

## A Rational Nuclear Pakistan: A Critical Appraisal

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### Abstract

*Pakistan transformed its nuclear posture from strategic to full spectrum deterrence to neutralize the possibility of a military incursion into Pakistani territory that could result from India's massive military build-up as envisioned in its Cold start Doctrine. This shift in its nuclear strategy is viewed risky by the Western strategic community. Therefore, attempts have been made to restrain qualitative and quantitative advancements in Pakistani nuclear arsenal. However, Islamabad prefers to maintain its tactical nuclear weapons instead of political and economic advantages.*

**Keywords:** Nuclear, World Order, Strategic Environment, Full-Spectrum Deterrence, Rational Decision Making, Safety and Security, Brackets, Tactical Weapons.

Pakistan's nuclear posture has entered into a new phase since 2013.<sup>1</sup> The National Command Authority announced that the country has acquired 'Credible Minimum Full Spectrum Nuclear Deterrence' ability and capability.<sup>2</sup> It reassured the nation about the unbreakable defensive fence of Pakistan. Indeed, the shift in Pakistan's nuclear posture was an outcome of rational decision-making processes as well as qualitative and quantitative improvement in its nuclear arsenal. The transformation in Pakistan's nuclear posture was not surprising because the objective of its nuclear weapons was/is to deter India's bigger military machine. Though Pakistan's nuclear weapons program was established to deter Indian nuclear blackmail or nuclear aggression, yet the transformation in its posture during the recent

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<sup>1</sup> Press Release, "Inter Services Public Relations (ISPR)", No. PR133/2013-ISPR, Rawalpindi, September 5, 2013. [http://www.ispr.gov.pk/front/main.asp?o=t-press\\_release&id=2361](http://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=2361), accessed on October 13, 2013.

<sup>2</sup> Credible minimum deterrence is a dynamic concept related to the strategic environment, technological imperatives and the needs of national security.

years called for critical examination of Pakistan's nuclear policy.

The national security paradigm and structural realist world view assist us in understanding the transformation in Pakistan's nuclear posture. Simultaneously, the international security paradigm and the discourse on the strategic stability alarm us about the probability of nuclear arms race in the region entailing strategic instability in South Asia. Therefore, the Western strategic community considers the transformation in Pakistan's nuclear posture risky for the international security and thereby continuously pressurizes Islamabad directly and indirectly to revamp its nuclear policy. A few security analysts have determinedly been recommending Islamabad to join the mainstream of the international nuclear order by revamping its declaratory 'credible minimum full spectrum nuclear deterrence posture'. Conversely, many security analysts believe that Pakistan's development of tactical weapons for the sake of full-spectrum deterrence is a rational choice.

Today, even the critics of Pakistan's nuclear posture admit the *raison d'être* of Pakistan's nuclear arsenal. That's why, instead of recommending roll-back of the nuclear program, they are advocating restraint in Islamabad's nuclear policy. The shift in demand ranges from the nuclear restrain policy to stick with 'strategic deterrence' posture or 'commit to a recessed deterrence posture and limit production of short-range delivery vehicles and tactical nuclear weapons.'<sup>3</sup> It was also reported in October 2015 that Washington is convincing Islamabad to accept 'brackets' on its nuclear arsenal in return for access to civilian nuclear technology.<sup>4</sup> These developments manifest that the international community has accepted that Pakistan needs nuclear arsenal for its security.

Interestingly, despite realizing the rationale of Pakistan's nuclear arsenal, many analysts oppose the qualitative and quantitative advances in its nuclear arsenal. They opine that addition of new weapons in Pakistan's nuclear arsenal would unleash nuclear arms race in South Asia having serious repercussions for the international security. Moreover, tactical nuclear weapons increase the hassle of

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<sup>3</sup> Toby Dalton and Michael Krepon, *A Normal Nuclear Pakistan, Report* (Washington D.C: Stimson Center and Carnegie Endowment for International Peace, August 2015), p. 3.

<sup>4</sup> David Ignatius, "The U.S. cannot afford to forget Afghanistan and Pakistan," *The Washington Post*, October 6, 2015. See also David E. Sanger, "U.S. Exploring Deal to Limit Pakistan's Nuclear Arsenal," *The New York Times*, October 15, 2015.

maintaining safety and security of the nuclear arsenal. Theoretically, these concerns seem logical. Practically, however, the accommodation of these concerns is impossible for Islamabad. The critics fail to take into account the gradual transformation in South Asian strategic environment due to India's military doctrinal transformation and mega military hardware purchases. In addition, they are also ignoring the current trends in the nuclear world order which decisively influence the nuclear decision-making in Pakistan.

Pakistan's nuclear decision making is very much determined by its regional strategic environment. Therefore, both national and international nuclear pessimists' maligning and horrifying propaganda against Pakistan's nuclear program including United States and its like minded Western nation's economic sanctions had failed to thwart Pakistan's nuclear weapon program's evolution during the last quarter of the twentieth century. Today, the consensus persists that on May 28, 1998, Pakistan made a rational decision to conduct the five nuclear explosions for restoring the strategic equilibrium in the region that was unbalanced due to India's five nuclear weapons tests on May 11 and 13, 1998. Precisely, being a rational actor in the community of sovereign nations, Pakistan has concluded that without its indigenous nuclear weapon competence, it would not be able to check India's military blackmail.

The primary objective of this study is to critically examine both Pakistan's current nuclear posture and a few recommendations by international leading nuclear analysts within the framework of rational decision-making. It also deliberates on "A Rational Nuclear Pakistan" Vs "A Normal Nuclear Pakistan". Four interlinked questions would be answered in the following discussion, i.e. what are the trends in the prevalent nuclear world order? Are various recommendations to roll-back or cap Pakistan's nuclear weapons development rational? Is the transformation in Pakistan's nuclear posture acceptable as a rational choice? Has Islamabad addressed the safety and security challenges rationally? The article is divided into five sections. The first section spells out the trends in the current nuclear world order. The second section contains the assessment of the sub-continent's strategic environment. The third section briefly overviews Pakistan's nuclear policy. The fourth section deliberates on the shift in Pakistan's nuclear posture due to its full-spectrum deterrence strategy. The fifth section contains debate on the subject of Normal Nuclear Pakistan.

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## Trends in Nuclear World Order

The prevalent nuclear world order illustrates realists' worldview. Though, the idealists or nuclear abolitionists have succeeded in institutionalizing the nuclear non-proliferation regime, yet they have been ended up in serving the interests of the Great Powers on the strategic chessboard. The international nuclear non-proliferation regime has only been successful in limiting the horizontal proliferation of nuclear weapons at the end of the Cold war. The nuclear disarmament remains a wishful objective and thereby nuclear weapon states have been progressively modernizing their nuclear arsenals. The review of the nuclear doctrines of the nuclear armed states reveals the commencement of a new era of global nuclear force modernization and growth. The trends disclose that the nuclear arsenals of the nuclear armed powers would be improved qualitatively in the future. It's because, "nuclear powers feel the need to modernize their arsenals for three main reasons. First, in today's international security environment they still see nuclear weapons as necessary, mainly for deterrence purposes. Second, nuclear weapons continue to play a very important role in maintaining global strategic stability. Third, as long as nuclear arsenals exist, modernization is necessary in order to keep weapons safe and reliable."<sup>5</sup> In addition, the confidence in the Missile Defence Systems' operational technologies definitely obliges the nuclear armed states to increase the quantity of their weapons.

