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India's Nuclear Status: Policy, Power and Projection in 1974

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Abstract: India's nuclear programme can trace its origin to March 1944 and its three-stage efforts in technology were established by Homi Jehangir Bhabha when he founded the nuclear research centre, the Tata Institute of Fundamental Research. After independence, the most distinguished feature of Indian nuclear policy has been determination to be self-reliant and retain a wide measure of autonomy in nuclear matters and the main drivers of India's nuclear posture are its geopolitical competition with China, and its simmering rivalry with Pakistan which has influenced India's international security conditions and gradually encouraged the development of nuclear programme. India's nuclear weapons are deeply rooted in the 1962 humiliation, which was followed two years later by its first nuclear test in 1964. It necessitated the development of India's nuclear programme to deter another attack by China and finally the former began a designed work in 1965 which culminated in publicly demonstrating India's nuclear capability through the peaceful nuclear explosion of 1974. The paper analyses systematically the development of India's nuclear policy, power and expression in its nuclear test.
Keywords: Nuclear policy, Development, Security, Rivalry, Explosion.

1 Introduction

In the years following India's independence its founding Prime Minister Jawaharlal Nehru worked energetically to defuse global tensions during the Cold War and campaigned tirelessly to eliminate what he termed these "frightful engines of destructions." *(Evans and Kawaguchi, 2009).* Having failed in endeavours over decades for global nuclear disarmament, India reluctantly weaponised its capability. In the absence of global nuclear disarmament, India's strategic interests required effective, credible nuclear deterrence and adequate retaliatory capability. In the situations, Dr. Homi Jehangir Bhabha, the founding chairman of its Atomic Energy Commission and the architect of its three-stage (thorium) programme, presented his plan for national development in November 1954 at the Conference on Development of Atomic Energy for Peaceful Purposes. Four years later in 1958, the Indian government formally adopted the three-stage plan and recognised that thorium was main source that could provide power to the Indian people for the long term. It adhered for long on the use of atomic energy for peaceful purposes but over the years the traditional concept of deterrence which aims to retain balance between mutual vulnerabilities and a capability to wreak unacceptable punishment on an aggressor has also undergone to symbolise a potential shift in focus from offence to defence *(Challaney, 2000).* Earlier, due to its unique nuclear policy India has been denied access to trade in nuclear materials, equipment and various kinds of technologies. In the Post Cold War era, perspective for civil nuclear cooperation between India and the United States arose in the context of India's requirement for adequate and affordable energy supplies to sustain its accelerating economic growth rate. It led the declaration of 18 July 2005, made by the Heads of the Government of India and the US. It also followed a safeguards agreement with International Atomic Energy Agency (IAEA) which became operational in October 2009. These understandings ended India's nuclear isolation from world trade by the Nuclear Suppliers' Group. It has paved the way for India's three-stage thorium-based nuclear power development progamme as cherished by the country long ago. In today's context, development of nuclear power with safety measures has become a precondition for countries like India who wished to be an influential regional/global power in world politics.

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2 Background of India's Nuclear Policy

The closing year of 1930s as well as the opening years of 1940s were crucial for giving the nuclear power a weaponary shape finally. The problem of 1942-43 was to find means of separating U-235 from U-238 in sufficient quantities to make a nuclear bomb. It also became clear that whereas plutonium can be separated from uranium by chemical means, U-235 cannot be. The problem was finally solved and by 1943 the United States had built up the atomic laboratory at Los Alamos in New Mexico where Professor J.R. Oppenheimer led a staff of more than 500 specialists of whom 300 were scientists *(Mallik, 1973).* At the same time, when scientists in the West were working solely on military application of nuclear energy, Homi Jehangir Bhabha, the architect of India' nuclear programme visualised the possibility of nuclear energy being used for civilian industrial use. More than a year before Hiroshima and Nagasaki in 1944 Bhabhba declared, 'when nuclear energy has been successfully applied for power production in, say, a couple of decades from now, India will not have to look abroad for its experts, but will find them ready at home *(Chellaney, 1993).* He was conscious enough about the future development of nuclear energy for the common good of mankind, He, in a letter to Sir Dorabji Tata Trust on 12th March, 1944 prophetically proposed for the setting up of an institute for fundamental research and a year later it was firmly laid as the Tata Institute of Fundamental Research with Dr. Bhabha as its Director. Indian nuclear programme, at least during its initial period clearly showed the ideas like tolerance and non-violence which were the features of Gandhi's techniques of *Satyagraha* and the peaceful transition of power that characterised the birth of Indian Republic. Accordingly, despite two atomic bombs being dropped on Japan, India's founding father demonstrated immense faith in the peaceful use of atomic energy *(Nehru] 1975).* Apart from Krishna Menon and Dr. Bhabha who talked of sharing nuclear knowledge in common interest, Nehru himself asserted: "We will not make these bombs even if we have the capacity to do so and in no event we will use atomic energy for those most destructive purposes'*(Jain, 1974).* Thus, Indian nuclear research and programmes were purposeful, confined only to civilian research.

