### Pugwash 50th Anniversary

Pugwash Novo Scotia, 8July 2007

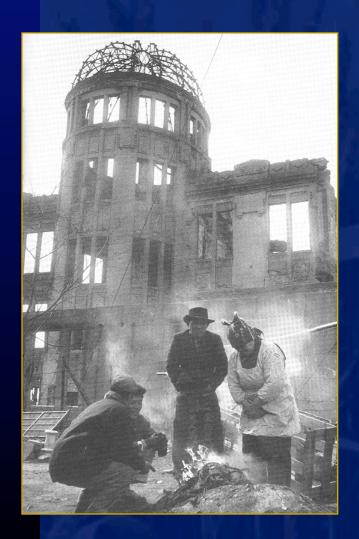
Urgency of Staged Universal Nuclear Disarmament

**Prof M.S. Swaminathan** 

President, Pugwash Conferences on Science and World Affairs





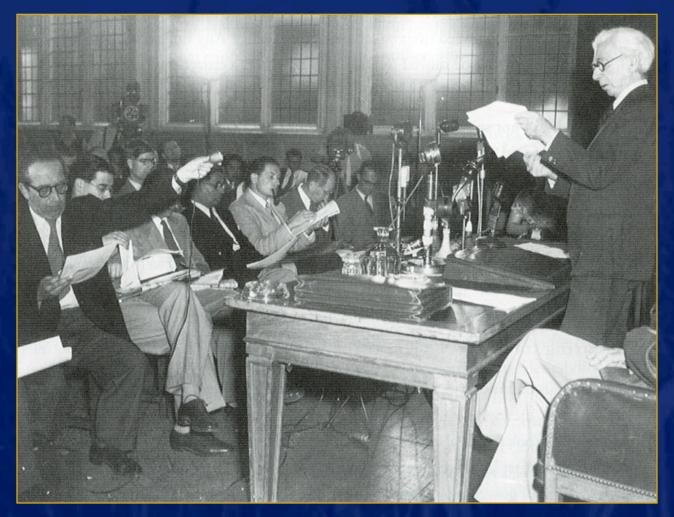


#### Hiroshima Prefecture Industrial Promotion Hall

**Grim reminder of Man's Inhumanity to Man** 

**August 6, 1945** 





Bertrand Russell reading the proclamation of the Russell – Einstein Manifesto in Caxton Hall, London on 9 July 1955

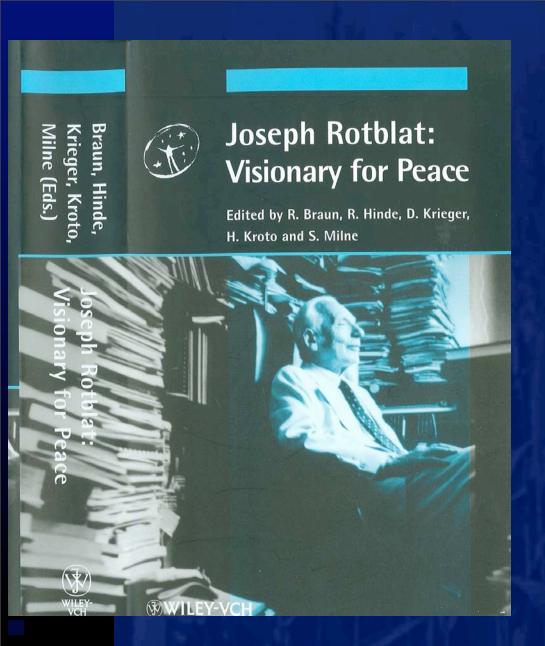




Joseph Rotblat 1955

I have to bring to your notice a terrifying reality; with the development nuclear weapons, man has of acquired, for the first time in history, the technical means to destroy the whole of civilization in a single act, indeed the whole human species is endangered, by nuclear weapons by other means of wholesale destruction which further advances in science are likely to produce.

