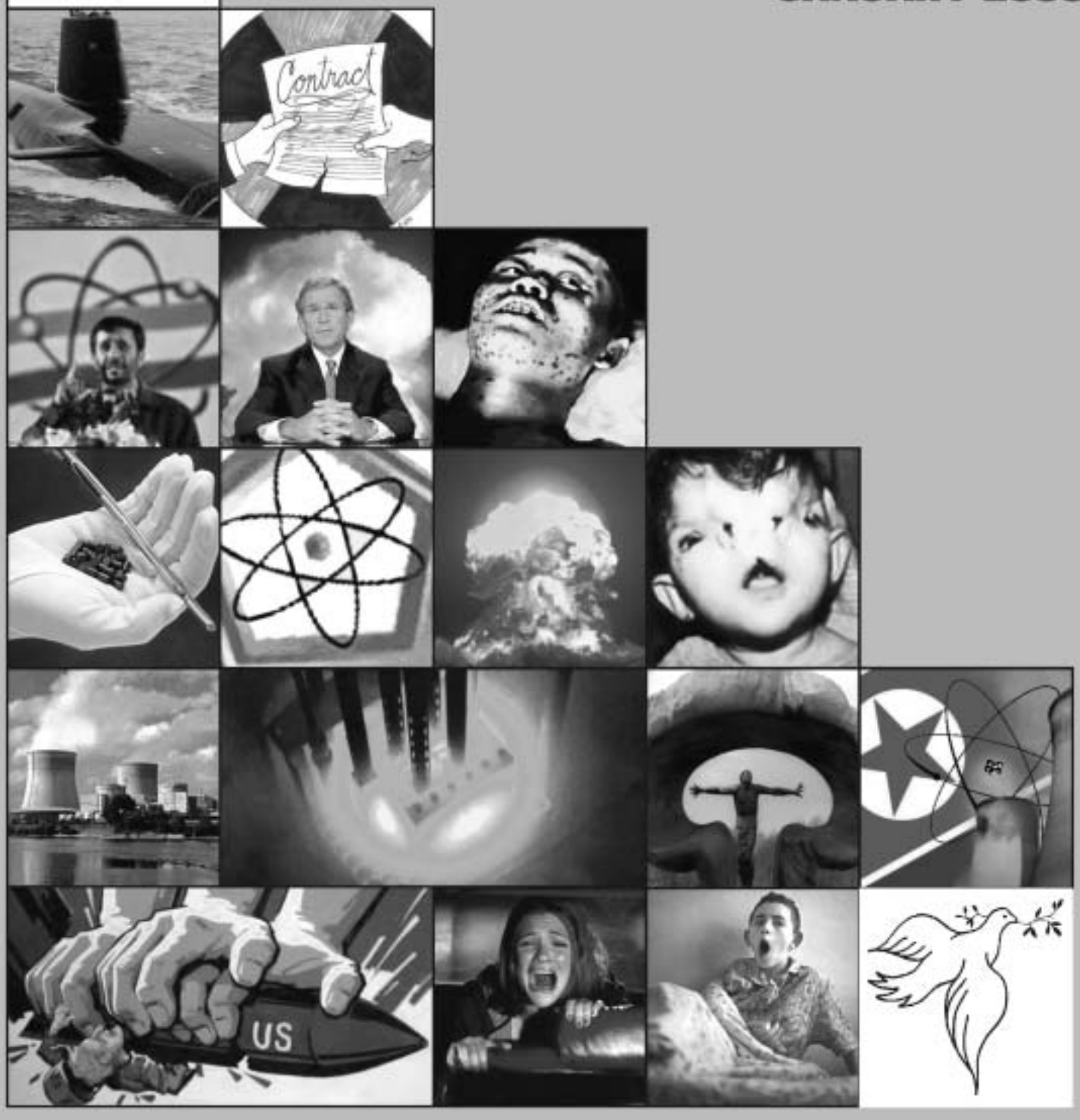
PEACE NOW

JANUARY 2008



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At Glory Graphics

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Contents

Towards Global Nuclear Disarmament

THE third national convention of the Coalition for Nuclear Disarmament and Peace (CNDP) is being held from 1 -3 February in Nagpur.

That the organisation has survived for more than seven years by now since its inception in mid-November 2000 is of course by itself not any big feat to boast of. But the fact that it could weather, and even counter in its not too insignificant manner, the avalanche of jingoistic chauvinism unleashed in the wake of India going nuclear in May 1998, literally through five big bangs – five nuclear blasts, is no mean achievement either.

While the avalanche could not last too long, the terms of discourse got permanently transformed.

Gone are the days when India would at least formally plead for nuclear disarmament at various international fora, denounce the very concept of possessing nuclear weapons as deeply immoral and scoff at the idea that it can in any way provide "security".

Gone is even any whiff of diffidence, let alone embarrassment, about possessing and remain riveted to posses more and more weapons of deliberate and indiscriminate mass murder – more and more lethal.

It has now become a social commonsense of sorts that nuclear weapon is the shortest cut to enduring global glory for the great Indian state, which right at the moment proudly occupies the 128th slot amongst 177 countries surveyed in terms of Human Development Index (HDI) – Roti, Kapda aur Makaan for the masses and longevity, gender parity and such other mundane parameters.

So while fierce debates are carried out in the Indian parliament from time to time about the desirability or otherwise of the Indo-US nuclear deal, there is a frightening unanimity amongst the parliamentarians debating the issue about the need to secure India's right to carry out further explosive nuclear tests – so very necessary to graduate from the Atom Bomb to Hydrogen Bomb, to upgrade its present capability to commit mass murder from the current level of hundreds of thousands to millions and millions. In complete disregard of India's official nuclear doctrine, which, at least for the record, aims for only "minimum credible deterrence". As if the capability to kill hundreds of thousands is not enough to "deter" - the actual or potential adversaries.

There is also, as it appears, an across-the-board acceptance of the dubious theory of "deterrence". No one stands up to challenge it. No one stands up to debunk it. Even though its basic and intrinsic flaw should be plain to anyone who cares to look into it.

The basis of "deterrence" is that one must have the capability to make the enemy "believe" in one's "will" and "capability" to strike back with nuclear weapons causing horrifying and therefore unacceptable level of damage and thereby "deter". This is evidently based on the premise that both, or all, the parties involved are perfectly "rational" and "capable" to read the adversary's mind. Needless to say that the real world is too complex for that premise to hold. But, the process would also necessarily involve constantly upgrading of one's capabilities as the enemy keeps on upgrading its own to "neutralise" the adversary's arsenal, and strike. And this game of constant brinksmanship straightaway leads to an open-ended arms race, as long as one sticks to this pernicious concept of "deterrence", making the "balance of terror" thus achieved more and more brittle. And in case one of the actors involved turns out to be a sort of "suicide bomber", the theory of "deterrence" woefully crumbles. In case of any "misreading" of the enemy's "intentions", the outcome could similarly be as catastrophic. Hence all the talks of "confidence building measures" – a grand oxymoron – building enemy's confidence that one has the "capability" and "will" to kill but won't kill nevertheless.

Faced with such formidable difficulties, the CNDP is steadfastly going ahead with its campaign for global and regional nuclear disarmament, constantly engaged with reaching out to people at various levels, including the opinion makers.

The struggle against the ongoing Indo-US nuclear deal, for very understandable reasons, is a major focus at the moment. The deal is facing rough weather from various quarters – both within the country and without. The formal negotiation with the IAEA, a necessary step towards operationalising it, which had commenced in late November last year after having remained stalled quite a while on account of domestic opposition, is now consequently dragging on and on. Quite contrary to the rosy predictions made by the official quarters. The domestic oppositions from all corners have in the meanwhile again intensified. During the recent debates in the Indian Parliament, while at the end of the debate in the lower house only the opposition NDA, led by the

BJP, and the UNPA members had walked out, at the end of the closely following debate in the upper house even the members of the Left Front, led by the CPIM, walked out, and in fact took the lead, to register their categorical protests against the ongoing deal. The CNDP is proud to do its utmost to raise the pitch against this ill-conceived move.

It is only in the fitness of things that this issue has devoted much of its space to various aspects of the ongoing deal, including the worrisome energy dimensions. It has also attempted to draw readers' attention to the horrific nuclear dangers that this subcontinent is presently faced with in the wake of overt of nuclearisation and which has been further aggravated in the recent days on account of heightened instability of our nuclear neighbour. One cannot, in this context, just afford to forget that Pakistan went nuclear in specific response to India's move in that direction. The issue has also carried a number of articles dealing with the threats on the global scale. A discussion paper on the suitable organisational structure for the CNDP has been included having the national convention specifically in mind.

We do strongly hope that apart from raising the awareness of general Indian public and thereby adding muscle and momentum to the ongoing anti-nuke peace movements, the current issue of this journal would also facilitate an informed deliberation during the national convention towards a more effective and broad based struggle for a nuclear weapon-free India, South Asia and the world.

India's Nuclear History: A Brief Outline

1947: India Gains independence from Britain.
1948: Indian government passes the Atomic Energy Act, the beginning of its nuclear programme.
1955: Canada agrees to supply India a powerful 40-MW research reactor, CIR (Canadian-Indian Reactor), under the Colombo Plan to be used by India for peaceful purposes only. With British assistance, construction begins on India's first reactor, the 1-MW pool type research reactor, Apsara.
1956, March: The US agrees to supply heavy water for CIR, now known as CIRUS. August: The Apasara becomes India's first operational reactor.
1960, July: CIRUS starts operating.
1962: India predicts 20 - 25 GW electricity from nuclear reactors by 1987.
1968: In the wake of explosive nuclear test by China in October, Indian government led by Lal Bahadur Shastri, pushed by the Bharatiya Jana Sangh and some others, shifts from the policy of "No Bomb Ever" to "No Bomb Now". Also resolves to work towards Peaceful Nuclear Explosion (PNE).
1969: India predicts 43.5 GW electricity from nuclear power plants by 2000.
1972: India starts work on a pilot-scale Fast Breeder Test Reactor, to become operational by 1976. But delayed till October 1985.
1974, May 18: India carries out its first nuclear explosion in Pokhran, Rajasthan. Calls it PNE or peaceful nuclear explosion.
1975: The Nuclear Suppliers Group (NSG) is formed to tackle diversion of nuclear resources meant to be used for peaceful purposes for weapons development in response to Pokhran explosion by India.
1987: India's nuclear-generated electricity production capacity reaches 950 MW (as against the earlier prediction of 20,000 - 25,000 MW made in 1962.)
1996: India rejects the Comprehensive Test Ban Treaty (CTBT).
1998, May 11 & 13: India carries out 5 more nuclear explosions, after the first one in 1974. Openly calls these tests as nuclear weapon tests.
May 28 & 30: Pakistan follows suit with 6 tests. Claims to have squared the account with India.
2000: India's nuclear-generated electricity capacity is 2.7 GW (as against earlier predicted 43.5 GW made in 1969.) For the first time India's Fast Breeder Test Reactor operates continuously for 53 days. Bill Clinton visits India. The first US President in 22 years. 2001, September: The US lifts sanctions on India and Pakistan imposed in the wake of May 1998.
2004, October: India begins construction of its first industrial-scale breeder reactor - the Prototype Fast Breeder Reactor.
2006: The DAE predicts India would produce 20 GW of nuclear energy by 2020 and more than 200 GW by 2052. On December 18, The US President Bush signs the Hyde Act, a major step in the direction of reintegrating India with global nuclear market.
2007: India's current electricity generation capacity is about 4 GW out of total electricity generation capacity of about 140 GW, just about 3%.

[Reference: <http://www.spectrum.ieee.org/jul07/5277 >]

Global Scenario

- The Nuclear Threat Today / IPPNW
- Nuclear war: the threat that never went away / Declan Butler
- Nuclear Abolition Is the Third, Best, and Only option / Ronald McCoy
- Toward a Nuclear-Free World / George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn

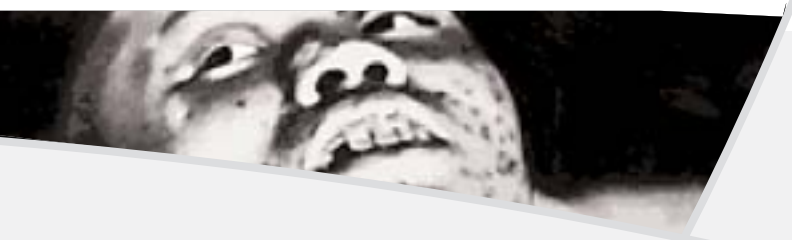
The Nuclear Threat Today

THE threat of nuclear weapons has been a fact of life on earth since the second half of the 20th century. The size of nuclear arsenals worldwide peaked at more than 35,000 warheads in the 1980s and remains at approximately 27,000 warheads today, including strategic and tactical weapons. The sophistication of the science and the political dependence on the doctrine of deterrence -- the threat of "mutually assured destruction" as a strategy for security -- have both increased steadily since 1945. In that year, the US dropped nuclear bombs on Hiroshima and Nagasaki; World War II ended; and the Cold War began.

Today, the Cold War has officially ended, though its doctrines still shape international politics. Relationships among countries, regional conflicts, and even some local conflicts continue to reflect the Cold War struggle, in which allegiances were forged through conventional military aid and promises of protection under the nuclear umbrella of one superpower or the other.

The tendency to resort to violence has not lessened in the first years of the 21st century, as exemplified by the war against Iraq and ongoing conflicts in Africa and parts of Asia. The capacity for violence, however, has increased exponentially in the form of massive stockpiles of nuclear weapons and nuclear materials, continuous military preparation and training for the use of nuclear weapons, and state policies that rely on nuclear deterrence for the indefinite future. The nature of the nuclear threat today has many elements:

- The United States has an estimated 7,000 operational strategic nuclear weapons. Russia has almost 6,000.
- France has approximately 450 nuclear weapons in its operational stockpile; Britain approximately 185. China is thought to maintain an arsenal of about 400 warheads.
- India and Pakistan tested nuclear weapons and declared themselves nuclear weapon states in May 1998; both countries have continued to develop and test missile delivery systems.
- Israel is assumed to have about 200 nuclear weapons.
- The DPRK (North Korea) tested nuclear weapons, declared itself a nuclear weapon state, and withdrew from the Non-Proliferation Treaty (NPT) in January 2001.
- Iran is actively pursuing a uranium enrichment program that it asserts is for a commercial nuclear energy industry, but that has led to global anxiety about its intentions with regard to nuclear weapons development.
- More than 40 states have the capability to develop nuclear weapons because they possess nuclear power reactors and/or nuclear research reactors.
- Despite the end of the Cold War, some 5,000 nuclear weapons are on hair-trigger alert, ready to be launched on a few minutes notice. Thousands more could be deployed in a short time.
- A typical modern 150-kiloton hydrogen bomb could cause somewhere between 736,000 and 8,660,000 deaths, depending on the population density of the target city.
- Nuclear weapons do not stand alone as weapons of mass destruction. The nuclear capability of some states is the excuse used by others to develop or maintain biological and chemical weapons. Thus nuclear weapons exacerbate the overall threat to our global survival.
- The number of countries with nuclear weapons capability, knowledge, or ambition will continue to grow unless governments and civil society commit themselves to policies and actions that will overcome the current nuclear weapons impasse.
- Fissile materials (plutonium and highly enriched uranium) needed to produce and maintain nuclear weapons are not being controlled or accounted for effectively, and efforts to cut off the production of fissile materials are still embryonic.
- The health and environmental consequences of nuclear weapons production and testing



include deaths, cancers, illnesses and ever-accumulating toxic and radioactive waste. The long-term effects of radiation on individuals, future generations, or the planet are not fully understood.

- Arms control and disarmament progress has come to a virtual standstill despite a universal obligation to pursue and conclude complete nuclear disarmament.

From Nuclear Non-Proliferation to Nuclear Abolition

The current international security regime relies on the Non-Proliferation Treaty to contain the threat of nuclear weapons and provide a framework for nuclear disarmament. The NPT originated in 1968, came into force in 1970, and has kept proliferation generally contained across states (horizontal proliferation), although within some states arsenals have grown dramatically (vertical proliferation).

The NPT recognized a "nuclear-weapon State" as one that had manufactured and exploded a nuclear weapon or nuclear explosive device prior to 1 January 1967. According to this definition, only the US, Russia, France, Britain and China are nuclear weapon states. These five states are also the five permanent members of the Security Council, the UN body authorized to identify threats to international peace and to enforce and maintain peace. In other words, the states with the most military power also have the most authority under the current international legal system.

The NPT regime includes the procedures and bodies that enforce it, such as the International Atomic Energy Agency (IAEA). The IAEA has extensive experience with the technology and mechanisms necessary for nuclear disarmament and its verification, and recent developments serve to strengthen safeguards by improving the type of information gathered and the quality of analysis applied to it. However, the dual nature of the mission of the IAEA-preventing diversion of nuclear material to weapons purposes while promoting nuclear energy-weakens its effectiveness as an agency for the enforcement of non-proliferation. Moreover, the military facilities of the nuclear weapon states are not covered by safeguards, and the civilian, or commercial, facilities of these states are only submitted to safeguards on a voluntary basis. In contrast, the non-nuclear weapon states are expected to submit to full-scope safeguards (all nuclear facilities). Thus the IAEA safeguards system perpetuates the discriminatory nature of the NPT.

The cracks in the NPT regime have become increasingly obvious. The DPRK, Libya, and Iraq are known to have pursued nuclear weapons technology in recent years, and the DPRK has joined the ranks of the nuclear weapon states. India and Pakistan, who have refused to sign the NPT, both tested nuclear weapons in 1998, publicly rejecting the NPT regime. Israel is estimated to have up to 200 nuclear weapons. The material and skill to develop nuclear weapons are becoming increasingly difficult to contain. In short, the NPT regime is likely to weaken further unless an international effort is made to halt and reverse current trends. Nuclear proliferation will remain a risk as long as any states claim the right to possess nuclear weapons.

