# South Asian Arms Control in Perspective of US-Soviet Experience

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#### Introduction

The advent of nuclear weapons in South Asia changed the dynamics of the relationship between India and Pakistan: adding a new dimension to their complex and adversarial relationship. The unsettled disputes left behind as a legacy of the unfinished agenda of the partition still haunt the bilateral relations. Both India and Pakistan have fought two wars, and since nuclearization have been through four military crises, bringing them near the brink of conflict/war. Moreover, the acquisition and development of new weapon systems, capabilities and doctrines that undermine deterrence are also a common denominator of their competition, increasing the chances of accidental or unauthorized use of nuclear weapons.

The situation is one which demands that measures to control this competition should be put in place and efforts to develop and build mutual confidence to decrease their mutual anxieties should be enhanced. Whereas, it should be logical to see both states sharing the common interest in pursuing arms control to their mutual anxieties and develop common understanding on issues of mutual discord, reduce the likelihood of conflict, crisis and miscalculation; the practical situation poses a dilemma. There appears to be a lack of activism in pursuance of the goal of arms control mutually. This lack of activism is attributable to their general perception that since both states are still in the process of strengthening their deterrence and command and control (C2) capabilities, any curbs on the systems would be premature at present. The arms

control measures are seen with great suspicion and considered to be aimed at curtailing their growing capabilities, which both view as part of maintaining their mutual deterrence relationship.

It is therefore necessary to understand the significance of undergoing an arms control process and identifying the prerequisites and impediments in such a process. Arms control is a means for achieving the national security through cooperative means; however, undergoing the process requires certain prerequisites to be met. The Cold War model serves as a touchstone for these preconditions that led to US-Soviet bilateral arms control process (successes as well impediments). However, the case of South Asia has certain peculiarities that differentiate it from Cold War rivalry. The geographical proximity of both states and territorial disputes are a peculiar feature of this equation. The geographical proximity complicates the situation because of short warning times and porous borders. The existing unresolved disputes and recurrent crises make it necessary to understand the mutual perceptions and anxieties of both states and specially to determine what can improve the prospects for arms control to happen and to understand the impediments in achieving the end state of arms control.

For these purposes, the following study will be divided into three parts. The first part will examine the factors that created a favorable ground or impeded cooperation in the US-Soviet bilateral arms control. The study will then look at the significance of employing arms control measures regionally given the mutual anxieties of the states. It will then test the applicability of necessary conditions for arms control in South Asia and assess the constraints.

#### Salience of Arms Control Measures

Arms control is a significant tool to enhance security cooperation between states with adversarial relationship. It is also a vital factor for attaining deterrence stability. It reinforces national security by enhancing predictability amongst actors caught in an action-reaction model in terms of the arms race. Measures for arms control enhance predictability regarding doctrines and force postures and contribute to reducing the likelihood of war. Here, the major aim of arms-control theory overlaps with that of deterrence. The purpose of deterrence is to dissuade war by assuring the enemy of unacceptable damage and similarly arms control's chief purpose is to make war less likely through enhancing predictability, agreed limit on weapon systems and their use doctrines. As Bhumitra Chakma illustrates the argument that "Deterrence theory is about avoidance of war, and arms control theory is about making deterrence stable which contributes to the avoidance of war."1 In general one can infer that deterrence drives arms control. This illustrates the importance of arms control for states that need to stabilize their bilateral deterrence equation. It is also important to understand that arms control, as a process, is a means towards an end, i.e. enhancement of security especially against the threat of nuclear war.

Arms control also provides states with a rational choice to avoid a costly arms race that can put an undue burden on their economies. History reinforces this proposition, as in the years of US war in Vietnam, the reorientation of US strategic priorities from strategic superiority to that of strategic sufficiency was partly done for the purpose of resources being diverted for social reforms<sup>2</sup>.

### **US-Soviet Bilateral Arms Control: Strategic Context**

US and Soviet Union/Russia have a long history of pursuing arms control as a bilateral measure of enhancing national security. Major achievements in the field of arms control during the Cold War include the Partial Test Ban Treaty (PTBT), Strategic Arms Limitation Treaty process, anti-ballistic Missile treaty (ABM) and Intermediate-Range Nuclear Forces Treaty (INF Treaty). This research has mainly reviewed three bilateral agreements, between US and Former Soviet Union (FSU), i.e. the ABM treaty, SALT I and SALT II, to assess the steps that led to or impeded arms control process.

During the late 60s and early 70s, "there was a thawing of the ongoing Cold War between the United States and the Soviet Union. This détente took several forms, including increased discussion on arms control." The Cuban Missile Crisis (1962), portending a nuclear conflict of highest order, led to cooperation and signing of the Limited Test Ban Treaty (LTBT), amongst the earliest arms control agreements in 1963. In August 1963, both the US and the USSR established a hot line between the White House and the Kremlin to reduce the risk of war. through accidental nuclear direct means communication. Furthermore, the Sino-Soviet split (late 50s and early 60s) and the difficulties US faced in Vietnam War (in late 1960s) helped in building favorable ground for improving relations with the former Soviet Union.4

On the broader front, détente led to broader framework agreements for arms control and security of Europe. Important elements of this détente also included signing of Treaty for the Nonproliferation of Nuclear Weapons (NPT)<sup>5</sup> and Conference for Security and Cooperation in Europe (as a result of the Helsinki Final act). The act "recognized political borders,

established military confidence building measures, created opportunities for trade and cultural exchange, and promoted human rights".6

#### **Arms Control Prerequisites for US-USSR**

A review of Cold War literature reveals that several factors played a role, both positive and negative, in moving towards bilateral arms control. These are elaborated as follows:

## Condition of Strategic Parity/ Military Balance

Philip Farley, in writing on the SALT Process, contended that "Asymmetries are troublesome since strategic arms limitation is inconceivable between two leading powers on any other basis than that of equality". Equality, therefore, served as a good criterion and precondition for undergoing arms control. The belief that an armed conflict would not have brought any decisive victory to either side developed a common interest in initiating the bilateral arms control talks.

The classified National Intelligence Estimate (NIE) of the US from 1957 to initial years of 1960s viewed the "post-Sputnik" Soviet Union to gain a military as well as psychological advantage over the US through rapid deployments of ICBMs.<sup>8</sup> As the US enjoyed an overall superiority, the Soviet advancements in the field of ballistic missiles threatened to undermine the US posture.

The review of the conditions that led to arms control in Cold War reveals the fact that arms control is possible amongst powers that have strategic parity and exercise a balance in their military capabilities. In the early years of the Cold War, both the US and USSR were trying to enhance their capabilities with the US

visibly retaining a strategic superiority. So there was a fear to enter into any agreement that may freeze strategic asymmetry.

During the Nixon-Brezhnev era (early 70s), the US and former Soviet Union reached a state of rough strategic parity that paved the way for arms control/reductions talks. Till the latter half of the 60s, US had a visible advantage against the Soviet Union in terms of the nuclear arms. It meant that in case of a nuclear conflict, the US would be able to achieve decisive victory against the Soviet Union through counter force strikes. This rough strategic parity coupled with the certainty of mutual destruction led both sides to realize their common interest in curtailing and restraining the arms race.