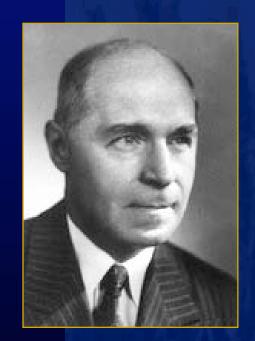




Tribute to Jo who was the very embodiment of the "Remember your Humanity" principle in life







Hermann J Muller 1890 - 1967

Scientists can no longer stand aloof from the question of whether their work will be used to wreck or to recreate civilization, even though they can scarcely have the deciding voice. Radiations cause mutations in genetic material and can thereby cause harm to the generations yet to be born

Prof Muller introduced me to Pugwash at the Second UN Conference on the Peaceful Uses of Atomic Energy held in Geneva, September 1988



#### Wake Up Call

- There is a growing violence in the human heart. Daily reports of deaths of innocent civilians in bomb blasts in Iraq, Afghanistan and other places no longer shock us. Hence, urgent steps are needed to heal wounds and restore harmony within the human family. We need a Convention on Human Diversity, on the lines of the Global Convention on Biological Diversity
- Avoid the possibility of a horrible shift from Nuclear Weapons States to Nuclear Weapons Groups and Individuals, by heeding to the Russel-Einstein warning, "Shall we instead choose death, because we cannot forget our quarrels."



### G 8 Summit (June 2007), Germany Discussion on Global Security Concerns

- o Climate Change
- Measures to prevent nuclear proliferation
- Intensify counter-proliferation initiatives
- Tighten sanctions against Iran
- Prevent the spread of uranium enrichment and spent fuel reprocessing technologies



# G 8 Summit : Lost Opportunity (June 2007)

- No initiative to reduce arsenals with the nuclear weapon states
- No discussion on how the world can rid itself of the menace of nuclear weapons
- Nuclear weapon-free world is an idea whose time is yet to come



# Plea for giving up the concept of deterrence based on Nuclear Weapons



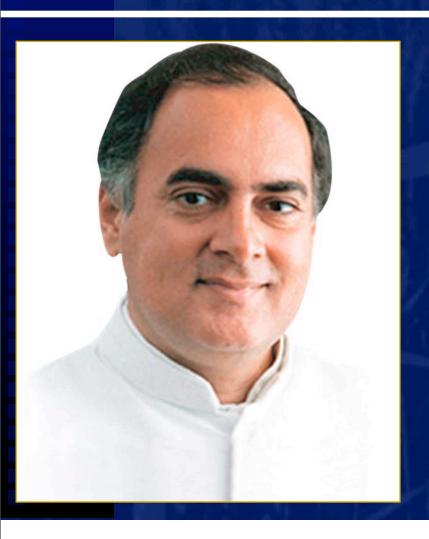
The citizens of the world, have an inviolable right to live. Anyone who tries to jeopardize this right is a devil incarnate, a fiend, a monster

Josei Toda, September 1957



### Rajiv Gandhi Plan for a Nuclear-Weapon Free World

(presented to the UN Special Session on Disarmament, 1988)



- Time bound elimination of all nuclear weapons
- No first use policy
- Voluntary Moratorium on further testing
- A comprehensive Test Ban



### **Veteran U S Policy Makers – January 2007**

Henry Kissinger, Sam Nunn, William Perry, George Schullz

"Reassertion of the vision of a world free of nuclear weapons would be and would be perceived as a bold initiative consistent with America's moral heritage. The effort could have a profoundly positive impact on the security of future generations".



# Dr Mohamad El-Baradei, Director General of the International Atomic Energy Agency (2007)

"Soon, there could be 30 virtual new nuclear weapons states on the horizon. There are no legitimate nuclear weapon powers. Elimination of nuclear weapons in all countries is the only way that will prevent new countries from acquiring nuclear weapons".



#### Dark Clouds on the Horizon

- Launching by US of a new family of nuclear weapons called, "the reliable replacement warhead"
- Development of a 'bunker buster' to destroy underground facilities where WMD activities may be hidden.
- Setting up missile defences in Poland and Czech
   Republic to counter Iran and North Korea
- Weaponsiation of space



#### **Way Ahead**

- No first use commitment and a comprehensive test ban
- Adopt a fissile materials cut off treaty that is universal, nondiscriminatory and verifiable
- During the transitionary period, place nuclear warheads, fissile materials and production facilities under the surveillance of the IAEA.
- Assist IAEA to develop a Fissile Materials Bank into which all fissile materials committed earlier to weapons can be deposited and made available to countries for use in civilian energy production
- Close down all Nuclear Weapons Laboratories and redeploy the scientists in nuclear energy programmes to provide non-carbon sources of energy