A variety of efforts across states, industries, institutions, and non-governmental channels is necessary if there is to be reversal of nuclear proliferation and the possibility of nuclear abolition. For this reason, IPPNW has taken a range of different approaches to address the nuclear threat under the rubric of the International Campaign to Abolish Nuclear Weapons (ICAN), including research and education, physician dialogues with decision makers, and grassroots action.

[Source: http://www.ippnw.org/Programs/ICAN/ICANThreat.html]

Nuclear war: the threat that never went away

Declan Butler

"WHAT gets my juices flowing is my conviction that a terrorist will explode a nuclear bomb in one of our US cities by 2014. And the truth is that this is a preventable catastrophe. It will be despite a wealth of things that we could have done. Afterwards, we will say that we should have done these things - some of which we didn't do at all, or didn't do expeditiously enough."

Graham Allison, director of the Belfer Center for Science and International Affairs at Harvard University in Cambridge, Massachusetts, is one of many in the field of nuclear security acutely aware of how much the world has changed - and of the need to change international approaches to the issue accordingly.

In the 1960s, when the international nuclear non-proliferation treaty (NPT) was negotiated, there were five nations with nuclear weapons and the risk was of full-scale nuclear war.

The new nuclear threats involve smaller numbers of weapons, and come in three flavours: that terrorists will obtain and use a nuclear bomb; that nuclear weapons will be acquired and used by states in regional conflict; and that established nuclear weapons states will blur the line between nuclear and conventional weapons and use nuclear tactical battlefield weapons.

The NPT is now at a dangerous tipping point, say experts such as Allison, who warn that unless rapid progress is made on non-proliferation issues, there is a real risk of nuclear weapons being used for the first time since the bombing of Hiroshima and Nagasaki. The issues will come to a head at an intergovernmental meeting in 2010 in Vienna, Austria, of the NPT's 189 members. On the table are likely to be controversial proposals to end flouting of the NPT by withdrawing the right that countries have enjoyed to develop civil uranium-enrichment technology - which can be diverted to military ends. Low-enriched uranium fuel would instead be supplied via multilaterally controlled fuel banks and enrichment facilities, under the authority of the International Atomic Energy Agency (IAEA). But the NPT review conference, which is held every five years, will above all be a measure of the international community's resolve to generate much-needed impetus for a suite of wide-ranging related steps designed to reinforce the NPT to deal with current threats.

Consensus on tightening-up the non-proliferation regime will be impossible unless the five official nuclear-weapons states - the United States, Russia, China, France and Britain - agree to take concrete steps to remove nuclear weapons from their security doctrines, to not build new weapons, and to accelerate dismantlement of existing arsenals.

THE GRAND BARGAIN

The original aim of the NPT, which came into force in 1970, was to restrict the weapons to the five countries that already openly possessed them, all of which agreed to take steps to disarm. As part of the 'grand bargain', other states agreed not to develop nuclear weapons, but were guaranteed an 'inalienable right' to use nuclear energy for peaceful purposes, dubbed atoms for peace.

Over the past decade, the nuclear-weapons states' reluctance to embrace their side of the NPT bargain has stalled non-proliferation efforts and countries such as India and Pakistan have tested weapons. Huge progress was made at review conferences in 1995 and 2000, including a package deal of 13 steps to further the NPT's twin goals of non-proliferation and disarmament by the existing nuclear-weapons states, such as a commitment to a Comprehensive Nuclear-Test-Ban Treaty (CTBT) and a Fissile Material Cut-Off Treaty to outlaw the production of new weapons material.

The reaction to the 11 September terrorist attacks in 2001 stopped progress, and the 2005 review conference ended with almost no agreement. "The 13 steps have been rolled back or forgotten about," says Jean du Preez, an arms expert at the Monterey Institute of International Studies in California. Indeed, non-proliferation efforts have if anything gone backwards. The United States and China, signatories to the CTBT, have failed to ratify it, and so prevented the treaty entering into force. And the US 2002 Nuclear Posture Review, while making cuts to the country's weapons infrastructure, flew in the face of its NPT commitments by increasing the role of nuclear weapons in its security doctrine and expanding the scenarios in which they might be used to

include attacks on countries with biological or chemical weapons.

NUCLEAR ARMS-RACES

North Korea 's testing of a nuclear device in 2006, and Iran's possible pursuit of nuclear weapons also pose significant challenges to the NPT. There is risk of a domino effect - if Iran acquires nuclear weapons, so will Saudi Arabia in response, launching a nuclear arms-race in the increasingly volatile Middle East.

Many experts are cautiously optimistic, however, that the current crises in nuclear non-proliferation are concentrating minds in capitals worldwide, and may actually generate a renewed political commitment to disarmament, which could be a springboard to a stronger regime. Momentum for disarmament is growing, particularly in the United States, whose leadership is critical to kick-starting non-proliferation efforts. "The United States now realizes that if it is to make progress on its own agenda it needs to re-embrace multilateral non-proliferation efforts," says du Preez. Gordon Brown's UK government has also adopted a much more proactive line on disarmament than his predecessor's.

This year's US presidential elections will be critical to the NPT review, and the Democrat candidates have broadly backed a re-engagement with multilateral efforts. "But whoever gets elected, non-proliferation issues will get a much more sympathetic hearing," says Bates Gill, director of the Stockholm International Peace Research Institute in Sweden.

There are two main negotiation tracks emerging in the run-up to 2010. The nuclear-weapons states want to reinterpret the treaty to bring in much tighter restrictions on civil nuclear use, in what may amount to a rethinking of the 'atoms for peace' philosophy that has been the core of the NPT. But such moves are not going to fly with the countries lacking nuclear weapons unless the nuclear-weapons states themselves agree to measures to hold up their part of the NPT bargain.

The predicted expansion of nuclear power for energy generation, entailing an increase in facilities and nuclear material, and the repeated flouting of IAEA safeguards on civil nuclear power, have led to calls for a ban in 2010 on the spread of technologies for uranium enrichment and reprocessing of spent fuel. Such technologies are inherently dual-use, and countries that possess such facilities are, in reality, virtual weapons states, as it takes little to redirect the technology to a weapons programme should they so wish.

Although tougher safeguards could make it more difficult for covert programmes to escape detection, as long as facilities are under national control, a determined state can abuse the system or withdraw from the NPT completely. "The Iran crisis has put the question of national enrichment facilities in the spotlight," says Frank von Hippel, a nuclear-weapons expert at Princeton University in New Jersey.

Hence the NPT agenda is likely to contain a proposal to resuscitate plans from the 1940s to bring enrichment facilities and reprocessing plants under multilateral control, with a restricted number of tightly guarded and controlled facilities acting as fuel banks for other countries. But it is clear from preparatory meetings for the NPT conference that many countries will only support further restrictions if the weapons states make concessions on several key issues. Although 'rogue states' have been the main public focus of non-proliferation, they are only one part the picture. The arms and stockpiles of the weapons states are also a big problem.

NPT cheats are nothing new for the treaty, and are at least amenable in theory to containment by diplomacy and sanctions, says Roland Timerbaev, a retired Russian ambassador, and one of the founding fathers of the NPT. In reality, cheats remain outliers and the majority of NPT members stick to the rules. The NPT's success is often overlooked, he adds, saying that without it, some 30-40 states would have acquired weapons. For Timerbaev, the greater risks to the non-proliferation regime are to be found in the continued existence of large nuclear arsenals, in the expansion of nuclear power, and in the huge and inadequately secured stockpiles of weapons-grade fissile material worldwide.

THE WAY FORWARD

There are many steps that could be taken quickly. One is early US ratification of the CTBT to provide impetus for planning the next review of the NPT. Wide ratification of the Fissile Material Cut-Off Treaty, which has lain dormant since its creation in 1995, would commit states to halting any new production of fissile materials. It is seen as the means to bring the unofficial weapons states, India, Pakistan, North Korea and Israel under a verifiable regime.

New reductions in arms remain important, but more crucial in the short term is 'outlawing' not the nuclear weapons themselves but any active role for them in policy. The goal is to reach a norm where it is as unacceptable for a country

to have any active role for nuclear weapons as it is now to invoke the use of chemical or biological weapons. This issue of de-emphasis is key for non-weapons states such as South Africa, says du Preez. "If you only have a dozen weapons, but you say you are willing to use them and are making threatening postures, it is the opposite of the modus operandi of the cold war where nukes were a weapon of last resort. There is now a crossing of the line between conventional and nuclear weapons," he says.

The steps to getting rid of nuclear weapons from national security policies are well-trodden, and include the 13 steps to disarmament agreed by the weapons states at the 2000 review conference. What has been missing is political will. With new administrations in the United States, Britain and France, that may be forthcoming at the 2010 NPT review conference. There's a possible perfect storm gathering, says du Preez, and "all it needs is a spark" to re-ignite non-proliferation efforts.

[Source: http://www.nature.com/news/2008/080109/full/451114a.html]

Nuclear Abolition Is the Third, Best, and Only Option

Ronald McCoy*

UNLESS our disorderly world seriously addresses the pathology of nuclearism and unequivocally commits to eradicate the scourge of war and abolish nuclear weapons, civilization may cease to exist before the end of the twenty-first century. Throughout history, humankind has always survived pandemic disease, recurrent wars and natural disasters. Today, global trends strongly indicate that ecologically imprudent human activity is causing irreversible environmental damage and climate change, and that a growing culture of militarism and war, waged with increasingly destructive weapons, threatens to destroy civilization. In the past, humanity has muddled along from crisis to crisis, but we are now at a point where muddling along is no longer a viable option. Today, we face two serious threats to human and planetary survival: climate change and nuclear war.

Climate change is now visible and palpable, forcing governments and the public to reduce greenhouse gases. It would be reprehensible to wait for a nuclear explosion to occur, before we move resolutely to abolish nuclear weapons. We have lived with nuclear weapons for more than sixty years, without nuclear war, but we cannot remain complacent any longer. During the Cold War years, it was sheer good fortune, not good management, that an ideologically divided world avoided 'mutual assured destruction.' Politicians, military leaders and war-planners, on both sides, were locked into an insane strategy of mutual overkill and were prepared to gamble with global survival. Military mindsets spawned a nuclear arms race, which peaked at 70,000 nuclear warheads, and fashioned the doctrine of nuclear deterrence which rested on a knife-edge and very nearly failed.

The Cold War is over, but we still hear the depraved mantra of nuclear deterrence, knowing that deterrence can only succeed in an error-free and rational world, and will therefore ultimately fail in the real world. We continue to live with a deadly residue of 27,000 nuclear warheads, three thousand of which are still on high alert, primed for launch on warning in fifteen minutes. New nuclear policies have expanded the utility of nuclear weapons from deterrence to complementing conventional weapons on the battle-field. The world must no longer tolerate nuclear weapons as chips in an end-game of nuclear roulette. The Canberra Commission on the Elimination of Nuclear Weapons warned that "the proposition that nuclear weapons can be retained in perpetuity and never used, accidentally or by decision, defies credibility."1

It is time to redefine security in terms of cooperative, human security - security without war and bloodshed, security without nuclear weapons. Physicians know that any medical response to the pandemic of nuclear war would be futile and that the only solution is the abolition of nuclear weapons.

NUCLEAR THREATS AND OPTIONS

When the Cold War ended, the international community squandered a great opportunity to devise a new world order by eliminating nuclear weapons and establishing a new paradigm for human security. Instead, the nuclear weapon states have refused give up their nuclear arsenals. This has resulted in 'mutually assured paralysis' of the Nuclear Non-Proliferation Treaty (NPT) and stimulated nuclear weapons proliferation, as in India, Pakistan and North Korea.

The nuclear threat is now more complex, more volatile and more unpredictable. Today, we face major nuclear dangers from existing nuclear weapons, the proliferation of nuclear weapons, and the nuclear fuel cycle. The future holds three nuclear options:

- First, maintaining the status quo of an exclusive nuclear club of declared and undeclared nuclear weapon states, and implementing provocative 'counter-proliferation' measures.
- Second, living dangerously with nuclear proliferation and a possible cascade of nuclear weapon states.
- And third, reducing nuclear weapons progressively and abolishing them under a Nuclear Weapons Convention.

The first option of nuclear double standards and maintaining a discriminatory status quo is unsustainable. The club of five nuclear weapon states, recognized by the NPT, has now grown to nine. Counter-proliferation in an era of monstrous militarism, unilateralism, pre-emption, and international terrorism presents a dismal prospect of endless violent conflict and the possible use of nuclear weapons. For example, the Middle East has become a nuclear powderkeg, where a non-nuclear weapon state, Iran, is being threatened with military action for pursuing a uranium enrichment programme, while Israel, a non-member of the NPT, exists as an undeclared nuclear weapon state, with the support of the United States. This foreshadows similar nuclear crises in other regions in the future. In the long term, nuclear energy must be phased out for security and environmental reasons and global energy needs met with renewable sources of energy, coupled with energy conservation and efficiency.

The second option represents an increasing danger of nuclear war from horizontal nuclear weapons proliferation, as the nuclear contagion spreads and infects another 20 or 30 nuclear-capable states, particularly in the absence of a ratified Comprehensive Test Ban Treaty and a Fissile Materials Cut-off Treaty.

The third option, nuclear abolition through a Nuclear Weapons Convention, is the only viable option we have if we are to survive the nuclear age.

OBSTACLES TO A NUCLEAR WEAPONS-FREE WORLD

The road map to zero nuclear weapons is there for all to see, although the terrain is littered with psychological barriers, political obstacles and broken agreements. The fundamental challenge is growing militarism that seeks and claims legitimacy for pre-emptive use of force, including pre-emptive nuclear warfare.

In particular, the explicit nuclear policies of the United States, as articulated in its Nuclear Posture Review and National Security Strategy, represent the greatest obstacle to nuclear abolition. In 2002, the Bush administration, in declaring that the US could no longer rely on traditional concepts of nuclear deterrence, given the emergence of so-called 'rogue states' and terrorists, unveiled a new 'pre-emptive' or 'preventive' strategy. This emerging US nuclear doctrine allows for the use of nuclear weapons in three scenarios:

- against targets, such as underground bunkers, which are able to withstand attacks with conventional weapons;
- in retaliation for an attack with nuclear, biological or chemical weapons;
- and "in the event of surprising military developments," such as an "Iraqi attack on Israel or its neighbours, or a North Korean attack on South Korea, or a military confrontation over the status of Taiwan."2

The doctrine advocates a New Triad of capabilities that will combine conventional and nuclear offensive strikes with missile defences, and a new nuclear infrastructure for the development, production and testing of new nuclear weapons. In effect, the US has expanded the role of nuclear weapons beyond their core function of nuclear deterrence to a war-fighting capability. It has blurred the distinction between nuclear

and non-nuclear missions and has reserved the right to pre-emptive nuclear strikes against any non-nuclear weapon state, which poses a threat with biological or chemical weapons.

Taking their cue from the United States, Russia, Britain, France and China are also modernizing and upgrading their nuclear arsenals. It is crystal clear that the United States is the circuit-breaker, if the surge of nuclear proliferation is to be interrupted and nuclear weapons abolished. Somehow, the people of the United States of America must be made to realize that their great country has lost its way and strayed from the great ideals and principles of its founding fathers, which made the United States a beacon of freedom, democracy and justice. To paraphrase Gandhi, America must be the change we wish to see. In other words, an America that leads without dominating, reforms without destroying, and flourishes without exploiting.

A SECOND NUCLEAR AGE

The world has entered a 'second nuclear age,' more treacherous and more unpredictable, where a combination of nuclear weapons proliferation and a lower threshold for their use will increase the likelihood of nuclear war, where the availability of nuclear weapons technology and nuclear materials and the growing technical sophistication in terrorist weaponry will enhance the risk of nuclear terrorism.

The nine nuclear weapon states no longer enjoy exclusive access to nuclear technology or nuclear materials. There are at least twenty or thirty 'virtual nuclear weapon states,' with the capacity to develop and produce nuclear weapons in a very short span of time. All that it may take to tip the political balance in these states could be a nuclear threat, a change in leadership, an irresistible desire for national power and prestige, or an ambitious nuclear scientist.

The new nuclear policies of the United States, North Korea's withdrawal from the NPT and its testing of a nuclear weapon, the crisis over Iran's pursuit of uranium enrichment, and failure to secure a Comprehensive Test Ban Treaty and a Fissile Materials Cut-off Treaty are all part of a larger failure to eradicate nuclear weapons.

In 1947, scientists of the Manhattan Project set up The Bulletin of Atomic Scientists and introduced the Doomsday Clock, which has since become a universally recognized indicator of the world's vulnerability to a nuclear catastrophe. On 17th January 2007, the Bulletin's Board of Directors moved the minute hand of the Clock from seven to five minutes to midnight, explaining that: 'Not since the first atomic bombs were dropped on Hiroshima and Nagasaki has the world faced such perilous choices.'

INTERNATIONAL CAMPAIGN TO ABOLISH NUCLEAR WEAPONS

Physicians are more than healers. They are also educators and leaders. When the 2005 NPT Review Conference ended with the cynical shredding of past agreements on nuclear disarmament, IPPNW decided it was time to think outside the NPT box and mount a parallel abolition initiative outside the paralysed NPT process. IPPNW has launched an International Campaign to Abolish Nuclear Weapons (ICAN), similar to the Ottawa process on landmines, where a partnership of like-minded governments, led by Canada, the International Campaign to Ban Landmines and the United Nations eventually succeeded in securing a Landmines Ban Treaty.

