

## Unravelling Ambiguities: The Quest for Credible Minimum Deterrence in South Asia

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### Abstract

*Since 1998, Credible Minimum Deterrence (CMD) has remained India's and Pakistan's doctrinal posture. At face value, a credible minimum means less nuclear force to ensure stable deterrence. However, the term is not as simple as it seems because there is no agreed-upon explanation of how much can be quantified as minimum and credible. The Asian nuclear triangle (India, Pakistan, and China) adds another layer of ambiguity to the concept of CMD in South Asia. Because India's minimum credible nuclear force may not be credible against conventionally advantageous China. Similarly, the conventional asymmetry between India and Pakistan presses the latter to rely on nuclear weapons to deter the full spectrum of threats (nuclear, conventional, and sub-conventional) from India. India's qualitative build-up, like the employment of Ballistic Missile Defence (BMD), its strategic partnership with the USA, and its doctrinal postulations, have direct implications for the stated policy of Pakistan. This research basically addresses the question: Are India and Pakistan abiding by the CMD policy? How can both sides ensure the practicability of the CMD in South Asia? The study is descriptive and analytical in nature. For this purpose, secondary sources like journal articles, books, newspaper articles, and accessible official websites and documents are utilized. The article concludes that what is considered a credible minimum today may not be credible tomorrow. Thus, the arms race will continue to be a constant feature of the South Asian nuclear environment. To abide by the CMD, India, and Pakistan need to be engaged in serious nuclear dialogue and focus on credible measures (beyond risk reduction) like the mechanism of some arms control regime.*

**Key Words:** India, Pakistan, Credible Minimum Deterrence, Full Spectrum Deterrence, Arms Control Regime.

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## **Introduction**

Keeping in view the destructive nature of nuclear weapons, these are always considered as political weapons aimed at deterrence purposes. The use of nuclear weapons is considered as mutual suicide for the belligerent nuclear capable states, thus countries always strive to deter nuclear confrontation. For this purpose states use to devise different deterrence strategies which are incorporated in their nuclear doctrines or postures.<sup>1</sup> Deterrence is not simply dependent on the possession of nuclear weapon capability. Rather it is dependent on the postures and doctrines that are intelligently designed by the policy making elites of a nuclear capable state.

Doctrines are defines as set of belief system to be followed by a community. Merriam-Webster Dictionary defined doctrine as a set of principles devised by a government to be followed in specific circumstances.<sup>2</sup> Furthermore, “doctrine consists of fundamental principles by which military forces guide their actions in support of national objectives. It constitutes official advice but requires judgement in application.”<sup>3</sup> Military doctrines are never synonymous to nuclear doctrines. As nuclear doctrines are not only limited to the deployment of available capabilities, these also include force structure, qualitative and quantitative build-up, deployment of command and control system etc.<sup>4</sup>

Keeping in view the historic rivalry and nature of uneasy relations among India and Pakistan, Kashmir (outstanding dispute between India and Pakistan) is termed as a nuclear flash point. India’s “Operation Smiling Buddah” (1974) has pressed Pakistan (asymmetrically disadvantaged in conventional armed forces) to follow the nuclear path. Both countries demonstrated their nuclear capabilities in 1998. Soon after the nuclear test both sides came up with their nuclear policies. Indian nuclear doctrine was announced in

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<sup>1</sup> Lawrence Freedman, *The Evolution of Nuclear Strategy* (New York: Palgrave Macmillan, 2003), 102.

<sup>2</sup> Definition of Doctrine, <https://www.merriam-webster.com/dictionary/doctrine>.

<sup>3</sup> “A Primer on Doctrine,” Curtis E. Lemay Center, [https://www.doctrine.af.mil/Portals/61/documents/Doctrine\\_Primer/A%20Primer%20on%20Doctrine%208%20Oct%2020%20v2.pdf](https://www.doctrine.af.mil/Portals/61/documents/Doctrine_Primer/A%20Primer%20on%20Doctrine%208%20Oct%2020%20v2.pdf).

<sup>4</sup> Amir Latif, “A comparative study of nuclear doctrines of India and Pakistan”, *Journal of Global Peace and Conflict* 2, no. 1 (2014): 129-146.

1999, which was later adopted in 2003. While Pakistan has no declared nuclear doctrine and signals its postures through the statements of important governmental and military representatives. “Credible Minimum Deterrence” (CMD) is the corner stone of the nuclear policy of both states. Pakistan's conventional disadvantage always presses it to possess a quantitatively superior nuclear force. On the other hand, India (with aspirations of regional hegemony) always indulges in technological augmentation, thus pressing Pakistan into an arms race. The Indo-US strategic partnership also tilted the balance in India's favour, hence fueling an arms race against the proclaimed CMD.

