Decoding India's Nuclear Deterrence Policy

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Anand KT Nambiar
Research Intern – India Strategic Studies Programme

Introduction

India's Nuclear Deterrence policy follows a unique character in the global order. It is at the crossroad of morals, principles and raising security challenges. Technological advancements and political order influenced by a history of colonization were the key factors behind the formation of India's nuclear policies. India was compelled to change its stance as the global security environment evolved from the nuclear arms race of the Cold war to the shifting dynamics in South Asia. It forced India to maintain moral and principled commitment to restraint and responsibility.

India has consistently affirmed a strong argument in favour of nuclear disarmament which is non-discriminatory and universal since the inception. India constantly advocates disarmament resolutions in the United Nations frequently raising apprehensions about the differences in the international non-proliferation regime especially regarding treaties such as the Nuclear Non-proliferation Treaty (NPT) and the Comprehensive Test Ban Treaty (CTBT). India has refrained from agreeing to these treaties based on its discriminatory nature and focused on a continuous multidimensional approach shaping its foreign policy. India's foreign policy enables it to challenge discrimination of the global nuclear order. It is an active and constructive transformative element in arms control negotiations.

India's nuclear doctrine reflects caution and minimal arms utility at the ground level. India's Credible Minimum Deterrence policy symbolizes a conscious approach of keeping a limited nuclear arsenal. It ensures regional stability and restrains aggression from other countries without encouraging a nuclear arms race. This approach is inherent to the concept of No First Use Doctrine as an important element which states that India will not initiate any nuclear conflict or employ nuclear weapons in any condition, other than in retaliation to a nuclear attack and inflicting chemical or biological harm. This commitment distinguishes India's position from many other nuclear states through the Nuclear Command Authority as it also promoted civilian control on important strategic decisions ensuring transparency and responsibility.

India's Deterrence framework has been further modified by technological advancements with the creation of a Functional Nuclear Triad. For instance, INS Arihant launched indigenous ballistic missile submarines ensuring India's second-strike capability enhancing its deterrence, though it maintains and commits to strategic restraint.

This paper is a critical analysis of India's Nuclear Deterrence policy examining it historical development, moral ideas and operational practices that has defined it till date. The paper also examines ethical principles and practical realities that has influenced and outlined India's evolution over time on Nuclear Deterrence through its doctrines. It reflects the necessity for regional security, global disarmament efforts and the larger view of global nuclear order.

India's Commitment to Nuclear Disarmament and Responsible Global Conduct

India has maintained a long term view that global peace can only be endured by completely eliminating nuclear weapons. India argued for disarmament based on fairness, inclusive participation and reliable

validation from the time United Nations was established. In 1948, Indian political leaders urged the world to refrain from using atomic energy for weapons development purposes to peaceful activities and eradicating nuclear weapons to retain peace and harmony. In 1954, India was the first country to initiate ban on nuclear testing. This initiation later led to agreements like the Partial Test Ban Treaty and other international efforts to reduce the spread of nuclear arms. India pushed for disarmament in the following decades. In 1982, it put forward a 'nuclear freeze' due to which it seized the production of both nuclear weapons and their delivery systems. This proposal reflected India's belief system that long term security can only be achieved by abolishing nuclear weapons. The world viewed a significant moment in 1988, when Prime Minister Rajiv Gandhi presented a blueprint to UN calling for a Nuclear-Weapon-Free and Non-Violent World Order. The proposal involved India's vision of a peaceful future which relied on responsibility, restrain and global cooperation.

The change in security dynamics pushed India to open nuclear options. In 1974, India demonstrated nuclear capability but avoided building an active arsenal though there were numerous tests conducted by other nuclear powers. India refused to sign Comprehensive Test Ban Treaty (CTBT) in 1996 despite its active involvement in negotiation, due to concerns about strategic autonomy, the imbalance in the global Non-proliferation system and the lack of clear timeline of the treaty which required nuclear-armed states to disarm.

India adopted a nuclear stance to balance the capability of nuclear weapons with restraint, after conducting tests again in 1998. It declared a doctrine based on credible minimum deterrence, asserted a No First Use (NFU) policy, and pledged not to use nuclear weapons against non-nuclear states. India was open to turning these commitments into multilateral agreements binding it legally. It continues to advocate for a global NFU treaty to reduce the legitimacy of nuclear weapons and encourage international stability.

