The Pugwash workshop, Moving Towards the Abolition of Nuclear Weapons, was held from 25 to 27 March in New Delhi, and was attended by some 25 participants, including 13 from 7 countries outside India. The meeting was hosted by the India Pugwash Group and held at the India Habitat Center in New Delhi.

Given the deteriorating relations among the world's nuclear powers and recent setbacks to the progress made in the 1990s in nuclear weapons arms control, a central purpose of the Workshop was to identify particular issues on which Pugwash could influence policy and public opinion.

An Uncertain Future

The workshop began with a review of the changing attitude toward nuclear disarmament. The optimism of the 1990s concerning the prospects for controlling and ultimately eliminating nuclear weapons has degenerated into concern that the world may be on the verge of new tensions and dangers from the proliferation and possible use of nuclear and other weapons of mass destruction. Humanity may well be advancing into the future facing backwards, in ways that are potentially dangerous, constraining the way it confronts new challenges.

As the Cold War evolved into the post-Soviet interregnum that characterized the period from 1989 to 2001, so now the world appears to be entering a new phase. What is to follow? The 21st century will be based on a number of principles far different from those characterizing the 20th century: nuclear science is no longer a new science and is being surpassed by the revolution in molecular biology and genetics; biotechnology and climate change are joining nuclear weapons as instruments that pose fundamental threats to humanity; and the international system itself is undergoing radical transformations, marked by globalization, an increased emphasis on
individual human rights relative to notions of state sovereignty, and an increased ability of individuals and small groups to cause great harm.

Within this framework, some of the many issues that will dominate policy agendas in the years ahead include: a growing Sino-American strategic rivalry; legacy issues of the Soviet nuclear complex; proliferation threats from both state and non-state groups; a retreat from multilateral institutions and increased propensities for unilateral action, especially by the US (including on national missile defense); and prospects for a coming energy shortage in western countries that is already stimulating renewed interest in nuclear power.

All of the above combine to require new ways of thinking about concepts of international security in general and the military and political utility, legality, and morality of nuclear weapons in particular. Some of the hard questions that need to be addressed include:

1. what are the ethical arguments for either retaining or abolishing nuclear weapons?
2. what political processes can best marginalize and lead to the elimination of nuclear weapons?
3. what are the likely political and military consequences of eliminating nuclear weapons?
4. how can democratic states' public opinion for abolishing nuclear weapons be influenced?
5. can nuclear weapons be separated from issues of human rights/sovereignty?

The workshop discussion elicited a wide range of views on whether new challenges posed by biotechnology and global climate change would indeed rival the nuclear threat, or whether renewed interest in civilian nuclear power will greatly increase proliferation risks. Moreover, several participants felt that substantial public support for eliminating nuclear weapons had yet to be effectively mobilized. Participants also differed on whether the 1990s was a decade of 'lost opportunities' for markedly reducing nuclear forces and the salience of nuclear weapons in international politics. Whether one sees the glass as half empty or half full, the question must now be raised regarding the changes that would be required in the international system in order to move beyond the current inertia and revitalize the process of de-legitimizing nuclear weapons.

**Delegitimizing Nuclear Weapons**

In advancing its work, it is imperative for a group like Pugwash to take into account the views of those who are highly skeptical of the desirability and feasibility of eliminating nuclear weapons and to assess strategies and goals accordingly.
For example, how well do we understand the motivations of countries that keep or seek to acquire nuclear weapons? One participant stressed the need to better understand both security and non-military factors (domestic politics, prestige, bargaining power) of countries such as Iraq, Iran, and North Korea in seeking to obtain nuclear weapons, and of those who might seek to acquire them in the future. Or, is the question really one of power politics, of the weak seeking nuclear weapons so the strong cannot impose their will on them?

If, in the end, there will always be at least some states or actors sufficiently motivated to obtain nuclear weapons, what other means are available to advance the goal of a nuclear weapon-free world? Groups like Pugwash should perhaps focus on strengthening international norms and instruments that can contribute to reducing the utility of nuclear weapons and the continued high risk of nuclear 'next use.' Other suggestions included evaluating whether indeed missile defenses could facilitate deep cuts in strategic systems, if carried out cooperatively between not only Washington and Moscow, but involving second-tier nuclear powers as well. Mention was also made of strengthening negative security assurances as a means of reducing the motivations of nuclear aspirant states. There were also questions regarding the extent to which we understand the differences between the political and security considerations motivating states to acquire nuclear weapons or to give them up.

What other steps could be taken to devalue the role of nuclear weapons in political and strategic thinking? One response was that, as the US, Russia and NATO took the lead during the Cold War in arguing for the political and military utility of nuclear weapons, so now should documents from those countries (particularly as Cold War archives are opened) be analyzed to show how little utility nuclear weapons had politically, as well as the substantial risks such weapons actually posed to US, Russian and NATO security.

