

EDITORIAL

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India's Nuclear Policy and Global Disarmament: Challenges and Opportunities

Introduction:

- The **International Day for the Total Elimination of nuclear weapons** emphasizes global disarmament efforts.
- The **Treaty on the Prohibition of nuclear weapons (TPNW)**, which came into effect in 2021, aims to entirely ban the use, development, and possession of nuclear weapons.
- India, a nuclear power outside the **Non-Proliferation Treaty (NPT)**, plays a critical role in shaping the future of nuclear disarmament.

Evolution of Global Nuclear Disarmament Efforts:

1. Early Era (1945-1960):

- The nuclear age began with the bombing of **Hiroshima and Nagasaki** in 1945.
- The **Soviet Union** tested its first nuclear device in 1949, fuelling the arms race.
- Efforts like the **Baruch Plan** (1946) and **Atoms for Peace** (1953) were proposed but failed due to Cold War tensions.
- India, under **Homi Bhabha**, began its nuclear program in the 1950s, initially advocating for global disarmament.

2. Non-Proliferation Treaty and Partial Test Ban (1960-1970):

- The **1963 Partial Nuclear Test Ban Treaty** limited nuclear tests to underground.
- The **NPT** (1968) aimed to prevent the spread of nuclear weapons, recognizing five nuclear powers.
- India rejected the NPT, viewing it as discriminatory, and continued developing nuclear technology.

3. SALT, START, and Regional Nuclear-Free Zones (1970-1990):

- **SALT I** and the **Anti-Ballistic Missile Treaty** (1972) were key outcomes of US-USSR negotiations.

- The **Treaty of Tlatelolco** created the first **Nuclear-Weapon-Free Zone** in Latin America.
- India conducted its first nuclear test, **Smiling Buddha**, in 1974.

4. Post-Cold War Disarmament (1990-2000):

- The end of the Cold War led to disarmament treaties like **START I** (1991), reducing deployed warheads.
- The **Comprehensive Nuclear-Test-Ban Treaty (CTBT)** opened for signatures in 1996, but key states, including India, have not ratified it.
- India and Pakistan declared themselves nuclear powers in 1998 with a series of nuclear tests.

5. Challenges and New Initiatives (2000-2010):

- The US withdrew from the **Anti-Ballistic Missile Treaty** in 2002, citing security threats.
- India's **civil nuclear agreement with the US** in 2008 marked significant progress in nuclear diplomacy.

6. Humanitarian Initiative and TPNW (2010-2020):

- The **Humanitarian Initiative** (2010) emphasized the catastrophic consequences of nuclear use, leading to the **TPNW** (2017).
- India maintained its nuclear doctrine of **credible minimum deterrence** and did not sign the TPNW.

7. Recent Challenges (2020-Present):

- The **Ukraine crisis** and increased nuclear rhetoric have raised concerns over nuclear risks.
- Emerging technologies, such as **hypersonic missiles** and **AI-supported warfare**, complicate nuclear stability.

India's Current Nuclear-Related Issues:

1. Balancing Deterrence with Disarmament:

- India holds approximately 160 nuclear warheads, while advocating for universal disarmament.
- India continues to modernize its nuclear capabilities, including **submarine-launched ballistic missiles (SLBMs)**, like the **K-4**.

2. Managing the China-Pakistan Nuclear Axis:

- China's support for Pakistan's nuclear program poses a significant security challenge for India.
- India has developed longer-range missiles like **Agni-V** and is focusing on **sea-based deterrence** to address this threat.

3. Nuclear Doctrine and No First Use (NFU) Policy:

- India's **No First Use (NFU)** policy faces scrutiny, with discussions around possible revisions due to Pakistan's development of tactical nuclear weapons.

- In 2019, India's Defence Minister hinted that the NFU policy could change based on evolving circumstances.

4. Nuclear Security and Safety:

- India's growing nuclear infrastructure, including **23 operational reactors**, raises concerns over safety and security.
- While India has maintained a strong safety record, incidents like the **Mayapuri radiation leak** in 2010 revealed potential vulnerabilities.

5. Civil Nuclear Cooperation and NSG Membership:

- India continues to seek **Nuclear Suppliers Group (NSG)** membership but faces opposition from China.
- Despite a **2008 NSG waiver** and civil nuclear agreements with countries like Japan, full NSG membership remains elusive.

6. Technological Advancements and Strategic Stability:

- India is advancing its missile technology, including **MIRVs** and **Ballistic Missile Defense (BMD)** systems, raising concerns about triggering an arms race in the region.

7. Nuclear Energy Expansion and Environmental Concerns:

- India plans to expand its **nuclear energy capacity** to meet climate goals, but faces opposition due to safety concerns, as seen in protests against plants like **Kudankulam** and **Jaitapur**.

Measures India Can Adopt to Balance Deterrence and Disarmament:

1. Strengthen Credible Minimum Deterrence (CMD):

- India can define and focus on a **quality-over-quantity approach** for its nuclear arsenal, emphasizing restraint while ensuring credible deterrence.

2. Promote Regional Strategic Stability Dialogues:

- India can initiate strategic dialogues with regional powers, focusing on risk reduction and confidence-building, particularly with **Pakistan**.

3. Engage in Global Disarmament Initiatives:

- India can take a more proactive role in global forums, advocating for a multilateral **No First Use** agreement and contributing to the **Conference on Disarmament**.

4. Invest in Verification Technologies:

- India can contribute to **nuclear disarmament verification** technologies, showcasing its technical expertise, as seen in space and satellite advancements like **Chandrayaan-3**.

5. Strengthen Domestic Controls and Export Regulations:

- India can enhance its domestic nuclear safeguards and export regulations, tightening control over dual-use technologies to improve its **global nuclear security ranking**.

6. Promote Nuclear Energy for Sustainable Development:

- India can focus on the peaceful use of nuclear energy, especially through projects like the **Advanced Heavy Water Reactor (AHWR)**, which uses a **thorium fuel cycle**.

7. Engage in Track 1.5 and Track 2 Diplomacy:

- India can actively support informal diplomacy channels to discuss innovative nuclear risk reduction strategies, fostering relationships that could support official negotiations.

Conclusion:

India faces the dual challenge of maintaining its **national security** through nuclear deterrence while supporting the global **disarmament agenda**. By modernizing its nuclear forces, advocating for **responsible nuclear practices**, and promoting **peaceful nuclear applications**, India can maintain its status as a key player in the international nuclear order while striving for eventual disarmament.

MAINS QUESTION

“India’s stance on the Treaty on the Prohibition of Nuclear Weapons (TPNW) demonstrates a complex balance between its strategic interests and global disarmament commitments.” Critically analyse this statement in light of India’s historical and contemporary nuclear policy.