the world terrorism lies in India's immediate neighbourhood.²¹

Pakistan's View of Security in the Indian Ocean

One could contend that a noteworthy geographic development of Indian influence can anytime occur in the Indian oceanic area. As Rajiv Sikri, a former Secretary in the India's Foreign Ministry remarked, "If India tries to be a dominant power, then the main bearing in which India's key impact can spread is over the oceans. In each other bearing there are formidable constraints."²² India remains to be the most crowded state in the Indian Ocean area and its focal position in the northern Indian Ocean has further added to its convictions about India's desire to control its eponymous sea. As indicated by a few, there is presently an entrenched conviction among the Indian vital groups that the Indian Ocean is, or ought to be, "India's Ocean."²³

¹⁹Harsh V. Pant "Modi's outreach to three Indian Ocean", *The Japan Times*, March 22, 2015, accessed at:

<http://www.japantimes.co.jp/opinion/2015/03/22/commentary/world-commentary/modis-outreach-to-three-indian-ocean-states/> (June 17, 2016).

²⁰V. Adm Khan Hasham Bin Saddique, "Pakistan Navy as a Stabilizing Force in Indian Ocean", *Hilal Magazine.*, (2015): pp. 35-37, accessed at: <http://hilal.gov.pk/index.php/layouts/item/670-pakistan-navy-as-a-stabilizing-force-in-indian-ocean> (June 19, 2016).

²¹The Daily Star: "Pakistan Epicentre of global terror: Advani", *The Daily Star*, June 12, 2003, accessed at : <http://archive.thedailystar.net/2003/06/13/d30613430270.htm> (June 19, 2016).

²²Rajiv Sikri, "*Challenge and Strategy: Rethinking India's Foreign Policy*", (SAGE Publications: New Dehli, 2009), p. 250.

²³David Brewster, "An Indian Sphere of Influence in the Indian Ocean?" *Security Challenges.*, (Spring 2009): p. 2, accessed at:

The impression given by the Indian Navy is as it is the only security granter not only in the territory surrounding India but also from Red Sea to the coasts of Singapore.²⁴ As indicated by one spectator: New Delhi views the Indian Ocean as its patio and hopes it to add to an overall Indian capacity, making it the pioneer and the dominating force in the region.²⁵

Pakistan being one of the key states in the Indian Ocean littoral area has relied on the sea access for its trade and economic activities. Pakistan's port city (Karachi) is very vulnerable to the dangers emanating from the Indian Ocean until the Gwadar port becomes operational. However, significance of the sea segment has never been acknowledged in Pakistan and there is an absence of foresight in Pakistan's sea precept. There has not been given much priority to the seaboard, as more stress is dedicated to Pakistan's land based borders, which is the main concern of the Pakistani leadership for the security and economic prosperity of the nation. Pakistan's ninety-five percent international trade and greater part of petroleum oil imports are done through sea.²⁶ The region has wealth of financial possibilities such as fishery, minerals/hydrocarbons and other seabed assets.²⁷ Gwadar carries the potential to turn up as a noteworthy business centre and transshipment port for the locale. It is therefore to Pakistan's greatest concern that no danger radiates from the Indian Ocean and it remains a zone of peace. Gwadar port's centrality to the arranged China Pakistan Economic Corridor (CPEC) will further transform the power dynamics of the Indian Ocean that has raised apprehensions in the US, India, and even Iran's strategic circles.

²⁴<http://www.regionalsecurity.org.au/Resources/Documents/vol6no3Brewster.pdf> (June 16, 2016)

. David. Scott, "India's Grand Strategy for the Indian Ocean: Mahanian visions." *Asia-Pacific Review*, (Spring 2010): Pp 97-129, accessed at: <http://www.tandfonline.com/doi/abs/10.1080/13439000601029048> (June 19, 2016).

²⁵Ibid., pp. 97-129.

²⁶Sajid Hussain, Dr. Muhammad Ayaz Khan, "Role of Maritime Sector in Pakistan's Economic and Security and Development", *Pakistan Annual Research Journal*, (Spring 2014): p.17, accessed at:

http://www.pscpesh.org/PDFs/PJ/Volume_50/05_Hussain.pdf (June 19, 2016)

²⁷Ibid., pp. 10-12.

India even went to the extent of helping Iran in upgrading/advancement of Chabahar port to undermine financial capability of Gwadar port.²⁸ The US is specifically weary of China developing CPEC around the Indian Ocean. Therefore, Pakistan shall face extensive challenges while it chooses to work in its national interests residing in the Indian Ocean. Simultaneously, keeping a balanced foreign policy and relations with other states and international powers will be important as Pakistan continues to reap maximum economic benefits at the same time ensuring its maritime security.

Historically, Pakistan has been ignoring its sea security area and has not given much thought to the maritime capability of its 1050 km coastline situated in the Indian Ocean.²⁹ Pakistan totally relies on the ocean courses for its exchange/economy and depends on foreign/shipping for both its imports and exports. Pakistan's publically owned National Shipping Corporation supports only 5% out of the total trade carried out by Pakistan.³⁰ This makes Pakistan helpless and vulnerable to aggressive move against the Sea Lines of Communication (SLOC) to disturb the movement of carrier ships and sea activity in the region. The defence of Pakistan's economy, exchange on sea course, and dependence on external transporters/shipments might be jeopardized by plunging into a financial decline in a very short time. The national decision makers unequivocally consider that the maritime/coastal defence has been and would be a fringe to any Indo-Pak struggle. The overwhelming perspective was that the destiny of the war would be chosen over land and to accomplish a stalemate. Additionally it was

²⁸ "PM Modi in Iran: India signs pact to develop Chabahar Port," *The Times of India*, March 23, 2016, accessed at: <http://timesofindia.indiatimes.com/india/PM-Modi-in-Iran-India-signs-pact-to-develop-Chabahar-port/articleshow/52398453.cms> (June 19, 2016).

²⁹ Khalid Chandio "Major Powers' Interests in Indian Ocean: Challenges and Options for Pakistan" *Islamabad Policy Research Institute*, March 2, 2015, accessed at: <http://www.ipripak.org/major-powers-interests-in-indian-ocean-challenges-and-options-for-pakistan/#sthash.g81TVhok.dpbs> (June 17, 2016).

³⁰ Garofano, John, and Andrea J. Dew, eds. "*Deep currents and rising tides: The Indian Ocean and international security*," (Washington: Georgetown University Press, 2013), p. 234.

likewise trusted that clashes between India and-Pakistan would not linger on because of the pressure from the global powers , which will wipe out the risk of Indian coastal attack and hence the maritime barricade by the Indians was not considered too genuine.³¹ However, naval planners constantly have been pointing at Pakistan's vulnerability as Pakistan's all assets were housed at Karachi port, in such circumstance a small port at Ormara 120 nautical miles west of Karachi has given some relief to Pakistan.

The Pakistan's administration knew that India could battle an extended fight to stifle Pakistan's sea movement along these lines undermining the whole war effort. The Indian Navy, despite the fact that they, in the initial phases of development compared to other countries already existing in Indian Ocean, has been progressing in terms of its capability compared to Pakistan.³² Kargil denoted the first geologically a limited crisis since the last conflicts, which saw India organizing a maritime barricade of Karachi.³³ The proposition ought to be self-evident; India had understood that its naval force had the quality to exploit the vulnerability of its Pakistani counterpart to keep its only port safe. Kargil issue hinted that if nuclear deterrence has improved the probability of constrained war; Pakistan might utilize the space short of nuclear threshold of India and in this manner India may be tempted to abuse its maritime predominance that would kill Pakistani advantages at an early phase of conflict. The latest naval weapon systems and

³¹Mishra, Sitakanta. "Deterrence Stability and Escalation Control in South Asia", *Strategic Analysis*, (Autumn 2014): pp. 755-757, accessed at: http://www.idsa.in/strategicanalysis/38_5/DeterrenceStabilityandEscalationControl (June 20, 2016).

³²Franz-Stefan Gady, "Does Pakistan Have a Sea-Based Second-Strike Capability?", *The Diplomat*, March 13, 2015, accessed at :<http://thediplomat.com/2015/03/does-pakistan-have-a-sea-based-second-strike-capability/> (June 19, 2016).

³³Global Security, "1999 Kargil Conflict", *Global Security*, November 7, 2015, accessed at: <http://www.globalsecurity.org/military/world/war/kargil-99.htm> (June 20, 2016).

technological advancements, which are vital for a sea based nuclear capability, are beyond Pakistan's technical and financial capacity and thus are not been addressed seriously.³⁴

Strategic Implications for Pakistan in Indian Ocean

External military danger and security recognitions for Pakistan are essentially connected to India.³⁵ Dominance of India over Pakistan in the maritime aspect might bring about a barricade of Karachi port, which could severely affect Pakistan's economy and with that the war-fighting ability in constrained time. Keeping in perspective the given role of Pakistan Navy, one can without much of a stretch deduce the security sensitivities of Pakistan's economy/vitality/prerequisites. Owing to the increased conventional disparity between India and Pakistan, the nuclear deterrence in South Asia is greatly stressed.³⁶ This is all the more so in light of the fact that between the two naval forces the equation tilts towards India.³⁷ Whatever subjective edge Pakistan Navy had in the past has dissolved fundamentally because of its stagnated advancement since mid 1990s.³⁸ Owing to the US sanctions and the drop in the financial development during that period, the Indian Navy has advanced

³⁴Michael Krepon, "Pakistan's Nuclear Strategy and Deterrence Stability", *Spearhead Research*, (Spring 2012): p.19, accessed at: http://spearheadresearch.org/wpcontent/uploads/2012/12/Pakistan_Nuclear_Strategy_and_Deterrence_Stability.pdf (June 20, 2016).

