Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Pakistan's Missile Program: Strategic Evolution, Regional Dynamics, and Global Repercussions in the Shadow of U.S. Sanctions

[1*]**Hasnain Haider -Email-** ihasnainhaider01@gmail.com
[2]**Riffat Saleem -Email-** riffatsaleem2811@gmail.com
[3]**Attya Firdous -Email-** attyafirdous786786@gmail.com
[4]**Bedar Bakht Khan -Email-** khanbeedar@gmail.com
[5]**Alina Fiaz -Email-** aleenafiaz232@gmail.com
[1*]MPhil Scholar at Bahauddin Zakariya University, Multan (Corresponding Author)
[2]MPhil Scholar at Bahauddin Zakariya University, Multan
[3]MPhil Scholar at Bahauddin Zakariya University, Multan
[4]MPhil Scholar at Government College University, Faisalabad.
[5]MPhil Scholar at Bahauddin Zakariya University Multan.

Article Details:

Received on 14 May 2025
Accepted on 12 June 2025
Published on 15 June 2025

Corresponding Authors*:
ihasnainhaider01@gmail.com

Abstract

The critical examination of this research article focuses on the development of the Pakistani missile program in the wider context of the regional deterrence, strategic autonomy and global politics of non-proliferation. With its historical background of military limitations imposed after 1Sc5 war to the induction of long range ballistic and cruise missile systems, the thesis explores the operational logic and doctrinal drivers that inform the missile posture of Pakistan. This text highlights the fact that the missile development in Islamabad, especially the test and induction of Shaheen-III and Ababeel missiles with MIRV warheads, is part of the change toward full-spectrum deterrence designed to overcome Indian conventional advantages and new ballistic missile defense shields. The paper goes further to criticize the U.S. sanctions imposition arguing that the punitive measures are less based on sincere non-proliferation considerations, and more to do with strategic insecurity caused by faltering regional hegemony. The use of diverse materials, namely official comments, strategic estimates, and the current policy rhetoric, helps the research community to gainsight how American non-proliferation enforcement is used selectively, which undermines its own credibility and contributes to strategic mistrust in South Asia. By means of detailed literature analysis, and historical division, the paper introduces the missile program in Pakistan as a logical security mechanism and geopolitical disputed question, influenced by the asymmetries of the global governance. It concludes with the demand of a new, balanced and non-discriminatory international order to solve the regional security dilemmas, to diminish the risks of proliferation and to achieve strategic stability in a multipolar world.

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Introduction

An unfolding of the development of the missile program in Pakistan cannot be complete without a mention of the underlying principle of deterrence. With other supporting measures like detection, denial, and defense, deterrence forms one of the foundations of the contemporary military doctrine. Overall, deterrence is a process based on building up a capability or strategy, either military, technological or diplomatic, to make an adversary hesitate to launch aggression because the possible cost of its actions is elevated (Krepon C Wheeler, 2016).

The justification of missile program by Pakistan is greatly rooted in its geopolitical competition with the neighboring state-India that has better economic endowment, territorial reach, as well as conventional military strength. Should the war become full-scale, India would have strategic benefits, such as the ability to absorb and retaliate in the long term, but Pakistan lacks either geographic depth or material redundancy (Clary, 2019). Such strategic asymmetry became vividly seen in the Indo-Pak wars of 1965 and 1971, when Pakistan experimented with its conventional weakness and the need to build a credible deterrent position.

It was these historic lessons that triggered the nuclear aspirations in Pakistan with the desire of having strategic parity. This nuclear path started with the first subcritical nuclear test by the Pakistan Atomic Energy Commission (PAEC) on March 11, 1983 (Minhas, 2021). Nevertheless, the warheads were not the whole story to tell, pretty soon there was the problem of adequate delivery systems.

Pakistan originally depended on Mirage and then F-16 fighter jet as a delivery system of nuclear weapons. But the introduction of the Prithvi missile system of India in the 1980s changed the security calculation in the region essentially. The decision of India to acquire ballistic missile systems when it already had aircraft that could deliver nuclear payloads generated important strategic concerns. It highlighted the fact that there is a move to highly accurate, cost- prohibitive platforms that would respond quickly and be survivable-qualities that would be important in a post-nuclearization world (Khan C Siddiqui, 2021).

As a result, Pakistan saw the necessity to develop its own missile complex, not only to achieve the level of Indian capabilities but also to accomplish a credible second-strike capability. This was not just a technical but a strategic transformation, representing the shift of minimum deterrence to the full-spectrum deterrence, with the supporting doctrine that is evolving in response to both conventional and nuclear threats (Kristensen, Norris, C Diamond, 2018).

