# Pakistan And The Deep Cuts Regime

Pervez Hoodbhoy
Physics Department
Quaid-e-Azam University
Islamabad 45320, Pakistan.

Pakistan lies close to the bottom of the nuclear "food chain". In all probability, therefore, the impact of changes in the global nuclear environment upon the Pakistani nuclear program will be felt largely via the effects that these will have upon its larger neighbour and adversary, India. However, one can expect some direct links as well. It is interesting to speculate on future Pakistan-India nuclear scenarios should the five nuclear weapon states move towards making deep cuts in their existing arsenals in the manner detailed in this volume.

Evidence can easily be adduced to the contention that Pakistan's acquisition of nuclear weapons has been solely driven by the desire to counter India's nuclear and conventional might. For example, in a poll conducted in 1996 by the Kroc Institute[1], every single respondent who supported the Bomb saw the reason as being fairly and squarely India. Contrary to popular belief in the West, Islamic solidarity was not stated to be a motive. The principal motivations, ordered according to their importance, for Pakistan's nuclear weapons program appear to be based upon:

1. The assumption that relations between the two countries will always be hostile, and a fear that, as in 1971, India's massive conventional military might will succeed in dismembering Pakistan.
2. The desire to provide a nuclear shield which would permit Pakistan to maintain its support to Kashmiri militants, while protecting it from attack by India. Although this is not officially acknowledged as a motive, there is no doubt that this is extremely important in strategic planning.
3. The obvious fear of India's nuclear weapons program, which came into view in 1974.
4. The nationalistic fervour which nuclear weapons provide. This is necessary to bolster national morale which is sagging on account of the Pakistani state's failure to fulfil its basic obligations, and provide adequate health, education, and means of justice, to the majority of its citizens.

While pursuing the nuclear program on the one hand, civil and military leaders have also been aware of the need to show flexibility before the international community. Therefore, at the level of diplomacy, Pakistan has sought negotiations and made several attempts to bring India to the nuclear bargaining table through various initiatives. These include proposals for bilateral nuclear talks, a five-nation conference, and a South Asian Nuclear Weapon Free Zone (NWFZ). Proposed by Pakistan to the General Assembly, the NWFZ concept has been repeatedly endorsed. The most recent vote was on 12 December 1994 when all but 3 nations

[1] See the forthcoming volume by Samina Ahmed and David Cortright, to be published by the Fourth Freedom Foundation in 1997.

(India, Bhutan, Mauritius) out of 157 voted in its favour. The Indian position is that NWFZs are “illusory” and promoters of the status quo, and that India is prepared to work for a nuclear free world instead.

Pakistan’s various offers for talks are usually dismissed by Indian commentators as being insincere, and said to be merely a diplomatic stick with which it seeks to beat India. Pakistan’s statement that it will sign the NPT if India agrees to do the same is also claimed to belong to this category since it knows that India will not sign the NPT, and therefore such declarations carry little real risk. Of course, one cannot fairly comment with certitude on abstract notions of sincerity. However, the significant point is that India has not made any attempt to call Pakistan’s bluff. The reason is fairly obvious; India now perceives itself as the emerging regional giant of South Asia. With the maturation of the Prithvi missile program, and the first successful launch of the Agni missile in 1989, India joined an exclusive club hitherto dominated by the world's five technological and military giants -- the US, USSR, France, China, and Britain. India's armaments production industry is the largest in the Third World in terms of product diversity, research and development, and value and volume of production. It has matured since 1970 into a producer of diverse equipment and weapons especially aircraft and ships, and now intermediate range ballistic missiles.

In pondering the world’s nuclear future, it will be necessary to keep in mind that India’s fierce, and quite newly found, nuclear nationalism will not respond readily to global disarmament measures -- even if the cuts are as deep and wide as can be realistically hoped for. Indian attitudes have undergone a profound change over the decades. For example, India, which had supported a test ban as far back as 1952, now finds much fault with the CTBT and has become a hold-out country. During the protracted and painful negotiations in 1996, India raised numerous technical objections to the CTBT and, most importantly, insisted on a time-bound framework for global nuclear disarmament, a position that drew wide condemnation for it as a treaty-killer. The rhetoric of numerous Indian leaders and commentators is that they will accept nothing short of parity with the NWS because to do otherwise would be to accept “nuclear colonialism”. Nevertheless, there does exist a realization that a global move towards nuclear arms reductions cannot leave India untouched because, through trade and aid, it is well integrated into the global economy. One may therefore reasonably speculate on, or perhaps demand, the direction in which India moves following an agreement between the 5 NWS to implement measures such as those proposed by the Deep Cuts Group. This will be discussed at some length later.

