



THE NUCLEAR EVOLUTION OF PAKISTAN & INDIA: A HISTORICAL OVERVIEW

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Abstract

The article dives deep into the history of nuclear evolution of South Asian giants Pakistan and India. Since Pakistan's drive for nuclear energy began in 1972, efforts have been made to examine the country's nuclear weapons possibilities. It wasn't until after India conducted its nuclear test in May 1974 that American officials began to worry that Pakistan was establishing a nuclear weapons capability. First came India's nuclear test, which prepared the path for Pakistan's nuclearization in South Asia. During the Gerald Ford administration from 1974 to 1977, the United States pursued a policy of non-proliferation with Pakistan. The government pushed France and Pakistan to abandon their plutonium reprocessing arrangement in an effort to limit Pakistan's latent proliferation potential. Even though it failed to stop Pakistan from developing nuclear weapons, the administration sought to construct a trade-off with Pakistan by pressuring it to chose military aid over nuclear weapons development. Due to its belief that the US non-proliferation policies in South Asia were biased towards India, Pakistan decided to use a nuclear weapon. For more than half a century, conflicts and crises have defined the path of the India-Pakistan conflict. They represent a danger to regional stability in terms of peace and security because of the escalating arms race between them. For decades, the two countries have engaged in a long-running disagreement over Kashmir, which is often regarded as the



nuclear war hotspot. It has been a long time since the division that the two countries have had a lengthy history of weapons. As a typical illustration of a security problem, the rivalry for security is a spiralling action-reaction connection in which one state's actions induce insecurity in another. A race to the top in military spending might result as a result of this security issue. As a result of New Delhi's military buildup, it has created a security challenge for its neighbours, particularly Pakistan, in recent years. A threat to regional stability in South Asia is posed by the weapons race between India and Pakistan.

Keywords: Pakistan, India, military, Weapons, Nuclearization.

Introduction

Since gaining their independence from British colonial domination, India and Pakistan have been embroiled in a bitter rivalry. India and Pakistan have been involved in several wars and continue to do so. Each country has adopted a security policy in order to achieve the position of an Asian Tiger or a regional power. As a result of these misperceptions about regional security, a new arms race has begun. Conventional arm races gave way to nuclear arm races as a result of the spread of nuclear weapons. The action-reaction spiral is taking place between the two countries. Here we take a closer look at the underlying causes of the divisions that have existed ever since. India and Pakistan have a long history of hostility. As a result of these disagreements, both countries went to war four times. Ethnocide politics were born as a result of the partition, and they are still flourishing in today's socially and politically troubled India-Pakistan. Relations between the United States and the Soviet Union were strained throughout the Cold War era, particularly when the struggle over Kashmir broke out in 1965. In 1971, Pakistan was split in two, and the newly formed state of Bangladesh was a challenge to Pakistan's sovereignty. Formed under the banner of "Atom for peace," India declared itself a nuclear power in 1974. (Homi J. BhabhaRaja Ramanna, 2018). Both countries began a secret arms race in the 1980s, which fueled increased tensions. At the end of May 1998, India and Pakistan conducted a series of nuclear tests for their weapons systems. There were two nuclear weapons tests in May 1998, one of which was classified as a two-stage thermonuclear bomb test by the Indian government. Atal Bihari Vajpayee, the Hindu nationalist party Bhartiya Janata Party (BJP) Prime Minister of India, who rose to influence alone two months earlier, well ahead claimed "These tests were vital to provide a credible nuclear deterrent for India's national security in the near future" (Vajpayee, 1998). Pakistan's first nuclear weapon tests were performed on May 28th and 30th, 1998, in response. Former Prime Minister Mian Muhammad Nawaz Sharif, who took office in 1997, stated Pakistan "was obligated to



develop a comparable capacity" and that the tests were aimed to build nuclear deterrence and serve the cause of peace and stability in our area (Sharif, 1998). US, EU and other countries agreed to allow India & Pakistan's nuclear testing as well as restricting financial aid from international development organisations.