³⁵Mian Khurshid Mahmud Kasuri, "Pak-India Relations: Security Dynamics and Future Scenario", *Institute of Policy Studies*, (Spring 2009): p. 23, accessed at: <http://www.ips.org.pk/security-and-foreign-policy/1056-pak-india-relations-security-dynamics-and-future-scenario> (June 19, 2016)

³⁶Shafei Moiz Hali "Indian Military Expansion 2020 – Implications for Pakistan's National Security", *CQ Criterion Quarterly*, March 4, 2013, accessed at: <http://www.criterion-quarterly.com/indian-military-expansion-2020-implications-for-pakistan%E2%80%99s-national-security/> (June 20, 2016).

³⁷Shafei Moiz Hali "Indian Military Expansion 2020 – Implications for Pakistan's National Security", *CQ Criterion Quarterly*, March 4, 2013, accessed at: <http://www.criterion-quarterly.com/indian-military-expansion-2020-implications-for-pakistan%E2%80%99s-national-security/> (June 20, 2016).

³⁸*Ibid.*, p. 7.

quickly in quantity and quality due to consistent monetary development and the resulting increment in defence spending.³⁹

The goals behind the India's maritime advancement are obvious; it seeks to be the sea power in the Indian Ocean because of its hegemonic plans. With its economy turning out to be steadier and the increase in demand of resources because of population explosion, India will move towards a notable maritime presence.⁴⁰ Even more imperative to notice is the way India is advancing to accomplish a sea based second-strike ability, apparently to seek independent foreign policy.⁴¹ This development will have a destabilizing impact on the military balance and will have strategic ramifications due to the lack of equal advancements by Pakistan. Considering the speculation that a conventional war between India and Pakistan cannot be completely precluded in the future, an overwhelming conventional asymmetry between the two naval forces can be a very destabilizing variable.⁴² For Pakistan, this may become instrumental in decreasing the capacity to retain/support a traditional blow and may even bring down the atomic threshold. That is to say that a conventionally weaker side would arrive at the atomic threshold sooner than its foe would. This might likewise bring about genuine ramifications for Pakistani leaders who might be tempted to employ atomic weapon. In addition, an atomic power, equipped with deterrence capabilities must have the capacity to survive a first strike intended to keep the other power/ nuclear state from striking back. India has achieved a dependable second-strike capability, which has

³⁹Ibid., p. 8.

⁴⁰IPS Study "Pak-China relations in the 21st Century: Regional situation, Security, Economic & Trade Cooperation", *Institute of Policy Studies*, (2014): pp. 2-6, accessed at: <http://www.ips.org.pk/global-issues-and-politics/182-pak-china-relations-in-the-21st-century-regional-situation-security-economic-a-trade-cooperation> (June 18, 2016).

⁴¹Dawn, "Pakistan has second-strike capability against India", *Dawn*, September 17, 2015, accessed at: <http://www.dawn.com/news/1207494> (June 20, 2016).

⁴²Sitakanta Mishra, "Deterrence Stability and Escalation Control in South Asia," *Strategic Analysis*, (Spring 2014): Pp, 755-757, accessed at: http://www.academia.edu/8355275/Deterrence_Stability_and_Escalation_Control_in_South_Asia_Book_Review (June 18, 2016).

destabilized the nuclear equation of the region and has tilted the deterrence equilibrium towards the Indian side.⁴³ In such a situation Pakistan has to work on acquiring a dependable sea based capability. Absence of a comparable ability by Pakistan might make pre-emption more probable; leaving Pakistan with the only option to gain a sea based second-strike capacity keeping in mind the end goal i.e. to keep up a reliable / credible nuclear deterrence.

India would have the capacity to bring about monetary strangulation of Pakistan by essentially blocking sea courses/ports and consequently modifying the results of the war on land. In this manner, the security ashore and in the air will be traded off by the shortcomings of Pakistan Navy to dissuade Indian naval force's hostile stance. From 21-29 June 1999, India deployed its naval war machines in a forward stance. Expecting economic barricade, the Pakistan Navy escorted national oil tankers and initiated observation forays along the coast.⁴⁴

Pakistan's hope with the Gwadar port would help solves its security dilemma while providing an extremely lucrative economic opportunity but should not imply that the process is likely to be straightforward. By bringing China in the Indian Ocean, Pakistan has activated balance of power politics that will prompt other relevant states to pursue contradictory policies. Numerous existing relationship equations will be effected due to the Gwadar port. The China-Indian equation, their improved ties, and the Indian quest for a blue water naval force are in clash with China's intentions to deny anyone hegemony in the Indian Ocean.⁴⁵ Therefore, India expressing its discomfort with China's

⁴³“Pakistan has second-strike capability against India”, *Dawn*, September 17, 2015, accessed at: <http://www.dawn.com/news/1207494> (June 20, 2016).

⁴⁴Zafar Nawaz Jaspal, “The Indo-US Strategic Relationship and Pakistan Security”, *South Asian Strategic Stability Institute*, (Autumn 2007): p.10, accessed at: <http://www.sassi.org/wp-content/uploads/2012/05/RP-9-Zafar-Nawaz-Jaspal-The-Indo-US-Strategic-Relationship-Pakistans-Security-Dec-2007.pdf> (June 19, 2016).

⁴⁵Dan Blumenthal. "Will India Be a Better Strategic Partner than China", *China File*, (2007): pp. 327-366, accessed at: <http://www.chinafile.com/library/reports/will-india-be-better-strategic-partner-china> (June 19, 2016).

presence and acknowledging that the Gwadar port presents strategic challenges to its naval ambitions, should not come as a surprise.

In spite of the fact that India might have lost its capacity to undermine Pakistan's naval capability both because of Pakistan's port at Gwadar and China's presence in the vicinity, it appears as if India is resolved to keep a check on China-Pakistan understanding.⁴⁶ With a specific end goal to undermine the financial prospects of the Gwadar port, India is helping Iran in renovating its Chabahar port.⁴⁷ Chabahar presents the quickest route for the Central Asian republics (CARs) to the sea; now that the US sanctions towards Iran have been relaxed, Chabahar could out shadow Gwadar to some degree. Pakistan is envisioning Gwadar port as the transit point from CARs, the Gulf, and in addition to the East, however, Chabahar port might influence overwhelming economic advantages to Pakistan if it comes in competition with Gwadar Port. As for India, it has expanded its presence in Afghanistan as well and is playing a big role by developing and advancing the infrastructure in Afghanistan.⁴⁸ The aim is to sidestep Pakistan and build a connection up with the Western and the Central Asian states. From Pakistan's points of view, this sums up as de-facto encirclement by India to setup an alternate path to access the Western and Central Asian states for itself. Furthermore, India will urge all its allies to utilize Chabahar port instead of Gwadar and subsequently hose Chinese financial enthusiasm for the area.

The US has shown distress over China-Pakistan relationship and China's presence in the Indian Ocean as the US has always intrigued to build up its own power in the region. On the contrary, pentagon has as of now thrown questions over Chinese goals and claims that Beijing is spying from Gwadar to monitor the ship activity through the

⁴⁶Munir Akram, "India's Great Power Game", *Dawn*, September 28 , 2014, accessed at: <http://www.dawn.com/news/1134772> (June 20, 2016).

⁴⁷Ibid.

⁴⁸Garofano, John, and Andrea J. Dew, eds., "*Deep currents and rising tides: The Indian Ocean and international security*", (Washington: Georgetown University Press, 2013), p.141.

Strait of Hormouz and the Arabian Sea.⁴⁹ The US is additionally seeking aggressive policies towards CARs in an offer to get hold of oil resources. China is likewise concerned about the US position in the region as China has shown its dismay when Pakistan provided an air base to the US close to the Gwadar at a time the port's deal was being agreed upon.⁵⁰ The China –US relationship has also perplexed Pakistan, where on one hand it tends to favour China but at the same time cannot stand to disengage itself from the US totally.

Pakistan also has to prepare itself for the possible response if in case the US asked to set up a maritime base or listening post at Gwadar. On one hand, by keeping China in its camp, Pakistan could feel tempted to deny US any favours while on the other hand, it may disturb China by Pakistan committing and acceding to the US demands. Thus, deft discretion will be required to adjust the Sino-US enthusiasm at Gwadar. The circumstances get further complicated because of Afghanistan factor. The US' presence in the region and Pakistan's security vis-a-vis Afghanistan has added to the many-sided consequences. From Pakistan's perspective, it is vital that Afghanistan permits exchange with CARs through Gwadar, as opposed to Chabahar in Iran. Gwadar's monetary advantages are dependent on Afghanistan's stability since it provides the main route to CARs.⁵¹ Pakistan knows that if Afghanistan stays troubled for long, it will largely undermine China's financial stakes and its efforts to protect Pakistan's vital and monetary interests.

⁴⁹“China Builds up Strategic Sea Lanes” *The Washington Times*, accessed at: <http://www.washingtontimes.com/news/2005/jan/17/20050117-115550-1929r/> (June 20, 2016).

⁵⁰Garofano, John, and Andrea J. Dew, eds. “*Deep currents and rising tides: The Indian Ocean and international security*”, (Washington: Georgetown University Press), p.54.

⁵¹Saima Perveen and Jehanzeb Khalil, "Gwadar-Kashgar Economic Corridor: Challenges and Imperatives for Pakistan and China." *Journal of Political Studies*, (Winter 2015), p.351, accessed at: http://pu.edu.pk/images/journal/pols/pdf-files/1%20-%20SAIMA_v22_2_wint2015.pdf (June 19, 2016).

