



## In stand-off, keeping an eye on the nuclear ball

### Context:

- India-China tensions along the LAC.

### Cause of concern:

- There is growing evidence that the People's Republic of China (PRC) has been expanding its nuclear arsenal and missile capabilities.



### What are the challenges posed by China to India?

China's nuclear modernisation and diversified nuclear capabilities present India with challenges.

### Nuclear weapons:

- The **Stockholm International Peace Research Institute (SIPRI)** observes that China's nuclear arsenal has risen from 290 warheads in 2019 to 320 warheads in 2020.
- Though the increase might not seem large relative to the size of the nuclear arsenal of the U.S. and Russia, it indicates a gradual shift toward a larger arsenal. Even as the U.S. and Russia are attempting to reduce the size of their respective arsenals, **China is in an expansionist mode.**
- China also possesses a **sizeable inventory of fissile material.** According to the International Panel on Fissile Materials (IPFM), China is estimated to possess 2.9+/-0.6 metric tonnes of Weapons-grade Plutonium (WGP) compared to India's 0.6+/-0.15 tonnes of WGP.
- **China's Lop Nur has been the site of Chinese sub-critical testing** since China adopted a moratorium on hot testing in 1996. China has been able to miniaturise warheads and develop new designs that have been progressively integrated into its nuclear arsenal.



## Missile modernization:

- The Peoples Liberation Army Rocket Force (PLARF) fields a range of Medium Range Ballistic Missiles (MRBMs) and Short-Range Ballistic Missiles (SRBMs).
- China is arming its missiles with **Multiple Independently Targetable Re-entry Vehicles (MIRVs)** capabilities to neutralise the multi-layered missile defence capabilities of the United States.
- China's DF-31As, which are road mobile Intercontinental Ballistic Missiles (ICBMs), are equipped with MIRVs and potent penetration aids.

## A comparison between India and China:

### Nuclear upper hand:

- On a comparison based on nuclear capabilities, China has an upper hand over India. **China has a higher number of nuclear warheads and a higher amount of Weapons-grade Plutonium.**

### China's Missile force:

- India also needs to take into consideration the PLARF's **land-based missile forces.**
- China is believed to base a part of its nuclear arsenal in inland territories such as in the Far-Western Xinjiang Region, which is close to Aksai Chin.
- China's land-based missiles are primarily **road mobile** and could play a key role in any larger conventional offensive the PLA might mount against Indian forces along the LAC. Their mobility gives them a **high degree of survivability.**
- Korla in Xinjiang is believed to host DF-26 IRBMs with a range of 4,000 kilometres, which can potentially strike targets across most of India. The DF-26 IRBMs can be armed with either a conventional or nuclear warhead.

### The Pakistan factor:

- India has to contend with a nuclear-armed Pakistan as well.
- The Indian nuclear arsenal, according to the SIPRI, stands at roughly 150 nuclear warheads while Pakistan has 160 warheads.



## Instrument of coercion:

- This development would also have **implications for the conventional military escalation along the China-India boundary**.
- The conventional military balance between Indian and Chinese forces along the Line of Actual Control (LAC) presents significant challenges for Indian decision-makers. The variegated and highly sophisticated nature of Chinese nuclear capabilities relative to India could **give China considerable coercive leverage**. China could commit further aggression under the cover of its nuclear arsenal.

## Way forward:

- In the conventional escalation along the LAC, India cannot afford to ignore China's expanding nuclear arsenal. India needs to factor in the role of nuclear weapons and their impact on military operations executed by the Indian Army and the Indian Air Force.

## Short term measures:

- **India's Strategic Forces Command (SFC)** needs to be on a heightened state of alert to ward off Chinese nuclear threats as well as be prepared to support India's conventional forces.
- The Strategic Forces Command (SFC), also referred to as the Strategic Nuclear Command, forms part of India's Nuclear Command Authority (NCA). It is responsible for the management and administration of the country's tactical and strategic nuclear weapons stockpile.

## Long term measures:

- India should start **assessing its extant nuclear doctrine** and redouble efforts to get a robust triadic nuclear capability for deterrence.
- The basic principle of India's nuclear doctrine of 2003 is **"No First Use"**. According to this policy, nuclear weapons will only be used in retaliation against a nuclear attack on the Indian Territory or on Indian forces anywhere.
- **A nuclear triad** consists of land-launched nuclear missiles, nuclear-missile-armed submarines and strategic aircraft with nuclear bombs and missiles. The purpose of having this three-branched nuclear capability is to significantly reduce the possibility that an enemy could destroy all of a nation's nuclear forces in a first-strike attack, ensuring a **credible threat of a retaliatory strike**, and thus increasing a **nation's nuclear deterrence**.