The Weapons of Mass Destruction Commission, chaired by Hans Blix, has asserted that abolition is not a utopian goal and can be achieved by setting benchmarks and agreeing definitions, timetables and transparency requirements. ICAN is now a primary IPPNW programme of education, research and advocacy, which aims to reinforce the nuclear taboo and generate a mass movement against nuclear weapons, by engaging with the public, civil society and decision makers and convincing them that nuclear abolition through a Nuclear Weapons Convention (NWC) is feasible, practical, verifiable, enforceable and achievable. A Nuclear Weapons Convention (NWC) would help to bridge the contentious divide between the nuclear weapon states, which demand 'non-proliferation-first,' and the non-nuclear weapon states, which demand 'disarmament-first,' and help to break the deadlock in nuclear disarmament.

A Model Nuclear Weapons Convention, which was submitted to the United Nations in 1997 by Costa Rica, has since been revised and launched at the NPT Preparatory Committee meeting in Vienna last May. It clarifies the legal, technical and political requirements for achieving and maintaining a nuclear weapons-free world, now made more feasible by advances in verification technology and compliance procedures. Although the Model Nuclear Weapons Convention may not initially answer all questions, which may be raised, such questions could be answered while

negotiations are under way.

The abolition of nuclear weapons must be a global endeavour, involving all states, but it cannot be achieved in isolation without also addressing the political and economic forces which shape a hegemonic world. Whatever process is followed, it must ensure that no state feels, at any stage, that further nuclear disarmament is a threat to its own security.

Generally, there are three ways by which a NWC can be achieved. The first, a step-by-step approach, entails negotiations on a limited number of initial steps towards nuclear disarmament, including bilateral reductions in stockpiles by the US and Russia, a Fissile Materials Cut-off Treaty, and a Comprehensive Test Ban Treaty.

The second approach calls for comprehensive negotiations on the complete elimination of nuclear weapons, under a time-bound framework.

A third hybrid approach is a combination of the elements of the step-by-step approach and the comprehensive approach, fashioned into an incremental-comprehensive programme, consisting of a series of unilateral, bilateral, plurilateral, and multilateral steps, which would lead towards the elimination of nuclear weapons through a Nuclear Weapons Convention or through a legally binding framework of instruments.

ICAN will work to persuade one or more governments to initiate measures, including an international conference, that would create the momentum and support for a Nuclear Weapons Convention. In a humanitarian sense, a Nuclear Weapons Convention would affirm universal condemnation of nuclear weapons, uphold international humanitarian law, and erase the unconscionable legacy of nuclear weapons to future generations.

The future is not preordained. History is replete with examples of successful grassroots movements and the power of individuals to effect change, as in the abolition of slavery and apartheid, the American civil rights movement, and the ban on atmospheric nuclear testing. The lesson is clear and compelling. Hope without action is futile. Change is possible when an action is right and when people demand it and are committed to act on it.

CONCLUSION

The world today is largely shaped by dominant political and economic forces, backed up by military power, sustained by an annual global military budget of one trillion dollars. The challenges of inequity and poverty, militarism and deadly conflict, environmental damage and climate change require of governments a renewed sense of global responsibility and accountability. There is an urgent need for new thinking and a new global ethical agenda in international relations, a need to conceptualise ethics in politics, rather than ethics and politics. In other words, integrating ethics with politics.

Although moral codes shape individual behaviour and state laws govern citizens, ethics and international law do not have the power to challenge state sovereignty and constrain nation states, particularly militaristic superpowers. To paraphrase George Orwell, all states are sovereign, but some states are more sovereign than others.

There is an urgent need to reinforce the application of ethical norms to international relations. Each state can make a choice. If we agree that foreign policy is shaped by considerations and choice, then it is possible that ethical values can contribute to foreign policy, either because decision-makers are persuaded of their importance or because electorates are so persuaded.

The creation of a global ethical framework as a 'global social reality' will depend upon what is established, not so much upon the norms accepted by states, as upon the norms embedded in institutions and practices. The challenge would seem to be in articulating, advocating and establishing a consensus of universal values.

For humankind to survive in an environmentally challenged and nuclear-armed world, we must learn from the mistakes of the past and forge a common, cooperative future.

The greatest moral challenge of our times is the unthinkable possibility of self-destruction on a global scale in a nuclear war or from climate change. The greatest priority is to uphold our humanity, protect the environment, abolish nuclear weapons, and ensure there will be a future.

To end, I can do no better than recall the brilliant eloquence of Bernard Lown in his acceptance speech at the Nobel Peace Prize ceremony in 1985: 'We physicians, who shepherd human life from birth to death, have a moral imperative to resist with all our being the drift towards the brink. The threatened inhabitants of this fragile planet must speak out for those yet unborn, for posterity has no lobby with politicians ....We physicians have focused on the

nuclear threat as the singular issue of our era. We are not indifferent to other human rights and hard won civil liberties. But we must be able to bequeath to our children the most fundamental of all rights which precondition all other rights: the right to survival.'

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The above is a keynote address delivered at a joint conference on'Nuclear Weapons and the Final Pandemic: Preventing Proliferation and Abolishing Nuclear Weapons', organised by International Physicians for the Prevention of Nuclear War and the Royal Society of Medicine at the RSM, London, on 3-4 October 2007.

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Toward a Nuclear-Free World

George P. Shultz, William J. Perry,
Henry A. Kissenger and Sam Nunn*

THE accelerating spread of nuclear weapons, nuclear know-how and nuclear material has brought us to a nuclear tipping point. We face a very real possibility that the deadliest weapons ever invented could fall into dangerous hands.

The steps we are taking now to address these threats are not adequate to the danger. With nuclear weapons more widely available, deterrence is decreasingly effective and increasingly hazardous.

One year ago, in an essay in this paper, we called for a global effort to reduce reliance on nuclear weapons, to prevent their spread into potentially dangerous hands, and ultimately to end them as a threat to the world. The interest, momentum and growing political space that has been created to address these issues over the past year has been extraordinary, with strong positive responses from people all over the world.

Mikhail Gorbachev wrote in January 2007 that, as someone who signed the first treaties on real reductions in nuclear weapons, he thought it his duty to support our call for urgent action: "It is becoming clearer that nuclear weapons are no longer a means of achieving security; in fact, with every passing year they make our security more precarious."

In June, the United Kingdom's foreign secretary, Margaret Beckett, signaled her government's support, stating: "What we need is both a vision -- a scenario for a world free of nuclear weapons -- and action -- progressive steps to reduce warhead numbers and to limit the role of nuclear weapons in security policy. These two strands are separate but they are mutually reinforcing. Both are necessary, but at the moment too weak."

We have also been encouraged by additional indications of general support for this project from other former U.S. officials with extensive experience as secretaries of state and defense and national security advisors. These include: Madeleine Albright, Richard V. Allen, James A. Baker III, Samuel R. Berger, Zbigniew Brzezinski, Frank Carlucci, Warren Christopher, William Cohen, Lawrence Eagleburger, Melvin Laird, Anthony Lake, Robert McFarlane, Robert McNamara and Colin Powell.

Inspired by this reaction, in October 2007, we convened veterans of the

past six administrations, along with a number of other experts on nuclear issues, for a conference at Stanford University's Hoover Institution. There was general agreement about the importance of the vision of a world free of nuclear weapons as a guide to our thinking about nuclear policies, and about the importance of a series of steps that will pull us back from the nuclear precipice.

The U.S. and Russia, which possess close to 95% of the world's nuclear warheads, have a special responsibility, obligation and experience to demonstrate leadership, but other nations must join.

Some steps are already in progress, such as the ongoing reductions in the number of nuclear warheads deployed on long-range, or strategic, bombers and missiles. Other near-term steps that the U.S. and Russia could take, beginning in 2008, can in and of themselves dramatically reduce nuclear dangers. They include:

- Extend key provisions of the Strategic Arms Reduction Treaty of 1991. Much has been learned about the vital task of verification from the application of these provisions. The treaty is scheduled to expire on Dec. 5, 2009. The key provisions of this treaty, including their essential monitoring and verification requirements, should be extended, and the further reductions agreed upon in the 2002 Moscow Treaty on Strategic Offensive Reductions should be completed as soon as possible.

- Take steps to increase the warning and decision times for the launch of all nuclear-armed ballistic missiles, thereby reducing risks of accidental or unauthorized attacks. Reliance on launch procedures that deny command authorities sufficient time to make careful and prudent decisions is unnecessary and dangerous in today's environment. Furthermore, developments in cyber-warfare pose new threats that could have disastrous consequences if the command-and-control systems of any nuclear-weapons state were compromised by mischievous or hostile hackers. Further steps could be implemented in time, as trust grows in the U.S.-Russian relationship, by introducing mutually agreed and verified physical barriers in the command-and-control sequence.

- Discard any existing operational plans for massive attacks that still remain from the Cold War days. Interpreting deterrence as requiring mutual assured destruction (MAD) is an obsolete policy in today's world, with the U.S. and Russia formally having declared that they are allied against terrorism and no longer perceive each other as enemies.

- Undertake negotiations toward developing cooperative multilateral ballistic-missile defense and early warning systems, as proposed by Presidents Bush and Putin at their 2002 Moscow summit meeting. This should include agreement on plans for countering missile threats to Europe, Russia and the U.S. from the Middle East, along with completion of work to establish the Joint Data Exchange Center in Moscow. Reducing tensions over missile defense will enhance the possibility of progress on the broader range of nuclear issues so essential to our security. Failure to do so will make broader nuclear cooperation much more difficult.

- Dramatically accelerate work to provide the highest possible standards of security for nuclear weapons, as well as for nuclear materials everywhere in the world, to prevent terrorists from acquiring a nuclear bomb. There are nuclear weapons materials in more than 40 countries around the world, and there are recent reports of alleged attempts to smuggle nuclear material in Eastern Europe and the Caucasus. The U.S., Russia and other nations that have worked with the Nunn-Lugar programs, in cooperation with the International Atomic Energy Agency (IAEA), should play a key role in helping to implement United Nations Security Council Resolution 1540 relating to improving nuclear security -- by offering teams to assist jointly any nation in meeting its obligations under this resolution to provide for appropriate, effective security of these materials.

As Gov. Arnold Schwarzenegger put it in his address at our October conference, "Mistakes are made in every other human endeavor. Why should nuclear weapons be exempt?" To underline the

governor's point, on Aug. 29-30, 2007, six cruise missiles armed with nuclear warheads were loaded on a U.S. Air Force plane, flown across the country and unloaded. For 36 hours, no one knew where the warheads were, or even that they were missing.

- Start a dialogue, including within NATO and with Russia, on consolidating the nuclear weapons designed for forward deployment to enhance their security, and as a first step toward careful accounting for them and their eventual elimination. These smaller and more portable nuclear weapons are, given their characteristics, inviting acquisition targets for terrorist groups.

- Strengthen the means of monitoring compliance with the nuclear Non-Proliferation Treaty (NPT) as a counter to the global spread of advanced technologies. More progress in this direction is urgent, and could be achieved through requiring the application of monitoring provisions (Additional Protocols) designed by the IAEA to all signatories of the NPT.

- Adopt a process for bringing the Comprehensive Test Ban Treaty (CTBT) into effect, which would strengthen the NPT and aid international monitoring of nuclear activities. This calls for a bipartisan review, first, to examine improvements over the past decade of the international monitoring system to identify and locate explosive underground nuclear tests in violation of the CTBT; and, second, to assess the technical progress made over the past decade in maintaining high confidence in the reliability, safety and effectiveness of the nation's nuclear arsenal under a test ban. The Comprehensive Test Ban Treaty Organization is putting in place new monitoring stations to detect nuclear tests -- an effort the U.S should urgently support even prior to ratification.

In parallel with these steps by the U.S. and Russia, the dialogue must broaden on an international scale, including non-nuclear as well as nuclear nations.

Key subjects include turning the goal of a world without nuclear weapons into a practical enterprise among nations, by applying the necessary political will to build an international consensus on priorities. The government of Norway will sponsor a conference in February that will contribute to this process.

Another subject: Developing an international system to manage the risks of the nuclear fuel cycle. With the growing global interest in developing nuclear energy and the potential proliferation of nuclear enrichment capabilities, an international program should be created by advanced nuclear countries and a strengthened IAEA. The purpose should be to provide for reliable supplies of nuclear fuel, reserves of enriched uranium, infrastructure assistance, financing, and spent fuel management -- to ensure that the means to make nuclear weapons materials isn't spread around the globe.

There should also be an agreement to undertake further substantial reductions in U.S. and Russian nuclear forces beyond those recorded in the U.S.-Russia Strategic Offensive Reductions Treaty. As the reductions proceed, other nuclear nations would become involved.

President Reagan's maxim of "trust but verify" should be reaffirmed. Completing a verifiable treaty to prevent nations from producing nuclear materials for weapons would contribute to a more rigorous system of accounting and security for nuclear materials.

We should also build an international consensus on ways to deter or, when required, to respond to, secret attempts by countries to break out of agreements.

Progress must be facilitated by a clear statement of our ultimate goal. Indeed, this is the only way to build the kind of international trust and broad cooperation that will be required to effectively address today's threats. Without the vision of moving toward zero, we will not find the essential cooperation required to stop our downward spiral.

In some respects, the goal of a world free of nuclear weapons is like the top of a very tall mountain. From the vantage point of our troubled world today, we can't even see the top of the mountain, and it is tempting and easy to say we can't get there from here. But the risks from continuing to go down the mountain or standing pat are too real to ignore. We must chart a course to higher ground where the mountaintop becomes more visible.

*** Mr. Shultz** was secretary of state from 1982 to 1989. Mr. Perry was secretary of defense from 1994 to 1997. Mr. Kissinger was secretary of state from 1973 to 1977. Mr. Nunn is former chairman of the Senate Armed

Services Committee. The following participants in the Hoover-NTI conference also endorse the view in this statement: General John Abizaid, Graham Allison, Brooke Anderson, Martin Anderson, Steve Andreasen, Mike Armacost, Bruce Blair, Matt Bunn, Ashton Carter, Sidney Drell, General Vladimir Dvorkin, Bob Einhorn, Mark Fitzpatrick, James Goodby, Rose Gottemoeller, Tom Graham, David Hamburg, Siegfried Hecker, Tom Henriksen, David Holloway, Raymond Jeanloz, Ray Juzaitis, Max Kampelman, Jack Matlock, Michael McFaul, John McLaughlin, Don Oberdorfer, Pavel Podvig, William Potter, Richard Rhodes, Joan Rohlfing, Harry Rowen, Scott Sagan, Roald Sagdeev, Abe Sofaer, Richard Solomon, and Philip Zelikow.

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Sub-continent

- An Assessment of the Extent of Projected Global Famine Resulting From Limited, Regional Nuclear War / Ira Helfand
- Madness, Malice, Miscalculation and Malfunction: Global Strategic Stability, India and Pakistan / John Hallam
- How Not to Handle Nuclear Security / Zia Mian

An Assessment of the Extent of Projected Global Famine Resulting From Limited, Regional Nuclear War

Ira Helfand, MD*

IT has been clear for some time, that a large scale nuclear war involving a substantial portion of the nuclear arsenals of the United States and Russia would have devastating consequences far beyond these two countries and would constitute a truly global catastrophe.

The recent study by Robock et al on the climatic consequences of regional nuclear war shows clearly that even a "limited" nuclear conflict, involving as few as 100 Hiroshima-sized bombs, would also have global implications with significant effects on weather patterns throughout the world. Debris injected into the atmosphere from the explosions and resulting fires would produce an average surface cooling of -1.25ºC that would last for several years. 1 Even 10 years out, there would be a persistent average surface cooling of -0.5ºC. Perhaps more important than the average cooling, there would be decreases in the growing season (frost free days), of 10 to 20 days in many of the most important grain producing areas throughout the world. This decrease might "completely eliminate crops that have insufficient time to reach maturity. " 2 There would also be major alterations in patterns of precipitation, with a 10% reduction in global rainfall, and large reductions in the Asian summer monsoon. A conflict of this magnitude would not necessarily involve the nuclear super powers. It could arise between emerging nuclear powers such as India and Pakistan. This paper attempts to examine the potential effect on human health of these sudden climate changes. The most important direct effect of these changes in temperature and precipitation would be a decrease in global food production. While there are no accurate estimates of the shortfall in food production available at this time, there is historical experience from previous cooling episodes which suggests the impact on food supplies would be very large.

