

Q) Discuss the global nuclear control and anti- nuclear proliferation measures?

Ans) The development and use of nuclear weapons in 1945 marked a major turning point in the history of warfare and, indeed, in the history of humanity. A primary security concern in today's world is the threat about the proliferation of nuclear weapons. Proliferation of nuclear weapons is one of the major challenges we face as a global society. Reducing the risks of nuclear war, limiting the spread of nuclear weapons, and reducing global nuclear weapons stockpiles are key national and international security goals today. They are pursued through a variety of international arms control, non-proliferation, and counter- terrorism treaties and agreements.

Nuclear Arms Control The first and only nuclear weapons that have been used in warfare were the atomic bombs, developed by the Manhattan Project, which were exploded over Hiroshima and Nagasaki in 1945, developed under the scientific direction of the US physicist J. Robert Oppenheimer. Nuclear arms control has been seen as a central means of containing conflict and ensuring global security. The objective of arms control is therefore to regulate arms levels either by limiting their growth or by restricting how they can be used. However, formal bilateral agreements and multilateral agreements to control or reduce arms were rare before the twentieth century. What changed this was the advent of industrialized warfare through the development of technologically advanced weapons. It is therefore no surprise that since 1945 the arms control agenda has been dominated by attempts to limit the spread of 'Weapons of Mass Destruction' and particularly nuclear weapons.

The principal means through which this has been attempted are treaties and conventions of various kinds.

Anti- Nuclear Proliferation Measures

The first step for nuclear non-proliferation was the establishment of the UN Atomic Energy Commission in 1946. Its main objective was to eliminate nuclear proliferation and place nuclear energy under international control.

1) The International Atomic Energy Agency (IAEA) - The International Atomic Energy Agency was established on 29th July 1957, as an autonomous organisation, with the objective to assist nations in carrying out their nuclear programmes for peaceful purposes. Its headquarter is at Vienna (Austria). It is an intergovernmental forum for scientific and technical cooperation on the peaceful use of nuclear technology and nuclear power worldwide. Its three missions are peaceful uses of nuclear energy by its member states, safeguards to verify that nuclear energy is not used for military purposes and promoting high standards for nuclear safety. This agency may also inspect other facilities if it suspects that nuclear materials are being used or weapons related activities are being carried out by anyone without filing the prescribed declaration. In fact, non-nuclear weapon states are required to file a declaration and submit details of all nuclear materials in their possession. This protocol has been signed by 146 countries and among them 125 has made it applicable and effective by 2015.

2) The Limited or Partial Test Ban Treaty (LTBT or PTBT) 1963 - The Limited Test Ban Treaty (LTBT) is a treaty prohibiting all detonations of nuclear weapons for testing in the Atmosphere, Outer Space and Under Water. However, it permitted such tests underground. The treaty was signed and ratified by the Soviet Union, the United Kingdom and the United States on 10th October 1963. Since then, 123 other states have become party to the treaty. Ten states have signed but not ratified the treaty. It is officially known as the treaty banning nuclear weapon tests in the atmosphere, in outer space and under water, and is often abbreviated as the Partial Test Ban Treaty (PTBT), Limited Test Ban Treaty (LTBT), or Nuclear Test Ban Treaty (NTBT).

3) The Nuclear Non- Proliferation Treaty 1968- The Nuclear Non-Proliferation Treaty (NPT), which came into force on 5th March, 1970 and the validity of which was extended indefinitely from 1995 onwards, is the most important piece of legislation supporting the nuclear non- proliferation regime. The treaty currently has 191 member states as parties. Its objective is to prevent the spread of nuclear weapons and nuclear technology, to promote cooperation in the peaceful uses of nuclear energy, and further the goal of achieving nuclear disarmament and general and complete disarmament. The NPT recognises five nations (USA, Russia, China, Britain and France) as nuclear weapon states. In this connection it is to be noted that three nations which have not signed the NPT -India, Israel and Pakistan- is known to possess capabilities to develop nuclear weapons. North Korea, which had initially signed the NPT, withdrew from it in 2003, following detonations of nuclear devices in violation of core obligations. It is now thought to possess a small number of nuclear weapons. Several countries, including Argentina, Brazil, and South Africa, suspended their nuclear weapons programmes and joined the NPT in the 1990s. Others Ukraine, Belarus, and Kazakhstan – gave up nuclear weapons deployed in their territories as part of Soviet Union and joined the NPT as non- nuclear weapon states in the 1990s. The NPT was first signed by the USA, UK and the Soviet Union along with 59 other countries. China and France signed the treaty in 1992. The NPT is presently the most widely accepted arms control agreement.