Importantly, the twentieth century structured nuclear non-proliferation regime's overall record is a mixture of success and failure. It is gradually becoming a more fragile and a tenuous arrangement in the twenty-first century. The developments in the global politics in the aftermath of Cold War, the new strategic partnerships and increasing connectivity in the 21<sup>st</sup> century make many non-proliferation regimes arrangements vulnerable to the political, economic and strategic agenda of both: existing Great Powers and Emerging Nuclear Powers. The state-specific criterion that was adopted by the Nuclear Supplier Group members in 2008 to accommodate India and in reciprocity benefit from its growing economic market dividends severely undermined the credibility of the non-proliferation regime as well as

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<sup>5</sup> Lu Yin, "How to approach nuclear modernization? A Chinese response," *Bulletin of the Atomic Scientists*, Vol. 71, Issue 3, May 2015, p. 8.

has germinated pessimism about the future of the Regime. Moreover, today, the nuclear powers have been pursuing their nuclear arsenals related objectives with vigour and firmness. They intelligently twist non-proliferation regime's censoring clauses or preventive arrangements to their advantage without realizing that these acts would put the regime in tatter.<sup>6</sup>

Consequently, the core items of Conference on Disarmament: Nuclear disarmament; A treaty banning the production of fissile material for nuclear weapons and other nuclear explosive devices; The prevention of an arms race to outer space; and Negative security assurances have failed to receive an affirmative response from the members of Conference on Disarmament.<sup>7</sup> The Conference also failed to adopt a program of work for its 2015 session.<sup>8</sup> Moreover, the 2015 Nuclear Non-Proliferation Treaty review conference (27 April to 22 May 2015) exposed the imperfections of the Treaty and the divisions among key parties instead of their collective efforts to help to advance the disarmament cause.<sup>9</sup> The review conference ended without an agreement on a final document.

Today, the long-term nuclear force modernization or advancement programs are underway in all the nuclear armed states.<sup>10</sup> According to the SIPRI Yearbook 2015, "all the nuclear weapon-possessing states are working to develop new nuclear weapon systems and/or upgrade their existing ones."<sup>11</sup> The United States has planned to spend \$355 billion to modernize its nuclear

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<sup>6</sup> Zafar Nawaz Jaspal, "Emerging Nuclear Powers and International Non-Proliferation Regime," *CISS Insight*, Vol. 1, No. 4, August–September, 2013, pp. 1-18.

<sup>7</sup> The Conference on Disarmament (CD) in Geneva, Switzerland is the world's only permanent multilateral disarmament treaty negotiating body.

<sup>8</sup> <http://www.reachingcriticalwill.org/disarmament-fora/cd/2015/cd-reports/9532-cd-fails-to-adopt-a-programme-of-work-for-its-2015-session>, accessed on November 2, 2015.

<sup>9</sup> Statement by Daryl G. Kimball to the 25th UN Conference on Disarmament Issues, Hiroshima, Japan, August 27, 2015. <http://www.armscontrol.org/events/Statement-to-the-25th-UN-Conference-on-Disarmament-Issues>, accessed on November 2, 2015.

<sup>10</sup> Hans M. Kristensen and Robert S. Norris, "Chinese nuclear forces, 2015," *Bulletin of the Atomic Scientists*, June 2015. <http://bos.sagepub.com/content/early/2015/06/17/0096340215591247.full>, accessed on June 20, 2015. BASIC Trident Commission Discussion Paper 1, Published by *British American Security Information Council (BASIC)*, November 2011.

<sup>11</sup> "Nuclear weapons states upgrade warheads despite disarmament," *The News International*, June 15, 2015. <http://www.thenews.com.pk/article-188056-Nuclear-weapons-states-upgrade-warheads-despite-disarmament>, accessed on June 15, 2015. See also "Nuclear force reductions and modernizations continue; peace operations increase - new Sipri Yearbook out now." <http://www.sipri.org/media/pressreleases/2015/yb-june-2015>, accessed on June 15, 2015. [International campaign to abolish nuclear weapons](http://www.icanw.org/faqs-2/), <http://www.icanw.org/faqs-2/>, accessed on June 3, 2015.

arsenal 2014 and 2023.<sup>12</sup> Moscow had also disclosed similar plan to refurbish its nuclear arsenal. Russian Federation announced to add more than 40 intercontinental ballistic missiles (ICBM) to its nuclear arsenal during 2015.<sup>13</sup> In addition to strategic weapons modernization, Moscow is also brandishing its tactical nuclear weapons capability. Similarly, British government announced “to spend £100bn-plus on a new fleet of four Trident nuclear ballistic submarines to provide a Continuous At Sea Deterrence.”<sup>14</sup> India's nuclear posture is also entering in an important new phase with the development of several long-range ballistic missiles, nuclear-powered ballistic missile submarine and increase in weapon grade fissile material.<sup>15</sup> Similarly, Pakistan continues to expand its nuclear arsenal. “With several delivery systems in development, four operating plutonium production reactors, and its uranium facilities, however, Pakistan's stockpile will likely increase over the next 10 years.”<sup>16</sup>

The realization that nuclear energy is a clean cum sustainable source of power generation has boosted the significance of nuclear power plants.<sup>17</sup> Today, nuclear energy is viewed as a secure, reliable,

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<sup>12</sup> “Reductions in US warheads envisioned under the New Strategic Arms Reduction Treaty (New START) will be offset by upgrades in the quality of the US arsenal.” Lu Yin, “How to approach nuclear modernization? A Chinese response,” *Bulletin of the Atomic Scientists*, Vol 71, Issue 3, May 2015, pp. 8-9. Matthew Kroenig, “How to approach nuclear modernization?: A US response” *Bulletin of the Atomic Scientists*, Vol. 71, Issue, 3. May 2015. <http://thebulletin.org/2015/may/how-approach-nuclear-modernization-us-response8291>, accessed on June 27, 2015.

<sup>13</sup> “Putin Says Russia Beefing Up Nuclear Arsenal, NATO Denounces ‘Saber-Rattling’,” *The New York Times*, June 16, 2015. [http://www.nytimes.com/reuters/2015/06/16/world/europe/16reuters-russia-nuclear-putin.html?ref=world&utm\\_source=Saithru&utm\\_medium=email&utm\\_term=%2AMorning%20Brief&utm\\_campaign=New%20Campaign&r=0](http://www.nytimes.com/reuters/2015/06/16/world/europe/16reuters-russia-nuclear-putin.html?ref=world&utm_source=Saithru&utm_medium=email&utm_term=%2AMorning%20Brief&utm_campaign=New%20Campaign&r=0), accessed on June 21, 2015.

<sup>14</sup> Richard Norton-Taylor, “70 years after Hiroshima, nuclear weapons threaten us all” *The Guardian*, July 23, 2015, <http://www.theguardian.com/news/defence-and-security-blog/2015/jul/23/70-years-after-hiroshima-nuclear-weapons-threaten-us-all>, accessed on July 24, 2015.

<sup>15</sup> “In addition to the Dhruva plutonium production reactor near Mumbai, India plans to construct a second reactor near Visakhapatnam, on the east coast. An unsafeguarded prototype fast breeder reactor is also under construction 650 kilometers (km) south at the Indira Gandhi Centre for Atomic Research (IGCAR) near Kalpakkam, which will significantly increase India's plutonium production capacity once it becomes operational.” Hans M. Kristensen, Robert S. Norris, “Indian nuclear forces, 2015”, *Bulletin of the Atomic Scientists*, Vol. 71, Issue 5, September 2015, p, 77.

<sup>16</sup> Hans M. Kristensen, Robert S. Norris, “Pakistani nuclear forces, 2015,” *Bulletin of the Atomic Scientists*, October 2015, <http://bos.sagepub.com/content/early/2015/10/06/0096340215611090.full.pdf+html>, accessed on November 2, 2015.

