Chapter 2

Nuclearisation and Regional Security in South Asia: Small States’ Perspective

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2.1 INTRODUCTION

A nuclear weapon is capable of mass destruction of human lives and properties and is morally unacceptable. No country should have them. People of South Asia should rise against the horrible and shocking weaponisation in the region or any part of the world. In Pokhran, India blasted five nuclear devices in March 1998, followed by Pakistan in Chagai Hills in West Baluchistan Province. The already shaky peace and harmony of the region, due to conflicts between these hostile neighbours, plunged into a nightmare of unspeakable uncertainties. The peace loving people of the world witnessed the shocking development of the nuclear arms race with despair; the smaller neighbours in the region, who have no role in their jingoism, became the automatic victims of their disastrous game.

Since 1974, after India’s first nuclear blast, there was a period of silence concerning the nuclearisation of South Asia. The world, particularly the smaller countries of South Asia, had a sigh of great relief. There were rumours that both of India and Pakistan were secretly developing their nuclear arsenals. At the end it was a reality and very unfortunate that the BJP Government of India decided to join the elite club of nuclear states. Pakistan’s reaction was a tit-for-tat. It was beyond the imagination of India that Pakistan could join the club of nuclear states. A section of Indian politicians and bureaucrats believed that Pakistan was bluffing and blackmailing all the way. It was believed that Pakistan did not develop the Gauri missiles to carry
warheads. When the most unfortunate event happened, it sent a shock wave around the world. The hostile relations between India and Pakistan further aggravated. Open demonstration of the Weapons of Mass Destruction also terrified their neighbours.

Why such a self-destructive race for weaponisation when this region is one of the poorest in the world? Why billions of dollars are spent for the development of nuclear armaments and missile systems for their delivery to target countries, when a large section of the people of these countries are deprived of their basic needs, such as food, health care, shelter and education? Both the countries argue that the development of nuclear weapon is necessary for their self-defence. Kashmir is regarded as the major flash point between them. Three wars were fought by Pakistan and India and two were on Kashmir. Kargil conflict, where thousands of troops of both the countries died, almost ran into a full-fledged war. This conflict frightened the world, particularly the regional states. It was said that nuclear bombs in both the countries acted as deterrent for full-scale war. On a critical analysis following India's explosion of bombs, the experts have opined that Pakistan is not considered a threat to India. In conventional warfare, India is much stronger than Pakistan. Then why India exploded the bombs first? It was a political and bureaucratic decision to show the world that India was very powerful and should be considered a regional power. It has attained considerable self-sufficiency in science and technology. After the 1974 blast of nuclear device nothing much was heard about the peaceful application of nuclear science. To maintain progress of nuclear science and technology and other advanced technology, like the missile systems, India embarked on this dangerous path. India was always very jealous and suspicious of the arming of Pakistan by the USA and China. Pakistan's blast, following India's, although equally condemned, got an edge over the hostile neighbour. Currently South Asia is the most dangerous region on earth to live in. The neighbours are seriously concerned about this arms race.

Opinion of the common citizen of both the countries was never considered before going for the development of Weapons of Mass Destruction (WMD). If public opinion was taken into consideration in their countries, probably such unfortunate events would not have happened. What role the relatively smaller and weaker neighbours could play in dissuading them to take the path of negotiation rather than confrontation? Considering the current world order, postures of our
nuclear neighbours are very threatening to the very safety and security of the small states of South Asia. Demonstration of strength by couple of N5s and occasional utterances of "pre-emptive strikes" in the name of terrorism might be a license to mighty neighbours for their hegemonic stances to subjugate the weaker states.

In spite of worldwide condemnation, the ego to become a nuclear state seemed to be the overriding consideration than looking after the teeming millions of people devoid of basic necessities in both the countries. It is very unfortunate that such blasts happened when the democratic governments were ruling both the countries. It is said that the more a country is democratised, the more its government will consider the opinion of the voters. India, the largest democracy on earth, did not show the way. The country from her very inception was against nuclearisation. She initiated the Comprehensive Test Ban Treaty (CTBT), but did not sign it. In addition, both India and Pakistan are not the signatories to the Nuclear Non-Proliferation Treaty (NPT). Bangladesh believes in living in a peaceful neighbourhood. Her commitment to live in a nuclear free zone has been established by signing both the treaties. Bangladesh has an elaborate programme for the peaceful application of nuclear energy for the improvement of the quality of the lives of her people.

What should be the roles of the small states in South Asia concerning the dangerous adventures of their immediate neighbours? We know very well that small neighbours have very little influence on them, particularly on the politicians and bureaucrats. There are many irritants among them. But that does not mean that the small states should remain silent. Particularly after the publication of the Draft Nuclear Doctrine (DND) of India, its hegemonic and hypocritical attitudes towards small states became more evident. Therefore, the small states have every right to express their indignation, despair and insecurity. They should find the way to mobilise the public opinion, particularly those peace loving and conscientious citizens of India and Pakistan and rest of the world. It is an honest cause we should fight not only for us but also for the coming generations.

The nuclear bombs travel beyond the boundaries of the targeted country. This is the real concern of the neighbours in case a war breaks out. We will be drawn into the after effects sharing the human tragedies and economic losses which will be a far reaching consequence of a least developed country like Bangladesh. This paper deals with the
effects that could be caused if a misadventure happens in the region. The small states cannot remain silent spectators, as they automatically become a party to it. Our security concerns are genuine. It should be delineated and ventilated. The big powers like N5 not only should restrain their selfish goals of dominance over the weaker states but should also control the egoistic behaviour of potential nuclear states. Otherwise, more countries will develop their nuclear arsenals covertly, as the signing of NPT and CTBT by them become irrelevant.

The paper is written at a time when the lone super power of the world along with few of her allies completed the invasion of Iraq defying the UNSC and public opinion. The world witnessed with shock and despair the destruction of a region of the world, which was the cradle of civilisation for thousands of years. A new world order is on the offing where the small states perceive to be in constant threat of their powerful neighbours. When the only superpower showed the way, how the lesser powers could be contained. Our security and safety was threatened after nuclearisation of South Asia. The situation is further aggravated by the events in Iraq, not only for Bangladesh but also for all the small states. The only positive thing is that the world opinion during and after the invasion of Iraq has been against such illegal act of harvesting the natural resources of a country. Irrespective of race, religion, colour and the region, including the invaders' countries, there was mass upsurge all around the world. Bangladesh along with small and vulnerable states should continue the momentum of the movement of the people of the world to achieve peace and prosperity in a safe and secure environment.

It is pertinent to mention that Bangladesh is a bridge between South and Southeast Asia. Considering her strategic location she should consider taking a leading role among the non-nuclear neighbours for a peaceful South Asia. As such, the role of Bangladesh has been emphasised, in the efforts to achieve a Nuclear Free South Asia, or at least to contain further nuclearisation of the region.

2.2 CAUSES BEHIND NUCLEARISATION
In the 1950s and 1960s India devoted her research on peaceful application and acquiring the technology i.e. to construct and operate nuclear reactors, mine uranium, fabricate fuel and extract plutonium. The objectives were to attain self-sufficiency in all these areas. India's defeat by China in the India-China war in 1962 was the turning point
for the decision of developing nuclear armaments. It became more necessary after the explosion of nuclear bomb by China in 1964. Very secretly India developed the nuclear device and exploded it in 1974. The falsehood of becoming a regional power to reckon with, plunged the country with it's poor economy into a rivalry with her neighbour. There was condemnation worldwide that prevented her from overtly developing the nuclear devices and exploding it till 1998. As far as Pakistan was concerned, democracy came and went, but it was the dictatorial power that ruled the state during most of her history. From it's inception the Pakistan Atomic Energy Commission (PAEC) was mandated to do whatever India did even in the development of nuclear weapons. It commissioned its first commercial reactor in 1970. After the 1965 war with India many politicians, media men and scientists pressed the government to develop nuclear weapons. Following this development, Foreign Minister Zulfikar Ali Bhutto declared that if Pakistanis had to eat grass she would develop nuclear bomb. After Pakistan’s defeat in 1971, Bhutto became the President, and Prime minister in 1973. In 1972 he convened a meeting of Pakistani scientists and discussed with them about development of a bomb. By 1980 designs for aircraft-borne bombs were reportedly complete. It was alleged that China provided the necessary technical support, which was denied by Pakistan.