Economic Interest of Pakistan in the Indian Ocean

The sea lines of communication from the Far East and the Red Sea may bolster Pakistan's sea exchange. The Persian Gulf, where much of Pakistan's oil passes through, serves as Pakistan's energy lifesaver. Two-third of Pakistan's oil imports, approximating US \$10 billion begins from the Gulf district and flows right across the Indian Ocean.⁵² More than 95 percent of Pakistan's exchange by volume and 88 percent by worth are transported via ocean.⁵³ Because of the peculiar location of Indian Ocean and the predominant geo-political environment, reliance on the routes through the ocean, for the exchange of goods and trade, is of utmost importance for the survival of Pakistan. With the culmination of Gwadar deep-sea port soon, Pakistan's exchange volume in coming years is liable to rise.⁵⁴

The imperative sea borne exchange must be secured against larger maritime threat of a growing and developing Indian Navy. Keeping in mind the end goal to flourish, create and secure Pakistan's trading lines, in such circumstances Pakistan's ports and sea routes must remain operational, secure and serene. Interruption of seaborne trade in any future conflict with India, which as an unambiguous operation imagined by the Indian Navy can have negative influence on the delicate economy of Pakistan. The financial strangulation of Pakistan by India has been characterized as one of the limits that would or could prompt Pakistani nuclear reprisal, yet there is something, which justifies watchful contemplations. Without very well developed trading ships under national banner, which in the event that Pakistan undertakes just 5 percent of the aggregate trade volume, in such a circumstance Pakistan will face serious challenges.

⁵²Qamar Fatima, and Asma Jamshed. "The Political and Economic Significance of Indian Ocean: An Analysis." *South Asian Studies*, (Spring 2001): p. 73, accessed at: http://pu.edu.pk/images/journal/csas/PDF/5%20Qamir%20Fatima_30_2.pdf (June 19, 2016).

⁵³Ibid., p. 10.

⁵⁴"Pakistan's Exports will Increase After Completion of Gwadar Port: Ahsan", *Daily Times*, March 26, 2016, accessed at: <http://dailytimes.com.pk/pakistan/25-May-16/pakistans-exports-will-increase-after-completion-of-gwadar-port-ahsan> (June 23, 2016).

It also can seriously influence the national economy while keeping the onus of progress in the existing status quo on Pakistan.

Pakistan's Nuclear Program and Pakistan Navy

Pakistan's threat perception stems from India and that is why Pakistan's atomic strategy is completely India-driven.⁵⁵ Pakistan's nuclear deterrence is coordinated against a conceivable Indian nuclear attack but also a conventional one too. Pakistan's nuclear strategy highlights the support of an atomic deterrence, preservation of a first strike option, and dependence on land and air strategic forces implied. Notwithstanding, essential sea based conveyance means are absent in this strategy.⁵⁶

In August 1999, India unequivocally expresses its expectation to build up a triad of atomic strengths.⁵⁷ The Indian triad is not only alarming for the Pakistan Navy, it likewise served as an indication of concern for land based conventional forces. For sure, the strongest argument here is that an Indian triad would require a coordinated reaction by Pakistan to keep its own particular deterrence reliable. For Pakistan, it was clear that both land and air based capability would not suffice and naval force must be taken aboard to guarantee deterrence against Indian animosity. In the year 2001, Pakistan announced four broad conditions under which it may turn to the threat of atomic weapons as portrayed by Lieutenant General Kidwai of the Strategic Planning Division: a 'space threshold', should India attack Pakistan and overcome vast piece of its territory; a "military edge" if India demolishes major portion of Pakistan's territory or air force; a "financial edge"

⁵⁵Pervez Hoodbhoy , “Win Pak-India nuke war?”, *Dawn*, October 31, 2015, accessed at: <http://www.dawn.com/news/1216449> (June 21, 2016).

⁵⁶Ibid.

⁵⁷Rizwana Abbasi, “A Strategic Shift in Indo-Pak Nuclear Strategy: Implications for Regional Stability”, *IPRI Journal*, (Summer 2015): p.23, accessed at: <http://www.ipripak.org/wp-content/uploads/2015/10/1-art-s-151.pdf> (June 17, 2016).

if India pushes Pakistan into political destabilization or huge scale inner subversion.⁵⁸

The “military threshold” in Pakistan's atomic judgment implies the decimation of an extensive segment of Pakistan's -aviation based armed forces as an instigation to go atomic. Nevertheless, the devastation of maritime strengths remains unstipulated.⁵⁹ In that manner, it can be concluded that national security policy gives low priority to the naval forces or perhaps the obliteration of maritime strengths is considered as monetary strangulation. In the present environment, the financial strangulation of Pakistan can be brought easy via sea. There also was non-appearance of any resistance/worry or remarks by US/worldwide groups towards the Russian help to India in the advancement of sea based atomic potential.⁶⁰ The late Indo-US nuclear deal has likewise not brought about any mayhem in the Nuclear Supplier Group and international community. The advancement on the Indian side and consequent hush by the global group gives Pakistan adequate motivation to either secure atomic submarines or build up its own.

Conclusion

The Indian Ocean has been primarily dominated by the US except the close proximity of Indian shores in the past decades. In any case, subsequent to the previous couple of years, the Indian Ocean, which has 30 littoral and hinterland nations, has turned into the most important zone of geopolitical movement. The oceanic routes of the Indian Ocean bore more than 80 percent of the world's oil exchange through its three important choke points particularly Straits of Hormouz, Straits of

⁵⁸ *Carnegie Endowment for International Peace*, “A Conversation with Gen. Khalid Kidwai”, March 23, 2013, accessed at: <http://carnegieendowment.org/2015/03/23/conversation-with-gen.-khalid-kidwai-pub-58885> (June 20, 2016).

⁵⁹ *Ibid.*,

⁶⁰ Petr Topychkanov, “Indo-Russian naval cooperation: Sailing high seas”, *Russia and India Report*, July 15, 2015, accessed at: http://in.rbth.com/blogs/2015/07/15/indo-russian_naval_cooperation_sailing_high_seas_44243 (June 19, 2016).

Malacca and Bab-el-Mandab Strait.⁶¹ Pakistan in spite of being key littoral state of Indian Ocean disregarded its significance and concentrated land based defensive policy. Notwithstanding, the scenario has now been changed drastically and today Pakistan needs to re-evaluate its sea security.

The prescience of prestigious historian and US geostrategic, Admiral Mahan, is turning valid in which he said, whoever has power over the Indian Ocean rules Asia.⁶² Indian Ocean is the focal point towards Western, Southern and South East Asia. It has great significance with regards to financial and energy network, being communicable to the Gulf and Middle East and other conflict prone zones attracting both regional and extra regional forces to dominate the Indian Ocean district. As the world is rapidly turning from unipolar to multipolar, no country can stay negligent of the advancement in the Indian Ocean. The whole world's forces have subsequently positioned considerable military powers in the Indian Ocean.⁶³

First among the battling forces is the US, as the sole power, it is keen on keeping the SLOC and choke points open, it additionally needs to create an impact on the clashes of the littoral states. In addition to other things, the US is worried over Sino-Indian rivalries, Iran's atomic programme, China-Pak nexus and lastly the CPEC, which visualizes transforming Gwadar into a future trade centre point. Likewise, another constant worry is the ascent of Islamic fanaticism, such as, Daesh, apart from already rising conflicts in the Middle East. Essentially, the US requires that the Indian Ocean's SLOCs remain free and unencumbered. Additionally, from a strategic point of view, the US remains aware

⁶¹Sergei DeSilva-Ranasinghe, "Why Indian Ocean Matters", *The Diplomat*, March 2, 2011, accessed at: <http://thediplomat.com/2011/03/why-the-indian-ocean-matters/> (June 19, 2016).

⁶²Khalid Chandio "Major Powers' Interests in Indian Ocean: Challenges and Options for Pakistan" *Islamabad Policy Research Institute*, March 2, 2015, accessed at: <http://www.ipripak.org/major-powers-interests-in-indian-ocean-challenges-and-options-for-pakistan/#sthash.g81TVhok.dpbs> (June 19, 2016).

⁶³Nilanthi Samaranayake, "The Indian Ocean: A Great-Power Danger Zone?", *The National Interest*, March 30, 2014, accessed at: <http://nationalinterest.org/feature/the-indian-ocean-great-power-danger-zone-10568> (June 18, 2016).

of the importance of the choke points that provide access to the Indian Ocean and, finally, is aware that this ocean could be a theatre of competition between China and India, two of the largest economic and military powers in Asia.⁶⁴

China, as Pakistan's partner, wants to project its influence in the Middle East, Africa and Europe and by some scholars, challenge significance of the US in the Indian Ocean region. China is thus working on two super ventures; one is to form a maritime silk route and the other an overland course that connects China with Central Asia and the Caspian Sea bowl.⁶⁵ Pakistan constitutes the key connection in each one of these projects especially the 3000 km undertaking to interface Xingjian area with Gwadar.⁶⁶ A stable Pakistan guarantees centrality in China's security and monetary point of view. India sees Indian Ocean region basic to its national interests. Hence India wants to spread its greater influence over the whole Indian Ocean to be able to turn itself into a prominent power in South Asia. India has shown major gestures to raise blue water naval force as well as building relations with the littoral states. It considers Pakistan to be a major obstacle in accomplishing its hegemonic destinations in the Indian Ocean region.

