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**CENTRE FOR ADVANCED STRATEGIC STUDIES**

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**PROCEEDINGS OF SEMINAR  
ON  
CHALLENGES OF COMPREHENSIVE TEST BAN TREATY  
IMPLICATIONS FOR INDIA**

**28TH AUGUST, 1996**

## C O N T E N T S

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Item	Page
Introduction	2
Proceedings of the Seminar	10
Opening Remarks By The Chairman Moderator Jasjit Singh	10
Challenges of CTBT	12
Main Speaker	: C. Raja Mohan
CTBT : Implications for India	27
Main Speaker	: S.K. Singh
Concluding Remarks	: Jasjit Singh 38
Closing Remarks	: R.D. Pradhan 49
Summary of Discussions	50
List of Participants	59

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**SEMINAR****THE CHALLENGE OF THE  
COMPREHENSIVE TEST BAN TREATY  
AND IMPLICATIONS FOR INDIA****28th August, 1996****( Venue : Auditorium, National Film Archives, India )****BACKGROUND PAPER****Introduction**

The Comprehensive Test Ban Treaty (CTBT) was expected to be finalised by 28 Jun 96 in the Committee on Disarmament. The Nuclear Weapon States (NWS) led by the US trumpeted that immediate conclusion of the CTBT is a must, and pressurised India, an undeclared Nuclear Weapon State, outside the NPT to sign the CTBT, and backed up these pressures with veiled threats. Indian response to the CTBT had to be immediate.

**CTBT History**

India had proposed the CTBT in 1954 "Standstill Agreement" as a disarmament measure and also as an environmental measure for stopping atmospheric pollution with radio-active fall out. Since then, the initiative was consistently stonewalled by the Nuclear Weapon States (NWS), namely US, UK, France and the Soviet Union. It had been on the agenda of the Geneva Conference on Disarmament and its predecessors from 1963 onwards, but UK and USA did not permit any negotiations. Even the 1991 attempt to convert the PTBT into CTBT, in the absence of unanimity proved futile. France and China were outside the NPT

and continued to carry out nuclear tests. The Partial Test Ban Treaty (PTBT) eventually drove the tests underground.

## **NWS And CTBT**

During the period 16 Jul 45 to 31 Dec 92, the NWS conducted 1932 nuclear tests, the USA and USSR being the star performers. (USA - 942 and 1303 by other estimates; and USSR - 716) India and Israel conducted one test each. UK and USA considered CTBT detrimental to their security interests because of their perceived absolute needs to maintain nuclear deterrence and the technical credibility of their stockpiles. France had opposed or abstained from UN General Assembly resolutions to ban nuclear testing. China did not concern itself as it joined NPT very recently. The sudden inspiration to promote CTBT, for the NWS came about after 1992, to be made effective after 1996. Under great US pressure unconditional and indefinite extension of NPT was signed on 12 May 95 by 178 members (173 NNWS and 5 NWS). The deemed NW nations, namely India, Israel and Pakistan had kept away. The US Nuclear Proliferation Prevention Act (NNPA) was passed in 1994 and was linked to its Arms Export Control Act.

The Nuclear Test Ban (NTB) Committees' Report became the draft text of the CTBT. The CTBT talks held in Geneva between USSR, UK and the USA were adjourned in 1980. The USA formally withdrew from the talks in 1982. President Bush, on 2 Oct 92 signed an Act with a provision for mandating a permanent ban on all US nuclear tests after 1996 unless another country tested after that date. The Administration was required to submit to Congress a schedule for resumption of talks with Russia and a plan for achieving a multi-lateral comprehensive ban on testing of nuclear weapons by 30 Sep. 96 as per SIPRI

Yearbook of 1993. By 1994, the USA had acquired the technology to carry out computer testing. This became apparent when the US Defence Secretary made an offer of this technology to China if they stopped their actual testing. Dr Henry Kissinger wanted to renegotiate the ABM treaty which has held good because of mutual deterrence factor. The US Administration also introduced a withdrawal clause to be operative after 10 years of the CTBT coming into force. India had suggested that the treaty should be of indefinite duration.

### **Nuclear Tests And Hydronuclear Experiments**

Most of the NWS wanted exemption for sub-critical, hydronuclear experiments (HNE) from CTBT. The US advocated threshold level at 1.8 kg, UK at 40-50 kg, Russia upto 10 tons and France 100-300 tons. JASONS Report concluded that sub-kiloton tests would be of marginal utility in ensuring nuclear stockpile safety. Soon thereafter US in August 1995 declared support for true zero yield CTB. UK and France had earlier dropped their proposal for permissible sub-critical test in the CTBT. Russia too fell in line soon. China wanted peaceful nuclear explosions (PNEs) exempted from CTBT. The US however announced plans to conduct sub-critical tests at Nevada in 1996 and beyond, one in June, one in September and four in 1997.

Despite world wide protests, France in late 1995 conducted a series of six nuclear tests. The French President Jacques Chirac recently stated that these tests had gone off with perfection with warheads on submarines and planes and that the French nuclear deterrent was now credible for 50 years.

China indicated its willingness to CTBT by 1996 and carried out a series of tests. It retained option to conduct peaceful nuclear explosions (PNEs). It had included a provision

to institute restrictive regional arrangements to constrain fissile material production in regions of instability and high proliferation risk - a subjective discretionary element for differentiating regions. China wanted a paragraph urging conclusion of international agreements pledging not to use or threaten to use nuclear weapons against NNWS, not to be the first to use nuclear weapons in any circumstances. This was opposed by the other four NWS.

China has now been offered by the US, the new technologies of computer assisted designing, testing and manufacturing of nuclear weapons. On June 6, as a quid pro quo, China announced its endorsement of the CTBT withdrawing all its earlier reservations. It wants the CTBT to be reviewed after ten years. It conducted a 20-80 kt test on June 8 and declared that it would conduct another by September, 1996. It plans to build up its nuclear arsenal to include SLBMs with Multiple Independently Targettable Recovery Vehicles (MIRV) which will invest it with deterrent capability against the US.

### **Fissile Material Production Control**

In the USA, highly enriched uranium (HEU) production was discontinued 30 years ago due to very heavy inventories, and plutonium production had to be shut down in 1989 on grounds of poor safety standards. USA has 112,200 kg of plutonium and 5,00,000 kg of HEU. Dismantling of START war heads will release 100-200 tons of plutonium and same amount of HEU. The Fissile Material Production Control (FMPC) therefore is only a talking point for the USA to curb and arrest nuclear programme of NWS outside NPT. A fissile material ban (FMPC) does not in any way adversely affect the NWS. In fact it helps them to further strengthen status quo and that is why it is being enthusiastically proposed. The commercial interests of the NWS

are likely to come in the way of concluding the FMPC. For UK and France reprocessing is a commercial venture and they would not give it up. Russia has immense stocks of plutonium and HEU and the interim storage of plutonium from dismantled warheads is unsafe. China has to build up its stock and therefore opposes FMPC.

### **CTBT And Disarmament**

CTBT as originally mooted was a disarmament measure, but over the years the NWS turned it into arms control measure, leading to phenomenal vertical nuclear proliferation and selective horizontal proliferation. Its purpose is to foreclose the nuclear option of the undeclared NWS. During the last 25 years the NPT was violated by the NWS on a massive scale leading to the NWS hegemony on the nuclear option of NNWS. The CTBT is a ploy to freeze an unequal order. The NPT was extended unconditionally for an indefinite period in May, 1995. As far as the 173 NNWS signatories of the NPT extension are concerned, they have surrendered even their right to protest. With the extension of the NPT, legitimatising and acknowledging the superior permanent status of NWS and their implied licence to indulge in selective horizontal proliferation, the CTBT, if concluded may moderate arms control among the NWS. The US Secretary of State, Mr Warren Christopher was in Geneva on 18 Mar 96 to harmonise the positions of five permanent Security Council members on the draft CTBT. The text of the CTBT was formulated in collaboration with other nations by 37 participating members of the Conference on Disarmament in Geneva. Part I deals with measures to redress a situation and to ensure compliance including sanctions.

### **Futile NPT**

The NPT is a futile treaty with no safeguards against NWS breaching the treaty obligations. The nuclear weapons role as a

currency of power in international relations dominates the thinking of the NWS. The NWS have established their hegemony and are determined to exploit it and perpetuate it. In their submissions to the World Court, the Western Powers asserted that they have a right to commit nuclear holocausts. China is the only NWS now which has "No First Use" policy. The US counter proliferation strategy is a deliberate denigration of the NPT. It conducted 217 nuclear tests in atmosphere causing widespread air pollution. Its nuclear strikes were on population centres of Japan. It carried out premeditated nuclear experiments on unwitting citizens to determine the effect on human beings. Thefts in the nuclear materials cycle have been common. 200 pounds of HEU disappeared from Apollo, Pennsylvania. There was a huge discrepancy of 1.5 million tons of plutonium production between figures of DOE and National Resource Defence Council. These provide adequate proof of US nuclear delinquency.

### **India's Options**

Some experts favour signing the CTBT, at best, getting an assurance from NWS to discuss elimination of nuclear weapons. They consider that this would improve India's bargaining strength in many areas. Some want India to ensure that the CTBT is truly comprehensive, non-discriminatory and with no loopholes. The anti-signers group of experts want strengthening of India's nuclear option, if necessary by testing and building up credible weapons capability, declaring itself a nuclear power and then claim privileges of NWS. There are also withdrawalists branding CTBT as non-comprehensive and superfluous after the unconditional and indefinite extension of the NPT and propose giving it the same treatment as given to the NPT. Others argue for blocking the CTBT by exercising veto power, India being one of the 37 member states of the Committee on Disarmament.