This study aims to investigate what ‘Credible Minimum Deterrence’ means to India and Pakistan. Are India and Pakistan abiding by this declared policy and are not indulging in an arms race? Does any arms control measure exist in South Asia? The paper also aims to investigate the role of extra-regional forces in fueling arms race in the region. This article is based on a qualitative research method and deductive approach and is basically descriptive and analytical in nature. Majority of the work is based on secondary sources which include books, research journal articles, magazine articles, newspaper articles, internet sources such as Google scholar, online libraries and HEC library etc. Primary sources for the current study are limited to ISPR Press briefs, statements of government officials, Indian Nuclear Doctrine 2003 and 2015 and an interview of General Kidwai with Peter Lavoy (available online).

Paper is divided in 5 sections. First section discusses Indian nuclear doctrine, concept of CMD and the evolution of the nuclear force structure and nuclear posture of India. Second part sheds light on Pakistan’s concept of CMD and the evolution of its force structure and nuclear posture. Third part is related to the role of extra regional powers in fueling arms race between India and Pakistan. Fourth part discusses the absence of arms control measures between India and Pakistan for controlling arms race. Fifth and final part concludes and analyses major findings.

### **Indian Nuclear Doctrine and the Concept of CMD**

As deliberated earlier, atomic weaponries are seldom regarded as war fighting and are always considered as a means for political manoeuvrings.<sup>5</sup> Thus the sole objective of the nuclear doctrine of any state is to deter its enemy from taking harmful and offensive moves. Same is the case with India. India is having a long standing rivalry with two Asian countries (China and Pakistan). With Pakistan, India has the long standing issue of Kashmir. While it faced humiliating defeat at the hands of China in 1962. Most recently India and China faced each other in 2020 Galwan crisis. These border tensions continued till the end of 2022.<sup>6</sup>

An important thing to note about the *Asian nuclear triangle* (India, Pakistan, and China) is that the 1998 nuclear explosions by India and Pakistan resulted in a *balance of terror* between the two. Nuclear-capable Pakistan restricted Indian conventional manoeuvrability against the former. While China is a significant power, India needs to maintain a balance with China. Indian nuclear policy is aimed at deterring both Pakistan and China. Main features of Indian nuclear doctrine (officially adopted in 2003) include: “No First Use (NFU), Credible Minimum Deterrence (CMD) and No-use of nuclear weapons against non-nuclear weapon states.”<sup>7</sup> The Indian strategic community always uses these terms without proper context, which is why these claimed policy options add to its benevolent image globally. To get a clearer picture of these claimed options, it is important to have a thorough reading of Indian nuclear doctrine.

Here, some policy statements are quoted for clarity. Draft nuclear doctrine states: Nuclear weapons will only be used against nuclear capable states. However small non-nuclear weapon states which are in alliance with nuclear capable states will also be targeted. Statement is in total contradiction with Indian declared claim that it will not use nuclear

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<sup>5</sup> Freedman, “The Evolution”, 102.

<sup>6</sup> Aleksandra Gadzala Tirziu. “Rising Tensions along India China Border”. *GIS*. (August 8, 2023). <https://www.gisreportsonline.com/r/china-india-border-2/>.

<sup>7</sup> Mohammed B Alam, “India’s Nuclear Doctrine: Context and Constraints,” *Heidelberg Papers in South Asian and Comparative Politics* 11 (Oct, 2002): 7-13. <http://nbn-resolving.de/urn:nbn:de:bsz:16-hpsap-21791>.



weapons against non-nuclear states.<sup>8</sup> As for as the clause of NFU is concerned Indian nuclear policy states: Nuclear weapons will only be used in retaliation against an attack by biological, chemical or nuclear weapons on Indian territory or its forces anywhere.<sup>9</sup>

NFU means that the nuclear-capable state will never initiate a nuclear attack and will retaliate with nuclear weapons only against a nuclear attack on its territory. But the draft doctrine contradicts both points. First, the draft doctrine claims that India will retaliate with nuclear weapons against chemical or biological attack. Secondly, it also justifies India's retaliation even if its forces are not stationed on Indian soil. The BJP hinted that it would reevaluate Indian nuclear doctrine, especially its policy on NFU, but Modi declared in 2014 that it had no intention of terminating NFU.<sup>10</sup> In addition to NFC and the non-use of nuclear weapons against non-nuclear states, CMD is another significant element of its nuclear doctrine. The concept is deliberated below.