Pakistan's past clashes with India were conventional or land based,⁶⁷ however, today Indian naval force wants to counter Pakistan's supply

⁶⁴“The United States and the Indian Ocean Region: A Case of Growing Interests”, *Future Direction international*, June 16, 2015, accessed at: <http://www.futuredirections.org.au/publication/united-states-indian-ocean-region-case-growing-interests/> (June 19, 2016).

⁶⁵Clarke, Michael. "China's Integration of Xinjiang with Central Asia: Securing a "Silk Road" to Great Power Status." *China and Eurasia Forum Quarterly*, (Spring 2006): pp. 89-111, accessed at: http://www98.griffith.edu.au/dspace/bitstream/handle/10072/22347/50986_1.pdf?sequence=1. pp. 89-111 (June 20, 2016)

⁶⁶Riaz Haq "Will Pakistan's Gwadar Become "Hong Kong West"?", *Haq's Musings*, March 1, 2015, accessed at: <http://www.riazhaq.com/2015/05/will-pakistans-gwadar-become-hong-kong.html> (June 20, 2016).

⁶⁷Christopher Clary, "What Might an India-Pakistan War Look Like?", *MIT Centre For International Studies*, (Spring 2012): p. 12, accessed at: http://web.mit.edu/cis/precis/2012spring/india_pakistan.html#.V5cqn9J97IU (June 21, 2016).

lines in the Arabian Sea. Pakistan's security targets hence require it to keep Indian naval forces from barricading Pakistan's trade from Arabian Sea and Indian Ocean. About 66% of its oil sways comes from the Gulf through the Indian Ocean.⁶⁸ In addition, Pakistan has a 990kms coastline and an Exclusive Economic Zone (EEZ) of 240,000sq Kms. Tragically Pakistan's policy makers have demonstrated absence of awareness with Pakistan's vulnerabilities in the Indian Ocean. In spite of its inability to project its maritime force in the Indian Ocean, yet it must procure capability to guarantee its oceanic assets, regional waters and continuous trade. Pakistan's Gwadar port is by design situated in the Indian Ocean area. Pakistan must guarantee that CPEC works regardless of Indian attempts at subverting the process. This China Pakistan Economic Corridor (CPEC) will resolve Pakistan's endemic security issue. By bringing China specifically into the Indian Ocean through Gwadar, it can be served as a game changer for Pakistan. It would open up boundless trading opportunities as well as help raise Chinese stakes and interests in guaranteeing Pakistan's stability.

⁶⁸Fatima, Qamar and Asma Jamshed. "The Political and Economic Significance of Indian Ocean: An Analysis.", *South Asian Studies*, (Autumn 2015): pp. 23-24, accessed at: http://pu.edu.pk/images/journal/csas/PDF/5%20Qamir%20Fatima_30_2.pdf (June 21, 2016).

Pak-China Defence and Strategic Relations: Emerging Global and Regional Dynamics

Maqbool Aslam Lashari*

Abstract

Since beginning in May 1951, the bilateral ties between Pakistan and China have generally been smooth and incremental with a sheer size of mutual trust and respect. Over the time the relationship between the two has evolved to a unique level where China and Pakistan are dubbed as all-weather friends and their relationship being 'deeper than oceans, higher than Himalayas, and sweeter than honey.' Starting with mere diplomatic acceptance of each other, the bilateral relations swelled over time to build a deep-rooted strategic partnership encompassing all aspects of geopolitics and geo-economics. Generally, changes at global level tend to affect relationships among states but in case of Sino-Pak relationship there has remained a sense of semblance and smoothness irrespective of any global or regional dynamics. This relationship is found and further cemented on the basis of a set of shared objectives and values and attainment of which is equally desired and pursued by each of the countries. Keeping this growing relationship in consideration, this paper attempts to examine different aspects of this relationship and the growing common ground for multifaceted cooperation in the view of a 'Peaceful rise of China' and emerging global and regional political and strategic dynamics.

*The author is an adviser to a senator, who is a member of various standing committees in Senate of Pakistan on strategic, political and domestic issues and is an M.Phil scholar at National Defence University, Islamabad.

Key Words: Deep-rooted, Geopolitics, Geo-Economics Strategic Partnership, Multifaceted Cooperation, Peaceful Rise, Strategic Dynamics.

Pakistan and China have enjoyed cordial and friendly relations from the onset when the two countries recognized each other in May 1951.¹ With the passage of time, the bilateral relationship became more inclusive to involve diplomatic, defence, economic and strategic cooperation. Pak-China friendly and close relationship is reinforced by the geographical contiguity with both countries sharing 510 km border in the north of Pakistan.² It is one of the fundamental principles of Pakistan's foreign policy to maintain cordial relations with its neighbours.³ China, on the other hand, has equally been receptive and reciprocal to Pakistan's friendly gestures. Sino-Pak relationship is based on mutual trust, mutual respect and shared security and economic interests.⁴ The bilateral relationship has sustained irrespective of the domestic, regional and global changes. Pakistan's foreign policy relating to China has been maintained by successive governments be it military or civilians at the helm of affairs. Moreover, the changing cycle of regional and global strategic contexts has ameliorated relationship between the two countries. It is against this backdrop that the Sino-Pak relationship has rightly been dubbed as deeper than oceans, higher than Himalayas and sweeter than honey.

Pakistan and China are situated in the geographical area that wields an immense significance in the broader geopolitical chessboard.

¹Kenneth, Lieberthal, "China and Pakistan: A deepening bond", *Council on Foreign Relations*, (March 2006).

http://www.cfr.org/publication/10070/china_and_pakistan.html

²Pakistan Foreign Policy, for full online text visit www.mofa.org.pk/mission/html (accessed April 10, 2016).

³Ibid, 2.

⁴Keylor, William R. *A World of Nations: The International Order since 1945*, (New York: Oxford University Press, 2003), 108.

In addition to the human resources, the area is also rich in natural material resources.⁵ Importance of this South West and East Asian region is maximized by the fact that it is also home to three nuclear states namely Pakistan, China and India. Just as the other regions of the world, this region is also characterized by border conflicts that resulted in various wars. Pakistan and India have fought three wars stemming out of territorial dispute over Kashmir.⁶ Similarly, China and India have also been at war with one another in 1962 over the border dispute.⁷ Pakistan, having an aggressive enemy at its eastern front, gives huge importance to a larger and more powerful China at its northern front.⁸ During the Cold war era, Pakistan matched growing Soviet-India cooperation by forging strong relationships with China and the United States.⁹

China-Pakistan Arms Transfer, 1979-92¹⁰

Year of Delivery	Weapon designation	Type	Receiving service	Quantity
1981	Hia-Ying-2	Ship to Ship missile	Navy	8
1981	Hia-Ying-2	Launcher	Navy	4
1981	Hegu Class	Fast attack Craft	Navy	4
1981-82	T-60	Tank	Army	50
1982-83	Type 82 122	MRL	Army	50

⁵“Pak-China relations in the 21st Century: Regional situation, security, economic & trade cooperation”. *Policy Perspectives*, Vol.1, No.1. website: <http://www.ips.org.pk/global-issues-and-politics/182-pak-china-relations-in-the-21st-century-regional-situation-security-economic-a-trade-cooperation> (accessed August 16, 2014)

⁶Abdul Sattar, *Foreign Policy of Pakistan: 1947-2010*, (Oxford University Press, 2011), 55.

⁷Ibid, 5. 103.

⁸Ibid

⁹Raja Muhammad, Khan, "A Broader Perspective of Sino Pakistan Relationship. (June 2011), 12.

¹⁰Musa Khan Jalalzai,. *Pakistan: Islam, Diplomacy and Foreign Policy*. Lahore: Kitabbistan, 2006.

	mm			
1983-84	A-5C Fan tan	Fighter/ground attack aircraft	Air force	52
1984	Hal-Ying-2	Ship to Ship Missile	Navy	16
1984	Hal-Ying-2	Launcher	Navy	4
1984	Huangfen Class	First attack craft	Navy	4
1986-7	F-7M Air Guard	Fighter Aircraft	Air Force	20
NA	A-5 A Fan Tam	Fighter/Ground attack aircraft	Air Force	9.8
1985	HQ-2B	Surface to Air missile	Navy	20
1985	HQ-2B	Surface to air missile system	Navy	2
1987	Fuking Class	Support Ship	Navy	1
NA	K-8	Jet trainer	Air Force	6
1989-90	Type P58A	Patrol Craft	Navy	4
1989-91	T-69	Tank	Army	275
1989-91	Anza (Under License)	Portable SAM	Army	350
1990-91	F-7P Air Guard	Fighter Aircraft	Air Force	80
1992	F-7M Air Guard	Fighter Aircraft	Air Force	40
1990-92	Red Arrow-8	Anti Tank Missile	Army	150
1991-92	T-69 11	Tank	Army	160
1991	M-11	Ballistic Missile	Army	55
1991	M-11 Launcher	Ballistic Missile Launcher	Army	20
1992	F-7P Sky Bolt	Fighter Aircraft	Air Force	40

Speaking to the audience at Harvard University in April 2016, Pakistan's permanent representative to the United Nations, Maleeha

Lodhi termed her country's relationship with China as "historic, strategic, trouble-free, and pivotal to Pakistan's foreign policy."¹⁰

Emerging Regional and Global Scenario and China's Interests in Pakistan

China has emerged as the most powerful country in the region and the primary rival of the US.¹² At regional level China is unrivalled and at the global level it is the only country that has successfully rivalled the once invincible US.¹³ However, just as China's approach to economic reform was informed by pragmatism, so too was its attitude towards the United States.¹⁴ Changes at regional and global level affect foreign policies of states to a considerable extent. For example, nature of the distribution of power at international level has a direct bearing on the behaviour of states comprising the system. States behave differently in unipolar, bipolar and multi-polar international systems. The region, in which Pakistan and China find themselves, is going through political makeover that is without precedent in the recent history. In the north of Pakistan is an emerging China, an assertive and hegemonic India in the East, and a highly instable Afghanistan homing NATO troops in the west. These dynamics in the region makes an enhanced relationship between China and Pakistan a logical and realistic objective.