India is one of the few nuclear-armed states which continuously urges for a comprehensive Nuclear Weapons Convention like the existing bans on chemical and biological weapons. It is evidently seen at the UN General Assembly during which India regularly proposes three key resolutions namely: banning the use of nuclear weapons, reducing the risk of nuclear war and preventing the reach of nuclear materials from the terrorists. India's posture is stirred by the belief that genuine disarmament must be inclusive and verified. In 2006, a detailed working paper on Nuclear Disarmament was submitted to the UN in which emphasized that trust between states and strong verification mechanisms are essential for progress. India has also backed strict approach on export measures which was internationally recognized in 2008, when it concluded civil nuclear cooperation agreements.

India upheld a steady and cautious approach in arms-control debates. In 2013, India chose not to join the Arms Trade Treaty (ATT) as it questioned the treaty's effectiveness and fairness. India supported international mechanisms to refrain the illegal arms trade that could reach non-state actors while protecting the self-defence capabilities and right of states to maintain legitimate nuclear weapons.
India has been party to Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC) and completely destroyed its chemical weapons stockpile under international supervision. It also continues its voluntary prohibition on nuclear testing and supports negotiations for a universal and valid Fissile Material Cut-off Treaty (FMCT). Additionally, India advocates preventing the militarization of outer space and supports measures under the Convention on Certain Conventional Weapons (CCW). It

also participated in UN processes regulating the illicit trade of small arms and light weapons which can lead to terrorism and organized crime.

Altogether, India's nuclear policy reflects an approach to balance national security with a commitment to global disarmament. India presents its vision of a safe future world where nuclear weapons have no place by cautious restraint and active participation in international rule-making.

India's Limited Nuclear Arsenal: Balancing Deterrence and Restraint

India's nuclear position is a blend of restraint, responsibility and deterrence which sets it apart from other nuclear-armed states. India appears to maintain a force to protect national interests by intentionally limiting the size of nuclear arsenal to keep stability in a region where both the neighbouring countries Pakistan and China possess nuclear weapons, rather than building a large arsenal. According to the Stockholm International Peace Research Institute (SIPRI), India possessed only 180 warheads in 2025 which is just slightly above Pakistan which estimated 170 warheads. This estimate represents a meagre increase from 2023, when India had about 172 warheads. The gradual rise indicates modernization more than expansion. This also mirrors India's consistent doctrine of credible minimum deterrence aiming to ensure the capability to retaliate effectively without involving in a competitive arms race.

The growing use of canisterised missile systems like Agni-P (Prime) and Agni-V are the major trend of modernization. These are road-mobile missiles which can be deployed quickly and are difficult to detect or target, increasing their chances of surviving a crisis. The Agni-V is popularly significant as it can carry MIRVs multiple independently targetable warheads letting a single missile to strike several locations. This sharpens India's second-strike capability and adds validity to its deterrent posture.

India prioritized the survivability and reliability of its existing arsenal rather than expanding its warheads. India ensured that nuclear weapons remain secure and usable only under pressure which was more important than simply expanding its stockpiles, even though crisis can escalate mainly in regions along the India-Pakistan border. Despite this, India maintains a slight increase over Pakistan. The major complication lies in the rapid expansion initiated by China. As per recent reports, China has added 100 warheads per year which is a pace far higher than India. China's growth is apprehensive and highlights the importance of modern delivery systems and the ability to deter threats on many fronts. India chooses to modernize carefully rather than majorly increasing warhead numbers and thus remaining committed to restraint and responsibility.

The NFU policy is central this approach of India's repeated emphasis that its nuclear weapons exist not for warfighting but for deterrence. India's official statements avoided provocative language even after high tension occurrence like Balakot operations which might undermine its deterrence policy. India has maintained modernization quietly strengthening its posture without triggering arms race or disturbing the international community.

Above all, India's strategy indicates a parity between technological improvements and calculated restraint. Its modest arsenal is designed to provide capability while maintaining emphasis on stability, reliability and deterrence. This further helps India navigate the complex pressures of security environment in the midst of upholding its commitment to regional peace.

India's No First Use Doctrine and Its Approach to Security Challenges

India's nuclear doctrine defers from other nuclear-armed states and stands out due to its continuous commitment to a No First Use (NFU) policy. It was formally implemented in late 1990s and has been significant to India's strategic identity, demonstrating the country as a responsible and cautious nuclear power. As security conditions have evolved, the NFU principle continues to be assessed and debated within its strategic community.

The history behind the idea of NFU traced back to the 1980s, when officials such as Lieutenant General K.Sundarji and K.Subramanyam debated for a clearly retaliatory posture. Their perspective eventually outlined the 1999 Draft Nuclear Doctrine, issued after the 1998 tests, which purely announced that India would not initiate a nuclear strike but would retaliate firmly if attacked.