## **Sufficiency and Strategic Stability**

Also, detailed revisit of Nixon years in US politics shows an interest in US policy towards the concept of sufficiency, i.e. in narrow military sense it meant "enough force to inflict a level of damage on a political aggressor is sufficient to deter him from attacking us." In its broader political sense sufficiency means the maintenance of forces adequate to prevent us and our allies from being coerced. Interestingly this doctrine of sufficiency coincided with Nixon's objectives for achieving arms control. "SALT I, for instance, set agreed arms ceilings that gave leaders confidence in the level of arms needed to ensure rough equivalence. Arms control and sufficiency both reinforced each other". 10

Nixon in this era opposed nationwide missile defense because he considered that such a defense mechanism would make the Soviets believe that the US wanted to neutralize the Soviet deterrent and this could have caused great strategic instability leading to an increased Soviet interest in preemption. Therefore, Nixon limited the missile defense for its ICBMs program to strengthen stability vis-à-vis Soviet Union. Similarly, the decisions to procure B-I bomber as well as the trident submarines were also guided by the principles of strategic stability, i.e. to enhance survivability of the retaliatory forces, making the Soviet's believe that neutralizing the US retaliatory forces would not be possible. However, US efforts for introducing MIRV technology, advocated to saturate the nation-wide Soviet ABM systems affected the strategic stability and sufficiency goal negatively. Although it became evident in the 1970s that the Soviet Union would not put missile defenses on a nation-wide scale, the deployment of MIRVs essentially led both states into an arms race. <sup>11</sup>

Also, one of the underlying conditions of cooperation amongst US-USSR bilateral arms control was "the acceptance of the objective condition of mutual deterrence". The underlying goal was to establish the unacceptability of nuclear war as an instrument of policy. This principle underlined the basis of the ABM treaty as well. The need for development of the security regime stemmed out of the premise based on mutual vulnerability, an offense-defense relationship and maintenance of the parity. 12

# **Economic Factor/Motivations**

It is important to analyze the US domestic context during the 1970s when the Vietnam War had embroiled much of the US resources leading to an increased military spending. As a result, a domestic back lash in terms of strong anti-war movements accusing US weapons as the cause of "world tension, were on an all-time high. Incidentally, US spending also led to an increase in Soviet military spending." Historians have assessed that the Vietnam War had a "lasting fiscal legacy"

because the increase in levels of government expenditure was financed by increases in taxation from 1968 to 1970. There was an increased budget deficit that led to rapid inflation in mid-70s. 15

The increasing protests, therefore, demanded a decrease in the military spending, reduction in foreign troop deployment and suspension of development of weapon systems, as, the "ongoing nuclear arms race was incredibly expensive, and both nations faced domestic economic difficulties as a result of the diversion of resources to military research." <sup>16</sup> This led the US to promote mutual restraint with Soviet Union.

#### **Domestic / Political Factors**

The domestic factors had a significant impact on arms control. There is however considerable debate in its positive as well as negative impact on arms control. Jeffrey Knopf in his study on the subject considers that the domestic factors played a positive role in promoting arms control.<sup>17</sup> His study brought forth the conclusion that domestic protests against increasing armaments impacted upon the administration to move into arms control talks. However, he uses an interesting qualifier to explain this factor. He says that in democratic regimes, domestic politics affect their foreign policy choices.

Similarly, Martin Goldstein points out in his work that, "[t]hroughout the Nixon years, the anti-war coalition exerted pressure to reduce military spending and shift the dividend to domestic needs. The peace movement thus had an effect on the balance between military preparedness and arms restraint." 18

It has been observed that the domestic factors serve as a constraint in moving towards cooperative approaches towards adversaries. For instance, political leaders often cite domestic electorate and constituencies as impediments in moving towards cooperative approaches towards adversaries, <sup>19</sup> as the population might see it as selling off to the adversary. For instance, during the US-USSR talks in 1980s, a newspaper article assesses the Soviet motivations (for arms control) in an interesting manner stating that "the strongest disincentive to arms control is the transitional nature of the present leadership. This means that candidates for the top post are reluctant to expose themselves to rivals' attacks by appearing too soft and making the kind of concessions needed for a realistic negotiating position."<sup>20</sup>

Moreover, Steven Miller argues that "the promise of arms control as an instrument of national security policy has been stunted as much by domestic political factors as by any other... the lesson that emerges most strongly from the record of the past twenty-five years is that domestic political impediments to arms control regularly triumph over its substantive He cites examples where the possibilities." achievements of arms control policy like SALT I talks were hostage to domestic calculations. US President Nixon and National Security Assistant Henry Kissinger could not pursue a ban on MIRVs because of opposition from Secretary of Defense and Joint Chief of Staff (JCS).<sup>21</sup> In identifying the impediments that contribute to the relative low success rate of arms control, Miller points to the "ability of internal politics to shape and limit the results of arms negotiations"22 This includes:

- 1. Agreement amongst internal parties to pursue control on a certain capability.
- 2. Dealing with bureaucratic politics.
- 3. Dealing with the military's weariness with controlling capabilities that they perceive enhancing security (because

although the goals of arms control and military policy are similar, the means to achieve them differ starkly).<sup>23</sup>

## **Geopolitical Asymmetries**

Philip Farley brings out in his research, "geopolitical asymmetries complicate the process of finding and defining areas of agreement and limitation, against the background factors of mutual suspicion and uncertain information. For example, the US has Canada and Mexico on its borders, and the Soviet Union has China to the east, Nato to the West and the Moslem world to the south. The other three nuclear powers United Kingdom, France and China, are rivals of the Soviet Union."<sup>24</sup> He illustrates that the geographical positions and military histories of nations affect their military concepts and force structures differently.

## South Asian Context: Inferences from Cold War Arms Control Model

While the Cold War US-Soviet bilateral arms control process brings forth interesting lessons, however, it is also significant to state that there are marked differences between the Cold War and the South Asian model. Most analysts while analyzing the South Asian nuclear dynamics refer to the Cold War US-USSR model but also note the peculiarities of the region as a caveat while doing so.<sup>25</sup> The South Asian region is marred by history of protracted conflict between India and Pakistan with the unresolved territorial disputes as legacy of their checkered partition history. Describing the difference from the Cold War model, Scott Sagan posits that "the Cold War superpowers held a deep-seated ideological rivalry, but held no disputed territory between them and had no enduring history of armed violence

against each other."<sup>26</sup> Also the US and USSR were on the opposite sides of the globe and often perceived each other as unpredictable adversaries. However, the South Asian case is just the opposite. Both states share common borders as well as the infamous legacy of partition, with unresolved disputes. They have a misconceived notion of knowing the adversary too much.

Geographically, Pakistan has to face a long border not only with its rival India but also with a politically unstable Afghanistan, and an Iran with considerable hostility against the United States. India shares its border with China and has sea access to the rising economies of the East Asian states. This geography of the region makes it a center of global attention. Whereas this geopolitical significance of India puts it at an advantage – making it a US ally and a counterweight to rising China; a lynchpin of its Indo-Pacific strategy – for Pakistan, the geopolitical advantages appear to be turning against it. The Afghanistan war exacerbates internal security situation and recurring crises with India have led the military force deployments to be overstretched. The US post withdrawal scenarios, alongside an aggressive and dismissive India in the neighborhood are complicating the challenge.