The Kashmir conflict between India and Pakistan has already brought deaths to thousands of people and miseries to millions on both sides of the border. For this shared tragedy Pakistan and India could not be blamed alone. International community must share the responsibility of intervention with the warring parties. For over five decades the UN has failed to resolve the issue by implementing its own resolution of holding a plebiscite to determine the fate of the Kashmiri people. Current events show that it might not be done in the foreseeable future. Now that India and Pakistan have acquired the damnable ability to immolate each other, it is likely that there will be a difficulty in imposing or facilitating acceptance of resolution on the Kashmir problem.

However, the international community should be proactive to influence both the countries so that they do not follow the path of self-destruction. The lone super power – the US – and her NATO allies and Russia have a great role to play. They should urge and facilitate neighbours to sit at the table for a dialogue. It should be taken into
consideration that militancy in the Kashmir valley is not going to be affected by the nuclear bombs. The horrific brutalities will continue and wounds will continue to bleed. India has nothing but the brutal iron fist to inflict and Pakistan will continue to let militants use its territory to launch cross-border raids. Kashmiris will continue to die in the hands of security forces and the militants. Miseries of common Kashmiris caught in a proxy war will not diminish and the cost of such brutalities will be borne by the common people of both the impoverished countries. There should be a political solution rather than military option. There are stalemates on the Sino-Indian border, the China-Taiwan issue, and there are common claims of China, Vietnam, Philippines, Brunei and Malaysia on some islands in South China Sea. Why such events like wars and skirmishes should happen between Pakistan and India? Why Kashmiris cannot live in peace?

However, it will be almost impossible for India or Pakistan to decide to go non-nuclear, as the reasons other than Kashmir do play roles. The varied explanations, however, are mutually exclusive and taken together they provide a complex and comprehensive portrait of the internal and international factors that led India and Pakistan to conduct their nuclear tests. The factors as summarised are

(1) The legitimate security interests of India and Pakistan drove them to become open nuclear states. India got frustrated, as she observed that, in spite of her political and diplomatic manoeuvres internationally, the global security remained nuclear in character. The nuclear 5 were not willing to relinquish their nuclear capabilities. Besides, India perceived long-term threat from China. In fact, Pakistan is not the main factor of nuclearisation, it is China that engenders concerns in New Delhi. Indian Defence Minister openly declared that China is number one enemy of India. Pakistan's explosions in turn was a direct response to Indian explosions, but in turn again, India justified her actions mentioning that it triggered her explosion due to Pakistan's provocative missile tests. India considered Pakistan's medium range Gauri missile test a provocative act as stated above. This was one of the series of provocations from each side. However, the decision to go ahead with the nuclear tests had already been taken by the bosses in Delhi. The Gauri test only gave the government an edge over the critics of nuclear bombs.
(2) India was disillusioned by the NATO powers and Russia; not only did they retain the nuclear capabilities but also declared their prominent role in their security policies. India was dismayed by the failure to move meaningfully in the direction of nuclear disarmament and she found the nuclear policies of the traditional nuclear powers unacceptable, discriminatory and hypocritical. Pakistan, in turn, acted in a direct response to the Indian nuclear tests fearing that India's diplomacy might be emboldened if its nuclear moves went unanswered and that Pakistan's nuclear capabilities might be underestimated if they were undemonstrated.

(3) Pressure from CTBT: It is possible that India chose to test at least in part because of concerns that momentum toward the achievement of a CTBT could make it more costly (in political terms) to test in the future, and might even foreclose the option altogether should India be pressured to joining the treaty.

(4) Status symbol: It might not be fully justified but the acquisition of nuclear weapons was motivated at least in part by a desire to gain the prestige associated with the nuclear status.

(5) Domestic political factors propelled Pakistan and India to conduct tests. The decision in India was taken by a strongly nationalist government seeking to bolster its domestic position. In both countries politicians anticipated that domestic support would profit them by openly declaring nuclear capabilities.

(6) Bureaucratic and technological imperatives had played a role in making the decision. It is the interest and rivalries of the bureaucrats of India and Pakistan to impel their respective governments for nuclear testing. The phenomenon of "intra-state arms racing" was articulated whereby competing bureaucrats agitate in their own government for decisions and tests that advance their own interests. To maintain the technological momentum, perhaps in the field of missile programmes, the technologists contributed in hastening the tests in both the countries.

(7) Other non-strategic factors revealed by the Indian media after the tests were that India was simultaneously undergoing a variety of domestic changes, some of which were revolutionary
in their implications. There was a stalled economic revolution, which began at the time when India's global image position changed. There was a social revolution, epitomised by the emergence of regional middle class and political parties, which fixed agenda in many fields. There was also a cultural revolution underway, led by the Hindu rightist party - the BJP, which sought to redefine and homogenise the meaning of 'Indian'. During the period there was a federal revolution as states were battling for more freedom. It appears that in short term the explosion of atomic bomb strengthened the hands of the BJP Government. All the above could have influenced open nuclear race by both the countries.

Nuclear technology and its extension to nuclear weapon have long been seen by the founding fathers of India as contributing to an economic and technical base that could transform India from a poor to a modern, relatively rich state. The central position is that the technologies underlying nuclear weapons can help make India a great scientific and modern power. Jawaharlal Nehru saw nuclear power in its peaceful capacity as providing India with the ability to develop many advanced technologies. India could go from dung power to nuclear power in one step. India did achieve these objectives. She is capable of establishing power reactors to meet her ever-increasing power requirements since long. Investment in Bhabha Atomic Research Centre, one of the largest in the world for the application of nuclear science from agriculture to weaponry, modernised India in the advanced sciences. This organisation gave birth to many industries and organisations for the application of nuclear energy, such as the Board of Radiation Technology and the Electronic Corporation of India. India's founding fathers' political decision made her a modern, technologically developed state compared to many developed countries. These are advantages of political decision that accrued benefits for the country.

Since 1989-1990 the events in Kashmir threatened to lead into a full-scale war. According to a 1993 New Yorker article by American journalist Seymour M. Hersh, US satellites detected a convoy of trucks moving from Kahuta, Pakistan's uranium enrichment facility, towards an airbase where F-16 fighter jets stood ready. American diplomats conveyed this information to Delhi, which withdrew amassed troops on the border. Most analysts believed that Pakistan was not contemplating to use nuclear weapon. However, the bomb lobby in
Pakistan took this opportunity to enforce their belief that nuclear weapon protected their country from an Indian attack. Therefore, Pakistan’s drawback in conventional weaponry could be met by nuclear weapons. She exploded nuclear bombs to join the elite club of nuclear powers.

2.3 BOMB PRODUCTION AND DELIVERY SYSTEM

Some facts about the state of nuclear and missile technologies of India and Pakistan are given here to emphasise on the gravity of the situation. India has a number of nuclear establishments that produce weapon grade fuels. The Cirus and Dhruva reactors in Mumbai and fast breeder test reactor in Kalpakkam near Chenai produce plutonium. Plutonium reprocessing plants are in Mumbai, Tarapur and Kalpakkam and uranium reprocessing in Rattehalli near Mysore. It is difficult to get an inventory of these facilities concerning their total production capacity. Through various reports it is estimated that the reactors produce about 26-40 kg of plutonium per annum and from the reprocessing facility 250 to 275 kg. The production of enriched uranium in Rattehalli facility is not available. India’s plutonium inventory as of 2001 is 450-722 kg. Quantity used in tests and in reactors as fuel is 165 kg and net stock is 285-557 kg equivalent to 55 to 110 nuclear bombs. Here enriched uranium is not considered. It could be said that it is a rough estimate; the actual situation could be grimmer.12

As stated, many Indian scientists and bureaucrats were sceptical about the capacity of Pakistan’s making a bomb. Pakistan’s explosion after India’s in 1998 buried all the suspicions and guesswork. In the 1960s both the countries were progressing almost neck-to-neck in R&D, but PAEC received a jolt after the repatriation of some nuclear scientists to Bangladesh. Karachi nuclear power reactor was mostly planned, implemented and run by the Bangladeshi nuclear engineers. During this formative stage of PAEC many senior nuclear engineers and scientists were conducting R&D in nuclear fields. Pakistan had to recoup the loss of 1971 and her programme of weaponisation was delayed. She has research in plutonium production reactor in Khushab, plutonium-reprocessing laboratories in Rawalpindi and uranium enrichment plant in Kahuta. Their production capacities are from 20 to 40 kg of plutonium per annum and highly enriched uranium from 60 to 100 kg. Pakistan’s cumulative production of enriched uranium as of 2001 was 450 to 750 kg. Consumption during
tests is 120 kg and 330 to 630 kg is net stock equivalent to the production of 20 to 40 nuclear bombs.

