

Presidential Address given by Jayantha Dhanapala
at the 59th Pugwash Conference on Science and World Affairs
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It is two years since I had the privilege of addressing you, in my capacity as the President of the Pugwash Conferences on Science and World Affairs - the 11th in a line over a period of 54 years traceable to our founder President Lord Bertrand Russell. That was in The Hague. We now meet in Berlin - a city which symbolizes the end of the Cold War. We are all converted into being Berliners by committing ourselves to breaking down the walls that separate us. I value this periodic opportunity to share some of my thoughts with you on global security issues.

The Pugwash Mission in a Changing World

The document “Principles, Structure and Activities of Pugwash” adopted at Bari in 2007 for the current quinquennium provides us all with a compass. In particular let me quote the section on Principles :

“The Pugwash Movement is the expression of the awareness of the social and moral duty of scientists to help to prevent and overcome the actual and potential harmful effects of scientific and technological innovations, and to promote the use of science and technology for the purpose of peace.

Its main objective is the elimination of all weapons of mass destruction (nuclear, chemical and biological) and of war as a social institution to settle international disputes. To that extent, peaceful resolution of conflicts through dialogue and mutual understanding is an essential part of the Pugwash activities, that is particularly relevant when and where nuclear weapons and other weapons of mass destruction are deployed or could be used.”

It is clear from the report of Pugwash activities on our website, and the proceedings of this conference, that we have faithfully followed this mission within our capabilities, limited as they are by our financial and human resources. It is also clear from the message of the United Nations Secretary General to this Conference that the United Nations(UN), and indeed the rest of the world, looks to us for leadership in fulfilling this mission.

Developments since the 2009 Pugwash Conference

2009, was a year of promise with President Obama's memorable speech in Prague, the negotiations between the United States(US) and Russia and many other hopeful signs. It was a spring time of hope - but I asked then, cautiously, having lived through several false dawns, whether we were going to see a summer season for disarmament. In January 2010, in my presence in New York, the Bulletin of the Atomic Scientists with which Pugwash has a sibling relationship, moved the minute hand of its famous "Doomsday Clock" one minute away from midnight citing a "more hopeful state of world affairs". The Clock is now at six minutes to midnight. Many of us felt, as the Bulletin did, that "We are poised to bend the arc of history towards a world free of nuclear weapons". 2010 saw some fulfillment of those hopes with the signature and the eventual ratification of the New START treaty between the US and Russia; the Washington Nuclear Security Summit; the new Nuclear Posture Review of the US and the successful adoption of a final document at an Non Proliferation Treaty (NPT) Review Conference after 10 years with significant decisions on a weapons of mass destruction free zone (WMDFZ) in the Middle East. 2011, I fear, could signify a return to business as usual. Indeed a significant drop in the momentum of multilateral activity on disarmament issues is noticeable. Civil society together with organizations like Pugwash must ensure that this does not happen despite the compulsions of an election year in the US, Russia and other places that loom ahead. Peace and disarmament in the world cannot be held hostage to any nation's domestic political processes.

New START and the NPT Review Conference

Let me deconstruct two of the much vaunted successes of 2010:

- When New START was signed on April 8, 2010, it was rightly hailed as a return to traditional nuclear arms control through verifiable and irreversible treaty arrangements between the two nuclear giants who own an estimated 95% of the nuclear weapons in the world. This was also part of the long overdue "resetting" of U.S.-Russian relations, which had been allowed to slide under both Clinton and Bush II, and almost resulted in a clash over Georgia.

It is, in reality, a modest disarmament measure. An estimated 30% reduction of permitted deployed strategic nuclear weapons over a seven-year period is envisaged out of the total of 20,530 nuclear warheads in the arsenals of eight nuclear weapon-armed countries. Approximately 5000 of these weapons are deployed and ready for use, including nearly 2000 that are kept in a state of high operational alert.