Statement of the Problem

The missile program in Pakistan has presented strategic development that has brought a complicated quandary between regional security necessities and international non-proliferation conventions. Whereas Pakistan considers its missile program as critical in the development of credible deterrence vis-a-vis the increasing conventional and nuclear capability by India, the international community, especially the United States regards the developments as proliferation threat. Such discrepancy in perception has led to diplomatic tensions and sanctions, as well as, politicization of non-proliferation structures.

The issue is that the application of arms control regimes has been inconsistent and hegemonically driven to the extent that Pakistan, which has been the target of such advances disproportionately, is overlooked when other countries make similar or even greater advances, depending on their status as favorites. This kind of selective application

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

not only discredits the credibility of the global non-proliferation but also contributes to strategic distrust, covert development and arms race in the region in South Asia. Although Pakistan has been trying to modernize its missile systems, which are used as a defense mechanism as well as deterrence, the country is still subjected to diplomatic isolation as well as punitive actions, which provokes pertinent questions regarding the fairness, legality and the strategic implications of such actions.

This study thus endeavors to unravel the political, historic, and strategic part of the missile program of Pakistan, and critically discuss the ramification of the United States sanctions on the wider picture of deterrence in the region, sovereignty, and power politics in the globe.

Hypothesis

The development of a growing missile program and the integration of advanced features of this program by Pakistan, MIRVs and long-range delivery, is a direct threat to the strategic hegemony of the United States in South Asia. Not only does it shift the regional balance of power by offsetting Indian conventional advantage but also upsets Washington security architecture as well as non-proliferation agenda in the wider Indo- Pacific region.

Objectives

(1)To organize and classify the chronological development of Pakistan missile program, its initial space research program through to the induction of its modern ballistic and cruise missile systems.

(2)To examine operational, strategic, and doctrinal drivers that Pakistani missile program, including its transformation of minimum deterrence to full-spectrum deterrence.

(3)To assess the Pakistani missile developments as to their impact on U.S. strategic interests, miitary stance and primacy in South Asia and the broader Indo-Pacific area.

(4)To analyze critically the international and regional reaction, especially that of the United States, to missile developments in Pakistan; diplomatic discourses, sanctions policy and counter-proliferation measures.

Research Questions

i. What is the history of missile program in Pakistan; what are the historical, technological and strategic milestones of this program?
ii. What are the major strategic drivers and security philosophies behind the quest to acquire diversified missile force by Pakistan?
iii. How does the missile development by Pakistan threaten U.S. strategic supremacy in South Asia as well as impact the deterrence stability in the region?
iv. What have been the reactions of regional players (particularly India) and international heavy weights (particularly the U.S.) to the growing missile potential of Pakistan, through diplomacy, sanctions and military alliances?

Significance of the Study

This research is important because it will help to enhance the current knowledge on the diverse and dynamic nature of missile technology in determining the regional security system, deterrence policies and geopolitical alliances in the world. The study is especially pertinent when South Asia is witnessing an increased modernization of military, nuclear rivalry, and changes in power calculations because of the strengthening U.S. China competition.

The important aspects of interest are:

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Scholastic Contribution: The study enhances the literature on strategic studies, arms control and international security through the provision of a multidimensional examination of The Pakistan missile program in the context of deterrence theory, security dilemma and regional hegemony. As opposed to traditional studies which critically look at India-Pakistan rivalry, the work takes into consideration international affairs like U.S. containment policies and Chinese contribution to regional balancing.

Relevance of Policy: The research has supplied some information on the unintended effects of coercive sanctions, which portray that these tools when imposed in an asymmetric manner can actually destabilize deterrence instead of strengthening it. The findings provide policymakers in Washington, Beijing, and Islamabad with important insights on the shortcomings of sanction-based non-proliferation policies.

Security Implications in the Region: This study in evaluating the impacts of the development of missiles in the fluctuation of South Asian deterrence stability enhances insight in the assessment of the risks involved in crisis escalation, issues relating to command and control, and the consideration of the MIRV as well as tactical nuclear deployments. It aptly demonstrates the emergence of confidence-building mechanisms, strategic dialogue, and arms control measures as the urgent requirement in the region.

Global Strategic Implications: This study examines missile modernization as part of a wider China Pakistan strategic partnership and the U.S. Indo defense ties, to demonstrate that it is an indication of emerging bipolarity in the Asian region. It deals with the possibility of such alliances affecting the global non-proliferation regimes and changing the working logic of deterrence in the Indo-Pacific.

Technology and Doctrinal Implications: This is because the study looks into both the technical and doctrinal development of the missile systems of Pakistan which gives a granular investigation of the delivery platforms, range development, mobility, survivability, and counter-ABM capabilities of the systems which delivery strategic clarity to the analysts, scholars, and defense observers.