Climate and Famine:The Historical Record In 1816 North America and Europe experienced "The year without a summer", following the 1815 eruption of the Indonesian volcano Tambora, the largest volcanic eruption in recorded history. 3 The average global deviation in temperature was -0.7ºC, and there was significant shortening of the growing season. In the northeastern United States and eastern Canada, which were particularly hard hit, temperatures were actually above average during the early part of the year, and even during the summer months there were a number of periods with average or above average temperatures. But four severe cold waves, June 6-11, July 9-11, and August 21 and August 30, brought killing frosts as far south as the Mid Atlantic States, and in New England and Quebec there was even significant snow fall in June. 4 These periods of frost caused extensive damage to crops, particularly to the most important crop, corn (maize), much of which was destroyed. The resulting shortages led to the extensive slaughter of livestock which could not be fed, and to a doubling in grain prices throughout the area. In the New World, where population density was still quite low, there was relatively little hunger, except in some isolated rural communities. In the more densely populated countries of western and northern Europe the effects were far more severe with the widespread crop failures leading to outright famine. As described in a letter published in an Albany, New York newspaper that year, "From the Baltic to Breslau the greater part of the land sewn with winter wheat has been obliged to be ploughed up, and of the corn that remains standing scarcely one third part of a crop is to be expected. " 5 Famine was reported in Ireland, the German states, Switzerland and France, and again a doubling of prices for grain occurred. In Europe a much greater disaster was averted only because of the very strong harvest in 1815 which left grain stocks high at the outset of the famine, and another strong harvest in the summer 1817. As it was, "In the spring of 1817 pallid, half starved people were wandering the fields, hunting for, and grubbing up, overlooked and rotting potatoes of the last year's crop. " 6 Crop failures and famine were also reported in India. 7 The worst of

the cooling caused by the Tambora eruption lasted for only one year. A less well documented, but more prolonged episode of cooling took place between 536 and 545. 8 This event may also have been precipitated by a large volcanic eruption in Indonesia , this time in the Sunda Strait between Java and Sumatra. The historical record from this period is quite fragmentary, but references to extensive crop failure and severe famine are found in documents from Byzantium , China, Korea and Japan, and the archeological record suggests a devastating drought in South America and the western United States. 9 During both of these prior events, crop failures were due primarily to cooling and lower precipitation; several other factors might affect the size of available food stocks in the event of a regional nuclear war. If the soot injected into the atmosphere in a nuclear war caused significant ozone depletion, that could cause a further major decline in actual food production. 10 Furthermore food that was grown might be diverted to industrial use. Today ethanol production is already using significant quantities of grain that would otherwise be available as food or livestock feed. 11 In the event that a regional nuclear war involved petroleum producing countries, or disrupted shipping from petroleum producing countries, there might be increased diversion of grain to ethanol production to try to make up for this shortfall. Finally, if a regional war resulted in significant radioactive contamination of one or more major food producing countries, large quantities of food might need to be destroyed and significant areas of crop land might need to be taken out of production.

CURRENT DEMOGRAPHIC CONDITIONS

At this point in time, we are ill prepared to deal with a major fall in world food supply. As of mid August of this year, global grain stocks were approximately 322 million tons with annual consumption at 2,098 million tons. 12 Expressed as days of consumption world grain stocks are therefore approximately 49 days, lower than at any point in the last 50 years, and dramatically lower than the 100 to 120 days of consumption available in the 1980's and 1990's. 13 These stocks would not provide any significant reserve in the event of a sharp decline in global production. At our current baseline there are already millions of people suffering chronic malnutrition. While there is considerable academic debate about the exact scope of global malnutrition, and even about the best way to define malnutrition, 14 The average adult needs somewhere between 1800 and 2000 calories per day, depend- Helfand 2 ing on his or her stature, to meet basic metabolic requirements and sustain a minimal level of physical activity. Requirements for children are dependent on age and size. There are more than 800 million people in the world whose daily caloric intake falls below these minimum requirements. Each year some five million children in this group starve to death. A small further decline in available food would put this entire group at risk. Given these conditions, even a modest, sudden decline in agricultural production could trigger massive famine. At the time of the great Bengal famine of 1943, during which three million people died, food production was only 5% less than it had been on average over the preceding five years, and it was actually 13% higher than it had been in 1941 when there was not a famine. 15 But in 1943, after the Japanese occupation of Burma, which had historically exported grain to Bengal, the decline in food production was coupled with panic hoarding and the price of rice rose nearly five fold, making food unaffordable to large numbers of people. These two factors, hoarding and the severe increase in rice prices, caused an effective inaccessibility of food far more severe than the actual shortfall in production. In the event of a major global cooling episode with widespread crop failures, a similar scenario would unfold on a global scale. Whatever the initial shortfall in agricultural production, and it might be much higher than the modest 5% drop that triggered the Bengal famine, there would be widespread panic, particularly if there were a general understanding that crops would continue to fail for a number of years. In 1972, the price of both wheat and rice doubled simply in response to a tightening of world food stocks to just under 60 days of consumption. 16 In this setting we would expect to see much greater rises in grain prices worldwide. These price increases would put a crippling burden on whole countries which import large portions of their food supply and would make food unaffordable for hundreds of millions of individuals who are already malnourished precisely because of their inability to afford adequate food even at current world prices. In addition we would probably see hoarding on a global scale. In September 2002, Canada, faced with a sharp decline in wheat production because of drought conditions, suspended wheat exports for a year. The next year the European Union took similar action, as did Russia. And in August 2004 Vietnam indicated it would not export rice until the following spring. 17 In the event of a regional nuclear war, the grain exporting states would be faced with major crop losses and the prospect of bad harvests for the next several years. It is probable that

they would take similar action, and refuse to export whatever grain surplus they might have, retaining it instead as a domestic reserve. This year global grain consumption is about 2,098 million tons, of which 220 million tons, or 11% is imported.18 Many countries which currently do not have major problems with widespread malnutrition arenonetheless dependent on imported food. For example, North Africa , home to more than 150 million people, with average caloric consumption well above the minimal level, imports 45% of its food. 19 A number of other countries in the Middle East, Malaysia, South Korea , Japan and Taiwan are also dependent on imports for 50% or more of their grain consumption. 20 The wealthier of these countries might initially be able to obtain some grain on the international market by bidding up the price, but as the extent of the global crop failures became clear, grain producing countries would tighten their export bans, and the hundreds of millions of people dependent on grain imports would also face starvation.

FAMINE DEATHS AND SYNERGISTIC EFFECTS

Somewhat paradoxically, the ongoing effects of global warming might make the world more vulnerable in the event of a sudden cooling event. For example, in Africa, "Increasingly variable growing season conditions are disrupting subsistence agricultural production leading to famine." 21 Populations already weakened by the negative effects on food production of global warming would be less able to withstand a sudden further decline in accessible food. It is of course impossible to estimate with accuracy the full extent of the global famine that would follow a regional nuclear war. But it seems reasonable to conclude that few of the 800 million people who are already malnourished would survive if their already substandard intake decreased by even 10% for a whole year. If the crop failures and resulting food shortages persisted for several years their fate would be sealed. Additional hundreds of millions whose current intake is marginal, or who live in countries dependent on food imports would also be at risk, particularly if the famine persisted. Thus, in the event of a protracted global cooling, triggered by a limited, regional nuclear war, it seems reasonable to fear that the total global death toll could exceed one billion from starvation alone. Two other issues need to be considered as well. First, there is a very high likelihood that famine on this scale would lead to major epidemics of infectious diseases. The prolonged cooling and resultant famine in 536-545 was accompanied by a major outbreak of plague which developed over the next half century into a global pandemic. 22 The famine of 1816 triggered an epidemic of typhus in Ireland that spread to much of Europe 23 and the famine conditions in India that year led to a an outbreak of cholera that has been implicated in the first global cholera pandemic. 24 The well studied Great Bengal Famine of 1943 was associated with major local epidemics of cholera, malaria, smallpox, and dysentery. 25 Despite the advances in medical technology of the 3 Projected Global Famine Resulting From Limited, Regional Nuclear War last half century, a global famine on the scale anticipated would provide the ideal breeding ground for epidemics involving any or all of these illness. In particular the vast megacities of the developing world, crowded, and often lacking adequate sanitation in the best of times, would almost certainly see major outbreaks of infectious diseases; and illnesses, like plague, which have not been prevalent in recent years might again become major health threats. Finally we need to consider the immense potential for war and civil conflict that would be created by famine on this scale. Within nations where famine is widespread there would almost certainly be food riots, and competition for limited food resources might well exacerbate ethnic and regional animosities. Among nations, armed conflict seems highly likely as states dependent on imports adopt whatever means are at their disposal in an attempt to maintain access to food supplies. It is impossible to estimate the additional global death toll from disease and further warfare that this "limited regional" nuclear war might cause, but given the world wide scope of the climate effects the dead from these causes might well number in the hundreds of millions.

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Madness, Malice, Miscalculation and Malfunction: Global Strategic Stability, India and Pakistan

India, Pakistan, and the urgent need for global nuclear disarmament**

John Hallam*

THE urgent need for global nuclear disarmament is intimately connected with the need for nuclear risk reduction and disarmament between India and Pakistan, something that is thrown into a sharp light by recent instability in Pakistan. Talk of military action to 'seize' Pakistani nukes in order to prevent Taliban/Al Qaeda elements getting hold of them is likely to provoke precisely the catastrophe it is supposedly intended to avoid.

If India and Pakistan can begin to transform their own relationship and commence a nuclear build-down (the opposite of the current arms-race), they could then play a vital role in leading the rest of the world toward the elimination of nuclear weapons as per article VI of the NPT and the Year 2000 NPT Review Conference final declaration.

The true significance of the nuclear disarmament issue was not lost on India's Government,20 years ago. Rajiv Gandhi, addressing the U.N. General Assembly on June 9, 1988, put it in the perspective in which it should still be seen: "Nuclear war will not mean the death of a hundred million people. Or even a thousand million. It will mean the extinction of four thousand million: the end of life as we know it on our planet earth. We come to the United Nations to seek your support. We seek your support to put a stop to this madness."

An India-Pakistan nuclear conflict would be an unparalleled catastrophe, with estimates of global casualties of up to a billion due to famine from global cooling. More immediate casualties

bear a range of estimates starting from 1 - 10 million and ending with up to 150 million depending on the number of warheads involved, the targeting doctrines and the time of year. (Any time other than monsoon will tend to blow back fallout from Pakistani cites destruction back over north India).

The most recent studies of nuclear winter have focussed specifically on the possibility of an India-Pakistan nuclear exchange. According to Ira Helfand (2007): "While it is not possible to estimate the precise extent of the global famine that would follow a regional nuclear war, it seems reasonable to postulate a total global death toll in the range of one billion from starvation alone."

My colleague Steven Starr notes in his article 'Catastrophic Climatic Consequences of Nuclear Conflict': "New studies show that a 'regional' nuclear conflict, which targeted large population centers in the sub-tropics with 100 Hiroshima-size weapons - about 0.3% of the global nuclear arsenal - could produce as many fatalities as World War II 1 and would significantly disrupt the global climate for at least a decade.2 Following this 'small' exchange, the world would rapidly experience cold conditions not felt since pre-industrial times."

The stakes still are high, but we seem to have forgotten, or seem not to care. To this day, there are about 2000 strategic warheads in both the US and Russia on permanent 'Launch-on-Warning' (LoW) status, able to be launched within minutes - as George Bush hears voices from 'God' (or the rapture cult or Cheney) telling him to do so, or in a moment of computer error, panic, and miscalculation amid wailing sirens, flashing lights, with stressed military personnel screaming across launch control centres as has taken place already far too often.

The issue of nuclear weapons Operating Status is in many ways a litmus-test issue for the rest of nuclear disarmament, as it embodies within itself the core reasons for opposition to nuclear weapons in the first place - namely the fact that their large scale use will still be more-or-less, the 'end of the world', and can, bizarrely, take place by accident. There are implications for India - Pak strategic stability, and in turn India Pakistan strategic stability has its implications for global strategic stability.

A major feature of the regional nuclear arms race with implications for regional strategic stability has been the testing of nuclear-capable missiles by both India and Pakistan. Others have also not been slow to test missiles.

Only a few weeks ago (Jan 2008) India had undertaken three missile tests in one week, in tests aimed at creating a delusional 'missile defence' system. Pakistan had also carried out Ghauri and other missile tests, the most recent right in the middle of the internal political crisis.

Others also were keen to test their nuclear delivery systems. Back in 2006,The Russian Bulava SLBM, which had been having troubles, flew faultlessly from the Barents Sea to Kamchatka. A US Minuteman deployed its multiple dummy warheads, as it would the ten real warheads. The SS19, a now aging missile, demonstrated it was as capable of taking out Sydney or New York as it had been during the 80s.

More recent Russian tests included two tests carried out on Christmas Day 2007, in which a submarine - launched (presumably Bulava) missile flew faultlessly from the Barents sea to Kamchatka and an ICBM flew from Plesetsk to Kamchatka. Putin described them as 'Christmas fireworks' and said we should 'relax'.

POSITIVE DEVELOPMENTS IN UN FIRST COMMITTEE

In October and early November 2006, UN First Committee passed a series of thoroughly excellent resolutions, any one of which, were it enforced, would ensure the survival of civilisation and the human species. As WILPF's Jennifer Nordstrom said, observing First Committee, 'the will of the planet for the elimination of nuclear weapons is clear - just look at the indicator board."

In 2006, some 44 Nobel laureates had signed a statement that I authored together with Alyn Ware of LCNP and Doug Mattern of AWC, urging that nuclear weapons be taken off launch-on-warning (LoW) - status.

That statement gathered significant support at the last NPT review conference, and led to the L29 resolution of October/December 2007.

I would draw attention not only to Australia's and Japan' s Renewed Determination Toward the Total Elimination of Nuclear Weapons, which passed by a massive majority, but to India's own Reducing Nuclear Dangers, a worthy resolution that focuses on the lowering of nuclear weapons operating status, as well as pointing toward a path to the elimination of nuclear weapons.

An effort needs to be made in the General Assembly to get wider support for this resolution, and to get India itself to abide by it.

The Indian representative in the General Assembly urged nations that had voted for or had sponsored L29 to also support Reducing Nuclear Dangers. Some

(Chile, Nigeria) already do so. India voted for L29.

The passage of the L29 resolution on Operating Status, sponsored by New Zealand, Sweden, Switzerland, Chile, and Nigeria, together with the placing of the draft nuclear weapons convention before the General Assembly Plenary, were high points of the 2007 general assembly and first committee. The L29 garnered support from quarters which rightly or wrongly would never support Reducing Nuclear Dangers, notably from a large part of NATO (Germany, Italy, Spain, Portugal, Iceland, Norway, plus Austria, Finland and Ireland, and Japan).

INDIA AND PAKISTAN IN THE WIDER GLOBAL DISARMAMENT PICTURE

So where do India and Pakistan fit into the wider global picture on nuclear disarmament or the lack thereof?

The risk of a subcontinental mini-apocalypse is very real and as time goes on the megatonnage involved inexorably grows. Measures to automate, computerise, and centralise, nuclear command and control will have the perverse effect of making an accidental exchange all the more likely and all the more lethal.

India's experiments with missile defence involve the maintenance of ultra - fast reaction missiles, and generally move India's strategic nuclear forces closer to a hair-trigger mode. So too will the increasing role taken by missiles as against aircraft as delivery systems. It is inevitable that reliance on truck mounted mobile missiles such as the Pakistani Ghauri will involve a high alert posture. Separation of warhead components as claimed cannot be possible for truck mounted missiles.

US Plans (assuming they really do exist) to 'snatch' Pakistani nuclear weapons in the event of a Jihadi 'takeover' of Pakistan (which seems unlikely - the assassination of Bhutto seems more likely to weaken than to strengthen the Jihadi faction) seem to be compounding madness with more madness. Pakistan has made it abundantly clear that it will defend its nuclear assets.

The possibility that attempts to snatch (or destroy) truck-mounted Ghauri missiles might be met by launches should not be discounted.

A mutual agreement by both India and Pakistan to end their nuclear rivalry could be the catalyst that might turn the tide of further nuclear weapons development and further horizontal proliferation back toward the goal of nuclear abolition.

WHO CAN STILL DESTROY THE WORLD?

Let's get a bit of perspective by looking at the numbers.

There are roughly 27,000 nuclear weapons in the world, of which 95% are in the hands of the US and Russia.

The 95% of the worlds warheads provide the US and Russia, on the ultimate bad - hair day, with the unique capability to undo 4 billion years of evolution in about 40 very bad minutes, an ability they do not seem to want to lose in spite of the fact that it is illegal and they are legally committed to eliminate it. Of these warheads, roughly 10,000 are in the hands of the US and a very rubbery 15,000 in the hands of Russia.

Of that number, approximately 2000-2,500 each in Russia and the US are in what is termed 'Launch-on-warning' (LoW) status, and it is this number that gives the US and Russia that unique planetocidal/omnicidal capability.

According to the 'nuclear winter' computer simulations were done up to about 1990, roughly 200-500 megaton-sized warheads, used for 'city busting' (i.e. the incineration of most of the worlds population living in the 200-500 largest cities), causes the 'nuclear winter' effect to kick in, giving rise to darkness and sub-zero temperatures as far south as Amazonia.

More recent studies of nuclear winter by Brian Toon and others, performed last year, simply reiterate what we already knew: The use of large numbers of nuclear weapons will cause global climatic impacts of a dramatic nature that dim the light of the sun, radically lowering temperatures worldwide. Toon's more recent studies also look at the effects of a 'mini-nuclear - winter', by which he means really, an India-Pakistan conflict using one or two dozen warheads. Toon concludes that this, while it would not mean the immediate end of civilisation worldwide, would also provoke global cooling effects as well as casualties in the tens of millions to the hundreds of millions.

Pentagon computer projections obtained by the Union of Concerned Scientists indicated that the body count, should a nuclear 'exchange' have happened between India and Pakistan would have been up to 150 million. A significant India-Pakistan nuclear exchange would have, according to Toons studies, global effects lasting at least for years, and most probably decades. More radical effects are predicted by PSR's Ira Helfand.

A range of estimates exist for India's nuclear arsenal. It is more usual to assume however, that India's arsenal is closer to 50 warheads than to the 150 warheads sometimes quoted. Perhaps a realistic number is 75-100 warheads. It does seem

likely that in the not too far distant future, assuming current trends continue, India's nuclear arsenal may overtake that of the UK at least in terms of numbers.

Pakistan has fewer warheads than India (50-75), but may have a more sophisticated North-Korea-derived missile delivery system. The Ghauri missile is based on the DPRK Nodong missile, and Pakistani missile tests were regularly attended by DPRK personnel. Pakistan also has the Shaheen missile, derived from Chinese technology.