These powers were immediately expanded. Early in the twenty-first century, as China's power rose in the region, the United States set aside concerns about India's nuclear weapons in order to establish India as a new political and strategic partner. The United States made a statement in reaction to the events of September 11, 2001. Concerned about Pakistan's nuclear tests and the imposition of martial law in October 1999, which ousted then-prime minister Mian Muhammad Nawaz Sharif and placed General Pervez Musharraf in charge, the United States stipulated Pakistan's participation in the war against Taliban factions in Afghanistan. Thus, nuclear-crises were sparked in the region after the nuclear weapons testing. In May and July 1999, India and Pakistan were involved in a conflict, and Pakistan has since deployed soldiers over the Line of Control (LoC) in the vicinity of Kargil, which is in Indian-occupied Kashmir (IoK). Even as world fears about the potential for escalation into a full-scale nuclear war grew, Pakistan felt obliged to withdraw its soldiers from Kargil. A major 14-month military crisis erupted in 2001-2002 before the subsequent terrorist assault on the Indian Parliament on December 13th. There was a large-scale deployment of military assets along the Indo-Pak border as a result, leading many to believe that nuclear war was imminent. No military standoff as Spartan as these between the two adjacent countries has ever occurred prior to now, no matter how threatening the current situation may be. As a result of the 2008 Mumbai attacks, in which almost 200 people were killed by terrorists linked to the Lashkar-e-Taiba (LeT) group headquartered in Pakistan, India reacted with self-confidence. (Aziz, 2015)

Background

Pakistan rejected the US-led Nuclear Non-Proliferation Treaty following Indian nuclear tests in 1974. (NPR). This essay investigates the causes of nuclear insecurity in South Asia. The Gerald Ford Presidential Archives' archival data on US non-proliferation policy toward Pakistan show that Pakistan's uprising against the NPR and pursuit of nuclear weapons in the 1970s were not spontaneous occurrences, as previously supposed. This study goes into depth on a sequence of events that occurred in Pakistan in the early 1970s that affected its strategic thinking towards attaining nuclear weapons capability. It's supported by a number of threads.

After India's first nuclear test in 1974, Pakistan claimed that it was only following in India's footsteps and that it was not responsible for bringing nuclear weapons to the area, as



Pakistan claimed. Pakistan pursued nuclear weapons as a means of securing itself because of the longstanding animosity between Pakistan and the United States, which the superpowers of the time had little concern about. The United States was aware of Indo-Pak dynamics and had a lot of information about the nuclear ambitions of both nations when Pakistan raised its alarm in the early 1970s, but the United States did not take Pakistan's warnings seriously. For one thing, the U.S. miscalculated how far Pakistan might go with nuclear weapons. (Hagerty, 1995)

For one thing, the United States' South Asian non-proliferation strategy favoured India, which drove Pakistan to develop its own nuclear capabilities. The US response was subdued in the face of proof that India violated its civilian nuclear pact with both Canada and the US by diverting heavy water from a Canadian-supplied reactor for the test. Third, the London Suppliers Group, founded in 1974 in reaction to India's nuclear test, had little effect on the parameters of US cooperation with India, notably in terms of nuclear fuel supply for the Tarapur reactors. The group was designed to regulate the transfer of nuclear technology. Finally, compared to India, Pakistan was the one that lost the most in two important ways following the 1974 nuclear explosion. An deal between France and Pakistan on nuclear reprocessing was scrapped in 1978 after years of negotiations that had been going on since 1974. Second, Canada has halted the delivery of replacement parts for Pakistan's first commercial nuclear power station, the KANUPP, and halted the export of a fuel manufacturing unit to that country.