India revised its nuclear doctrine and made a major update in 2003 to include the probability of using nuclear weapons in response to any chemical or biological attacks. This addition was not to replace NFU but to acknowledge the evolution of security threats which required some flexibility.

Strategic and Moral Rationale

India's NFU policy supports both strategic reasoning and diplomatic objectives. It aligns with the principle of credible limited deterrence maintaining a strong nuclear force to retaliate but not for aggressive or destabilizing postures. India's approach contradicts with Cold War doctrines risking accidental escalation like launch-on-warning. NFU helps reduce the pressure for immediate risky responses especially in the South Asian environment where crisis escalates quickly without enough time for decision making. Diplomatically, NFU enhanced India's global stance post 1998 tests. India secured its civil nuclear agreements with major powers like the United States, Russia and France, by presenting itself as a responsible member. It also attained entry into the key export control regimes such as the MTCR and the Wassenaar Arrangement. India's NFU pledge that it would act with restraint even while possessing nuclear weapons, reinforced the perceptions of many countries.

i) Risks of Abandoning NFU

Given the tense and unpredictable nature of India's relation with both Pakistan and China, dropping the No First Use (NFU) pledge would create instability and risk of accidental launches. Analysts Sundaram and Ramana highlighted that shifting First-use policy would push India to prepare for launch-on-warning or maintain a state of readiness of nuclear forces. This would require constant deployment of nuclear assets and early warning systems of high accuracy which can increase the risks of false alarms and accidental launches. It may also force rival states to display India's change, provoking an arms race. In contrast, India's commitment to NFU encourages it to deter its adversaries without promoting uncontrolled escalation which often fuels from brinkmanship.

ii) Uncertainty and emerging shift in Doctrines

NFU remains India's official position. However, the policy is the subject of debate frequently. The discussions emerged from remarks by former officials rather than the government. In 2016, India's former NSA Shivshankar Menon suggested that India might deliberate a counterforce strike in a situation where reliable intelligence is of an imminent nuclear attack. Though he did not suggest banishing NFU, his comments implied that the doctrine must have flexibility than acknowledgement. A similar argument proceeded after former Defence Minister Manohar Parrikar challenged the wisdom of strictly following

NFU. This clarifies his opinion and influence about India's long-term intentions of countering a nuclear attack. These discussions developed the question whether India's improving technological potentials such as MIRV-enabled missiles or canisterised systems may perhaps shape strategic thinking in future. However, formal alteration of India's policy is not evident. Experts caution the dangers of reading too much into isolated comments may exaggerate the extent of any doctrinal shift.

The Role of India's NFU Policy in Regional and Global Stability

India's NFU pledge is a reflection of the country's long-term approach to nuclear responsibility rather than just a strategic principle. India's stance stands out as an example of restraint while major powers like United States and Russia have denied NFU commitments. India declares openly that it will not strike first and signals that its nuclear weapons are meant to deter aggression and not to initiate conflict. This declaration contributes to a stable South Asian environment and reduces the risk of miscalculation.

However, India must maintain consistency in its declarations and its military practices for NFU to remain credible. The fluctuation of security conditions can reduce or weaken the faith in the doctrine by passing confusing and ambiguous messages. The challenge remains in preserving the stabilizing value of NFU while securing a deterrent that adversaries respect. India's NFU policy needs to remain steady yet flexible given the rising global tensions and the frequency of conflicts in South Asia. This can happen only through planning, clarity in communication and maintaining forces allowing India to use NFU as a tool for crisis stability. The following scenarios will define the kinds of pressure points that may challenge the flexibility and credibility of India's NFU posture in real-world situations.