Nuclear weapons are, therefore an important factor in the overall relationship. After the first decade of nuclearization, both countries are still developing their weapon capabilities and command and control structures. The geographical congruity complicates the issue. There have been recurrent crises in post nuclearization era mainly attributable to the acts by non-state actors – with an agenda of spoiling the process - that have halted and reversed the gains accrued by the confidence building process underway.

However, there are some significant CBMs that have been struck. Specifically, in the nuclear field, the history of strategic

CBMs goes back to two significant CBMs in the prenuclearization era, i.e. Director general Military Operations (DGMO) hotline established in 1971 and Agreement on the Prohibition of Attack against Nuclear Installations and Facilities signed on December 31, 1988.

After the overt nuclearization, with intent to reduce the risk of war, the famous Lahore declaration was signed between Indian Premier Vajpayee and Pakistan's PM Nawaz Sharif in February 1999.<sup>27</sup> The document was important in putting almost all significant issues on the agenda, including peaceful resolution of all outstanding issues, and subsequent Lahore MoU contained a comprehensive plan for future engagement including a number of nuclear CBMs. The Foreign Secretaries of India and Pakistan had agreed not only to undertake measures to reduce the risk of accidental/ unauthorized use of nuclear weapons but also to establish communication mechanism for notification of nuclear incidents.

Other important strands of the MOU emphasized on the need to discuss concepts and doctrines and to establish CBMs in the nuclear and conventional fields, aimed at prevention of conflict. This acknowledgement of the conventional and nuclear aspects of CBMs, by both parties, carries a lot of significance, as it is vital in preventing conflict. Any measures that leave the growing conventional asymmetries would not be a genuine measure in reducing the risk of conflict. Indian conventional force deployments and doctrines are a significant factor in enhancing Pakistan's reliance on its nuclear weapons. Feroz Khan in this regard writes that, "One of the foremost issues regarding CBMs between India and Pakistan is of a conceptual nature. The premise behind strategic CBMs is that nuclear measures on their own are meaningless if conventional force restraints are not applied."<sup>28</sup>

The Lahore MOU also undertook to: notify parties of ballistic missile tests by concluding an agreement in this regard; sought periodic review of the the implementation of existing CBMs and establishment of appropriate consultative mechanisms to monitor and ensure effective implementation of these CBMs. Two significant nuclear agreements that materialized later; i.e. Agreement on Pre-Notification of Flight Testing of Ballistic Missiles (1999) and Agreement on reducing the Risk from Accidents relating to Nuclear weapons (2007); were actually a manifestation of the Lahore MOU. However, there has been no serious consideration given to review of the CBMs (consultative mechanism) as being separate from the bilateral dialogue.

It is important to mention here about Pakistan's proposal for a strategic restraint regime (SRR) in post-nuclearization era. After the nuclear tests, under marked pressure from international community (UNSC Resolution 1172) India and Pakistan started a strategic dialogue with the US. During the process, Pakistan proposed the idea of strategic restraint with India to be the lynchpin for a forward looking strategy encompassing strategic three elements of restraint: conventional balance, and conflict resolution. The idea however, did not gather much traction, neither for the Indians nor for the US. The significance of highlighting such an approach is based upon understanding Pakistan's strategic concerns emanating from Indian conventional force and doctrinal developments and unresolved disputes<sup>29</sup>. Any lasting peace in the region is unthinkable without considering these three elements of a regime governing restraint amongst the South Asian powers.

The interruption of the dialogue after each crises has been a serious issue. In post Mumbai period, the resumption of dialogue was seen positively, though it did not bring forth new strategic CBMs.<sup>30</sup> The Uri attacks on 18<sup>th</sup> September, 2016,

which India unwarrantedly blamed on Pakistan<sup>31</sup>, use of pellet guns by India in the Indian occupied Kashmir (IOK)<sup>32</sup> and the use of Kashmiri youth as human shields in the IOK<sup>33</sup> has exacerbated the already strained relations between the two countries. In the backdrop of Pakistan's capturing of an Indian spy, Kulbushan Yadav, operating inside Pakistan, the opportunity for a fruitful dialogue to effect a strategic CBM is a far-fetched thought. With India's Prime Minister Modi in the office, India's government is inching towards stringent measures in Kashmir and a tougher stance against Pakistan, in effect limiting the scope for dialogues.

Currently, there are significant differences of priority regarding the issues that need to be resolved. India wishes a dialogue on nuclear issues that is delinked from conventional force keeping its "conventional force-supremacy intact."34 Moreover, India doesn't wish to be tied down regionally in any control mechanism with Pakistan, it wishes to project its position on these issues in a multilateral context as opposed to Pakistan that considers such measures as a means to restrain Indian aggressive military pursuits in conventional and nuclear field. There is an asymmetry in Indian and Pakistani approach. India adopts a systemic approach to the issue and advocates bringing in China and discussing arms control at multilateral level, whereas Pakistan adopts a regional approach to arms control. Assessing the prospects of arms control in such scenario appears to be challenging and therefore an assessment of the preconditions and impediments to such prospects need to be made. Therein, the nuclear triad also figures in with India's assessment of insecurity at multilateral fronts as opposed to a bilateral issue. Therefore, in the context of exercising control and deterring China in the Indian Ocean Region, India considers Pakistan's worries as void citing its own threat perception.

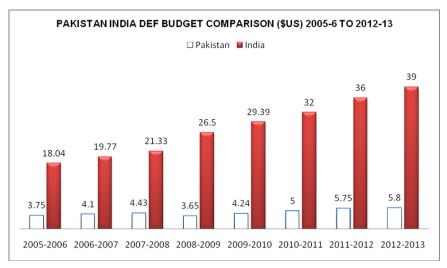
## Assessing the Preconditions and Impediments for Arms Control in South Asia

The US-Soviet arms control analysis brought out that a significant prerequisite for nuclear arms control is the principle of balance of power based on military balance and strategic parity. In South Asia, an analysis of the current Indian and Pakistani conventional military capabilities reveals that there is visible disparity in the conventional forces of both the countries.

## Strategic Parity/ Military Balance

India enjoys a conventional military superiority over Pakistan due to several different reasons discussed in the later part of the paper. However, with the advent of nuclear weapons and their assimilation into the respective defence apparatuses, there has remained a strategic parity between the two countries; albeit one that requires a constant maintenance owing to the offense-defense policies that India continues to pursue. India's weapons program, modernizing, ostensibly as a response to the Chinese program, affects Pakistan with its policy framework direction, which destabilizes the strategic stability in the region. The development of short, medium and long-range cruise and ballistic missiles, which can be launched from land, air and recently acquired sea based platforms induce a spiraling competition in the region.