Apart from those with a visceral allergy to any arms reductions, specific attention was focused by opponents of New START on its verifiability - a rich irony when the 2002 Strategic Offensive Reduction Treaty (SORT) had no verification and the 1991 START I arrangements were allowed to lapse in December 2009. There was also criticism of the innocuous preambular language on missile defence leading to wild accusations of secret agreements to abandon what is in fact a wasteful, ineffective and provocative military programme with illusory defence and the real danger of another arms race in Ballistic Missile Defense(BMD) systems.

The U.S. Senate ratification of New START has exposed the strength of the opposition by the cold warriors and the military-industrial complex to nuclear disarmament and nuclear non-proliferation. They exist and work assiduously in many countries and represent, collectively, what President Eisenhower, in the wisdom distilled from an illustrious military career followed by 8 years as President of the USA during the Cold War, warned us about in his farewell speech in January 1961. It bears quoting again and again -

"In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.

We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together."

Many believed Obama when he declared -- "clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons." adding "(we) must ignore the voices who tell us that the world cannot change. We have to insist, 'Yes, we can.'"

Obama can still redeem himself by continuing to seek the elimination of nuclear weapons despite the odds he faces. He needs the support of the international community for this.

A second success claimed was the NPT Review Conference of May 2010 where Pugwash was active in the lead up and the duration of the conference. An objective assessment of the conference involves honest answers to the more political questions related to the future of the regime.

The relief of the Nuclear Weapon States (NWS) over the adoption of the Final Declaration's conclusions and recommendation including the 64 point Action Plan together with the lukewarm reaction by the Non Aligned Movement (NAM) states and the pro-disarmament NGOs indicates that we have only bought the NPT another five years. The tensions endemic over the central bargain remain. Good-faith implementation of the document's Action Plan will be crucial, as will progress on the new START, and ratification of the Comprehensive Nuclear Test Ban Treaty(CTBT) by the United States. The future course of the Six –Nation Talks on the Democratic People's Republic of Korea(DPRK), the resolution of the questions over Iran's nuclear program, and the outcomes of the 2012 Middle East conference- if it is held at all- will also determine the future of the NPT. The NPT has survived another challenge, but without further action by the NWS, the nonproliferation regime may well wither away.

Let me add a word on the decisions taken on the Middle East Weapons of Mass Destruction Free Zone (WMDFZ.) After 15 long years of delay in implementing the Resolution in the Middle East- an integral component of the package crafted by me as President of the 1995 NPT Review and Extension Conference to ensure the indefinite extension of the NPT - that resolution was given some attention in 2010. A number of steps were agreed upon in the New York negotiations surrounding the decision to hold a conference on the WMDFZ in 2012. Immediately after the Review conference statements were made by officials of the

US Government which were unhelpful. Today, 13 months after the conference, we have no sign of the decisions taken in New York last May being implemented – except for one line in a Press Release issued at the end of the P5 meeting in Paris last Thursday which said “The P5 welcomed the steps taken by the US, Russia and UK towards holding a Conference on a Middle East WMD Free Zone (MEW MDFZ) in 2012.” What indeed are these steps?

We could have another period of frustrating inactivity culminating in a confrontational climate at the 2015 NPT Review Conference and the Preparatory Committee meetings that precede it beginning next year, Surely domestic election consideration need not prevent the preliminary tasks of appointing a Facilitator and selecting the host country of the 2012 Conference. I call upon the UN Secretary-General to seize the initiative and announce these decisions urgently so that the process can commence. Consultations can begin thereafter through the Facilitator for the actual convening of the conference.