As a result of these technological obstacles, Pakistani officials looked to the nuclear black market for ways to acquire nuclear capability, believing that this was the only option to compete with a nuclear-armed India. Under Ford's administration, the U.S. non-proliferation strategy with Pakistan shifted from a cautious approach to a more aggressive one. The Ford administration attempted to set up a deal with Pakistan in which military and economic aid to Pakistan was used as a leverage to prevent Pakistan from pursuing nuclear weapons capability. (Lyon, 2008)

Literature Review

The development of nuclear weapons on the part of both India and Pakistan raises the possibility that the two countries have reached a state of stalemate or mutually assured destruction (MAD), but this is by no means a given. After confronting each other for sixty years, with Kashmir being seen as essential to the national identity of both countries, the two contenders have come to accept in principle that a non-deployed posture is less threatening and, as a result, more stable than one in which weapons are in an advanced state of readiness. This realisation was brought about as a result of Kashmir being seen as



essential to the national identity of both countries. In the year 1998, Pakistan conducted its first nuclear tests and afterwards declared itself to be a nuclear state, thus mirroring the nuclear programme that India had been working on. It is a common misconception that Pakistan's decision to begin its own nuclear programme was motivated in any way by India's nuclear test in 1974; however, this is not the case. The position that India has as the head of the non-aligned movement made it impossible for them to acquire the bomb and display it to the rest of the world.

During the entirety of the Cold War, China maintained its support for Pakistan, and this assistance was interpreted as an act of friendship toward the Islamic world in the 1990s. In 1995, China modified its policy of "no first use" of nuclear weapons to make it applicable only in the event of a conflict with a country that does not possess nuclear weapons. As part of a new US policy aimed at strengthening India as a counter-weight to China, President George W. Bush decided in 2005 to supply India with nuclear know-how as part of that programme. In response, China has established military outposts in Pakistan, Sri Lanka, Bangladesh, and the Maldives in order to encircle India. (Arnold, 2012)

Pakistan's Nuclear Journey

The Pakistani nuclear weapon was built primarily for security reasons. Islamabad required these nuclear weapons to assure its existence after losing East Pakistan in the 1971 war. A lack of reliable security guarantees strengthened this argument, as did the apparent certainty of the Indian bomb following the 1974 test. These conditions have remained mostly unchanged since then. Pakistan has always been concerned about India's conventional dominance and so regards nuclear weapons as a method of preventing a defeat on the battlefield. As a result of the tumultuous history of relations between the United States and Pakistan, Islamabad is unable to rely on Beijing in the event of conflicts in South Asia. In addition to protecting Pakistani backing for the Kashmiri resistance, the initiative was able to neutralise the possibility of significant conventional war. The deadly Kargil expedition of 1999 was the result of Pakistan's erroneous notion that it could expand military operations beyond the Line of Control.

Pakistan's nuclear ambitions have a political underpinning as well. He wished for Pakistan to "walk tall," as Zulfikar Ali Bhutto put it. The goal was to keep India and the United States on equal footing. Even today, Islamists are proud that they were the first Muslim nation to get their hands on a nuclear weapon. Despite Bhutto's removal in a bloodless coup in 1977, this logic has persisted. Even though the Pakistani military was responsible for eliminating Pakistan's best-known populist leader, the country's nuclear weapons



programme became associated with national sovereignty and national prestige in the late 1970s. (Yusuf, 2018)

Between 1984 and 1987, Pakistan crossed the nuclear threshold. When attempting to pin down a precise year, one must consider whether or not one is referring to the year in which enough HEU was created for military use. The insurgency in Kashmir in 1989-1990 led India to consider limited strikes targeting training centres across the border, according to some eyewitness accounts. However, General Musharraf asserts that Pakistan's nuclear capabilities "was not yet operational" as late as 1999, despite the fact that this is widely accepted.

After the 1998 nuclear tests, Islamabad established a long-term nuclear development strategy. It is currently said to be carrying out its second 10-year plan (presumably covering the years 2010-2020). It is Islamabad's belief that a smaller nation may discourage a larger one by the fear of harm that is incomparable to the stakes of the battle. In order to cause "unacceptable" or "unbearable" damage to India, it aspires to be able to do so. In a quasi-official assessment, Pakistani strategists concede that it is impossible to define what constitutes unacceptable damage, and that "overkill would be incorporated into the reaction as a result."