Pakistan’s nuclear stance will be largely reactive to India’s -- should India make significant nuclear concessions, such as agree to the NPT or CTBT or some regional denuclearization measure, Pakistan is likely to respond in kind. However, even if there is no significant change in the Indian nuclear posture, Pakistan will feel the impact of deep global cuts quite directly because such cuts will inevitably lead to a changed international environment much more hostile to nuclear proliferant states. On account of its external economic, political, and military dependencies, Pakistan is intrinsically more susceptible to external pressures than India. In fact, there are reasons to believe that its economic and technological weakness will impose increasingly more stringent, perhaps crippling, constraints on the growth of its defense capabilities. It is therefore likely that, in years to come, Pakistan’s

nuclear program will cap itself even if the country's political or military forces wish it to be otherwise. Two factors virtually dictate that this be so.

First, over the years the increase in both debt-servicing (44% of the total budget) and defense spending (36%) has meant that a mere 5% of the total annual spending is left over for all social, economic, and community services[2] (the remainder goes largely into administration and various subsidies). While education and health care of reasonable quality are still available to the tiny minority which can pay for it, public educational and health institutions are barely functional. The population of 130 million has less than 40 million who are literate, newspaper circulation is less than one for 70 persons, clean drinking water is unavailable to the majority of the populace, and on the Human Development Index (HDI) Pakistan ranks 134 out of 184 countries[3]. It is clear that the Pakistani state, at the present time, is spending close to every penny that it possibly can on defense. Further squeezing this, or cutting back on subsidies or administrative expenditures, may yet yield another few percent increase for defense but at the cost of severe social disruption. Pakistan is under continuous pressure for debt payments from the International Monetary Fund and the World Bank, and these organizations are pressuring Pakistan to scale back defense spending. Although presently negotiated loans have not been made conditional to specified reductions, it is quite possible that future loans will be subject to strict terms.

Secondly, five decades of high defense spending have sharply reduced Pakistan's ability to defend itself by draining away resources from a reservoir which is the source of strength of every modern country -- its educational system and a pool of highly skilled people. Today, the poor quality of scientific and technical education in Pakistan, and hence the generally poor quality of scientists and engineers employed in national technical institutions, place fundamental limitations on Pakistan's efforts for a high-technology based defense. The indications are that higher education, particularly in the sciences, is in a fast downward spiral. Pakistan's weakness in technological infrastructure and manpower development has no short-term solutions. While Pakistan, like India, is capable of making nuclear weapons, these would have to be based on an imported (Chinese) design otherwise they would be crude in design and manufacture, of rather large size, and uncertain reliability. In any case, the numbers are likely to be small and explosive yield boosting, miniaturization, PALs, and other sophistications are ruled out. Pakistan's failure to develop the Khalid tank and, more significantly, to successfully match India's Prithvi missile with an indigenously developed missile, the Hatf, are principally due to lack of technical and scientific expertise.

One may therefore surmise that changes in the global security environment, such as those under consideration by the Deep Cuts Group, will inevitably put severe pressure upon Pakistan to respond. Further, given that it is a weakened and weakening power, Pakistan may even welcome the opportunity to at least partially disengage from a race which it is losing. Pakistan is not in a position to match India's development of IRBM technology or contest it in the field of satellite surveillance. These elements will be decisively important for all future military strategies, including those relying on nuclear weapons as a last resort. Thus, while a

[2] Economic Survey of Pakistan, 1996, published by the Ministry of Economic Affairs, Government of Pakistan.
[3] Human Development Report, UNDP, 1993.

full-fledged nuclear race would be bad for both countries, Pakistan would stand to lose far more.

It would be dangerous to assume, however, that Pakistan will bow out of the race; at the present time Pakistan and India are locked into a zero-sum game, and simple knee-jerk actions substitute for planning and strategy. As long as the two countries continue to view each other as hostile aggressors, violent conflict will always be just around the corner. Therefore, only political dialogue and resolution of conflicts through negotiation can assure a peaceful future.

I shall now consider those actions by the five NWS which, in my opinion, would have the greatest positive impact upon the subcontinent's security environment.