Concept of Minimum Deterrence (MD) was explained by Bernard Brodie in his work named “Strategy in Missile Age” in 1959. Brodie was of the opinion that “minor but reliable nuclear force can deter a strong belligerent from initiating an offense”.<sup>11</sup> This understanding of MD was basically similar to the concept of *Existential/Basic Deterrence*. Contemporary notion of minimum deterrence is somewhat different from that of Bernard Brodie. Modern concept is more aligned with “proportional rather than existential/basic deterrence.”<sup>12</sup> Proportional deterrence requires a specific enemy, so the deferred state can set retaliatory

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<sup>8</sup> Lauren Sukin, “When Nuclear Superiority Isn’t Superior: Revisiting the Nuclear Balance of Power,” *Carnegie Endowment for International Peace* (October 17, 2023). <https://carnegieendowment.org/research/2023/10/when-nuclear-superiority-isnt-superior-revisiting-the-nuclear-balance-of-power?lang=en>.

<sup>9</sup> Ibid.

<sup>10</sup> Sitakanta Mishra, “Revision of India’s nuclear doctrine,” *Journal of Indo-Pacific Affairs-Feature*, (Winter, 2019): 88-106, [https://www.airuniversity.af.edu/Portals/10/JIPA/journals/Volume-02\\_Issue-4/Mishra.pdf](https://www.airuniversity.af.edu/Portals/10/JIPA/journals/Volume-02_Issue-4/Mishra.pdf).

<sup>11</sup> Joshua D. Wiitala, “Challenging Minimum Deterrence,” *Air and Space Power Journal*, [https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-30\\_Issue-1/F-Wiitala.pdf](https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-30_Issue-1/F-Wiitala.pdf).

<sup>12</sup> Joshua D. Wiitala, “Challenging Minimum Deterrence: Articulating the Contemporary Relevance of Nuclear Weapons,” *Air and Space Power Journal*, 30(1), (2016): 16-29. [https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-30\\_Issue-1/F-Wiitala.pdf](https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-30_Issue-1/F-Wiitala.pdf).

option in view of a particular aggressor.<sup>13</sup> Another important component of MD is the ‘type of targets’ (*Counter-Force/ Counter-Value*) set for nuclear attack. Both concepts, the contemporary and ancient, of minimum deterrence are destined against *Counter-Value* targets.<sup>14</sup> Credible Minimum Deterrence (CMD) is somewhat different from MD. Minimum is a clear concept in both cases. Minimum means that states will rely on a smaller number of nuclear force for deterring its enemy. But the term credible is ambiguous because it is impossible to quantify nuclear warheads in exact terms to ensure the credibility of a nuclear force.<sup>15</sup> In the context of MD, the case of India is quiet complex.

As Indian nuclear program is aimed at both Pakistan and China and in both cases there is a strategic disparity. Thus it seems very difficult to grasp how much will be regarded as minimum? And how much is sufficing for ensuring deterrent value of the nuclear weapons? Zafar Khan defined the concept of CMD in South Asian scenario by saying that the states claiming CMD as their stated policy: “would observe a restraint in nuclear testing, would rely on limited nuclear force, they will not indulge in an arms race and their perceived smaller number will be enough for ensuring deterrence against their enemy.”<sup>16</sup>

When India declared CMD as its policy, it seemed a very vague concept. Because there was no clarification how minimum will be required against Pakistan and China? And will this minimum ensure the credibility of nuclear force or not? When India conducted its nuclear explosions in 1998 it was possessed only 4 nuclear warheads and according to 2023 report of Stockholm International Peace Research Institute (SIPRI), India owns about 164

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<sup>13</sup> Par Olivier Debouzy, “Nuclear Deterrence: The Permanent and the Change.” *La Revue Geopolitique*, (Nov 5, 2009), <https://www.diploweb.com/Nuclear-deterrence-the-permanent.html>.

<sup>14</sup> Wiitala, “Challenging Minimum Deterrence,”

<sup>15</sup> Zafar Khan, “Pakistan’s Minimum Deterrence and its Policy Approach towards Fissile Materials: Security Concerns and Region’s Changed Strategic Environment,” *The Korean Journal of Defense Analysis* 26, no. 1 (2014): 51-64. DOI: 10.13169/polipers.13.1.0077.

<sup>16</sup> Zafar Khan, “The Changing Contours of Minimum Deterrence in South Asia. Policy Perspectives”, *The Journal of the Institute of Policy Studies*, 2016. Vol. 13(1):77-96. DOI: 10.13169/polipers.13.1.0077.

warheads.<sup>17</sup> Following table explains the growth of Indian nuclear arsenals since 1998.

