

# NUCLEAR PROLIFERATION

## CAUSES:

- **Security Delimma** is the responsibility of state itself. So states are attracted to the notion of developing nuclear weapons to secure itself. Each and every state wants to maximize their stockpiles of sophisticated weapons.
- Before 1964, **India supported nuclear free world**. However, **this created a security threat for India** so India also developed weapons and conducted nuclear explosion in 1998. This was immediately followed by Pakistan conducting nuclear explosion in 1998.
- **Iran wants to develop nuclear weapons due to its hostility with nuclear armed Israel.**

## Lack of Collective Security

- United Nations is not powerful enough to protect the security of states which are members of USA. In 2003 invasion of Iraq by US, there was no consensus in UNSC with Russia and China opposing it. So lack of strong Institutional Organisation leads to security threat.

## Enhancing Status

- Even nation states want to acquire nuclear weapons for raising or enhancing their status in international arena. Example Pakistan, North Korea. Both conducted nuclear explosion for enhancing their status in world politics.

## Technological

- Nuclear Technology is in fact **dual-use technology**. It can be used either ways. For peaceful purposes too and for weapons and destruction too. So it is **double-edged sword**.

# TREATIES REGARDING ARMS CONTROL AFTER 1990

- Treaty on Conventional Armed Forces in Europe, (CFE Treaty) signed 1990, entered into force 1992– established limits on deployment of conventional military forces in Europe between NATO and the Warsaw Pact.
- Strategic Arms Reduction Treaty I (START I), signed 1991, entered into force 1994, expired 2009 (START I was a successor to the expired SALT agreements.) – provided limitations on strategic offensive arms
- Chemical Weapons Convention, signed 1993, entered into force 1997 – prohibited production and stockpiling of chemical weapons
- START II, signed 1993, ratified 1996 (United States) and 2000 (Russia), terminated following Russian withdrawal 2002 – prohibited intercontinental ballistic missiles with multiple independently targetable reentry vehicles.

- **Open Skies Treaty**, signed 1992, entered into force 2002– allowed unarmed **reconnaissance flights** between **NATO** and **Russia**.
- **Comprehensive Nuclear-Test-Ban Treaty**, signed 1996, has not entered into force. – prohibited nuclear weapons testing.
- **Ottawa Treaty** on **anti-personnel landmines**, signed 1997, entered into force 1999
- **Strategic Offensive Reductions Treaty** (SORT), signed 2002, entered into force 2003, expires 2012 – limited nuclear warheads.

- **International Code of Conduct against Ballistic Missile Proliferation**, signed 2002 – limited proliferation of **ballistic missiles**.
- **Convention on Cluster Munitions**, signed 2008, entered into force 2010 – prohibits deployment, production, and stockpiling of **cluster bombs**.
- **New START Treaty**, signed by Russia and the United States April 2010, entered into force February 2011 – reduced strategic nuclear missiles by half.
- **Arms Trade Treaty**, concluded 2013, entered into force 24 December 2014 – regulates **trade of conventional weapons**.

# STEPS TAKEN FOR NON-PROLIFERATION

## **NPT- Nuclear Non-Proliferation Treaty:**

- It was signed in 1968 and came into force in 1970.

### **PROVISIONS**

- NPT defines nuclear weapons states- the nation which conducted nuclear explosion **before 1<sup>st</sup> Jan, 1968.**
  - (1)US-1945
  - (2)Russia-1949
  - (3)Britain-1952
  - (4)France-1960
  - (5)China-1964
- So only **5 states are nuclear weapon states- N5** according to NPT. India, Pakistan, Israel, and North Korea are not nuclear weapon states according to NPT.

- N5 or Nuclear 5 will transfer nuclear technology and fuel for non-nuclear weapon states but **for peaceful purposes only**. In addition to that non-nuclear weapon state should sign over NPT. So without signing NPT, no nuclear weapon state can transfer technology to non-nuclear weapon state.
- NPT will be reviewed once every **5 years** and it was implemented for indefinite period in **1995**.
- It also incorporate the provision of Nuclear free zone. This means any region can be declared as nuclear free zone- ASEAN- no nuclear submarine allowed, no country allowed to acquire nuclear weapons.