**Cutting Conventional Arms Exports**

The five NWS, in addition to their special nuclear status, also have the dubious distinction of being the biggest exporters of conventional weapons. According to the Stockholm Peace Research Institute, between 1990-1994 the aggregate exports of the top six countries, five of them being the NWS, were as in the table below:

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| USA | 62,354 |
| USSR/Russia | 21,912 |
| Germany, FR | 10,536 |
| United Kingdom | 6,557 |
| France | 6,287 |
| China | 5,980 |

Conventional arms exports 1990-1994 in units of US dollars (million). Source: SIPRI Yearbook 1995.

In the same time period, India and Pakistan imported, respectively, $5998 and $3505 million dollars of weapons with the bulk of imports being from the NWS.

The high returns in the export of conventional arms, with profits accruing to the domestic arms industries, makes it a lucrative business. The cost, both in economic terms and lost opportunities for peace, are borne by the consumer. Today South Asia is awash in arms ranging from hand-held weapons and mines to submarines and the most sophisticated fighter aircraft. It would be disingenuous to cook up formulae for peace which concentrate entirely upon reducing or eliminating nuclear weapons from the subcontinent; the fact is that India and Pakistan have already fought 3 wars with conventional weapons imported almost exclusively from the NWS and may well fight a much more destructive war in the future with more of these. Therefore, the Deep Cut strategy must include deep cuts, and eventually total prohibition, in allowable exports of major weapon systems by the industrialized countries. One formula might be to demand that the total volume exported each year be 10% less than the previous year.

**De-Alerting And Warhead Reduction**

With Start II having been ratified by the U.S Senate (but not the Russian Duma yet), the number of deployable warheads has been reduced from over 30,000 to 3500 for each side. However, as argued by the Deep Cuts Study Group, there is plenty of room for further reductions without compromising national security. One notion needing exploration would be to reduce arsenals to 200 warheads each for the US, Russia, China, and Western Europe[4]. Further, nuclear forces could be de-alerted to decrease dangers of mistaken or unauthorized launch. This would involve separating warheads from missiles and bombers, removal of key components, de-targeting, etc.

It would be relatively easy to work out a parallel arrangement on the subcontinent after the NWS have established a transparency regime for their warhead and fissile materials stock. Indeed, one could hope for a consolidation and formalization of the present state of "non-weaponized deterrence". Pressure could be brought to bear upon Israel, India, and Pakistan to put their unsafeguarded fissile materials in predesignated storage facilities which would be continuously monitored for movement of materials by an internationally agreed upon procedure. These countries, however, would retain the right to retrieve the materials upon giving adequate notice. While there are zero chances of this being acceptable at the present moment in time, the change in global nuclear ambience after Deep Cuts could well make this a real possibility.

Perhaps the most urgent task at present is to reduce the threat posed by Indian and Pakistani intermediate range ballistic missiles. India possesses the indigenously manufactured Prithvi, an IRBM. The Prithvi project director, Vijay Kumar Saraswat, was recently quoted as saying "The development program of Prithvi missile is over, and production of the 150km missile has begun"[5]. The report states that missile production started in mid-1996 and 60 (out of the 100 that have been ordered) have already been build. Each missile costs more than $1 million. Indian defence ministry sources are reported as saying that it will be for frontline battle field support and carry a prefragmented warhead for destroying airstrips or a fuel-air explosive warhead. Retired General K.Sundarji, now an influential defence analyst, writes that "The Prithvi though primarily designed and developed for delivering sophisticated advanced conventional munitions can in the case of need be modified to carry a nuclear warhead"[6]. He also writes "The nuclear pits that are to go into the aircraft bomb casing or the missile warhead compartment have to be successfully miniaturised and with only the proverbial 'last wire' yet to be connected by teams of suitably qualified scientists. I expect we are in that state now." Pakistani missile capabilities are much more limited. It has acquired Chinese built M-11's missiles with specifications similar to the Prithvi, but it has no real indigenous capability.

Given the essentially zero warning time of missiles, and the near impossibility of an effective missile defense system, the deployment of IRBMs by the two adversaries is bound to

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[4] "A Program Of De-Alerting and Deep Cuts", Frank von Hippel in the Bulletin of the Atomic Scientists, 1997.

[5] Defence News, March 10-16, 1997

[6] Imperatives of Indian Minimum Nuclear Deterrence, in AGNI - Studies in International Strategic Issues, vol. 2, no. 1., pp17-22, published in New Delhi by the Forum for Strategic and Security Studies.

provoke tensions and induce instability. However, so far there are no credible reports that the Prithvi has been deployed or that the M-11's have been taken out of their crates at the Sargodha airforce base. This state of affairs should be prolonged as much as possible. In the eventuality that the missiles are deployed, an agreement should be aimed for wherein the missiles are kept away from the border and out of range of each other's territory. While the missiles are mobile, a suitable verification agreement could allow the two countries to gain a margin of safety and move away from the razor's edge.