Year	Approximate No. of Nuclear Warheads
2010	60-80
2011	80-100
2012	80-100
2013	-
2014	90-110
2015	100-120
2016	120-130
2017	130-140
2018	130-140
2019	150
2020	-
2021	156
2022	160
2023	143

Table 1: *Growth of India's Nuclear Arsenals 2010-2023*<sup>18</sup>

Above-mentioned table is evident of the fact that India is gradually increasing the quantity of its nuclear warheads. In addition to this quantitative increase India is also indulging in the qualitative up-gradation of its arsenals as well as its also evolving its nuclear posture. As far as the qualitative arms race is concerned, Indian pursue of *assured second*

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<sup>17</sup> "SIPRI yearly book 2000-2023", *World Nuclear Forces*.

<https://www.sipri.org/yearbook/2023/07#:~:text=At%20the%20start%20of%202023,to%20be%20potentially%20operationally%20available.>

<sup>18</sup> SIPRI yearly book 2000-2023", *World Nuclear Forces*.

*strike capability* and *Ballistic Missile Defence* (BMD) system is very important. Indian BMD system is two layered: *Prithvi Air Defence (PAD)* and *Advanced Air Defence (AAD)*. According to some reports first phase of BMD got completed in 2020. Indian air force is seeking approval of its government to deploy it around the New Delhi.<sup>19</sup> With the successful testing of Arihant (nuclear powered submarine) in 2018 India came one step closer to the second strike capability.<sup>20</sup> In March 2022, India commissioned INS Anvesh (A 41). A 41 is the back bone of the Indian naval BMD programme. In April 2023, India successfully conducted the test of “sea-based endo-atmospheric interceptor missile.”<sup>21</sup>

In March 2024, India successfully tested intercontinental Agni-V (5000 km range) with MIRV (Multiple Independently Targetable Re-entry Vehicles) technology. Without this ICBM, India can still manage to attack every inch of Pakistan; the use of MIRV technology with medium and intermediate-range ballistic missiles can empower Indian offense against Pakistan. Dr. Zafar Nawaz Jaspal states that the extended range of the missile enables India to deploy missiles further away from the Pakistani border, thus “can prevent Pakistan from counterforce preventive strikes.”<sup>22</sup> There is no doubt that India's modernization of its land-based nuclear-capable ballistic missiles, investment in sea-based deterrent capabilities, and successful development of its BMD are detrimental to Pakistan's defensive barriers. These qualitative arms build-up not only encourages the race between India and Pakistan but also encourage FU of nuclear weapons in a conflict.

Additionally, the transformation in Indian nuclear strategy, doctrinal posture and

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<sup>19</sup> Snehes Alex Philip. “India's Missile Defense Shield is ready, IAF and DRDO to seek government nod to protect Delhi”. *The Print*. (January 8, 2020). [https://www.drdo.gov.in/drdo/sites/default/files/drdo-news-documents/DRDO\\_News\\_08\\_Jan\\_2020.pdf](https://www.drdo.gov.in/drdo/sites/default/files/drdo-news-documents/DRDO_News_08_Jan_2020.pdf).

<sup>20</sup> Asia Karim, Amna Mahmood, Muhammad Wajeeh Shahrukh, and Abdul Jabbar. “Transformation of Pakistan's nuclear posture from minimum credible to full spectrum deterrence.” *Liberal Arts and Social Sciences International Journal (LASSIJ)* 6, no. 1 (2022): 89-108, <https://www.ideapublishers.org/index.php/lassij/article/view/552>

<sup>21</sup> Adithya Krishna Menon. “India Conducts First Test of New Ship Based BMD System.” *Naval News*. (April 25, 2023). <https://www.navalnews.com/naval-news/2023/04/india-conducts-first-test-of-new-ship-based-bmd-system/>.

<sup>22</sup> Dr. Zafar Nawaz Jaspal, “India's new Missile increase South Asia's nuclear arms race”, *The Arab News*. (March 15, 2024). <https://www.arabnews.pk/node/2477276>.

nuclear force structure raises a lot of questions over the claimed policy. Being conventionally superior to Pakistan, presence of nuclear weapons restrained its strategic manoeuvrability against the latter. Pakistan's claimed strategy of First Use and its intent of maintaining its superiority in escalation control, eliminated the possibility of a conventional offense against it. Such situation pressed Indian policy makers to devise a new war fighting strategy which can ensure its strategic freedom below the nuclear threshold of Pakistan. *Indian Cold Start Doctrine* (CSD) of 2004 was the first attempt by Indian government to sustain the freedom of manoeuvring in a nuclearized environment. It was basically a proactive strategy through which India envisioned its offensive forces to cross Pakistan's border within 72-96 hours of order and seize almost 50-80 km of its territory. Stated territory was aimed to be used as a bargaining chip in post-war dialogues.<sup>23</sup>