A large nuclear programme for both civilian and military purposes is in place in Pakistan. Even though both PAEC and KRL were initially founded primarily for uranium enrichment, they soon became rivals when they were involved in weaponization and missile acquisition. PAEC and KRL have long battled it out for control of Pakistan's nuclear programme. It's possible that the Pakistani government encouraged this rivalry, but the A. Q. Khan network flourished as a result of this policy. (Rid, 2018)

The programme was reorganised between 1999 and 2001. This control is now held by the National Command Authority (NCA) and the Strategic Plans Division (SPD) (see below). There are several laboratories that are doing the same thing at the same time. In 2001, the National Engineering and Scientific Commission (NESCOM) was founded to oversee the development of military systems. Weaponization falls under the purview of the National Development Complex, a 1990 outgrowth of PAEC. Under the ambit of the PAEC, uranium and plutonium mining and processing are covered. The Khushab complex of heavy-water moderated reactors controls the known reprocessing facilities at Nilore and Chashma. As far as we know, KRL is in charge of enriching uranium only at its Kahuta and Gadwal facilities.

India's Nuclear Journey



There were exciting discoveries in Europe's nuclear physics sector that Indian scientists were aware of as well as the debates about the potential economic and political impact on harnessing nuclear energy. Dr. Homi Jehangir Bhabha was one of them, and he was determined to get India ready for the atomic age as rapidly as possible after the Second World War ended and India became independence. Bhabha applied for and received a grant from the Tata Trust in 1944, three years before India gained independence, to establish a centre for advanced research in nuclear and associated fields of physics in Bombay. President Jawaharlal Nehru, the first Indian leader to show genuine concern for the advancement of Indian science and technology, lent his full support to Bhabha's efforts to construct a comprehensive national nuclear programme. (Salik, 2009)

Bhabha and Nehru's focus was on nuclear power for non-military applications. India's rapid growth in the 1950s would be based on nuclear research, which Bhabha and Nehru thought would lead to power that was too cheap to be metered. Nehru's diplomacy and Bhabha's wide network of connections in the Western physics community, many of whom were now influential in government, allowed India to win major foreign backing for the building of an infrastructure for atomic research and development. Bhabha was elected president of the inaugural international conference on peaceful uses of atomic energy in Geneva in 1955 because of his enviable reputation. Bhabha and Nehru were aware of the nuclear program's military implications as they built the groundwork for a wide-ranging nuclear programme. Although he acknowledged he could not guarantee the policy of future generations of Indian leaders, Nehru explicitly rejected the military use of nuclear energy. In light of Nehru's insistence on peace and disarmament, it could not have been any other way. A nuclear testing moratorium and a freeze on nuclear material manufacturing were among his first calls for a global halt to nuclear weapon development. (Abdullah, 2018)

Nehru and Bhabha were certain that India should retain the capability to produce nuclear weapons even as they advocated for a world free of nuclear weapons. As a result, they refused to support any control mechanism aimed at limiting India's nuclear capability and future decision-making on the bomb, whether it was the United States' Baruch Plan in 1945 or the international safeguards system in the first place. India focused its nuclear strategy almost entirely on developing civilian technologies, de-emphasizing nuclear weapons' potential military applications, and vigorously promoting nuclear restraint around the world. When China conducted its first nuclear test in October 1964, declaring itself the fifth nuclear weapon state, this policy combination was put under tremendous strain. Only two years after humiliating New Delhi in a border conflict, China's nuclear test prompted India to openly consider its nuclear weapons option for the first time. India has a great desire for nuclear weapons notwithstanding its strong opposition to nuclear weapons and



the notion of deterrence. Nehru's death made it more difficult for India to decide on nuclear weapons in the months running up to China's nuclear test.