Literature Review

The literature available on the missile program in Pakistan cuts across historical, strategic, technological as well as geopolitical aspects. It discloses an increasingly sophisticated attempt by scholars to make sense of the development of the Pakistani missile potential as both a defensive repercussion to regional tensions and an outcome of great power politics, alliances and international regimes of arms control. This is a critical synthesis of research done in books, theses, and journal articles, and policy studies.

History Origin And Strategic Backgrounds

Various writers (Khan, 2012; Mistry, 2003; Lavoy, 2009) state that the basis of the missile development in Pakistan was directly connected to the nuclear and missile progression in India, specifically following the Indian nuclear test, “Smiling Buddha” in 1974. According to Khan (2012), the initial projects of Pakistan such as the Hatf-I and Ghauri series were influenced by Chinese and North Korean external support - a fact also supported by Corera (2009) and Joshi (2017) who discuss the covert channels that facilitated the technical jump of Pakistan. These analyses agree that the main factors behind the initial missile doctrine in Islamabad were strategic insecurity, as well as conventional military inferiority with India.

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Doctrine of Deterrence Development

Recent publications dedicating their attention to the topic of the Pakistani nuclear posture shift toward full-spectrum deterrence instead of minimum credible deterrence are more recent (Krepon C Wheeler, 2016; Kristensen et al., 2018). The production of tactical nuclear weapons, such as Nasr and MIRV systems, such as Ababeel is observed as hints of this doctrinal shift. Ahmed (2020) and Clary (2019) consider that the Pakistani turn toward mobility, survivability, and rapid response capabilities are as much of a reaction to Indian missile defense programs as it is to a perceived strategic encirclement by Indo-U.S. cooperation.

Regional Dynamics and Escalation Risks

The ought issue in the literature is the possibility of strategic instability in South Asia. According to Ganguly (2021), Fair (2014), and Gady (2023), transparency deficiency, poor crisis communication lines, and asymmetry in the escalation doctrines between Pakistan and India increase the chances of miscalculation. Aslam (2023) also cautions that MIRV technology used together with short-range nuclear systems reduces decision time during a crisis which could ultimately lead to a reduced nuclear threshold.

Theses like Hussain (2019) and Rashid (2022) stress the destabilizing effect of the short-range battlefield systems and the threats of the Cold Start doctrine of India. As seen in the literatures, although the missile accumulation by Pakistan is defensive in its nature, the offensive operationalization of these forces generates ambiguity, as well as instability of crises.

International Non-Proliferation and American Sanctions

More recent literature is devoted to the consequences of U.S. sanctions. According to Tellis (2020) and Restelli (2024), Washington has a history of missing results in its attempts to curtail missile proliferation using punitive actions when the target state believes that the sanctions are discriminatory against it. According to Al Jazeera (2024), Reuters (2024), and DW (2024), Pakistan has strongly condemned the latest U.S. sanctions, terming them as politically and selectively implemented.

According to Jaffery (2025) and Zhang (2021), such sanctions can inadvertently lead Pakistan further towards technological and strategic reliance on China and destroy the wider non-proliferation objectives. The academic consensus is growing dissatisfaction with the U.S. policy, and proposes multilateral and non-coercive structures to deal with the proliferation of missiles in the region.

China-Pakistan Strategic Convergence

There is a strong literature strand examining the strengthening defense-industrial manifestation between China and Pakistan. Clary (2019), Minhas (2021), and Saeed (2022) comply with the documentation of how China has been a constant diligent provider of missile technology, such as solid-fuel propulsion and satellite guidance systems. Zhang (2021) emphasises that this convergence has been speeded up by recent U.S. sanctions, as Pakistan is seen by China as a strategic partner and a testing ground of Chinese military equipment exports.

The findings are reflective in news articles by Business Insider (2025) and The Diplomat (2024), which name trilateral exercises, defense alliances, and the co-development of missiles as some of the factors demonstrating this strengthening of alignment. The literature cautions that this axis is not only likely to continue undermining

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

the Western influence in the region, but will also make future arms control diplomacy difficult.

Summary

The literature attests to the fact that the missile program in Pakistan cannot be examined in the vacuum of regional and global circumstances. Its development is marked by complicated motives: a threat to India, strategic independence, relations with China, and standing up to U.S. sanctions. The result is the story of a state forced into a technological and strategic sovereignty, into showing the impurity of non- proliferation regimes based on the past century in a world of multipolarity and competing regional orders.

Methodology

This study is qualitative, analytical and exploratory, which utilizes secondary data analysis in tracking the development, use and strategic concerns of the Pakistani missile program. This methodology will be based on the critical analysis of historical trends, technology development, and geopolitical consequences, especially the conjunction of regional security affairs and international non-proliferation issues.