Counter-terrorism and stability in Afghanistan: A shared objective

South Asian region has a history of Superpowers untimely engagements and uncertain abandonments.¹⁵ Though Afghanistan has

¹¹China Pivotal to Pakistan's foreign policy: Maleeha Lodhi, *Dawn*, April 27, 2016.

¹²Martin, Jacques, *When China Rules the World* (London: Penguin Books, 2009), 13.

¹³*Ibid*, 10.

¹⁴*Ibid*, 10. 180-181

¹⁵The sentence comes from author's intuition and has not been taken from a source. The British colonization of India, the Soviet Invasion of Afghanistan and then American engagement in Afghanistan are instances that lend credence to the statement above. However, similar views have been expressed by many authors as

been the primary epicentre of superpower engagements, remaining countries of the region have also been greatly affected as a result of these engagements.¹⁶ The US was to leave Afghanistan after staying for more than 12 years leaving behind an Afghanistan fraught with an uncertain future.¹⁷ However, the US has been delaying its exit from Afghanistan after its proposed withdrawal in 2016 given the growing instability in Afghanistan. There are 9500 US troops still stationed in Afghanistan to train the Afghan forces. China, being a major stakeholder in the region, is cognizant of the challenges and opportunities associated with the eventual lessening of US influence in Afghanistan. China is increasingly concerned about the stability in Afghanistan with which it shares a short border in the mountainous region in the north. Earlier in 2016 the Chinese foreign minister Wang Yi visited Kabul and held talks with the Afghan president and foreign minister. The visiting Chinese foreign minister assured Afghanistan of his country's commitment to peace and stability in Afghanistan and vowed to play his role in bringing peace and stability to the war torn country.¹⁸

The restive Xinjiang in the north, home to ethnic Uyghurs, is creating security problems for China as Uyghur militants have been using terrorism as a tool to amplify their demand for separation.¹⁹ China traces the root of these militants to the training camps in Afghanistan and Pak-Afghan border tribal areas where terrorists of all sorts have found a sanctuary.²⁰ China considers the stability in Afghanistan a linchpin of stability for its restive province of Xinjiang, in particular, and the entire region, in general.

well. For example in, Norman, Lowe, *Mastering Modern World History*, (London: Paperbacks), 266-267.

¹⁶Norman Lowe, *Mastering Modern World History*, (London: Paperbacks), 280.

¹⁷Ibid

¹⁸Mirwais Harooni, "China has become Very Concerned about Stability in Afghanistan," *Business Insider*, February 22, 2014.

¹⁹Hasan Askari, "The United States India and Pakistan," *Express Tribune*, October 24, 2014.

²⁰Khalid Munir, "A backgrounder to the North Waziristan Operation," *The Express Tribune*, June 18, 2014

Pakistan, like China, is desirous of a stable and democratic Afghanistan and believes a stable Afghanistan is not only in its interest but in the larger interest of the region and globe. Pakistan has been a frontline state in the war on terror and sacrificed thousands of its civilians and continues to bear huge economic costs. Pakistan, being an immediate neighbour of and one of major players in Afghanistan, can help stabilize the country. Moreover, Pakistan has started a major military operation to wipe out terrorists and their sanctuaries in its northern areas bordering Afghanistan.²¹ Pakistan has offered its support to China in Combating East Turkestan Islamic Movement (CETIM), a terrorist group which is active in China's restive Xinjiang province.²² In connection with these efforts, Pakistan's Chief of Army Staff, General Raheel Sharif, visited China in June 2015 and assured his Chinese counterpart that Pakistan would spare no efforts to crack down on the terrorists.²³ Terrorism is a common threat to both countries and to be able to neutralize this threat, the two countries need to continue their cooperation in countering terrorism.

Pakistan and China have recently been actively involved in quadrilateral dialogue process to bring peace in Afghanistan.²⁴ Several meetings among the quadrilateral states have brought Taliban leaders to the negotiating table. After the failure of Murree talks, another round of dialogue between Taliban and representatives of quadrilateral group was due in May 2016.²⁵ However, the killing of Afghan Taliban top leader Mullah Mansoor in a US drone strike on May 21, 2016 has halted the peace process.²⁶ The US has also conceded that the killing of Mullah Mansoor has made the peace process uncertain. In its quarterly report to Congress, the US Special Inspector General for Afghanistan Reconstruction (Sigar) observed

²¹Ibid, 16.

²²Ibid

²³“Raheel assures China of anti-terror support”, *The Nation*, June, 5, 2014. website: <http://www.nation.com.pk/national/05-Jun-2014/raheel-assures-china-of-anti-terror-support> (accessed August 18, 2014.)

²⁴Quad

²⁵President Speeches archives, www.whitehouse.com.us/speeches

²⁶“Mullah Mansoor Killed in a drone attack”, *Dawn*, May 22, 2016.

that “Mullah Mansoor's death shuffled Taliban leadership, exacerbated fighting, and left the future of the peace process uncertain.”²⁷ The report also found that after the death of its leader, Taliban have enhanced fighting and gained new territory and now controlled 19 of the country's approximately 400 governing districts.²⁸

Economic Interests

China, superseded only by the US, has the largest economy in the world with 13.50 trillion US dollars.²⁹ A large part of Chinese economy is dependent upon its trade with and investments in the region and the world at large. China is focused on fulfilling vision of its peaceful rise through maximizing its trade and thus strengthening its economy. A mere glance at the preponderance of economy in the Chinese foreign policy agenda suggests that Beijing has made “Power through Trade” its *raison d'être*.³⁰ It is against this backdrop that Pakistan, being a longstanding friend and neighbour of China, wields a significant position in China's foreign policy calculus. Apart from economic interests, China considers trading with Pakistan and Afghanistan can bring stability as poverty and underdevelopment have been the main factors behind the continuing instability in these two countries.³¹ Chinese Economic interests are subdivided here to square the significance of the subject:

Gwadar Port and Economic Corridor

Pakistan has a crucial geo-strategic position having links with other South Asian countries and Central Asian republics. However, it does not have effective and well-developed trade routes to reach out to

²⁷Text of the Sgar Report, published on July 29, 2016.

²⁸Ibid, 20.

²⁹Country Profile China, CIA World Fact-book 2015.

³⁰Martin, Jacques, *When China Rules the World* (London: Penguin Books, 2009), 66.

³¹Zhang Lijun, “Closer Ties,” *Beijing Review*, Vol.49, No.2, (January 12, 2006), 11.

Central Asian countries.³² On the other hand, China does not have access to any of the deep sea ports on Arabian sea which leaves it with the only sea route along the Strait of Malacca. The trade route through the Strait of Malacca is not only a long one but it is also influenced by US and its allies in East Asia.

Gwadar port is situated in Pakistan's province of Baluchistan whose operational control was handed over to a Chinese company in 2015 by the government of Pakistan in an attempt to further cement the bilateral ties.³³ Gwadar port is close to the Strait of Hormuz, the world's most important chokepoint due to its daily oil flow amounted to 17 million bbl/d in 2011, roughly almost 20% of oil traded worldwide.³⁴

China is the world's most populous country with a fast-growing economy that has made it the largest energy consumer and producer in the world.³⁵ Chinese demand for oil has been increasing gradually thus increasing its reliance on oil imports from Persian Gulf region.³⁶ The US Energy Information Administration (EIA) projects in its country analysis that China would surpass the United States as the largest net oil importer by year 2014.³⁷ China's oil imports have traditionally been coming in-through a detour via the Strait of Malacca that is considered costly.³⁸ Pakistan and China have agreed to build a road connecting China with Baluchistan, home to Gwadar port which is also called Pak-China Economic Corridor,³⁹ so that China can import its oil through Gwadar

³² Lawrence Ziring, *Pakistan at the Crosscurrent of History*, (Oxford: One World Publishers), 15-16.

³³ Chinese Company Given control of Gwadar Port, *Dawn*, May 22, 2015.

³⁴ Strait of Hormuz is Chokepoint for 20% of World's oil, *Today in Energy*, Website: <http://www.eia.gov/todayinenergy/detail.cfm?id=7830>, (Accessed September 4, 2014.)

³⁵ CIA World Fact Book, Country Profile China, 2015. 155.

³⁶ Ibid, 28. 156.

³⁷ China: Country Analysis Brief Overview, U.S Energy Information Administration, website: <http://www.eia.gov/countries/country-data.cfm?fips=CH>, (Accessed September 5, 2014.)