In fact, after the explosion of nuclear bombs on Hiroshima and Nagasaki in August 1945, peace among nations has been a necessary condition for mankind's survival. It is true that there has been no World War since 1945; it is also true that nuclear weapons have been developed and deployed in part to deter such a conflict. Nuclear revolution, in post World War-II phase, has forced great powers to behave in a careful and restrained manner and to accept a compromise, which in pre-nuclear times would surely have been unacceptable *(Singh, 2005).* It has even changed the modes of thinking, and thus we drift towards unparalleled catastrophe. Although the catastrophe Einstein envisaged has not occurred, the experience of Hiroshima and Nagasaki was more than sufficient to prevent all the nations possessing this new technology from any actual use of it under any circumstances. The Father of the Nation was at pains, following the incident and in July 1946 he observed, ''The atom bomb has deadened the finest feelings which have sustained mankind for ages….It has resulted for the time being in the soul of Japan being destroyed. What has happened to the soul, the destroying nation is yet too early to see'' *(Ramana, 2008).* Hence, India since independence, has consistently pursued the goal of global disarmament-based on the principles of universality, non-discrimination and effective compliance. ''There is only one way to end this threat and that is to abolish these weapons. Either nuclear weapons must be eliminated or human beings face the threat of extinction by weapons of their own creation''*(Sisodia, 2009).* Coming of nuclear age unshered the humanity in a quite new phase not known earlier.

With the end of Second World War people from all over the world have felt the need to halt the spread of nuclear weapons since the early days of the nuclear age. In January 1946, the United Nations General Assembly resolution envisaged the elimination to such weapons from the national arsenals. Surprisingly, the United State had not only been the first country to apply nuclear energy to the production of weapons but it also proposed firstly in the United Nations for the establishment of an international authority to control all atomic energy activities potentially. Its proposal was known as "Barruch Plan" but it failed miserably as shortly thereafter the USSR exploded its nuclear device in 1949, United Kingdom in 1952, France in 1960 followed by China in 1964 *(Bose, 1994).* In context, many analysts including Lewis A. Dunn and Herman Kahan and Meyor have listed various reasons or pressures encouraging a country to go nuclear. Dunn and Kahan have listed as many as fourteen factors which have been classified under several heads such as security, status or influence, bureaucratic and domestic. They have also indentified eight types of events as "trigger" activating consideration on the pressure or reasons for a country going nuclear. These are :

(i) Involvement in foreign crisis;
(ii) Reduction in alliance credibility;
(iii) Nuclearisation of the other countries;
(iv) Weakening or breakdown of international constraints;
(v) Domestic crisis; and
(vi) Changed perception and utility of nuclear weapons *(Meyer, 1984).*

Another analyst Meyor, notes three basic types of incentives. First, incentives of international political prestige and image-building. These can affect the country's appearance and posture, Second, incentives to advance national military and security objectives, to minimise external threats to the country and to strengthen its relative power position and strength. Third, incentives to support and promote domestic policies and to prevail in domestic political struggles. In general, four sets

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of arguments are frequently advanced by threshold states aiming to retain the nuclear options–military security; political prestige and influence; economic gains; and domestic pressures and compulsions.