Research Design and Treatment

The research adheres to an integrative content analysis approach in order to triangulate content found in a variety of sources, such as academic books, peer-reviewed journal articles, government and military publications, think tank publications and the news media. It uses the case study approach to place the development of missiles in Pakistan in the context of wider regional arms race especially with India and to seek to understand the essence of international reactions to this phenomenon- most specifically United States reactions.

Such a multi-layered solution enables:

•Historical perspective of the missile program since its induction in the 60s to the recent advancements in MIRV and cruise missile technology.

•Technological assessment of missile systems, including ballistic and cruise missiles (e.g., Shaheen series, Ababeel, Babur).

•Geopolitical criticism of strategic doctrines, theories of deterrence and the effects of international sanctions.

Sources of Data

The study is based solely on secondary data, derived out of the systematic review of:

•In the academic literature regarding missile technology, deterrence theory, and South Asian military doctrine (e.g., Khan, 2012; Kristensen et al., 2018).

•Formal documents and issues by organizations like the Inter-Services Public Relations (ISPR) of Pakistan Ministry of Foreign Affairs, the U.S. State Department and the Missile Technology Control Regime (MTCR).

•Think tank commentaries and international media coverage, such as by The Diplomat, Al Jazeera, Jane Defence Weekly, Times of Israel and DW News.

•International organizations including IAEA and Carnegie Endowment to international peace.

All sources of data have been evaluated critically based on their credibility, currency and relevance to foster an objective well-informed debate.

Analysis Technique

The search of recurring patterns, contradictions and cause-effect relationships is achieved via a comparative thematic analysis. These include:

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

•The links between the missile developments in India and the Strategic Responses by Pakistan.
•The doctrinal development of deterrence in Pakistan, that is, the shift to full- spectrum deterrence, Minimum deterrence.
•The interaction of the domestic technology potential and external aid (of China, North Korea).

Diplomatic and Strategic Effects of the U.S. Sanctions

Moreover, the study incorporates the aspects of the realist international relations theory particularly the notions of balance of power, strategic parity, and deterrence in explaining the strategic rationale of developing and deploying missiles.

Limitations

Considering the sensitivity of the strategic and defense information, primary sources are limited in availability, especially when it comes to the internal decision-making process in the military and classified information on technological aspects. Hence, the study is restricted to secondary sources that are openly accessible and proven.

Nonetheless, the multiple-credible-data-point triangulation alleviates the limitations and guarantees the depth and credibility of the analysis.

Discussions s Findings

Today's Pakistan's missile program is also under very active development, which during the last years has shown significant progress visible in the increased accuracy of strikes, as well as in multiplying the missile loading and increasing the range of locality. Its ballistic as well as cruise missile systems have been enhanced to a large extent by the help of foreign aids. Moreover Pakistan has stepped into the role of seller of missile systems and their related technology, although Pakistan is not a member of MTCR.

History of Pakistan Missile Program Landscape

The missile program in Pakistan, especially the ballistic missiles and cruise missile systems, forms the core of nuclear weapons delivery system. In addition to their importance in providing survivability and a second-strike capability, these systems also represent the core of the Pakistani strategic deterrent against conventional superiority of the Indian military forces. It has been testing missiles regularly to demonstrate the reliability of the system, achieve technical improvements, and send strategic preparedness messages (Kristensen, Norris C Diamond, 2018). However, Pakistani still takes advantage of the external help to develop technology and it is not a member of the Missile Technology Control Regime (MTCR), which creates doubts about regional proliferation and transparency (Malik, 2023). In spite of the U.S. removing certain sanctions relating to missiles against Pakistan in 2003, there are still suspicions relating to the risks of proliferation and the destabilization of the region (Mistry, 2003).

(1G60 to 1GG0): Space Research and the Birth of a fledgling Missile Program

The actual work on the missile program in Pakistan started in the early 60s with the establishment of the space and nuclear research centers. The space program was started under the Pakistan Atomic Energy Commission (PAEC) in 1961; it received some technical cooperation with the United States, such as the training of Pakistani engineers with NASA. By the year 1962, Pakistan had already managed to produce a two-stage sounding rocket; which was one of the initial stepping stones towards its subsequent missile aspirations (SUPARCO, 2011).

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

In 1981, Space and Upper Atmosphere Research Commission (SUPARCO) was established institutionalizing space research and subsequent missile development/production. After the Indian test launch of the Prithvi missile in 1988, Pakistan test launched the Hatf-1 and Hatf-2 in 1989. Originally these missiles were technologically unsophisticated, short range, and most were solely meant as training missiles; they were allegedly based on foreign aid, specifically French and Chinese (Chandrashekar, 1993; Cirincione et al., 2003).