Estimation from various sources and experts believe that each bomb produced by these countries is equivalent to 20 kilotons of TNT, the devastating capacity of the bombs dropped by US on Hiroshima and Nagasaki in 1945.¹³ Their numbers have also been reported by various organisations. Janes, the military analysis group based in London, estimates India has between 50 to 150 nuclear warheads, The Institute for Science and Security in Washington indicates 60 warheads and Stockholm International Peace Research Institute estimates between 20 to 25 warheads. Estimates for Pakistan by these three institutions are 25 to 50, 40 and 15 to 20 warheads respectively. Both the countries claim that they have a variety of nuclear bombs ranging less than one kiloton to a possible high of India to 150 to 200 KT. Most weapons are believed to be in 15 to 29 KT range. Pakistan claims to have tested a bomb in the capacity 25 to 36 KT and India 43 to 60 KT, although intelligence sources estimate the range between 12 and 25 KT.

When Pakistan tested the Gauri missile, its long range was not believed by many experts in India. Soon the gravity of the situation was understood and India got a shock. Both the countries have developed short and medium range (now long range) missiles to carry nuclear warheads probably for targets up to China. India has short-range ballistic missiles (Prithvi I, II, and III Dhanush) range from 150 to 250 km and medium range (Agni I, II,) from 1500 to 2000 km and over.¹⁴ The long range Agni III, which could achieve a range of 5000 km, is ready to be test fired at any time in the near future. The Prithvi and Dhanush missiles are capable of carrying 20 KT warheads and Agni from 150 to 200 KT. In addition, India has anti-ship cruise missiles and short range tactical missiles (Sagarika-submarine launched cruise/ballistic missiles 300 km range and supersonic Brahmos missiles with 290 km range-jointly produced by India and Russia to arm submarines) that might be converted to carry small nuclear warheads. Janes has reported that India has French Mirage 2000 fighter jets, British Jaguar star fighter and old Soviet MIG-27M fighters that could carry nuclear warheads. On the other hand, Pakistan also has short range ballistic missiles (Hatf, I, II, III, and M-11) range 60 to 600 km and medium range Gauri 1500 km and Shaheen single stage 600-750 km and two stage 2400 km. Pakistan also has fighter planes that could carry the warheads like the American E-16
Fighting Falcon that could also carry nuclear warheads. The above shows that both the countries are well advanced in developing their nuclear weapons and the delivery system to reach in all the sensitive places of their countries and beyond to cause devastation.

2.4 COST OF DETERRENT SYSTEM

It is mentioned that development of nuclear weapon system is a very expensive venture. But how much? A cost analysis from Indian sources is mentioned here. Production of the nuclear bomb costs around 10% of the total cost. There are constant recurring (annual) costs for maintenance and replacement-improvement that can be anything between 30-50%. Command, control, communication, control mechanism account for about one third of the cost and about 50% goes to the delivery system. Cost for a minimum deterrent could be from US$15-150 billion. A small 100-warhead arsenal would cost around US$ 9-11 billion. But the arsenal as envisaged in Draft Nuclear Doctrine (DND), that will be discussed later, could well have 400 plus warheads. It is estimated that nuclear deterrent has cost the US over $5,500 billion and Chinese minimum so far over US$ 100 billion. Even if the cost of production is considered low compared to Chinese, still critics mentioned that US$ 15 billion is an underestimate for India.

According to Indian President Abdul Kalam, father of development of the delivery system, about 70% of the materials are imported. This could only show how the production of deterrent system is dependent on foreign companies. Therefore, in an emergency situation the cost could skyrocket. These figures confirm the critics how costly nuclear weaponisation could be to a developing country like India or Pakistan. Therefore, it is a dangerous game at the expense of poor peoples of the two countries. Taxpayers are paying a heavy toll that otherwise would have been used for the development of the quality of lives.

2.5 INDIAN DRAFT NUCLEAR DOCTRINE

After a year of Pokhran II explosion (I in 1974) the BJP Government published Draft Nuclear Doctrine (DND) on August 17, 1999 for the consumption of the public and information of the world the objectives behind the nuclearisation of India. In this section both the explanation behind the drafting of the DND by the member of the National Advisory Board (NAB) that drafted the same and the expert critics on the subject are given. The two main features of the doctrine
as explained by a NAB member are\(^{19}\):

1. It was the first instance of a country putting forth such a doctrine before weaponisation. All other nuclear states have enunciated their doctrines (if at all) after the fact.

2. The National Advisory Board that drafted the DND consisted of 27 members from diverse walks of life and thus represented a remarkable across-the-board consensus in the drafting process.

Here the NAB member wanted to say that a neutral body, hardly anybody representing the BJP, did the DND.

The framework of the doctrine delineates eight broad features: (1) minimal arsenal, (2) actual deployment, (3) credibility of posture, (4) survivability of force, (5) no-first use, (6) no arm control fetters on research and development, (7) flexible, versatile force based on land-air-sea triad, (8) rather than being static, fixed force, it will be dynamic force whose size and strategy will be continually shaped by adversarial capabilities and technological changes.\(^{20}\)

Some of the core elements with particular reference are given here:

1. India’s decision to become a nuclear weapons state gave it a greater degree of autonomy on the world stage with respect to decision-making in its development process.

2. Global order talks of global deterrence.\(^{21}\) It is interesting that the nuclear weapons states (N5) argue for disarmament on the one hand and continue to weaponise themselves on the other. The NATO of the Cold War looked to most of the world to be a purely defensive organisation; it was preoccupied with defending the territories of the member states in the event of a Soviet attack. The doctrine adopted in the NATO Summit in Washington in spring 1999 looks very different when viewed from other states around the world. It is offensive in the sense that NATO asserts the right to use force even if not attacked. It is focussed not on the defence of the members in Western Europe, but on contingencies “out of area”; outsiders fear that “out of area” could have global application. Additionally, it is unilateral, in that NATO reserves to itself the right to make decisions about the use of force even if legitimising authorisation from the UN or other international body is lacking. New NATO doctrine looks extremely interventionist and can be construed as threatening by any state that has reasons to fear disagreement
with the United States. It is indeed menacing to justify the states acquiring nuclear weapons.

3. India’s nuclear deterrence has to be “a minimum nuclear deterrence”. It is to be used in the event of a nuclear attack, and not to be a “first use” weapon. Such a theory of deterrence has worked well over 50 years. The deterrent is to be based on the Triad Delivery system (comprising missile/aircraft/sea-borne warheads), with final authorisation for use resting with the Prime Minister.

4. India at least 14 times in 50 years tried in world forums for a nuclear free world and proposed the CTBT, but she got frustrated because all the actions were futile. The N5 continued weaponisation. In addition, indefinite extension of NPT was a last straw to consider that there would be a nuclear disarmament for all. Besides, all the efforts and treaties by USA and Russia like START 1 and II were not satisfactorily followed upon. In fact, there was no reduction of nuclear armaments in its true sense by the USA. Bush administration has gone to the fourth stage of development in nuclear weapon system. India’s ego was hurt as the Western powers consider India negatively. Even a very reputed Magazine “The Economist” opined that India was unlikely to be a “big power by 2030”.

Much is said about non-violence. It is often quoted that Mahatma Gandhi in response to Kashmir issue stated that if it came to a choice between violence and cowardice, violence was advised. Therefore, India’s next objectives are the following: (1) to challenge 6 nuclear states to produce DND in their respective countries; (2) to take lead in promoting de-alerted warheads and missiles; (3) to promote global disarmament and cooperation with the 6 nuclear states and weak influential countries towards global nuclear disarmament; (4) to promote global democracy by strengthening international institutions; (5) to pursue strategic goals if 6 nuclear weapon states make no convincing move towards global nuclear disarmament; (6) to complete India’s half-hearted attempts at state building. The above objectives were in no way reassuring to non-nuclear neighbours. The current behaviour of India with her neighbours was not going to change after joining the elite nuclear club.

All the above as stated in the DND was aimed at making India a great power to reckon with. Some of the very serious aspects that have
been heavily criticised by the opponents of DND who are also in favour of nuclear free world is discussed here. This would give an insight of the hidden agenda behind the DND and how it would affect the global disarmament and India’s hidden motive to become a regional power. Experts on India frankly stated that India wants a multipolar world but in South Asia she wants unipolar position.