The impact of deep cuts in warhead numbers by the NWS on the subcontinent is more difficult to assess. Effects upon Pakistan would arise from the general hardening of the global environment against proliferant states, but it is difficult to be more specific. In principle India could demand that it be given parity with the NWS and therefore is also entitled to the 200 warhead level. This would mean that India can increase its present arsenal several times over before it reaches the prescribed limit. While Indian hawks are likely to make such demands, in all probability a Deep Cut regime would put tremendous pressure on India to respond by cutting back in some appropriate way. What could that way be? Acceding to a fissile materials cutoff would be the most significant.

**Fissile Materials Cutoff**

Guesstimates exist for the inventories of fissile materials held by India and Pakistan. How good they are is a matter of speculation, but having numbers provides some basis for the formulation of guidelines for a possible cutoff of fissile materials production.

According to the most current estimates[7], Pakistan possesses 210 kg (with an error margin of plus or minus 50 kg) of HEU. This was produced via the centrifuge enrichment process at Kahuta between 1986-1991. Assuming that 25kg of HEU is used per weapon, this puts Pakistan's arsenal at 8-13 Hiroshima size bombs. In 1991 Pakistan, under pressure from the United States, promised not to enrich uranium beyond the 5% limit but refused to allow on-site verification. Therefore, the quantity of feedstock which can be rapidly converted to HEU is not known.

The same source lists India's inventory as well. A steady source of weapon-grade plutonium is provided by its two largest research reactors located at the Bhabha Research Centre in Bombay. Additionally, it has unsafeguarded CANDU power reactors which can provide plutonium of any desired level of purity. India has had the capacity to reprocess plutonium from spent fuel since as far back as 1964, and the Pokhran test of 1974 established that it has acquired adequate knowledge of fission explosives. The estimated inventory of weapon-grade plutonium at the end of 1995 was 330 kg with an error of plus or minus 15 kg. This translates into roughly 60 bombs at 5kg per weapon.

On a possible FMC the present positions are as follows: India has rejected a regional cutoff, but has said that it would agree to a global one provided that civilian stockpiles are exempted. However, since India's weapon grade plutonium is derived partly from the BARC

[7] "Plutonium and Highly Enriched Uranium 1996 -- World Inventories, Capabilities, and Policies", David Albright, Frans Berkhout and William Walker, SIPRI, Oxford University Press, 1997.

complex and partly from reprocessing the waste from its civilian power reactors, this makes it effectively impossible to have a meaningful treaty. Pakistan, on the other hand, agrees with the concept of a FMC but insists that existing stockpiles are taken into account, and on-site verification not be deemed mandatory. The technical difficulty of verifying the former, and the necessity of including the latter for a meaningful treaty, means that Pakistan's support for the FMC treaty would not automatically follow even if India signed such a deal. Rather recently, Pakistani officials have recently also started using an argument that a FMC must be global rather than regional[8].

The present Indian and Pakistani stands must be seen as bargaining positions which could change quite dramatically should there be a cessation of fissile material production by the 5 NWS as the result of a multilateral, but not necessarily global, agreement. There are good reasons for believing so -- at least at the present time, both nations use the veiled threat of nuclear weapons to deter each other. This relies on some diffuse meaning of "nuclear capability"; real numbers are presently **not** the major issue. Therefore one can imagine a situation where India is persuaded to put its power reactor plutonium, and Pakistan its low-enriched uranium, under international safeguards.

**Targeting Changes**

Nuclear strategists have debated the virtues of counterforce, countervalue, and counterpower targeting of nuclear weapons (see, for example, the article by S. Fetter in this book). Sometimes the argument is given that assured destruction of enemy cities requires fewer and less accurate bombs, makes military planners less nervous about losing command and control centres, and hence that countervalue targeting is superior to counterforce targeting as a means of achieving deterrence. However, in the context of the subcontinent, nuclear weapons can be made relatively less destabilizing by an agreement to limit nuclear attacks on counterforce targets only. I shall argue this below.

Since Pakistan is an undeclared nuclear state, it has never enunciated a nuclear doctrine and nuclear targeting has never been publicly discussed. However, it is said to have no more than 8-13 weapons and, because of interception and reliability problems, no more than 2-4 could be reasonably expected to get to the target and explode properly. Hence, the general belief is that, instead of "wasting" these against military formations or installations, Pakistan will go for high value targets -- Delhi, Bombay, and other Indian cities within the range of its delivery aircraft. The Indians are presumably not willing to pay this price, according to the Pakistani calculation, and so an invasion by a more powerful adversary will have been deterred. However, this calculation is based upon a number of untested premises.