The U.S. intelligence estimates in the 1990s indicated that Pakistan missile potential in that period was very minimal and that the F-16 combat aircraft, provided by the United States, remained its most viable delivery system. Pakistani missile program was still at this point regarded to be in its infancy (Cirincione et al., 2003; Mistry, 2003).

(1GGo to 2001): Arms Racing, Interagency Competition, and Foreign Aid

This study refers to the essence of 1990-2001 as the critical moment of missile proliferation and technological consolidation in Pakistan, which was mainly shaped by Indian defense modernization and geopolitics of the post-Cold War world. The main influencing factor in missile doctrine adopted by Pakistan at this time was the need to offset conventional and nuclear superiority of India which had been compounded by an increasingly strategic Indian orientation toward China (Mistry, 2003).

With the induction of U.S. Pressler Amendment sanctions in 1990, which had resulted in the curtailment of American military assistance because of Islamabad's nuclear program, Islamabad enhanced its aboveboard and secret missile development efforts with foreign assistance. It is noteworthy that Pakistan purchased M-11 missile systems in China and NoDong missile technology in North Korea. The solid-fuel program led by Dr. Samar Mubarakmand within the PAEC and the liquid-fuel program of Dr. Abdul Qadeer Khan at the Khan Research Laboratories divided the previously mentioned internal development effort (Gertz, 2001; Corera, 2009).

In this time:

- In 1997, SUPARCO launched Hatf-3 (Ghaznavi)
- In 1998 KRL developed and tested Hatf-5 (Ghauri).
- Another intermediate-range ballistic system that was developed is the solid-fuel missile Hatf-4 (Shaheen-1).

This marked a large swing to home grown systems with greater range, mobility and payload capacity. They were directly aimed to counter the Prithvi and Agni missile development in India and thus escalate the arms race in the region (Kristensen et al., 2018).

Military rule of General Pervez Musharraf provided structural change with the creation of National Development Complex (NDC) in 1999 to rationalize the production of missiles. NDC was made the central organization in charge of missile development that combined efforts of both KRL and PAEC and removed the bureaucratic overlap (IISS, 2007; Ansari, 2008).

(2001 to 2010): Interagency Integration, and Technical Maturity

The period between 2001 and 2010 was witness to the maturation of the missile program in Pakistan; both technologically and institutionally. This trend would continue throughout this time with an average of one test every other month involving both missiles and India as the other country and would usually coincide with some major political or military development (The Guardian, 2002). The functional testing of:

- Hatf-3 (Ghaznavi)
- Hatf-5 (Ghauri-1)

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

- Hatf-6 (Shaheen-1 and Shaheen-2)

...disclosed significant advances in solid-fuel technology (range: 2,0002,500 km) and liquid-fuel systems (range: 1,300 km) carrying 1,000 kg payloadsPakistan will be able to strike most of Indian territory with strategic weapons (Kristensen et al., 2018).

The major event in this period was the testing of Hatf-7 (Babur), the first land-launched cruise missile of Pakistan, in 2005 and the air-launched Hatf-8 (Raad) in 2007. Although represented as national inventions, the resemblance of the design to Chinese and American systems indicates some level of external (technical) influence (Hewson C Koch, 2005).

In an exception of bilateral stability, in 2005 Pakistan and India signed a missile test notification agreement, evidence of anything but strategic cooperation (Associated Press, 2005). After 2007, the testing rate of Pakistan reduced due to the turn towards the development of cruise missiles, motivated by:

- The Indian Ballistic Missile Defense (BMD) investment
- Adequacy of current payload delivery systems of nuclear origin
- International criticism and sanctions pressure
- A focus on tactical nuclear weapons (TNWs) as a component of a full-spectrum deterrent posture (Krepon, 2011; Bokhari, 2010)

Pakistan's Missiles Capabilities

The missile potential of Pakistan has gone through a long way over the decades, and currently, it became the central element of the state missile defense concept. The state investment on missile systems is not only symbolic but also strategic in nature because it provides a method of assuring deterrence, survivability and declaratory sovereign defense capabilities. The nation remains under recurring sanctions and external pressure, but it proceeds with the development of ballistic and cruise missile technologies to maintain the credible second-strike capability and balance the regional threats, especially that of India (Kristensen, Norris, C Diamond, 2018).

Ballistic Missiles

Ballistic missiles form the core of the Pakistani nuclear delivery system because they have the range, payload and multiple warhead possibilities. These systems take a sub orbital parabolic path and are only powered and steered in the initial stages of their flight. The initial versions were distinguished by a lower level of precision, but the current technological growth significantly increased their precision and reliability (Minhas, 2021).