The agenda for disarmament and in particular, nuclear disarmament, contains a welter of unfinished business. The CTBT has still to enter into force and the US administration must ensure its ratification by the US Senate paving the way for the other 8 countries to follow their example. In Geneva, the single multilateral negotiating forum-the Conference on Disarmament (CD)- goes into a second decade of paralysis. It is simplistic to blame one country for that state of affairs when there are so many topics crying out for negotiations immediately if only the membership agreed to do so. As we have heard repeatedly in this Pugwash conference, some 200 NATO tactical nuclear weapons remain deployed in 5 countries in Western Europe despite the declared policies of some of these countries and their public opinion. NATO - Russian relations have still to address many difficulties that lie ahead and further US Russian nuclear reductions have to be negotiated along with understandings on the deployment of BMD systems. Risks of a space war and cyber war remain ominous. The problems over the nuclear programme of the DPRK remain daunting. Similarly with Iran, negotiations with the P5 +1 have not brought the desired results. We were briefed during the Conference on progress being made in negotiating an Arms Trade Treaty. Complicating all this is the persistent impact of the global economic crisis of 2007-2008.

Military Expenditure, Arms Transfers and Global Security

Throughout my diplomatic and international civil service career, I have depended on the Yearbook of SIPRI to provide me with reliable information and analysis of the international peace and security situation in the world. Today, as Vice Chairman of the Governing Board of SIPRI, I am more aware than before of the intensive research and rigorous scholarship that go into this annual assessment. SIPRI estimates that the world spent US \$ 1630 billion on military expenditure in 2010 - 1.3% higher in real terms than in 2009 and 50% higher than in 2001 - notwithstanding the global economic crisis. The growth in 2010 was almost entirely due to the US military spending. While military spending grew most rapidly in South America and Africa, the only surviving super power the USA accounted for 43% of the global share which even the next 10 largest military spenders could not match. One of them, Saudi Arabia, spent 10.4 % of its GDP on military expenditure - well above the global average of 2.6%. Admittedly there were 15 major armed conflicts including those in Afghanistan and Iraq which explains some of this expenditure. But knowing as we do that an over armed world has been the pattern even after the cold war ended, there is no prospect of serious military expenditure reductions in the future. Another statistic that emerges from SIPRI's Yearbook is the volume of international transfer of major conventional weapons. From 2006 to 2010 this was 24% higher than in 2001 and 2005. The 5 largest suppliers of weapons during this period were the USA 30 %, Russia 23%, Germany 11%, France 7% and UK 4%. Among the major recipients were the Republic of Korea, India, China, Greece, South Africa, Singapore, United Arab Emirates and Saudi Arabia.

Bruce Blair estimates that the full cost of nuclear weapons alone is \$101 billion this year and that for just one nuclear weapon we could provide health care to 36,000 people, textbooks for 43,000 students or convert 64,285 households to renewable energy. All nine nuclear armed states, whether within the NPT or outliers, present a threat to global security. Napoleon is said to have remarked: "Bayonets are wonderful! One can do anything with them except sit on them!". Today's bayonets are nuclear weapons; and we are actually sitting on them. The potential for their use by accident or design; by the states themselves or by terrorist groups within states is too great for the people of the world to accept.

Outside these sombre statistics is the larger political landscape with the continuing impact of the 2008 international financial crisis lingering on in many countries and the gradual shift of the centre of gravity in global political and economic terms .

There is clearly an emergence of the Global South. As Deepak Nair, Emeritus Professor of the Delhi School of Economics has pointed out, in 1000 AD Asia, Africa and Latin America together accounted for 82% of the world population and 83% of global income. This continued for eight centuries. In 1820, the three continents still claimed three fourths of the world population and two thirds of its income. Then, came the industrial revolution and colonialism, a revolution in transport and communication and the rise of Western Europe and the decline of Asia. Between 1870 and 1950 per capita incomes in Asia fell to one tenths of Western Europe. So also did the incomes in Africa and Latin America. But from 1950 Nayar identifies a resurgence of developing countries after decolonization.