#### No Room for Double Standards

So long as any state has nuclear weapons, others will want them. So long as any such weapons remain, there is a risk that they will one day be used, by design or accident. And any such use would be catastrophic.... The Commission rejects the suggestion that nuclear weapons in the hands of some pose no threat, while in the hands of others they place the world in mortal jeopardy"

Blix Commission, June 2006 Report on "Weapons of Terror"



#### Responsibility of Scientists

WMD (weapons of mass destruction) constitute challenges not just for governments and international organisations. Research communities, nongovernmental organizations, civil society, business, the media and the general public share ownership of the WMD challenges. They must all be allowed and encouraged to contribute to solutions

Blix Commission, June 2006 Report on "Weapons of Terror"





#### The Article VI Forum

The Article VI Forum was established in response to the crisis of the non-proliferation/disarmament regime manifested by the breakdown of the 2005 NPT Review Conference. In creating the forum, the Middle Powers Initiative - a group of "middle power" governments and international NGOs dedicated to nuclear abolition – sought to "create an informal setting where diplomats, experts and NGOs can discuss ways to strengthen the nuclear disarmament and non-proliferation regime through the NPT" of The inaugural forum was held in October 2005 with the participation of representatives of 28 governments. The Forum takes its name from the article VI of the NPT in which the nuclear states commit themselves to the elimination of their nuclear weapons.

The aim is to advance international cooperation in preventing the spread of nuclear weapons and to fulfil existing commitments to achieve the reduction and ultimate elimination of nuclear arsenals



### Towards a Nuclear-peril Free World

Because of the multi-dimensional threats posed to human security by climate change, and the consequent need for reducing green house gas emissions, interest and investment in nuclear power plants are growing. The civilian uses of atomic energy are likely to grow. Hence, the UN may convene an International Conference on the Civilian Uses of Atomic Energy to develop a Code of Conduct to ensure that the non-military use of nuclear fuels does not get abused and to further strengthen safeguards and the inspection role and monitoring capacity of IAEA.



### Science and The UN Millennium Development Goals

Goal 1:Eradicate extreme poverty and hunger

Goal 2: Achieve universal primary education

Goal 3:Promote gender equality and empower women

Goal 4:Reduce child mortality

Goal 5:Improve maternal health

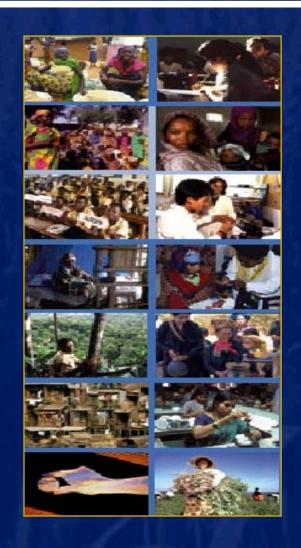
Goal 6: Halt and begin to reverse the spread of

HIV/AIDS, malaria and other diseases

Goal 7: Ensure environmental sustainability

Goal8: Develop a Global Partnership for

Development







#### **Hunger – free world : Coalition of the Concerned**

"Hunger allows no choice To the citizen or the police. We must love one another or die...... Defenceless under the night Our world in stupor lies; Yet, dotted everywhere, ironic points of light Flash out wherever the Just Exchange their messages; May I, composed like them of Eros and of dust, Beleaguered by the same Negation and despair, Show an affirming flame"

- W. H. Auden



"Every gun that is made, every warship launched, every rocket signifies in the final sense, a theft from those who are hungry and are not fed, from those who are cold and are not clothed."

"The world in arms is not spending money alone.

It is spending the sweat of its labourers, the genius of its scientists, the hopes of its children".

Dwight D Eisenhower
President of the United States
August 16, 1953



#### Peace Dividend

# UNCOMMON OPPORTUNITIES

An Agenda for Peace and Equitable Development

The Report of the International Commission on Peace and Food
Chaired by Prof M S Swaminathan, 1994





#### **End of the Era of Proxy Wars**

In a world now free from major opposing military blocs fighting proxy wars in the developing world to maintain their perceived security interests, there is no insurroundable economic or technical or political obstacle to the complete abolition of war as an instrument of national policy and of the incidence of war in international affairs. It requires a determined will and the functioning of effective institutional arrangements for enforcement. The complete abolition of the production, possession or use of nuclear weapons is a first essential step toward this most desirable goal