Ballistic missiles are broadly classified according to their Operation range:

- Battlefield-Range Ballistic Missiles (BRBMs): fewer than 300 km
- Short-Range Ballistic Missiles (SRBMs): 300 - 1000 km
- Medium-Range Ballistic Missiles (MRBMs): 1,000 3,000 km
- Intermediate-Range Ballistic Missiles (IRBMs): 3,000 5,500 km
- Intercontinental Ballistic Missiles (ICBMs): More than 5,500 km

Today, Pakistan deployed three major types of ballistic missiles:

BSRBMs/SRBMs: Nasr (Hatf-9), Abdali (Hatf-2), and Ghaznavi (Hatf-3) have a range of 60 300 km, and their main purpose is Battlefield and the Cold Start Doctrine against India (Shaikh, 2011; Kristensen et al., 2018).

MRBMs: Shaheen-1 (Hatf-4), Shaheen-2 (Hatf-6) and Ghauri (Hatf-5) with a range of 1,250 2,500 km.

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Longer-Range Systems: The most advanced Pakistan missile, Shaheen-3, has a range of up to 2,750 km, which would give Islamabad strategic capability over the entire Indian territory as well as some regions in the Middle East (Gady, 2015).

Ballistic missile interception is a technologically complicated undertaking that needs sophisticated facilities like space-based sensors, radar arrays, kinetic interceptors, and an integrated command and control system in real-time, which is beyond the means of the majority of nations (Minhas, 2021).

Cruise Missiles

Besides ballistic systems, Pakistan has also spent a lot on developing cruise missiles, which are characterized by flying at low altitudes, maneuverability, and evading radars. Such systems will provide Pakistan with additional nuclear delivery capabilities and improve the deterrence by making the operation of enemy missile defense more difficult.

Babur (Hatf-7): Land-based, mobile, cruise missile, having a range of 350 km, and able to carry nuclear warheads. It has a terrain-hugging and radar-evasion design. There is an improved variant Babur-2/Babur-1B with the range of 700 km (Hewson, 2005; ISPR, 2018).

Ra -ad (Hatf-8): An air-to-ground missile (ALCM) having a range of 350 km, which is carried by combat aircraft to drop conventional warheads. It represents the Pakistani progress in the deterrent systems of the air (Richardson, 2007).

Babur-3: It is a sea-launched cruise missile (SLCM), which is under development as of now, and is said to be based on the U.S. Harpoon missile. It is a strategic element of second-strike capability through naval platforms (Gady, 2015; Kristensen et al., 2018).

The combination of these systems marks the Pakistani move towards the triad-based deterrence and greater flexibility in nuclear posture operations.

Shaheen-III and Ababeel Dilemma

i)Shaheen-III: Originally designed as a small satellite launch vehicle, the Shaheen-III has already become the longest-range ballistic rocket of Pakistan. Shaheen-III is a two- stage, solid-fuel, road-mobile missile with a range of up to 2,750 km that is tested firstly on March 9, 2015, and capable of carrying nuclear warheads (Minhas, 2021).

This distance would allow Pakistan to attack any target in India including strategically vital Andaman and Nicobar Islands. The missile was built with a strategic reason in mind namely, to destroy the second strike sites of India and deprive the enemy any geographical sanctuaries. It travels at speeds of up to Mach 18, meaning that it is highly maneuverable and intercepting it would be very challenging, even to sophisticated missile defense systems (Minhas, 2021).

ii)Ababeel: Ababeel missile is a significant advancement in the missileology of Pakistan. It is a three-stage solid fueled MRBM, having range of 2200 km, which is being developed by Khan Research Laboratories (KRL). It successfully test-fired the first time on January 24, 2017, and it is estimated that it is based on the Shaheen-III airframe (ISPR, 2017).

Ababeel made the headlines as the first Pakistani missile to use MIRV (Multiple Independently Targetable Reentry Vehicle) technology. MIRVs allow a single missile to deploy several nuclear warheads, each warhead capable of striking separate target with great accuracy. This greatly boosts the deterrent potential of Pakistan and makes missile defense planning on the part of the enemy more difficult (Kristensen et al., 2018).

Whereas Shaheen-III extends the geographic range of Pakistan, Ababeel increases survivability and strike resilience, overwheling Ballistic Missile Defense (BMD) systems. BMDs normally are based on intercepting one projectile in mid-flight by its trajectory.

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

However, MIRVs disperse several independently-guided warheads and decoys that fly at supersonic speeds and target various locations, making traditional BMD interception useless (Minhas, 2021).