The aim of such efforts, of course, is to effect substantial changes in attitudes towards the value of nuclear weapons. In the US, this means demonstrating that not only are nuclear weapons a net liability to its security, but also that US security would be enhanced in a non-nuclear world. Making the same argument for Russia and other nuclear powers faced with greater security challenges, the problem is admittedly more challenging.

Despite the difficulties posed in changing such mindsets, and the obstacles that remain in achieving the elimination of nuclear weapons, it was argued that being clear about the goal of
eliminating nuclear weapons helps clarify what the world needs to do in the short term to both achieve the goal and to reduce the risk of nuclear weapons ever being used.

**Strategies for Eliminating Nuclear Weapons**

Discussion ranged widely over various strategies that would be most effective in leading directly to the elimination of nuclear weapons. In addition to focusing on modalities such as nuclear weapon-free zones (NFWZ), No First Use (NFU), and comprehensive verification, other strategies mentioned included effective enforcement of international treaties, including the need for more effective sanctions in cases of non-compliance. Also noted was the need for the five main nuclear powers to live up to their NPT obligations for working seriously toward the complete elimination of nuclear weapons. Questions were also raised about the ethical aspects of relying on deterrence and mutual assured destruction, as well as the moral responsibility of scientists not to work on military projects.

On the question of NFU, for example, there is little question that declaratory NFU statements must be operationalized in nuclear weapons policies and procedures (through such steps as de-alerting, separating warheads from delivery systems, etc.). Yet NFU treaties are also important, as they make it difficult for governments to renounce steps previously taken. Similarly, a NWFZ covering Central and Eastern Europe could be an important step, especially in helping to prevent (in conjunction with decelerating further NATO enlargement) a return to the Cold War between Russia and the West.

Others were less sanguine about the utility of concepts such as NFU and NWFZ, or the viability of international treaties. It was noted that the international community does not even have high confidence about the disarmament of Iraq, despite incredibly intrusive verification measures. For this view, the emphasis should be less on formalities and more on changing the fundamental political and security conditions that will advance the goal of eliminating nuclear weapons.

The discussion that followed emphasized the complementarity of both strategies - of analyzing the political and security conditions necessary for a nuclear weapon-free world (NWFW) as well as the technical requirements (verification and enforcing compliance, operationalizing a No First Use policy, extending nuclear weapons-free zones) for building confidence in the stability of such a world.

Mention was also made of rigorously analyzing the end game: of demonstrating how a non-nuclear world, even with unresolved conflicts and uncertainties over breakout capabilities, would
be more stable and secure than a world with nuclear capabilities. For example, many take it as a given that a NWFW would be a net security gain for the US (because of its conventional weapons superiority); yet the stronger one makes that case, the more uneasy others will become about giving up their nuclear weapons. This makes it important to focus not only on the process of getting to a NWFW, but on how a NWFW would entail a net security gain for all countries. Also, by the time we get to a NWFW, how will it differ from the world we know today? Will the US be as dominant? Will other countries have mastered technologies that greatly reduce the political, economic and military superiority the US enjoys today? In making the case for a NWFW (in this case, to Americans), it is important to specify how such a world might be beneficial even in a situation where the US, or any other country, may no longer be as dominant. Whatever the priorities decided on, the nuclear situation today is far different than that which existed at the time of the Russell-Einstein Manifesto in 1955. Nuclear weapons are now embedded in the security fabric of democratic societies; the risk through deliberate use is decreasing, but that of accidental or unintended use may well be increasing.

**Confronting the Major Issues**

In the short term, it is important to focus on specific dangers and bring these to the attention of policymakers and the public. These include: the possibility that the risk of nuclear weapons use might be increasing; renewed nuclear competition and the development of new weapons; and horizontal proliferation. Through its work, Pugwash should identify specific solutions for minimizing these risks, such as de-alerting, deep cuts, restraints in deployments, strengthening the Comprehensive Test-Ban Treaty (CTBT), going slow on the National Missile Defense (NMD), and solving the problem of "loose nukes."

**Strengthening Norms**

Participants stressed the importance of norms in making the transition to a non-nuclear world. To begin with, increasing public debate on these issues is important; the idealistic aspect of a moral repugnance for nuclear weapons is something Pugwash should not lose. How then to bridge this idealism with the realist aspect of ensuring security? While a Cold War framework still dominates much of the debate (i.e., the primacy of the US, Russia and China), it is the regional aspects of nuclear weapons (Middle East, South Asia, East Asia) that are ultimately more important in today's world. In this regard, the CTBT as a global norm remains vital.
The need to go beyond a Cold War mindset was also pointed out, including the need for fresh analysis of the role of nuclear weapons for deterrence, defense, and compellence, and for demonstrating how nuclear weapons undermine security. On the issue of military usability, many felt strongly that Pugwash needs to stress the inutility of nuclear weapons use, whether against nuclear or non-nuclear states. Thus NFU is not just a declaratory policy, but one based on sound military policy.