<sup>17</sup> The environmentally clean power-generators are solar, wind, and nuclear.

low-carbon solution.<sup>18</sup> Therefore, there are 439 nuclear reactors in operation in 31 countries and 67 reactors are under construction in 13 countries. The majority of the operating reactors are located in United States, Europe and Russian Federation, but the most reactors on order or planned are in the Asian region.<sup>19</sup> The current trends in the global energy politics are in favour of the atomic energy. Hence, the emerging economies in Asia have been approaching the nuclear reactor manufacturing nations for the purchasing of the nuclear reactor material as well as for the transfer of nuclear technology for the peaceful application of nuclear energy. United Nations is also encouraging and facilitating the development of nuclear power industry for the prosperity of less developed nations. On October 29, 2007 during the 62<sup>nd</sup> Regular Session of the United Nations General Assembly, a resolution appealing to Member States to continue to support the IAEA's indispensable role in 'encouraging and assisting the development and practical application of atomic energy for peaceful uses' was adopted.

The trends in the global energy realm indicate that nuclear energy share in the global energy market will gradually increase. According to the IAEA estimate, during the next two decades the use of nuclear energy would immensely be increased. It reported that "... the future of nuclear power forecast a projection of an installed global nuclear power capacity of about 510 giga watts [GW(e)] in 2030, a 40% increase over the 370 [GW(e)] installed in 2009. The IAEA's high projection foresees 810 [GW (e)], more than a doubling of 2009 capacity."<sup>20</sup> The Nuclear Energy Technology Roadmap, published in 2010 by the International Energy Agency (IEA) and the OECD Nuclear Energy Agency (NEA) estimates that almost one quarter of global electricity could be generated from nuclear power by 2050.<sup>21</sup> This

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<sup>18</sup> According to the UK government, nuclear energy represents the lowest-cost low-carbon technology available at scale. Leda Betti, and Younes El-Ghazi, "Global Energy Security-The Way Forward," Conference Report- 2012, *Global Diplomatic Forum*, 2012. p. 31. <http://www.gdforum.org/> "Plans For New Reactors Worldwide," *World Nuclear Association*, March 2013. <http://www.world-nuclear.org/info/Current-and-Future-Generation/Plans-For-New-Reactors-Worldwide/>, accessed on February 19, 2014.

<sup>19</sup> <http://www.world-nuclear.org/info/Current-and-Future-Generation/Plans-For-New-Reactors-Worldwide/>, accessed on February 19, 2014.

<sup>20</sup> The details about future nuclear energy were listed in footnote no.1 in Fred McGoldrick, *Limiting Transfers of Enrichment and Reprocessing Technology: Issues, Constraints, Options*, (Cambridge, Mass.: Project on Managing the Atom, Harvard University, May 2011), p. 2.

<sup>21</sup> The details about future nuclear energy were listed in footnote no.1 in Fred McGoldrick, *Limiting Transfers of Enrichment and Reprocessing Technology: Issues, Constraints, Options*, (Cambridge, Mass.: Project on Managing the Atom, Harvard University, May 2011), p. 2.

anticipated role of nuclear energy persuaded many developing states to acquire nuclear technology to address their domestic energy needs. They have planned to construct new nuclear power plants with the assistance of nuclear supplier states. On December 10, 2010, the IAEA Director-General Yukiya Amano pointed out that more than 60 countries “are considering introducing nuclear energy.”<sup>22</sup>

The probability of an accident at the nuclear power plant, vulnerability of a nuclear facility, and terrorist group's sabotage are important puzzles.<sup>23</sup> Therefore, the safety and security of a power plant is a legitimate concern, yet is not irresolvable challenge. The security problem can be resolved by the development of a strong security culture-in which the relevant individuals hold a deeply rooted belief that insider and outsider threats are credible.<sup>24</sup> The 60-year-long recorded history of nuclear energy programs worldwide germinates confidence in the safety apparatus of nuclear power plants. Notably, during these six decades there have been only three major accidents leading to the release of radiation, i.e. Three Mile Island, Chernobyl nuclear power plant, and Fukushima Daiichi nuclear power plants. Among these, the Chernobyl was the only one of these incidents that resulted in human casualties and significant damages to the environment.<sup>25</sup> Nonetheless, the Chernobyl accident formally introduced the concept of 'safety culture' to the vocabulary of nuclear safety.<sup>26</sup> The Chernobyl accident was the result of an old reactor design, compounded by gross safety mismanagement. Similarly, in the case of Fukushima, the Japanese operating authority failed to stick to the International Atomic Energy Agency's safety standards. Notably, in

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<sup>22</sup> Paul K. Kerr, Mark Holt, Mary Beth Nikitin, “Nuclear Energy Cooperation with Foreign Countries: Issues for Congress,” *Congressional Research Service*, No. R41910, August 10, 2011, p. 2. <http://fpc.state.gov/documents/organization/171374.pdf>, accessed on July 12, 2012.

<sup>23</sup> Fukushima is the latest and oft quoted example of radioactive leakage. However, there was not a single radiation-related causality as a result of radioactive disaster.

<sup>24</sup> Hui Zhang, “How Beijing can help prevent nuclear terrorism,” *Bulletin of the Atomic Scientists*, March 10, 2014. <http://thebulletin.org/how-beijing-can-help-prevent-nuclear-terrorism>, accessed on March 16, 2014.

<sup>25</sup> Jacqueline Koch, “Rethinking Asia's Energy Mix: Sustainable, Reliable Nuclear Power,” *The National Bureau of Asian Research*, March 14, 2012. [http://www.nbr.org/research/activity.aspx?id=223#.UwF\\_l\\_mSxR8](http://www.nbr.org/research/activity.aspx?id=223#.UwF_l_mSxR8), accessed on February 16, 2014.

<sup>26</sup> Airi (Iris) Ryu1 & Najmedin Meshkati, “Why You Haven't Heard About Onagawa Nuclear Power Station after the Earthquake and Tsunami of March 11, 2011,” *Vitebi School of Engineering University of Southern California (USC)*, Revised and updated February 26, 2014, p. 17.

Fukushima four reactors were damaged instead of six. The two were saved from the Tsunami because the operators of the facility followed the IAEA safety guidelines.<sup>27</sup> The Chairman of the National Diet of Japan's Fukushima Nuclear Accident Independent Investigation Commission, Dr. Kiyoshi Kurokawa pointed out that: "Accident at the Fukushima Daiichi Nuclear Power Plant cannot be regarded as a natural disaster. It was a profoundly manmade disaster-that could and should have been foreseen and prevented."<sup>28</sup> Nonetheless, both Chernobyl and Fukushima accidents have prompted major improvements in nuclear establishment's approach to nuclear safety or 'nuclear safety regime'. Thus, the safety issue could be addressed by employing the available safety features properly and also by cultivating best safety practices in the trained workforce employed at the nuclear power plant to ensure its safe operation.