Having Shaheen-III and Ababeel in its inventory, Pakistan has acquired the strategic capability of hitting the entire India, whereas it could potentially hit targets as far as the Middle East and beyond. These systems validate the fact that Pakistan has joined the club of nuclear missile technologies powers.

U.S. Sanctions and Pakistani Reply: A Case of Strategic Dilemma inclined by Hegemonic Interests

U.S. Sanctions: Security Issue or Hypocritical Strategies?

The recent sanctions by United States against the missile program in Pakistan, allegedly on proliferation grounds, have to be seen in a larger context of power asymmetries and hegemonic discourses in the world. Although Jon Finer, the U.S.

Deputy National Security Adviser, designated the increasing range of missiles developed by Pakistan as a possible "aspiring threat to the United States", such a statement seems more of American fears of losing strategic monopolies rather than any imminent offensive plans on the part of Pakistan (Al Jazeera, 2024).

The comments of Finer of the Carnegie Endowment for International Peace that the missile capability of Pakistan could soon project force outside the region of South Asia posed telling questions on the U.S. intent: Is it really about regional stability and non-proliferation? Or is it saving U.S hegemony in a fast multipolar world? The rhetorical turn taken by the U.S. leaders is especially convenient in overlooking the past U.S. forbearance toward similar or even more aggressive missile development by its allies, such as India and Israel, which have tested intercontinental and submarine-launched systems without incurring anywhere near the same punishment (Kristensen, Norris C Diamond, 2018).

Moreover, the fact that Finer focuses on the scenario in which Pakistan obtains bigger rocket motors and increases its launch capabilities, thus suggesting Chinese technical support, should be interpreted in the context of Sino-American competition, where the west is increasingly securitizing strategic relations with the Global South. Therefore the sanctions issuance under the auspices of non-proliferation is more of a patchy system of limiting arms control rather than a global obligation to arms control.

Pakistani Reaction: Defensive Sovereignty on a Selectively Controlled System

Pakistan reacted to U.S. sanctions in a clear and aggressive way. The Islamabad government condemned the action as politically driven, referred to the discrepant non-proliferation criteria applied by Washington, and mentioned the unauthorized conveyance of advanced military hardware to preferred partners (Pakistan Ministry of Foreign Affairs, 2024). This is the crux of the Pakistani contradiction: Non-proliferation is also now politicized, and is used not to promote peace in the region, but to maintain a strategic status quo in the world.

Pakistan Foreign Office stressed that missile development program is not an adventurism but a genuine security necessity of the country. Considering the regional disparity in relation to the rising missile arsenal by India and its coordination with the U.S. Indo-Pacific strategies, Pakistan believes its missile program is a deterrence, rather than an escalation. Pakistan is not trying to engage in a global confrontation by equipping itself with modern ballistic and cruise missile systems but rather a strategic parity in an otherwise hostile neighborhood (Minhas, 2024).

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

In addition, the allegations of U.S. officials on Chinese cooperation are hypothetical and indicative of the general U.S. uneasiness with Chinese growing defense presence. And indeed, unless it is a false claim, such collaborations are a reflection of the same alliances that the United States promotes with its own defense customers- served as a normative hypocrisy in international arms control arrangements (Reuters, 2024). The United States hurtles its own credibility and the very tenets of non-discriminatory security governance which it purports to respect by sanctioning Pakistan and blessing Indian missile tests and Israeli long range strikes.

Critical Argument

Fundamentally, the U.S. sanction regime towards the missile program in Pakistan is neither simply related to non-proliferation nor strategic stability. Moreover, it is a geostrategic move to put in check technological sovereignty in states, which disrupt the power status quo. The refusal of Pakistan to forego its quest to develop long range missile capability is not just a military related strategy, but a show of middle finger to the status quo of the world order that promises benefits to those who obey and destruction to those who seek independence.

This situation is an indicator of a bigger problem in global politics, the weaponization of norms by hegemonic actors. The United States in endeavoring to portray itself as the champion of global arms control remains strategic in its selectivity thereby undermining the integrity of the international non-proliferation regime. The development of missiles in Pakistan, however, not lacking danger as it is, must be viewed as a logical reaction to structural insecurity, rather than a provocation per se.

Conclusion

Once a primitive defense project, Pakistan has transformed its missile program into a strong strategic force, which has been Pakistan-specific in nature due to its persistence in insecurity, asymmetry with its neighbor India and the desire to achieve sovereign deterrence. This is because anchored in a security environment informed by the growing military power of India and the selective application of international non- proliferation standards, Pakistan has followed a logical path based on reacting to systemic weaknesses as opposed to adventurist tendencies. The level of the country in the ballistic and cruise missile technologies, the MIRV-capable systems, such as Ababeel or the long-range Shaheen-III, is an indicator not only of the technological maturity but also strategic maturity.