Scenario-:1- India's NFU vs Pakistan's First Use Lessons

India's No First Use Policy (NFU) is grounded in the promise that it will never initiate a nuclear attack, retaining nuclear retaliation only as a response to an attack. The policy is on the basis of strategic restraint. Whereas Pakistan implements and maintains an explicit First Use strategy which is opposite to India's stance. Pakistan's First Use Strategy is supported by tactical nuclear weapons (TNWs) aimed at countering India's remarkable conventional forces. This imbalance where Pakistan might use TNWs during conventional conflict becomes a critical situation. In India's stated stance massive retaliation might be triggered if there is nuclear use tactical or otherwise by any adversaries. Such a position would lead to difficult questions like would India actually risk full-scale mutual destruction in response to a limited nuclear strike? Nevertheless if India chooses restraint would that restraint be seen as a weakness and provoke further escalation? These concerns became a reality during the April- May 2025 India Pakistan Crisis rather than a mere theory. India launched Operation Sindoor following a terrorist attack in Jammu and Kashmir wherein India deployed drones on militant targets along with precision airstrikes across the Line of Control. The standoff rapidly escalated and reached on the verge of an open war when Pakistan retaliated with missile and drone attacks. By doing so the components of both nations nuclear command structures was apparently activated. Pakistan moved their TNWs forward whereas India raised its nuclear alert levels. The incident exposed deep vulnerabilities in existing deterrence strategies though nuclear weapons were not used and India had reaffirmed its NFU policy despite this debates over the likelihood of massive retaliation intensified. Critics were of the view that a calculated and proportionate response could discourage adversaries from nuclear first use without creating tensions between nations and turning it into a catastrophic escalation. They argued that an inflexible approach would weaken deterrence rather than strengthening it.

Scientific research studies supports this concern, for instance studies conducted by Alan Robock cautions that even a limited nuclear confrontation between India and Pakistan can kill tens of millions immediately and could trigger a devastating nuclear winter. This would eventually lead to worldwide humanitarian impacts.

The 2025 crises though reaffirmed the stabilising value of NFU, ultimately it highlighted the need for a more versatile and flexible doctrine, one that increases the credibility of its deterrent stance at the same time that preserves India's moral restraint.

Scenario 2: A China–Pakistan Coordinated Attack on India

A nuclear confrontation with both Pakistan and India at the same time offers India with a far more complex challenge as Pakistan continues to persist on an assertive First Use Strategy. Meanwhile China though it publicly maintains a NFU Policy, its rapid expansion of nuclear weapons and delivery systems indicates growing strategic ambitions. If China gives political, military or nuclear reassurance to Pakistan then Islamabad might be encouraged to deploy TNWs early in a conflict. India would then face a serious dilemma as massive retaliation could escalate the conflict across two powerful adversaries at the same time selective retaliation might weaken deterrence.

To overcome such challenges India must strengthen its second strike capabilities especially through endurable platforms such as SSBNs and road mobile missiles. These systems allow to withstand a two front nuclear threat by providing it with operational adaptability.

Scenario 3: China Violates NFU and Strikes India First

Although China has long promoted NFU, its recent developments suggests a more assertive nuclear stance as it has developed new missile silos, hypersonic systems and expanded its accumulation of nuclear weapons. This will eventually put India's Doctrine to a critical test as if China abandons its NFU and launches a limited nuclear strike on Indian military assets then India will have no other option but to retaliate but again India will face a massive dilemma.

Would massive retaliation be an appropriate or an effective response against a major nuclear power? India's doctrine becomes a liability here due to its rigid nature. This scenario exposes a limitation of the India's Nuclear Doctrine, the presumption that other nuclear armed states will recognise NFU. India must draw a clear red line along with limited nuclear response options systems which reinforces deterrence without instantly triggering a total war.

Scenario 4: Nuclear Crisis in a Multipolar World

India's NFU was mainly designed for a bilateral environment but as times have changed and evolved today's world has become multipolar in nature wherein all countries have an equal chance of demonstrating their power. In such a scenario nuclear confrontations can occur even outside South Asia and can affect India in multiple ways. Since the world has become multipolar in nature if a nuclear confrontation erupts India can unknowingly get involved through alliances or geography or it can have spillover effects. For instance crises can quickly escalate if its involving say countries like China and Russia or China and United States than ever before, this may have an effect on uninvolved states and can pull these states into a nuclear armed environment. NFU doesn't take into account for such multi-party crises

and for crises like cyberattacks or accidental launches.

To remain reliable, India's crises management mechanisms should be improved and strengthen its durable nuclear command and control systems and guarantee that NFU remains flexible enough to react to a swiftly changing global environment.

Scenario 5: Nuclear or Radiological Strike by a Terrorist Group

The risk posed by non-state actors in the form of nuclear terrorism whether by Lashkar-e- Taiba, ISIS or any other groups remains highly possible and continues to threaten the global security as a whole. It is often assumed that non state actors possibly operates with some sort of state support. For example, if there is radiological of a nuclear attack arose on Indian soil and if there is sufficient evidence suggesting Pakistan's involvement in the attack then India would be under immense pressure to respond but as per the literal interpretation of NFU India would not launch a nuclear strike even against a state indirectly linked to such an attack. This ultimately creates a lack of doctrinal clarity, does NFU apply only to states or also to state backed terrorist groups? To tackle such concerns India must strengthen its intelligence systems, have reliable source tracking systems and should have fast acting conventional military forces. Additionally, policymakers need to clearly specify whether NFU applies in all cases or if exceptions persist for nuclear terrorism.