Instead of reacting from time to time to the stances of the NWS specially the US, India's nuclear policy should be based on short term as well as long term strategic perceptions and should respond to the challenges in adequate measure. Besides a nuclear Pakistan, the Chinese factor, now making inroads in the Indian Ocean looms large on India's security horizon. Pakistan's access to clandestine nuclear weapons through CIS cannot be ruled out. Strength respects strength and weakness invites contumely and contempt. India therefore should not get into a position of nuclear asymmetry vis a vis Pakistan, and in the long run vis a vis China.

India's 1954 proposal for a non-discriminatory CTBT with universal adherence and intrusive monitoring, and a rigid time bound global elimination commitment still remains valid. India should clearly explain this position of hers in support of the CTBT at every forum and inspite of threats from any quarter quietly continue its nuclear programme, till all the NWS firmly commit themselves to such a CTBT linked with time bound nuclear disarmament.

The CTBT now remains only a test explosion ban treaty and does not cover nuclear weapon simulation technologies which eliminate detectable explosive testing. The NWS are investing heavily in these new technologies. They consider nuclear weapons essential for their security. The US defence secretary and national security adviser have declared that they need nuclear weapons for the next 50 years. India is hemmed in by NWS and undeclared NWS, namely China, and Pakistan. China has been passing on nuclear weapon components and technologies to Pakistan with impunity. The nuclear weapons with the CIS too pose a threat.

UK and China introduced an amendment to the CTBT draft to include the entry-into-force (EIF) clause. The NWS tried their

utmost to make India fall in line. The EIF clause compelled India to block the adoption of the text of the CTBT at the Committee on Disarmament (CD) at Geneva. India's next diplomatic move will have to be to impress upon the international community the implications of any attempt to take the matter to the United Nations General Assembly (UNGA). If the CTBT draft is attempted to be put to vote in the UNGA, objections could be raised on procedural grounds. Further, bypassing the CD would downgrade, even nullify it. Incidentally, UNGA resolutions are recommendatory and not mandatory.

In the last meeting of the CD, Pakistan and Iran raised objections to the CTBT draft and wanted amendments to ban all forms of nuclear testing including through computer simulation. According to media reports of 19 Aug. 96, Pakistan has expressed willingness to the forwarding of the CTBT draft to the UNGA on the condition that it will withdraw support if a deemed NWS (India) conducts a nuclear test. Moscow is now of the view that the CD should take India's sensitiveness into account. Besides ignoring India's genuine national security concerns, the present CTBT draft with its EIF clause assails India's sovereignty. The intensive public debate and ground swell of public opinion compelled the Indian Government to take a firm stand on the subject in the international fora. Dr Shankar Dayal Sharma, the President of India, in his 15th August speech stated that India's national interests were supreme and that it will not be propelled by the agenda of powerful nations. The USA and other NWS may lie low for some time, but they are expected to continue with their machinations and pressures, and bring back their CTBT agenda, perhaps in a slightly modified form in the near future, or soon after the US Presidential elections.

## PROCEEDINGS OF THE SEMINAR

Air Marshal S. Kulkarni, Director, CASS opened the Seminar and welcomed and introduced the distinguished visitors from Delhi. He welcomed all the participants of the Seminar.

The Seminar was chaired and moderated by Air Commodore Jasjit Singh, Director, Institute of Defence Studies and Analyses (IDSA), New Delhi, and ex-officio member of the Governing Council of the Centre. Dr. C. Raja Mohan, strategic columnist of repute and currently the Strategic Affairs Editor of the "Hindu", as the main speaker spoke on "The Challenge of Comprehensive Test Ban Treaty." Shri S.K. Singh, former Foreign Secretary, as the main speaker spoke on "CTBT : Implications for India."

After a brief introduction by the moderator and presentation by the main speakers, the seminar was thrown open for general discussion, which proved animated, lively, thought provoking and useful.

### OPENING REMARKS BY THE CHAIRMAN / MODERATOR

JASJIT SINGH

Mr. Pradhan, Members of the Governing Council, Ladies and Gentlemen. It is indeed a tremendous pleasure for me to be here this morning and to be able to moderate amongst not only friends, but also experts in the fields both in terms of foreign policy as well as in terms of strategic issues. If I may, right in the beginning, take the opportunity to express our gratitude, not only my own but also of Mr. S.K. Singh and Dr. Raja Mohan to the

CASS for giving us the opportunity to travel from Delhi to this place.

We always come across this great problem that everyone believes, and I talk in terms of facts that it is true that the bulk of the discussion and debate, the seminaring goes on in Delhi. We, particularly I myself was very keen, and I think so were my friends and colleagues who are on the table, both on the mat and on the table I should say, are keen that outside Delhi we should also take part in discussion because I think India is not in just Delhi. There is lot more and I think, that makes this meeting this morning even extremely more important than what it otherwise would have been if the same one was held in Delhi.

I do not wish to stand between you and the speakers this morning. The way we have organised this discussion is that Dr.Raja Mohan will be talking about the implications of CTBT, in a variety of forms, what it does mean, what it does contain, because the CTBT is not finished yet. It is now in the process of most likely going to the General Assembly. That itself is the debate and actually how it will move forward. We have taken some steps right now and I think this is going to be a long drawn out affair.

Having spelt out the implications of CTBT, Mr. S.K. Singh has very kindly agreed to talk about what does it mean to us now and in the future and we will then get on to the questions and discussions.

If this is alright ladies and gentlemen, I think we can start off straightway.

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## CHALLENGES OF COMPREHENSIVE TEST BAN TREATY

MAIN SPEAKER : C. RAJA MOHAN

I begin by thanking the CASS for giving me an opportunity to come to this city, very rich in tradition, culture and heritage, which has contributed immensely to the making of history of our country. Coming to the subject, the question of CTBT, much has been stated and it is a great public debate in this country for the last many months,

I would say that one of the most democratic and widest possible debate you have seen, almost every possible view point has been aired in public with considerable passion and vigour. At the end of it I think the country has come to a consensus and the Government at the end did not have any option but to follow the consensus that was emerging from the public debate.

Now I do not want to go into many of the details. You are familiar with it and the background paper that was given by the CASS gives you a large and excellent survey and summary of the broad issues that had come up during the last two years in the negotiations of the treaty and the summary of the treaty. But what I would like to do is really to put across some of the broader contexts in which we would be looking at the CTBT and what all is implied in the long term, and that our own policy which itself has evolved in last two years.

We have begun to see the complexity of the changing world order and the meaning of arms control upon which the CTBT is going to have the greatest implication, how does this changing order affect us, how does it affect our security policies over the long term.

Beginning with the assumption that the CTBT is clearly one of the major exercises in multilateral arms control that has taken place over the years, I think we have to be very clear on what is arms control. I think in India historically in the last 40-50 years we tended to debate the issue of arms control in a more normalised and goodwill phrase that there is disarmament, this must lead to good things in the world in the sense as the heritage of the national movement within the broad parameters on which we thought we were entering into. This moral largely tended to dominate. I think there was a certain innocence at the way we entered into these issues.

The CTBT was important because we were beginning to learn the hard way, but learn. If you look at the history of arms control over the last 50 years, what has it meant? I think arms control has fundamentally two objectives - one is to achieve a particular type of distribution of power among the great powers, that is, by negotiating a particular arms control agreement, you would expect to achieve a particular type of outcome in terms of military political power relations between the great powers, because arms control really matters as far as the great powers went. All the minor countries did not come into this in a really serious way. Second important idea was, use arms control agreement to achieve stability, to balance this kind of military strategic objectives. It was not about peace and goodwill, it was not about achieving Nirvan or something like that, but essentially getting balance, stability stipulated among the great powers. That was one of the fundamental purposes of arms control.

The other important aspect of arms control agreement is that it is not a moral issue, it does not derive from principles of morality, good will and motherhood and those kind of things but essentially it is an extension of the national security doctrines

of the major powers. Arms control is not separate but it is an integral part, an extension of the national security strategies of the great powers in the international system. Once we agree to these two basic points, I think then we must begin to see things slightly in a different way. In any public debate in the last 100 years ever since Napoleon, there has been a tendency to present interests of the great powers as collective universal interest. If you ask the US, they will tell you, this is in the collective good of humanity ; CTBT is the best thing that has happened to the world (and God knows when), since it helps everybody, it is in everybody's interest. Let us do it.

Now, that is the normal way, given the democratic structure in the world today. Every state tries to project its own interest as a collective interest. As far as collective interest is concerned, I think, that, we must not take things for granted. We must see it clearly, and must be able at analytical level to distinguish between what is the interest of one power and what is the interest of the entire international system.

When it comes to arms control in a multilateral context like the CTBT, there is always a problem of harmonising interests of all the major powers, because if you have interest of one power that does not align with those of others then you have a problem. If you historically see through multilateral arms control, there is always this problem. If you go through the multilateral treaty that was signed back in 1963 by Britain, Russia and United States, everybody said, the whole world said, "ending test was a good thing" because it had the kind of health consequences, fall out etc.etc. And you thought everybody would do the same. But two countries did not. One was France, which had just become a nuclear power in 1960. So it saw this agreement as a way of stopping France from testing and from advancing in its individual

nuclear capability. So France said, we do not like this treaty, you might say this is the greatest thing in the world, but we do not see this treaty as the one that serves our national interest. France refused to accept this treaty and continued the atmospheric testing far late into the seventies.