According to Indian critics, DND is nothing but a cosmetic exercise for legitimisation of nuclearisation of India by the BJP. Deterrence is an attempt to achieving security by threatening someone else’s security. In fact mutually hostile countries would always be tempted to strike first, regardless of commitment given. The country that strikes second is no longer acting to enhance its security. Therefore, nuclear retaliation is an act of revenge not security. Pursuing security through nuclear deterrence is, therefore, always a dangerous gamble where the consequences of failure are horrendous and unthinkable. The DND states that any adversary must know that India can and will retaliate to inflict destruction that the aggressor will find unacceptable. According to critics, these stances are so open-ended they can assert a need for nuclear deterrent against almost anybody, including major weapon states such as the USA and other NATO powers. This would require a huge weapon system for credible second-strike capacity. These stances effectively commit India’s arms race with major nuclear weapon states – a suicidal policy economically, politically, and socially. India’s minimum deterrent system is also a mockery as it emphasises, on triad system and sea-based assets multiple redundant system, mobility, dispersion and deception. It also talks about developing a capability of maximum credibility, survivality and effectiveness. This is a system Britain or France or NATO will not follow; they go for airborne and submarine deployment.

It has been mentioned that the Draft Nuclear Doctrine (DND) promises No-First-Use (NFU) against nuclear weapon states and No-Use against non-nuclear weapon states except where the latter are aligned to a nuclear weapon state. It is indeed threatening to peaceful non-nuclear neighbours amounting to the subjugation of their security. On the other hand, China’s NFU commitment excludes use against any non-nuclear-state regardless of whether it is aligned to a nuclear state or not. India follows the aggressive stance of NATO. India assures in the DND that it would pursue other nuclear states to give assurances of non-nuclear states globally and achieve an agreement on
It could have been better if as a democratic country, with claim to be the spokesman for the developing world to follow the stance first and then advise others. Its no-first-use of nuclear weapons claimed to be its basic commitment and persuasion of Nuclear Weapon States (NWS) for an international treaty banning first use could have been reassuring to neighbours. On the contrary, the small states of South Asia suffer further insecurity after the DND. Russia after the collapse of the Soviet Union depends more on its nuclear capability than the conventional forces due to economic reasons. Being a poorer country, India will continue developing both nuclear and conventional forces like the NATO states. Here arises the suspicion of the small neighbouring states for the subjugation of their safety and security through intimidation, threat and the recently pronounced “pre-emptive strike”. It does not go with the primary objective of DND to achieve economic, political, social, scientific and technological development within a peaceful and democratic framework of India; nor its efforts to achieve the goal of a nuclear weapon-free world. Rather it is threatening to its non-nuclear neighbours. The inhabitants of small states of South Asia are much worried because the DND is full with contradiction and hypocrisy.

In fine, the critics conclude that DND is adventurous, aggressive and destabilising like others of its kind. The DND thus re-enforces the view that the Indian government’s decision to go nuclear was not determined by any changes in threat perceptions, not by any degradation of national security, but instead by the obsession with nuclear weapons as status symbol and power currency, which needs an open-ended and highly ambitious arsenal, regardless of the cost to the nation. The DND is entirely in keeping with the self-righteous and grandiose nationalism of the BJP-led government and of its ideological mentors, which makes the people subservient to the state.

One important aspect in DND mentions the continuous research and development to re-equip the arsenal with new armouy of nuclear devices. It is an open-ended and definitely an expensive game of nuclear race with the big nuclear powers. However, DND provides no guidelines for a stand-off between Pakistan and India. In the context of South Asian reality, the DND will be destabilising and dangerous as stated above. It does not address the Kashmir issue nor about the more conventional wars. The recommendation of the DND that a high level
of conventional power, coupled with a triad nuclear defence system, clearly implies that India is preparing for more conventional confrontations as well.

It is hoped that the Government of India heeds the warnings of the critics and of the organisations against nuclearisation of India. The BJP government is not going to place this Draft Doctrine to the current parliament. It will leave it for the next election in 2004. However, the document is drafted in such a way that even if there was a change in government, it will be very difficult to scrap it altogether. In spite of its assurances in nuclear risk reductions and confidence building measures, India's treatment, borne out of its attitude of supremacy and big brotherliness, meted out to its small neighbours, particularly to Bangladesh, do not have a soothing effect on their psyche. India is too big and too strong with conventional forces compared to the neighbouring small states. Instead of developing WMD it could have invested much less in modernising its conventional forces with latest sophisticated technology. Threatening smaller neighbours with nuclear weapons is indeed pointless and redundant.

2.6 NUCLEAR SCIENCE IN BANGLADESH

In this section a background of nuclear science in Bangladesh is given. Fifty per cent of the PAEC scientists were the bright products of the former East Pakistan universities. Many of them held top positions in PAEC. Bangladesh Atomic Energy Commission was established after the liberation of the country. In 1973-74 Bangladeshi scientists came back to Dhaka and joined the BAEC. There was only the Atomic Energy Centre-AECD for research and development in former East Pakistan. It could not provide working facilities for many of them. As a result, some nuclear engineers and scientists sought jobs elsewhere or migrated abroad. Articles appearing in the Time and Newsweek magazines in 1972 indicated that countries planning to go nuclear and prospecting scientists and engineers should seek them in Bangladesh and Pakistan.

The primary objectives of BAEC are to: undertake necessary fundamental research in various fields of physical, biological and engineering sciences using nuclear technology; acquire and adopt related technology like electronics, computer, material sciences, etc.; render services to various end-users; develop human resources for sustainable development of nuclear technology; monitor and assess
hazards of radiation and environmental pollution and discharge international obligations in the field of atomic energy. There are 19 institutions engaged in fundamental and applied research. The 13 Nuclear Medicine Centres (NMC), attached to medical colleges and some Governmental central hospitals, provide diagnostic and curative services to thousands of people annually. The Institute of Nuclear Medicine (INM), located on the campus of Bangabandhu Sheikh Mujib Medical University, Dhaka, is engaged in developing and continuous upgrading of nuclear medicine in the country. INM, in association with NMCs, has established Nuclear Medicine as an integral part of health services system of Bangladesh. Over 450 highly trained scientists, engineers, doctors and geologists with Ph.D., M. Phil and other postgraduate degrees from home and abroad are engaged in BAEC establishments. Bangladesh Institute of Nuclear Agriculture (BINA), a separate national institute developed from the Agriculture Division of BAEC, is currently functioning on the campus of the Bangladesh Agriculture University in Mymensingh. BINA has already developed and introduced many high yielding varieties of crops in the country.

Like many of the IAEA Member States, Bangladesh extensively applies nuclear science in the areas as stated above. Bangladesh actively participates in all the regional and international activities of IAEA. In fact, Bangladesh is one of the largest recipients of IAEA’s technical assistance. She organises training courses, workshops, seminars and meetings in the peaceful application of nuclear energy. She established reactor, irradiation facilities, highly sophisticated tools and other associated infrastructures for R&D in nuclear science and technology. Bangladesh is not an LDC in nuclear application. As mentioned, she has acquired the know-how on peaceful application, established regulatory mechanism for safe handling and monitoring the radiation facilities and in case of an explosion possible radiation effects and their possible remedial measures. Bangladesh is capable of cooperating and assisting some regional countries in these fields. Countries like Bangladesh are not called nuclear. Traditionally, the countries that have nuclear weapons are called nuclear countries like the big N5, India, Pakistan and Israel (undeclared). Although 32 out of the 138 Member States of IAEA have nuclear power plants, four of the N5 (the exception being France- second in position) hold the positions of 17, 18, 20 and 32nd for the share of electricity generation from nuclear power reactors in their national grid. Therefore, weaponisation and peaceful application of nuclear sciences are two different issues.
Bangladesh is committed to using nuclear energy and the related technologies solely for peaceful purposes. With this in view, it has signed a whole range of treaties, conventions and agreements on international non-proliferation. These include the Treaty on Non-Proliferation of Nuclear Weapons (NPT-August 1979), The Bilateral Safeguards Agreement with the IAEA (June 1982) and the Protocol Addition to Safeguards (March, 2001) and the Comprehensive Test Ban Treaty (CTBT-October, 1996). Bangladesh is also a signatory to the Convention of Early Notification of Nuclear Accident (1986), the Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency (1986) and the Convention of Nuclear Safety (1986).