Missile- flight time from Pakistani launch sites to Delhi is of the order of two minutes. (from Siberia to New York it is about 30 minutes). Islamabad and New Delhi place increasing reliance on computerised centralised control systems.

During the 2002-2003 India-Pakistan crisis, in which a million men fought artillery duels across the 'line of control', In December 2002, the most prominent wire story in the world was 'India, Pak move nukes to line of control'. Such a move, would have placed nuclear missiles in positions in which they were very likely to have been fired.

In spite of official denials, the story may have its basis in a decision - a foolish one in my view - to move truck - mounted Prithvi missiles closer to the line of control, and corresponding Pakistani moves.

Both parties, Prime minister and President, admitted after the dust began to settle in 2003, that it had been 'close'.

WHERE CAN WE GO FROM HERE?

Governments worldwide have not given nuclear disarmament the priority that it needs in spite of the near- unanimity at a global level that it is a priority for human survival. The right noises - or some of them - keep on being made at disarmament conferences (and it is utterly vital that they keep on being made), but we must go beyond making the right noises and agreeing to the right words important as that is, and move to doing the right things.

India and Pakistan could do much by starting with bona-fide confidence - building measures (some of which ARE taking place - sort of), by not undermining those measures by testing missiles within days of their signature, and by engaging in a subcontinental Detente. The missile tests that continue to be undertaken by both countries are destabilising and dangerous. (as are those of both the US and Russia) They should stop.

From there we need to move toward the US and Russia going beyond the minimal and undefined reductions in the Moscow Treaty to really fulfilling their obligations under article VI of the NPT to eliminate their nuclear arsenals as per the clear language, multiple times reaffirmed, of that treaty.

India and Pakistan, as subcontinental powers that have significant nuclear arsenals and who have more than once threatened each other with mutual incineration have a vital role to play in taking the apocalypse OFF the worlds agenda once and for all.

By doing so, we will not just make history, but make history possible

**Based on a speech delivered at the International Seminar on Indo-US Nuclear Deal in Mumbai, held from March 10 -12 2007.

***John Hallam** was the author and joint co-ordinator, together with the Association of World Citizens, of an appeal on nuclear weapons operating status that was signed by 44 Nobel prize-winners and that resulted in Kofi Annan prioritising the issue of operating status in the 2005 NPT Review conference. In October 2006 and 2007 he attended the United Nations General Assembly's First Committee and gave a panel there on nuclear weapons operating status with Steven Starr of PGS. The 2006 panel led to a resolution on Nuclear Weapons Operating Status in the United Nations First Committee in 2007, which passed 124 to 3 with 34 abstentions in First Committee and 136 to 3 in GA plenary.

How Not to Handle Nuclear Security

*Zia Mian

THE United States recently admitted that since the attacks of September 11, 2001, it has been helping Pakistan secure its nuclear weapons and the materials used to make them. Pakistan has welcomed this assistance. A former Pakistani general who was involved in the nuclear weapons complex has said that "We want to learn from the West's best practices."

But the U.S. track record for securing its own nuclear weapons, nuclear materials and weapons information isn't encouraging, to say the least. If the United States can't secure its own nuclear complex, why expect Pakistan to do it any better?

On November 11, The Washington Post reported that the United States sent "tens of millions of dollars worth of equipment such as intrusion detectors and ID systems to safeguard Pakistan's nuclear weapons." A week later, The New York Times, which had been sitting on the story for three years, revealed that the program was in fact much larger, "Over the past six years, the Bush administration has spent almost $100 million on a highly classified program to help Gen. Pervez Musharraf, Pakistan's president, secure his country's nuclear weapons." The assistance ranged from "helicopters to night-vision goggles to nuclear detection equipment."

The U.S. military claims to be confident about the security of Pakistan's nuclear arsenal. A Pentagon press spokesman said, "At this point, we have no concerns. We believe that they are under the appropriate control." The Chairman of the U.S. Joint Chiefs of Staff declared "I don't see any indication right now that security of those weapons is in jeopardy."

Zero Locks

A concern about nuclear weapons security in Pakistan is that Islamists in the military may seize control of the weapons and try to use them. Pakistan claims to have followed the U.S. example and installed coded combination-lock switches, known as Permissive Action Links, on its weapons.

Since the 1960s most U.S. nuclear weapons are supposed to have been protected against unauthorized use by coded combination-lock switches that could only be activated by someone who knew that proper sequence of characters. These switches were introduced in 1962 by Robert McNamara when he was Secretary of Defense to ensure control over the use of U.S. nuclear weapons.

According to Bruce Blair, a former missile launch control officer, Strategic Air Command, which was responsible for the nuclear-armed missiles and bombers, installed the switches but set the combinations of all the locks to a string of zeros. The codes for launching U.S. nuclear missiles apparently stayed set at OOOOOOOO until the late 1970s. The reason? Strategic Air Command did not want there to be any problems or delays in launching the nuclear missiles because of the need to put in a more complex set of numbers.

Robert McNamara apparently did not know that the locks he had ordered to be installed on nuclear weapons were largely worthless, and that the military with direct control of the weapons were evading official instructions for securing nuclear missiles. McNamara only learned of this from Bruce Blair in January 2004. McNamara was outraged. But, as Blair observed, this is but "one of a long litany of items pointing to the ignorance of presidents and defense secretaries and other nuclear security officials about the true state of nuclear affairs."

WAYWARD NUKES

Problems with securing nuclear weapons are not a matter of Cold War history. In August this year, six U.S. nuclear-armed cruise missiles were inadvertently loaded onto a bomber at Minot Air Force Base in North Dakota and flown across the country to Barksdale Air Force Base in Louisiana. The cruise missiles remained fitted to the bomber for 24 hours before it took off and for hours after it landed without anyone realizing that it was carry-

ing nuclear warheads. It was "an unprecedented string of procedural failures," according to General Richard Newton, the assistant deputy chief of staff for operations for the U.S. Air Force.

As nuclear analyst Hans Kristensen has pointed out, the incident showed "the apparent breakdown of nuclear command and control for the custody of the nuclear weapons." Put simply, the ground crews did not know, or bother to check, that they were loading nuclear weapons on a plane; the bomber's pilot and crew did not know or bother to check that they were carrying nuclear weapons; the respective base commanders did not know nuclear weapons were leaving or arriving; and, the national authorities responsible for nuclear weapons did not know where these nuclear weapons were or that they were being moved across the country. The weapons were to all intents and purposes lost for about 36 hours.

GATES, GUARDS, AND GUNS

A key concern about nuclear security in Pakistan is the risk of radical Islamist militants making a bid for its nuclear weapons or its stock of the materials with which to make nuclear weapons. There is a growing armed insurgency in the areas bordering Afghanistan that has been spreading across Pakistan's North-West Frontier Province and into its major cities.

The United States, which has much less of a threat to worry about, has had plenty of problems trying to makes sure terrorists could not get their hands on the materials with which to make nuclear weapons. The U.S. Department of energy currently spends $1.3 billion a year on securing its facilities that contain significant amounts of nuclear weapons-useable materials through the use of fences, guards, cameras, intrusion sensors, and so on. But many of these facilities are not required or able to protect against a 19-strong group of attackers such as were involved in the 9/11 aircraft hijackings.

The failure to secure weapons materials at U.S. facilities has been exposed by exercises in which simulated attackers carried away material sufficient to make a weapon. Reports show that the security at the sites fails more than 50% of the time. The Project on Government Oversight, an independent watch dog group, has revealed for instance that during a mock attack on Los Alamos National Laboratory in New Mexico, a U.S. Special Forces team "was able to steal enough weapons-grade uranium for numerous nuclear weapons." In a subsequent security test at the same site, the "mock terrorists gained control of sensitive nuclear materials which, if detonated, would have endangered significant parts of New Mexico, Colorado and downwind areas."

NUCLEAR KNOW-HOW

A particular worry about Pakistan is that scientists and engineers within its nuclear program may share weapons information with other countries or Islamist groups. The story of A.Q. Khan is all too familiar, as is that of several senior former Pakistani nuclear scientists who were found to have met with the Al-Qaeda leadership in Afghanistan.

In the United States, there is a long and troubling history of nuclear weapons information going missing from the nuclear weapons laboratories, and ending up in unexpected places. The first and most famous atomic spy was Klaus Fuchs, who passed on the secrets of the U.S. nuclear weapons project to the Soviet Union during World War II. Fuchs claimed he did it for ideological reasons.

More recently, the Project on Government Oversight has compiled a list of reports on the loss of classified information from the U.S. nuclear complex. They found 17 incidents in 2004 alone in which classified information from Los Alamos was sent using unclassified networks. This led the Department of Energy, which manages the U.S. nuclear weapons program, to shut down all operations involving removable hard drives, laptops, CDs and DVDs, flash drives and such like, across the entire complex.

In one dramatic case, missing computer disks containing nuclear weapons information were lost and mysteriously found several weeks later behind a copy machine. In another case, classified information about nuclear weapons designs was found during a raid on a drug den. In January 2007, there was an incident in which a highly classified email message about nuclear weapons was sent unsecured by a senior Pentagon nuclear adviser and then forwarded by others. It has been described as "the most serious breach of U.S. national security."

NUCLEAR PEOPLE

History suggests that the most enduring problem for the security of nuclear weapons, materials and information, is the people who work in and manage the nuclear weapons complex. The United States has a nuclear weapons personnel reliability program which screens people who are allowed to work with nuclear weapons. Pakistan says it has adopted a similar program.

An independent study of the U.S. nuclear personnel reliability program

found that between 1975 and 1990, the United States disqualified annually between 3% and 5% of the military personnel it had previously cleared for working with nuclear weapons. These people were removed on the grounds of drug or alcohol problems, conviction for a serious crime, negligence, unreliability or aberrant behavior, poor attitude, and behavior suggesting problems with law and authority.

Problems like this continue. In October 2006, a Los Alamos lab worker with the "highest possible security clearance" was arrested in a cocaine drug bust. One year later, the commander of a U.S. nuclear submarine was removed from his duties after it was discovered that the ship's crew failed to do daily safety checks on its nuclear reactor for a month and then falsified the daily records to cover up the lapse.

FALSE SECURITY

After 60 years of living with the bomb, the United States has failed to get its own nuclear house in order. It continues to suffer serious problems with securing its own nuclear weapons, nuclear materials and weapons related information. Showing no sign of having learned from its own mistakes, the United States may only end up encouraging a false sense of security and confidence about nuclear weapons security in Pakistan.

The only sure way to secure nuclear weapons and materials is not to have them. The only way to be sure that nuclear weapons scientists do not pass information is to forbid scientists from working on such weapons. Anything short of that is taking a risk and being willing to pay the price for living in a nuclear-armed world.

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[Source:http://www.fpif.org/fpiftxt/481]

On Indo-US Nuclear Deal

- Choosing the Wrong Future: the U.S.-India Nuclear Deal / Andrew Lichterman and M.V. Ramana
- India's Foreign Policy and Indo-US Nuclear Deal / Sukla Sen
- India at the IAEA: Mind the Additional Protocol / Aaron Tovish

Choosing the Wrong Future: The U.S.-India Nuclear Deal

Andrew Lichterman and M.V. Ramana *

The fate of the nuclear deal between India and the United States still remains uncertain. The agreement would allow India access to international markets in nuclear fuels and technology, despite India remaining outside the Nuclear Non proliferation Treaty (NPT) regime and developing and testing nuclear weapons. The nuclear deal is part of a broader set of agreements between the two countries, centering on increased military cooperation and high tech trade.

The current charge against the deal, and the government that has negotiated it, has been led by the left parties, chiefly the Communist Party of India (Marxist). While their opposition has been cast as primarily due to their antipathy to the United States, in reality it is also part of a larger contest about the way India develops and the particular form globalization has taken.

But the deal has also drawn opposition from India's neighbors, who fear the prospect of an enlarged nuclear arsenal and closer military ties to a nuclear armed superpower. Pakistan, for its part, has signaled that it would respond in kind to a more ambitious Indian nuclear weapons program. Thus, the deal will further fuel an arms race between nuclear armed neighbors that have fought multiple wars.

A natural opponent to the deal is China, which has been identified as a key reason to offer this deal to India. To quote Ashley Tellis of the Carnegie Endowment: "If the United States is serious about advancing its geopolitical objectives in Asia, it would almost by definition help New Delhi develop strategic capabilities such that India's nuclear weaponry and associated delivery systems could deter against the growing and utterly more capable nuclear forces Beijing is likely to possess by 2025." In the context of the deal between the United States, which long has ignored its NPT nuclear disarmament obligations, and India, which has acquired nuclear weapons while refusing to join the NPT, such thinking only serves to legitimize the ultimate weapons of mass destruction.

In the United States an array of corporate interests led by the nuclear industry and arms makers are supporting the deal. They see the possibilities not only for nuclear trade but for big ticket weapons sales, as well as selling other goods and services to India's elite, only a fraction of the population but a huge new market nonetheless. This emerging economic order, which systemically generates huge disparities of wealth both within and among nations, is itself a source of conflict. The answer envisioned by the military elites is to throw ever more sophisticated levels of high tech violence at these conflicts. Foreign policy pundits and officials in both countries extol the benefits of increased military cooperation, with the more enthusiastic on the U.S. side envisioning India as a junior partner for the U.S. military agenda in Asia. In the aftermath of wars against Afghanistan and Iraq, the prospect of U.S. military action in Asia is hardly remote.

Despite the future oriented rhetoric the deal has been wrapped in, what is most striking about it is its backward looking character. Nuclear power was the technology of the future in the 1950's. Half a century later, the promise of energy "too cheap to meter" remains an unfulfilled dream, the fundamental problems of catastrophic risk and long lasting highly radioactive waste still unsolved. With nuclear power construction grinding to a halt in wealthier countries, the industry has turned its sights to Asia, trying to sell its technology as a climate friendly solution to the continent's burgeoning energy demand.

However, nuclear power cannot play a significant role in solving the energy needs of the vast majority of India's population, much less do so in a way that offers any net environmental gains. Nuclear plants today generate only three percent of India's electricity and less than one percent of its total energy needs. Even under the most optimistic scenarios nuclear power will only be able to double or triple its contribution by the middle of this century. Investing the immense capital needed to construct nuclear plants in energy efficiency measures offers far larger payoffs for reductions of carbon emissions. Nuclear power, the most expensive form of centralized electricity generation, is an inefficient way to deliver energy to India's vast unserved rural population.

The single most pressing "security" issue of the 21st century will be assuring the essentials of a healthy, dignified life for the billions of people who are left out of a global economy focused on delivering mass consumption items to urban middle classes, luxuries to wealthy elites, and weapons to enforce this inequitable status quo. In the rising global awareness of both global warming and limits on oil supplies, there is an opportunity for a different path of both technology development and trade. This

path would stress decentralized energy strategies and technologies, first to serve the basic needs of unserved populations, moving as quickly as possible to the use of renewable energy sources rather than fossil fuels. This approach to energy development has other positive consequences as well, e.g. improving public health by reducing open fuel burning for cooking and heat, slowing deforestation where wood is used for fuel, and creating large numbers of jobs broadly distributed geographically and in skill levels, from technology development through manufacturing to widely distributed work installing equipment for decentralized energy generation and use. Mass production of renewable energy generation technologies will both reduce their cost and encourage further innovation, providing growing opportunities for reducing energy consumption in the United States, where opportunities for conservation gains are abundant.

Several virtuous, mutually reinforcing cycles can be created in this way: improving energy access, providing employment, and generally broadening the economic potential of areas left out of the current mode of corporate globalization, reducing both greenhouse gas emissions and oil consumption in the United States, reducing as a consequence the need for access to foreign oil and gas that is a significant factor driving an aggressive U.S. foreign policy world-wide. This kind of approach, furthermore, can more easily be achieved incrementally, with constantly improving decentralized energy technologies being deployed a household, a village, a city at a time, without the kind of massive, one shot capital costs that commit entire regions to a narrow set of technologies and generating facilities for decades at a time.

This is what the 21st century could look like. In contrast, the U.S. India nuclear deal would build another set of institutional ties binding us to the power structures, both technical and political, of the last century, strengthening those who profit from centralized control of energy resources, a society that generates and tolerates great disparities in wealth, and a global weapons trade that further concentrates wealth while raising the risk of catastrophic wars from the local to the global. Nuclear power, nuclear weapons, and this nuclear deal are all bad risks for ordinary people everywhere, risks that humanity can no longer afford. It is time to invest in a different future.

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India's Foreign Policy and Indo-US Nuclear Deal

Sukla Sen*

We have an ambitious agenda with India. Our agenda is practical. It builds on a relationship that has never been better. India is a global leader, as well as a good friend. ... My trip will remind everybody about the strengthening of an important strategic partnership. We'll work together in practical ways to promote a hopeful future for citizens in both our nations.

President George W. Bush, February 22, '06
[Source:http://www.whitehouse.gov/news/releases/2006/03/20060302-13.html]

FOREIGN POLICY

The 'foreign policy' of a country or state essentially encompasses the formulation of doctrines - to define and shape the relationships of that particular country, under the incumbent regime, with the outside world in the global and regional contexts, and their actual working out.

The 'foreign policy' cannot but be strongly linked to the domestic policy. For one, it is essentially the same larger body of elite consisting of state managers and 'opinion leaders' etc. - notwithstanding their specific specialisations and

niches, formulates the both. And it is the same range of interests, and ideology, that informs in both the domains.

Nevertheless, one is not the simple extension of the other.

THE INDIAN CASE

Independent India, its emergence rooted in the specificities of decades long huge anti-colonial mass struggles and the British colonial rule for about two centuries that it eventually overturned, charted out a specific and well thought out path for itself (1).