Comparison of Indian and Pakistani defence budget reveals that (Data available for the last seven years) there has been average annual increase of \$ 0.25 billion and \$3 billion in amount of defense budgets of Pakistan and India respectively as shown in graph below.



Just for the year 2012-13 there was a 17 percent increase in the Indian military budget, turning it into the largest importer of arms, according to SIPRI 2012 estimates.<sup>35</sup> In 2015, India's Defence budget increased to US\$40.4 Billion<sup>36</sup> whereas Pakistan's spending remained at US\$7.6<sup>37</sup> Billion. Accordingly, in the year 2022, the projected defense budget of Pakistan will touch US\$8.05 billion and India \$66 billion. By these estimated projections, and the growing inductions of state of art weaponry and technological advancements the current differential of 79 percent between the defense budgets of both countries would rise to 88 percent by the year 2022.

In terms of air and sea capabilities, Indian military is undergoing massive modernization programs with inductions of new state of the art air, land and naval platforms.

IAF is the 4<sup>th</sup> largest Air Force in the world<sup>38</sup> and is undergoing massive modernization. The modernization includes upgrades of existing fighter planes, purchase of new ones, weaponized drones, improvements in avionics, radars, mission computers, electronic warfare suites, early warning and radar systems, missiles, weapon delivery and precision-targeting systems.<sup>39</sup>

Among other major aerial platforms, the induction of aerial refueling and airborne surveillance aircraft serve a move to enhance its force multiplier capability.

The army and navy is also following suit in terms of modernization. Efforts to develop blue water navy, an assured second strike capability after the acquisition of INS Arihant, and network centric warfare widens the asymmetry.

The growing economy of India makes it a lucrative market for the west and results in massive induction of state-of-art armament inductions for India. These developments are perceived to be challenging by Pakistan. Economically constrained, Pakistan cannot match Indian conventional might and relies more on nuclear weapons for its security. Although India justifies its conventional military built-up as being directed against China, the development of major cantonments close to border with Pakistan and armour brigades are evidence of being directed towards Pakistan<sup>40</sup>.

This increased conventional strength of Indian military forces enhances India's interest in military adventurism against Pakistan and pursue doctrines like theCold Start Doctrine or the Proactive operations strategy, i.e. to conduct conventional incursions inside Pakistan's territory below the (perceived) nuclear threshold.<sup>41</sup> Also statements by Indian officials of fighting<sup>42</sup> (and winning) a limited war under the nuclear overhang, are perceived by Pakistan as posing a challenge to its notion of deterrence and strategic stability. This lack of balance of power obstructs a shared sense of strategic stability and poses a challenge to pursuing arms control. Besides, the most imminent danger in the nuclearized South Asian region could be the result of a conventional conflict escalating beyond the parameters either side desired. Rodney Jones explains the phenomenon when he writes that "conventional arms control

is... important to consider because the disparity in conventional capabilities between India and Pakistan is increasing, and outright conventional warfare probably would make reciprocal nuclear deterrence unstable."<sup>43</sup>

This threat of an Indian armed forces invasion on Pakistan's territory to achieve limited objectives without crossing its nuclear threshold, has invoked a response from Pakistan, in the form of Nasr, a short range missile of 85 kms range, professing to "add deterrence value to Pakistan's Strategic Weapons Development programme at shorter ranges." 44

The case for nuclear sufficiency with regards to Pakistan and India is set on a premature stage. Despite having acquired nuclear weapons, developed missiles and delivery systems and stocking enough nuclear weapons to neutralize the other, the outside elements serve to imbalance the strategic stability. While both US and USSR were leading economies and had superpower status during the Cold War era, Pakistan and India lack resources, capital, technological prowess, and economic stability to ward off foreign pressures and demands to attain strategic stability. However, the salience of nuclear weapons remains in their ability to provide deterrence stability which remains intact between the two states, which then serves to induce strategic balance by providing space to work on other elements of security.

Currently, the nuclear capabilities on both sides are considered to be roughly equal. India has certain edge in terms of fissile material stockpiles and naval platforms for second strike capability. However, there is a wide range of nuclear capable delivery systems (ballistic and cruise missiles) on both sides that are considered credible for nuclear strikes. Both countries are considered to have approximately equal number of nuclear weapons, with Pakistan, according to western estimates, having

10-20 more missiles; however, these are untested claims owing to lack of transparency on declarations of number of nuclear weapons by both states.

However, there is a new drive towards technologies that could undermine the nuclear balance and negatively affect the strategic stability. Indian induction of the ABM systems 45 and its prospective deployment is considered to affect the strategic offense-defense balance negatively. It drives Pakistan to take measures to retain the credibility of its deterrence against India by either developing more missiles (more fissile material by implication) or by inducting ABM systems of its own.46 The strategic modernization in India and Pakistan has also been instrumental in opening new avenues to create an insecurity matrix. With MIRVs becoming an integral part of strategic weapons armoury in South Asia to reinforce strategic deterrence and provide reassurance against ballistic missile defence systems, there is a second nuclear age setting in South Asia, akin to one that was already a major part of US-USSR strategic dilemma. Pakistan's Ababeel, a MIRV capable, 2,200 kilometer range ballistic missile tested in January 2017 resuscitated the weakening strategic balance between Pakistan and India after India initiated work on its Ballistic Missile Defence system. These developments in the region are essentially on a trajectory of an offense-defense relationship which can be detrimental to the possibility of an arms control regime.

Indian submarine program, with recent induction of Nerpa, armed with cruise missiles, along with INS Arihant SSBN will negatively affect the notion of mutual vulnerability. Arihant can be equipped with submarine launched K-15, K-5 and K-4 nuclear capable ballistic missiles. K-15 has a range of 750 Km and can carry a warhead of 1 ton;<sup>47</sup> K-4 has a longer range of

3500 Km with a 2.5 ton warhead<sup>48</sup>, while K-5 is under development by India's DRDO. These missiles, once in service, will afford India with both short and long range nuclear strikes. With India working towards its own assured second strike capability in what it claims to be a stabilizing factor with regards to its rivalry against China, in effect it disturbed the deterrence equation in the region, impelling Pakistan to develop its own assured second strike capability. Pakistan's Submarine Launched Cruise Missile, Babur-3, which can be tipped with both nuclear and conventional warheads (a debate on its own) is its deterrence stabilizer in the region. Babur-3 has a range of 450 KM.<sup>49</sup> These developments, apart from fueling an arms race, have been instrumental in undermining mutual vulnerability.