The question of how security can be assured for all states, without nuclear weapons, should be high on the Pugwash agenda. For example, the US itself will not be able to contribute to the abolition of nuclear weapons until it helps solve some of the world's regional problems where nuclear weapons play a role. For a country like Israel, a secure and stable Middle East is a prerequisite to giving up nuclear weapons, yet (for some) Israel's nuclear capability complicates this process and even stimulates efforts by others in the region to acquire weapons of mass destruction.

Missile Defenses

In a discussion of missile defenses, questions were raised as to possible positive benefits of NMD for the sharing of technology and making deep cuts of strategic systems more feasible. If NMD is indeed inevitable, how can the focus shift from mid-flight interception (which China sees as a threat to its deterrent) to sea-based boost phase systems, focused specifically against rogue states? Others pointed out that sea-based systems would only be effective against a country like North Korea, not other potential rogue states.

Rather than uniformly opposing missile defense efforts, many felt that groups like Pugwash should find entry points where policies and strategies can be altered and the political damage limited (keeping in mind that, while the political costs of NMD will be immediate, the benefits are distant; i.e., no deployable defenses until 2008 or after, and no strategic consequences for Russia and China for 10-20 years). Others noted that ballistic missile threats do exist, so missile defense needs to be placed in a larger context. Debates over missile debate should be technical and strategic, not political or ideological.

It was feared that missile defense issues could shape the arms control agenda for years, enhancing the credibility of the nuclear threat and undermining deterrence (give someone a shield, and it becomes easier to use the sword). Russia may well withdraw from existing arms control agreements (INF and CFE treaties) while China will be given a credible rationale for
enlarging its strategic forces. Among nuclear aspirants, missile defenses could well stimulate proliferation as countries act unilaterally in response to US unilateralism and the decay of cooperative strategies. Above all, NMD undermines those in Russia who argue for cooperative security efforts with the US.

Non-Proliferation Efforts

Difficulties with strengthening the non-proliferation regime include: violations of the NPT by nuclear aspirant states; the failure of the nuclear weapons powers to convincingly move toward fulfilling their pledge on complete nuclear disarmament; a decline in the credibility of the IAEA; and the inability of the US to give positive security assurances. How does the international community deter a North Korea that is well situated strategically? How can sanctions be better targeted and strengthened? To what extent should distinctions be made between countries that sign treaties and violate them, and countries that do not sign them (as not being in their security interest)?

One proposal stressed the need for greater political cooperation among democratic states to counter proliferation (although this leaves out China and Pakistan) and for differentiating the nature of the proliferation threat (e.g., Japan going nuclear is not the same as North Korea). Another emphasized implementing a global convention prohibiting the use of nuclear weapons (like the Geneva convention on chemical weapons) to further strengthen norms of non-use and military inutility.

To deal with ballistic missile proliferation, some advocate creating a multilateral INF regime. While some countries will criticize this as hypocritical (the US and Russia, having strategic systems, found it easier to give up INF systems) and others as useless (those countries of most concern will not join), similar criticisms were made of the NPT, yet it established norms over time and NPT participation has broadened. To be sure, INF limits were specific to US and Russia, so different limits would be necessary for countries of concern. There are also the issues of a global INF ban pushing countries to develop strategic missiles, and of expanding INF limits to cover sea-based missiles. Nonetheless, a joint US-Russian initiative to create a multilateral INF regime would be symbolically important and would have positive benefits in engaging China.

More attention needs to be paid to political strategies for dealing with rogue state threats, whether from North Korea or various Islamic countries (Iran, Iraq, Libya). It was thought that
negative pressure will be counterproductive, and that international political and economic assistance would be more effective. In a similar vein, more emphasis is needed on political activities (dialogue and interaction) and on the relative strengths that countries other than the US can bring to bear on potential proliferators. For example, China should be very worried about a North Korean nuclear capability, as this would stimulate potential Japanese acquisition of nuclear weapons, which in turn would be even more worrisome to China. Thus, how can the US work with other countries such as China in joint efforts to solve the North Korean problem? A second example is that of greater cooperation with Russia in discussing future NATO expansion (especially as it relates to the Baltic states).

Summary
Continued work toward the goal of eliminating nuclear weapons will be needed on three levels:

1. weakening the symbolic embedding of nuclear weapons in society (e.g., through the NMD debate);
2. increasing perceptions and awareness of the disutility of nuclear weapons (e.g., through proposals for de-alerting and deep verification);
3. de-legitimizing nuclear weapons (e.g., countering what will surely be continued reliance on nuclear weapons in the Bush administration's nuclear review, and among the other nuclear powers as well).

In all these efforts, the need exists to reverse the receding public consciousness regarding nuclear weapons. In a world where relations among the nuclear powers are deteriorating, and where the threat of terrorist acquisition and use of nuclear and other weapons of mass destruction could well materialize, there is a need to strengthen multilateral approaches to security and to pinpoint how motivations for both acquiring and retaining nuclear weapons can be constructively influenced.
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