The nuclear energy advocates maintain that nuclear waste of nuclear power plant is manageable because it accounts only for a small fraction of nuclear spent fuel, approximately 3%.<sup>29</sup> Currently, countries such as France, China, India and the Russian Federation reprocess most of their spent fuel. Mohamed ElBaradei pointed out that: "The amount of spent nuclear fuel produced annually-about 10,000 tonnes - is actually small when contrasted with the nearly 28 billion tonnes of carbon dioxide (CO<sub>2</sub>) waste from fossil fuels that are released directly into the atmosphere."<sup>30</sup> The proper waste management requires that it must be stored in the geological

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<sup>27</sup> Tepco, on the other hand, to make it easier to transport equipment and to save construction costs, in 1967 removed 25 meters from the 35-meter natural seawall of the Daiichi plant site and built the reactor buildings at a much lower elevation of 10 meters. Tepco's tsunami risk characterization and assessment was, in the judgment of one of the world's renowned tsunami experts, Costas Synolakis, director of the Tsunami Research Center at the University of Southern California, a "cascade of stupid errors that led to the disaster." Airi Ryu and Najmedin Meshkati, "Onagawa: The Japanese nuclear power plant that didn't melt down on 3/11," *Bulletin of the Atomic Scientists*, March 10, 2014. <http://thebulletin.org/onagawa-japanese-nuclear-power-plant-didn%E2%80%99t-melt-down-311>, accessed on March 16, 2014.

<sup>28</sup> Airi (Iris) Ryu & Najmedin Meshkati, "Why You Haven't Heard About Onagawa Nuclear Power Station after the Earthquake and Tsunami of March 11, 2011," *Vitebi School of Engineering University of Southern California (USC)*, Revised and updated February 26, 2014, p. 16.

<sup>29</sup> To make it a manageable issue, spent fuel can be reprocessed to reduce the nuclear waste to a very small amount, which can be stored safely, as is done in France and Russia. About 96% of spent fuel is unused enriched uranium and about 1% of the remaining spent fuel is plutonium, both of which can be used in nuclear power reactors after the reprocessing of spent fuel

<sup>30</sup> Mohamed ElBaradei, "Nuclear Power's Changing Picture," *IAEA BULLETIN* 49/1, September 2007, p. 20.

repository. Today no state in the world has a geological repository. Nonetheless, many states including Pakistan have plans to build their geological repositories.

The positive trajectory in the military application and peaceful use of nuclear technology make the nuclear terrorism a credible catastrophic threat to global security and prosperity. Therefore, the safety and security of nuclear facilities and materials have received serious attention to prevent the nuclear and radiological terrorism. Serious efforts have been made to prevent nuclear terrorism by securing the world's most dangerous materials. Since the passage of UN Security Council Resolution 1540 (April 28, 2004), the international community has been on record as calling on states to refrain from supporting non-state actors in their pursuit of WMD and to adopt and enforce domestic laws and controls towards this end. President Barack Obama declared on April 5, 2009 in Prague, “[W]e must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security.”<sup>31</sup> He launched the Nuclear Security Summits to galvanize world leaders in April 2010 at Washington. This initiative has taken the nuclear security issue to the highest political level. The primary objective of the Nuclear Security Summit process is to harmonize and strengthen the global nuclear security regime. During the third Nuclear Security Summit at The Hague, the leaders of 53 countries agreed to steps designed to improve the security of nuclear and other radioactive material.<sup>32</sup> It was reported that “some 6,000 tons of nuclear material have been permanently secured as a result of the three summits, and participating countries developed other initiatives to strengthen nuclear security practices.”<sup>33</sup> A fourth, and most likely final, summit will be convened in the United States in March 2016.

The leaders participating in the fourth Nuclear Security Summit in 2016 would be expected to announce “additional voluntary proposals, along with a declaration that responsibility for further work on nuclear

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<sup>31</sup> Office of the Press Secretary, The White House, “Remarks by President Barack Obama, Hradčany Square, Prague, Czech Republic,” April 5, 2009.

<sup>32</sup> The First Nuclear Security Summit held in Washington in April 2010. Second in Seoul in March 2012. Third in the Hague in 2014.

<sup>33</sup> By Kenneth C. Brill and John Bernhard, “Closing the gaps in nuclear security,” *The Washington Post*, March 26, 2015. Ambassador John Bernhard, Ambassador Kenneth C. Brill, Dr. Anita Nilsson, and Dr. Shin Chang-Hoon, International Convention on Nuclear Security, Washington, DC March 2015, p. 3. <http://www.nsgeg.org/ICNSReport315.pdf>, accessed on October 29, 2015.

security issues will revert to the patchwork of institutions and mostly voluntary arrangements that predate the summit process, such as Interpol, the International Atomic Energy Agency, the G-8 Global Partnership, and the Global Initiative to Combat Nuclear Terrorism.”<sup>34</sup>

The members of the International Atomic Energy Agency (IAEA) also issued their support for strengthening global nuclear security measures and recognized the importance of closing the gaps in the international legal system in Agency's 59<sup>th</sup> General Conference.

### **Strategic Environment of the Subcontinent**

The unsettled borders, irredentist claims, separatist movements, growing fatal radicalized non-state phenomenon, and above all India's derive to accomplish great power primacy in the region and Pakistan's commitment to sustain sovereign equality among the South Asian nations resulted not only in the Nuclearization of the Subcontinent but also have unleashed destabilizing nuclear arms race between India and Pakistan. Perhaps, the nuclear weapons presence in both the Indian and Pakistani arsenals have created a fatal balance of terror between the belligerent neighbours that caution them to act rationally and desist from tactics, which entail nuclear strike exchanges. At the same time, both New Delhi and Islamabad have been endeavouring to shift the prevalent equilibrium in one's strategic advantage by the introduction of new generation of weaponry in their arsenals and transforming their nuclear postures, i.e. “the incorporation of some number and type of nuclear warheads and delivery vehicles into a state's overall military structure, the rules and procedures governing how those weapons are deployed, when and under what conditions they might be used, against what targets, and who has the authority to make those decisions.”<sup>35</sup> Indeed, the “nuclear postures are evolving in ways that fuel requirements for more

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<sup>34</sup> By Kenneth C. Brill and John Bernhard, “Closing the gaps in nuclear security,” *The Washington Post*, March 26, 2015.

<sup>35</sup> According to Vipin Narang, “the term nuclear posture refers the capabilities (actual nuclear forces), employment doctrine (under what conditions they might be used), and command-and-control procedures (how they are managed, deployed, and potentially released) a state establishes to operationalize its nuclear weapons capability.” *Vipin Narang, Nuclear Strategy in the Modern Era: Regional Powers and International Conflict* (Princeton: Princeton University Press, 2014), p. 4. “Nuclear doctrine defines how, under what circumstances, and for what purposes a state will use its nuclear arsenal. A command and control system (C2) ensures that the state's nuclear weapons will only be used according to the principles of its nuclear doctrine.” Michael Clarke, “Pakistan and Nuclear Terrorism: How Real is the Threat?” *Comparative Strategy*, 32: 2, April 2013, pp. 98-114, 102.

weapons that will, in turn, exacerbate security dilemmas.”<sup>36</sup> The aggravation in security dilemma, undoubtedly, kick start the destabilizing arms race between the strategic competitors.

India and Pakistan's bilateral relations generate a classic military security dilemma involving proliferation of military technologies, arms racing and the interplay of national policies for defence and deterrence. Since 1947, generally, New Delhi has been introducing a new kind or generation of weapons in the sub-continent and Islamabad follows suit.<sup>37</sup> Michael Krepon pointed out that: “This dynamic has been characterized by another Western construct—the 'action-reaction syndrome.' Pakistan and India are now enmeshed in the action-reaction syndrome, despite their initial desire to be content with credible minimum deterrence. India considers deploying missile defences, making Pakistan feel less secure. Pakistan states a requirement for short-range delivery systems for nuclear weapons because of Indian conventional military advantages.”<sup>38</sup> Notably, India has been endeavouring to modernize its ham-fisted armed forces and institutionalize its new military doctrine—Cold Start Doctrine—since the beginning of the twenty-first century. The Indian Army Chief Gen Deepak Kapoor stated in 2010 that “Cold Start calls for cutting Pakistan into salami slices as punishment for hosting yet another Mumbai-style terrorist attack inside India.”<sup>39</sup> This Indian militaristic approach obliged Pakistan to revamp its defence strategy by developing tactical nuclear weapons.