And then you had the Chinese. Don't forget the partial test ban treaty came in 1963 when the Chinese were on the verge of going nuclear. Their first explosion was in November 1964. In 1964 they had to go even more strongly than the French who had decided in 1963 to attack the treaty, in fact to attack this treaty in the hegemonic days of the two super powers. The two Super Powers during the days of their nuclear hegemony colluded to attack this treaty. Anybody who recalls the intra-communist debate in the sixties, would recall how important role the CTBT played in terms of defining Sino-Soviet differences as well as putting across a completely new world view which the Chinese brought into international political discourse.

So you have a situation that the arms control is not an abstract state but it is really an extension of individual national security interest. The treaty subscribed to be drafted on the basis of this understanding that unless there is harmony achieved, unless the interests of all the key powers, who will get affected by the particular treaty, are taken into account, you are not going to have treaties that are credible or reliable over the long term.

The second thing I would say is how was this structure of arms control changed since the end of the cold war. It is an important question to ask ourselves because throughout the cold war the Americans refused to accept the CTBT as a feasible or desirable goal. It is only now, at the end of the cold war, they



said, 'Look, there are some gains to be made from the CTBT and we are going to push it.' The fact that US has changed its position fundamentally after the end of the cold war makes us look at it not from the point of view of CTBT itself, but what is the largest power's arms control agenda of which it is a part.

If you see, in the last five years, of course, almost any single issue, it is the hegemonic power or the dominant power of the international system that fixes the agenda. After the collapse of the Soviet Union, the US really set the agenda in much more stronger terms than it was in the previous decades, whether it is child labour, or CTBT, the human rights or the intellectual property rights, whether it is corruption or collective security. Corruption is now going to be another global issue. US State representative is now going to take upon himself the sole responsibility to force what he calls more transparency in the Government procurements in other countries and in fact they are making it a point. They say, we have cleaned up intellectual piracy and piracy in videos and discs, and now we are going to take up corruption in other countries. Corruption is a trade barrier. From that to collective security, nature of the United Nations, nature of the peace keeping operations, all these broad issues - the agenda has been set by the U.S. There is no question about that. It is not that others are setting agenda and US following it, but US sets the agenda and it is no different in the context of arms control.

To understand the arms control objectives of the US, I think we got to see the larger strategic objectives the US defines for itself, with the end of the cold war. If you recall, the first Military Strategic Guidance Document that Pentagon issued was after the cold war after the end of the Gulf War. It was released in April 1992 issue of New York Times. It had one basic principle,

prevent the rise of new powers. With the collapse of the Soviet Union it was believed that the major threat to military security is gone but the US is not going to let other new power centres to emerge, even their friends, there was a reference to Germany and Japan. There were references to India. So then the idea was clear. The American Century is now really going to be realised. This is the time, now, after the collapse of the Soviet Union, the real opportunity for establishing virtually a perpetual American Century and that was the idea. So the thrust of the American international policy must be aimed at preventing the rise of new powers. It is in this context that arms control acquired the importance that it did with the end of the cold war.

Professor Samuel Huntington has written about this clash of civilised systems recently. He has just a couple of paragraphs on arms control. He talks about what role does arms control have in this new situation. He says, before the end of cold war, arms control was about managing the balance between Russia and United States, ensuring the stability. The nature of arms control in the post cold war period is about preventing the non-western societies from acquiring advanced strategic capability. Fairly simple. I think you do not have to go into too much of mumbo jumbo. Here is a clear summary of what the US is trying to do at the end of the cold war - that you do not let non-western societies with which you are not comfortable, from gaining dramatic advances in strategic capabilities.

It is in this context that non-proliferation became such a central objective of US foreign policy since the end of the cold war and were set a range of issues, i.e. reform of the IAEA, the setting up of various expert control mechanisms, of creation of a whole series of tightening measures, of national and international regulations of technology.

And if we see the membership of all these clubs, it is essentially the Western countries, and the old East lining up with the West, and a few other assorted countries thrown in. But in the division China was not a part of any of these clubs. India was not either. So you have a clear sense that the peril from outside, from the non-Western world remains, and that must be banished and efforts must be made to manage it right from the beginning.

The third important arms control objective, I think, arose out of the Gulf War, the American experience of the Gulf War. What the U.S. did in fact, it analysed the Gulf War, and it looked at the situation. All of you remember the SKUDS flying in and out particularly on Israel. After the war they sat. They analysed the Gulf War. One of the basic questions they asked themselves was, if Saddam Hussain had nuclear weapons on top of SKUDS, what would have been the outcome in the Gulf War. I think one of the basic conclusions of this analysis was that if Saddam Hussain had nuclear weapons on top of SKUDS, there would have been a considerable amount of restraint imposed on the entire operation, the ability to concentrate troops, the ability to bring them from around the world - that you would take six months to bring the troops from around the world, locate them in Saudi Arabia, wait for all the gathering of the staff and then go on and finish off Iraq. That strategy, the way they handled the whole military strategy that would not be possible if these emerging powers in the third world countries had the ability.

In fact until now the American nuclear weapons helped to neutralise the dominant Soviet conventional military power in Central Europe which was the main sector for them. But today it is the nuclear weapons of the emerging powers put on top of missiles that are going to have the power of equalising or constraining its ability to intervene in the third world where there

are vital interests. Definitely today we would want that capability constrained by the spread of missiles and nuclear weapons ability. Today we would want no regional context. The military strategy in regional context is what would be constrained by the spread of nuclear weapons and missiles. Pushing for the whole strategy of non-proliferation since the end of the cold war is not a random thought but it is fairly based on the real calculation of their own interests. So, where does CTBT fit into this larger hegemonic strategy outline ?

If you look back to the outcomes of the treaty, what does the treaty do ? Two three major outcomes, one, it locks all the countries at the current level of nuclear knowledge. This is one of the major justification. John Hollum one of the Directors of Arms Control in United States said that the future generations of Americans should be grateful to us, that is, the Clinton administration, that we managed to lock all nations at the present position of nuclear learning curve, that is, you freeze everyone down.

He said one more thing, hereafter the gain from additional testing by the United States is far outweighed by the gains emerging powers can make by the first few tests. In fact somebody puts a curb on what you learn from the nuclear testing, puts a lock to keep doing more and more tests . So they were fairly clear as to why the US was keen on freezing others and that is what will be the fundamental outcome of the CTBT.

Second important outcome is really that it helps cap the capability of China, which has a number two position in this international situation. It is to be in the worst position in any organisation to be number two, that is, you see it as emerging as number two, as possible number two power challenging the

dominant powers. Then it becomes much more important to control. It is a system devised to manage and control that emerging power.

I think it is fairly clear why the Chinese took so long in supporting this treaty. It was the fear that the US is seeking to cap their capability and then steering the arms race in new directions, into the information warfare, into the space areas, including the missile defences. These are the areas which the Chinese believe they cannot compete. I think they are right there. So freezing the nuclear capability while opening doors for missile defences and star wars is the nightmare for the Chinese, and that it would undermine the credibility of the Chinese nuclear deterrent. That is the reason why the Chinese have introduced this whole clause into the nuclear treaty and have won the right to re-do the whole treaty ten years down the road if the issue becomes real.

If the Japanese and the Americans are developing star war system together then the Chinese will have to completely reconstruct their own nuclear strategy down the road. That is why they gave tactical support for this treaty, They fear that if Asia is going to change, that is drifting towards the international strategy with the Japanese playing a lead role with developing technologies, then Chinese will have no option but to resume and go back to their expanding the size and sophistication of their own arsenal.

As far as India is concerned they never made it a secret. In fact when I was covering the Clinton Administration in early 1995 there were a series of statements by the senior administration officers of the Clinton Administration that they were trying to cover CTBT and one of the fundamental outcome of the CTBT would be to cap the nuclear capabilities of the threshold countries

like India, Pakistan and Israel. That became the fundamental objective and that is the reason. The objective is to cap and reduce over a period of time and eliminate the nuclear and missile capability of India. So the objective was clear. Now the question was, are we going to take the first step although put in a global context and then get pushed down the slippery slope of de-nuclearisation under the relentless pressure of the United States. And that, I think, is the question. They saw the outcomes in clear and strategic terms for their own benefit but it takes a longer time to figure out this. How does it affect our interest ? It is not a question whether Jawaharlal Nehru supported it in 1954 or not. It is a question of today, how does it affect. Contexts were different. Fundamental question is if we sign the treaty with so much of verbiage in it, how does it affect our options, how does it affect our security in the long term. I think to that extent finally the CTBT forced India to wake up and look at its own strategy and doctrine in relation to nuclear weapons in a more than serious manner than the mantra we have had all these days of keeping the option open.

The question is what if it does not happen. What are you going to do in the next few months, next fifty years, if nuclear weapons are around. So, we have been forced to look. May be we can all come to different answers to these questions. But I think the questions are being asked today. That itself is a great advance.

Just two other points before I conclude.

To look at the CTBT as a product. What are the products that have come up after these two years of negotiations. For that I think the paper gives you quite a bit of the details that in a sense it is neither comprehensive nor a test ban treaty. This point has been made. The treaty has left so many loopholes for all the

nuclear powers to exploit. It is not really a comprehensive treaty and since it does not ban testing certain other types of nuclear weapons, it would be appropriate to call it a nuclear test explosion ban treaty and not the treaty that bans nuclear testing because the testings are going to take place in the laboratories. The US announced plans for sub-critical underground tests, what they call since it won't be crossing the actual testing threshold. There are many people in this country saying in spite of its weakness CTBT is good because it will stop them from developing a new generation of nuclear weapons. Some people have said whether you are killed by a third generation or fourth generation weapon, it is not going to make much difference. But they are not doing any favour by not developing the fourth generation weapons. Secondly purely as a scientific problem you cannot prove this. It is in the moratorium in the late fifties, and early 60s, US was observing a moratorium but they also did the hydrogen nuclear test at that point of time and nobody knew. In the last two years US conducted 200 tests more than what they had said initially. You do not have the knowledge, you do not have the power to understand what they are actually doing, because science is so advanced. So you believe just because they are saying that the fourth generation cannot be developed and it is not much on the record of their past policies and postures, nor do we have the ability to find out what they are doing.