The Indian government explored three ways to tackle its nuclear conundrum. To begin, it requested security assurances from the United States, the Soviet Union, and the United Kingdom in order to deal with a hostile nuclear China at her behest. All three countries rejected India. To begin with, it called for the signing of a non-proliferation treaty, which would obligate nuclear-armed states to hand over their arsenals and prevent anybody else from acquiring them. The nuclear nonproliferation treaty that emerged from the multilateral discussions was a very different document. On the third of three occasions, Indian Prime Minister Lal Bahadur Shastri approved a nuclear explosion project that would have taken place underground in 1965. (SNEP). However, in January 1966, both Shastri and Bhabha passed away. SNEP had to be postponed because of India's major political and economic crises at the time. In 1974, Mrs. Indira Gandhi and the successors of Bhabha conducted the first underground nuclear test, completing the work of Bhabha. Even yet, India's nuclear dilemma was not solved by the test, which was an overdue response to China's explosion from a decade prior. Despite this, New Delhi refused to label itself a nuclear weapons state despite its nuclear capabilities being proved. By referring to the test as a "peaceful nuclear explosion," it confused the rest of the world and claimed that it had no plans to develop nuclear weapons. A rift existed between India's moral aversion to nuclear weapons and its need for security. After India's 1974 nuclear test, the world responded by taking action against it—through a growing series of non-proliferation sanctions—without completing its goal of challenging global non-proliferation. (Dr. Farhat Konain Shujahi, 2018)

It wasn't until the 1970s that India was under increased pressure to change its nuke policy. It was Pakistan this time, on the other side of the western border, that had begun a covert nuclear weapon development programme. To Pakistan, China has initiated a huge transfer of nuclear weapons technology. After renewing its strategic partnership with Pakistan in the early 1980s to expel the Russians from Afghanistan, US policymakers were reluctant to question the relationship. In the early 1980s, Mrs. Gandhi contemplated conducting nuclear testing, but the information got out and it had to be scrapped. Indian Prime Minister Rajiv Gandhi's attempt to urge the United States into ending Pakistan's nuclear weapons programme in the mid-1980s backfired, however. When the Cold War was at its height, Mr. Gandhi began a worldwide campaign against nuclear weapons but resisted demands from the strategic establishment to go nuclear. There were just a few options left for India as Pakistani officials began to show off their nuclear weaponry in the early '87. Mr. V.P. Singh, Mr. Gandhi's successor, finished the nuclear weaponization programme, which he had authorised in 1988. Indian nuclear policy remained, however, unclear.



Nuclear Doctrine of Pakistan

Between now and May 1998, Pakistan has acknowledged the detonation of a nuclear weapon there. It has not formally recognised any official pronouncement on nuclear weapons strategy. Along with its anti-nuclear sentiment, Pakistan's nuclear strategy aims to frighten India (Salik, 2009). When it comes to why Pakistan is developing nuclear weapons, it is no different than why other threshold states have done so. Political prestige, security, economic benefits, and domestic compulsions are all reasons to use nuclear power. Since the partition, Pakistan's nuclear programme has been centred on India because of the competition between the two countries (Abdullah, 2018). Since the Kashmir issue has gone unresolved for so long, Pakistan has maintained its nuclear capabilities in order to preserve a sense of security and threat perception against India. Because of their long history of competition, the general public interprets India's goals as anti-Muslim or unfriendly. It's been this way ever since we got our freedom. Pakistan's security challenges need a search for a better solution than relying on partnerships. Even while conventional asymmetries are developing, the creation and ownership of adequate numbers and kinds of nuclear weapons by both countries, according to Lieutenant General (R) Khalid Kidwai, has rendered war as a policy instrument nearly superfluous. "This has been made certain by the tried-and-true MAD principle." It's counterproductive, according to this thinking, to pursue effective methods of preventing harm. "Pakistan's nuclear doctrine is structured around the concept of deterrence," Tughral Yamin explains. As long as nuclear weapons aren't used, Pakistan's idea of deterrence may be extended to the maximum.