3 Nuclear Policy of Independent India

In 1947, when India emerged as a free country to take its rightful place in the comity of nations, the nuclear age had already dawned. In the circumstances, India stressed on the creation of a broad-based science and technology infrastructure because it believed that technological backwardness made a country politically and economically vulnerable. It decided to produce all the basic materials because of nuclear power's strategic nature and hence made the nuclear programme a major area of scientific research and development. The prevailing situation also compelled Nehru to announce before assuming office. ''As long as the world was constituted on nuclear might, every country will have to develop and use the latest scientific devices for its protection.'' However the formal annoucement of India's nuclear policy was made by Nehru on 10th May 1954, when he said in Lok Sabha, 'I should like the House to remember that the use of atomic energy for peaceful purposes is far more important for a country like India whose power resources are limited, than for a country like, say, France, an industrially advanced counry''*(The Times of India,1974).* Nehru's statement identified the basic components of India's nuclear policy. They are :

(i) Not to make nuclear weapons;
(ii) To work for and support nuclear disarmament and nuclear arms control measures;
(iii) To develop and use nuclear energy for peaceful purposess, and
(iv) Not to accept discriminatory international inspection and safeguard in respect of national nuclear facilities. India's commitment to the peaceful use of nuclear energy during the stewardship of Jawaharlal Nehru remained firm. No doubts were cast on his bona fides in his lifetime. Not only that but Nehru assured the world on behalf of any future Government of India that his country would not go in for nuclear weapons. Inaugurating the first reactor on Asian soil on 20th January 1957, he said, ''……No man can prophesy the future. But I should like to say on behalf of my Government-and I think I can say with some assurance on behalf of any future Government of India-that whatever might happen, whatever the circumstances, we shall never use this atomic energy for evil purposes. There is no condition attached to this assurance, because once a condition is attached, the value of such as assurance does not go very far.'' *(Nehru, 1958).* But when by the year 1960 Britain and France had become nuclear powers, India, felt that a ban on proliferation was both essential and urgent and it clearly stated that the heavier responsibilities lay with the nuclear powers.

Since the early 1960s environment stands nuclearised. Both China and Pakistan possess nuclear weapons and delivery systems to pose a nuclear threat across the length and breadth of India. Substantive amount of nuclear technology moved from US to Pakistan. In situation, the basic adverse nuclear asymmetry was not likely to be resolved through disarmament in the predictable future and the only option left for India was to "exercise" the option towards a nuclear deterrent. In addition, the humiliating defeat at the hands of China in 1962 awakened India to the new realities of military power as a major factor in international politics and inter-state relations. Even at the moment Nehru, who inherited the traditions of Gandhian nonviolence relied on the principle of a minimum of military power to maintain internal law and order and safeguard the country's security against any external threat. *(Singh, 2001).* However, the prevailing developments held in nuclear sphere necessitated the shift in India's defence policy. Especially, in context of 1962 India-China war Nehru admitted that it had stalled the pace of development. In fact he felt that the Chinese attack was primarily meant to derail India in its journery towards economic growth. The setback had opened the eyes of the powers that be, leading the modernisation of the armed forces and induction of advanced weaponry in all the three wings. But as earlier Nehru, despite pressures, was firm in his stand for peaceful uses of atomic energy and in the event of Chinese nuclear threat or blackmail he hoped that the United States would provide a "nuclear umbrella" to India *(Ohajunwa, 1992).* After the death of Nehru in May 1963, Lal Bahadur Shastri succeeded him as the Prime Minister of India. As a result of India-China war of 1962 but particularly after 16th October 1964 when China exploded its first nuclear device, the people of India began to agitate over the likely nuclear threat that China could pose to this country. The Chinese tests showed considerable sophistication but the more worrying fact was that they have all the basic facilities viz., man-power requirements and raw-material requirements for a sustained weapon programme. The Chinese explosion provided the greatest incentive for self-reliance in defence production and hardly a week after it Mrs. Indira Gandhi, then Minister for Information and Broadcasting had said in an interview with the French Television in Paris on 22nd October 1964, ''India is in a position to produce the bomb within eighteen month. But we should not deviate from our stand and should use atomic energy for peaceful purposes only.'' *(Ojha,1982).* Further during Lok Sabha debate on foreign affairs, in November 1964, members of different parties, including some Congressmen demanded a change in the Government's "no bomb policy". The indication was given on 27th November 1964 by the Prime Minister Lal Bahadur Shashtri. Sharing the concern of members over the Chinese blast Shastri said that Government's present stand should not be regarded as permanent one. No Government can afford a static approach. He said, ''I cannot say that the present policy is deeprooted, that it cannot be set a side, that it can never be changed…….and an individual may have certain static policy….. But in the political field we can not do so. Here situations alter, changes, take place and I have to move our policy accordingly. If there is need to amend what we have said even we will say all right, let us go ahead and do so. It was in

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that kind of situation that India, under Shastri's premiership, initiated the nuclear explosives programme in 1965 and later carried out by Mrs. Gandhi's Government. But unfortunately, given the strength of India's general anti-bomb orientation, the untimely deaths of both Lal Bahadur Shashtri and Bhabha during 1966, followed by the economic difficulties and Vikram Sarabhai's opposition to pursue this scheme; India's nuclear programme got delayed by many more years.