From 1951 to 1980 there was rapid economic growth in the developing world. And in 2005 we were back to the same statistics as in 1870. This catch up is still limited to a few countries in the global south, particularly, India, Brazil, China and of course, the South East Asian countries but the 21st century is going to be the turning point. It is going to be a turning point where we are going to see an economic and political impact in the rise of the global south. There are, of course, very clearly demographic factors at work. But I would also like to see a new paradigm so that the emerging economies do not repeat the mistakes of the OECD countries in the industrialized West. They must undertake nuclear disarmament, reduced military expenditure and sustainable development. This is not yet evident and environmental abuse as well as corruption afflict these countries while some of them remain nuclear armed.

The influence of non state actors and new global and regional powers is also taking place at a time when the global security structure is exposed as being weak, outdated and inefficient. The institutions, the treaties and the processes that we had established after World War II have to be revisited and revised. We have to learn the lessons from the recent economic crisis. I quote the UN Secretary General, Ban Ki-moon who said, "While recently we have heard much in this country about how problems on Wall Street are affecting innocent people on Main Street, we need to think more about those people around the world with no streets. Wall Street, Main Street, no street – the solutions devised must be for all."

An official US Commission established to investigate the causes of this economic collapse, came to the following conclusions in a report presented this year:

- The financial crisis was avoidable.

- Widespread failures in financial regulation and supervision proved devastating to the stability of the nation's financial markets.
- Dramatic failures of corporate governance and risk management at many systemically important financial institutions were a key cause of this crisis.
- A combination of excessive borrowing, risky investments, and lack of transparency put the financial system on a collision course with crisis.
- The government was ill prepared for the crisis, and its inconsistent response added to the uncertainty and panic in the financial markets.
- There was a systemic breakdown in accountability and ethics.
- Collapsing mortgage-lending standards and the mortgage securitization pipeline lit and spread the flame of contagion and crisis.
- Over-the-counter derivatives contributed significantly to this crisis.
- The failures of credit rating agencies were essential cogs in the wheel of financial destruction.

That is a damning indictment of the financial institutions in the richest country in the world. It is an acknowledgement of the irresponsible management of economic power with appalling consequences for the rest of the world hurt by the contagion that spread throughout the global system in a highly accelerated process of globalization. We are still recovering from this. But let us draw lessons from this. A more serious crisis threatening the survival of humankind is waiting to happen.

We, in the political and security arena have got to address the international security governance system. It has to include much needed reform of the Security Council - to which the German Foreign Minister referred in his keynote address opening this conference, if we are going to ensure that the changing power equations are going to be accommodated smoothly. I have argued elsewhere for the eclipse of hard power both in military terms and in economic terms and advocated the evolution of smart sustainable power. Only then can we have a more secure world at lower levels of armaments ensuring that the bottom billion of our global population who now live below \$ 1.25 per day are lifted out of the indignity of poverty.

With regard to the Security Council, it is curious that Security Council resolution 1973, is adopted by a simple majority with 2 permanent members abstaining, and is thereafter interpreted as legal authority for a massive onslaught on a country for having caused civilian casualties while the NATO bombing itself results in civilian deaths. Likewise, the “Arab spring” which has given the world so much hope is being snuffed out in some countries with foreign intervention while the Security Council looks on. The selective application of the “Responsibility to Protect” concept vitiates its very objective.