Its foreign policy, from the very beginning but more so since the emergence of the People's Republic of China at its very doorstep and the US backing up Pakistan's claim on Kashmir, took a broad anti-colonial and anti-imperialist orientation, notwithstanding its own supremacist designs vis-à-vis the extended neighbourhood. This, however, did not deter it from actively engaging with both the major contesting global camps of the day, while maintaining some, even if fluctuating and asymmetrical, distances from the both. India's role as an active proponent of the doctrine of Peaceful Coexistence, since 1955 Bandung Conference, and its emergence as a major driver of the Non-Aligned Movement, formally launched in Belgrade in 1961, are just two most tangible manifestations (2).

However, the self-image and the perception of self-interest of the Indian elite, which itself underwent a very significant metamorphosis on account of the generational changes and, more importantly, the socio-economic developments initiated and engineered by the Indian State under its stewardship, evolved and changed over the decades (3).

In the outside world, at the same time, the mighty wave of decolonisation, rather paradoxically, came to a virtual close with the final and humiliating defeat of the US imperialism in Vietnam by the mid-seventies. The Soviet Bloc collapsed, virtually overnight, between 89 and 91. Neo-liberalism gained respectability since early eighties and became the reigning economic doctrine on the global scale some time thereafter. India adopted it with evident gusto particularly since 1991 (4).

Consequently the foreign policy, as a tool of promoting "national interest" as perceived and formulated by the ruling elite, also kept on taking a very different hue.

Of late these changes are getting much starker and alarming with the frank jettisoning of old practices and ethical posturing, courting of new friends, and shameless cosying up to the global hegemon in a determined bid, further spurred by the recent economic upswing, to emerge as a mini-hegemon (5).

The overt nuclearisation of South Asia in May 98 and India's role vis-à-vis the ongoing turmoil in West Asia are two very important markers in this unfolding process. So is the yet-to-be-wrapped-up Indo-US nuke deal (6). Apart from its grave fallout on the nuclear scenario, both globally and regionally, it'd also mark a new breaking ground in the context of the continually evolving Indo-US relationship (7). Some observers have even compared this development with Nixon's visit to Mao's China in the early seventies. And the intertwining of India's foreign policy and the nuclear policy had never been as salient, with so very menacing proportions. The foreign policy establishment, headed by the Prime Minister himself, has been desperately pressed into service to engineer safe delivery of the nuke deal, without as yet any spectacular success though.

Conversely, the anti-nuke peace activists in India are also grimly engaged with the issue in all its dimensions (8).

THE DEAL

The broad outlines of the deal were first laid out in the joint statement (9) issued by the Indian Prime minister and the US President on July 18 2005 from Washington DC and then further reiterated on March 2 2006 in another joint statement by them issued from New Delhi incorporating the major elements of agreements between the countries reached till then.

The deal, in its essence, is meant to enable India, a non-signatory to the Nuclear Non-Proliferation Treaty (NPT) like (only) Pakistan and Israel, henceforth to have 'civilian' nuclear trade - in terms of nuclear fuel, technology, plants, spares etc., with the US, and also other nations so desirous, by making a unique exception in case of India. India in return will have to designate, at its own options, its nuclear reactors into two categories - 'civilian' (for power production) and 'strategic' (for Bomb making), and ensure separation between the two. The 'civilian' reactors/plants only will be opened up for international inspection by the International Atomic Energy Agency (IAEA). The nuclear trade will accordingly be limited to the 'civilian' reactors only. In case of the 'strategic' ones, there will be neither any inspection nor any trade.

The deal as and when, and if at all, comes through will grievously undermine the current global regime of nuclear nonproliferation, as it is

meant to make a unique exception in case India, in gross violation of the underlying principles of the NPT, and thereby also the prospects of global nuclear disarmament. The fact that Pakistan has been brusquely refused a similar deal by the US in spite of persistent clamouring and Iran is being demonstratively coerced to desist from developing its own nuclear fuel cycle technology, integral to nuclear power production allowed and encouraged under the Article IV of the NPT, further brings out graphically the abominable discriminatory nature of the deal. Moreover, the lesson that one would tend to learn is that if one can weather the initial storms of international censures after breaking the nonproliferation taboo, things would normalise in a while. One may even get rewarded in the process. This is sure to trigger off stepped up vertical and horizontal proliferations.

Moreover, by enabling India to import fuel, natural or enriched uranium, from abroad, the deal would make it possible for India to use the indigenously produced uranium exclusively for Bombmaking. This possible escalation in its fissile material production capacity is, in all likelihood, push Pakistan further to nuclearise even at a great cost, and thereby aggravate tensions and accelerate arms race in the region with spinechilling consequences.

It'd also further cement the growing (unequal) strategic ties between the US and India and thereby would add momentum to the US project for unfettered global dominance and Indian craze to emerge as a global power basking in the reflected glory of the global headman. It'd just not only undermine India's position as a founding and leading member of the NAM, it'd also pose a very serious challenge to the NAM and its objectives in terms of radically raised level of US domination on the global scene.

India's rather meek submission to highly deplorable and dangerous threats issued and postures adopted by the Bush regime in relation to Iran and its nuclear programme instead of trying to find a just and fair solution in terms of having a Weapons of Mass Destruction free Middle-East including Israel is a clear and extremely worrisome pointer (10). India's keenness to join the Proliferation Security Initiative (PSI) initiated by the US to interdict any vessel in international waters suspected of carrying (unauthorised!) nuclear materials, in gross violation of all international laws and also the Ballistic Missile Defence (BMD) programme of the US are two other highly disturbing indicators.

India's growing closeness with Israel, the frontline state of the US in the Middle East, would also pick up further pace in the process.

This deal would obviously distort India's energy options by diverting scarce resources to developments of resource-guzzling, intrinsically hazardous and potentially catastrophic, nuclear power at the cost of ecologically benign renewable sources of energy.

This would, furthermore, provide a strong boost to the nuclear industry worldwide, particularly the potential suppliers from the US. And that's precisely why the business lobby in the US is working overtime to get the 'Deal' clinched.

The recent visit by the Russian President Vladimir Putin to India as the guest of honour at the Republic Day event and his public commitment to supply additional nuclear reactors to India and work for the safe passage of the deal through the NSG underscores the convergence of interests of the nuclear power lobbies worldwide as regards the 'Deal' and the new market that it is promising to open up (10A).

PUTIN'S INDIA VISIT AND MANMOHAN'S CHINA VISIT: INTERESTING DIMENSIONS

The last visit of Vladimir Putin, the Russian President, as the guest of honour on the occasion of India's Republic Day (2007), has shown up in graphic details the divergence and also convergence between the Russian and US interests, particularly on the issue of the ongoing Indo-US nuke deal.

That Russia has, on this occasion, signed an MoU with India as regards supply of four additional nuclear reactors in future for the Koodankulam nuclear power plant in Tamil Nadu has been rather convincingly interpreted as an attempt on its part to preempt American moves to sell their wares and corner the Indian market, as and when and if at all the deal eventually comes through. The fact that Russia (Atomstroiexport), and Frnance (Areva), had been pipped to the post by the US-based corporate Westinghouse, now a subsidiary of Japanese Toshiba, in the race to secure a giant deal to supply four nuclear reactors to friendly China with an estimated price tag of $5 to $8 billion must have had made Putin all the more desperate.

Rather paradoxically, but quite self-evidently, this desperation has also impelled Putin to demonstratively commit himself to garnering support for the American initiative to change the ground rules of the 45-member NSG to accommodate the Indo-US Deal in the making (11).

The joint declaration issued on Jan. 14 2008 by India and China, titled "A Shared Vision for the

21st Century", on the occasion of the Indian Prime Minister's visit to China, in a somewhat similar, even if in a significantly less emphatic, manner but with an element of much higher level of surprise, iterates the commitment of both the countries to bilateral cooperation in civil nuclear energy. It solemnly avers that "the two sides pledge to promote bilateral cooperation in civil nuclear energy, consistent with their respective international commitments, which will contribute to energy security and to dealing with risks associated with climate change" (12). And the China Atomic Energy Authority (CAEA) Chairman Sun Qin would likely visit India this year to discuss the process for bilateral nuclear cooperation.

Those who were/are trying to block or opposing the deal principally in terms of loss of India's national sovereignty cannot but be highly discomfited by the outcome these visits. That the Indo-Pak-Iranian gas deal has been kept alive, even if just that, despite strong American disapproval and India continuing with joint military exercises with Russia and also China will further underscore the essential untenability of such opposition. That the Indian Prime Minister attended the SAARC meet at Havana in September 2006 in preference over the UNGA meet in New York where the then Defence Minister, the second seniormost member of the Indian Cabinet, had been deployed while crucial debates in the US Congress had been under way as regards the deal with Indian Foreign Secretary being stationed in Washington DC to see the deal through brings out the highly complex nature of the game that the Indian ruling elite is engaged with in the global arena. It also underscores the failure, or refusal, on the part of a significant section of the opponents that the deal is a manifestation more of misuse of national sovereignty than outright loss of it.

CONCLUSION

The deal as and when, and if at all, comes through will grievously undermine the current global regime of nuclear non-proliferation and thereby also the prospects of global nuclear disarmament. It is also likely to further aggravate tensions and accelerate arms race in the region.

It'd also further cement the growing strategic ties between the US and India and thereby would add momentum to the US project for unfettered global dominance. India is unlikely though to close doors on all others countries considered inimical by the US.

It'd also act as a booster for nuclear energy industry - which is as of now uneconomic, intrinsically hazardous, potentially catastrophic, dishes out false promise of being environmentally benign given its rather limited impact on reduction of emission of CO2 and that too on a progressively reducing scale as the quality of the natural fuels keeps on deteriorating and also the fact that there is no failsafe method of disposal of continually piled up huge stocks of radioactive wastes and outlived plants and acts as a driver for developing nuclear warheads; and a considerable dampener for efforts to develop ecologically benign renewable sources of energy - nationally and also globally.

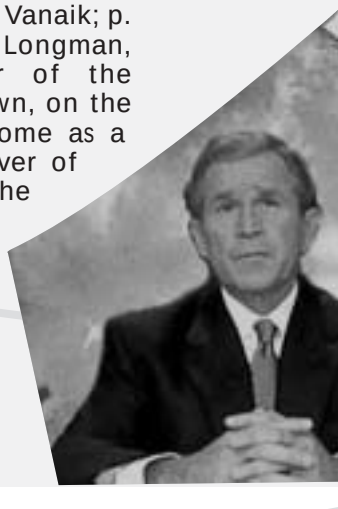
In essence, the deal is both an outcome and manifestation of the accelerated shift in India's foreign policy - propelled by the transmutation of Indian elite over the decades since Independence caused by the socio-economic developments within the country and also shift in global power balance - particularly since the early nineties, frankly embracing and glorifying realpolitik and dumping any pretension to an equitable global order.

Whether the deal eventually goes through or not, unless interrupted by popular resistance, the shift is likely to continue. However, the scuttling of the deal or even change of regime in the US would most likely affect its pace, at least on the short term.

While moving closer to the US, the Indian elite are unlikely to surrender all the alternate options in tune with their burning ambitions to occupy a seat at the high table in the global asymmetric order.

NOTES AND REFERENCES

1. See From Colonial to Independent Economy in Essays on Colonialism by Bipan Chandra; p. 315 -328 in particular (Orient Longman, 1999). As regards the foreign policy of independent India, Chandra succinctly posits his position thus: "India's foreign policy has played a major role in cementing the diverse social forces around the dominant leadership. Foreign policy and its cementing role have been consciously used to follow the path of independent capitalist development, to counter overt or covert imperialist blackmail, and to weaken the élan of the left-wing opposition."
2. India in a Changing World by Achin Vanaik; p. 19 - 28 (Tracts for the Times, Orient Longman, 1995). India becoming a member of the Commonwealth, under the British Crown, on the very morrow of Independence had come as a shocker to many. But after the takeover of power in neighbouring China by the Communist Party after a protracted civil war, India became one of the



first countries to recognise the new regime. India also persistently supported the claim of the People's Republic of China for a permanent seat in the UN Security Council. It also aggressively opposed the US armed intervention in Korea under the UN flag. All these, understandably, contributed to the reversal of the role of the Communist Party of India towards the Indian National Congress, Jawaharlal Nehru in particular, and the government led by him. Disgracing of B T Ranadive and scrapping of his militant policies as the leader of the Party was the immediate outcome of this process of shift in India's foreign policy. See The Swing Back: A critical survey of the devious zig-zags of CPI political line (1947 - 50) by Tridib Chaudhuri in Documents of the Revolutionary Socialist Party, Vol. II, Lokayata Chtana Bikash Society, Agartla (2003). Also available at < http://www.marxists.org/archive/chaudhuri/1950/swing-back/index.htm>. In spite of the West remaining its by far the major trading partner, India tried to skilfully balance it by developing relationship with the USSR in many critical areas - supply of armaments in particular.

3. Indian Nationalism, Hindutva and the Bomb by Sukla Sen (mimeoed working paper, available also at < http://india.indymedia.org/en/2003/09/7976.shtml>.)

4. The New Indian Right by Achin Vanaik (<http://www.sacw.net/2002/achin_NewIndian Right.html >)

5. For an elaboration of this new drive, see: India's Foreign Policy Grows Up by Sumit Ganguly (http://www.worldpolicy.org/journal/articles/wpj03-4/ganguly.html).
Also see for a far more unabashed and hawkish, but essentially similar, elaboration of this position: Aim low, hit lower by Bharat Karnad (http://www.india-seminar.com/2005/545/545% 20bharat%20 karnad3.htm).

6. See India's Foreign Policy: Shifts and the Calculus of Power by Kamal Mitra Chenoy and Anuradha M. Chenoy (http://www.epw.org.in/uploads/articles/10980.pdf).

7. The U.S.-India ''Global Partnership'': How Significant for American Interests? By Ashley Tellis (http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=17693&prog=zgp&proj=znpp,zsa,zusr). And also see India as a New Global Power: An Action Agenda for the United States by Ashley J. Tellis (< http://www.carnegieendowment.org/files/CEIP_India_strategy_2006.FINAL.pdf>). Faulty Promises: The U.S.-India Nuclear Deal by George Perkovich (<http://www.carnegieendowment.org/files/PO21.Perkovich.pdf >) for a different perspective.
Also for an official Indian view INDIA-US RELATIONS (< ttp://72.14.235.104/search?q=cache:FY4VE-LOzJkJ:meaindia.nic.in/foreignrelation/usa.pdf >).

8. Coalition for Nuclear Disarmament and Peace (CNDP), India Condemns 123 Agreement and Abolition 2000 (Press Release 14 August 2007) in Peace Now (August 2007).

9. See <http://www.whitehouse.gov/news/releases/2005/07/20050718-6.html >.

10. See NON-ALIGNED REALIGNING TO CONFRONT IRAN (< http://wmdinsights.org/Old_Global/March06/I3_G2_Global_Iran.htm>). However, the charge that India alone has broken the non-aligned ranks is just not factually correct. See the table in the link provided here.

10A. See <http://pagespersoorange.fr/sacw/saan/2007/Res032007.html>.

11. For recent developments in this regard, see: Russia still hopes for nuclear pact by Vladimir Radyuhin (< http://www.hindu.com/2007/12/21/stories/2007122157880100.htm>) and also France for nuclear pact with India bySandeepDikshit(<http://www.hindu.com/2007/12/22/stories/2007122257570100.htm >).

12. See India, China to promote cooperation in civil nuclear energy by Pallavi Aiyar (< http://www.hindu.com/2008/01/15/stories/2008011555490100.htm >).

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India at the IAEA: Mind the Additional Protocol

*Aaron Tovish

AS the US-India deal shows new signs of life in India, negotiations with the IAEA have begun. The IAEA's main task is implementing the verification undertakings of States Parties to the Nuclear Non-proliferation Treaty. But it is also expected to deal with states that are not parties to the Treaty to whatever extent they are willing: today that means Israel, Pakistan, and India

Until the 1990s, site-specific safeguard agreements were deemed adequate for NPT verification as long as they were applied to all known sites. The clandestine Iraqi nuclear weapons program uncovered after the first Gulf War made it clear that the IAEA's existing safeguards agreements could not provide the necessary degree of assurance of compliance with nonproliferation obligations. This presented a profound challenge to the NPT, since States Parties are under an obligation not to assist any nuclear program, be it openly or secretly pursued. It is crucial therefore to keep in mind that the NSG members, all of whom all NPT members, need to be convinced that they can do business with India without violating Article I of the NPT which prohibits interaction with another country that might "in any way" assist a military nuclear program.

The IAEA's so-called Additional Protocol was born out of the Iraq experience. The standard version of the Additional Protocol is meant to apply to non-nuclear-weapon States Parties to the NPT. It requires that the non-nuclear-weapon state operate its peaceful nuclear activities very transparently, providing information on and access to equipment, materials, and personal. There is another version of the Additional Protocol for nuclear-weapon States Parties, which deals almost exclusively with export controls. Its main purpose is to provide a cross-check on the import aspects of non-nuclear-weapon States Parties Additional Protocol. It imposes on the nuclear-weapon States Parties few if any of the intrusive verification requirements imposed on the non-nuclear-weapon States. It makes no pretense of being able to verify a firewall between the military and civilian programs of the nuclear weapon states.

But there is yet a third version of the Additional Protocol for states that are not parties to the NPT. The IAEA will have no choice but to negotiate with India on the basis of this third category. But this is uncharted waters. Before Cuba joined the NPT they negotiated an agreement within this category; but that agreement did not have to assure separation between a civil nuclear program and a military nuclear program because there was no military program. India, of course, does. So the nature of this Additional Protocol will be of great concern to the NPT Parties who take their Article I obligation seriously - as most do.