CSD was basically aimed at engaging a conventionally inferior state into a conventional war without crossing its nuclear threshold. CSD proved a failure in the subsequent crisis of 2008 Mumbai crisis and 2016 Uri attacks. Thus India made another alteration to its doctrine and after 2019 Balakot strikes Indian strategic circles came up with *New Normal*. Through New Normal India aimed at conducting precise targeted operations in Pakistan. As the surgical strikes of 2019 have successfully avoided the red lines of Pakistan and it was not left with the option to retaliate with nuclear weapons, thus there are chances that this doctrine will give impetus to a new arms race in South Asia.<sup>24</sup>

### **Pakistan's Conceptualization of Minimum Deterrence**

Pakistan formally announced *Minimum Deterrence* policy as part of its nuclear doctrine after 1998 nuclear weapon test. Initially Pakistan's policy makers believed that

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<sup>23</sup> Sadaf Farooq and Ms Asia Karim. "Indian Cold Start Doctrine: Implications for Pakistan" *International Journal of Science and Research*, 73, no. 8 (2017). [https://www.researchgate.net/profile/Asia-Karim-2/publication/347975583\\_INDIAN\\_COLD\\_START\\_DOCTRINE\\_IMPLICATIONS\\_FOR\\_PAKISTAN/links/5feb0f17299bf1408856bdf4/INDIAN-COLD-START-DOCTRINE-IMPLICATIONS-FOR-PAKISTAN.pdf](https://www.researchgate.net/profile/Asia-Karim-2/publication/347975583_INDIAN_COLD_START_DOCTRINE_IMPLICATIONS_FOR_PAKISTAN/links/5feb0f17299bf1408856bdf4/INDIAN-COLD-START-DOCTRINE-IMPLICATIONS-FOR-PAKISTAN.pdf).

<sup>24</sup> Karim, et al. "Transformation of Pakistan's Nuclear Posture,"

maintaining such a posture would necessitate possessing an arsenal of around 70 nuclear warheads.<sup>25</sup> However, because of the fear of invasion from conventionally superior India, Pakistan couldn't sustain its initial policy and instead shifted towards what it termed 'credible minimum deterrence.'<sup>26</sup> This change was prompted by Pakistani policymakers' concern that they must have enough weapons to create an impression of credibility in the opponent's mind. Apparently, the adjustment seems straightforward, but its implications were significant, leading to an expansion of Pakistan's nuclear arsenals. Consequently, Pakistan gradually increases its nuclear warheads. As per the 2023 report of Stockholm International Peace Research Institute (SIPRI), Pakistan possesses about 170 warheads.<sup>27</sup>

Pakistan adopted *Credible Minimum Deterrence* posture for following reasons. Firstly, Islamabad believes that having a smaller number of nuclear force is sufficient to deter potential threats from New Delhi, as it was effective in preventing conflict in the past. Secondly, it chose to have a modest number of nuclear arsenals to avoid pressure from other states, especially those promoting nuclear non-proliferation (NPT) efforts, though it's not part of NPT. Pakistan intends to join the treaty if India also joins it and recognises Islamabad as a legitimate nuclear power. Thirdly, by keeping its nuclear arsenal small, Islamabad can manage and control its weapons more efficiently, reducing the risk of accident or unauthorized use that could lead to a nuclear conflict.

Fourthly, minimum nuclear weapons are more cost-effective for Pakistan, as it fulfils the purpose and remains affordable in comparison to having a large number of arsenals. Pakistan's strategy of CMD aims to strike a balance between practicality and security,

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<sup>25</sup> Dr. Bhumitra Chakma. 'Pakistan: Whither Minimum Deterrence?'. Policy Brief, S. Rajaratnam School of International Studies. (December 2013). <https://www.files.ethz.ch/isn/175764/Policy%20Brief%20-%202013-12-31%20-%20Pakistan%20-%20Whither%20Minimum%20Deterrence.pdf>.

<sup>26</sup> Chakma. 'Pakistan: Whither Minimum Deterrence?'

<sup>27</sup> Hans M. Kristensen and Matt Korda, "World Nuclear Forces", SIPRI yearly book 2023, <https://www.sipri.org/yearbook/2023/07#:~:text=At%20the%20start%20of%202023,to%20be%20potentially%20operationally%20available>.

ensuring stability while protecting its interest in South Asia.<sup>28</sup> This posture underscores Pakistan's commitment to avoiding an arms race and opting for a measured approach in its nuclear capabilities vis-à-vis India. The integration of concealment and dispersion tactics into nuclear strategy increases the credibility of deterrence. The principle of *the minimum, the better* underscores the rationale of minimum deterrence, stressing the advantages of being safer and wiser. Can this conceptualization be sustained as Islamabad's ultimate nuclear policy? How will it adapt to a changing strategic environment? Interestingly, the failure of non-proliferation regime to secure complete disarmament has led major powers to retain their capabilities.