Nuclear power and Fukushima

I extend my sincere sympathies to the Government and people of Japan – and especially to the members of Japan Pugwash – over the loss of life and damage caused by the effects of the recent tsunami on the Fukushima Daiichi nuclear plant. We have heard an authoritative and graphic description of this tragedy, and its repercussions and implications from Dr. Tatsujiro Suzuki in his Dorothy Hodgkin Lecture today. Societal resistance to nuclear power plants has clearly increased. It was not long ago when the world was hailing what appeared to be a nuclear renaissance or Second Nuclear Age. It was the upsurge of a demand for nuclear power as a response to the Intergovernmental Panel on Climate Change reports on climate change and the shift away from carbon emitting fossil fuels. Currently some 14% of global electricity is supplied by nuclear power. The International Atomic Energy Agency (IAEA) Power Reactor Information System (PRIS) reports that 440 power reactors are operating in the world and that 65 reactors are under construction. Concerns were being expressed over the challenge this posed for the non-proliferation of nuclear weapons. All countries within the NPT are of course well within their rights to embark on nuclear power for peaceful purposes as an energy option. Article IV of the Treaty for the Non-Proliferation of Nuclear Weapons (NPT) states that the use of nuclear energy for peaceful purposes is “the inalienable right of all the parties” without discrimination, and that all should facilitate this transfer of technology. Many countries already benefit from non-power uses of nuclear energy for development purposes in areas like nuclear medicine, industrial applications, control of vector-borne diseases etc. Over 60 countries have notified the IAEA of their interest in developing nuclear power. This spurt of interest in nuclear energy as a source of power is undoubtedly related to the high cost of oil; acute concern over climate change through CO₂ emissions; the slow pace of technological development –and consequently, in cost reductions in non-conventional renewable sources of energy such as biomass, solar and wind; and the abundance and relative cheapness of uranium. The so-called ‘nuclear renaissance’ was already sputtering out before Fukushima, as a new Canadian study revealed. Nuclear power is expensive and takes time to come on stream, whereas cheaper and quickly deployed alternatives are available. The nuclear-waste problem, which no country has solved, as remains daunting. Can we insulate nuclear plants from strikes, acts of sabotage and sheer human error apart from natural disasters like earthquakes, volcanic eruptions, tsunamis and typhoons? For all of the above reasons, a healthy open debate must begin and Pugwash with its scientific expertise must lead this. I am glad that the Sri Lanka Pugwash group plans a Workshop in Negombo in early September to discuss the power options of

developing countries in South and South-east Asia while the Africans plan something similar.

Conclusion

Finally, ladies and gentleman, let me assure you all that the governance of our organization, the Pugwash Conferences on Science and World Affairs, is in good hands with its existing Council and Executive Committee which met here in Berlin prior to the opening of our conference. However, I appeal to each and every one of you and in particular, the national Pugwash groups to redouble your efforts to recruit new members, especially, scientists, academics and policy specialists from among the younger generations. The torch lit by Bertrand Russell and held aloft by Pugwash must be passed on. I also appeal to you to redouble your fund raising efforts since the more funds we have the more we can do in terms of organizing workshops and meetings in our effort to achieve our objectives. Pugwash has a slender staff which carries an enormous burden and I would like to pay a sincere tribute to them all for the work they carry out tirelessly and conscientiously.

May I use this occasion to pay a special tribute to Dr Jeffrey Boutwell who ceased to be Executive Director in our Washington office during the course of last year. His modest demeanour and unfailing courtesy were combined with a total dedication to the mission of Pugwash. Jeffrey has not ended his long and distinguished link with Pugwash, although he is not able to be with us today, I wish him well in the future and thank him for his splendid services to Pugwash and its great causes.

In terms of our structural framework, or our “constitution” if you like, we are required to have general conferences at intervals ranging from 12 to 18 months and a quinquennial conference every 5 years. Fund raising for these major events is a bigger challenge than ever before and with the consent of the Council we have had to delay some of these events so that they can be better organized and more productive. We have improved our website and our communication links with the members, but are always open to suggestions for greater improvement.

The Pugwash journey has been a long and meritorious one. While we look forward to the achievement of our objectives our pride is in the journey and those of you who accompany us on the road.

Let me conclude with a quotation from the 2011 UNDP Human Development Report –

“ Putting people at the centre of development is much more than an intellectual exercise. It means making progress equitable and broad-based, enabling people to be active participants in change and ensuring that current achievements are not attained at the expense of future generations. Meeting these challenges is not only possible-it is necessary. And it is more urgent than ever ”

With development and security - both national and human – so closely intertwined, that perspective is no different from the humanist message of the Einstein-Russell Manifesto and the central philosophy of Pugwash. Let us never forget that.

Thank you.