³⁸ Strait of Hormuz is Chokepoint for 20% of World's oil, *Today in Energy*, website:

³⁹ Ibid

port that could subsequently be transported through land route to China. This route will help Chinese imports to avoid the detour through Strait of Malacca hence can be less costly and less time consuming.⁴⁰

China Pakistan Economic Corridor (CPEC) has been termed as 'game changer' by the Pakistani Prime Minister because of its long lasting and fecund impact on Pakistan's internal and external outlook. The 46 billion USD project comprises a labyrinth of roads and railway tracks encompassing all provinces of Pakistan all the way leading to Xinjiang province of China and also a number of power generating plants in different parts of Pakistan make for the most of the 46 billion USD worth investment.⁴¹ This colossal investment by China is the biggest of its external investments in its modern history.⁴² China's investment in CPEC project is in line with its peaceful rise by expanding its trade relations to all the major regions of the world. Pakistan, on the other hand, is destined to benefit greatly from the Chinese investment under the aegis of CPEC. Firstly, it will enable Pakistan to overcome the power shortage it has been facing for a decade. Secondly, the project will act as a catalyst in further cementing the strategic bilateral relationship between the two in the face of growing strategic partnership between the United States and India, a setting viewed as threatening by both China and Pakistan.⁴³

The proposed corridor can face both internal and external challenges. Security challenges are the most important challenges that the corridor project is confronting. Both Xinjiang and Baluchistan have been affected by militancy and there has been an unrest.⁴⁴ For the realization of this project, peace is required to be ensured in these places.

⁴⁰Elizabeth C. Economy, "China's Imperial President: Xi Jinping Tightens his Grip," *Foreign Affairs*, June 13, 2015, 35.

⁴¹www.mpdr.gov.pk/cpec/html

⁴²*Ibid*, 32.

⁴³Syed Ali Abbas, "Regional and Global Scenario and Pak China Relations," *Pakistan Vision*, Vol.12, No.1, (June 2012), 11.

⁴⁴*Ibid*

Both the US and India are not happy with the corridor project because of the fact that the realization of the project will make both China and Pakistan more powerful.⁴⁵ The US fears that this will enhance Chinese influence in Middle East, Gulf and in other parts of the world and may even replace US as the powerful broker in the affairs of these regions. India, on the other hand, seems to have bandwagon with the US in its opposition to the corridor. However, their opposition may affect the goodwill of the project, it will not affect the completion of this project. To ensure security along the route, Pakistan has constituted an army force of ten thousand special troops which will look after the security matters for this project.⁴⁶ Moreover, proposed construction of economic zones in Kashgar and Baluchistan⁴⁷ will provide employment to the local people and will transform their life thus taking them away from extremism and violence. The Baluch insurgents in Gwadar area also pose a serious threat to the project. However, through economic zones and employment to the Baluch youth, they can be pacified and be given a chance to take part in the economic revival of the province.

Bilateral Trade

Trade between Pakistan and China has gradually been increasing since the two established diplomatic relations in 1950s.⁴⁸ According to Chinese ambassador to Pakistan earlier this year, the bilateral trade between China and Pakistan has increased to \$12 billion.⁴⁹ A cursory look at the statistics of bilateral trade shows that the imports of Pakistan from China have always exceeded Pakistan's exports to China. Pakistan always had trade deficit with China and with the passage of time

⁴⁵Urvasha Aneja, "Pakistan China Relations: Recent developments", *IPCS Special Report* 28, (June 2015).

⁴⁶"Army constitutes CPEC force, *Dawn*", April 19, 2015.

⁴⁷*Ibid*

⁴⁸Kenneth, Lieberthal, "China and Pakistan: A deepening bond." *Council on Foreign Relations*, (March 2006).

http://www.cfr.org/publication/10070/china_and_pakistan.html

⁴⁹"Pak-China trade increase to \$12 billion", *The Express Tribune*, January 18, 2014. Website: <http://tribune.com.pk/story/660108/all-weather-friends-pak-china-trade-increased-to-12-billion-says-weidong/> (accessed Sept 5, 2014.)

this deficit is increasing. Given the ratio of Pakistan's imports from China, it is beneficial for China to increase bilateral trade with Pakistan.⁵⁰ If the volume of the bilateral trade increases, it will be beneficial for both China and Pakistan. Chinese products will have access to Pakistani markets and subsequently customers in Pakistan will have access to Chinese products easily. CPEC project is the greatest example of Sino-Pak bilateral trade in the history of the relations of the two countries. The bilateral trade will increase manifold after the completion of the project.

The CPEC project is mutually beneficial for both countries. However, given the fact that Pakistan will receive the huge investment that would not only refurbish its transport infrastructure but also its power sector, the project will be more beneficial for Pakistan in the long run.

US Pivot to Asia Strategy

US President Barack Obama announced in 2009 the American pivot to Asia, a strategy to shift attention towards the Asia-Pacific.⁵¹ Exhausted by its long term engagements in Europe and Middle East on the one hand and faltering economy at home on the other hand, the US shifted its focus of foreign and security policies towards Asia-Pacific coast, from Indian subcontinent to Northeast Asia.⁵² This way, the US expected its diplomatic, military, and economic presence in the region to enhance. This reorientation was based on the assumption that Asia's economic growth, China's in particular, and the Chinese military modernization process make the region critical for United States' interests, especially in the context of a US withdrawal from Iraq and Afghanistan.

⁵⁰Fazal ur Rehman, "Pakistan China Economic Relations: Opportunities and Challenges," *Strategic Studies*, Vol.26, No.2, (2006).

⁵¹Michael D. Swaine, "Chinese Leadership and Elites Responses to the US Pacific Pivot," *China Leadership Monitor*, Vol. 38, No.3, 23.

⁵²Joao Arthur Reis, "China's dual response to the US Pivot," Asia Times Online, January 24, 2014. website: <http://www.atimes.com/atimes/China/CHIN-01-240114.html> (accessed August 20, 2014).

This pivot to the Asia-Pacific potentially has a dual character: it can be part of an engagement strategy with the region and increase of its presence, as well as be part of a “China containment strategy”.⁵³ However, the US plans of deploying its forces in the region and strengthening of its alliances with India and Japan have been seen by China as destined to contain its peaceful rise in the region and beyond. China reacted to this strategy by establishing the Air Defence Identification Zone (ADIZ), in the East China Sea directed at Japan, an ally of the US that welcomed its rebalancing to Asia strategy.⁵⁴

Apart from Japan, another important ally of the US in the region is India. The US and Japan's strategic partnership with India is a clear indication of containing China. Pakistan on the other hand has been supportive of a peaceful rise of China. Senator Mushahid Hussain Syed, a member of Senate Standing Committee on Foreign Affairs, said that Pakistan always welcomed the peaceful rise of China since it is a source of strength and security for small and medium-sized countries in Asia, and particularly neighbours like Pakistan.⁵⁵ Moreover, with regards to India, China and Pakistan share a security concern and have been at war with it separately in the past.⁵⁶ Thus in the emerging regional scenario after the US pivot to Asia, a strong and long term defence and strategic cooperation with Pakistan is in the interest of China. In order to balance the US-assisted India, China can enhance its defence and strategic partnership with Pakistan, a country that has its own security concerns emanating from India.

In addition to this, the under-construction Pak-China Economic Corridor, which aims to link China's Xinjiang province with the strategic Gwadar Port in Pakistan's Baluchistan province, can also be a game changer in the regional dynamics.

⁵³Ibid.

⁵⁴Ibid

⁵⁵“Pakistan Supports Peaceful Rise of China: Mushahid”, *The Nation*, March 29, 2014. Website: <http://www.nation.com.pk/islamabad/29-Mar-2014/pakistan-supports-peaceful-rise-of-china-mushahid> (accessed August 22, 2014).

⁵⁶Kenneth, Lieberthal, “China and Pakistan: A deepening bond.” *Council on Foreign Relations*, (March 2006). http://www.cfr.org/publication/10070/china_and_pakistan.html

Once completed, this corridor will enable the two countries to transport oil and gas through highways and railways and will serve as a primary gateway for China and Middle East and Central Asia and Africa.⁵⁷ China is dependent on the Middle Eastern oil to meet its industrial demand and currently imports oil through Pacific Ocean taking a long detour. Gwadar Port, located at a strategically important point near the Strait of Hormuz, will become a productive route for Chinese imports and exports and it would vastly cut the 12,000-kilometre route that the Mideast oil supplies must now take to reach Chinese ports.⁵⁸ This will eventually strengthen the already growing economy of China thus making its prospects of rise at the international level even more likely. This can happen if the strong relations between China and Pakistan are maintained and strengthened.

The proposed project of CPEC is not just limited to the networks of land and rail routes but a major portion of the investment is allocated to develop power sector in Pakistan.⁵⁹ Out of total 46 billion USD, 30 billion USD is proposed for the development of power sector in different cities of the country.⁶⁰ Development in Pakistan has been marred by electricity downfall which has not only affected the industrial prowess of the country but has also affected the lives of Pakistanis. The proposed 30 billion USD investment in power sector of Pakistan by China will greatly benefit the dilapidating power sector of the country and will revive the industrial growth. In addition, the proposed land route between Xinjiang and Baluchistan will be mediated by economic zones at different intervals throughout the route which will bring employment to the country.

Indian Ocean and India Factor

China has been very concerned about the security environment in South Asia. After the withdrawal of the Soviet Union from the region, and its defeat in Afghanistan,

⁵⁷Talat Masood, "Gwadar Strategic Importance," *Dawn*, February 12, 2005.

⁵⁸Ibid

⁵⁹www.mprd.gov.pk/cpec/html

⁶⁰Ibid

China's strategic fear of its encirclement by Russia has been considerably reduced.⁶¹ However, China is apprehensive of India's ever increasing power and considers it as a threat to its interests in the region. Chinese concerns have further increased in the post-Cold War era, where the US and India have developed a highly robust strategic partnership.