## DRAWBACKS OF NPT

- Critics say that there is a difference between disarmament and nuclear proliferation. Nuclear proliferation means that nuclear weapons should not proliferate from N5 to other nations. So **it addresses Vertical proliferation** (an increase in the numbers and types of nuclear weapons in the arsenal of nuclear weapon states) but no **Horizontal proliferation** (the spread of nuclear weapons to non-nuclear weapons states). There was no provision in NPT for dismantling nuclear weapons of N5.
- India was thus critical towards NPT and said **that it legitimised the privilege of N5.**

- **This will cause a “security dilemma” in non-nuclear states.**
- India always emphasised over nuclear disarmament. Disarmament means no nation will be allowed to keep nuclear weapons whether they are N5 or other countries. Therefore India never signed over NPT.
- In International Law and also in UN Charter, each and every nation is equal and sovereign. So in the eyes of International Law Nepal and US are equal. Thus **any international treaty should not be discriminatory towards nation states.**
- However, **NPT is Discriminatory.** It divides nation state in two categories:
  - (1) **Non-Nuclear Weapon States (NNWS)**
  - (2) **Nuclear Weapon States (NWS-N5)**

# TURNING POINT IN INDIA'S FOREIGN POLICY

- In 1974, India conducted a nuclear explosion. At that time and before India had strongly advocated for nuclear disarmament. So this was contradictory. India described it as **“Peaceful nuclear explosion”**.
- Indian nuclear programme was **assisted initially by US and Canada**. After this explosion both left the nuclear programme of India. They also **imposed economic and technological sanctions over India too**.
- It was in this context that **USSR came in support of India**. USSR tried to strengthen her relations with India in view of her rivalry with US and their policy of gaining allies.

- **In 1975, Nuclear Supplier Group (NSG) was set up.** This included US, UK, France. It was made mandatory that members of NSG should sign over NPT. Members of NSG will not transfer nuclear reactor and fuel for countries which are not signatory of NPT. NSG is popularly known as **LONDON CLUB** too.
- **In 1980's, many nation states developed Inter-Continental Ballistic Missiles (ICBM).**
- **In 1980's Missile Technology Control Regime (MTCR) was set up** to monitor the proliferation of missile technology. It prevents the proliferation of missile technology which can carry 500 kg weight upto 300 km.
- **Due to MTCR, India could not get cryogenic engine from other countries.**

# FISSILE MATERIAL CUT-OFF TREATY (FMCT)

- Fissile material means **Uranium** and **Thorium** which can be used for making nuclear bombs.
- This treaty is based on the principle that if availability of fissile material is restricted then proliferation of nuclear weapons will automatically be restricted.
- So it was **initiated by US in 1992**. So the scope of non-proliferation was gradually expanded to include fissile material along with nuclear and missile technology.
- **In 1996, Wassenaar Arrangement** took place. It was for prevention of proliferation of Dual Use technology.

# NUCLEAR EXPORT REGIME

## Nuclear Suppliers Group

- The NSG came into being in 1975 with seven countries (US, USSR, UK, Canada, France, Germany and Japan)

## Missile Technology Control Regime

- There are currently **35 countries** that are members of the MTCR for example: Argentina, Australia; Austria; Belgium; Brazil; Bulgaria; Canada; Czech Republic; Denmark; Finland; France; Germany; Greece; Hungary; Iceland etc.

## Wassenaar Arrangement

- the Wassenaar Arrangement (WA) came into being in **1995**. Consisting of **41 countries** US, UK, France, Italy, Belgium, the Netherlands and Luxembourg etc.

## Australia Group

- The Australia Group (AG) for control of chemical and biological technology that could be weaponized.

# COMPREHENSIVE TEST BAN TREATY (CTBT)

- In 1996, another milestone development occurred in the world. This was Comprehensive Test Ban Treaty (CTBT).

## **Meaning of Comprehensive**

- No country will allow to conduct nuclear explosion. It is applicable over both N5+ Non-nuclear weapon states.
- Nuclear test will not be permitted in any form-in air, water, or underground. So no nuclear test is allowed.
- **Thus it was not discriminatory unlike NPT.**

- **Entry into Force Clause** was essential feature of CTBT which requires that **44 nations must sign over the treaty mandatorily** for enforcing the CTBT. These 44 nations were to be those **which had nuclear reactor technology or nuclear research facility**. So without signing of these 44 countries, CTBT will not come into force. This is the reason that till today CTBT has not come into force because **India and Pakistan refused to sign over CTBT** and US has signed over CTBT but **US Senate has not ratified it**.
- **CTBT also incorporates international data system and international monitoring centre too.**

# Why India didn't Sign over CTBT

- India said that disarmament is necessary and CTBT is a mechanism for non-proliferation and non disarmament. So **India wanted N5 to dismantle nuclear weapons first.**
- India also said that N5 have developed **Computer-Simulation Technique.** They are capable of conducting virtual tests and modify and develop their weapons with precision. **Therefore, non-nuclear weapon states will suffer from CTBT.**
- India said that CTBT is not aiming for a nuclear free world but it is directed against **Threshold Countries** like India Pakistan and Israel.
- **Entry into Force Clause is against the sovereignty of nation states.**
- CTBT is against the transfer of technology which will **hamper the technological and scientific development of developing countries like India.**