During the critical phases of nuclear signalling, the Pakistani political, military, scientific, and diplomatic leadership has first-hand expertise in escalation control. They are continually fine-tuning these abilities through war games. They have mastered the technique of increasing dominance from the top down. Deterrent stability has been rigorously war-gamed to maintain deterrence in many circumstances" (Tasleem, 2015). Pakistan's nuclear policy was designed to deter India from promising action against Pakistan and, if necessary, to prevent India from winning a war if it were to take place.. Because of Pakistan's nuclear policy rationale, which still relied heavily on an enormous retribution approach, the country has been gradually shifting away from an all-or-nothing deterrent strategy to a more complex one that includes more alternatives for responding. These alterations, as evidenced by weapons delivery system growth and variety, may call for a shift from non-deployment to an advanced enthusiastic near and a corresponding adjustment from federal to substitute command and control. Significant implications for the region's long-term viability may be drawn from these new trends. While the nuclear



powers' crises were managed well, certain understandings about the shifting elements of the boom rheostat between India and Pakistan may be sacrificed in the process.

Nuclear Doctrine of India

India carried out its first nuclear test forty years ago, in 1974. (Ramanna, 2018). China became a nuclear power in 1964, during the height of the cold war; as a result of these explosions, India had feelings of insecurity and saw a danger from China. Approximately twenty years ago, the Bhartiya Janata Party (BJP) of India was in charge of the administration of permissible nuclear weapons testing, which helped colour the explicit nuclearization of the subcontinent. The National Security Advisory Board, which had been chosen as part of the process of vitalizing the National Security Council framework, continued to push a nuclear policy even though the government will soon be sacked from its position of power. In the second document to set up a nuclear policy, which was published in August 1999, it was obvious that India's strategy regarding nuclear weapons had shifted from "dipped deterrence" in the 1990s to "credible minimum deterrence" (National Security Advisory Board, 1999). This dependability was replicated in its enunciation of assured retaliation based on the competency of a troika. There is not a very compelling rationale to India's possession of nuclear weapons. Israel, which is suspected of working toward achieving nuclear capability and which also refuses to sign the Non-Proliferation Treaty (NTP), poses a greater danger to the world than does India.

The following is a draught of a nuclear doctrine: there will be no first use of nuclear weapons, there will be a minimum nuclear deterrence, there will be command and control, and there will be survival. It has been made clear in the draught report of the Indian nuclear doctrine that India would pursue a strategy of dependable nuclear minimum deterrence in accordance with what is outlined in the draught. Both the continuation of India's nuclear arsenal and its strategy of retribution, which is barely mentioned in paragraph 2.3, pose a threat to the world (National Security Advisory Board on Indian Nuclear Doctrine, 1999). Mr. Vajpayee gave the public his word that India's nuclear capabilities would be capable of provide for their own defence in future (Vajpayee, 1998). India has also claimed that it would not have the possibility of the use of nuclear arms or the danger of using nuclear arms, which stands in contrast to nations that do not own nuclear weapons and are not linked with nuclear power states. In addition to this, it reduces the effective battlefield space that India's nuclear arsenals have to operate in. The actual strata in the draught are somewhere in the middle of the least credible and most credible options. The United States has often made the demand that India augment the magnitude of its deterrence, which might mean that India will need to do so as well.



Nuclear Arsenal of Pakistan

Pakistan is the first nation in the Muslim world and the seventh nation overall to possess the technology necessary to construct and manufacture nuclear weapons. The fast developing missile arsenal that Pakistan possesses is an essential component of Pakistan's overall defensive strategy. Since the country's independence, to ward against the danger posed by its competitor India. The majority of Pakistan's missile arsenal is made up of short- and medium-range ballistic missiles, but Pakistan is also making strides toward developing its cruise missile capabilities (ISPR, 2018). Additionally, Pakistan profited from China's contribution to the future development of advanced nuclear weapons (Thakur, 2019), and it was also a recipient of Chinese aid (Yaseen, et. al 2016). During the border skirmish tragedy that occurred between 2001 and 2002, the fear of nuclear war was substituted as a restraint from a large-scale war between the two nations. This was especially true in the aftermath of that conflict. The Shaheen solid-powered (MRBM) and Ghauri liquid-powered (MRBM) sequences of missiles are both an essential component of the Pakistani missile systems that are now in place. These missiles are quite effective in striking the majority of India. Recently, Pakistan made the announcement that it has successfully launched two types of cruise missiles: one called "Babur," which is capable of mobile fire, and another called "Ra'ad," which is capable of air launch. During the 1990s, tense ties between India and Pakistan contributed to increased nuclear proliferation, and recent estimates suggest that Pakistan may have up to one hundred nuclear weapons in its stockpile (Strategic Security Project, 2002). Pakistan has made measures toward developing concrete plutonium missiles, as well as starting such developments, and has expanded its plutonium mining capabilities (Ahmed, 2018). According to recent reports, Pakistan reportedly possesses between 150 and 160 nuclear bombs.