China primarily wants to prevent India from developing such a power that would help it dominate the South Asian region and may eventually challenge the China's leadership role in the region. China is convinced that there is a conspicuous element of hegemonic aspiration in the Indian strategic thinking wherein it believes to be the legitimate hegemonic power of South Asia.⁶² Chinese strategic circles perceive that India wants to dominate the whole of Indian Ocean region, and for that it has forged close relations with the US. China has been very vocal about India's policies to turn Indian Ocean into India's ocean. Indian Ocean constitutes a major sea route for both China and India as both heavily rely on for the export and import of their goods to and from other major regions of the world.⁶³

Thus, there has been a general willingness on the part of China to stop India from dominating and influencing the Indian Ocean region while simultaneously devising prudent strategies to contain India so that it cannot become the regional leader of South Asia.

Pakistan, being the only South Asian country capable of challenging Indian hegemonic aspirations became a natural choice for China when it came to the Chinese interest in South Asia. On the vis-a-vis other hand, given the conventional military asymmetry between India and Pakistan, China became an important partner for Pakistan to make for latter's policy to prevent Indian hegemony in the region. In the post Cold War era, a major element of Sino-Pak partnership has been to prevent India from dominating South Asia⁶⁴ and both China and Pakistan feel

⁶¹Rajvir Singh, *US, Pakistan and India: Strategic Relations*, (Allahabad: India), 1985, 166-167.

⁶²Zhang Lijun, "Closer Ties", *Beijing Review*, Vol.49, No.2, (January 12, 2006), 11.

⁶³Ibid

⁶⁴Ibid

threatened if India becomes the leader of South Asia. Thus, this common interest has bound China and Pakistan in a strong relationship which has successfully endured change in leadership in both countries over a period of half century. While it is in Chinese interest to support Pakistan in order to prevent India from dominating South Asia, it has also been in the interest of Pakistan to have China by its side while it deals with its security and strategic problems India. China is aware of the fact that Pakistan is the only country in South Asia which has both; the capability and the will to challenge India and the fact that Pakistan has fought three wars with India, negating its regional superiority, further strengthens China's perception about Pakistan. Thus, on one hand China views Pakistan as a balancer against India, while Pakistan, on the other hand, views China as a balancer against the US strategic partnership with India.⁶⁵

Over the last five decades, China and Pakistan have strengthened their bilateral relationship through close partnership in almost all fields especially in defence and trade sectors.⁶⁶ China is aware of the fact that Pakistan is the only country that provides it an access to the Indian Ocean and through it to the Gulf and the Middle East for the exports of Chinese emerging market especially military hardware.⁶⁷ The two countries collaborated to build Gwadar port along the Makran coast in Baluchistan which opens up to the Indian Ocean. The port located at a strategically important location can also serve as a naval base for submarines which can be used to monitor Indian Ocean. Moreover, the port provides a shorter route for China through Karakorum Highway from its Xinjiang province to Baluchistan and further into Gulf.⁶⁸

⁶⁵“Pak-China relations in the 21st Century: Regional situation, security, economic & trade cooperation”. *Policy Perspectives*, Vol.1, No.1. website: <http://www.ips.org.pk/global-issues-and-politics/182-pak-china-relations-in-the-21st-century-regional-situation-security-economic-a-trade-cooperation> (accessed August 16, 2014)

⁶⁶Ibid.

⁶⁷Elizabeth C. Economy, “China's Imperial President: Xi Jinping Tightens his Grip,” *Foreign Affairs*, June 13, 2015, 35.

⁶⁸Ibid.

The most important driver of Sino-Pak strategic alliance has been the India factor,⁶⁹ for both countries have perceived a serious threat from Indian hegemonic aspirations in the region. Pakistan has genuine security concerns with India, particularly over Kashmir for which the two countries have fought wars.⁷⁰ China considers itself the leader of the region and it sees any attempt by India to take the leading role threatening to its larger regional strategic interests.⁷¹ This shared interest has brought Pakistan and China close and their relationship has strengthened to such an extent that the two are dubbed as all weather friends.⁷²

As far as the military-to-military cooperation between the two nations is concerned, it has become one of the tools for strengthening the relations between the two countries.⁷³ China delivered 50 additional JF-17 fighter jets to Pakistan, assisted Pakistan in building its first indigenously built frigate and in August 2011 launched a communications satellite for Pakistan.⁷⁴ This was followed by Pakistan's keen expression of interest in sending an astronaut on a Chinese spacecraft.⁷⁵ Finally, the reports that the Pakistani military had given China an access to the US helicopter that crashed and had to be abandoned during the raid on bin Laden's compound in Abbottabad caused alarm in Washington, although China and Pakistan both vehemently denied the accusations.⁷⁶ All these events made headlines

⁶⁹ Abdul Sattar, *Pakistan's Foreign Policy 1947-2005: A Concise History*. (Karachi: Oxford University Press, 2007)

⁷⁰ Ibid.

⁷¹ Urvasha Aneja, "Pakistan China Relations: Recent developments," *IPCS Special Report* 28, (June 2015).

⁷² Abdul Sattar, *Pakistan's Foreign Policy 1947-2005: A Concise History*. (Karachi: Oxford University Press, 2007)

⁷³ Ibid.

⁷⁴ Nabih Gul, *Pak-China Strategic Partnership*. Lahore: Jahangir's World Times, January 2012.

⁷⁵ Ibid.

⁷⁶ Ibid.

during 2011 and only served to further fuel the suspicion that shrouds the relationship between Pakistan and the United States.⁷⁷

For China, the purpose of enhancing military-to-military cooperation is to ensure Pakistan facilitates, and does not hinder the domestic stability within China's borders. Cooperation pivots around supply of weapons, intelligence-sharing, counter-terrorism and joint exercises.⁷⁸ Pakistan and China carry out military exercises every two years and have tested their capacity to conduct operations from a joint-command centre, including simulation of large-scale intelligence gathering by Chinese and Pakistani troops, and search-and-destroy missions.⁷⁹ In November 2011 the two armies held their joint exercises, Youyi-IV (translating into 'friendship'), which were aimed at building capacity and intelligence-sharing for the purpose of countering terrorism.⁸⁰

Conclusion

Pakistan and China have remained trusted friends and neighbours despite the changes at regional and international level. Recent divisions at regional and global level indicate opportunities for both countries to further strengthen their defence and strategic relationship. The issue of terrorism and extremism needs to be tackled through mutual intelligence sharing. Pakistan needs to ensure the security of Chinese workforce deployed in Gwadar and on the other projects that are already underway in various sectors in Pakistan. China and Pakistan share common security concerns in the region and this commonality has so far cemented the bonds of strategic and defence relationship between the two. China has supported Pakistan at every step and even helped Pakistan to establish strong defence system, it would also be right to say that China is the biggest arms supplier of Pakistan.

⁷⁷Ibid

⁷⁸Michael Yahuda, *Towards the End of Isolationism: China's Foreign Policy after Mao*. (London: The Macmillan Press Ltd, 1983).

⁷⁹Ibid

⁸⁰Mathieu Duchatel, "The Terrorist Risk and China's Policy toward Pakistan: strategic reassurance and the "United Front", *Journal of Contemporary China*, Vol. 20, No. 71, September 2011, p. 555

BOOK REVIEWS

Responding to China's Rise; US and EU Strategies

Vinod K. Aggarwal. Sara A. Newland, (Springer International Publishing Switzerland, 2015, 179 pages)

Reviewed by Asia Maqbool*

The book primarily focuses on the economic and security issues to understand the implications of China's rise by explaining both theoretical and empirical analysis. The world has recently undergone major transformation and generated important debates on various issues which include the loss of jobs in west, deindustrialization, and the management of global economy by international institutions, industrial policies and the role of state-owned enterprises. Under Mao 's distinctive nationalism which was combined with the real need of rehabilitation of economy that had been destroyed by the decades of mismanagement, civil war and conflict with Japanese led to the developmental strategies which channeled resources towards urban industrialization. Resultantly the industrial economy spread rapidly in early Maoist period but took several decades to embrace to more market-driven, outward oriented strategy which played as catalyst in the reemergence of China as global power in the 21st century. It was only in late 1970s under the leadership of Deng Xiaoping, China focused on the market-driven pricing for agricultural and industrial goods and new firms like rural Township and Village Enterprises which increased the competition. These early reforms in China which were termed as “reform without losers” inducted greater efficiency in the domestic economy by avoiding the destabilizing effects of privatization and complete liberalization. But the period of mid 1990s witnessed China's adopting a new approach to economic reforms which included the privatization, the downsizing of the state sector and embracing international business by cooperating with the other countries. During the period 1988-1994 China had normalized its relations with 18 countries and actively cooperated with Southeast Asian members of ASEAN through the

*The reviewer is an M.Phil scholar at DSS Department, Quaid-i-Azam University, Islamabad.

ASEAN+1 and ASEAN+ mechanisms in 1995. In the year 1999 China pursued the “go global” strategy by lifting restrictions on foreign investment by Chinese firms. Both the proliferation of free trade agreements in 2000s and the Obama Administration's active pursuit of Trans Pacific Partnership since 2008 which excludes China has compelled China to pursue free trade agreements. Resultantly China and ASEAN Free Trade Agreement came into effect in the year 2010 which further led to the inclusion of ASEAN+6 in the year 2011. Later on it came to be known as Comprehensive Economic Partnership which was formalized in 2012. The economic ties between Europe and China from 1975 to 1985 show that the trade between PRC and Europe Economic Community had increased 15% per year, which renewed and strengthened strong economic relations since 1990s. China is the EU's second largest trading partner and EU is China's largest trading partner. There were 4 million Chinese tourists travelling to EU in 2011. Economic tensions is the crucial factor which color the Sino-American relationship, apart from this, the significant role of the US in East Asian security and more generally its predominant worldwide military position since WWII are additional conflicts as China claims its greater role in the region and the world. According to Kang, China does not pose any threat including military threat to the US unlike USSR which posed major threat to the US when Russia was at its peak.