Adding to the difficulty is China's growing nuclear and missile arsenal and its increasing strategic partnership with Pakistan, these developments urge for a doctrine that will uphold restraint at the same time deal with disproportionate and multi actor threats.

India's Command and Control Authority

In spite of persistent debate about the difficulties of establishing Command and Control of India's Nuclear Weapons the structure and organisation of such a system is largely unknown in the public sphere. While India's Draft Nuclear Doctrine of 1999 laid down the goals of effective Command and Control of India's nuclear arsenals which was followed by a more official declaration in 2003 that illustrated the organisations governing the new arsenal.

We will now delve into these evolutions in detail by examining its comprehensive framework which is accessible to the public domain through various statements made by retired military veterans. In 2013 Shyam Saran, former chairman of the National Security Advisory Board, highlighted that India had created a Secure, Survivable, and redundant command and control infrastructure capable of withstanding a first strike, reflecting significant progress since 1998. In the last two decades since the testing of the nuclear weapons in 1999 by both India and Pakistan respectively the two countries have had several military confrontations of which during the Kargil conflict reports surfaced that the nuclear delivery vehicles were ready for potential use and in the aftermath of the 2019 Pulwama attack again it was reported that the Indian Navy deployed a number of vessels including possibly a nuclear armed submarine. Such mobilisation of Indian Nuclear forces raises concerns and questions about who ultimately controls these weapons systems and how the control is exercised, can it used by a military personnel when there is an attack being launched by the adversaries or were they tightly regulated by political leadership? Any answers to these queries can only be suppositions due to the lack of knowledge and information available to the public domain about the command and control structure.

In general there has been a history of confidentiality surrounding all nuclear matters in the country. Many analysts have argued that India's Nuclear Posture is tightly controlled by a handful of Senior Civilian Officials, Scientists and Officers in a dedicated strategic forces command but the authenticity of how far this is true is difficult to verify. Given this backdrop of limited public information, the starting point must be the organisational framework that provides the foundation for India's Nuclear Command and Control.

Organisational Structure:

India's Nuclear Command System is regulated under the Nuclear Command Authority which consists of a political council chaired by the Prime Minister and an Executive Council headed by the National Security Advisor. The sole body empowered to authorise the use of nuclear weapons is the political council, ensuring firm civilian control and the Executive Council provides advice, coordination and implementation support. Under this overarching authority comes the Strategic Forces Command led by a senior three star officer who is responsible for the operational deployment and readiness of nuclear forces. This layered structure reflects India's intent to retain political authority at the core while delegating specialised military leadership to oversee day to day operational responsibilities.

With this institutional framework in place, the next step is to examine the technical systems that support and operationalise India's nuclear command and control.

Infrastructure and Capabilities:

India's Nuclear Command and Control System have progressed through the establishment of Nuclear Command Centres, the expansion of Satellite Capabilities and the handling of Nuclear Weapons. Numerous Command centres and Satellites serve both Military and Civilian Purposes as it can be interpreted from various reports of India's Defence Budget covering only the existing capabilities and not more. Although Fibre Optic Networks which are used in Indian Nuclear Weapons and Underground Command Centres amplify Survivability all land based communications susceptible to nuclear strikes. Dependence on Civilian information which the Indian Military heavily incorporates as it has been well documented and reported and foreign hardware creates jeopardy as these systems could possibly fail or be compromised during crises menacing the Reliability and security of India's Nuclear Command and Control infrastructure.

ii) Command Centres

The official Nuclear doctrine of India declared that the Civilian Government specifically the Prime Minister will control the nuclear arsenal but with alternate command chains for retaliation in his absence or if he is unavailable. Though the NCA might need to be available and informed to give counsel to the Prime Minister and also to order the use of the weapons. While there has been no official National Command Post been openly identified to discuss and authorise nuclear plans like other nuclear states, India has developed several military command centres that may assist in nuclear operations. There are various disagreements surrounding on whether India's Nuclear and Conventional Command systems are integrated or separate. Verghese Koithara a former vice admiral stated in his book Managing India's Nuclear Forces (2012), that a unified national command centre does not yet exist while other scholars hinted a bifurcation between conventional and nuclear oversight and planning functions.