4) The Anti- Ballistic- Missile Treaty 1972- At the U.S. - Soviet summit held in Mexico in 1972, President Richard Nixon of the USA and President Leonid Brezhnev of the Soviet Union signed the Anti-ballistic Missile (ABM) treaty. The treaty limited each country to two ABM sites, with no more than 100 ABM launchers and interceptors at each site. Furthermore, it excluded the transfer or deployment of ABM systems to or in other nations. The 15 articles of the treaty

were not limited by any duration. It was provided that the treaty would come up for renewal every five years. In 2001, however, the USA announced that it would no longer follow the treaty.

5) The Comprehensive Test-Ban Treaty (CTBT) 1996- The Comprehensive Test Ban Treaty, 10th September, 1996 is a multilateral agreement signed by the US, UK and 90 non nuclear-weapon states which would ban any and all nuclear tests, big or small, above and below the Earth's surface. It established a worldwide monitoring system- including 170 seismic stations- to check air, water and soil for signals when someone set off a nuclear explosion. By 2003, the CTBT was signed by 167 and ratified by 100 out of a total of 197 countries.

6) The Chemical Weapons Convention (CWC) 1997- The Chemical Weapons Convention (CWC), which was adopted in 1992 and came into force in 1997. The CWC bans development, production, stockpiling and use of chemical weapons. It requires state parties to destroy all stocks of chemical weapons within 10 years of its coming into force, with a possible extension of up to five years. However, challenges remain, most importantly due to the slow rate of destruction of vast chemical arsenals by USA and Russian Federation. High costs as well as environmental concerns have contributed to these delays.

7) Strategic Arms Reduction Treaty (START): The end of the cold war between the US and the USSR gave rise to optimism for nuclear non-proliferation. This optimism was boosted by START I (1991) and START II (1993), through which both the countries agreed to reduce their nuclear warheads and to eliminate certain categories of weapons such as long-based intercontinental ballistic missiles with multiple warheads. However, this optimism did not last long. The commitment about reduction of nuclear stockpiles and encouraging nations to abandon nuclear weapons faded. The START III (1999)

talks in Moscow ,failed over disagreements about a possible negotiation of the Anti-Ballistic Missile (ABM) treaty.

8) Intermediate-Range Nuclear Forces Treaty: The Intermediate-Range Nuclear Forces Treaty was a bilateral agreement signed by the US and the USSR in 1987 to reduce their nuclear arms. Consequently, the US eliminated 846 missiles and the USSR removed 1,846 INF missiles.

9) Strategic Offensive Reductions Treaty (SORT): The US entered into a new agreement with Russia known as the Strategic Offensive Reductions Treaty (SORT) in 2002. The objective of the treaty was to reduce the strategic systems of both the US and Russia. The agreement allows either side to decide what to do with the warheads removed from missiles, long-range bombers and submarines. No warheads were to be destroyed. But the treaty had some inherent weaknesses and contradictions as it did not contain any verification measures about the reduction of strategic systems. It also allowed either side to withdraw from the treaty at three months' notice. Finally the SORT expired in 2012.

10) The United Nations Security Council Resolution 1540- In 2004, the U.N. Security Council adopted Resolution 1540, which requires all states to “criminalize proliferation, enact strict export controls and secure all sensitive materials within their borders.” The resolution did not, however, provide for any enforcement authority, nor did it specifically mention penalties.

The current status of nuclear non-proliferation remains fluid as some new states with potential nuclear capabilities such as Iran, North Korea and their disputes with the US have instilled doubts in the minds of the leaders of the world about achieving complete non-proliferation. The world should look towards peace and stability and not conflicts. The idea of a nuclear free world has been advanced by both peace activists and, more recently, senior politicians in the

USA and Russia. Despite the development of an extensive non-proliferation regime, effective arms control has been difficult to bring about because states tend to place concerns about national security above their obligations under bilateral or multilateral agreements.