Moreover, the Indo-US strategic partnership agreement of 2006 has brought to bear severe challenges for regional deterrence. Whereas Pakistan cannot afford to match Indian arsenal, the subsequent nuclear cooperation agreements, flowing out of the deal, will allow India to free its domestic uranium fuel for weapons purposes, altering the overall balance in deterrence. Also, the deal allows India to keep its strategic weapons programme including the Fast Breeder reactor (FBR) program outside of safeguards. These alongside the reactor grade stocks of material (that is considered to be military stock 1) will offset the future balance of deterrence. As argued by Adil Sultan,

"The India-US nuclear agreement, besides undermining the established global nonproliferation norms has also serious security implications for Pakistan. The nuclear deal allows India to maintain at least eight nuclear facilities outside the IAEA safeguards. India has also been given unprecedented concession to reprocess US supplied fuel in two dedicated facilities. In the past such largesse was extended only to the closest of US allies, i.e. Japan and Euratom. The US assurance of fuel supplies in

perpetuity would further allow India to devote more of its domestic uranium to beef up its nuclear arsenal, whereas the imported fuel would be used mainly to furbish its nuclear power plants."52

These trends serve to create a condition where asymmetries are growing and as described earlier, the condition of strategic parity is missing. Pakistan's opposition to the FMCT, as an arms control measure, is argued in light of these developments. It does not want to perpetuate asymmetries in the region by undergoing an agreement that does not address the issue of existing stockpiles of weapon usable material. It preconditions negotiations of such a treaty, therefore, on inclusion and verifiable reduction of current stockpiles.

During the height of arms control era in Cold War (in early 70-s) there was a realization of development of mutual capabilities that enhanced strategic stability and so there was a limit on development of destabilizing technologies like MIRVs and ABM systems. The situation between India and Pakistan brings forth opposing trends. The current discussion points to conditions that do not appear to favour arms control in terms of strategic parity or military balance. The indicators unlike the Cold War environment are moving away from a mutual sense of vulnerability, strategic parity or a stable defence-offence relationship.

Indian military advancements are also directed against China which complicates the future of arms control further.

#### **Economic Indicators**

In the last few decades, South Asian economics dictated different financial policies for Pakistan and India, due to their weaker economic backbones, population bulges, governmental corruption and largely agricultural economic bases. There has always been an existing situation where increased spending remained an issue by default. However, as India's economic base is strengthening, its military budget is being catered for as well. On the other hand, Pakistan's economy, whilst growing at a steady rate, does not facilitate overly increased military spending due to several imminent economic and internal security challenges. For India, a well budgeted military spending translates into a greater conventional edge over Pakistan which is contributing to an acute asymmetry between the arch-rivals.

The discussion of economics in India-Pakistan equation clearly brings forth statistics that favour Indian defence spending. Pakistan's present state of economy cannot afford to achieve strategic parity or military balance with India. Therefore, it subscribes to nuclear weapons to deter India from conventional war. Indian economic rise and increasing GDP growth has made it into a lucrative defence market for the West. This increasing stake of the West in the Indian economic rise and its translation into new weapons acquisition and supply of nuclear materials and technologies has led to its declining interest in negotiating bilateral arms control measures with Pakistan. The role of external powers in the equation is negative, although they are motivated by the economic and strategic dividend of cooperation in new weapons sales to India, it translates negatively for prospects of arms control.

The war on terror and US war in Afghanistan has increased the economic woes of Pakistan. A huge chunk of the resources have been consumed by the war, with the costs rising from \$ 2.669 billion in 2001-02 to \$ 13.6 billion by 2009-10, to a peak of \$ 23.3 Billion in the financial year (2010-11) before receding to \$ 3.88 Billion in the year 2016-17.<sup>53</sup> However, the total cost (direct and indirect) in the last 15 years, till 2016 has been

estimated to be some \$123.13 billion.<sup>54</sup> Therefore, a policy of arms control with India to negotiate constraints would supplement Pakistan's official policy of constraint conventional and nuclear level and avoidance of an arms race. Pakistan army's new doctrine has clearly reflected the importance of the internal security threat by incorporating the internal security in the threat spectrum to be a priority. Lt-Gen Asim Saleem Bajwa, the then director general of the Inter-Services Public Relations (ISPR) stated in this regard that, "subconventional threat is a reality and is a part of a threat matrix faced by our country. But it doesn't mean that the conventional threat has receded."55 The tackling of these accumulated threats have made defense burdensome. Current scenario indicates that measures supporting arms control would be in Pakistan's interest, as opposed to India, which currently lacks an interest on the issue on account of its economic rise and greater international clout.

## **Political/Domestic Factors**

The domestic factors in India-Pakistan generally serve as an impediment rather than a positive driving force. Although, there is a peace constituency in both the countries, mainly in the intelligentsia and academic community; however, the politics in both countries, particularly in India, mainly thrives on policies of mutual rivalry and strong identity against the "other".

The sustainability of the democratic process in Pakistan is a positive development that might translate into a sustainability of the dialogue process amongst the states. With N-League's formation of government in Pakistan as a result of a popular vote, there was hope of some positive headway however such hopes of political risk-taking were dashed because of Indian

intransigence under Modi's government. As described earlier in US-Soviet case, the inter-party frictions and civil bureaucracy frictions also serve a challenge to taking bold approaches. The recent India-Pakistan border tensions indicated an increasing Indian assertiveness aided by bellicose statements by its military. Indian Air Force Chief warned Pakistan of striking Pakistan's nuclear facilities 'if the need arises'.56Other manifestations of such behavior of political intransigence (because of military's assertiveness) were seen during the Gayari tragedy in Siachen. The Pakistan's army chief's proposal for demilitarization of Siachen was dismissed by India. Before the next round of dialogue which was to be held in June 2012, the Indian defence minister A. K. Antony remarked during the debate in the Parliament that, "Don't expect dramatic announcement or decision on an issue which is very, very important for us, especially in the context of national security..."57

Moreover, unlike the US model in Cold War, the masses do not promote positive influence on the government to develop cooperation. Ideological factors and bitter historical realities reinforce a negative political discourse that entrenches national positions and pitches both states against each other rather than moving towards developing a mutual understanding on disputes and reduce differences. For instance, "In India ... The Indian National Congress (INC) and Hindu political force Bharatiya Janata Party (BJP)... tend to use the nuclear issue as a tactical means in critical moments of their political clashes.<sup>58</sup>"

Moreover, the domestic and religious factors influence the decision making in not so positive ways. As Happymon Jacob has observed that,

"religion and cultural aspects ... influence the discourses surrounding nuclear issues and these discourses could have potential, indirect though, impact upon nuclear decision makers, conception of the role of nuclear weapons in national strategy and the social legitimacy surrounding the use and rhetoric of nuclear weapons."<sup>59</sup>

Another instance of such domestic pressures was witnessed during the joint statement at Sharm-el-Sheikh in July 2009, where both India and Pakistan agreed that "Action on terrorism should not be linked to the composite dialogue process and these should not be bracketed," 60 however later, when the Indian PM landed in India, he had to face severe domestic criticism on the issue, which again led to a hardened stance and insistence of conditioning all dialogue on cooperation on terrorism issue 61.

#### **Exploring Prospects**

In light of the discussion above, it is clear that the development of doctrines and technologies have accentuated the asymmetries and undermined prospects for mutual control. Furthermore, the strong political will to undertake restraint on armament as a national policy is not sellable in India, mainly because of domestic political considerations. The external powers play a negative role in this regard by providing India with more armaments and giving it an incentive to negotiate these issues in the big power circles, reducing its interest in settling for arms control at the bilateral level with Pakistan. For Pakistan, the weaker adversary in the equation, arms control can bring some clear dividends. India's rising economic strength, translating in turn into conventional and strategic modernization is making it less interested in undertaking such a bargain with Pakistan.