4 Role of India in Global Disarmament

On the other hand, earlier, by the end of the 1950s when the prospects of successful negotiations on disarmament were once again getting dark, many non-aligned nations like India, Yugoslavia, Egypt, Ghana and Indonesia mounted the pressure of their demand on activising the UN General Assembly in respect of disarmament. Also in the wake of the Chinese explosion the world powers became aware of the implications of nuclear device. A treaty banning all nuclear tests except those held underground was signed in Moscow on 5th August 1963, by the United States, the Soviet Union and Great Britain. India also signed the treaty on 5th August 1963. But this treaty did not bring about a breakthrough in relations to the problem of disarmament. It had only a limited value for it failed to secure ban on all nuclear tests by not covering the underground tests and limiting itself only to the tests on the ground, in water and in atmosphere. There was certainly a lot of use despite the ban on these *(Mallik, 1973).* India too, despite signature, had opposed it as an unequal and discriminatory instrument conferring unequal privileges on the powers then possessing equal weapons, and imposing one-sided restrictions on the non-nuclear weapon powers. In this regard, India favoured "genuine disarmament… and not just those arms control measure which suit the convenience of the major military powers. In its capacity as a responsible member of the world body, India's representative while participating in the initial debates in the UN General Assembly on Nuclear Non-Proliferation Treaty in November, 1965, stressed the need to establish ''an acceptable balance of mutual responsibilities and obligations of the nuclear and nonnuclear powers *(Singh, 1998)*. Earlier India had hoped that the Test Ban Treaty of 1963 would encourage steps towards a complete and comprehensive disarmament. Thus, the regional and global environment prevailing in 1960s compelled India to be ready for nuclearisation. In addition, China's first atomic test had indeed unleashed a national uproar which was to kick-start India's first serious debate in favour of building nuclear weapons. The sixty-ninth annual session of the Indian National Congress which followed Chinese test in January 1965, witnessed a heated debate on the issue *(Roy, 1967)*. Again, during September 1965, over one hundred Members of Parliament (MPs) from various political parties submitted to the government a joint memorandum demanding a prompt and immediate decision to develop nuclear weapons. The annual session of the Indian Science Congress in 1966 passed a resolution making the same demand *(Namboodiri, 1985)* . At last Homi Bhabha, the founder architect of India's nuclear establishment, had to reassure the nation, that, given the political green signal, India's scientific community could explode a nuclear bomb in eighteen months. And it is in this context that the then Prime Minister Lal Bahadur Shastri was to sanction the proposal put forward by Bhabha on investigating a Subterranean Nuclear Explosion Project. This can be seen as the earliest signal of a pro-bomb tilt in India's nuclear policy *(Subrahmanyam, 1998)*. By the end of 1966, there was unanimous support for a nuclear weapons programme. Further developments on the discriminatory aspects of the Non-Proliferation Treaty of 1968 which India rejected, New Delhi had decided to sustain its independence on international security by allowing her for the development of the peaceful nuclear explosion technology.

The minor shift in policy and emphasis that we visualise in India's nuclear policy is mostly due to change in regional and global perspectives. The new regional atmosphere on the subject was indicated when India's Ambassador to the UNO said on 14th May 1968. "It is a matter of concern to India that across its borders a major power, the Peoples Republic of China, continues to conduct nuclear weapon tests in the atmosphere in flagrant violation of the will of the international community and in total disregard of the grave dangers posed by such testings'. At the same time it was also considered in some quarters that it is in India's interest to balance Chinese nuclear capabilities by developing an 'Asian Balance of Power' by acquiring similar nuclear capabilities. On the other, at the close of 1960s international milieu on the nuclear issue was also deteriorating and discriminatory treaties were signed one after another *(Singh, 2001)*. In 1967, in a strategic move, the United States and Soviet Union presented to the Eighteen Nations Committee on Disarmament at Geneva on 20th August 1967, two separates identical draft of a treaty banning the spread of nuclear weapons. These were subsequently revised in January 1968 and in March 1968, making some amendments. Later, the UN General Assembly adopted and commended the treaty but in India, Mrs. Indira Gandhi, the Prime Minister of the country, criticised several articles of the treaty under which it was improper that each nuclear weapon state party to the treaty undertook not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive device directly or indirectly, and not in any way to assist, encourage or induce any non-nuclear weapon state to manufacture or otherwise acquire nuclear weapons or nuclear explosive devices, or control over such weapons of explosive devices. India refused to sign it on these very grounds, though it reiterated its pledge not to produce nuclear weapons.