If an agreement could be reached between Pakistan and India not to target each others cities while freezing their nuclear stockpiles at the present level, nuclear stability could be enhanced. "Allowed" targets could include military concentrations, dams, non-nuclear power stations, and other targets of high economic value. The Indian temptation to launch a pre-emptive strike in order to save its cities might otherwise become irresistible in a crisis situation. To be sure the actual , or attempted. use of NWs by Pakistan against an Indian city

[8] The News, Islamabad, Nov. 1996.

will be suicidal because of the much larger number of Indian weapons which will then surely be used against Pakistani cities. Therefore such an agreement should be mutually desirable.

There is an example of a nuclear targeting agreement between Pakistan and India which gives encouragement for such a step. The two countries agreed in December 1985 to not attack each others nuclear installations. This is the first, and so far only, nuclear agreement between the two. It entered into force on 1.1.92 and lists of nuclear installations have been exchanged every year since then. Both countries have occasionally accused each other of cheating in the lists, but the agreement has survived[9].

**No First-Use**

If the 5 NWS should agree upon a treaty barring the first-use of nuclear weapons, and agree not to use these against non-nuclear states, it would be highly likely that significant progress on similar lines could be made on the subcontinent as well. A treaty between Pakistan and India to the effect that neither country will initiate the use of nuclear weapons against each other would be an important confidence building measure. No formal negotiations have been carried out, but it is generally believed that India is for this measure while Pakistan is against it. Pakistan's reasoning, following NATO doctrine in relation to the former Warsaw Pact countries, is that its use of NWs would be to protect its territory against invasion by a larger adversary. The implication is that, if necessary, it will use nuclear weapons even if it is attacked by conventional arms.

Should this issue be brought formally to the negotiating table and a positive agreement reached, Pakistan would actually stand to gain much. It makes no sense at all for it to actually use nuclear weapons under any conditions; while a couple of Indian cities may be severely damaged, the Indian response would leave every single Pakistani city in ruins. Hence, to suggest that NWs can defend Pakistan is dangerous folly. On the contrary, Pakistan's agreement to no first-use could lead to a substantial decrease in nuclear tensions and force India towards bilateral nuclear discussions, which it has so far spurned.

**Comprehensive Test Ban Treaty**

The rejection by India of the CTBT casts a pall over hopes that changes of nuclear attitudes globally will bring commensurate changes on the subcontinent. However, in the event that deep cuts in their arsenals are agreed upon by the NWS, it will be difficult for India to adhere to its present position of extreme rigidity. One can also be critical of Pakistan which, by following a simple reactive policy of declaring that it would not sign the CTBT unless India did, failed to take a step which would have brought it considerable diplomatic and political gain while paying little in military or strategic terms. The "entry into force" clause in the draft treaty specifies that the treaty would not come into effect unless all countries with nuclear programs, including India, Israel, and Pakistan, become signatories. Pakistan has no intention of performing a nuclear test because such a step would have extremely serious political and economic consequences. It is even possible that a second

[9] How well such agreements can be expected to hold is anybody's guess, however. The Chief of the Pakistan Air Force, Air Marshal Abbas Khattak, in an interview (The News, Islamabad, 9 April 1997) said "an agreement of no-attack on each other's nuclear installations would not hold good in case of outbreak of war".

Indian nuclear test may not compel Pakistan to test. Therefore, it could easily have signed the treaty unilaterally, knowing that it would not be bound by it until India signed it too. However, given that political parties and governments in Pakistan have been held hostage by the right-wing (which derives immense political capital from propagandizing a unilateral action), it does not seem that this will happen at the moment.

To conclude: the implementation of the Deep Cuts Program by the nuclear weapons states could substantially decrease the intensity of nuclear competition between India and Pakistan. Drastic reductions in the number of warheads held by the five atomic powers, de-alerting of their missiles and bombers, cutting off fissile material production, agreeing to no first-use, forgoing further nuclear testing, and a declaration that non-nuclear states will not be targeted, cannot fail to have a profound impact upon the subcontinent even if the issues seem to be regional. But this is not enough. These same powers must immediately cease, and accept responsibility for, their immensely profitable, and wholly immoral, business of selling conventional weapons with immense destructive capabilities to sworn enemies who have used them thrice in 50 years to make war upon each other.