The current strategic environment does not portend positively towards arms control. However, it is significant that both states maintain the process of dialogue on basis of sustainability and irreversibility. This requires a lot of **strategic patience** from both sides. Incidents of terrorism should not be allowed to hijack the dialogue process and be dealt with in the current mechanism (anti-terror cooperative framework). Measures to reduce the risk of war can only be achieved through continued engagement.

Secondly, there is a need for strong political will and conciliatory gestures to break the deadlock. For instance, India can respond positively to Pakistan's new military doctrine that lays more emphasis on internal threat<sup>62</sup>, through some conciliatory steps. One strategy could be for India to provide some assurance to Pakistan about its non-aggressive intent through actions. This could include signaling of "openness to convening an official dialogue about the posture and readiness levels of military units, including nuclear-capable missile forces, deployed along the common border"63, which could be a conciliatory step. Nonetheless, the statements by Modi, India's current Prime Minister, have introduced a hardliner stance against Pakistan. His rhetoric of diplomatically isolating Pakistan<sup>64</sup> has put Pakistan on the defensive both at regional and international levels. His 'Moditva' doctrine is an extreme ideology where he discounts the interests of other states and focuses on an extremist Hindu agenda. Such extremist approaches undermine the prospect for a fruitful dialogue putting on hold any meaningful dialogue between the two states.

As Michael Krepon analyzes the situation,

"One way is for New Delhi to take dramatic steps to improve relations and to "take away the enemy image," similar to what Mikhail Gorbachev accomplished when he was leader of the Soviet Union in his dealings with the United States. There is, however, little appetite within India for bold steps to reinforce the obvious need of the Pakistani Army to focus on internal security threats."<sup>65</sup>

Considering terrorism as an issue which affects both states, cooperation in counter-terrorism bilateral could bring dividends for both states. There are less divisive areas that can serve to continue engagement for the time being. Economic interdependence may be useful as an interim measure to improving the overall environment. The economic situation in Pakistan can be used as an incentive for both sides to cooperate to build trust and develop a stake in mutual stability of each other. However, these "atmospheric CBMs cannot be a substitute for arms control; they can serve to maintain a relationship of mutually beneficial engagement, which is significant in its own respect. Various other CBMs like increasing trade, establishing communication links, people to people contacts, easing travel links through bus service and trains, scholars exchange programs etc. have been useful and should be built upon further.

Galvanizing the civil society on these issues will help develop popular support on the imminence and significance of arms control. A strategic debate within India and Pakistan on the salience of arms control and resolution of outstanding disputes can help change the popular security narrative that drives the domestic politics. The changed domestic narrative can help both states' leaders to engage in constructive dialogue and take "political risk-taking" vis-à-vis the adversary.

Finally, the external partnerships forged by India, especially US-India partnership will push the region more towards arms race and away from arms control. Therefore, one can argue that the US and other powers should formulate policies for the region,

rather than favoring one state at the expense of strategic stability of the region.

#### Conclusion

South Asia is a conflict prone region with unresolved disputes. The possession of nuclear weapons demands that measures to control this competition should be put in place and efforts to build mutual confidence and to decrease mutual anxieties should be enhanced. This research paper therefore explored the necessary conditions that may favor or impede the arms control process. The US-Soviet bilateral arms control served as a touchstone to determine necessary conditions. The prerequisites included condition of strategic parity, politico-domestic, economic factors and geopolitical asymmetry.

The paper argues that the situation in South Asia brings forth trends that do not promote initiation of an arms control process. The introduction of new destabilizing technologies in the region is affecting the rough strategic parity between both states. The international community's approach in advancing nuclear trade with India is also negatively affecting the bilateral deterrence equation. India has a systemic approach to arms control as opposed to Pakistan which looks at the issues regionally. This Indian systemic approach has made it dismissive about negotiating bilateral arms limitations vis-à-vis Pakistan. India considers that measures for arms control should include China as well as other nuclear armed states. This makes the prospects of bilateral arms control a distant and farfetched goal. Whereas the economic dividends and political atmosphere in Pakistan makes it necessary to negotiate with India to reduce its acute anxieties, conversely, India's economic strength and the ensuing political dividends are making arms control a less attractive option for New Delhi.

However, without dialogue and building of trust, the strategic anxieties of the states will only worsen. Both states should indulge in an institutionalized dialogue process that discusses mutual force postures/doctrines and force modernization plans as a transparency measure. Importance of other areas' engagement like cooperation from economics, trade, and energy to cultural and scholarly exchanges cannot be underplayed. Developing a domestic narrative that promotes arms control than imposition from outside would be beneficial. The international community should adopt a criteria based approach to dealing with nonproliferation outliers, to integrate them into the nonproliferation regime; this will have a positive impact on regional stability.

There are no quick fixes for South Asian region; however, for a lasting peace conventional and nuclear armaments would have to be curtailed both qualitatively and quantitatively through unilateral or bilateral measures for confidence building as well as efforts for arms control. The experience of the US and Russia in limiting conventional and strategic forces and arms in Europe could be useful models in this regard. Finally, the resolution of outstanding disputes is a key to peace and stability.

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#### **End Notes**

http://www2.hull.ac.uk/fass/pdf/India%20Review%20Nuclear%20Arms %20Control.pdf

- <sup>2</sup> Martin E. Goldstein, *Arms control and Military Preparedness from Truman to* Bush (New York: Lang, 1993).
- <sup>3</sup>"Détente and Arms Control, 1969-1979", US Department of State Office of Historian, <a href="http://history.state.gov/milestones/1969-1976/Detente-">http://history.state.gov/milestones/1969-1976/Detente-</a>
- <sup>4</sup> Ibid.
- <sup>5</sup>Note: In August 1967, US and USSR, together, submitted draft proposals at the Geneva Disarmament Conference for a treaty to prevent the further spread of nuclear weapons.
- 6"Détente and Arms Control, 1969-1979", US Department of State Office of Historian, <a href="http://history.state.gov/milestones/1969-1976/Detente">http://history.state.gov/milestones/1969-1976/Detente</a>
- <sup>7</sup>Philip J. Farley, "Strategic Arms Control, 1967-87," in Alexander L. George, Philip J. Farley, Alexander Dallin Eds., *US-Soviet Security Cooperation: Achievements Failures Lessons*, (New York: Oxford University Press, 1988), 230.
- 8 David G. Coleman and Joseph M. Siracusa, *Real world Nuclear Deterrence: The Making of International Strategy*, (Greenwood publishing Group: 2006), pp.81-82.
- <sup>9</sup>Martin E. Goldstein, *Arms control and Military Preparedness from Truman to Bush* (New York: Lang, 1993), p. 142-144.
- 10 Ibid.
- <sup>11</sup> Ibid. For detailed study read the debate presented by Condoleezza Rice where she makes clear that cooperation was possible only when both powers had parity and would not freeze inferiority. SALT contributed to developing of a set of rules that implicitly define parity. Condoleezza Rice, "SALT and the Search for a Security Regime," in Alexander L. George, Philip J. Farley, Alexander Dallin Eds., *US-Soviet Security Cooperation:*

<sup>&</sup>lt;sup>1</sup>Bhumitra Chakma, "Nuclear Arms Control Challenges in South Asia," *India Review* 9, No.3, (July–September 2010), p. 364,

*Achievements Failures Lessons*, (New York: Oxford University Press, 1988), pp.294-297.