Additionally, many states who are part of the NPT have achieved nuclear threshold. Meanwhile, the Indo-US nuclear deal and deepening strategic collaboration significantly impact the regional deterrence stability. New Delhi's special NSG waiver for nuclear technology, reluctance to adherence to fissile material regulations and strategic forces modernization heighten regional assertiveness and concerns. These factors are triggering an arms race, disturbing the current strategic balance and increasing the risk of escalation. Translucent policies and dialogue are crucial for maintain strategic balance in the region.

In addition, addressing these complexities also requires contemporary scholars to focus on various strategic dimensions. Analysing the practicability and adopting of MD necessitates consideration of these evolving dynamics, including the shifting power dynamics among major players and the implications of bilateral agreements and strategic partnerships. As the strategic environment of South Asia continues to evolve, Pakistan's minimum deterrence policy will likely undergo adjustments to effectively address emerging challenges.<sup>29</sup> Pakistan initially perceived that possessing 60 to 70 nuclear warheads would be sufficient to deter New Delhi, based on past successful instances (1999 Kargil Conflict, 2001-02 Border Standoff, 2008 Mumbai Incident). However, Islamabad shifted its stance,

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<sup>28</sup> Zafar Khan. "The Changing Contours of Minimum Deterrence in South Asia." Policy Perspectives 13, no. 1 (2016): 77–96. <https://doi.org/10.13169/polipers.13.1.0077>.

<sup>29</sup> Khan. "The Changing Contours of Minimum Deterrence."

prioritizing ‘credibility’ over a specific number of warheads. This policy adjustment was notable as it facilitated the rapid expansion of Pakistan’s nuclear capabilities. The former Foreign Minister of Pakistan *Abdul Sattar* argued;

‘the minimum cannot be quantified in static numbers. The Indian build up will necessitate review and reassessment in order to ensure the survivability and credibility of the deterrent. Pakistan will have to maintain, preserve and upgrade its capability.’<sup>30</sup>

This underlines the significance of ambiguity in shaping the concept of MD in South Asian region. Ambiguity has indeed become a central part of nuclear strategy for both states. However, the degree of uncertainty differs among nuclear states due to strategic considerations. Pakistan's government and military view the doctrinal ambiguity as integral to MD, believing it enhances deterrence effectiveness by keeping adversaries uncertain about each other’s strategies. In essence, if ambiguity achieves its intended purpose, there may be little incentive to adopt a more transparent approach.

Ambiguity is fundamental and cornerstone of minimum deterrence in Pakistan’s nuclear thinking. Nuclear armed states generally believe that transparency and openness in nuclear policy can undermine the credibility of deterrence. Indeed, ambiguity is inherent in the policies of all nuclear weapons states, whether explicitly stated or implicit.<sup>31</sup> Despite biased international reports suggesting Pakistan’s rapid nuclear expansion, the official stance of Pakistan emphasizes adherence to credible minimum deterrence.<sup>32</sup> This importance on deterrence aims to sustain the core elements of minimum deterrence, including reliability, capability, accuracy, penetrability and the on-going modernization of deterrent forces.

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<sup>30</sup> Sadia Tasleem, “Pakistan’s Nuclear Use Doctrine”, *Carnegie Endowment for International Peace*, (June 30, 2016). <https://carnegieendowment.org/research/2016/06/pakistans-nuclear-use-doctrine?lang=en&center=global>.

<sup>31</sup> Sandeep Baliga and Tomas Sjöström. "Strategic ambiguity and arms proliferation." *Journal of Political Economy* 116, no. 6 (2008): 1023-1057. <https://www.journals.uchicago.edu/doi/10.1086/595016>.

<sup>32</sup> Toby Dalton and Michael Krepon, “A Normal Nuclear Pakistan,” Carnegie and Stimson Centre, Washington (2015): 1-45. <https://www.stimson.org/2015/normal-nuclear-pakistan-0/>.



