



Global Expansion of Nuclear Arsenal: SIPRI Report

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Why in News

According to a recent report published in the **SIPRI Yearbook 2021**, the **number of nuclear warheads which are ready and deployed have increased globally.**

- The SIPRI Yearbook is **released by the Stockholm International Peace Research Institute (SIPRI)** which researches international armament and conflict.
- The SIPRI “Yearbook 2021” assesses the current state of armaments, disarmament and international security.

Key Points

- **Nine Nuclear Armed States:**
 - The nine nuclear armed states are: **US, Russia, the U.K., France, China, India, Pakistan, Israel and North Korea.**
 - These countries **together possessed an estimated 13,080 nuclear weapons** at the start of 2021.
 - **Russia and the US together possessed over 90% of global nuclear weapons** and have extensive and expensive modernisation programmes under way.
 - Both the US and **Russia have approved** the extension of the **New START treaty.**
 - The Treaty is the last remaining **nuclear Russia-US arms control treaty** which expired in February 2021.
 - **China’s nuclear arsenal consisted of 350 warheads up from 320** at the start of 2020.

China is in the middle of a significant modernisation and expansion of its nuclear weapon inventory.
 - **India possessed an estimated 156 nuclear warheads** at the start of 2021 **compared to 150** at the start of last year, while **Pakistan had 165 warheads, up from 160** in 2020.

India and Pakistan are seeking new technologies and capabilities that dangerously undermine each other’s defence under the nuclear threshold.
 - **Low Levels of Transparency:** The availability of reliable information on the status of the nuclear arsenals and capabilities of the nuclear-armed states vary considerably.

- **Largest Military Spenders:**
 - The growth in **total spending in 2020** was largely influenced by expenditure patterns in the **United States and China** (first and second largest spenders respectively).
 - **India's** spending of USD 72.9 billion, an increase of 2.1% in 2020, ranked it as the **third highest spender in the world**.
- **Importers of Major Arms:**
 - SIPRI **identified 164 states** as importers of major arms in 2016-20.
 - **Country Wise:** The **five largest arms importers** were **Saudi Arabia, India, Egypt, Australia and China**, which together accounted for 36% of total arms imports.
 - **Region wise:** The region that received the largest volume of major arms supplies in 2016-20 was **Asia and Oceania**, accounting for 42% of the global total, followed by the **Middle East**, which received 33%.
- **Suppliers of Major Arms:**

The **five largest suppliers** in 2016-20 - the **United States, Russia, France, Germany and China** - accounted for 76% of the total volume of exports of major arms.
- **Recent Instances of Armed Conflict:**
 - The **territorial conflict between India and Pakistan over Kashmir**. The situation in 2020 largely reverted to the status quo of relatively low levels of armed violence.
 - In June 2020, for the first time in over five decades, the **border tensions between China and India** in the disputed eastern Ladakh region of Kashmir turned deadly.
 - A new armed conflict broke out in the **Tigray region of northern Ethiopia** in November 2020 between federal government forces and the Tigray People's Liberation Front, which killed thousands and forced more than 46, 000 refugees to flee into eastern Sudan.

Nuclear Weapons

- **About:**
 - Nuclear weapon is **a device designed to release energy in an explosive manner** as a result of nuclear fission, nuclear fusion, or a combination of the two.
 - Fission weapons are commonly referred to as **atomic bombs**, and fusion weapons are referred to as thermonuclear bombs or, more commonly, **hydrogen bombs**.
 - These have been used in the **bombings of Hiroshima and Nagasaki in 1945**.

- **Treaties Preventing Nuclear Proliferation and Testing**
 - The **Treaty on the Non-Proliferation of Nuclear Weapons (NPT)**.
 - The Treaty Banning Nuclear Weapon Tests In The Atmosphere, In Outer Space And Under Water, also known as the **Partial Test Ban Treaty (PTBT)**.
 - The **Comprehensive Nuclear-Test-Ban Treaty (CTBT)** was signed in 1996 but has yet to enter into force.
 - The **Treaty on the Prohibition of Nuclear Weapons (TPNW)**, which will enter into force on 22nd January 2021.
- **Other Related Initiatives:**

Nuclear Suppliers Group, the **Missile Technology Control Regime**, the Hague Code of Conduct against Ballistic Missile Proliferation, and the **Wassenaar Arrangement**.
- **India's Nuclear Weapon Program:**
 - India **tested its first nuclear device in May 1974**, and **remains outside both the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the Comprehensive Nuclear Test Ban Treaty (CTBT)**.
 - However, India has a facility-specific safeguards agreement in place with the **International Atomic Energy Agency (IAEA)** and a waiver from the **Nuclear Suppliers Group (NSG)** allowing it to participate in global civilian nuclear technology commerce.
 - It was admitted as a member into the **Missile Technology Control Regime (MTCR)** in 2016, **Wassenaar Arrangement** in 2017 and **Australia Group** in 2018.
 - India **maintains its official commitment to no-first-use of nuclear weapons**.

Source: TH