

# **Assessing the Relevance of Nuclear Submarines**

#### What is the issue?

 $n\n$ 

\n

• India's first indigenous ballistic-missile armed nuclear submarine (SSBN), Arihant, had successfully completed its first deterrence patrol. Click <a href="here">here</a> to know more.

\n

 But the pursuit of nuclear-armed submarines reflects a security assessment that is becoming increasingly irrelevant.

 $n\n$ 

#### How did SSBNs evolve?

 $n\n$ 

\n

• SSBNs (Ship, Submersible, Ballistic missile, Nuclear) were first deployed during the Cold War.

۱'n

- It was justified then as a tool of last resort to counter any attack destroying land-based missiles and paralysing air force.
- $\bullet$  The submarine, undetected at sea, could deliver a counter-strike, assuring the "mutual destruction" of both countries. \n

 $n\n$ 

## Why are SSBNs not very relevant now?

 $n\n$ 

۱n

• The strategic function of SSBN mentioned above makes little sense in the modern Indian context.

۱n

• There is no realistic threat that could wipe out India's existing nuclear deterrent, which the Arihant could counter.

\n

• The range of the missiles carried by the Arihant is about 750 km, and so it can only target Pakistan and perhaps China.

\n

• **Pakistan** - Pakistan government has threatened to use "tactical nuclear weapons".

\n

• This is to counter India's cold-start doctrine that envisions a limited invasion of Pakistan.

\n

• However, these are relatively small nuclear weapons that could devastate a battlefield.

\n

- It would not certainly affect Indian military's ability to launch a counterstrike using its existing land or air-based forces.
- **China** China has consistently pledged that it will never be the first to use nuclear weapons in a conflict.
- $\bullet$  However, even if China were to suddenly change its policy, any attempt would have unacceptable risks regardless of whether India possesses SSBNs. \n
- **Global** Even the U.S., which maintains such a large nuclear stockpile, is unwilling to militarily engage a limited nuclear power such as North Korea.
- This is because it understands that it cannot reliably disable North Korea's land-based deterrent.

\n

- Much of the rest of the world has moved to outlaw nuclear weapons.
- Last year, 122 nations voted in favour of the "Treaty on the Prohibition of Nuclear Weapons".

\n

- The Indian government skipped these negotiations but claimed that it was committed to universal nuclear disarmament.
- So the government's active pursuit of nuclear-armed submarines undermines
  India's stated international position.

 $n\n$ 

### What are the concerns?

 $n\n$ 

\n

 Risks - In fact, nuclear-armed submarines increase the risks of an accidental conflict.

\n

- Traditionally, nuclear weapons in India have been kept under civilian control, and separate from their delivery systems.
- However, the crew of a nuclear-armed submarine will have both the custody of nuclear weapons and the ability to launch them at short notice.
- $\bullet$  Reportedly, nuclear weapons on Indian SSBNs will be safeguarded by electronic switches, called "permissive action links".  $\$
- However, such a setup can dangerously weaken the civilian command-andcontrol structure.

\n

• E.g. Cuban missile crisis

\n

- $\bullet$  During the crisis, U.S. warships recklessly attacked a Soviet submarine with practice depth charges to force it to surface.  $\mbox{\sc h}$
- The captain of the submarine, sailing under difficult conditions, was out of radio contact with the Soviet leadership.
- He thought that war had broken out and decided to respond with nuclear torpedoes.

۱n

- But with intervention of another senior officer on the submarine, Vasili Arkhipov, the outbreak of large-scale nuclear hostilities were prevented.
- $\bullet$  For averting a civilisation-threatening event, Arkhipov was posthumously awarded the "Future of Life" award last year.  $\$
- The government has not released precise figures, but the international experience reflects the costs of such a fleet.
- $\bullet$  E.g. British government recently estimated that the cost of four new SSBNs would be about Rs. 70,000 crore per submarine. \n
- The lifetime costs of operating such submarines are even larger than the initial costs.

\n

• British and American estimates suggest that each SSBN requires between Rs. 2,000 crore and Rs. 5,000 crore in annual operational costs.

 $n\n$ 

 $n\n$ 

**Source: The Hindu** 

\n