Why didn’t Bangladesh go nuclear? It appears that in case of the Democratic People’s Republic of Korea – an impoverished communist country – the nuclear deterrent was working. Iraq and Kosovo were occupied, as Iraq and Serbia had no nuclear weapons. Iran and Syria are under constant threat of the US and Israel, as they do not possess nuclear weapons. Bangladesh would not have been under constant threat and patronisation of India whenever it came to negotiations over serious matters like water sharing and border issues; Bangladesh could have been on an equal standing with India as was the case with Pakistan. But we should recollect that Bangladesh gained independence with the active support of India. We thought that we would be treated as a friend. In fact, the politicians, even the general public, were apathetic to have even a reasonable defence force. Current world order has changed.

However, under the changed circumstances Bangladesh cannot revert her decision of peaceful application of nuclear energy for defence purposes. Most importantly, because Bangladesh will face tremendous economic and political pressure from outside that cannot be resisted by our fragile economy and weak political standing in the world stage. Under the above circumstances, it is not logical to think about the development of nuclear deterrence, rather we should think to develop our higher education particularly in science and technology in order to devote its knowledge to peaceful application of nuclear energy.

2.7 RELIABILITY OF WMD AND CONCERNS OF BANGLADESH

Not only Bangladesh, all the peace loving people of the world are also much worried about the nuclear race between India and Pakistan because they are not only engaged in hostilities and skirmishes but
also actually went to war. It is the most dangerous region of the world where hostilities could erupt into nuclear war. While half a billion of their people are languishing in extreme poverty, their leaders are engaged in billions of dollars spending in this most unfortunate deadly nuclear race. It is a race nobody can win; it is a political decision not for the safety and security of the countries but to satisfy the ego of their leaders. Bangladesh is genuinely concerned, as she will be the most affected country in the region, in the aftermath of nuclear adventures of her neighbours. This would become evident when we examine here the reliability of these Weapons of Mass Destruction.  

Both India and Pakistan tested both missiles and warheads in controlled conditions; there is no guarantee that they would work and follow the procedure in combat condition. Andrew Brookes of the International Institute for Strategic Studies has noted that after launch the warhead must survive both separations from the missile and re-entry to the atmosphere above its target. How precise is the technology to guarantee that missile systems will behave as expected? How could one ensure that the warheads are not unloaded on the poor people of Bangladesh or Sri Lanka? One should not forget that one of the most sensitive establishments of India is Kalpakkam near Chennai. Sri Lanka is not far from the spot. We should consider the recent invasion of Iraq and Afghanistan by America and its allies with deadly computer guided remotely controlled precision missiles that failed targets and landed on masses. Death and destruction of people in the event of a nuclear war are enormous. Let us consider what will happen to combating countries. We have the estimate of the death and destruction of Hiroshima and Nagasaki (immediate death in Hiroshima-140,000 and in Nagasaki-70,000 people). An analysis of nuclear war between India and Pakistan, conducted by the US Defence Department and leaked to New York Times, estimated up to 12 million will be killed immediately in a nuclear exchange and as many as another 7 million injure. More would die in the resulting firestorms in cities and even more as a result of disease and starvation. A more limited attack would kill about 3 million and injure 1.5 million, reported by British Magazine New Scientist.

The above reports are based on one key assumption that the bomb would ‘airburst’ at least 600 metres above a city, similar to the American bombs dropped on Hiroshima and Nagasaki. If it would
explode on the ground, the effect would be more devastating. Tons of soil would be sent to the atmosphere and spread radioactive fallout over a wider area. Depending on the air movement the radioactive contamination will spread back to the attacking country, but neighbours would also suffer the contamination due to airburst. The report obtained by the *New York Times* says that nuclear war would immediately overwhelm hospitals across the Middle East and South Asia and would require massive foreign aid and trigger famine across South Asia. The Americans are worried that after such a war, the world would then call on the United States to help the victims and help clean up the resulting physical and radioactive damage.

Some effects have been stated in the above reports, but actual condition for Bangladesh could be much worse. Nobody could ensure the timing of the war. Even in winter there are skirmishes between Pakistan and India on the snow capped and most hostile environment of Siachen Glacier. Airburst at the time of monsoon could bring the fallout very soon to Bangladesh by cloud, rain and water, making us victims of someone else’s misadventure. If the bomb is dropped on Chennai, the same condition will happen to Sri Lanka. Should we not express our concerns to our nuclear neighbours? All our major rivers are flowing from India, Bangladesh thus becoming the downstream country. If any part of North and Northeastern India is bombed, the flowing rivers (in addition to cloud, rain and air) will bring radioactive contaminations with their water and soil. An agrarian country like Bangladesh could not imagine the extent of damage to her crops, water and livestock. Our impoverished country will face immense economic damage.

Some international reports have already given an indication that victims will move into some South Asian countries for treatment, food and shelter. That definitely will include Bangladesh. If some cities near our border are affected, one could imagine the frightened citizens of India moving into Bangladesh for shelter. Even in the case of an anticipated nuclear bomb attack thousands of people will cross over to Bangladesh, like what happened in Bangladesh to the Bengalis in 1971. Such large-scale human disaster will definitely cause serious crisis to our fragile economy. Bangladesh should raise her voice in all regional and international forums dealing with the control and prohibition of nuclear armaments. Disaster to a densely populated country like Bangladesh after an
anticipated nuclear war in the region deserves special consideration by the international community.

On April 26, 1986 one of the Chernobyl reactors exploded, resulting in the release of radioactive contamination to air. Air and cloud carried the contamination and deposited to ground, affecting the soil and crops. As the radioactive contamination entered food chains, the ultimate victims were the consumers, i.e. man and animal. Contaminated food, particularly the dried milk, was moving to West Europe from East Europe. Such products entered international trade and even reached the coast of Bangladesh. A compulsory testing of all foods, particularly milk from East Europe, was mandatory before entry into the country. The radioactive levels were much above the normal limit. Preventive measures were taken by Bangladesh and BAEC collected suspected samples, tested and given certificate for trade. Food trade with the nuclear neighbours will be seriously affected in case of nuclear explosions in India and Pakistan. Would it be possible to test all the food and agricultural materials coming from India? We should consider our porous border. Bangladesh’s food trade, such as frozen food (fish and fishery products) and fresh food and vegetable, will be seriously affected. Importers would find it difficult to differentiate between our food and those coming from India. It can be expected that there would be a general ban on our food and agricultural products from the region. These are the real problems government, traders and general people of Bangladesh will face.

Our consumers are already facing the problem of quality control measures in our marketed foods due to the Government’s inadequate quality control laboratories and regulatory enforcement. Our export products are following international code of practices both in food content and hygiene. In the international market, our frozen food industries have come a long way to gain the confidence of importing countries and have developed a billion dollars industry. This will be totally devastated, as food is a very sensitive issue to the consumers of rich countries. Effects of nuclear war between our neighbours on our people and economy will be beyond imagination. How a poor country like ours could remain silent when the nuclear arsenals of the neighbours are being enriched? Bangladesh should voice her concern at the regional and international levels.

The above facts are given in order to illustrate a worst-case scenario. Although Lahore and Agra Summits between India and
Pakistan at the highest levels have given some hope for restraints and procedure for risk reduction factors and building CBMs, critics do not believe that the above will work. In the Cold War period it worked between the US and the Soviet Union. Both the countries were separated by thousands of miles. There was enough time of communication in emergencies. For India and Pakistan, being adjacent neighbouring countries, even minutes are too long as the nuclear weapons travel very fast. In the conventional forces India is far superior to Pakistan. It is logical to think that Pakistan will be tempted to use its nuclear force, instead of waiting for facing up to the superior defence force of the enemy. Information given on the delivery systems of both the countries clearly shows that, in case of wrong signal and push of the button, nuclear weapons can be made to travel to any part of the subcontinent and beyond.