Yet, the latest round of U.S. sanctions in the name of non-proliferation serves only to highlight the hypocrisy and geopolitical nature of the entire arms control system in the world. As nuclear-armed partners of the United States continue to build up their missile forces with no admonition, the defensive efforts of Pakistan are justified as threats.

Such discriminatory practice decreases the credibility of international non-proliferation regimes and leads to an increased strategic trust gap in South Asia.

More importantly, the U.S. response does not factor in the deterrence rationale that drives the Pakistani missile program specifically, and its military modernization efforts, in general: compensation of strategic equilibrium with India, conventional imbalance, and deterrence of aggression. In its effort to punish and contain the strategic growth of Pakistan, Washington runs the risk of a security dilemma that will eventually cripple the regional order it is trying to protect.

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Going ahead, the international community should resolve the structural biases in arms control regimes and work towards multilateral, non-discriminatory system that takes cognizance of the valid security needs of all states. Unless conscious effort is made to move to a more balanced and inclusive global security dialogue, unilateral sanctions and coercive diplomacy can do nothing but further divide, provide an incentive to go covert in proliferation efforts and increase tensions in an already tenuous South Asian region.

In the end, the missile program of Pakistan is not the threat itself, but the symptom of the flawed security order, where the deterrence, defiance, and distrust meet. Unless regional and global players can rise beyond the politics of exceptionalism, then South Asia could well be trapped in a vicious circle of rivalry, mistrust, and militarised brinkmanship.

References

(1) Ahmed, Z. (2020). *Strategic instability in South Asia: Misperceptions and escalation risks*. Journal of Strategic Studies, 42(3), 215–232.

(2) Al Jazeera. (2024, December 19). *Pakistan slams US sanctions on ballistic missile programme*. Retrieved from https://www.aljazeera.com

(3) Clary, C. (2019). *Thinking about Pakistan's nuclear weapons*. Naval War College Review, 72(3), 1–29.

(4) Gady, F.-S. (2015, March 13). *Does Pakistan have a sea-based second strike capability?* The Diplomat. Retrieved from https://thediplomat.com

(5) Hewson, R. (2005, October 1). *Cruise missile technology proliferation takes off.* Jane's Intelligence Review.

(6) ISPR. (2017, January 24). *Press Release No PR-34/2017-ISPR*. Inter-Services Public Relations. Retrieved from https://www.ispr.gov.pk

(7) ISPR. (2018, April 14). *Press Release No PR-142/2018-ISPR*. Inter-Services Public Relations. Retrieved from https://www.ispr.gov.pk

(8) Khan, F. H. (2012). *Eating grass: The making of the Pakistani bomb*. Stanford University Press.

(9) Khan, S. A., C Siddiqui, M. (2021). Strategic technologies and MIRV capabilities in South Asia. *Strategic Studies*, 41(2), 91–114.

(10) Kristensen, H. M., Norris, R. S., C Diamond, J. (2018). Pakistani nuclear forces, 2018. *Bulletin of the Atomic Scientists*, 74(5), 348–358. https://doi.org/10.1080/00963402.2018.1507796

(11) Krepon, M., C Wheeler, T. (2016). *The lure and pitfalls of MIRVs: From the first to the second nuclear age*. Stimson Center. Retrieved from https://www.stimson.org

(12) Malik, M. H. (2023). *Missile proliferation and Pakistan's export potential: A security dilemma*. Modern Diplomacy. Retrieved from https://moderndiplomacy.eu

(13) Minhas, S. M. (2021, September 19). *Pakistan's ballistic missile program*. Scientia Magazine. Retrieved from https://scientiamag.org

(14) Minhas, S. M. (2024). *Pakistan's ballistic missile advancements and strategic calculations*. Policy Watch, 12(4), 37–42.

(15) Pakistan Ministry of Foreign Affairs. (2024, December 20). *Official statement on U.S. sanctions related to missile development*. Retrieved from https://mofa.gov.pk

(16) Reuters. (2024, December 19). *US imposes new sanctions on Pakistan over missile program*. Retrieved from https://www.reuters.com

(17) Richardson, D. (2007, September 1). *Pakistan tests Hatf-8 air-launched cruise missile*. Jane's Missiles C Rockets.

Vol. 3 No. 6 (2025)

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

(18) Rizvi, H. A. (2015). *Pakistan's strategic culture and foreign policy making: A study of Pakistan's post-S/11 strategic behavior*. International Journal of South Asian Affairs, 8(1), 57–74.

(19) Shaikh, S. (2011, April 20). *Pakistan test-fires Hatf-IX*. The News International. Retrieved from https://www.thenews.com.pk