# POSSIBILITY OF NUCLEAR FREE WORLD

- **Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, 1967.**
- **South Pacific Nuclear Free Zone Treaty, 1985.**
- **Treaty on the Southeast Asia Nuclear Weapon-Free Zone, 1995.**
- **African Nuclear Weapon-Free Zone Treaty, 1996.**
- **Treaty on a Nuclear-Weapon-Free Zone in Central Asia, 2006.**
- **NPT and CTBT are being implemented forcefully. For example Iran was placed under tough economic sanctions due to disobedience of NPT.**
- **The strong emergence of civil society has also been working against the proliferation of nuclear weapons.**
- **Terrorism is a negative outcome of globalisation, whereas civil society is its positive contribution.**
- **Civil societies are very strong in European and Scandinavian countries. In countries like Japan and Scandinavian countries nuclear weapons are like a social taboo.**

- **Several regions have declared itself as a Nuclear Free Zone like ASEAN and South-America. Nuclear Free Zone means the countries will never acquire nuclear weapons.**
- **All these factors strengthen the hope that in days to come, the opposition to nuclear weapons will rise and we will see the emergence of a nuclear free world.**

# DETERRENCE

- Deterrence is a military capability which **prevents the potential attack of an enemy.**
- Each and every state wants to maximize their stockpile of arms in order to ensure the security of the nation.
- Presently, deterrence is associated with **nuclear deterrence** which is also known as **Mutually Assured Destruction (MAD)**. There is no possibility of a full-fledged war between two nuclear powers or nuclear-armed states. Because war between them will mean total destruction of states.
- Deterrence means there will be **no winner and loser** in a nuclear war. **Nobody will survive.**

# EXTENDED DETERRENCE

- It is also known as “Nuclear Umbrella”.
- Nuclear weapons state like US has extended her nuclear umbrella for South Korea and Japan. South Korea and Japan are non-nuclear states but US takes responsibility for their protection.

## **Complex Deterrence**

- It means the various states have acquired nuclear weapons like Pakistan, North Korea which are considered as irresponsible states. There is no power parity in the world but the countries like North Korea want to increase her power through the nuclear bomb.

# UTILITY OF DETERRENCE

- **Kenneth Waltz** accepted the relevance of deterrence.
- Between 1945-1990, it was the phase of Cold War. Cold War means it was less than a hot war, it was an ideological war between two major powers US and USSR. It was cold because weapons were not used.
- The outcome of Cold War was arms race between US and USSR. However, no direct war occurred because of nuclear deterrence. So this means deterrence works and prevents war.
- The 1962- Cuban Missile Crisis was the height of Cold War. It manifests that deterrence works.
- Technically, deterrence is based on the **Retaliation Capability**. Nuclear weapons generate a sense of responsibility among nation states. Therefore, it is beneficial.

# ARGUMENTS AGAINST DETERRENCE

- **John Muller.**
- Some scholars say that nuclear deterrence was not the reason behind war rather **they tried to maintain peace due to horrific and disastrous memory of World War-2.**
- A limited war occurred between India and Pakistan in 1999- Kargil issue. Both countries were nuclear weapon states.
- Technically, the notion of deterrence **relies over the Retaliation Capability or Second Strike Capability.**

# MINIMIZING THREAT OF NUCLEAR WEAPONS

## NO FIRST USE

- **No first use (NFU)** refers to a pledge or a **policy** by a nuclear power not to **use** nuclear weapons as a means of warfare unless **first** attacked by an adversary **using** nuclear weapons. China declared its NFU **policy** in 1964, and has since maintained this **policy**. India also preferred No First Use policy.
- Although US and Russia are not sticking to the principle of no first use.

# CONVENTION

- Treaties are signed between the nation states but convention is recognized by United Nation and it is ratified by member states too.
- The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, 1972.
- Chemical Weapons Convention, signed 1993, entered into force 1997 – prohibited production and stockpiling of chemical weapons.
- We should focus over finalisation of the convention for non-proliferation rather than relying of treaty.

# CIVIL SOCIETY AND NON PROLIFERATION

- **The International Campaign to Abolish Nuclear Weapons is a global civil society coalition working to promote adherence to and full implementation of the Treaty on the Prohibition of Nuclear Weapons.**
- **ICAN was launched in 2007 and counts 541 partner organizations in 103 countries as of 2019.**
- **ICAN seeks to shift the disarmament debate to focus on the humanitarian threat posed by nuclear weapons, drawing attention to their unique destructive capacity, their catastrophic health and environmental consequences, their indiscriminate targeting, the debilitating impact of a detonation on medical infrastructure and relief measures, and the long-lasting effects of radiation on the surrounding area.**