The most serious concern will be the DND of India. If it is approved by her parliament, being a signatory to NPT and CTBT Bangladesh will have no relief from its nuclear neighbour. This is the worst part of the DND that most of the nuclear powers have given guarantees that they would not use nuclear weapons against non-nuclear state. It is one of the reasons many countries, which had the capability to become nuclear, had abandoned their programmes and became NPT signatories in the late 1990s such as Brazil, Argentina, Turkmenistan, Kyrgyzstan, Ukraine, and Belarus. In fact, South Africa and Kazakhstan had nuclear weapons that were destroyed and they became signatories to NPT. Currently, the defiant states left are India, Israel and Pakistan. In fact, all three are nuclear. Considering the fact that Bangladesh has a programme for peaceful application, it would remain a target. She will be under the threat of India as per the DND, because if a non-nuclear-country is aligned to a nuclear state, it forfeits the guarantee. Bangladesh has very friendly relations with China and several other nuclear powers. It could be taken as a pretext in case India wants to attack Bangladesh. It has been mentioned that China guarantees even Japan, that has a special defence pact with USA, for no use. It is the appropriate time that conscientious citizens of South Asia rise against nuclearisation to keep our region a zone of peace. Indian Scientists Against Nuclear Weapons (ISANW) commented that India was no longer considered a soft state. In the new world order the safety and security of the small states will depend on the mercy of their powerful neighbours. Here, I give the example of the statement of Foreign Minister
of India for pre-emptive strikes against Pakistan and America’s caution for restraint. The statement generated renewed tensions between New Delhi and Islamabad. The great concern for Bangladesh is that such open statements by the top leaders of both the countries should not lead to a nuclear nightmare in the subcontinent.

2.8 ROLE OF BANGLADESH IN THE REGION

As stated, Bangladesh is a signatory to NPT and CTBT. She is committed to a nuclear free world. She has a significant role to play in international forums, particularly in the activities organised by the IAEA. Bangladesh is not only contributing to UN peacekeeping efforts but also to the inspection services of the IAEA. Almost in all disciplines of nuclear science Bangladesh has trained manpower. Therefore, Bangladesh should raise her informed concern in the region and beyond. It is understood that our influence on our big neighbours is insignificant, but it does not mean we should remain inactive. Bangladesh should continue her activities at two levels – in regional and international forums by the government and by private professional and civil organisations and NGOs with their counterparts at the regional and international levels.

Reactions to the tests in the P-5, the UN Security Council, and the Group of Eight advanced industrial nations (G-8) converged on common themes, which focussed on averting a nuclear race in the subcontinent and protecting the non-proliferation regime. In addition to condemning the tests, their responses included: no further testing, adherence to CTBT, non-deployment of nuclear weapons and nuclear capable ballistic missiles, support for a fissile production ban, and a moratorium on production while a treaty was being negotiated, tightening export controls over materials, equipment and technology that could contribute to the development of WMD or missiles capable of delivering WMD, exercising restraint in the development of ballistic missiles capable of delivering nuclear weapons and taking political steps to address and resolve long-standing differences that could lead to military hostilities between two states. Bangladesh should reiterate its support in these UNSC resolutions and for the interest of the small states of South Asia she should lend her political support for speedy implementation of the above resolutions.

Bangladesh should play a role in promoting Confidence-Building Measures (CBMs) between India and Pakistan. CBMs are useful and
they could lead the feuding parties in the right direction. At least potentially they promote dialogue, desensitise military balances, enhances mutual understanding and dampen misperceptions and facilitate communications. India and Pakistan have taken some significant steps in this direction, like the Lahore Declaration in 1999 which contains impressive roster of CBMs such as joint consultation on military doctrine, pre-notification of missile tests, notification in the event of accidental or unauthorised launch, an agreement in sea accidents, the creation of consultative mechanisms to audit implementation of CBMs, upgrading the links between the two governments and conducting bilateral consultations on multilateral arms control issues. These are excellent points to make a beginning of the CBMs. The Kashmir issue results in violence from time to time and, following a change in Pakistan government, the Lahore Declaration received a blow. India and China have some CBMs that are working. This experience could be an encouraging example.

Other regional measures, such as promotion of conventional arms control in South Asia, seeking an agreement on no first use, seeking a non-use of force agreement and promotion in energy cooperation, should be facilitated in the region. In future SAARC forums CBMs could also be placed. Agreements on NPT and CTBT might not be acceptable to India. Here the influence of Super powers is needed. If India signs these agreements it is expected Pakistan would do the same. Although Fissile Material Cutoff Treaty (FMC) is being negotiated it should be encouraged that Pakistan and India sign it.\textsuperscript{37} Easing tension could be further minimised if the governments of both the countries allow movement of people more freely. Even among SAARC countries legal movements of citizens are much restricted. Discussion on these aspects needs to be initiated by our country with other member states of SAARC. Unfortunately, SAARC has been made ineffective due to conflicts between two of its larger members. Bangladesh should work together with the rest of the SAARC member states to defuse tension for the future development of the region.

NGOs in all these countries are very active in defusing the tension. The exchange of information and holding of seminars, workshops, meetings, etc. should provide the forum for exchange of ideas. It is their obligations to raise their voices and ventilate their concerns for the welfare of the common people of their countries. They have no political or other inherent interest except to look after the just causes of
the people. They should raise their voice together in organising peace movements, in writing popular articles in newspapers and producing leaflets for the consumption of general population. Through their activities they should influence the public in favour of disarmament in the region. Politicians need votes. One day they have to listen to the voices of the people. Due to the thawing of relations after the conciliatory statements by President Musharraf and Prime Minister Vajpayee in June-July 2003, MPs, politicians, mediapersons, social leaders and NGO organisations visited both the countries. It is very heartening to read in the newspapers how the guests are warmly received by the people on both sides of the border, whenever such a visit takes place. The South Asia Free Media Association (SAFMA) in Islamabad arranged a dialogue in August 2003 attended by 60 Indian delegates across different sections of the society including MPs. The people of Pakistan in Lahore, Karachi and Islamabad, irrespective of political, cultural and religious lines, warmly received them. It is an indication that people across the borders have great feeling for each other and would like to live in peace. Is it the politicians, bureaucrats and their mentors who create the tensions?

Like NGOs, civil associations and societies, such as cultural and scientific ones, should also be very active in exchanging information and visits whenever an opportunity occurs. The media is playing an important role in defusing tension. NGOs like SAFMA should form a strong forum to promote exchange of media information. Common people on both sides of the border do not like war, because they become the victims of warfare. In addition, spending huge amount of money in arms race takes a large portion of the national budget that could have been used for the improvement of their standard of living. Our people should also be informed about it and mobilise resistance and protest against such self-destructive measures of the leaders of our neighbours that could engulf the whole region in uncertainty, chaos and tension. The peoples of South Asia like to live a life in peace and harmony, not in conflicts with their own brothers across the border as we all have the same language, culture and heritage. Mass upsurge worldwide against US invasion in Iraq set an example that people did not like the illegal invasion and aggression.

Are the weapon systems reliable? This is a very genuine question that has already been examined. None of these countries can answer satisfactorily. Considering very limited experience in the technology,
even experts feel very sceptic about their reliability. I have already stated about the smart and precision bombs of America and the failure of some of those to hit the targets. Let us consider what happened after the Chernobyl accident. The atmospheric contamination has been mentioned. Death was limited but other emergency measures, such as people around 30 km radius of the reactor were evacuated. Soil was constantly monitored for radiation contamination. An International Chernobyl Project was established under the aegis of IAEA. It was reported that evacuation was a huge task and to provide them food was another great problem. Hundreds of thousands of people suffered psychological trauma. Compared to atomic explosion, the after effects of Chernobyl were rather little. Simply by an accident if a bomb exploded over a part of Bangladesh it would be a catastrophe. If explosion takes place in the air the effect will be different from the one on the soil contaminating the land and making the soil unproductive with contaminated soil for years to come. An estimate has been given above on casualty. With these effects, can a country like Bangladesh or Sri Lanka afford to mobilise their resources to face such unprecedented death and destruction? Who is going to come to help? The small states like ours will be crying in wilderness.

The great powers will play power politics for their advantages to exploit the situation. Some UN and international NGOs will come with some insufficient aid. But it is the affected country that will bear the brunt. Before it is too late, should we not make noises against such possible tragedies in appropriate forums and advocate for de-escalation? A pressure group has to be developed with our civil organisations and NGOs against nuclearisation of South Asia. They should raise their voice in concert with similar organisations in India and Pakistan to defuse tension between these countries and achieve the objective of peaceful co-existence. Therefore, the small states must act before it is too late. The world has designated South Asia as the most dangerous place because of the acquisition of nuclear weapons by the two arch-rivals, in view of their history of wars.