- <sup>12</sup> Condoleezza Rice, pp.297-298.
- <sup>13</sup> See Appendix 1 for Cost of the Vietnam war.
- <sup>14</sup> Martin E. Goldstein, *Arms control and Military Preparedness from Truman to Bush* (New York: Lang, 1993), p.126.
- <sup>15</sup> Stephen Daggett, Costs of Major US Wars, CRS Report, June 29, 2010, http://www.fas.org/sgp/crs/natsec/RS22926.pdf
- <sup>16</sup>"Détente and Arms Control, 1969-1979", US Department of State Office of Historian, <a href="http://history.state.gov/milestones/1969-1976/Detente">http://history.state.gov/milestones/1969-1976/Detente</a>
- <sup>17</sup> Jeffrey W. Knopf, "Domestic Sources of Preference for Arms Cooperation; The impact of Protest," Peace Research 35, No.3, (November 1998), p. 677-692.
- <sup>18</sup>Martin E. Goldstein, *Arms control and Military Preparedness...*, p.127.
- <sup>19</sup> For detailed discussion Steven E. Miller, Politics over promise: domestic impediments to arms control, *International Security* 8, No. 4, (Spring 1984), pp. 67-90.
- <sup>20</sup> Elizabeth Pond, "Incentives for arms control. Both US, USSR have political reasons for favoring talks now, but window of opportunity may be small," The Christian Science Monitor, January 4, 1985, <a href="http://m.csmonitor.com/1985/0104/ochat.html/%28page%29/1">http://m.csmonitor.com/1985/0104/ochat.html/%28page%29/1</a>
- <sup>21</sup> Steven E. Miller, "Politics over promise: domestic impediments to arms control." *International*

*Security*, 8, No. 4, (Spring 1984), pp. 67-90

- <sup>22</sup> Ibid, p.79.
- <sup>23</sup> Ibid.
- <sup>24</sup> Philip J. Farley, "Strategic Arms Control, 1967-87," in Alexander L. George, Philip J. Farley, Alexander Dallin Eds., *US-Soviet Security Cooperation: Achievements Failures Lessons*, (New York: Oxford University Press, 1988), 229.

 $^{25}$  Scott D. Sagan, "The Perils of Proliferation in South Asia",  $Asian\ Survey\ 41,\ No.\ 6,\ 2000,\ pp.2-5,$ 

http://sga.myweb.uga.edu/readings/perils\_of\_proliferation.pdf

 $^{27}$  "The Lahore Declaration", United States Institute for International Peace,  $^{21}$  February 1999,

http://www.usip.org/files/file/resources/collections/peace\_agreements/ip\_lahore19990221.pdf

- <sup>28</sup> Feroz Hassan Khan, "Prospects for Indian and Pakistani Arms control and Confidence Building Measures", Naval War College Review63, No.3 (Summer 2010), p.112, http://www.dtic.mil/cgibin/GetTRDoc?AD=ADA520991
- <sup>29</sup> For detailed discussion on Strategic Restraint Regime, see Feroz Hassan Khan, "Prospects for Indian and Pakistani Arms control and Confidence Building Measures", Naval War College Review63, No.3 (Summer 2010), pp. 114-116, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA520991
- <sup>30</sup> Though the December 2011, the round on nuclear CBMs decided to extend the validity of the "Agreement on Reducing the Risk from Accidents Relating to Nuclear Weapons" for another five years.
- <sup>31</sup>India blames Pakistan after Kashmir attack kills 17 soldiers, The Telegraph, September 18 2016, http://www.telegraph.co.uk/news/2016/09/18/seventeen-indian-

http://www.telegraph.co.uk/news/2016/09/18/seventeen-indian-soldiers-and-four-militants-killed-in-kashmir-a/

 $^{\rm 32}$  Pellet guns take toll on civilians in Indian-administered Kashmir, AlJazeera April 23, 2017,

http://www.aljazeera.com/video/news/2017/04/pellet-guns-toll-civilians-indian-administered-kashmir-170423052248825.html

- <sup>33</sup> Indian army award frightens Kashmir 'human shield' *BBC*, May 24, 2017, http://www.bbc.com/news/world-asia-india-40025517
- <sup>34</sup> Feroz Hassan Khan, "Prospects for Indian and Pakistani Arms control and Confidence Building Measures", Naval War College Review 63, No.3 (Summer 2010), p.112, <a href="http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA520991">http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA520991</a>

<sup>26</sup> Ibid.

- <sup>35</sup> Paul Holtom, Mark Bromley, Pieter D. Wezeman and Siemon T. Wezeman, Trends in international arms transfers, 2012, SIPRI Fact Sheet, p.6, <a href="http://books.sipri.org/product\_info?c\_product\_id=455">http://books.sipri.org/product\_info?c\_product\_id=455</a>
- <sup>36</sup> Laxman Kumar Behera India's Defence Budget 2015-16 Institute of Defence Studies and Analyses, March 3, 2015, <a href="http://www.idsa.in/system/files/issuebrief/IB IndiasDefenceBudget2015">http://www.idsa.in/system/files/issuebrief/IB IndiasDefenceBudget2015</a> 16 lkbehera020315.pdf
- <sup>37</sup> Baqir Sajjad Syed, Defence budget raised by 11.6pc to Rs781 billion, *Dawn*, June 6, 2015 <a href="https://www.dawn.com/news/1186510">https://www.dawn.com/news/1186510</a>
- <sup>38</sup> "Modernization of the Indian Air force," http://www.isn.ethz.ch/isn/Digital-Library/Articles/Detail/?id=157423
- <sup>40</sup> India has deployed Out of the current six Army tactical area commands (each comprising two or three Corps), five are believed to be deployed against Pakistan...Out of 13 Corps', 10 are defensive, while three are Strike Corps. The three Strike Corps consist of three Armoured, four Infantry, five Mechanised and three Artillery Divisions. But the only country these mechanised components (3000-plus tanks and armoured personnel carriers) could be deployed against is Pakistan, due to the mountainous nature of the terrain on the northeastern border. The Indian Navy, for its part, is equipped with more than 140 surface ships and more than a dozen submarines, which are divided into four Naval Commands, the bulk of which are also deployed against Pakistan.

http://thediplomat.com/flashpointsblog/2011/02/09/india%E2%80%99s-offensive-new-strategy/

- <sup>41</sup> Masood Ur Rehman Khattak, "Indian Military's Cold Start Doctrine: Capabilities, Limitations and Possible Response from Pakistan", SASSI Research Paper 32, March 2011, <a href="http://www.sassi.org/wp-content/uploads/2012/05/RP-32-Masood-Indian-Militarys-Cold-Start-Doctrine-Mar-2011.pdf">http://www.sassi.org/wp-content/uploads/2012/05/RP-32-Masood-Indian-Militarys-Cold-Start-Doctrine-Mar-2011.pdf</a>
- <sup>42</sup> "Indian military ready to fight China and Pakistan simultaneously: report", *Daily Times*, 31 December 2009, <a href="http://www.dailytimes.com.pk/default.asp?page=2009\12\31\story\_31-12-2009\_pg7\_11">http://www.dailytimes.com.pk/default.asp?page=2009\12\31\story\_31-12-2009\_pg7\_11</a>
- <sup>43</sup> Rodney W. Jones, "Prospects for Arms Control and Strategic Stability in South Asia", Contemporary South Asia14, No. 2, (2005), p.205.