The other important point is the question - by signing the treaty the conservatives in the US who had finally come round to supporting CTBT extracted the whole series of concessions in terms of what US must do to keep up its nuclear capability. Testifying before the Senate Committee in May, the man responsible for atomic arms acquisition in the Pentagon said fairly clearly that the U.S. will have the ability to design, develop new nuclear weapons and only thing they will not do is production.

So the idea behind it is do everything that is possible except the actual testing and production and that tomorrow if there is a new threat they will have the policy to quickly surge back to new levels of production and use the old design in the interim period.

But finally it is only the question of process of the CTBT, if you see that as more important. This aspect has not really been covered very much in the massive debate. The process was as bad as the product. The problem in the process was that there was a friction that initially 38 countries and now 61 countries were sitting round the table and negotiating the treaty. I went twice to cover this treaty negotiations both in February and June this year. No such thing was happening. It is only the most idiotic and irrelevant verbiage in the treaty that was being negotiated. But all the key aspects of the treaty and scope and the obligations under the treaty, the nature of the verification mechanism, linkage to disarmament, and the entry into force, these were finally decided by the so called P-5.

Throughout the multilateral negotiations there was a parallel private negotiation amongst the P-5 nations. On all the key issues, the decisions flowed from the P-5. What would be the scope of prohibition ? That was not discussed. When we put amendments wanting a genuine prohibition in the treaty, this was not available because P-5 were deciding what would the treaty contain, because they had the clapper boys, in terms of Australia, Canada, the Anglo-Saxon world together, but it had nothing to do with the real negotiations amongst the countries. It was what suited the P-5 best and that required, of course, compromises within the P-5. In fact within the P-5, how do you get the Chinese to support the zero yield test ban, how to get the Chinese to drop their objections to a particular form of verification.



This involved trading between the P-5. For example US was offering various kinds of concessions, giving simulation test data, nuclear test data, to Britain and France. When they offered it to France the French said, 'O.K. We will stop test', and France and Britain were collaborating in building these new super facilities that they are going to use in a computer simulation. The same thing they were offering to Chinese, the whole new interaction in the Chinese and the American nuclear energy establishments. Of course the Chinese are not in a position to accept this kind of a generosity from the Americans because their worry is that if they are hooked on to American knowledge and information, how does it help serve their own independence. But the fact is that throughout these negotiations you have this kind of dealing going on among the P-5 and that remained the dominant forum for negotiations and not the public forum on the conference on disarmament.

In fact even Pakistan delegate Munir Akram (some sort of a diplomat) said, 'Texts were falling like manna from heaven.' You negotiate them for three months and suddenly the Chairman comes and says, 'This is my working paper.' Where did it come from ? It came from P-5. Of course most of the third world was protesting against this manna falling from heaven.

At the end of this they were all lined up and put into shape. The problem both in terms of product and process is that really you could not do very much about it and I think personally I had hoped that because of the nature of the Indian objections to the treaty, US would come to offering a notional deal for us to buy our support. But it did not happen because they had assumed India can be made to just shut-up, and keep quiet, and that India would make thundering speeches, but when it came to the crunch, they will fall on their nose, just walk out of the way. That

was the business assumption. No signing, fine. They keep objecting, keep saying - no blocking and no testing. There will be silence. When it comes to the crunch they will walk out of the way with these three NOs. As long as they follow these three NOs, it is fine with US. They have the real question saying whether you sign or not, but they will block you from a test. But they assumed. The judgment from American assessment in Delhi was that these three NOs will be upheld and there was no question of India really but then the public debate forced the Government of India into finally prevailing upon New Delhi into saying, 'NO', because finally the outcomes were so bad even they had no option left.

In essence, after years of vacillation, of catching cold even before Washington sneezes, the tendency of not even trying to know what are the lines of difference, where they are drawn, I am not making any case of differences, but I think you should at least figure out where is the line of difference. Even before you go to the 'Laxman Rekha', you are running away from it because you are so self-deterred. You are ready to stop.

I think this is one of the major transformation today. We are beginning to look at these questions today. The issue is not dead for us. For India, the game is just beginning. Because the CTBT, even if assuming that it will be adopted, it will still have that 'Entry Into Force' clause which will say that the treaty would not come into force without India's signature. We will still be in the picture even after the General Assembly passes it, because in the next three years we would still be the critical element to bring the treaty into force, as soon as possible.

Having stood up today the time for India is to calculate those implications which appear serious and see what are the

core interests we must preserve, what are the peripheral interests on which we can bargain and how do we finally advance ourselves using this context to change our own position, of how the third world perceives us and how we see ourselves as a nuclear power.

And finally, let me just conclude by saying that historically the incorporation or accommodation of a new rising power has always posed difficulty. The existing club would always resist the entry of the new power into the system, resist any fundamental shift in international relations taking place purely in terms of size and productive capacity. Despite such resistance, India and China will be among the largest powers in the international system. China is already being recognised as a major nuclear power. It is being accommodated. As far as India is concerned, the decisive factor would be whether you have the gumption to cross certain line and say, here I am, let us see what it is, how are you going to beat us. Those steps will have to come from our own internal conviction and nobody is going to invite us in a formal manner.

## CTBT : IMPLICATIONS FOR INDIA

MAIN SPEAKER : S.K. SINGH

Mr. Ram Pradhan, Air Marshal Kulkarni, members of the Centre for Advanced Strategic Studies, and friends from Pune.

For me it is always a moment of exhilaration when I come to Pune as a student of history. For me it has always remained an inspiring place, the centre of the Peshwas, the centre of an empire that might have been, I mean if this city, mixture of culture, literature, military science had worked in a certain way, we might never have had any colonial rule.

It is one of these might have beens which Dr. Raja Mohan has described to you ; might have beens of the future which is still within our own capability, capacity to mould. That is the story of the implications. Because he has described the challenges, let me talk of the implications for us.

Before I speak of the implications for India, I must say how I see India. I see India very much as Nehru did. He used to take interest in training probationers, foreign service probationers. He asked us, our group, 'how do you see India, what animal or what member of the animal kingdom does India identify with ?' He said we identify a little bit with the peacock in the bird kingdom. What animal do we identify with in the animal kingdom? Then he proceeded to answer the question. He said we are like the elephant - lumbering, lazy, heavy, large, slow moving, vegetarian, non-aggressive, with a long memory, never forgetting either a good or an ill done to it, very grateful for little favours shown by the mahout, but when angry and provoked, very destructive.

He said, that is the India I see you negotiating on behalf of. And he said one other implication of this India is that you will never be anyone's pet. Dogs and cats are pets. Elephants are nobody's pets. Because if this pet sits on somebody's knee it will get broken. Now that is the kind of India you and I represent howsoever poor the relationship between ethics and politics at the top may appear on a certain morning of the week.

The CTBT draft, as Raja Mohan has explained was negotiated by the five nuclear weapon states for the five nuclear weapon states, and there was a little bit of a problem in the minds of the four whites - because I include the Russians amongst the white - about the one yellow inside that group, and I am sorry if I appear to be speaking in racist terms, but this is not racist. It is the complications of power structure in the world, the new world order that we are all talking about. They are representing it in a particular way to us and they are meaning it in quite another way for themselves. They were determined, these five, to rope in the other three, that is Israel, Pakistan and India.

Israel's nuclear capability was a reflection and a continuation in the middle east of the American capability and they had persuaded Israel before the CTBT negotiations began that it will sign ultimately.

Pakistan they knew was a sort of response to whatever India's capability was because Pakistan has neither the industrial structure nor the scientific base for becoming a nuclear or a missile power. Therefore the first steps that Pakistan took was clandestine in this direction and based on stolen technology and ancillaries from Holland, USA and Canada. Now some of these major Pakistani technology thieves, shall we say, were arrested by the American police under their own law, put up before the

court, remanded to custody. Then nobody heard about them. Each one of them has slung back into Pakistan. The technology somehow has come back into Pakistan and Pakistan is today recognized either a nuclear capable power or perhaps a nuclear power to a certain extent.

The same game is starting as far as the missiles are concerned. The missile technology came to Pakistan by way of the HATF-I and HATF-II technology from China. Then the missiles' components came and now I think a large consignment, according to the American intelligence people. I have spoken to some of our people. They thought that in about the last six months a certain amount of industry was being developed, exactly how much, what, that will get known, but the point is that they are on the road, both of the weapon and of its delivery.

There was another aspect of Pakistani attitude to this which was that they would do anything to spite India. I mean even cutting off their own noses which is what they are beginning to do now. Because as soon as India's "NO" blocked the treaty, the kept followers of the United States, the five permanent members of the Security Council - all the nuclear weapon states - said, therefore, to Australia, 'OK boys, move this show to New York by way of a resolution.'

Pakistan has become not merely a signatory but also a proponent, a co-sponsor of that particular resolution. I don't see how Pakistan can prevent itself from signing the document. The Treaty Document Draft is attached to the resolution and as the resolution Pakistan has co-sponsored, it will have to sign it, but it will make some caveat like if India does not sign Pakistan's signature should be considered null and void or some such thing.