The signatories to the NPT and CTBT should initiate a movement to attract the attention of the big N5 and seek their protection in case of an attack from a nuclear state. Although knowing very well how reliable the NATO powers and Russia would be considering their doctrines and recent behaviour of some of them, it would be logical on their part to come forward for checking further proliferation of nuclear
weapons. For the good of the mother earth and for the good of our coming generations, Bangladesh on behalf of the Least Developed Countries (LDCs) should urge the big N5 for restraint in their behaviours and honestly and earnestly act to implement the recommendations of UNSC and G8 adopted following the nuclear explosions by India and Pakistan. All the member states of the UN, with the exception of the US but including its partners of the Iraq invasion, believe that for world peace the belligerents should come to the UN for conflict resolution. The unilateral decision taken by the US to invade Iraq, not only sidetracking but also downgrading the world forum, is a serious violation of the world order. Why then it comes to the UN and requests the world body to assist it in establishing peace in troubled Iraq when the mess has been created by it? Bangladesh, as spokesman of the LDCs in world forums like on matters of interest to the group in the World Trade Organisation, should play a leading role in strengthening the hand of the UN.

2.9 NUCLEAR WEAPONS FREE SOUTH ASIA

It is the expectation of every peace loving person of South Asia that our subcontinent should be nuclear weapons free and Bangladesh can definitely play a role because:

- If India and Pakistan go for nuclear war, the neighbouring countries particularly Bangladesh in the region will be seriously affected.
- Bangladesh being a signatory to the NPT and CTBT needs to take a proactive role in defusing tension in neighbouring states and work for a nuclear free South Asia.
- Bangladesh's experience over 50 years in nuclear science and technology puts her in a unique position among the non-nuclear states of South Asia to play a central role in defusing tensions.
- Bangladesh should cooperate and exchange information on this subject and if required provide cooperation and assistance to prepare an inventory of capabilities and preparedness of neighbouring non-nuclear countries, should a disaster happen. International influence can also be exerted to restrain India and Pakistan from developing missiles.

India thinks that Pakistan is not committed to restraints. But the Lahore Declaration lays out 'no-first-use'. But by all means it cannot be
expected to happen in case of warfare. Anti-nuke movement does not believe in any doctrine. There should be a total ban. It is utopian to believe that India and Pakistan will roll back their nuclear programmes after spending billions of dollars of taxpayers' money. India stated in its DND that it would continue its efforts to achieve a nuclear weapons free world. If it is so, then why does India not take the lead and show the world what it means and sign the NPT and CTBT. Considering its size, population, advancement in science and technology and defence forces, it is established that it is a regional power. If India signs the above agreements Pakistan could be pressurised by the N5 to do the same. Therefore, the only option of the welfare of the people of the region is a total ban on nuclearisation.

South Asia should follow its neighbouring regions for the establishment of Nuclear Weapons Free Zone. ASEAN had signed a treaty on Nuclear Weapon Free Zone in Southeast Asia in 1995; it came into effect in 1997. However, due to their vested interests in the region, the five nuclear states did not accept the treaty. However, after cessation of the French testing in the South Pacific, they established on their own a separate Nuclear Free South Hemisphere Zone. Africa is also a nuclear free zone. A similar nuclear free zone had been established in Central Asia by Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan through signing a treaty in Almaty in 1997. It has been strongly supported by Russia and China, the two neighbouring nuclear states. The UN passed a resolution establishing a nuclear free zone in Central Asia in 1997. The resolution requested the Secretary General to provide assistance (within existing resources) to Central Asian countries for the preparation of the form and elements of an agreement for the establishment of nuclear weapon free zone in Central Asia. It may be stated that Kazakhstan was the only country in the region that inherited nuclear weapons from the former USSR.

People of South Asia can only live in peace if our neighbours control their expensive race of weaponisation. South Asia Partnership (SAP) is an established forum participated by organisations from India, Pakistan Sri Lanka and Bangladesh. I should recommend to civil organisations to undertake initiative in formulating documents on Nuclear Weapon Free South Asia and start pressing for acceptance by their governments.
The common people of South Asia have no particular apathy for each other. They would like to see that the major issue between the two countries – the Kashmir imbroglio – be resolved through dialogue not through force or indirect pressure. Numerous bilateral efforts, including CBMs and Nuclear Risk Reduction Measures (NRRMs) agreed upon by former Prime Minister Vajpayee and President Musharraf in Agra, need to be materialised in true spirit of cohabitation. This agreement had reached an understanding for taking NRRMs and creating a consultative mechanism, along with periodically reviewing the CBMs. An agreement establishing nuclear risk resolution centres may be promptly negotiated and established even before resolving the Kashmir conflict, which might take considerable time due to its own dynamics and complexity. Positive measures taken to sustain dialogue would form eventual basis for building trust between the two governments and help defuse tension in Kashmir. It is naïve to believe that India will bring Pakistan to her knees by way of the former’s conventional and nuclear superiority, nor can the latter solve the Kashmir conflict through indirect measures. It is a game of the politicians, bureaucrats, military and their cronies to satisfy their evil greed. People should be made to understand the objectives of the power games of their rulers at the expense of their miseries. It is the obligation of the conscientious citizens of the subcontinent to work hard to achieve the establishment of Nuclear Weapon Free South Asia for peaceful co-existence and a happy future of our coming generations.

2.10 CONCLUSIONS AND RECOMMENDATIONS

When about 400 million people of the region are suffering from extreme poverty, it is an immoral and tragic act that the region has been nuclearised. The amount of money spent in conventional weaponry is beyond the economy of India and Pakistan; as much as US$100 billion in nuclear weapons and delivery system should put tremendous pressure on the economy of both the countries. This wasteful path has been taken to meet the growing ego, greatness and superiority in the regional power game by the politicians, bureaucrats and technocrats of these countries. It appears that Indian achievement in science and technology, instead of using it for mitigating poverty and giving a decent life to her people, has gone one step further in
investing the hard earned money in becoming a nuclear weapon state. A great democracy established along the spiritual, secular and non-violent path of Gandhi has taken the path of total hegemony and destruction by the present leaders. In the case of Pakistan, the country is mostly run by the covert or overt military dictatorship. It is very unfortunate that having a smaller economy than her adversarial neighbour she has taken the path of mass destruction. Billions of dollars are spent in development of nuclear weapons and their delivery systems. Should the smaller states of the subcontinent watch these developments as passers-by? We should make our voice heard as loud as possible to say "NO", because, in case of a nuclear conflict, none of us can remain unaffected.

It is a false notion that nuclearisation gives an edge over the adversary. Experts feel that there was no use for India to become nuclear, as her strength over the neighbours in conventional war already gives her an edge. Pakistan’s nuclear programme has remained covert and she would have no chance of exploding nuclear bombs. She is now in a position to go for the refinement of her nuclear weapon system. She has gone ahead with the development and, having successfully tested her missiles system, she could boast of being a nuclear state along with India. It is no way a political gain for India. Another important point India should have considered, if Pakistan had exploded a bomb tremendous economic ban would have been imposed on her. The already declining economy would have been badly affected. Following explosion she had got away with it, because it was her security, which was considered to be of paramount interest to her. Nuclear armaments make up for Pakistan’s inferiority in conventional weapon systems.

Some Indian writers, whether in favour of the bomb or of the anti-nuclear lobby, suggest that India should be given a permanent seat on the UNSC. But current geopolitics might not be in favour of it. More than one-fourth of her population languishing under extreme poverty, per capita income, overall development and the current mentality of the politicians make India not even near middle-income group country. She still remains a developing country at the lower end. Maybe India has become a lucrative market of the industrialised countries like the US with her 250 million who can afford a modern living. A country existing with thousands of years of caste system, the
current religious intolerance, conflicts in power sharing between states
and Delhi and demand by some tribal areas for self-determination
make this great country into an uneasy state. Is it not the central
administration's responsibility to address these problems in spite of
spending billions in defence that the country cannot afford? One day
the policy is bound to boomerang. It is the responsibility of civil
societies and NGOs of India to raise their voices against this wasteful
path. And our role should be working in cooperation with these peace-
loving organisations. There are a large number of NGO forums such as
South Asia Partnership (SAP), anti-nuke professional organisations
such as Indian Scientists Against Nuclear Weapons, Journalists
Against Nuclear Weapons, Doctors Against Nuclear Weapons, etc.
They are trying to expose the damage that could be caused due to
nuclear explosion, such as taking measures against it, in case of
nuclear warfare or dropping of bombs due to lack of precision in
missile delivery system.