Theoretically, none of these features exceeds the bounds of minimum deterrence.<sup>33</sup>

Year	Estimated no. of Nuclear Weapons
2010	90
2011	100
2012	110
2013	120
2014	120
2015	-
2016	110-130
2017	130-140
2018	140-150
2019	160
2020	160
2021	165
2022	165
2023	170

Table 2: *Growth of Pakistan's Nuclear Arsenal 2010-2023*<sup>34</sup>

As long as Islamabad refrains from engaging in a typical Cold War style arms race, their policy stances remain constant with the fundamental principles of MD. The concept of Full Spectrum Deterrence (FSD) falling inside the larger framework of minimum deterrence aligns with Islamabad's declaratory policy. Pakistan deterrence forces are primarily directed

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<sup>33</sup> Khan. "The Changing Contours of Minimum Deterrence in South Asia."

<sup>34</sup> Adapted from Robert S. Norris and Hans Kristensen, "Global Nuclear Weapons Inventories, 1945-2010," *Bulletin of the Atomic Scientists*, vol. 88, no. 4 (July-August 2010), pp. 77-83; SIPRI Year book, 2013-23: *Armament, Disarmament and International Security* (Oxford: Oxford University Press, 2013-23).

towards India; minimum deterrence remains the most practical option for deterring threats from its eastern border. However, the growing dynamics of nuclear deterrence could pose challenges to the effectiveness of MD in the South Asian context.

### **Challenges to CMD in South Asia**

Current paper is focusing on two main challenges to the adaptation on CMD by both India and Pakistan:

#### **The Syndrome of Extra Regional Factor**

Bhumitra Chakma holds that “extra regional forces” are of significant importance in shaping the security paradigms and strategic decision making of ‘Asian nuclear triangle’.<sup>35</sup> The construct highlights the nuanced interplay between external stimuli and the formulation of regional security policies, underscoring the pervasive influence of factors beyond immediate geographical boundaries. This phenomenon is evident in security dynamics between China and the US, where the security imperatives of the former are profoundly shaped by the latter’s actions and policies. Similarly, India’s strategic calculus is notably influenced by China’s military modernization endeavours, while Pakistan’s security posture is predominantly shaped by perceived threats emanating from its eastern neighbour, India.<sup>36</sup>

The intensified struggle between these states affects the respective security postures and policy trajectories. Moreover, the existence of external influence presents significant obstacles in establishing strong non-proliferation frameworks and arms control agreements within South Asian region. The justification for seeking advanced military capabilities often revolves around the perceived need to address external threats, making efforts to promote a minimal deterrence approach more challenging. Consequently, actions aimed at enhancing regional stability face substantial hurdles due to the predominant geopolitical environment

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<sup>35</sup> Bhumitra Chakma, “Pakistan Nuclear Weapons,” (London: Routledge, 2009): 9-16.

<sup>36</sup> Ibid.

and the diverse influence of external actors. The world is full of similar examples. North Korea decided to develop nuclear weapons due to the perceived threats. Iran did the same after seeing Iraq and Libya attacked. Japan and South Korea have also contemplated acquiring nuclear arms for security reasons.<sup>37</sup> Tensions between China and the US push de-facto nuclear weapon states like India and Pakistan towards an arms race. In this context, India's nuclear program is largely motivated by concerns about China, while Pakistan's focus is on India. Additionally, New Delhi's concerns about the China-Pakistan alliance for nuclear and conventional military advancements prompt Islamabad to be wary of the Indo-US nuclear deal.<sup>38</sup>

Apart from this deal, India is diversifying its defence partners. For accelerating its modernization pace India is working with countries like *France, Australia, Russia and Israel*, adding to the security threats of Pakistan. Considering these strategic realities, Khurshid Khan suggests that the "existing fragile balance between India and Pakistan will get exposed in the coming five years or so."<sup>39</sup> Some significant enhancement in New Delhi's anti-missile capabilities could compel Pakistan to reassess its strategic policies. Therefore, a unilateral or bilateral arms reduction agreement at the highest levels or on an international scale, such as between the US and China or China and India, is the urgent call of the time.

The phenomenon of the extra-regional link factor directs attention towards the US, as the pioneer of the destructive nuclear technology bears a moral responsibility to address its consequences.<sup>40</sup> Though in 2009 US president Obama voiced for the policy initiative for a nuclear free world.<sup>41</sup> But this was just a lip-service as no practical step was initiated in this

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<sup>37</sup> "Breaking the Iran, North Korea, and Syria Nexus," Committee on Foreign Affairs, <https://www.govinfo.gov/content/pkg/CHRG-113hhrg80364/html/CHRG-113hhrg80364.htm>.

<sup>38</sup> W. Rodney Jones, "Prospects for Arms Control and Strategic Stability in South Asia," *Contemporary South Asia* 14, no. 2 (2005): 191–209.

<sup>39</sup> Muhammad Khursid Khan, "Fissile Material Cut-off Treaty: An Overview from Pakistan," *Journal of Strategic Studies* (2011): 195–223.