iii) Satellite Capabilities

To support both military and civilian objectives India has developed a range of satellite capabilities including potential nuclear command and control. Since the 1999 draft nuclear doctrine early warning and reconnaissance have been key goals driving the acquisition of space based assets. India's Cartosat optical satellites and Risat Radar satellites provide high resolution imaging with some capable of daily surveillance while Microsoft TD and HySIS add infrared and hyperspectral imaging. Dedicated military satellites include GSAT-7 for naval communications, GSAT-7A for the Air Force and EMISAT for electromagnetic intelligence. While their nuclear role is unconfirmed these assets support surveillance, operational planning and Communications. Their integration with civilian and conventional systems suggests possible use in nuclear command and control.

iv)Nuclear Weapons - Delivery systems and Weapon design

India's nuclear delivery systems covers aircraft, land based ballistic missiles and sea based assets. This makes an overall command and control process difficult than previous years. In recent years, India has adopted canisterised missiles which is operational and launched more easily. The uncertainty of delivery systems and storage of warheads adds ambiguity in the preparedness of the force. The command and control is more demanding due to the addition of nuclear armed submarines. These postures need secure, dependable communication channels and systems that permit the political leadership to exercise complete control constantly. Ensuring both security and constant oversight at sea is complicated, and it increases the technical and organisational challenges associated with managing India's growing nuclear forces. This diverse mix of delivery platforms, when combined with dual use infrastructure, adds significant operational complexity and elevates the risks involved in managing crisis.

India's Nuclear Triad

For International Security Nuclear Weapons remain one of the most powerful deterrents for the overall existence of the countries. The states that possess Nuclear Weapons formally known as nuclear states have built delivery systems that launch warheads from land air and sea establishing what experts call a nuclear triad. India is one among the very few countries to have fully operational nuclear triad. A Nuclear

Triad refers to a country's capability to launch nuclear weapons from three 3 different environments- Land Based Ballistic Missiles, Air Delivered Nuclear Bombs or Missiles and Sub Marine launched ballistic missiles. Apart from India the US, Russia, China and France have also developed and maintained a credible nuclear triad. The advantage of such a triad is that it allows a country to launch a catastrophic counterattack in response to a nuclear attack even if an adversary disables one or two platforms. It expands the scope of retaliation which in turn will reduce the possibility of a nuclear attack. The commissioning of the indigenous ballistic missile submarine INS Arihant marked the completion of this triad, enhancing India's second-strike potential and intensifying its constraint posture.

India's Land, Air and Sea Nuclear Arsenal

Agni Series

Land Based Nuclear Missile Force of India includes missiles like the Agni Series. For example the Agni-V missile has an estimated range of around 5000-5500 kilometres efficient enough to reach most parts of Asia including China and parts of Europe. The Agni -III and Agni IV have shorter ranges are also formidable.

Beyond the Agni series, India's sea-based nuclear deterrent has grown significantly. Its second nuclear-powered ballistic missile submarine (SSBN), INS Arighaat, was commissioned in August 2024, marking a major boost for the undersea leg of its triad. INS Arighaat is capable of carrying either four long-range K-4 SLBMs (range ~3,500 km) or twelve K-15 (Sagarika) SLBMs (range ~750 km), significantly extending India's second-strike reach. The K-4 was test-fired from INS Arighaat, demonstrating its operational potential. India is now moving ahead with more advanced K-series SLBMs. The K-5 reported to be fully developed with an estimated range of 5000-6000 km and will be deployed on larger S4-class SSBNs under construction. Simultaneously, the development of the K-6 SLBM has been moving forward. This missile is expected to have a range of 8000 km and has the ability to incorporate hypersonic features. At completion, it could support MIRV capabilities on future SSBNs. On the other hand, Agni-IV and Agni-V will continue to reinforce India's long-range deterrence posture. The Agni-V gives India
the ability to strike deep into the territory of potential rivals. India is developing more flexible platforms like Agni-Prime which was tested recently from a rail launcher to improve mobility and survivability. India's air-based nuclear delivery arm plays an important role even now. Mirage 2000H and Jaguar IS are associated with nuclear delivery missions. In recent years, many analysts believe that the SU-30MKI has taken responsibility due to its long operational range and heavy payload capacity for stand-off missions. The government has not confirmed the role of these aircraft but it remains valuable for signalling and for dispersing during a crisis. Unlike missiles or submarines, aircraft can be recalled in between a mission, giving political leaders more flexibility during tense situations. Though official information is limited, the air components continue to evolve along with India's modernization efforts. However, all these services have strengthened India's second strike capability and reflects India's intention to maintain credible and survivable deterrence.

