# Enhancing India's Underwater Capability

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## [GS Paper 3 - Defence, Indigenization of Technology]

**Context** - Recently, India joined a select group of nations with its successful launch of **SLBM** (Submarine-Launched Ballistic Missile).

Apart from India, the countries include five permanent **UNSC Members** i.e. USA, Russia. China, UK and France whereas North Korea has also claimed a successful launch of its SLBM back in 2016.

#### **About K-15 SLBM**

- The Indian version of SLBM has been given the code names **K-15 or B-05** which has a **range of 750 Km**. It is designed for retaliatory nuclear strikes and belongs to the K-Missile family which forms a part of India's Nuclear Triad.
- It is a two-staged submarine-launched ballistic missile which uses a gas booster to eject out of its launch platform and rise up to the surface of water. It is followed by the firing of a solid rocket motor after the missile reaches a fixed altitude.

#### **INS Vikrant**

• INS Vikrant was the **first indigenous nuclear-powered ballistic missile** which was launched in 2009 and commissioned in 2016. It was built under the secretive **Advanced** 

Technology Vessel (ATV) project which was initiated in the 1990s.

• These classes of submarines are classified as **'SSBN'** which is the hull classification symbol for nuclear-powered ballistic missile-carrying submarines.

## **Significance of SLBM**

- Making India's strategic profile strong: It is significant in terms of India's strategic profile. Credit should be given to the navy, DRDO and other agencies who have enabled this success.
- Enhancing Underwater deterrence: A credible underwater deterrent is perceived as being invulnerable to detection and hence nations with the capacity can deliver a retaliatory second strike which enhances their deterrence capabilities and such a credible underwater deterrent is perceived as being invulnerable to detection.
- Showcasing the precision and high accuracy: As per the official claims and reports the missile impacted the target area "with very high accuracy".
- Familiarity and capability with SLMB: The proficiency to launch the SLBM in case of any exigency has been acquired by the crew of the INS Arihant and the entire HR (human resource) comprising the pyramid from the SFC (strategic Forces Command) going right up to the national command authority with the Prime Minister at the apex.
- Demonstration of competence: No doubt that our country must be proud of the
  achievement and such level of competence with the SLBM but still this achievement
  needs to be located objectively. A nuclear-propelled submarine armed with a nucleartipped ballistic missile simply temed as SSBN, is deemed to be the ultimate deterrent
  and this profile of macro-lethality and zero error credibility is predicated on the
  robustness of the "boat" and the efficacy of the missile.
- Validates SSBN programme: The **SSBN Program** has been validated by the successful launch of INS Vikrant's USer Training which is significant to prove crew competency.

### What is Deterrence?

- It is a **military strategy** under which one power uses the **threat of reprisal** effectively to preclude an attack from an adversary power.
- The deterrence has been largely **applied to the basic strategy of nuclear power** and of the major power alliances owing to the advent of nuclear weapons.

## **Deterrence through SLBM**

- China became a nuclear power and carried out its first SLBM test in 1982. While they
  had their own set of challenges, a nuclear-propelled submarine missile with a range of
  9000 km could be developed by them in 2018 only. As the Chinese SSBN is deemed to
  be operational by 2025, it provides India with a slight edge in the naval sphere.
- Given its wide spectrum of security and strategic challenges, it is imperative for India to acquire the optimum degree of **nuclear deterrence**. Slow and steady progress has been made by India in its missile programme and nuclear weapon capability, going as far as building an aircraft carrier very recently as well.

# **Conclusion**

India's ploy to restrain from announcements and claims regarding their strategic capabilities reflects deterrence in a very quiet and effective manner. From a national point of view, walking softly, while wielding a big stick is the need of the hour.