<sup>40</sup> Bill Cohen, "Closing Pandora's Box: Obama's Pro-Active Nuclear Weapons Initiative Seek to Turn Back the Clock," April 23, 2009.

<sup>41</sup> George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, "How to Protect Our Nuclear Deterrent," *Wall Street Journal*, (January 2010), accessed May 15, 2012.

direction. US *Nuclear Posture Reviews* (2002-2018) designates the dependence of American government for its defence and the defence of its allies in Europe. Thus, Global Zero seems a far cry.<sup>42</sup>

### **Non-Existence of Arms Control Mechanism in South Asia**

Though the presence of nuclear weapons has successfully deterred conventional full scale wars in South Asia, the proactive military strategies and the qualitative and quantitative arms race by the regional giants has made deterrence fragile. And international community always considers South Asia as a boiling pot for nuclear exchange. Threat got heightened because of the lack of arms control regimes.<sup>43</sup> Both sides agreed on some arms control measures but these were short of proper agreements. Most of the understandings are in the form of *Confidence Building Measures* (CBMs), thus far from making considerable impacts. These initiatives are summarized in the following table.

S.no	Date of Agreement	Name of the Arms control Measure
1	December 1988	Prohibition of Attack against Nuclear Installations and nuclear facilities.
2	April 1991	<ul style="list-style-type: none"> <li>• Advance Notification of Military Exercise, Manoeuvres and Troops Movements</li> <li>• Prevention of Airspace Violations and Permitting Over flights and Landings by Military Aircrafts</li> </ul>
4	August 1992	Complete prohibition of Chemical Weapons (Joint declaration)
5	October 2005	Advance Notification of Ballistic Missile Tests
6	February 2007	Reducing the risk from accidents Relating to nuclear weapons

Table 3: Risk Reduction Mechanisms in South Asia<sup>44</sup>

<sup>42</sup> Khan. "The Changing Contours."

<sup>43</sup> Sonia Naz. "Prospects and Challenges to Arms Control in South Asia: A Pakistani Perspective". *Istituto Affari Internazionali*. (October 17, 2023) <https://www.iai.it/en/pubblicazioni/prospects-and-challenges-arms-control-south-asia-pakistani-perspective>.

<sup>44</sup> Bhumitra Chakma, "Nuclear Arms Control Challenges in South Asia," *India Review*, 9 (3), 364.

These measures by no means are enough to deter nuclear escalation or confrontation between India and Pakistan. Rodney Jones (2005) opined that both sides will never negotiate seriously any arms control measure unless both achieve some sort of strategic parity.<sup>45</sup> Arms control treaties have the potential for promoting peace and preventing wars. But the increased investment by Indian government on its military build-up and the resultant successes added to its hard stance and non-flexibility. India 'New Normal' and the success of its BMD programme may encourage India to take offensive moves against Pakistan which might result in unintended escalation. If both sides want to avoid conflict and remain intact to the principle of CMD, they must pursue some arms control measures.

### **Conclusion**

The terms 'MD' (Minimum Deterrence) and 'CMD' (Credible Minimum Deterrence) apparently seem straightforward, but quantifying what constitutes a minimum deterrent is a challenging task. Moreover, ensuring the reliability of this minimum deterrent in the face of a conventionally superior adversary adds another layer of complexity. India and Pakistan initiated their nuclear journey with an aspiring claim that they will not follow the pattern of Cold War arms race. Both sides declare that they will maintain a minimum nuclear force required to maintain deterrence against the potential aggressor.

However, the challenges arise from the asymmetric nuclear triangle in South Asia. While India seeks to balance China, this generates a security dilemma for Pakistan. This issue is also linked to the Indian aspiration of becoming a dominant player in global politics. From the above-mentioned discussion, it is evident that the qualitative arms build-up of Indian nuclear arsenals, evolution of its nuclear postures and military strategies, Indo-US strategic partnership, role of other extra regional forces and the absence of a comprehensive arms control regime in the region are major threats to CMD. Considering the unstable

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<sup>45</sup> Rodney W. Jones "Prospects for arms control and strategic stability in South Asia." *Contemporary South Asia* 14, no. 2 (2005). P 198-199.

economies of Pakistan and India, it is crucial for both countries to manage their defence spending. They must resume dialogue process, resolve outstanding bilateral disputes and negotiate an effective arms control agreement. Without these measures, Credible Minimum Deterrence will remain merely symbolic without achieving the intended goals of peace, stability and security in South Asia.

**Disclousre Statement:**

No potential conflict of interest was reported by the authors.