One thing which Raja Mohan mentioned might survive the negotiations on CTBT in Geneva despite our blocking it is the coming into force article. I must read that article because it is not often published in our papers and I do not know how many of you have seen the text of it. It is a very interesting text. It says, and I quote

“ If this treaty has not been entered into force three years after the date of the anniversary of its opening for signature the depository (depository in this case meaning UN) shall convene a conference of the states that have already deposited their instruments of ratification on the request of the majority of those states ( as many as have ratified and deposited, out of them a majority) that conference shall examine the extent to which the requirements set out in paragraph one has been met and shall consider and decide by consensus what measures consistent with international law may be undertaken to accelerate the ratification process in order to facilitate the early entry into force of this treaty (In other words paragraph one covers all those countries with reactors and research reactors and they are 44, out of which we are one) They shall decide by consensus so the consensus will be whatever the Americans determine, what ‘measures’, and the measures could be sanctions, could be a blockade, could be anything, because at this time we must also understand that already on the table in the Security Council there is a resolution proposed two years ago by Argentina saying that these disarmament things which threaten to de-stabilise the future of mankind could be brought under Chapter 7 of the UN. Chapter 7 of the UN Charter is mandatory jurisdiction of the Security Council. When the Security Council says ‘X’, it has to be done).

And then again coming back to reading that article - shall consider and decide by consensus what major relationship, what measures - and the caveat is consistent with international law.

I have explained the charter and there was chapter 7 to accelerate the ratification process in order to facilitate the early entry into force of this treaty. Unless otherwise decided in paragraph two or other such conferences, this process shall be repeated at subsequent anniversaries of the opening for signature of the treaty, until this 'entry into force'. So if the first such conference does not work, the next will work. If that does not work, the next will work.. The countries which want this particular measure of arm control so badly will work. It will not only work abroad, they will also work on your political party and on your government.

I think Raja Mohan was right. They had not expected the force of the public opinion in India forcing the hands of the government in the manner in which it has. They were not prepared. Therefore I would say that the game is just beginning. The pressure will be on for sometime and what you and I have to determine amongst ourselves is three or four questions.

The first question is how can the rest of the world accept our economy ? Conversely what kind of leverage the size of our economy has on other producing and selling countries, marketing countries, marketing societies ?

The second question is how close are we technologically to the attainment of our objectives, through demonstration of our capabilities in the nuclear field and in the missile field? In the missile field it is quite clear that in the last 3-4 years of rather hesitant handling of the situation, the government did not move towards serial production of the Prithvi which might have encouraged our adversary.

Second thing is also quite clear that the Government prevented, I mean there has been a recent statement by Dr.Abul



Kalam which I read as saying that he was prevented from furthering the work on the Agni missile. I should imagine that he was prevented. Some kind of false fear, frightening oneself, kind of process that was going on in the previous government.

Now the third question arises. Will the whole roof come tumbling upon us if we go in for a couple of tests, may not be immediately, but say gradually when it suits us, and if so, what kind of tests? I do not think tests of an ordinary old mill of the run type will impress the rest of the world ; your capability of handling fission and moving towards a hydro-nuclear test. I do not think it should be disregarded. I have been out of the Government for more than five years. I am not privy to anything within the nuclear establishment. But I hear voices, sounds, messages firstly some kind of re-vamping of that organisation is required and secondly that they are functioning alright. They are themselves internally considering separating the civilian power production from whatever abilities they might suggest they may be having. Just now, it is not clear.

So there are possibilities open for India which is not so unusual because after all please do not forget that we have been in the game since 1946, when, Nehru, before he became Prime Minister, when he was only Vice President of the Vice Roy's Executive Council, had authorised with the approval of the then Cabinet of which Liyakatali Khan was a member, Bhabha to establish a nuclear research organisation which could move towards generation of power. As all of you know, generation of power route is roughly productive of the same results as the route towards weapons.

That is the big dilemma in nuclear methods for all countries. As far as generation of power is concerned, again, our record in

the last six years has been a poor one. We had intended to have 10,000 MWs of power through nuclear means, and we are somewhere, just about 2000 MWs, yes something like that. We have not progressed the fast breeder test reactor which should have been done considerably by now, considerably far ahead. I am mentioning these technical details because in today's world we must recognise technology and strategy are together. Economics and strategy are together. Economics and defence are together. There is no country which can be self reliant or self-sufficient in its defence unless it is self-reliant and self-sufficient in its economic function. No country can go ahead in its strategic thinking unless its technological thinking, functioning and achievement are up to the mark. These areas have converged one with the other and this must not be forgotten because these are all part of the implications of our thundering NO, thundering blocking NO in Geneva. We have to take all this into account.

Another aspect which we have to take into account is the implication and the geography of India. Our next door neighbour is not Pakistan alone, it is also China. Our borders run parallel with China. Not merely that. Russia is very close. And the Soviet 'Avatar' of Russia was once one thing for us. Even today there is a lot of mutual goodwill. There is a lot of mutual trust and faith. But I have at times worried about Russia's internal problems. The Mafia handling, the kind of infiltration of American technology, scientists etc., that has taken place in all kinds of organisations and institutions inside Federalist Russia. Because as you know we have said it the Czarist Russia, the Socialist Russia and now we have the Federalist Russia. The Federalist Russia is fast changing and in certain areas of functioning it is feeble in a manner that you cannot really forecast how far the goodwill for India the traditional, bilateral relationship will hold. Not that they do not mean well by us but because they may be helpless.

India's accent has been on goodness and faith since the early fifties, the Beirut plan problem and all those things in which Nehru interfered earlier between Soviet Union and America - the Nehruvian feeling of what Raja Mohan called the innocence and goodwill of a disarmament philosophy which was based on the Puranic belief in goodness of the human soul. Not that it was bad from our point of view. Strategically it helped us. But from that we have had to move. Again I will not go into that but conceptually our quest has been for general and complete disarmament, which philosophy also induced us to insist that any utilization of nuclear weapon was a crime against humanity; 'Crime against humanity' this is a phrase in the documents of the first special session on disarmament but it has never been allowed to be permitted to appear in the second, third, fourth session. There it has been banished.

Having said this and having mentioned that China and Pakistan are collaborating both in nuclear and in missile functioning and having said also that the West has not been beyond treating Pakistan as lever against us by building it up to a certain extent, we have to be concerned about the future. This itself is a major implication which has been clarified for us by our functioning during the negotiations in Geneva on the CTBT and henceforth it will again affect us.

Now I come to this question of ambiguity. We have been, again this is a quotable term "keeping our option open". How open can an option be kept indefinitely. This is a question. The ambiguity about the nuclear weapon capability has to be seen in historical, regional, political, economic and doctrinal aspect. This is a major implication which has not yet been studied as far as I know within the Government. Development of industry, social and welfare segment - expenditure on those. This whole thing

has an impact on our defence. This is another facet of the implications of this particular thing. Having said all this there are three aspects of the implication for us.

One is how will the five nuclear weapon states try to mould our thinking to their own liking, or force us or push us? Immediately my answer is they will not issue any sanctions, they will not do very much. They will see how the public opinion within India goes. Barring an accident, I do not think Chapter 7 will be invoked against us in the next several years, because of our size.

At the second level are the implications for us in the technological, scientific sense and this is about maintaining and sustaining nuclear devices, production and the deployment of visible and viable missile capable activities coping with nuclear threat in our environs. This is something which broadens the field considerably and here one must understand, to put it plainly, 'how do our adversaries or potential adversaries view us'. Part of this as Mr.Raja Mohan said is speculative. So far it is speculative, it is psychological.

Psychologically, I think, as of today, Pakistan is deterred by us. Whatever they may say. They are deterred. But I have a question mark. Whether China is deterred? There is one kind of implication for us if China is deterred. If China is not deterred as of today, the implication is quite another for us. If there is disbelief amongst our adversaries, it is matched also by disenchantment amongst our own military colleagues - army, airforce, navy. Then we are down the slippery slope.

This is the third implication of this whole thing which needs to be clarified. Our military do wish to know whether our devices

can function within desired specification, also whether our Government are totally confident about their reliability, performance and also their delivery . This is the supreme implication for us. I am not depressed about it. There is nothing to be depressed about it. The area has opened up. Now you have to fill it whatever space has been opened up by the question.

The CTBT negotiations triggered off a more detailed and better informed discussions at home. The answers to these discussions have not yet come and these need to be expected. How long it will take coming in, I do not know. But I think the point should be put by the public before their legislators, the government in Delhi and the Parliament. The educated elite, the intelligentsia of this country not merely in Delhi but in centres like Pune, Mumbai, Bangalore, Madras where a lot of people who function in industry, who function in economic areas, who have had experience of military thinking, strategic thinking, cultural, social thinking, has to bestir itself and think about its role and its duty to the country.

The third level of implications and the last one is the most important and the most difficult to answer and that can depress some of you as it depressed me. That implication is never mentioned and it is perhaps the most important. It is the need to re-examine our political functioning in our society, not merely of the government but of the citizens, of the organisations at city and town levels, our own levels, the kind of efficiency we have produced, the kind of competence we are utilising - that sort of thing - the relevance of ethics for political functioning - the need to pursue excellence in our economic, industrial and social areas, health, education, welfare. What we are doing is pursuing slogans in affirmative action - Mandal, social justice, poverty removal, employment generation without asking whether we are moving

towards something fundamentally superior, something with excellence in it. The answer is 'No'. It is not enough to fill up individual coffers or to pursue caste and communal vote bank which is what all of us read in our newspapers. The area of Centre State relationship also should worry us. Because what happens as a result of CTBT in respect of our industrial functioning, in our nuclear field, in our missile field will depend very much on this. There is a trend to erode, not to strengthen, either the Centre or the State. There is a trend to divide, and not to unite either at that end or this end. This is common.