China's economic rise is based on the principle of market economy and is not a coherent alternative to the western liberal economic order. It also does not possess an ideological challenge to the west. According to David Kang comparing China with Germany of nineteenth century is a poor predictor of China's behavior today as China's rise doesn't seem to provoke any kind of anxiety among its neighbors as Germany did because other East Asian states are willing to accept China's leadership position.

There is a debate stimulated on the question that whether or not East Asia will devolve into great game of balance of power politics, the one that Europe had experienced? The answer is that it is quite unlikely situation in East Asia because China hasn't regained its place

as regional hegemon. It has become common to use the analogy of 19th century Germany for China in the East Asia of 21st century. The two events are quite dissimilar as at that time Germany was a newly created state in a multipolar European regional situation and rapidly rising power and wanted to secure a status and position for itself among the equal sized and populous states, while China is one of world's old civilizations and was unquestioned hegemon in East Asia for many centuries. According to Aaron Friedberg for better or for worst, Europe is past and Asia is the future.

Language is not only the medium but it is a form of social and political practice. Post-structuralism addresses the interdependence of the language, discourse, identity and policy. The foreign policy relies upon the identities that language constructs on the global stage and the policy that reproduces identity. China's rise is different from that of Germany and Japan. China's Peaceful Rise elaborates that the peace is both the means and inevitable result of rising. It further implies that China's rejuvenation posed challenge, and was perceived as a threat by the others. According to various IR theorists, there are many explanations of China's rise, firstly Liberals see the rise as generally stable and peaceful in future aspect while realists see it as more confrontational and conflict ridden, further still, the constructivists see China's rise as a general reality and most valid development. It was the Clinton's Administration that openly perceived China as a competitor, a potential competitor, a cooperator and a stake holder to develop constructive strategic partnership. The contemporary dynamics of their relationship is very precarious as Mearshiemer also holds the view that the past behavior is not reliable indicator for future. According to the liberal pessimists the ideological factors strongly shape their behavior such as if China were a democracy Americans may not have felt threatened by China's growing influence. Since the WWII, the US has been striving to maintain its world hegemony and determined to prevent China's impressive power accession. Hence there might be a possibility of China's neighboring countries like India, Japan, Singapore and South Korea to join hands with US to contain China.

According to Condoleezza Rice and John Mearshiemer an IR theorist, China is a revisionist power which is destined to clash with the US. This book has highlighted the “Chineseness” which seem a strange word but it is often used by scholars of Chinese studies worldwide. It is a set of characteristics which define the Chinese identity, in contemporary times. It is referred to the stamina, flexibility and skills of China's political leaders to keep the country united and prosperous.

Modern transnational values could be reduced to four categories: economic growth, liberty, social justice, and environmental protection. China got its primary national achievement falling in first category of economic growth. China should focus on its Asian neighbors with a holistic strategic framework by checking America's dominant power gently, consistently and moderately.

The US and China's economic integration and implications on US policy in the Taiwan Strait is important. US-Taiwan consistent relations have been the source of friction in Sino- American relations. Being world's largest exporting country; China attracts more foreign direct investment than any other developing country. In contemporary world China is the principle trading partner of many countries like Japan, North Korea, South Korea, and also Taiwan. Now China is the second largest trading partner of the US and the US is second largest trading partner of China after EU. The volume of bilateral trade in 2010 was \$ 457 billion. There are also some elements which contribute to deepen the US-China economic integration affecting the US policy towards Taiwan. For example when Taiwan got entry into WTO in 2002, their officials called for the negotiation for free trade agreements with the US but the later had remained down or lukewarm to that idea. Secondly the governor Jay Nixon's canceled visit to Taiwan was also a turning point. The economic integration of both US and China, hints at their interdependent relationship rather than the dependent one. In Sino-European relations the main factors of cooperation around 2006, were China's hunger for the European technology, European interest in China's growing consumer market at economic level and quite inconsistent shared

interest in multipolar world order. On the other side, there are main elements of competition which includes the diverging strategic interest such as Europe's dissatisfaction with China's reluctance to adopt liberal values and simultaneously China's disappointment with Europe's failure to become a soft balancer against the US and the weakening of Europe's economic leadership. The time period of 2008-2012 Europe was struck in global financial crises; this situation had created economic uncertainty which became a strong momentum to Europe's relations with China. The US, China and Europe could use the more sophisticated hedging strategies having dependent or contingent elements which can ensure their positions in international system characterized by a transition to a new bipolar system and emergence of Asia centered world. There should be division of labor for the transatlantic cooperative relations to overcome new security challenges.

This book comprehensively draws a picture of how China paved the way for its progress and rise. Authors gave a comprehensive empirical and theoretical analysis of China's rise and gave multiple future scenarios of China's role in Asia. This book has given both Chinese perspective of its peaceful rise and the discourse on the US rise too. The behavior of China after becoming global power is also questioned.

This book talked about the characteristic of futuristic international system as bipolar system and emergence of Asia centered world. I believe world is moving towards multipolar system as apart from China many other developing countries such as India are emerging. There is no clear cut or any convincing scenario discussed in this book about whether China is actually posing a threat to the US or not. The book also does not address the relative decline of the US. It has also not mentioned that approximately how much time or how many decades China will take to be the global power. What should be the steps for China in case it becomes an exception in the Trans Pacific Partnership? These important points and questions could have been discussed in more details in the book.

Playing to the Edge: American Intelligence in the Age of Terror

Michael V. Hayden (Penguin Press, 2016, 464 pages)

Reviewed by Abdur Rehman*

Gen. Michael V. Haden served in the US Air Force as an Intelligence Officer and retired as a four star General. While in office, he contributed by providing intelligence services to B52 bombers in Vietnam. During Bosnian war, he served as a Chief Intelligence Officer to Europe and also owned the Air Intelligence Agency. In 1999, he was appointed as a Director of National Security Agency and then to CIA. His expertise in intelligence field made him the ideal choice to run the top most US intelligence offices.

For Gen Hayden, *Playing to the Edge* is a delicate relationship between securing the national interest vis-a-vis the threats emanating after 9/11. The book is a memoir of Gen Hayden who served at both NSA and CIA as a Director Gen. Hayden narrates his personal life experiences and gives an account of the events while being part of the most sophisticated intelligence network in the world. The post 9\11 scenario came up with tremendous challenges to American National Security that revealed many loopholes in the system. The mounting challenges of war on terror and intelligence interceptions revealed that terrorist communications were channeling through mainland US. Therefore, the “Stellarwind” program was initiated which covered interception of international calls coming in and out of the US. However the interception was allowed only after the rigorous debate in the Congress provided the NSA had a probable reason that a certain call had a connection with Al-Qaeda.

From 2001 to 2005, Stallerwind produced a lot of reports that altered the course of war on terror. The Stallerwind program was instrumental in exposing the terror networks which also included the financiers, trainers, armaments, supporters and high profile affiliates like Khalid Sheikh Muhammad, who were intercepted and captured. As

*The reviewer works at the Strategic Vision Institute, Islamabad.

the program got mature, Hayden gave many briefings to the congressional intelligence committee and many other members of prestigious offices. However, much later congressional reports began to criticize NSA for not doing enough interceptions. The Inspector General of NSA, Joel Brenner, expressed it later that “any president who failed to collect the intelligence authorized by this program would have been derelict in his duty.” The program continued even after Hayden had left the office, amidst lots of complexities and legalities that are further described as the “edge” in this book. The notion *Playing to the Edge* basically refers to the act of pushing the legal boundaries to secure national security interests with responsibility.

Further he writes about NSA's data collection methods, techniques and technicalities that sometimes overstepped the legal jurisdictions and got widely misunderstood. For example, “warrantless” telecom data collection without court orders is not entirely illegal as there are many technological barriers and only suspicious data is collected with foreign terrorist links. Stunning revelations made by Edward J Snowden and Chelsea Manning were aimed at stripping off intelligence/surveillance programs and show how these actions have direct implications on individual privacy. In response to that, Hayden cleared himself and Bush administration by showing no interest to infringe or tape phone calls or e-mails unless someone is found talking to a terrorist.

One of the striking revelations in this book is the severe torture and coercive tactics of CIA to interrogate the prisoners at various detention centers. Gen Hayden defended the tactics in his book with a firm position that water boarding, sleep deprivation and other methods are helpful to retrieve useful information. Although, the leaked pictures of miserable prisoners at Abu Ghuraib prison in Iraq damaged the image of Bush administration and the US' war efforts with a back lash at home and all around the world but Hayden is taking those practices as procedures and SOP's of intelligence gathering.

The readers will find this book specifically useful if they want an insight into how states tend to justify their actions and strive to gain a legal status too in order to ultimately secure their national interests.

Journal of Security and Strategic Analyses (JSSA)

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Strategic Vision Institute (SVI) is pleased to announce the publication of second volume of its Biannual Journal: *Security and Strategic Analyses* (JSSA), Jan-June 2016. *Journal of Security and Strategic Analyses* is a peer-reviewed journal focusing on contemporary issues of peace, security and strategic studies.

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Strategic Vision Institute (SVI)

E-mail: info@thesvi.org

Web: www.thesvi.org

Tel: +92-51-8434973

Fax: +92-51-8431583

Address: Please see the SVI website