Pakistan's development of tactical weapons may oblige India to revamp its nuclear doctrine. Especially when the current ruling political party in India-Bharatiya Janata Party (BJP)-included in its

<sup>36</sup> Michael Krepon, Introduction, in Michael Krepon, Joshua T. White, Julia Thompson, Shane Mason, ed. *Deterrence Instability & Nuclear Weapons in South Asia* (Washington, D. C. Stimson Center, April 2015), pp.11-12

<sup>37</sup> Ravi Rikhye examined 97 systems induction into the armed forces of India and Pakistan in the 40-year period 1948-88. He concluded that on 76 occasions India was the first to introduce new military system; and on 21 occasions Pakistan introduced a new system prior to India. If one takes into account that some of the Pakistani 'firsts' were due to Indian delays in procurement—as was the case with the 155mm gun—and others were in such minuscule numbers that they could hardly alter the military balance between the two states, the number of Pakistani 'firsts' in Rikhye's analysis actually goes down to six. Amit Gupta, “Determining India's Force Structure and Military Doctrine: I Want My Mig,” *Asian Survey*, Vol. 35, No. 5, May, 1995, p. 442.

<sup>38</sup> Michael Krepon, “The Nuclear Myth,” *Dawn*, August 3, 2014.

<sup>39</sup> Pervez Hoodbhoy, “Win Pak-India nuke war?” *Dawn*, October 31, 2015.

[http://www.bjp.org/images/pdf\\_2014/full\\_manifesto\\_english\\_07.04.2014.pdf](http://www.bjp.org/images/pdf_2014/full_manifesto_english_07.04.2014.pdf), accessed on October 30, 2015.

manifesto to “revise and update” India’s nuclear doctrine “to make it relevant to challenges of current times.”<sup>40</sup> And also “maintain a credible minimum deterrent that is in tune with changing geostatic realities.”<sup>41</sup> The complexity in the prevalent regional strategic environment is multiplying. Both India and Pakistan are endeavouring to amass large quantity of conventional weapons, nuclear capable ballistic and cruise missiles for tactical and strategic nuclear war-fighting. Moreover, since fall 2014 the disputed Line of Control (disputed Kashmir border between India and Pakistan) has heated up again.

The continuity of deterrence stability between India and Pakistan can only guarantee strategic stability in the region. Though, the latter has been giving an impression to alter its nuclear posture to sustain the deterrence stability in the region, yet the former is less inclined to trust on the positive signalling of Islamabad.<sup>42</sup> The change in Islamabad’s nuclear posture would be having a cascading effect on the Indian nuclear policy. Nevertheless, at least rhetorically, both New Delhi and Islamabad have been expressing their commitment to strategic stability. Paradoxically, both India and Pakistan are bent on efforts to dismiss or at least undermine the existence of strategic stability in the sub-continent. In addition, Islamabad’s optimism in “mutual assured destruction” which has put an end to Clausewitzian concept of war in the nuclear era;<sup>43</sup> and at the same time, India’s eagerness to create a space for successful military operation below the nuclear threshold in the sub-continent underscores divergence in the belligerents’ strategic outlook. Indeed, the contrasting trends in India and Pakistan military doctrines have their own dynamics, which cannot be perfectly understood conclusively with the assistance of Cold War nuclear deterrence stability experience.

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<sup>40</sup> “Ek Bharat Shrestha Bharat: Sabka Saath, SabkaVikas,” 2014 Election Manifesto of Bharatiya Janata Party (New Delhi: Excelprint, 2014), p. 39.

<sup>41</sup> Ibid.

<sup>42</sup> India did not figure as an important variable in the last two general elections—2013 and 2008 of Pakistan. Prime Minister Nawaz Sharif expressed his strong commitment to establish good relations with India. That’s why, he visited New Delhi and attended the in the oath taking ceremony of the newly elected Indian Prime Minister Narendra Modi on May 26, 2014.

<sup>43</sup> The 2001-2002 Pakistan-India eye-ball to eye-ball (ten months) military standoff brought home the fact that the nuclear-armed neighbors risk mutual catastrophe, if they go to war. Despite India’s ambitious arms buildup, this reality of “mutual assured destruction” is unlikely to change. Munir Akram, “Security is imperative,” *Dawn*, October 13, 2013. <http://www.dawn.com/news/1049433/security-is-imperative>, accessed on October 13, 2013.

The alarming puzzle for the regional strategic stability is that India's promising military doctrine and nuclear posture signal immense confidence in its 'massive nuclear retaliation' strategy. In 2013, Shyam Saran, the then head of the National Security Advisory Board (the apex body concerned with security matters) declared: "India will not be the first to use nuclear weapons, but if it is attacked with such weapons, it would engage in nuclear retaliation which will be massive and designed to inflict unacceptable damage on its adversary. The label on a nuclear weapon used for attacking India, strategic or tactical, is irrelevant from the Indian perspective."<sup>44</sup> It denotes that Indian strategic armed forces possess a capability through which they could decapitate Pakistan's strategic nuclear retaliatory strikes. Conversely, Islamabad has been demonstrating that it has acquired enough nuclear weapons due to which it is capable of inflicting unacceptable damage on India in any future military contingency. On August 23, 2015, Mr. Sartaj Aziz, Adviser to the Prime Minister on Foreign Affairs and National Security rightly stated: "Modi's India acts as if they are a regional superpower: we are a nuclear-armed country and we know how to defend ourselves."<sup>45</sup> Many strategic analysts misinterpreted Mr. Sartaj Aziz statement by claiming that he was threatening the use of nuclear weapons against India. Whereas, he was confidently articulating Pakistan's potential to defend itself. Importantly, announcing a person's confidence in one's defensive apparatus does not qualify to be declared his/her aggressive or offensive designs. Moreover, it is an open secret that Islamabad has been continuously increasing its fissile material stocks,<sup>46</sup> and also sharpening its small or tactical nuclear weapons in addition to its strategic nuclear weapons.<sup>47</sup>

The preceding discussion highlights that both India and Pakistan are adhering to their policies of strategic competition and the enduring primacy of military security. The military security is primarily about the interplay between the actual armed offensive and defensive

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<sup>44</sup> Quoted in Pervez Hoodbhoy, "Win Pak-India nuke war?"

<sup>45</sup> "We are a nuclear power, and know how to defend ourselves: Sartaj Aziz," *Dawn.com*, August 24, 2015. <http://www.dawn.com/news/1202323>, accessed on September 19, 2015.

<sup>46</sup> Islamabad's stance on FMCT at Conference on Disarmament highlights that it is not ready to cap its nuclear fissile material production ability and capability. Many security analysts opined that Pakistan's nuclear weapons program is one of the fastest growing nuclear weapon programs. Conversely, officially Pakistan denies the fastest growing nuclear weapon program's perception. In reality, it is difficult to identify, which states nuclear weapons program is fastest growing program due the secrecy of the nuclear weapon programs.