A press release by the Indian Doctors for Peace and Development
states that the Army Medical Corps managing disastrous effects of
these weapons is not scientifically viable. Various studies have
shown that there is no remedy to the aftermath of nuclear weapons.
There should be no remedy after explosion to population or to the soil,
water and the environment. Even in situations like Hiroshima and
Nagasaki, when the destructive power used was smaller than the
present day ones, it was difficult to manage for even the medical
professionals were hesitant to go there. Nuclear weapons are not
ordinary weapons. They cause immediate and delayed effects in the
form of blast, heat, light and radiation. No one can offer a remedy for
nuclear weapons. Only remedy is to prevent making them. Even Anti-
Nuke doctors assert that, when the governments failed to take
appropriate measures in natural and man-made disasters like Gujarat
earthquake, the Orissa Cyclone or the Bhopal accident, innumerable
deaths occurring due to starvation, malnutrition, malaria, cholera,
tuberculosis, how can they address the nuclear disaster when these
biological and natural disasters are not properly attended to. Therefore,
they urged the health professionals from everywhere to stand for
complete elimination of Weapons of Mass Destruction. Expenses required
to build safe havens (bomb shelters) for some people are beyond the
reach of the developing countries; in fact they are discriminatory.
We the citizens of small states should work in concert with others of the region and raise the issue at every opportune moment - at the bilateral and regional levels. India is not only the largest democracy of the world but also the largest and the mightiest in the subcontinent. In the present-day world, leadership cannot be earned by force but through diplomacy, cooperation and coexistence. However, the recent invasion of Iraq by the US, the UK and their few allies has shattered this notion, exposing the small states to the mercy of their big neighbours, and set an evil design and dangerous example of arrogance defying the UN system and opinion of the people of the world. Our leaders in the subcontinent should take the path of conciliation rather than the path of immolation and demolition. The smaller neighbours are indeed much worried and in despair. Bangladesh has some irritants with India that do not put her in a position of a mediator between India and Pakistan. However, it is a matter great urgency that India and Pakistan should be persuaded to follow the path of peace and coexistence.

Animosity through arms race should be replaced by dialogue and mutual respect for each other. The developed countries do care for the greatness of China - a super power in the making. In spite of her problems with neighbours, through CBMs China is maintaining a policy of coexistence with her neighbours including India and Taiwan. India is reciprocating with China; why not so with her other neighbours. The Lahore Declaration has a roster of CBMs and steps to defuse the tension. Why not both the governments implement them for the greater benefit of the people of the region? Kashmir is the most burning issue in the sub-continent. To India it is a very sensitive issue. Both the governments should realise that it could not be solved by force. It can only add miseries in Kashmir valley where thousands of people are dead due to brutal militants and security forces. The Bangladesh government can facilitate the dialogue through the friends of both the countries and big powers as stated above. At least there should be a status quo and CBMs should take priority over the mutual mistrust and show of force.

The main objective of people is a nuclear free South Asia. I am sure counterparts of these organisations in Bangladesh are also trying to raise their voices against these menaces. It is a responsibility of citizens' organisations, which work for the welfare of the people without hidden motives and should come forward and make strong alliance
with other regional organisations, to raise a voice someday so loud that their governments will have to listen to it. I think it is the sacred responsibility of our professional organisations to take the lead and disseminate information on the disastrous aftermath of a nuclear explosion. Most of the citizens of the world are in favour of peace, not war, as demonstrated after the Iraq invasion.

Private welfare citizens’ bodies are independent in their actions. They are not bound by diplomatic niceties. They can immediately approach both the governments with the concerns of the people of Bangladesh about the aftermath of a nuclear war. We are poor enough; further pressure to our economy is simply not acceptable. We want to keep our water, soil and air free from any nuclear contamination. We are committed to peaceful application of nuclear science.

Cooperation between international anti-nuke organisations, such as Green Peace and the like, and similar organisations in South Asia should be established. The media has a great role in this respect. It should publish reports on this subject. If condition demands, daily newspapers should publish special supplements. The organisations should publish brochures, booklets, pamphlets and other information materials for the consumption of the public. The author was associated with R&D, technology transfer, commercial liaisons and information dissemination for almost forty years. Almost ten years were invested for the information dissemination to accept the food irradiation processing by the consumers. Such efforts were a success. All the actions related to public information were taken including seminars, workshops, training involving consumer organisations and the media, symposia, conferences, meetings, production of information materials and videos. Our sincere efforts paid off at last. It was appreciated by the Director General of IAEA – Hans Blix. I believe sincere efforts and patience to face all the eventualities will show the light at the end of the channel. IAEA’s hand for arms control must be strengthened.43

Being an active member of IAEA and a signatory to the agreements for research development, production and use of nuclear material for peaceful application, it is obligatory for Bangladesh that she should continuously hammer to achieve a nuclear free world. She should persuade the friendly countries to follow suit. A worldwide movement is needed to control the existing arms race and achieve a nuclear free world in the future.
This generation is passing through a very critical period of the history of our civilisation. It appears that the mighty powers do not like to listen to the feeble voices of the poor states. Their main objectives are acquiring the natural resources of the poor countries and create a market for their goods both for general consumption and defence purposes. The days of colonialism was over, it is neo-colonialism by the same people coming to countries in the name of human rights abuse, bad governance, absence of democracy etc. Governments of developing countries are in no way able to resist, as there will be arm-twisting through hidden means. If our neighbouring regions can implement Nuclear-Free-Zones for the future of their children why should we not do it?

World opinion is against nuclear proliferation. Bangladesh should raise her voice in regional and international forums, as done in NAM Summit 2003, to influence her neighbours to control their nuclear arsenals and bring them to an agreement not to use those against each other. The following actions from Bangladesh could be recommended:

- Raise her concerns at the bilateral inter-governmental meetings with both the countries.
- Cooperate and mobilise the support of the other small countries of the region for the common goal of achieving a stable and peaceful region;
- A false signal and push of the button could cause havoc to both India and Pakistan as also their neighbours. This is a real threat to the safety and security of the people of Bangladesh and this should guide Bangladesh’s concerned policy.
- Although taking a measure after nuclear explosion is almost impossible and beyond the reach of the economy of a very poor country like Bangladesh, the government through the media should make her citizens aware at an appropriate time concerning the havoc that could be caused by nuclear warfare. The public should not be taken by surprise, as we have the expertise to disseminate the information.
- Big powers should be contacted to exert their pressure on both India and Pakistan (1) to find a peaceful solution to root causes, (2) to develop mutual trust between them, and (3) to make
simultaneous and mutual verification of nuclear installations and disarmament programmes.

- Interact between the conflicting countries for enforcing CBMs, as agreed by their governments in Lahore and Agra meetings.

- Put forward a proposal to reach an agreement to compensate in case of nuclear fallout if a bomb is dropped in our territory during combat or testing.

- Most importantly, Bangladesh should draft a document like the ASEAN and Central Asian nations for a nuclear free zone in South Asia. Initially, we should reach agreement with the other members of SAARC and then take all actions so that the proposal finds acceptance of India and Pakistan.

- One important action is to ease the movement of people between the SAARC countries for trade, tourism and private visits. Bangladesh should take the initiative in granting visas like Sri Lanka and Nepal for the citizens of SAARC countries.

- Both India and Pakistan should commit unconditionally that they would not use nuclear weapons against their non-nuclear neighbours.

In fine, after the Iraq invasion, the world order, so much cherished by the people of the world for 50 years, is not going to be the same. It appears the nuclear deterrent is working for North Korea. The countries that abandoned their nuclear programmes for defence and signed the CTBT and NPT will be encouraged to rejuvenate it covertly or overtly. Therefore, the existing nuclear powers should get the message that their behaviour influences the international perceptions of legitimacy, importance and utility of nuclear weapons. The US, NATO, Russia and China clearly signal to the world that nuclear weapons are legitimate, important and useful. Hypocrisy of the nuclear powers lies in their insistence that nuclear weapons are neither desirable nor useful nor acceptable in the hands of others, while enshrining nuclear weapons at the heart of their own security policies. They show enormous determination to 'disarm the armed' but no will to curb their own. Their hypocritical agenda will encourage more countries developing WMD covertly making our planet a more dangerous place to live in. The only way to contain this mad race is to continue global
mass outrage till the politicians and bureaucrats of nuclear states are silenced in their misadventures. The DND of India is not going to sanctify nuclear war.\textsuperscript{44}

The people of Bangladesh are very happy in spite of our economic hardship. We can smile when the natural disaster like flood inundates our land and we receive praise from the international media. But our people cannot face a man-made havoc. Our geopolitical location, experience in nuclear science and international commitment demand that we try to act regionally and internationally to facilitate the control of the nuclear weapon race in South Asia to enhance our safety and security.

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