At this point it is far from clear whether India accepts this logic. It is assisted in this contrary stance by the 123 Agreement that it negotiated with the United States. In that agreement, there is a precise parallelism between the wording on the prospective Additional Protocol of India and the already-negotiated Additional Protocol of the United States. To make matters worse, since the United States has failed to ratify and hereby bring into force its Additional Protocol, the 123 Agreement does not require India to complete the process either prior to trade commencing. The reality is that the negligent US position does not help India's cause. India would be ill-advised to harbor any illusions that it can get the exceptions it seeks from the NSG without a fully negotiated and ratified Additional Protocol.

As mentioned, the IAEA makes no pretense of trying to assure strict separation between civil and military nuclear programs in nuclear-weapon states, and indeed in Russia and China there is no such separation. If, in negotiations within the third category, India insists on being treated by the IAEA more like a nuclear-weapon states than a non-nuclear-weapon state, the IAEA might acquiesce, but the resulting agreement will put members of the Nuclear Suppliers Group in an untenable situation. Without objective assurances that their nuclear trade will remain in the civil nuclear program alone, they will not be able to approve an exception for India since that would mean accepting the possibility of violating Article I of the NPT.

NSG members could only move forward on that nuclear track, if India were first accepted as a de facto nuclear-weapon state. While such a develop might seem the ideal solution to some in India, they should temper their enthusiasm. The problem is that the NSG is not the correct body to pass judgment on such a major matter. The correct body is

the States Parties to the NPT, since creating a sixth nuclear-weapon state challenges the very foundation of the NPT. The non-nuclear-weapon states signed on to the NPT on the understanding that the line would be held at five nuclear-weapon states and any other would-be nuclear powers would, among other things, be denied any nuclear assistance that might have military overtones or be diverted to military use.

Thus, proceeding under these circumstances within the NSG, without reference to the NPT States Parties, would disenfranchise a multitude of other parties. The NSG cannot credibly act as a proxy for the NPT membership as a whole since it is not at all representative of the Treaty's members. By way of example, two third of NSG members rely upon nuclear weapons for their defense, while nearly two-thirds of the NPT State Parties place their trust in nuclear-weapon-free zones.

Thus, the only good faith course of action for the NSG members would be to refer the matter to the NPT States Parties. The next opportunity, however, for the NPT parties to pass judgment on this matter is the 2010 NPT Review Conference. That often contentious body takes decision only on the basis of consensus. Is India willing to wait until 2010 for such an uncertain outcome? I suspect not.

If not, then India needs to calibrate its negotiations on the Additional Protocol so that they look more like a non-nuclear-weapon state Additional Protocol. Recall, NSG member states must be convinced that they can do business with India without violating Article I of the NPT. India should present itself eager to provide objective assurances that to that end. For NSG parties to have confidence that materials, dual-use equipment, specially trained personnel, confidential design plans, etc., are not being transferred to the military nuclear program, they must be able to monitor a physical boundary between the two programs. In that way, shipments or personnel crossing the boundary from the civil to the military side can be monitored to ensure none of these sensitive items are crossing over.

Monitoring done solely around the civil facilities could only be effective if, for example, specially trained personnel privy to confidential information never left the facilities! The more sensible approach would be to do the monitoring around the military installations, so that civil-nuclear-program workers would be free to travel throughout the country with only a very few off-limits areas. This would require a degree of transparency far greater than that required of the NPT-recognized nuclear-weapon states.

While Indians might find this treatment 'discriminatory,' they should pause to reflect: discriminatory compared to whom? We have already seen that they need to relinquish the idea of being on an equal footing with the nuclear-weapon states unless they are prepared to go before the 2010 NPT Review Conference to plead their case. So the relevant comparison is the non-nuclear-weapon states. Any such areas for a military nuclear program that are off-limits to IAEA inspectors are, of course, entire ruled out for the non-nuclear weapons states. Keeping in mind that all but five of the 45 NSG members are non-nuclear-weapon states, India would be well-advised not to make too much of an issue over 'discrimination.'

Indeed, if India were to fully embrace the special category concept and negotiate a wide-ranging safeguards and Additional Protocol agreement with the IAEA, it could become a trail-blazer for the nuclear-weapon states. When the nuclear-weapon states get serious about their NPT Article VI nuclear disarmament obligations, the days will soon come when they too have to have IAEA monitoring around their military nuclear program sites. India could regain a great deal of credibility as a leader in global nuclear disarmament this way.

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Documents

- Resolution of The International Conference On The Indo-US Nuclear Deal
- Abolition 2000 US-India Working Group

Resolution of The International Conference On The Indo-US Nuclear Deal

31sT August -1st September 2007
IIC. New Delhi

An International Conference on the India-US Nuclear Deal was held in New Delhi on August 31 and September 1, 2007. Convened by HBF, CNDP, and PEACE, this unique event was attended by an overflowing audience at the India International Centre. Participants came from the United States, the European Union, Pakistan, Nepal, and different parts of India and represented varying backgrounds and disciplines.

The conference covered three thematic areas: the strategic and geopolitical dimension, the deal's implications for nuclear disarmament in South Asia and the world, and the myths and realities pertaining to nuclear energy.

The keynote address was delivered by the eminent economist Professor Jean Dreze who spoke of the immorality of nuclear weapons and the irrationality of the notion of nuclear deterrence. The deal, he pointed out, goes against various international norms, treaties and United Nations resolutions, and thereby undermines the cause of nuclear disarmament and peace.

Speakers who talked about the security aspects of the deal warned against the harmful consequences of a collusive strategic arrangement between India and the United States, given the ambitious pursuit of global military dominance by the US.

There was unanimity that the deal would aggravate the nuclear arms race in South Asia and the Asian continent as a whole, and would further weaken the already feeble momentum towards regional and global disarmament. The present nuclear momentum poses new and unique dangers in a world greatly changed since the end of the cold war.

Contrary to the claim that the deal will cap India's nuclear arsenal, access to the international uranium market would allow the diversion of domestic uranium towards increased production of weapon-grade plutonium, sufficient for as many as an extra 40 bombs every year, In addition to India's estimated inventory of 100-150 bombs.

There are serious misgivings about the deal in other South Asian countries including Pakistan, Bangladesh, and Nepal. As a result of the deal, Pakistan is also accelerating its fissile material production efforts.

The deal is being promoted in the name of energy security through nuclear power development. However, experience from all over the world, especially the history of the atomic energy department in India, has shown that nuclear power cannot be the route to energy security. It is environmentally unsound, accident-prone, and produces radioactive wastes that remain hazardous for tens of thousands of years.

Nuclear power is expensive and its rapid growth is infeasible. It cannot make a significant contribution to tackling climate change. It is inappropriate to India's specific energy needs that call for a mix of decentralized sources. Besides there are commercially viable and environmentally sustainable strategies such as increased efficiency and the promotion of renewable energy sources.

For all these reasons, the sense of the conference was that the deal is not in India's interests and militates against the causes of nuclear disarmament and peace, as well as a sound energy policy.

Abolition 2000 US-India Working Group

Letter sent to foreign ministers of governments represented on the NSG and on the IAEA Board of Governors

FIX THE PROPOSAL FOR NUCLEAR COOPERATION WITH INDIA

January 7, 2008

Dear Foreign Minister

In the coming weeks the International Atomic Energy Agency (IAEA) Board of Governors will likely be asked to consider a new "India-specific" safeguards agreement that would cover a limited number of additional "civilian" reactors. Shortly thereafter, the members of the 45-nation Nuclear Suppliers Group (NSG) will be asked to take a position on the Bush administration's proposal to exempt India from longstanding NSG guidelines that require full-scope IAEA safeguards as a condition of supply.

Contrary to the claims of its advocates, the proposed arrangement fails to bring India further into conformity with the nonproliferation behavior expected of other states. India's commitments under the current terms of the proposed arrangement do not justify making far-reaching exceptions to international nonproliferation rules and norms. Consequently, the proposed arrangement would damage the already fragile nuclear nonproliferation system and set back efforts to achieve universal nuclear disarmament.

We are writing to urge your government to consider the full implications of the proposed agreement and to play an active role in proposing and supporting measures that would help ensure that this controversial proposal does not:

- further undermine the nuclear safeguards system and efforts to prevent the proliferation of technologies that may be used to produce nuclear bomb material;
- in any way contribute to nuclear proliferation and/or the expansion of India's nuclear arsenal; or
- otherwise grant India the benefits of civil nuclear trade without holding it to the same standards expected of other states parties of the nuclear Non-Proliferation Treaty (NPT).

Because the NSG and IAEA traditionally operate by consensus, your government has a pivotal role to play. Please consider the following:

1) India is seeking unprecedented "India-specific" safeguards over the additional facilities it has declared "civilian". Such safeguards could allow India to cease IAEA scrutiny if fuel supplies are cut off because it renews nuclear testing. Indian officials suggest that they will seek safeguards that are contingent upon the continued supply of nuclear fuel from foreign suppliers. India may also assert that it has the option to remove certain "indigenous" reactors from safeguards if foreign fuel supplies are interrupted, even if that is because it has resumed nuclear testing. Such proposals should be rejected whether they might be included in the actual safeguards agreement or accompanying statements.

As part of the final document of the 1995 NPT Review and Extension Conference, all NPT states parties endorsed the principle of full-scope safeguards as a condition of supply. A decision by the 45-nation NSG to exempt India from this requirement for India would contradict this important element of the NPT bargain.

We urge your government to actively oppose any arrangement that would give India any special safeguards exemptions or which would in any way be inconsistent with the principle of permanent safeguards over all nuclear materials and facilities.

2) India pledged in July 2005 to conclude an Additional Protocol to its safeguards agreement. Given that India maintains a nuclear weapons program outside of safeguards, facility-specific safeguards on a few additional "civilian" reactors provide no serious nonproliferation benefits. States should insist that India conclude a meaningful Additional Protocol safeguards regime before the NSG takes a decision on exempting India from its rules.

3) The United States has put forward a draft NSG guideline that would allow NSG states to continue providing India with nuclear supplies even if New Delhi breaks its nuclear test mora-

torium pledge. Indian officials say they want changes to NSG guidelines that do not impinge upon their ability to resume nuclear testing. The U.S. proposal on India at the NSG would, in the case of a resumption of nuclear testing by India, make the suspension of nuclear trade optional for NSG members. Such an approach would undercut the international norm against nuclear testing and make a mockery of NSG guidelines. If the NSG members agree by consensus to exempt India from the full-scope safeguards standard, they should in the very least clarify that all nuclear trade by NSG member states shall immediately cease if India resumes nuclear testing for any reason.

4) India is seeking exemptions from NSG guidelines and IAEA supply guarantees that would allow supplier states to provide India with a strategic fuel reserve that could be used to outlast any fuel supply cut off or sanctions that may be imposed if it resumes nuclear testing. The U.S.-India bilateral nuclear cooperation agreement includes political commitments to support an Indian strategic fuel reserve and an "India-specific" fuel supply arrangement. If NSG supplier states should agree to supply fuel to India, they should do so in a manner that is commensurate with ordinary reactor operating requirements.

5) India is seeking and the United States has proposed an NSG guideline that would open the way for other nuclear suppliers to transfer sensitive plutonium reprocessing, uranium enrichment, or heavy water production technology to India even though IAEA safeguards cannot prevent such technology from being replicated and used in its weapons program. India detonated a nuclear device in 1974 that used plutonium harvested from a heavy water reactor supplied by Canada and the United States in violation of bilateral peaceful nuclear use agreements. U.S. officials have stated that they do not intend to sell such technology, but other states may. Virtually all NSG states support proposals that would bar transfers of these sensitive nuclear technologies to non-NPT members and should under no circumstances endorse an NSG rule that would allow the transfer of such technology to India.

6) Absent a decision by New Delhi to halt the production of fissile material for weapons purposes, foreign fuel supplies would allow India not only to continue but also to potentially accelerate the buildup of its stockpile of nuclear weapons materials. This would not only contradict the goal of Article I of the NPT, but it would also foster further nuclear competition between India and Pakistan. Has your government conducted an independent assessment of the impact of foreign fuel supplies on India's weapons production capacity and the security balance in South Asia?

7) UN Security Council Resolution 1172 calls on India and Pakistan to sign the Comprehensive Test Ban Treaty (CTBT) and stop producing fissile material for weapons. Your government is bound by the UN Charter to support the implementation of this resolution. Before India is granted a waiver from the NSG's full-scope safeguards standard, it should join the other original nuclear weapon states by declaring it has stopped fissile material production for weapons purposes and, like the 177 other states that have signed the CTBT, make a legally-binding commitment to permanently end nuclear testing. India's verbal commitment to support negotiations of a global verifiable fissile material cut off treaty is a hollow gesture given the fact that states have failed to initiate negotiations on such a treaty for over a decade.

CONCLUSION

If your government is truly dedicated to the goal of stopping the spread of nuclear weapons, ending nuclear arms races, and strengthening rules governing the transfer of nuclear material and technology, it will insist upon these and other vital nonproliferation measures. We look forward to your responses to our questions and recommendations.

Sincerely,
Daryl G. Kimball,
Executive Director,
Arms Control Association
(Washington, DC, USA)
Steven Staples
Director

References

Rideau Institute on International Affairs (Canada)
Global Secretariat to Abolition 2000
Hideyuki Ban
Co-Director
Citizens' Nuclear Information Center (Tokyo, Japan)
Endorsements continued below

CONTACT ADDRESSES:
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Arms Control Association
1313 L Street NW, Washington, DC 20005

Endorsements continued
Individual Endorsements
International NGOs
National and Local NGOs

INDIVIDUAL ENDORSEMENTS (ORGANIZATIONS LISTED FOR IDENTIFICATION PURPOSES ONLY)
Tadatoshi Akiba
Mayor of Hiroshima
Richard Broinowski (Australia)
Adjunct Professor, School of Letters, Art and Media
University of Sydney
Former Ambassador to Vietnam, Republic of Korea, Mexico, the Central American Republics and Cuba
Jayantha Dhanapala (Sri Lanka)
Former United Nations Under-Secretary-General for Disarmament Affairs
President of the 1995 NPT Review & Extension Conference
Winner of the 2007 IPB MacBride Prize
Ambassador Robert Grey Jr.,
Director, Bipartisan Security Group (Washington DC), and
former U.S. representative to the Conference on Disarmament (USA)
Fred McGoldrick,
Consultant, and former Director of Nonproliferation and Export Policy at the State Department (Boston, Mass., USA)
Hon. Douglas Roche, O.C.,
Canadian Senator Emeritus
Former Canadian Ambassador for Disarmament
Tomihisa Taue
Mayor of Nagasaki City (Japan)
Ambassador (Retd.) Roland Timerbaev
Chair of the Executive Board of the Center for Political Studies (Moscow, Russia)
Len Weiss (USA)
Consultant and former Staff Director of the U.S. Senate Committee on Governmental Affairs when the Congress approved the Nuclear Nonproliferation Act of 1978
Praful Bidwai (India)
Senior journalist and author
Fellow of the Transnational Institute and co-winner of the IPB MacBride Prize
Dr. Helen Caldicott (Australia)
Co-founder of Physicians for Social Responsibility
Founder of Womens Action for Nuclear Disarmament
Founder Nuclear Policy Research Institute
Prof. Kamal Mitra Chenoy
Professor of International Studies
Jawaharlal Nehru University (New Delhi, India)
Noam Chomsky
Emeritus professor of linguistics and philosophy
Massachusetts Institute of Technology (Cambridge, Mass. USA)
Joseph Cirincione,
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Center for American Progress (Washington, D.C., USA)
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Michiji Konuma
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Adjunct Associate Professor of Peace and Conflict Studies
Conrad Grebel University College
University of Waterloo (Canada)
Fellow, Centre for International Governance Innovation
Adi Roche (Ireland)
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Member of Japan Pugwash Group
Co-founder of Peace Pledge, Japan
Aaron Tovish
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Mayors for Peace (Vienna, Austria)
Hideo Tsuchiyama
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Emeritus Professor and former President of Nagasaki University (Japan)
Hiromichi Umebayashi
President
Peace Depot (Japan)
Achin Vanaik
Professor of International Relations and Global Politics
Department of Political Science
Delhi University (India)
Fellow of the Transnational Institute and co-winner of the 2000 IPB MacBride Prize
Alyn Ware (New Zealand)
Vice-President of International Peace Bureau

INTERNATIONAL NGOS

Peter Becker
International Secretary
International Association of Lawyers Against Nuclear Arms
Regina Hagen
Coordinator
International Network of Engineers and Scientists Against Proliferation
Tomas Magnusson
President
International Peace Bureau
Susi Snyder
Secretary General
Women's International League for Peace and Freedom
Rene Wadlow
Representative to UN, Geneva
Association of World Citizens
International Physicians for the Prevention of Nuclear War
Associate Professor Tilman Ruff
Chair
International Physicians for the Prevention of Nuclear War
ICAN (International Campaign to Abolish Nuclear Weapons) Working Group

NATIONAL AND LOCAL NGOS (LISTED BY REGION)

South Asia
India
Dr Mahesh Kumar Arora
Secretary
Anubhooti Society (Jaipur, Rajasthan, India)
Dr. Prakash Louis
Bihar Social Institute (Patna, Bihar, India)
Harsh Kapoor
South Asians Against Nukes (India)
Prof. E. P. Menon
India Development Foundation (Bangalore India)
N.D.Pancholi
Convenor,
Champa -The amiya & B.G.Rao Foundation, New Delhi (India)
Sandeep Pandey and Medha Patkar
National Alliance of People's Movements, India
Sukla Sen
EKTA (Committee for Communal Amity) (Mumbai, India)
S. P. Udayakumar
Coordinator
People's Movement Against Nuclear Energy (Tamil Nadu, India)
Nepal