Nuclear Arsenal of India

India has been constantly increasing and modernising its nuclear arsenals. Nuclear-launched aircraft, land-based delivery systems, and sea-based delivery systems are all candidates to be replaced by at least five new weapon systems now being developed to augment nuclear capabilities. According to estimates, India had between 130 and 140 nuclear weapons. But they may need more plutonium in the future to make warheads for missiles, and India is supposedly building multiple more plutonium manufacturing facilities. For the purpose of becoming a more capable nuclear power, India is constantly adding to its nuclear arsenal and developing new nuclear infrastructure. In addition, India is working on plans to construct six more reactors in order to improve the quality of its weapon-grade plutonium. Indian scientists are currently looking for new sources of uranium, as well as facilities that use dangerous gas centrifuges for uranium enrichment



(Kristensen, 2017). There are four types of land-based ballistic missile launchers in India, all of which are currently operational. Prithvi-II and Agni-II have short ranges, whereas Agni-III has a medium range. The development of at least two other long-range missiles is now underway. According to the Indian government, the Prithvi-II ballistic missile was the first to be developed under the Indian Unified Directed Missile Expansion Program for the country's nuclear deterrent posture (Press Information Bureau., 2013). This missile has a maximum range of 250 kilometres and is capable of carrying both nuclear and conventional warheads. There were three user trials of this ballistic missile in 2016 undertaken by the Indian nuclear authority, and future experiments may be done in series (Balasore, 2018). Chinese officials may have just agreed to equip their ICBMs with MIRVs, while Pakistani officials may have said the same when their Ababeel ICBM with MIRVs was tested in January 2017. Agni VI, India's newest ICBM, has supposedly begun development. According to a government-backed website, the Agni-VI should have a range of between 8,000 and 10,000 kilometres and be capable of launching from the sea and the land (Ghosh, 2016). However, whether or not these powers are precise will have to be determined in the future. India is also developing a ground-launched cruise missile known as "Nirbhay," which resembles the Tomhawk in the United States or the Babur in Pakistan and has the potential to be launched from the air or the sea, depending on the launch location. In spite of the succession of failed tests, the public status of its functionality has not been established (Pandit, 2017). A ship-based ballistic missile launch system is also in use in India, and the country is also working to construct a submarine-launched ballistic missile. The "Dhanush" ship-based ballistic missile has a 400-kilometer (equal to 249-mile) range and is powered by liquid fuel. Subhadra and Suvarna, two specially manufactured "Sukanya" class guard boats, each have two missiles that may be fired from their rears. The Prithvi II SRBMs were adapted for use on ships, resulting in the "Dhanush" ballistic missile.

Conclusion

Nuclear proliferation in South Asia might lead to a full-scale nuclear war between India and Pakistan, which is now taking place. As we live in the age of powerful nuclear weapons and the two governments are at odds with one another, a widespread sense of unease might represent a severe danger to regional peace. It is possible that the long-standing Kashmir dispute may serve as a catalyst for nuclear war. It may be possible to avert future escalation by decreasing the weapons race and establishing certain parameters based on mutual confidence. As a result of signing the NPT and CTBT, Pakistan and India will be able to lower their military expenditures and spend it on the future development of their countries for the benefit of their incoming generations, while also reducing the danger of nuclear proliferation and full-scale conflict.



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