<sup>47</sup> The three tests of NASR missile since April 2011, reveals that every NASR missile test demonstrates or discloses a new scientific dimension and advancement in the missile inventory.

capabilities of states on the one hand and their perceptions of each other's capabilities and intentions on the other. The Indian and Pakistani ruling elites and populations treat the armed forces of each other threateningly. It's because, there is a lack of trust and no constraints at all or only weak/limited constraints over the development and procurement of conventional and nuclear weapons. Consequently, India and Pakistan fell prey to 'security paradox'.<sup>48</sup>

### **Pakistan's Nuclear Policy**

Pakistan's economic situation has gradually worsened by the global war on terrorism. Despite the US and NATO drawdown from Afghanistan, the state of affairs at the Pakistan-Afghanistan border remains volatile. The situation in the Federal Administrative Tribal Areas due to the spill over effects of ungovernable Afghanistan is deplorable. Pakistani armed forces launched operation Zarb-e-Azb in June 2014 to eradicate transnational terrorist organizations sanctuaries in North Waziristan. Precisely, these negative developments have been severely taxing Pakistan's economy. The economic constraints and India's arms procurement spree from the militarily advanced countries have obliged Pakistan to increase its reliance on indigenous nuclear weapon capability as a cheaper alternative to purchase sophisticated costly military hardware from the United States and European military equipment supplier nations.

The National Command Authority of Pakistan, the apex nuclear program-related policymaking body, has declared it's "the national resolve to maintain 'Full Spectrum Deterrence Capability' in line with the dictates of 'Credible Minimum Deterrence' to deter all forms of aggression". Pakistan's full spectrum deterrence capability response is developed in the aftermath of India's announcement of offensive military doctrines such as Cold Start or Pro-Active Military Operation Strategy. Under its Cold Start Doctrine, India had moved its cantonments close to the Pakistani border that allowed India to move its conventional weapons close to Pakistan along with other vehicles and fuel supplies: "By drastically reducing the time required to launch an aggression against Pakistan." Praveen Swami pointed out that: "The Indian gamble is this: Air strikes and small military operations on the

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<sup>48</sup> The complex situation in which 'more a country strives to be secure the less secure it becomes' is known as security paradox. For a detailed discussion, see Sujeet Samaddar, *Defence, Development and National Security* (New Delhi: Gyan Publishing House, 2005), pp. 45-46.

LoC won't give Pakistan enough reason to escalate a conflict, mired as it is in a sapping internal war."<sup>49</sup> On October 20, 2015, Pakistan's Foreign Secretary Aizaz Chaudhry categorically stated: "We have plugged the gap India had created. We have the right to do so."<sup>50</sup> He added: "Our nuclear program is one dimensional: stopping Indian aggression before it happens. It is not for starting a war. It is for deterrence." Precisely, India's attempt to create a gap for limited war through its Cold Start Doctrine prompted Pakistan to make low-yield nuclear weapons. Certainly, the development of low-yield nuclear weapons to bridge the gap, which India tried to create for limited war, is a rational choice in the prevalent complex South Asian strategic environment. Because these devices make war in the sub-continent unwinnable - and focused on enhancing confidence building measures to prevent both inadvertent and accidental limited war between India and Pakistan.

Pakistan's expanding economy, growing urbanization, and efforts to address underdevelopment in rural areas, in the recent years, resulted in acute power shortage. Moreover, the socio-economic trends of the Pakistani society manifest that the energy demand would increase in the country on a steady basis in the foreseeable future. Perhaps, the rising energy demand necessitated the ruling elite to chalk out a multifaceted energy policy. Intelligently, instead of relying on one or two sources of power generation, the government has devised as well as articulated a comprehensive energy mix strategy to resolve the current power shortage and protect the country from similar crisis in the future.

### Full Spectrum Deterrence

Realistically, New Delhi's conclusion that its modernized military machine would enable it to successfully pursue its objectives through a limited-conventional-war without permitting it to escalate into a total war having probability of nuclear exchanges is too simplistic. It denotes that India's makers of modern strategy are not cognizant to both Pakistan's modern military thinking and its military doctrine or

<sup>49</sup> Praveen Swami, "Pakistan's nuclear weapons may not deter Indian retaliation, but destruction mutual," *The Indian Express*, October 28, 2015. <http://indianexpress.com/article/opinion/columns/pakistans-nuclear-weapons-may-not-deter-indian-retaliation-but-destruction-mutual/>, accessed on October 28, 2015.

<sup>50</sup> Anwar Iqbal, "Pakistan has built low-yield nuclear weapons to counter Indian aggression," *Dawn*. Com, October 20, 2015. <http://www.dawn.com/news/1214157>, accessed on October 28, 2015.

war-fighting modern strategy, i.e. 'synchronization of its conventional and nuclear weapons capability.' Pakistani decision-makers are convinced that endeavour to create a space for conventional war in a nuclear environment is unattainable. In the words of Pakistan's Foreign Secretary: "Our argument is, when you are a nuclear power, you do not create spaces for war. War is no more an option."<sup>51</sup>

Pakistani military planners are vigilant about the Indian military machine advancement and its likely impact on the defensive fence of the country. Therefore, they have been chalking out as well as executing rational countermeasures to respond effectively to India's new military doctrine by vigilantly transforming its Military Doctrine in general and nuclear posture in particular. Consequently, today, Pakistan has developed tactical nuclear weapons (low-yield nuclear warheads to be delivered by short range missiles) having a localized impact or used in the battlefield, unlike big bombs designed to destroy cities. On September 5, 2013, Pakistan's National Command Authority (NCA), chaired by Prime Minister Muhammad Nawaz Sharif stated that: "Pakistan would continue to adhere to the policy of Credible Minimum Deterrence, without entering into an arms race with any other country. Pakistan, however, would not remain oblivious to the evolving security dynamics in South Asia and would maintain a 'full spectrum deterrence' capability to deter all forms of aggression."<sup>52</sup> On October 29, 2015, Pakistan's Foreign Secretary Aizaz Chaudhry while elaborating the concept of Full Spectrum Deterrence stated: "Our conduct continues to be guided strictly by the principle of credible minimum deterrence. Full Spectrum Deterrence is by no means a quantitative change in our credible minimum deterrence; it is rather a qualitative response to the emerging challenges posed in South Asia."<sup>53</sup> This accentuates Islamabad's sincere desire to avoid an arms race with New Delhi without compromising on the credibility of its defensive fence.

The acceptability of chalking out a military doctrine which advances interplay of conventional and nuclear strategic and tactical

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<sup>51</sup> Anwar Iqbal, "Tactical N-arms to ward off war threat, says FO," *Dawn* October 20, 2015. <http://www.dawn.com/news/1214196>, accessed on November 2, 2015.

<sup>52</sup> Press Release, "Inter Services Public Relations (ISPR)", No. PR133/2013-ISPR, Rawalpindi, September 5, 2013. [http://www.ispr.gov.pk/front/main.asp?o=t-press\\_release&id=2361](http://www.ispr.gov.pk/front/main.asp?o=t-press_release&id=2361), accessed on October 13, 2013.

<sup>53</sup> "Pakistan stresses conflict resolution in South Asia," *The News International*, October 30, 2015. <http://www.thenews.com.pk/Todays-News-13-40469-Pakistan-stresses-conflict-resolution-in-South-Asia>, accessed on October 31, 2015.

or battlefield forces has brought about a gradual transformation in Pakistan's nuclear posture. Because, it would be more credible on all counts to develop nuclear weapons with ranges, yields, and targeting doctrine to threaten Indian conventional forces, while retaining strategic nuclear weapons (massive retaliation) options to deter further escalation. The declassified information about Pakistan's nuclear posture reveals that in a few areas transformation in the posture has already occurred. The rational decision making processes indicate that the current qualitative transformation gradually entails more changes in the nuclear posture in the near future. Today, one can conclude that at four distinct levels i.e. National Command Authority; Nuclear Deterrence Strategy; Nuclear Weapons Inventory; and in Nuclear Targeting Strategy, the transformation in the nuclear posture has occurred. Indeed, these transformations would have a decisive impact on Pakistan's nuclear posture. Therefore, the said transformations have been deliberated in the following discussion.