India since independence had entirely contributed to the Disarmament Conference aimed to make the world nuclear weapon free but on the other continued to review the emphasis on self-reliance. Earlier the research and development work which the Atomic Energy Commission was carrying on had been in pursuance of the national objective of harnessing atomic

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energy for peaceful purposes only. In opposite, the prevailing situation necessitated the development of Indian nuclear devices and the progress made so far had been informed to the Lok Sabha by Mrs. Indira Gandhi on 15th November 1972. 'The Atomic Energy Commission is studying conditions under which peaceful nuclear explosions carried out underground could be of economic benefit to India without environmental hazards.'' Exactly after one year on 15th November 1973 she informed the honourable members of the Rajya Sabha of the continuing interest of the Atomic Energy Commission in this field and also stated that after satisfactory answers to the problems of the possible effects on environmental and ecological conditions are available, the question of actual underground test for peaceful purposes could be considered.

5 India's Detonation and Nuclear Deterrence

On 18th May 1974, at 8.5 am, hours India had detonated its first atomic device at Pokharan (Rajasthan). The Nehru-Bhabha combination provided India's nuclear programme a chain of nuclear research and development facilities, some of them matching the most advanced in the West. Now India, had acquired capability in nuclear sphere which also means scientific, technological and industrial acquisitions right from the stage of uranium mining to developing fuels for various reactor types-designing, building and operating reactors, and atomic power stations. The nuclear device tested at Pokharan was the cheapest nuclear device build and tested by any nation in the world. Taking into account its nuclear capability, India's standing was distinct in two respects. First, the country ranked among top five nations in technology attainments along the entire nuclear fuel cycle – ahead of China except in the limited domain of weaponising – India had been pushed into the wilderness of nuclear have nots. Secondly, barring the leading industrial nations, no country has assimilated and developed plutonium-based technology, both for India's second generation atomic power programme and weapon-grade plutonium capability, as India had done *(Sabherwal, 1997)*. However, the whole issue of explosion was clarified by Prime Minister Indira Gandhi. She said that India does not intend to make nuclear weapons of destruction. But nuclear technology and nuclear explosions, whether for peaceful or destructive purposes, cost the same. The main threat comes from China which has not been a friendly neighbour and has opted for development of nuclear weapons of destruction. The problem of nuclear deterrence by India is mainly a problem of developing a weapon system which will beadequate to deter the Chinese weapons system. In this situation India should not close her option of making nuclear weapons for defensive purposes. 'Nuclear deterrence' as a theory means–the threatened use of nuclear weapons, to keep someone else from actually doing what they may be contemplating of doing. The possibility of an adversary possessing such weapons influence the perception of nuclear weapon threat by a country. The estimation of the probability of war with the country concerned and of the probability of that country using or threatening to use nuclear weapons in such a war, play important roles in the development of threat perception *(Koithara, 1999)*. It happened for the first time in the history of international relations that the very existence of a weapons system devised to enhance the security of great powers had become sufficiently threatening to those powers to provide them with a persistent and strong incentive to settle their differences, rather than to risk getting into situations where they might be forced to use the means of warfare they themselves had devised. This was, then, a new kind of international order, imposed not by design or by principle, but by fear.

Nuclear strategy, as a whole, can be regarded as a complex of pseudo-problem of which deterrence is a part. Since the aim of deterrence is to instill of caution without raising tensions, there is always a very fine balancing act between making the opponent fear the negative consequences of his own aggression and reassuring him that there is nothing to fear as long as he stays on a peaceful course. However, in military perspective, this balancing act becomes more delicate than ever because of their tremendous destructiveness and closely related advantage of striking first, if all out war appears imminent. Advocates of nuclear deterrence argue that offensive measures are necessary to make the deterrence credible in a period of rough strategic parity. The basic idea is that military capability will enhance stability only to the extent that you are able to convince your opponent that you are better prepared than him to fight, even if you are less inclined to start the fighting. The problem, of course, is that the things you do to deter the other side may also make him suspicious about your intentions *(Singh, 2005)*. Obviously, continuation of the regime of deterrence depends largely on how the contending powers calculate their gains and losses but with equal rationality and efficiency, which is rarely found in today's international politics.