Ram Narayan Kumar
South Asia Forum for Human Rights (Kathmandu, Nepal)
Pakistan
Aslam Khwaja
Executive Director
People's Development Foundation (Pakistan)
Sri Lanka
Upali Magedaragamage
Coordinator
Asian Network for Culture and Development (Maharagama, Sri Lanka)

SOUTH ASIAN DIASPORA
Mr. Abi Ghimire
Canadian Network for Democratic Nepal (Canada)
Hari Sharma (President) and Board of Directors
South Asian Network for Secularism and Democracy (Vancouver, Canada)
Coalition for an Egalitarian and Secular/Pluralistic India (Los Angeles, CA, USA)
EKTA Los Angeles (Committee for Communal Amity) (Palos Verdes, CA, USA)
South Asia Forum (Huntington Beach, CA, USA)

EAST ASIA
Japan
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Secretary General
Japan Congress Against A- and H-Bombs (Gensuikin) (Japan)
Akira Kawasaki
Executive Committee
Peace Boat (Japan)
Masayoshi Naito
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Citizens' Network for Nuclear Weapons Abolition (Tokyo, Japan)
Osamu Niikura
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Japanese Lawyers International Solidarity Association
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Japan Association of Lawyers Against Nuclear Arms
Daisuke Sato
Secretary-general
NoNukes Asia Forum Japan
Yoshiko Shidara
Co-Director
Women's Democratic Club
Aileen Mioko Smith
Director
Green Action (Kyoto, Japan)
Hiroshi Taka
Secretary General
Japan Council against A- and H-Bombs (Gensuikyo) (Japan)
Terumi Tanaka
Secretary General
Nihon Hidankyo (Japan Confederation of A- and H-bomb Sufferers) (Japan)
(Hidankyo was winner of the 2003 IPB MacBride Prize)
Hiroshima Alliance for Nuclear Weapons Abolition
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People's Solidarity for Participatory Democracy (South Korea)
Wooksik Cheong
Representative
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Belgium
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Friends of the Earth, Flanders & Brussels (Belgium)
Hans Lammerant
Bombspotting - Vredesactie (Belgium)
Finland
Laura Lodenius
Peace Union of Finland
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Jean-Marie Matagne
President
Action des Citoyens pour le Desarmement Nucleaire
Action of Citizens for the total Dismantling of Nukes (France)
Pierre Villard
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National Secretary
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World Conference of Religions for Peace (Canada)
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Western North Carolina Physicians For Social Responsibility (Asheville, NC, USA)
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Women's Action for New Directions (Washington, D.C., USA)
Alice Slater (New York, USA)
Convener
Abolition 2000 Sustainable Energy Working Group
Jennifer O. Viereck,
Director
HOME: Healing Ourselves & Mother Earth (Tecopa, CA, USA)
Sisters of St. Francis "Center" for Active Nonviolence (Clinton, Iowa, USA)

COUNTRIES REPRESENTED ON THE 45-MEMBER NSG

Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom, and the United States.

COUNTRIES REPRESENTED ON THE 35-MEMBER IAEA BOARD OF GOVERNORS (2007-2008)

Albania, Algeria, Argentina, Australia, Austria, Bolivia, Brazil, Canada, Chile, China, Croatia, Ecuador, Ethiopia, Finland, France, Germany, Ghana, India, Iraq, Ireland, Italy, Japan, Lithuania, Mexico, Morocco, Nigeria, Pakistan, Philippines, Russian Federation, Saudi Arabia, South Africa, Switzerland, Thailand, the United Kingdom, and United States of America.

[Source: http://cnic.jp/english/topics/plutonium/proliferation/usindiafiles/nsgiaea7jan08.html]

Book Arrival

Book Arrival

EMPIRE AND THE BOMB: HOW THE U.S. USES NUCLEAR WEAPONS TO DOMINATE THE WORLD.

Joseph Gerson, Pluto Press,
www.plutobookscom 3
48 pages soft cover, $28.95.
Published May 31 2007

"This book focuses the reader on the source of global destabilization: not Iran or North Korea but the United States."

Walden Bello in his foreword.

The book does pretty compellingly bring out how the WMD is above all and after all a political weapon. It does so by comprehensively recounting and reinterpreting the relevant history - graphically illustrating the repeated use of it by the US to blackmail and bulldoze others.

It is, by no stretch, a weapon of defence in whichever hands.

It also meticulously shows up the overlaps between arms management and disarmament and yet the fundamental difference between the two.

A case has been made out in a highly lucid manner why universal nuclear disarmament must attract all the immediate attentions of the international community and the masses all over the world, and why it is so very necessary to secure the continued existence of the humanity.

This is a must read just not for the anti-nuclear peace activists to acquaint oneself with relevant history and arguments but also for a lay reader given the utmost salience of the topic dealt with.

Here is a "partial list" of nuclear blackmail by the US:

TABLE 1: PARTIAL LISTING OF INCIDENTS OF NUCLEAR BLACKMAIL

(From Empire and the Bomb: How the United States Uses Nuclear Weapons to Dominate the World (p 37-38) by Joseph Gerson)

1946	Truman threatens Soviets regarding Northern Iran.
1946	Truman sends SAC bombers to intimidate Yugoslavia following the downing of U.S. aircraft over Yugoslavia.
1948	Truman threatens Soviets in response to Berlin blockade.
1950	Truman threatens Chinese when U.S. Marines were surrounded at Chosin Reservoir in Korea.
1951	Truman approves military request to attack Manchuria with nuclear weapons if significant numbers of new Chinese forces join the war.
1953	Eisenhower threatens China to force an end to Korean War on terms acceptable to the United States.
1954	Eisenhower's Secretary of State Dulles offers French three tactical nuclear weapons to break the siege at Dienbienphu, Vietnam. Supported by Nixon's public trial balloons.
1954	Eisenhower used nuclear armed SAC bombers to reinforce CIA-backed coup in Guatemala.
1956	Bulganin threatens London and Paris with nuclear attacks, demanding withdrawal following their invasion of Egypt.
1956	Eisenhower counters by threatening the U.S.S.R. while also demanding British and French retreat from Egypt.
1958	Eisenhower orders Joint Chiefs of Staff to prepare to use nuclear weapons against Iraq, if nec essary to prevent extension of revolution into Kuwait.
1958	Eisenhower orders Joint Chiefs of Staff to prepare to use nuclear weapons against China if they invade the island of Quemoy.
1961	Kennedy threatens Soviets during Berlin Crisis.

1962	Cuban Missile Crisis.
1967	Johnson threatens Soviets during Middle East War.
1967	Johnson's public threats against Vietnam are linked to possible use of nuclear weapons to break siege at Khe Shan.
1969	Brezhnev threatens China during border war.
1969	Nixon's "November Ultimatum" against Vietnam.
1970	Nixon signals U.S. preparations to fight nuclear war during Black September War in Jordan.
1973	Israeli Government threatens use of nuclear weapons during the "October War."
1973	Kissinger threatens Soviet Union during the last hours of the "October War" in the Middle East.
1973	Nixon pledges to South Vietnamese President Thieu that he will respond with nuclear attacks or the bombing of North Vietnam's dikes if it violated the provisions of the Paris Peace Accords.
1975	Sec. of Defense Schlesinger threatens North Korea with nuclear retaliation should it attack South Korea in the wake of the U.S. defeat in Vietnam.
1980	Carter Doctrine announced.
1981	Reagan reaffirms the Carter Doctrine.
1982	British Prime Minister Margaret Thatcher threatens to eliminate Buenos Aires during the Falklands War.
1990	Pakistan threatens India during confrontation over Kashmir.
1990-91	Bush threatens Iraq during the "Gulf War."
1993	Clinton threatens North Korea.
1994	Clinton's confrontation with North Korea.
1996	China threatens "Los Angeles" during confrontation over Taiwan. Clinton responds by sending two nuclear-capable aircraft carrier fleets through the Taiwan Straight.
1996	Clinton threatens Libya with nuclear attack to prevent completion of underground chemical weapons production complex.
1998	Clinton threatens Iraq with nuclear attack.
1999	India and Pakistan threaten and prepare nuclear threats during the Kargil War.
2001	U.S. forces placed on a DEFCON alert in the immediate aftermath of the September 11 terrorist attacks.
2001	Secretary of Defense Rumsfeld refuses to rule out using tactical nuclear weapons against Afghan caves possibly sheltering Osama Bin Laden.
2002	Bush communicates an implied threat to counter any Iraqi use of chemical weapons to defend Iraqi troops with chemical or biological weapons with a U.S. nuclear attack.
2006	French Prime Minister Chirac threatens first strike nuclear attacks against nations that practice terrorism against France.
2006 & 2007	"All options are on the table": U.S. threats to destroy Iran's nuclear infrastructure made by President Bush and presidential candidate Senator Hillary Clinton.

Event Announcements

Announcement of Global Events

I. Global Summit for a Nuclear Weapon-Free World:
Laying the Practical, Technical and Political Groundwork
City Hall, London, February 16-17, 2008
Organised by CND, UK

II. "AAPSO in a Globalized Interdependent World"
to commemorate the fiftieth
anniversary of the Afro-Asian Peoples' Solidarity
Organization on 26-28 February, 2008 in Cairo, Egypt.

III. The 18th IPPNW World Congress will be held in New Delhi, India.
Main Congress:
March 9 - 11, 2008
Student Congress:
March 7 - 8, 2008

Discussion Document

Discussion Document

CNDP: Organizational Structure

CNDP: Organizational Structure**
Varsha R Berry and Minar Pimple*

BACKGROUND

More than 600 social activists', feminists, trade unionists, writers, physicians, scholars, environmentalists, Gandhians, post-modernists, artists, former generals and admirals from India, Pakistan, Japan , England, Malaysia, Holland, Australia, America, South Africa and France met in Delhi, India on November 11-13, 2000 in the First over National Convention for Nuclear Disarmament and Peace. It was the most varied gathering, a veritable peace fest and an altogether exciting historic landmark.

The convention was the culmination of a one year long process and also the beginning of a new phase in India's broad based Rainbow Coalition type movement for nuclear weapons abolition. The convention offered the first national level opportunity to debate a range of issues and established India's first every Coalition for Nuclear Disarmament and Peace (CNDP), a network of trade unions, women's organizations, youth associations and federations, anti-nuclear movements in various cities, such as, Bangalore, Delhi, Nagpur, Mumbai organizations, all India networks of bank employees, doctors, insurance workers, layers, science networks etc. with a 50 Member Coordination Committee.

The CNDP was a response to nuclear weaponisation in India and Pakistan against a background of the global stockpiling of nuclear weapons. It opposes assembly, induction, deployment, acquisition, testing, development and research of nuclear weapons, Its mission is to demand that India go back to be among the pacesetters in all matters relating to global nuclear disarmament and abolition of nuclear weapons.

Although CNDP formally came about after the convention in 2000, the networking process and building of the coalition had been happening for the one year and the convention itself was a culmination of this process. Since inception, the uniqueness of the Coalition has been the only one of its kind with a broad network and being the first collective voice against the nuclear weapons. Each one of its constituent members have been doing committed work in the field and spreading the message across a cross-section of the population through writing, posters, films, lectures, booklets etc. In come of the regions esp. Chattisgarh, Goa and movement has really become strong and widespread and they have even been able to hold their regional convention and a meeting of all the groups together against the nuclear weapons.

One of the major drawbacks of the Coalition has been a lack of communication and information, which could also be because of the non-or less effective functioning of the Secretariat. The other major area, which we all need to collectively look into is, more a general comment to the peace movement in India and also specially to the CNDP, to create consciousness among the critical mass and induce vitality into the movement as a whole. The need is to act collectively and immediately.

Keeping the above background in mind we now look into the various forms of organizations and try developing an appropriate Organisational structure for the CNDP aimed at achieving its mission.

LEGAL REGISTRATION AND ORGANIZATION

Organizational structure in the CNDP context can be seen as a necessary evil. It is required for effective functioning, but too much of it can take CNDP away from its mission, where more energy gets spend in maintaining and sustaining the organization than focus on the issue at hand. A Coalition which consist of individuals and organizations as its members (which must have by its very nature) will suffer from internal tensions because of uncertainty on the parts of its members about what its relationship of rights and responsibilities with it are, because these are different from the rights within those organization and those enjoyed by individuals and these rights themselves differ between different kinds of organizations.

It is important for CNDP to have an efficient secretariat managed, guided and directed by a group of individuals for whom the issue is not very important but on high priority who also have adequate time to spend on it.

Legal registration of CNDP as an organization is undesirable. Although, this does not stop us from

	Key Characteristics	Constituency/ Sectors	Issues	Example
A SPACE	Open Forum bounded by broadest value and or ideological framework open to everyone who voluntarily agrees with it.	Multiple Constituencies and Sectors	Multiple issues "Space"by itself not taking any stand on any issue	World Social Forum e-forum
B ALLIANCE	Political platform formed for defined political objective with specific timeline Less open that SPACE May be Transitory in nature	Multiple Constituencies and Sectors	Multiple issues bound by common political thread & defined objectives	NDA / NAPM
C COALITION	Specific issue Specific stand on the particular issue closed It allows membership	Multiple Constituencies and Sectors	Single issue Focused theme Work in other issues as a extension of core issue	CNDP / Habitat International Coalition
D NETOWRK	Membership driven and formal Attempts to protect the interest of members and its constituency	Single Constituencies and Sectors	Multiple issues that affect the membership & constituency	VANI / Coordination of Trade Unions / Chambers of Commerce
E ORGANIZATION	Common purpose Common ideology Formal Restricted membership	As defined by the organization	Multiple issues as defined by that organization	PEACE / Focus

registering CNDP as a Legal Trust to protect its name and identity. The membership of this can be given to 5-6 agreed upon individuals who hand over all the execution rights to the Coalition's Coordination Committee and only act as legal cover to receive and dispense the money and to buffer CNDP from controversies.

CNDP can also work out an arrangement with one of its constituent organizations having all legal clearance and who treats it as not only one of its projects but makes a MoU leaving all financial and program implementation authority to the Coordination Committee.

If broadly the above understanding is carried through then CNDP at district state, regional and national level becomes a group of interested individuals and organizations deputing individuals interested in the issue to carry out activities, programmes etc. as decided in the district, state, regional and national meetings of constituencies. Issues of representation, relationship are fundamentally looked at from the perspective of how the struggle and or activities on the defined issue/s can be taken forward, rather than how correct the organization process is. In effect those individuals and organizations that will put more time and other resources will enjoy large decision making authority within the broad policy framework.

COMMUNICATION

In such form of the organization everyone has aright to all communication. The mandated bodies such as the NCC and the state and district level coordination committee will have the right to take decisions but the best form to achieve this is to have:

A non - moderate list serve where anybody can express his /her views, propose activities, resolutions, sign, statement, programmes etc.

A moderated NCC list coordinated by a convener or a team of conveners to facilitate easy and fast decision - making

For non - digitized and / or non - English constituent - this responsibility has to be decentralized by identifying members whose rights to information needs to be protected in English or other regional languages in print form. Members from the district, state and region should undertake the responsibility. For E.G if the proposed bulletin is brought out in English and Hindi it will reduce the problem considerably and for non - English an non - Hindi constituents, the above arrangement should be followed.

POLITICAL PARAMETERS

It is important to list out the principles and build a consensus on a very clear defined mission, which articulates in detail the meaning of opposing nuclear weapons in precise terms.

We also need to articulate the issue of 'Peace' in the CNDP framework.

If at present we go by the common agenda defined in the CNDP Charter brochure - For India under points 1 to 7, if strictly interpreted it does not allow us to actually go beyond a push for nuclear disarmament though under sub-section 5 it allows CNDP to demand for transparency and independent monitoring for full public accountability pertaining to nuclear development and energy matters.

Point 6 talks about activities related to all aspects of nuclear fuel cycle and its impact on environment and population and need for compensation and other remedial measures.

We as coalition in the interest of building the coalition further should now decide to interpret and opening under point 5 and 6 in its most liberal fashion. This means that the CNDP must now operate within certain basic political parameters which today requires interpreting the Charter to mean linking up with issues of development, anti-militarism / anti-war-US hegemony and anti-communalism / anti-national chauvinism and improving India-Pakistan relations particularly. However, such linking must be of a specific kind, i.e. related to its core issues. Therefore, other organizations/ alliances/ networks/fronts with their own distinctive preoccupations cannot expect a coalition like the CNDP to be straightforward ally for their own agendas in specifics or detail but should only expect general support and solidarity and participation in joint actions which are a) relevant to the CNDP's won aims, and b) do not cause divisions within the CNDP's own ranks as coalition and which must respect the nature of that coalition and its political and organizational boundaries/limitations.

Thus the CNDP can and should come out periodically with general position statements pertaining to issues of development, democracy and communalism but these must be from a distinctive standpoint always linking them to its core issues of nuclear disarmament and peace. It cannot just sign or support statements of other anti-communal, pro-democracy, pro-human development groups that do not address its core issues. That is to say, the CNDP as a coalition of a certain kind is not a single organization or body that can simply be a straightforward participant in various progressive actions of others on issues related ot their own agendas like communalism, threats to democracy in India, matters of development and justice, but which do not allow the CNDP to bring in or highlight in some way or the other its own core concerns. The CNDP would not be able to justify this to its own broad constituency of all kinds of people and would lead to debilitating accusation of the CNDP being manipulated by a select few who are going beyond the agreed parameters. Nonetheless, its should be clear that there is a considerable range of collaborative possibilities with others.

**** This document had been submitted for discussion sometime back. This is carried here for its continued relevance.**

*** Both the authors at that time belonged to the Focus on Global South, a constituent of the CNDP.**