#### Pakistan's Nuclear Posture Matrix

<p>Nuclear Posture</p>	<ul style="list-style-type: none"> <li>- Minimum Credible Deterrence.</li> <li>- Full Spectrum Deterrence.</li> <li>- Shifting from a Catalytic Nuclear Posture to an Asymmetric Escalation Nuclear Posture.</li> <li>- First use of nuclear weapons against military and civilian targets.</li> </ul>
<p>Objective</p>	<ul style="list-style-type: none"> <li>- To deter India's bigger conventional war-machine's intervention or penetration inside Pakistan (Cold Start Doctrine/Proactive Military Operation strategy).</li> <li>- To deter India's nuclear blackmail.</li> </ul>

<p>Logic</p>	<ul style="list-style-type: none"> <li>- It is facing a conventionally superior proximate offensive threat.</li> <li>- It is not confident that it could compete with India in conventional arms race due to its financial constraints.</li> <li>- Its indigenous nuclear capability gives it a confidence of self-reliance in keeping its sovereign defence.</li> </ul>
<p>Effectiveness</p>	<ul style="list-style-type: none"> <li>- Today, it seems effective.</li> <li>- Having de-jure National Command Authority</li> </ul>

Pakistan's repeated nuclear capable ballistic and cruise missile's tests reveal that it has gradually been perfecting its full spectrum deterrence requirements. It has been developing a triad of nuclear forces. Indeed, its air force and land based ballistic missile capabilities have been developed and tested. Whereas; its naval tier is in its formative phase. Therefore, the next step of Pakistan's nuclear posture "includes an effort to develop nuclear warheads suitable for deployment from the Indian Ocean, either from warships or from one of the country's five diesel-powered navy submarines."<sup>54</sup> The steady enlargement of country's nuclear arsenal resulted in a fictitious narrative that: "Pakistan has the world's fastest growing nuclear program."<sup>55</sup> Islamabad has repeatedly declared baseless the reports about Pakistan's fastest growing nuclear program. On October 29, 2015, Secretary Aizaz categorically stated: "such reports are aimed at diverting attention from the exponential increase in India's fissile material stockpiles as a result of nuclear deals with a growing number

<sup>54</sup> "Pakistan eyeing sea-based nuclear weapons: report," *Pakistan Today*, September 22, 2014. <http://www.pakistantoday.com.pk/2014/09/22/national/pakistan-eyeing-sea-based-nuclear-weapons-report/> assessed on November 24, 2014.

<sup>55</sup> Sajjad Haider, "Pakistan has world's fastest growing nuclear programme: US think tank," *Dawn*, November 24, 2014. <http://www.dawn.com/news/1146584/pakistan-has-worlds-fastest-growing-nuclear-programme-us-think-tank>, accessed on November 24, 2014. <http://www.dawn.com/news/1216319/world-powers-urged-not-to-pressurise-pakistan-on-n-issue>,

of NSG countries and its destabilizing consequences for the region.”<sup>56</sup>

### **A Normal Nuclear Pakistan: A Debate**

The advancements in the nuclear capable delivery systems and miniaturization of the nuclear devices once again commenced a debate on Pakistan's nuclear program during the recent months. A few American nuclear experts expressed their distress over the modernization of the program and also made baseless claims such as the “fastest-growing nuclear program on earth” or “Pakistan might be on the verge of deploying a small tactical nuclear weapon.” They spelled out a few policy options to cap the quantitative as well as qualitative improvement in the program. They also listed a few benefits, such as membership of NSG, MTCR, A Normal Nuclear Pakistan, etc. that Pakistan would receive in the reciprocity of observing restraint in its nuclear program modernization. For instance, two senior American Journalists David Ignatius and David E. Sanger reported in *The Washington Post* and *The New York Times* respectively in October 2015 that Obama administration is exploring a nuclear deal with Pakistan provided it accepts “brackets on Pakistan's short-range and long-range nuclear options” on its nuclear weapons developments.<sup>57</sup> The brackets' proposals seem centered on Pakistan's shortest-range ballistic missile-NASR having 60km range, so-called tactical nuclear weapons and long-range ballistic missile Shaheen-III having 2750 km range. The test of Shaheen-III marked Pakistan's potential to develop intermediate range ballistic missiles.<sup>58</sup> Indeed, acceptance of Washington's conditional civilian nuclear offer would give Islamabad access to a global marketplace for nuclear power plants, technology, services and fuel for civilian purposes. Toby Dalton and Michael Krepon, two leading American nuclear analysts, also published a report titled “A Normal Nuclear Pakistan” in August 2015. Indeed, this report requires critical examination. Nevertheless, these writings have intensified debate on Pakistan's nuclear program in the international media.

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<sup>56</sup> “World powers urged not to pressurise Pakistan on N-issue,” *Dawn*, October 30, 2015.

<sup>57</sup> David Ignatius, “The U.S. cannot afford to forget Afghanistan and Pakistan,” *The Washington Post*, October 6, 2015. See also David E. Sanger, “U.S. Exploring Deal to Limit Pakistan's Nuclear Arsenal,” *The New York Times*, October 15, 2015.

<sup>58</sup> Peter Lavoy, a veteran intelligence and Pakistan expert cataloged Americans concerns on both NASR and Shaheen-III on March 23, 2015 during a conversation with Lt. General (retired) Khalid Kidwai, the former Director General of SPD at the Carnegie International Nuclear Policy Conference 2015 (CINPC 2015) held at Washington D.C. The author was present in the audience during conversation.

Theoretically, these offers seem in the advantage of Islamabad. However, the norm of the real-politick, trends in the global nuclear order and above all the developments in the regional strategic environment due to India's gigantic military build-up refrain Islamabad from accepting these recommendations. Is this denial approach of Islamabad rational? Today, Islamabad seems prepared to negotiate a civilian nuclear deal with Washington without compromising on its 'credible minimum full spectrum nuclear deterrence posture'. Similarly, Pakistan expressed its desire to be a member of all international export control regimes, i.e. the NSG, MTCR, Australian Group and Wassenaar Arrangement. However, it is not ready to compromise on its nuclear posture by accepting unrealistic conditions on its nuclear weapon program. It's because, Pakistan's nuclear decision making is very much determined by its regional strategic environment instead of idealistic norms of nuclear non-proliferationists or nuclear pessimists conclusions. Moreover, Pakistan developed its nuclear weapons to defend itself from the Indian nuclear blackmail.

The review of Pakistan's nuclear program's evolutionary history reveals that Islamabad's nuclear policy has always been rationally perceived and logically executed. Despite it, a few strategic pundits question it prejudicially. Instead of examining Islamabad's nuclear policy objectively, within the context of South Asian strategic environment, they demand for the rollback of Pakistan's nuclear program. They deliberately ignore the Indian military doctrine transformation entailing colossal military build-up. Similar flaws or deliberate negations of Pakistani concerns can be noticed in Toby Dalton and Michael Krepon report-*A Normal Nuclear Pakistan*.