Closely related to it is the aspect that whether the deterrence has worked in the past or not. Looking ahead begins by looking back. If the detterrence has not worked in the past it cannot work in future. Its past working can be known in two ways—by knowing facts from archives and files which were planned but not implemented due to deterrence; and second, by explaining conflict behaviour of the powers which, in fact vary from power to power and is totally unpredictable. The core of the deterrence theory seems eminently reasonable, and even self-evident. If the expected punishment exceeds the gain, the opponent will be deterred. The claim of nuclear deterrence is inherent in the claim itself, for it is seeking to explain something that did not happen– a non-event in the literal sense *(Dan, 1996)*. Because, the deterrence is a pseudo-problem and it cannot be solved, may be the reason for continuing to discuss and research. At most it should be respected as necessary category of intellectual discourse. Its discussion does not end but merely punctuate. It often demands sweeping arguments and wide-ranging perspective, while conclusions are highly circumscribed.

In practice, immediately after the Second World War, the USA was not in a position to challenge Soviet Union on

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political or strategic issue and it considered the bomb as a counter-weight to the massive Soviet military establishment. Being aware of bomb's destructive capabilities and its unique potential as an influence towards world peace. US president Harry S. Truman linked it directly to the political characteristics of the states possessing it, and equally important, of the international system to which they belonged. Besides deterring military aggression, this new kind of superiority was also thought to be essential for resisting Soviet attempts at intimidating the vulnerable West European democracies, keeping conventional military spending within reasonable bounds and maintaining US leadership in the emerging Western alliance. But the US monopoly over this new technology did not last long. The former Soviet Union was the most concerned, who put all its resources available to break US monopoly, as told by Stalin at technology has shaken the world and destroyed the balance as well. It feared attack on Soviet camp and expected the Americans to use their exclusive possession of atomic bombs to impose their political and economic schemes in Europe. The first Soviet explosion witnessed in August 1949 and it gained retaliatory capability in mid-fifties. Thus, in the first decade of the Cold War, both the US and Soviet leadership developed what we might call a defensive nuclear ideology. They felt that nuclear weapons were essential to prevent both political blackmail and large-scale military attack by other side. Despite repeated call for disarmament, both cling to their nuclear deterrent as their best hope of maintaining peace. As a result, there have been many disputes since the war, neither power has had grievance so essential as to make a world war whether nuclear or not. They did not deter each other, they were jointly, deterred by a force external to both. This force is best called common deterrence. It served as a functional equivalent to a monopoly of violence at global level. The rivals were like Siamese twin that die when they are separated *(Bergh and Bentham, 1996)*. Consequently, beginning with the limited test ban and the hot-line agreement, they became entangled in security cooperation with arms control.

6 Conclusions

However, in the period of nuclear deterrence there has been a multiple divergence of expectation–all out nuclear war, nonatomic wars fought with conventional weapons, "limited nuclear war of graduated deterrence," of mere tactical use of nuclear weapons and the "counter-force strategy." Military policy can no longer be mono-emphatic as it used to be in the preatomic age. Years back George F. Kennan said that he could see no grounds whatsoever for confidence in such "frantic schemes" and did not trust the calculations on which they were based *(Kennan, 1958)*. War, Kennan puts it so well, as always been an uncertain exercise and the best-laid plans thereabout are frequently confounded. Variables and unknowns in calculations are greater today than ever in the past. It is pitiable that mankind may have to resign itself entirely to the negative dynamics of the weapons race. In general for both USA and USSR but particularly for the US proliferation of nuclear weapons technology to other great powers and later on to the Third World countries was a cause of concern. In its view, to ensure its usefulness and to hinder that it should instead become a destroyer of mankind, it was first of all necessary to prevent the secrets of new weapon from falling into the wrong hands. In response to India's first nuclear test of May 1974 an ad hoc body called "London Club" with a view to tighten export controls to ensure that nuclear facilities and materials sold exclusively for peaceful use were not diverted to military purposes *(Vardarjan, 2008)*. The London Club had seven founding members, the United States, Russia, France, Britain, Germany, Japan and Canada. Under the new guideline they made them applicable to all 'non-nuclear weapon states', that is, the whole world other than the five countries that had nuclear weapon state status under the Non- Proliferation Treaty (NTP).

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