Statements by Former Prime Ministers on WMD Retaliation

India's perspective to nuclear deterrence has been shaped by policy documents and the statements made by successive prime ministers over the years. Their speeches, remarks in Parliament and diplomatic statements reflect into how India looks at retaliation, restraint and the responsibilities that comes ahead of being a nuclear armed state. The earliest political articulations came during Prime Minister Indira Gandhi's tenure. Under her leadership, India conducted its first 'peaceful nuclear explosion in 1974. In her addresses in Parliament and public forums, Indira Gandhi emphasized India's nuclear stand that it was meant for nuclear capability not for aggression. She framed it to preserve India's strategic autonomy during the time of shifting global politics. Her speeches often expressed that the nuclear decisions of the country was driven by security environment and the need to open options to technology. These declarations became important to India's claim that its nuclear programme was defensive, cautious and firmly under political control.

A more deliberate understated posture emerged under P.V.Narasimha Rao in 1990s. Rao maintained a steady and calm stance during the intensifying non-proliferation debate in the early 1990s. He avoided publicly defining operational nuclear doctrine though he spoke about importance of the need to protect India's security interests. According to Institute of Defence Studies and Analyses (IDSA), Rao was reluctant to initiate any formal No First Use proposal because he believed that Pakistan might view it as

India's weakness.
This insight reflected his understanding of deterrence as premature or idealistic declarations could send a wrong signal. Rao preferred some ambiguity which allows India to keep its options open though strengthening its long-term strategic position. A drastic change came with Prime Minister Atal Bihari Vajpayee after the Pokhran-II test in 1998 where the government no longer kept the doctrine hidden. Vajpayee declared that India's nuclear weapons existed for self-defence intending no harm or coercion. He openly committed India to a No first use policy. He also invited nuclear powers to adopt bilateral NFU agreements. It was formalized in 2003 Nuclear Doctrine which stated that India would use nuclear weapons as only for defensiveness or in retaliation to massive damage. The doctrine also reserved the right to apply nuclear force if India suffered a huge chemical or biological attack. This move was significant to India during Vajpayee's leadership which clearly articulated India's deterrence rooted in assured retaliation.

Dr. Manmohan Singh preserved this framework as a successor of Vajpayee. He spoke consistently about India's stand committed to NFU and to maintain credible but limited deterrence. Singh emphasized responsibility and restraint as principles and proposed a global NFU convention to encourage other nuclear powers to commit to deterrence. He reinforced civilian oversight of the arsenal and stressed that all nuclear decisions would remain under strict political authority.

Prime Minister Narendra Modi maintained continuity as his public remarks underlined that India remains a responsible nuclear power with credible deterrence. In 2019, he made a statement that future choices would depend on the circumstances though no official change has followed. His overall message has reassured that India's existing framework remains intact.

Together prime ministers over the decade continue to shape India to be a nuclear state with a balanced deterrence status bound by responsibility.

Guiding Values: Restraint and Responsibility

India's nuclear policy is designed not only by strategic thinking but also by a set of guiding values that characterize how the country views itself in the global system, rather than pursuing following a proactive stance or building a massive first use arsenal, India has always opted to limit the number of nuclear weapons largely to retaliation. This decision comes from an ethical aspect as well that nuclear weapons are only meant for protecting the nation in the worst case scenario and not to threaten others or expand its influence. This was clearly mentioned in the 1999 draft nuclear doctrine which depicted nuclear weapons as posing the gravest threat to humanity and to peace and stability in the international system. This has further been repeated in the subsequent policy statements and has reiterated its position that India will not initiate a nuclear strike. It supports the belief that deterrence should rely on credibility and restraint rather than as a means for competition to match the nuclear strength of major powers and this commitment is real and not symbolic. India's aim is not to achieve equal numbers with other nuclear states rather it has always committed in maintaining a force that can discourage any nuclear attack. India displays itself as a balancing actor by emphasising on the fact that its nuclear weapons are meant solely for deterrence. This signifies a broader effort to present nuclear assets as a responsible asset rather than displaying it as a means of coercion. The utmost priority has always been to ensure safety, endurability and security of the arms to prevent it from unauthorized use, access which will further escalate dangerous accidents so India's doctrine has emphasised that the licensee to launch nuclear weapons lay in the hands

of the highest political leadership which is in the civilian control and not military alone. This portrays