We are at a very delicate kind of point, where we might be looking helpless witnesses of foolish and selfish individuals and groups, destroying the balance between the federal and state structure, who may overturn the balance that is constitutionally envisaged between and amongst the three branches - executive, judiciary and legislature and above all things one major implication is that in this globalised era how does the rest of the globe see us. If they see us as weak, they will not respect anything we say or negotiate. If we are firm, stable, self-respecting, self regarding, improving ourselves with weaknesses but mindful of those weaknesses then we will be respected and winning respect in deterrence is ninety nine percent of the game.

Thank you.

## CHAIRMAN MODERATOR'S CONCLUDING REMARKS

JASJIT SINGH

Last one year or so we find that on occasions the Americans quote Nehru and Gandhi to us. Therefore it is also important for us to clearly look and see if Nehru asked for CTBT, are we not somehow going away from those principles. After all, that should not be the only factor guiding us. Because Nehru could not have visualised what will happen in 1996 and beyond. I am sure we can. What did Mr.Nehru ask for at that time? Again when you look closely to what he asked for, in fact,it has already been achieved partly. He asked that pending the elimination of nuclear weapons let there be a standstill agreement in respect of its testing and production, stand still in the sense as a moratorium, stop testing, stop the arms race, move towards disarmament. That is what Mr.Nehru asked for.

What is the CTBT doing ? It is now starting a new arms race. That is the problem with this text. Within this whole argument of how far it goes in terms of being comprehensive, the fact is that it allows almost formally subcritical testing and computer simulation. Because it allows that, in fact that area, as Dr.Raja Mohan said, in the United States, at the level of U.S. Secretary of Defence at the National University of Beijing in July 1994 offered technology to China to be able to make their weapons and better weapons in future.

If the vertical proliferation will not be stopped and will get legitimised by the test ban treaty, are we then being true to what Mr.Nehru said or sought in principle or in letter. I think we now need not go into it, but perhaps it will require going into

discussion to say exactly not just what India set out to do, not just what Nehru asked for, but what the international community looked for, because this is being thrown again and again by the West and the five weapon states that the world is now ready for the treaty. The world wants this treaty.

What did the treaty want to achieve ? When we set out to do so in December 1993, the United Nation's General Assembly adopted a resolution to say we must have a treaty now. The United States co-sponsored the resolution with India. What did the resolution ask for ? It asked for a treaty which will effectively contribute to non-proliferation in all its aspects, that means vertical, horizontal, qualitative, quantitative and the process of disarmament. And I think ladies and gentlemen that is the direction given by the General Assembly to this body at Geneva in January 1994, for this body to adopt as the Charter, the mandate according to which they will produce the treaty.

They adopted a mandate which said that this treaty must effectively contribute to non-proliferation in all aspects and the process of disarmament. So today all of us and hopefully this is what the world ought to be doing, should examine this text from what the mandate was and for us it is important that you look back and go back to 1964-65 that at that time the General Assembly adopted the resolution for an NPT.

The mandate at that time was to have a non proliferation treaty which will contribute to non-proliferation and disarmament. What came about was a non-proliferation treaty, no disarmament. That is why India could not sign the NPT. It is not just a moral issue. I think there is a very fundamental issue involved here which we need to be clear on. Our problem is that the nuclear weapons exist, they have been proliferated by tens of thousands



and we are placed in a position of asymmetry, an adverse position of asymmetry not in relation to Pakistan. That is a problem that you can always handle but also in relation to the five weapon states, China very specifically. Let us also not forget the fact that in December 1971 when we were in the middle of the war the United States sent a task force which was armed with nuclear weapons, for a political purpose and that is the real role of the nuclear weapons. Now is India going to remain in asymmetry or adverse position for all time to come? I think that is the fundamental issue.

So the test ban treaty is much more than just a Test Ban Treaty - that adverse asymmetry, that there are some weapon states who have certain policies related to India. India so far does not have weapons. But it has the ability to make them. Should that asymmetry continue? The answers are very simple. India's core interests lie in removing this asymmetry, in removing this imbalance which has worked against us all these years. We cannot allow this to go into the 21st century. There are two ways that you can remove the imbalance. Either the world disarms or India arms. That is the simplest meaning of all our sophisticated arguments that we have used. The core of it is just this question that will this country of 930 million people be denied the quality, and ability.

Merely a spokesman of the United States Department comes and says, well, China has nuclear weapons. We had to make that adjustment because it has 1.2 billion people. Fine, we are pretty close to that. But China has nuclear weapons and China is a permanent member of Security Council. The decision to give permanent membership of the Security Council rests with the international community but the issue of nuclear weapons rests right here with us.

This is the stated policy of the United States as Dr.Raja Mohan said - cap, reduce, eliminate. There is a little sophistry to it but this cap, reduce and eliminate in South Asia knowing fully well that Pakistan is not a factor in this cap, reduce and eliminate India's nuclear capability. This is a stated US policy since 1992 formally. It has not altered. As stated, CTBT is a part of capping process, shall we join this process and now wait for the reduction of India's capability without a corresponding reduction among the weapon states. I would have no difficulty if the United states applied that formula cap, reduce, eliminate to all the nuclear weapon capability world wide. If it is a universal process I think we would be happy to do so. This is what India will be pushing for. This is what Mr.S.K.Singh and others have argued at the UN for years and years and in other fora that you cap, freeze. There is a resolution up in the General Assembly pending since 1980 pushed by India on the nuclear freeze and in that nuclear freeze is included the test ban treaty, no first use etc. etc. etc.

I do not think we have a problem with that. Our problem is that what they are trying is to take away India's capabilities without any restraint on their own. Will that be acceptable down the line 10 years or 20 years from now. In the core of it that is I think the question that we have to address ourselves to. As we now move into this phase it is fairly clear that this is going to be a long drawn out process.

Mr. S.K. Singh has already mentioned about the processes. In all probability the treaty will be up at the General Assembly in a few day's time. It is all quite likely, we should be prepared to accept, or they must hope that it will not somehow go to that place but we should be realistic, ready to accept that if it goes there it will also get signed, it will also not come into force as long as this clause remains, but very much on the table.

It is not that the people in the United States will be unhappy. Here is a presidential candidate Bob Dole who says he does not agree with the test ban treaty and the republican party has a majority at the Congress. For all of them, China, Russia, Britain, United States it is very convenient to put that clause there and then say we wanted this but these Indians have blocked it. In fact they are the blockers. They want the treaty to be blocked . In fact if genuinely they wanted this treaty then when they were talking of the three 'NOs', they should have insisted and let the treaty come into force.

On 19th July the European Parliament passed a resolution asking Britain to modify its position, to talk to India so that the treaty can come into force at an early date. This is already almost a month after India made it clear at Geneva that we will not sign, that don't impose it on us. The issue is not only Test Ban Treaty, the issue is also India's sovereignty, India's independence. Britain still thinks that Indian policy must be made in London. That is the choice that we have to make. Is it going to be made in New Delhi or is it going to be made in London.

That takes me to one more important point which we need to discuss hopefully this morning - that having done this, we agree with all the principles. We agree to all the substance that we have been saying and that as we have said before there is an extensive consensus in the country on this issue as to what opposition towards the CTBT would be. What will be the cost of this policy. There are this and other minor points. Certainly somewhere down the line there is a sense that the cost will be paid.

If we are clear what the costs will be I think it will be easy to bear them. Firstly, will there be sanctions at the end of it?. I do not think so although there will be lots of threats of these

sanctions. Can there be sanctions today? I am afraid no. Even today the Air India is negotiating with the Boeing & the Air Bus Company for a four billion US dollar worth contract for aircrafts on account in a market which India will provide, expanding to 15 to 20 billion dollars in the next 10 years. We are the buyers. If you don't buy these aeroplanes Air India will fly less, but so will be the sales and profits of these companies.

The point I am trying to get across is, these 930 million people provide a market. That market also has a voice. It also has a sense of interest and it should know how to manipulate itself as the buyer, the user. It does not necessarily mean that we are simply going to be exploited. What is going to happen in fact is not so much sanctions. What is increasingly already visible which is adopted is a former strategy by the United States. They are talking of it as a revolution in military affairs. Their extensive studies are going on what they call information warfare. Target the minds. Targeting the mind from a variety of sources so that you look at your interest differently. If you look at your interests differently your decision will be different. I am not saying that we should not re-examine our own sense of logic as to why we are doing these things. But it is also important to see that the motives of others may not be that clean and certainly whether they are in our interest or not.

In the final analysis, I think we have to look at this question of CTBT as to what does it do? What happens if we were to sign it, however undesirable that may be? What will it do to us and what will it do to us if we don't sign it?

The CTBT does not take away your nuclear option. It defines the quality of that option because it stops you from testing. Is the quality of that deterrent so important to me or the deterrent itself is so important to me?

My view, ladies and gentlemen, is that the deterrent is critical to me. The quality is useful, beneficial, but I must weigh the cost and benefit of that. But the position we take on the CTBT in fact will define the position we take on the deterrence. That is why this question is coming up again and again which Mr. S.K. Singh has also said, what about the option? Can we continue to keep the option open indefinitely? I am afraid you will not be able to keep the option indefinitely open. It is going to get closed and in some ways the United States and the weapon states are doing us a favour in bringing clarity to the situation.