<sup>44</sup> ISPR Press Release, No PR94/2011-ISPR, 19 April 2011, http://www.ispr.gov.pk/front/t-press\_release.asp?id=1721&print=1

<sup>45</sup> Indian indigenous ABM systems alongside procurements of systems like Israeli Iron Dome and Green Pine Radars, for details see "Israel showcases Iron Dome for Indians", UPI.com, 11 February 2013,

http://www.upi.com/Business News/Security-

Industry/2013/02/11/Israel-showcases-Iron-Dome-for-Indians/UPI-52051360617181/

<sup>46</sup> Rida Zeenat, "Indian Pursuit of Ballistic Missile Defence Program – Analysis", Eurasia Review, 31 March 2011,

http://www.eurasiareview.com/31032011-indian-pursuit-of-ballistic-missile-defence-program-analysis/

<sup>47</sup> Vivek Bhardwaj, "K-15 Sagarika Missile Submarine Launched Ballistic Missile (SLBM), Indian Armed Forces," November 5, 2015, Aermech, <a href="http://aermech.in/k-15-sagarika-missile-submarine-launched-ballistic-missile-slbmindian-armed-forces/">http://aermech.in/k-15-sagarika-missile-submarine-launched-ballistic-missile-slbmindian-armed-forces/</a>

48 "India to test a submarine-based ballistic missile," Russian Navy, December 29, 2010,

http://rusnavy.com/news/othernavies/index.php?ELEMENT ID=11204&print=Y

<sup>49</sup> "Pakistan Conducts First Test of Submarine-Launched 'Babur-3' Cruise Missile," Missile Threat, January 10, 2017,

 $\underline{https://missilethreat.csis.org/pakistan-conducts-first-test-submarine-launched-babur-3-cruise-missile/}$ 

50 Adil Sultan Muhammad, "Indo – US Civilian Nuclear Cooperation Agreement Implications on South Asian Security Environment," Henry L. Stimson Center, July 2006,

http://www.stimson.org/images/uploads/research-pdfs/AdilSultan.pdf, for recent analysis see, Mansoor Ahmed, "The Tortoise and the Hare: A Rebuttal", 23 April 2013,

http://krepon.armscontrolwonk.com/archive/3754/the-tortoise-and-the-hare-a-rebuttal.

<sup>51</sup>"India," International Panel for Fissile Materials, http://fissilematerials.org/countries/india.html <sup>52</sup> Adil Sultan, "Pakistan 's Approach towards Nuclear Arms

Control", in "Prospects of Engaging India and Pakistan in Nuclear Arms Limitations," Alexei Arbatov, Vladimir Dvorkin and Sergey Oznobishchev eds., Institute of World Economy and International Relations Russian Academy of Sciences, 2012,

http://www.academia.edu/3065066/Military Strategic Relations of India and Pakistan

<sup>53</sup> Cost of War on Terror for Pakistan's Economy, Survey, Government of Pakistan,

http://www.finance.gov.pk/survey/chapters 17/Annex IV War.pdf

54 Ibid.

55 "New doctrine: Army identifies 'homegrown militancy' as biggest threat," *Express Tribune*, 3 January 2013,

http://tribune.com.pk/story/488362/new-doctrine-army-identifies-homegrown-militancy-as-biggest-threat/

<sup>56</sup> "India can 'locate, fix, strike targets' across border, says Air chief Dhanoa," *Hindustan Times*, Oct 5, 2017, <a href="http://www.hindustantimes.com/india-news/iaf-has-the-capability-to-locate-fix-and-strike-across-the-border-air-chief-marshal-bs-dhanoa/story-Y6IikH9sIGYfwrOBPxq6f0.html">http://www.hindustantimes.com/india-news/iaf-has-the-capability-to-locate-fix-and-strike-across-the-border-air-chief-marshal-bs-dhanoa/story-Y6IikH9sIGYfwrOBPxq6f0.html</a>

<sup>57</sup>"Indian defence minister rules out Siachen breakthrough", *Express Tribune*, June 8, 2012,

http://tribune.com.pk/story/390786/indian-defence-minister-rules-out-siachen-breakthrough/

<sup>58</sup> Vyacheslav Trubnikov, The Role of Nuclear Status in India's and Pakistan's Foreign and Domestic Policy: Russia's Perspective, p.17, <a href="http://www.academia.edu/3065066/Military Strategic Relations of India">http://www.academia.edu/3065066/Military Strategic Relations of India</a> and Pakistan

<sup>59</sup> Happy moon Jacob, "Revisiting Indo-Pak Strategic Stability: Contours of South Asian Nuclear Order," Program on Strategic Stability Evaluation (POSSE),

http://www.posse.gatech.edu/sites/posse.gatech.edu/files/Happymon%2 0Jacob%20POSSE%20VI%20Final%20Paper.pdf. 60"Joint Statement of Prime Minister Manmohan Singh and the Prime Minister of Pakistan Syed Yusuf Raza Gilani, Sharm-el-Sheikh," *The Hindu*, 16 July 2009, <a href="http://www.hindu.com/nic/indopak.htm">http://www.hindu.com/nic/indopak.htm</a>

<sup>61</sup>"Sharm-el- Sheikh like surrender in Thimphu," Rediff News, 14 February 2011, <a href="http://www.rediff.com/news/column/sharm-el-sheikh-like-surrender-in-thimphu/20110214.htm">http://www.rediff.com/news/column/sharm-el-sheikh-like-surrender-in-thimphu/20110214.htm</a>

<sup>62</sup>"New doctrine: Army identifies 'homegrown militancy' as biggest threat," *Express Tribune*, January 3, 2013,

http://tribune.com.pk/story/488362/new-doctrine-army-identifies-homegrown-militancy-as-biggest-threat/

63David J. Karl, "Pakistan: Will Doctrinal Shifts Lead to Changes toward India?" Foreign Policy Blogs, January 5th, 2013,

http://foreignpolicyblogs.com/2013/01/05/pakistan-will-doctrinal-shifts-lead-to-changes-toward-india/

<sup>64</sup>"Modi says India will work to 'isolate' Pakistan internationally," *Dawn*, September 24, 2016 <a href="https://www.dawn.com/news/1285839">https://www.dawn.com/news/1285839</a>

<sup>65</sup> Michael Krepon, "Nuclear Race on the Subcontinent," *New York Times*, April 4, 2013,

http://www.nytimes.com/2013/04/05/opinion/global/nuclear-race-on-the-subcontinent.html? r=0