India as a responsible nuclear country from a global perspective as it acts carefully and morally while also safeguarding its strategic military interests. This idea of non-aggression moral restraint and minimalism reflects a hint of Gandhian ethical philosophy even though it hasn't been directly mentioned in its official policy, this can be seen by the doctrines emphasis on practice of disarmament, avoiding first use and not targeting non-nuclear states. This directly intertwines with the Gandhian concept of ahimsa (non-violence) and trusteeship (the idea that power must be held for the common good, not for domination). India's security environment is unpredictable. The doctrine still includes the possibility of retaliation if deterrence fails. India cannot resort to non-violence alone to uphold moral restraint which creates tension. Retaliation remains as a part of its posture but never as a first move. India commits to the ethical choice of attacking only if provoked. These are the broad principles of India's nuclear policy that it upholds by a set of specific commitments.

i. **No first Use:** India promises not to strike first and will use nuclear weapons after a nuclear strike on its own territory.
ii. **Minimum Deterrence:** India maintains the level of capability required to deter any attack than matching other countries warhead for warhead.
iii. **No use against non-nuclear states:** India pledges to avoid using nuclear weapons against countries that do not use nuclear weapons.
iv. **Civilian authority and secure command systems:** Decisions of nuclear use is strictly with the political leadership.
v. **Commitment to disarmament:** India maintains long-term goal is to see a world without nuclear weapon and to rely on them only for security purposes.
vi. **Survivability and readiness:** India ensures that nuclear forces can withstand a first strike and retaliate, preserving stability.
vii.

These principles reflect practical security thinking and ethical restraint. They align to India's democratic identity which emphasizes responsibility and accountability in matters of national security. The message India sends to its own people and to the international community is that nuclear weapons exist for protection, not for coercion.

Collectively these principles align with India's democratic ethos which stresses upon responsibility and accountability in matters of national security. These principles are often a combination of both ethical restraint and practical security approach. India's message has always been clear be it towards its own people and to the global community that its nuclear weapons are in place for protection and not for intimidation, they are meant be used wisely and with utmost care and not casually.

Ultimately India's Nuclear Doctrine relies on the values of restraint and responsibility, be it NFU, Credible Minimum Deterrence and strong Civilian Control they all symbolize to an approach which avoids unnecessary escalation. The themes of non-violence, ethical caution and restrained power are all certainly inspired from Gandhian Principles though it hasn't been explicitly stated in the doctrine, one can easily conclude about its origins by extensive research about the evolution of the guiding values of India's Nuclear Deterrence Doctrine.

In an era where the usage of nuclear weapons is rising around the world, India's approach is to make an effort to strike a balance between safeguarding its national security and avoiding a tilt towards an aggressive nuclear behaviour. This eventually gives an opportunity for researchers to explore how a nuclear armed state tries to deal with a tricky challenge between deterrence and moral responsibility.

Conclusion

India's Nuclear Deterrence Policy at the very core lies in a long standing belief and commitment that nuclear weapons are political instrument which is meant to prevent war rather than be used as a means for military gain. It has further evolved through decades of long term strategic planning technological advancements and philosophies like moral restraint has influenced India's positions on global disarmament. Through its preference for a limited but effective and reliable nuclear arsenal, and its emphasis on responsible behaviour in an uncertain regional environment we can understand how such philosophies shape India's Nuclear Doctrine policies. India have pursued its Deterrence Doctrine with the aim of strengthening it rather than triggering unhealthy competition among nation states, this can be seen in its development of a survivable triad, improvements in command and control arrangements and gradual modernisation over the years.

India's No First Use policy though debated among strategic analysts remains integral to this approach, as it continues to indicate India's eagerness to separate deterrence from aggression and to maintain security even under pressure. Right from Atal Bihari Vajpayee to Manmohan Singh and Narendra Modi have reiterated the fact that India will avoid nuclear intimidation at the same time give immense importance for preserving India's security, through various statements made by them which is available to the public domain. Their statements reflect not only India's national commitment but also its aspiration for a rules based and a familiar nuclear order. As India faces with new challenges and realities, like a changing security environment marked by Chinas growing competence and its rising influence along with Pakistan's unstable doctrines and global transition in nuclear policies India's difficulty will be to uphold and preserve its principles while also adjusting with new realities that it may face in the future. India's approach so far demonstrates that both deterrence and restraint doesn't have to be opposing rather carefully maintained capabilities, civilian oversight and constant diplomatic enforcements can support one another. Finally India's Nuclear Policy shows how a state can protect its security while continuing to support for the long term goal of a stable and peaceful international system.

About the author:

Mr. Anand KT Nambiar is pursuing his third year of B.A in International Relations, Peace Studies and Public Policy with the Department of International Relations, Peace Studies and Public Policy at the St Joseph's University, Bengaluru. He interned under the India Strategic Studies Vertical at the Centre for National Security Studies (CNSS).

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