The Report is an interesting reading. The contributors diligently endeavoured to prove that presently Pakistan is an atypical nuclear weapon state. They also recommended Islamabad five nuclear weapon-related initiatives to become a normal nuclear weapon state. These recommendations warrant serious deliberation on the subject because speculatively these five proposals to Islamabad seem benign, but in reality these proposals are perilous for Pakistan's national security in general and defence in particular. The report fails to treat Pakistan on par with India. The objective analysis necessitates that each proposal ought to be examined systematically. Dalton and Krepon proposed five proposals are following:

1. Shift declaratory policy from “full spectrum” to “strategic” deterrence.
2. Commit to a recessed deterrence posture and limit production of short-range delivery vehicles and tactical nuclear weapons.
3. Lift Pakistan's veto on Fissile Material Cut-off Treaty negotiations and reduce or stop fissile material production.
4. Separate civilian and military nuclear facilities.
5. Sign the Comprehensive Test Ban Treaty without waiting for India.<sup>59</sup>

The aforementioned recommendations highlight that the complex strategic environment of South Asia has completely been ignored by the authors of the Report. In addition, they also disregarded India's colossal military build-up and transformation in its military doctrine. Indeed, today, for the Americans, India's military build-up is an advantageous development due to the Indo-US Strategic Partnership, New Delhi's potential to purchase American military hardware,<sup>60</sup> and strategic competition with China. The Indian strategic community has successfully been propagating that India would check China's rise in the Asian strategic environment. It's a debatable assertion that whether New Delhi checkmates China or only maintains a phony rivalry with Beijing. But it's an established fact that India's military build-up is perilous for Pakistan's defence. Therefore, Islamabad ought to chalk out a viable strategy to defend itself from the increasing conventional fire power of India.

Many analysts seem ignorant about the factual situation when they opined that Pakistan's nuclear weapon program is a fastest-growing program. The comparative analysis of India and Pakistan nuclear inventories reveal that latter's program is not fastest-growing. For instance, Hans M. Kristensen and Robert S. Norris' findings

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<sup>59</sup> Toby Dalton and Michael Krepon, *A Normal Nuclear Pakistan*.

<sup>60</sup> India has emerged as one of the world's largest buyer of weapons systems during the recent years. Therefore, the United States has established “India Rapid Reaction Cell at the Pentagon” to streamline the coordination required for India's procurement of American arms in February 2015. Keith Webster, Director, International Cooperation Office of the Under Secretary of Defence for Acquisition, Technology and Logistics, heads this cell. Importantly, India is the only country to have a specific cell of its kind inside the Pentagon. “Special cell in Pentagon for defence ties with India,” *Dawn*, September 17, 2015. “Regional Arms Buildup,” *Dawn*, September 18, 2015.

contradict Toby Dalton and Michael Krepon estimates about India's fissile material. They concluded that: "India is estimated to have produced approximately 540 kilograms of weapon-grade plutonium, enough for 135 to 180 nuclear warheads, though not all of that material is being used."<sup>61</sup> The Pakistani estimates also contradict the authenticity of international analysts' estimates. It was reported that "Pakistani assessment is that India has enough fissile material, both reactor- and weapon-grade plutonium, for more than 2,000 warheads."<sup>62</sup> In such a situation, certainly, it is difficult for Islamabad to alter its credible minimum full spectrum nuclear deterrence policy. The following table also reveals the asymmetry in India and Pakistan's fissile material.

	HEU, tones	Non-civilian Pu tones	Civilian Pu Tones
<a href="#">Pakistan</a>	<b>3</b>	<b>0.15</b>	<b>0</b>
<a href="#">India</a>	<b>0.8</b>	<b>5.2</b>	<b>0.24</b>

Source: <http://www.fissilematerials.org/>

The proposal about "committing to a recessed deterrence posture and limit production of short-range delivery vehicles and tactical nuclear weapons" seems partially acceptable. But it is only viable, if Islamabad is capable to spend billions of dollars to purchase conventional sophisticated military hardware from the developed world's military industrial complex. In simple words, Pakistan limits its nuclear weapons production and enters into an economically devastating conventional arms race with India. Indeed, it would be an economically disastrous option for Pakistan and thereby it ought to avoid conventional arms race with India. Another workable option in this context is a comprehensive arms control agreement between India and Pakistan. The former, however, seems least interested in negotiating an arms control agreement with Islamabad.

Importantly, Islamabad had not only expressed its aspirations, but had also endeavoured to keep South Asia free from nuclear weapons. Unfortunately, it had failed to keep South Asia free from nuclear weapons due to India's Great Power designs. Therefore, despite

<sup>61</sup> Hans M. Kristensen, Robert S. Norris, "Indian nuclear forces, 2015", *Bulletin of the Atomic Scientists*, Vol. 71, Issue 5, September 2015, pp 77-83.  
<http://thebulletin.org/2015/sepember/indian-nuclear-forces-20158728#sthash.HykdiJGa.dpuf>, accessed on September 5, 2015.

<sup>62</sup> Baqir Sajjad Syed, "Broadest deterrence capability to be kept," *Dawn*, September 10, 2015.

Islamabad's earnest desire to keep South Asia free from nuclear weapons, it has refrained from joining the Nuclear Non-Proliferation Treaty in 1970s. Subsequently, it developed its indigenous nuclear infrastructure. And, also has refrained from signing CTBT because the global nuclear environment is not conducive for the Treaty entry-into-force in the near future. The CTBT lost significant support in October 1999, when the Senate of United States refused to ratify it. Therefore, it is an erroneous conclusion that Islamabad is waiting for India to sign the Comprehensive Test Ban Treaty. The practical approach for the entry into force of the CTBT is that the United States Senate ratifies the Treaty.

Islamabad's firm stance on the Fissile Material Cut-off Treaty (FMCT) at the Conference on Disarmament is not acceptable to the United States and its like-minded nations. Therefore, the American analysts including the writers of the report-A Normal Pakistan-criticized Pakistan's FMCT stance. Despite the severe opposition Islamabad is disinclined to alter its stance on FMCT at CD. On February 13, 2015, it reiterated its stance that it cannot accept negotiations on FMCT with the Shannon Mandate, due to its security concerns. Ambassador Zamir Akram stated: "Other elements of the PoW (Program of Work) were acceptable to us. We were and are ready to negotiate on any or all of the other CD's agenda items except FMCT with the Shannon Mandate. Accordingly, we proposed amendments to your PoW."<sup>63</sup> Today, many nations are pressuring Islamabad to soften its stance on the FMCT. Conversely, Islamabad seems convinced that FMCT scope should include both arms and disarmament components as well as take into account the regional security environment. Secondly, the continuing policies of nuclear exceptionalism and discrimination for the sake of commercial gain and profiteering have also hardened its position on FMCT. Thus, it seems appropriate to focus and address the causes due to which Pakistan is reluctant to lift its veto on FMCT negotiations at the Conference. Moreover, the current trends in the global nuclear politics also reveal that the reduction or stopping of fissile material production is impossible. Thus, neither international nor regional trends support the demand of authors of the Report to reduce or stop fissile material production.

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<sup>63</sup> Statement by Ambassador Zamir Akram, Permanent Representative of Pakistan to the UN at the CD Plenary on 13 February 2015.

## **Conclusion**

An objective analysis of Pakistan's nuclear posture reveals the rational decision-making thinking at the National Command Authority's echelon. The Authority realistically delineates both conventional and nuclear threats to the country; and thereafter vigilantly chalks out a Credible Minimum Full Spectrum Nuclear Deterrence posture. Notwithstanding, many strategic pundits are uncomfortable with the qualitative transformation in Pakistan's nuclear posture. They consider the shift in the posture perilous and destabilizing. Hence, they have recommended various proposals to administer Pakistan's nuclear decision making. These recommendations, however, were rejected by the NCA because Pakistan is confronted with a credible threat from India, which has been pursuing dangerous and provocative military doctrines such as Cold Start and Proactive Military Operation Strategy.

To conclude, the increasing complexity in the strategic environment of Pakistan due to India's conventional military build-up obliges the NCA to act rationally and advance its nuclear arsenal qualitatively to realize the requirements of its 'credible minimum full spectrum nuclear deterrence posture' to solidify country's defensive fence.