My view and this is also my basic position that India should have continued with an open option for the next 100 years. It is in fact the better option. From every angle it provides you with the maximum benefit at the least cost. But the option can be closed on two ends, either by making India non-nuclear, in which case you are permanently in a position of disadvantage in political terms, not in military terms, or by making a nuclear weapon, because once you have made the weapons and they are in your arsenal it is not an open option any more. Bulk of the time people think that open option closes by simply signing the document. You also close it on the other ends. We have been forced to close it on this end. I think India would be better off and the world will be better off if we stayed in the centre with an open option.

The straight, perfectly legitimate, suits the Indian psyche, drive in the middle of the road if you like. Today this is the fundamental issue that we have to look at very very carefully. I think therefore in the coming months and years our thinking, our line of argument, examination, should we continue the way we have continued for 35 years with an open option or go a step further? Going a step further can only be in one direction that we

can argue now. Let us disarm unilaterally. There are then misrepresentations of Mahatma Gandhi, Lord Buddha and others. You can go back and read them again and again as to what did Mr.Gandhi say on these issues. Use non-violence as part of a strategy to deal with inequality. His whole struggle was to create equality and not to accept inequality as a permanent feature. That inequality is what we have to seriously think about.

Let us look at the financial cost. One factor which Mr.S.K.Singh mentioned is that the bulk of the cost required for nuclearisation are already sunk in, your strike aircrafts or delivery system substantitively, barring some parts of a longer range missile system.

In fact India got what could be called a nuclear delivery system in 1956, when we got the Canberra and you will recall that this is one of the places where it is located. In the NATO, Canberra aircraft was a nuclear delivery system. In 1974, we did the test. The material exists. The scientific know-how exists. All these costs are paid not because you had a weapons programme, but these costs were paid because you had the peaceful programme and separately you need a conventional military capability that is created over the years. So I do not think that there has been anything fundamentally wrong with the policy that was pursued.

What is the incremental cost now ? How do we calculate that with 1990 prices ? I talked to the man who was in charge of the South Africa's weapons' programme. He assures me and this is also today available in a published form, that the six and a half bombs cost 350 million dollars at 1990 prices. That comes to 650 crores rupees. You can accept this figure, you can reject this figure. This is when they had to go out to make the

weapons' programme, not because they were getting the material, but because they had a fuel cycle which is producing nuclear power.

What will be the cost of the Agni, Agni plus or whatever ? The three Agnis cost 55 crores. You can then make your calculations. How much more will x numbers cost ? The point really speaking is that financial cost perhaps is the least part of the problem. The costs have to be seen in terms of what today is not easily definable.

To some extent we have been paying the costs for last 25 years - denial of technology, the opportunity costs of larger policies, some of them related to your nuclear policy but some of them are not at all related to the nuclear policy which are part of the international relations. Those are not easily definable but then again there are benefits which are not easily definable. Some of going that side, some of not going that side. So I am afraid I have no way of a concrete answer to give except these indicators. I think we need not worry too much on the physical costs of weapons as such, but the larger issues that one has to deal with.

I am certain that fingers were not pointed towards Delhites that Delhi made concessions in the past in whatever form. I have a different reading to the situation. My reading is that in the last five years in fact it is the United States that made concessions to Indian position so far, not Indians having made any concessions at all. It was the United States that agreed to co-sponsor the resolution with India. Now you can say it is a glass half full of water, or half empty, but the fact that for more than 10 years India was putting such a resolution at the UN and the United States used to oppose it. In 1993, the United States agreed with

India to co-sponsor the resolution, not because they were very friendly to us but for a different set of reasons, their own set of calculations in the altered circumstances,

So I think we should have some level of confidence. We will make mistakes and we have made them in the past. Unfortunately we will make them in the future. But when a big country makes mistakes they are big mistakes. You only have to look at the US, the mistakes the United States does with all the other assets available to it. That is not the issue. The issue is can we reduce the number of mistakes and increase the number of non-mistakes that we made and the positive steps that we do?

Somewhere in this one gets a sense again and again of isolation. Are we isolated, alone in this? I do want to say this once again that the issue related to CTBT which is a topic of this discussion is really centred round five weapon states and India. It has the reaction of other countries, has an importance but the central issues will still be governed by how the five nuclear weapon states and India behave towards each other and relate to each other

If India was important to the United States to rope into the CTBT, I am afraid the Americans should have listened to the Indian point of view. You just can't say this does not matter because we can deal with new situation. United States has made a very fundamental error of judgment which again to a large extent is to the advantage of the Indians. That is because we normally remain in a way what might appear to be undecided. Americans say Indians do not think strategically. We do not have clear vision is perhaps why we do not make up our minds till we get to the last point when we have to make up our minds. After this there is no choice. You have to make up your mind soon.



As the draft started to evolve, I think it was logical for us to have sponsored the resolution, to engage ourselves in negotiations and work for the best treaty possible. Even today I would very firmly say that a CTBT is not to our advantage provided it is comprehensive, provided it is according to the mandate. What we are getting is a treaty that serves our interest. That does not mean that we are not interested in a CTBT. The others are not interested in such a CTBT that we think we should be. It is not a question whether we made a mistake in 1993 or whether we did not make a mistake. Let us not get involved in this issue of this party of that party's Government. After all the amendment to the present draft proposed in January by a different Government, was supported by different sets of Governments. The Governments are elected. At least in theory, and I suppose, in practice to pursue India's national interest, unless of course there are others who also serve in between their own interest.

Where do we go from here, that is where we should be devoting our time and thinking for? Disarmament is an obvious central agenda and that serves our interest, whether I am an Indian citizen or a world citizen or both, which I hope I am. I can't accept the position that working for disarmament is somehow either not an Indian or not a world problem when we know that this is not going to be an easy task to achieve in the foreseeable future. Countries like United States are clearly saying, 'do not talk to us on disarmament for 50 years. Then we cannot remain in a state of suspension for those 50 years. you have choices to make because in the process attempts are being made to take the option away.

The issue is to defend yourself against the nuclear scenario and to defend yourself against those who want to take away your ability to defend yourself. That is the core issue and that then we can move forward in a variety of ways.

I would like to thank everybody here for the tremendous co-operation that I got as a Chairman moderator of the session and may I now hand over to Mr.Pradhan.

### **R.D. PRADHAN : CLOSING REMARKS**

On behalf of the Governing Council as well as all members of the Centre for Advanced Strategic Studies, I take this opportunity to convey our sincere thanks to all the three gentlemen who have very actively explained, educated us on what has been happening, how they see and perceive it. I must thank all the participants. Very searching questions and animated discussions made it worth while for all of us to be here. Holding a Seminar away from Delhi has its advantages, for you get a view which is different from just merely agreeing with what has been said.

In this seminar it has been repeatedly and very forcefully brought out that we must become stronger economically, otherwise we have to face the music. But the fact is that we are in a state of political uncertainty. How long this kind of situation will remain, one does not know. But this CTBT, by bringing it down from diplomatic negotiations down to political debate and discussion in the press, in the parliament and by bringing it to a place like Pune and elsewhere, has one advantage. I think we are now realising that there are certain issues in which people have got to be involved. Ultimately it is the people and public opinion that alone can decide what is good if a price has to be paid. So I am very glad that we in the CASS and my colleagues took the initiative of organising this discussion. Once again I thank all of you for having come and enthusiastically participated in today's discussion. I now declare the seminar closed.

## SUMMARY OF DISCUSSIONS

The Seminar has been very timely. The CTBT issue has heated up. The machinations of the United States to either compel 'India to sign the CTBT or to neutralise and render it helpless and impotent in the near future are in full swing. The other nuclear powers are colluding in this process to the extent their self interest permits them. The Indian Government has been compelled to adequately respond to the alert public opinion in its stance on the CTBT in the United Nations and the international fora. India will be subjected to a great deal of pressure by the five nuclear powers in the immediate future. This is likely to continue for next three to four years. This pressure from the nuclear hegemons will be well camouflaged and coloured as pressure from the world body. The Seminar addressed itself to presenting a clear picture of the background of the CTBT, the current unfolding picture, and the implications for India.

All action of the UN General Assembly is recommendatory. Signatory nations are deemed under international law to be bound by the recommendation/resolution, whereas non signatories are not. All recommendatory action, even of the UN Security Council under Chapter six is recommendatory. Article 24 of the UN Charter is about sovereignty. It is only chapter seven which is mandatory. The actions of the CD (Committee on Disarmament) which go out with unanimity or consensus are deemed to be binding under international law. But if a particular State in exercise of its sovereignty makes a reservation on a particular article or a particular action of the conference on disarmament, that also is not deemed as applicable to that State.

According to the unanimous judgement of the International Court of Justice, delivered on 8 Jul 96 "There exists an obligation

to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament, not the arms control, in all its aspects under strict and effective international control." India's point of view, since 1950s, Mr.Nehru downwards, has been upheld, unanimously by the International Court of Justice.

The last paragraph of this judgment, where seven judges voted in favour and seven against, and the President gave the casting vote is the most important. It reads as follows. "It follows from the above mentioned requirements that the threat or use of nuclear weapons, would generally be contrary to the rules of international law applicable in armed conflict and in particular the principles and rules of humanitarian law. However in view of the current state of international law and of the element of facts at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake."

The observations/questions raised by a very large number of well informed participants were wide ranging and pertinent. These enabled the Chairman moderator and the main speakers to go deeper into the subject from historical, legal, psychological and other angles. The discussions were animated and lively. A general consensus emerged on the following lines :-

- India had proposed the CTBT in 1954 "Standstill Agreement" as a disarmament measure and also as an environmental measure for stopping atmospheric pollution with radioactive fall out. Since then, the initiative was consistently stonewalled by the Nuclear Weapon States (NWS), namely US, UK, France and the Soviet Union. It had been on the agenda of the Geneva Conference on Disarmament and its

predecessors from 1963 onwards, but UK and USA did not permit any negotiations. Even the 1991 attempt to convert the PTBT into CTBT, in the absence of unanimity proved futile. France and China were outside the NPT and continued to carry out nuclear tests. The Partial Test Ban Treaty (PTBT) eventually drove the tests under ground.