ICPF, 1994



#### **Nuclear weapons**

The use of nuclear weapons should be declared by the UN a crime against humanity. Based on the precedent of the Chemical Weapons Treaty, the proposal for a universal ban on the possession of nuclear weapons by any nation should be placed before the Security Council. The five permanent members should agree to the suspension of their veto power on this issue so critical to the future of humanity

ICPF, 1994



### Global Cooperative Security System: Win-win for All Nations

Global cooperative security system: The present statecentred competitive security framework must be replaced by cooperative security system that unconditionally guarantees the security of member nations against acts of external aggression by means of a Standing World Army, similar in constitution to NATO but open to all countries that practice democratic principles of national governance, contribute financial and defense resources to a common armed force, accept ceilings on national defense expenditure and eschew possession of nuclear weapons

ICPF, 1994



### 50 Years After First Pugwash Conference

- For 60 years, nuclear weapons have existed but have not been used. This is a tribute to the work of Pugwash, many civil society organisations and mass media.
- O Unfortunately, we are now entering an unchartered territory in human conflicts and retribution. At least to prevent the potential non-State use of nuclear weapons, Nuclear Weapon States should not lose even a day in working towards the goal of Zero in the existence of nuclear arsenals



## 50th Anniversary – Proposal for a Pugwash Appeal Major Components

- All nations with nuclear weapons should adopt a legally mandatory policy of "no first use for nuclear weapons".
- 2. Respect commitments to nuclear non-proliferation treaty (NPT), ratify Comprehensive Test Ban Treaty (CTBT), conclude a Fissile Material Cut Off Treaty, and end all research relating to the development of new nuclear weapons
- 3. Conclude a Nuclear Weapons Convention outlining a time frame for getting to Zero by 2020.
- 4. Avoid prospects for nuclear terrorism and adventurism by eliminating all unsecured nuclear fissile material and by implementing the concrete steps proposed by Pugwash for the elimination of highly enriched uranium; otherwise there is risk of nuclear power groups and individuals emerging, in addition to nuclear power States.

Contd.



# 50<sup>th</sup> Anniversary Pugwash Appeal Major Components

5. Because of the multi-dimensional threats posed to human security by climate change, and the consequent need for reducing green house gas emissions, interest and investment in nuclear power plants are growing. The civilian uses of atomic energy are likely to grow. Hence, the UN may convene an International Conference on the Civilian Uses of Atomic Energy to develop a Code of Conduct to ensure that the non-military use of nuclear fuels does not get abused and to further strengthen safeguards and the inspection role and monitoring capacity of IAEA.

Contd.



# 50<sup>th</sup> Anniversary Pugwash Appeal Major Components

- 6. Democratic systems of governance are fast spreading in the world, which involve the holding of free and fair elections periodically. It would be useful to develop a Pugwash 50<sup>th</sup> Anniversary Appeal which calls upon all political parties in every country to include in their next election manifesto, a firm commitment to work for speedy nuclear disarmament. Without global political commitment, this goal cannot be achieved.
- 7. Introduce in all school curricula, information relating to the consequences of the use of nuclear weapons in Hiroshima and Nagasaki in August 1945, so as to bring home the immediate and long term disastrous impact of a nuclear war. Without a nuclear peril literacy movement, the climate for eliminating nuclear weapons and ending nuclear proliferation cannot be generated.

Proposed by M S Swaminathan at Hiroshima, August 2005



#### **Recipe for Peace**



Northern Ireland is an example of how ordinary women and men can make a difference to changing entrenched prejudices

First sitting of the new Northern Ireland Assembly in Belfast, 8 May 2007





#### **Back to Basics: What Can Scientists Do?**

Scientists are an indispensable link in the chain leading to the construction and improvement of nuclear weapons. They are willing participants in the enterprise; not conscripted labour. They form an elite group within their respective nations. They have an ethos and a conscience of their own. It was through their assistance in the first place that nuclear arms originally emerged. It would be idle to contend that a body of persons in this key position can make no impact. If they do face these issues (as Jo Rotblot did) the consequences will be felt all the way up the chain of command

C G Weeramantry Nuclear Weapons and Scientific Responsibility



## October 2, 2007 International Day of Non-violence



"Be the change you want to bring about"

M K Gandhi

Launch the Pugwash 50th Anniversary Appeal