- India's 1954 proposal for a non-discriminatory CTBT with universal adherence and intrusive monitoring, and a rigid time bound global elimination commitment still remains valid.
- The NWS conducted large number of nuclear tests, the US and USSR being the star performers. Massive vertical and selective horizontal proliferation of nuclear weapons took place.
- After the Soviet Union's disintegration the US donned the role of being the sole dominant nuclear power and was "inspired" in 1992 to promote CTBT. It succeeded in getting the support of the remaining NWS for the CTBT through negotiations, cajoling, bargaining and secret dealings. It herded the other countries as docile camp followers.
- NPT's indefinite extension in May, 1995 perpetuates the nuclear hegemony of the NWS, legitimises their violation of Article VI of the NPT and extinguishes the right of the 173 NNWS signatories even to protest against blatant violations by the NWS.
- The CTBT as originally mooted was a disarmament measure, but over the years the NWS turned it into arms control measure, leading to phenomenal vertical nuclear proliferation and selective horizontal proliferation. Its purpose is to foreclose the nuclear option of the undeclared NWS.

- The CTBT now remains only a test explosion ban treaty and does not cover nuclear weapon simulation technologies which eliminate detectable explosive testing. The NWS are investing heavily in these new technologies. They consider nuclear weapons essential for their security. The US defence secretary and national security adviser have declared that they need nuclear weapons for the next fifty years.
- The CTBT is a ploy to freeze an unequal order with its primary aim to implement the US strategy to “cap, reduce and eliminate” India’s nuclear capability, India being a potential emerging power centre. The US tried to achieve this by manipulating and distorting the NPT. It is trying these very tactics through CTBT.
- The CTBT in its present form will not stop vertical proliferation. It sets the framework for a new qualitative arms race through computer designed, non-explosive testing.
- The CTBT does not address the problem posed by transfer of tested designs by a Nuclear Weapon State (NWS) to another country, e.g. transfer of nuclear weapon technology and components like ring magnets by China to Pakistan. Further, the danger from clandestine sale/transfer of nuclear weapons remains.
- India’s isolation in the world body on the CTBT issue is being trumpeted by the Western media. Many in India have been taken in by this ruse. The confrontation on the CTBT issue is ‘really’ between India and the five NWS only.
- The NWS have justified perpetuating their nuclear status on grounds of national security and appear to be bent upon

denying the same to India, which is hemmed in by China, Russia, the US (Diego Garcia), all NWS, and Pakistan, a deemed NWS. China has been transferring nuclear weapon design and components to Pakistan. Clandestine sale of nuclear weapons from the CIS bordering Pakistan is a distinct possibility. National security considerations dictate that India should not be caught in a position of nuclear asymmetry vis a vis its neighbours.

- On the CTBT issue, India is acting its stature and its size to protect its security interests without compromising its principles. India was isolated in the world body on the Goa issue, on the Bangla Desh formation issue. It then stood erect to safeguard its security and sovereignty despite threats from power centres and came out a winner in the end.
- There is an apprehension that blocking CTBT may result in blocking India's entry as a permanent member of the UN Security Council. This does not bear scrutiny, for it is only the strong nation, which is perceived as being strong stands a chance of being made a permanent member. Weak nations stand no chance.
- The rest of the world sees India in two ways - one is very rigid, on its principles. Since Nehru's time this has not changed. The NPT line was the same. India's CTBT line remains the same. And what bolsters India's case is that in the Chemical Weapons' Convention when there were no discriminatory clauses, no such clauses impinging upon anyone, when the whole thing was equal between the haves and have nots, it went along. India is co-operating even to day in building up the structure. So its motivations and honesty is not in doubt in the world amongst those who understand these things and take the decision.

- May be the ASEAN Nations will see the relevance to them of a strong militarily strong India capable of deterring China in the context of the dangers lurking in South China Sea and perhaps via Myanmar in the Indian Ocean. If they see India is emerging as a power that will come despite constraints and then if they believe that India can play a role in the larger ASEAN balance of power, they may make a deal with it. They will calculate at every point and if three years down the road they see India weak, a blundering, collapsing giant, then every body will deride it and treat it with contempt.
  
- It all depends upon how the world sees you. If they see you weak, they will push you. India's tough stand on CTBT in the UN General Assembly had its repercussions in the US; Stephen Cohen, a leading American South Asia hand changed his tune. In 1992 he argued that the road to NPT lay through Srinagar. Today, he talks about issues more important than CTBT between US and India, that India could be useful as a possible counter weight against China, of starting US-India talks to see if India could be a part of the alliance. The formal position of the Government of United States, even today, however much we may have got differences with the United States, till today is that the CTBT and the economic issues, trade relationships are two different issues. That is what Mr. Warren Christopher said when he went back from Jakarta, that the relationship between United States and India must be based on a much broader issue and not just on a single issue.
  
- India cosponsored only a resolution on CTBT in 1993 which had the disarmament and elimination questions accepted by all. The draft CTBT came later dropping these questions thus distorting the original version.



- India announced the withdrawal of its facilities from the International Monitoring System, so as to keep out of the CTBT without blocking it.
- The Chairman before abandoning the negotiations at Geneva on 28 June 96 produced another draft on the final day which listed the ratification of 44 countries (under another criterion) including India as essential for entry into force. This is arbitrary and violates international treaty making rules. This draft presented by Ramaker (which is neither a consensus draft nor a negotiated one) is designed to bring India in the CTBT fold by hook or crook violating international norms and international law.
- Ramaker draft of 28 Jun 96 leaves India no option but to oppose any consensus for the treaty at the CD invoking supreme national interest and the right to self defence sanctioned by the UN charter. Since the treaty cannot be voted only upon the “entry into force” clause, India will have to vote against the treaty text itself blocking the principle of consensus at the CD.
- The intensive public debate and ground swell of public opinion compelled the Indian Government to take a firm stand on the CTBT in the international fora and veto the revised CTBT draft with the entry-into-force (EIF) clause. Mr. I.K. Gujral, the foreign minister who made statement on this subject in the Rajya Sabha in the morning had to change it by the time he reached the Lok Sabha.
- Over the last two years, it has been a major learning process for everyone in India, inside the system and outside the system, that we began to understand and assess the changing international environment, the international arms control regime as to how it is going to affect us.
- The time for keeping the nuclear option open is over. India has only three years time to plan its strategy to make

a clearcut stand in respect of the nuclear issue, but the decision on nuclear policy, nuclear option has to be taken now, without any further delay. It needs a minimum period of two years to implement the decision - how to strengthen its deterrent force, how to give it more credibility. Dilly dallying and drift in decision making at this juncture will prove very damaging - almost suicidal.

- The nuclear weapons are considered as currency of power, the main reason for the nuclear weapon states to retain them. For the British, it is a question of prestige, and like the French, projection of a powerful image in Germany dominated European Union. Russia, a declining power, beset with internal turmoils found it necessary to change its nuclear doctrine of no first use. The Chinese, emerging super power, needs the weapons as a deterrent against the US. The Americans proclaim that they need their huge and sophisticated nuclear stockpile constantly refined and upgraded for their national security atleast for the next fifty years and also as effective deterrent against rogue states and crazies.
- US plan is to maintain the capability to design, fabricate and certify new warheads, although no production of new warheads is involved.
- China and Russia have serious difficulties with the asymmetric capping that the CTBT will achieve, and also with monitoring and verification procedures. Hence, they along with Britain made CTBT contingent to India's ratification, which India had rejected in its present form. Thus they are riding piggy back on India on the CTBT issue as India's rejection of the CTBT in its present form serves their purpose.
- There are apprehensions in some quarters about the cost of blocking the CTBT. It is not in rupees, annas, and pais, and

it is not a deadline sort of challenge that is being faced. The challenge is a more holistic one. The price that has already been paid for many things that were not done is not even calculable. Nobody is calculating. Nobody is even being reminded to calculate the cost of all the decisions which were not taken at the right time. That is the kind of debate we are in now. It is not necessary to frighten ourselves by our own sort of doubts and hesitations about our own capability. Our capabilities are not bad, but they are not outstanding. They are capable of being made excellent if we begin to realise what we need to do.

- We are dealing with an evolving international situation. You cannot bind the Americans to certain things which they had said in 1992-93. Equally they do not bind us towards the things we had said two years or three years ago in a slightly different set of situation.
- Fears have been expressed about technology transfer and non co-operation, sort of sliding non-co-operation with us in economic matters. Well, the profits have to be calculated. It is profits by them who are trying to sell us. Technology transfer is nobody's gift to us, or to any country. Technology today is something you pay for as you pay for a tape, a musical tape or a TV tape. Technology therefore is something you as a society also need to create. India is creating some technology.
- The former US Defence Secretary and senior military commanders in the report of the committee chaired by General Andrew Goodpaster have argued that US security will be enhanced with total elimination of nuclear weapons.
- Nuclear disarmament is a moral/ethical principle for India, and fundamental to its strategic and security interests. But it cannot be accepted unilaterally. CTBT in its present form fails to meet India's fundamental interests and principles.

**THE CHALLENGE OF THE  
COMPREHENSIVE TEST BAN TREATY  
AND IMPLICATIONS FOR INDIA**

**SEMINAR : 28th August, 1996**

**( Venue : Auditorium, National Film Archives, India )**

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- 129.