Submarine Arms Proliferation in Asia

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In 1981-1982, eight Asian countries had 147 submarines in their naval inventories. Out of 147 submarines, 144 were conventional, coastal and mini-submarines and 3 were nuclear attack submarines.

In four decades since 1981, the number of countries with submarine arms rose to fifteen. They together operate a total of 290 submarines. Out of 290 submarines, 20 are nuclear submarines, 180 are conventional and 90 are coastal and mini-submarines.

Out of the 20 nuclear submarines, People's Liberation Army Navy (PLAN) accounts for eighteen submarines (90%) and Indian Navy (IN) 2 (10%). In the conventional submarine category PLAN operates 76 (42%) of Asia's conventional submarine force. South Korean Navy (ROKN) operates 24 subs (13%), Japan Maritime Self Defence Force (JMSDF) and North Korean Navy 20 subs each (11%) and IN operates 15 subs (8%). North Korea is the major user of coastal/mini submarines (60) followed by Iran (27) and Pakistan (3).

In the regional context, only Indonesia in South East Asia (SEA) had submarine arms with two boats in 1981-1982. Indonesian Navy's submarine arms began with one Whiskey Class submarine in 1960. Currently, the navy operates four diesel-electric submarines. Three more boats are expected to join the navy by 2024. Out of ten SEA countries, currently five (Vietnam, Malaysia, Singapore, Myanmar and Indonesia) have conventional submarines.

Vietnam has a submarine fleet of six Kilo-class submarines. These can carry anti-ship torpedoes and missiles and land attack missiles. Vietnam's Prime Minister said in 2017 that the submarine acquisition was neither a race nor a threat to regional countries but to increase the capability of protecting its waters and islands. Six subs together provide coverage to Vietnam's east coast and offshore islands.

Royal Malaysian Navy (RMN) inducted submarines in 2009 with two Scorpène Class attack submarines from France. Weapon systems include anti-ship

missile and torpedo. The Chief of the RMN announced in 2018 the plan to procure two more submarines as part of its Transformation Plan 2040. According to the RMN Chief, these submarines will be beneficial in protecting maritime claims and security in the South China Sea.

The Republic of Singapore Navy (RSN) has acquired four boats from Sweden between 2001 and 2013. Two Challenger-class subs weapon system include wire-guided torpedo and two Archer-class includes WASS Black Shark heavyweight torpedoes. Two more submarines are expected to join RSN by 2024. Myanmar is the latest SEA country to commission one submarine on 24 December 2020. It has a plan to have a fleet of three submarines by 2030, Taiwan in the SEA region operates four submarines.

Out of five maritime countries in South Asia, three possesses submarine arm. Pakistan Navy (PN) acquired its first submarine from the USA in 1964. In 1981-1982 PN had six submarines but currently operates five diesel-electric submarines and three mini-submarines. Pakistan signed a contract worth USD 5 billion credit scheme with China to buy eight attack submarines. The first four are planned to join the navy in 2023. Bangladesh Navy (BN) acquired its first submarine in 2017 and currently operates two boats.

China and India, the two largest countries in Asia inducted submarine arms in the 1950s and 1960s, respectively. China followed naval development strategy diametrically opposite to India. India focused on the simultaneous development of the two strategic arms-aircraft carrier centric task force and submarine fleet. China had focused on developing submarine arms and positioned PLAN in submarine arms far ahead of India. PLAN made the entry to nuclear technology in 1967 and completed the first submarine in 1974.

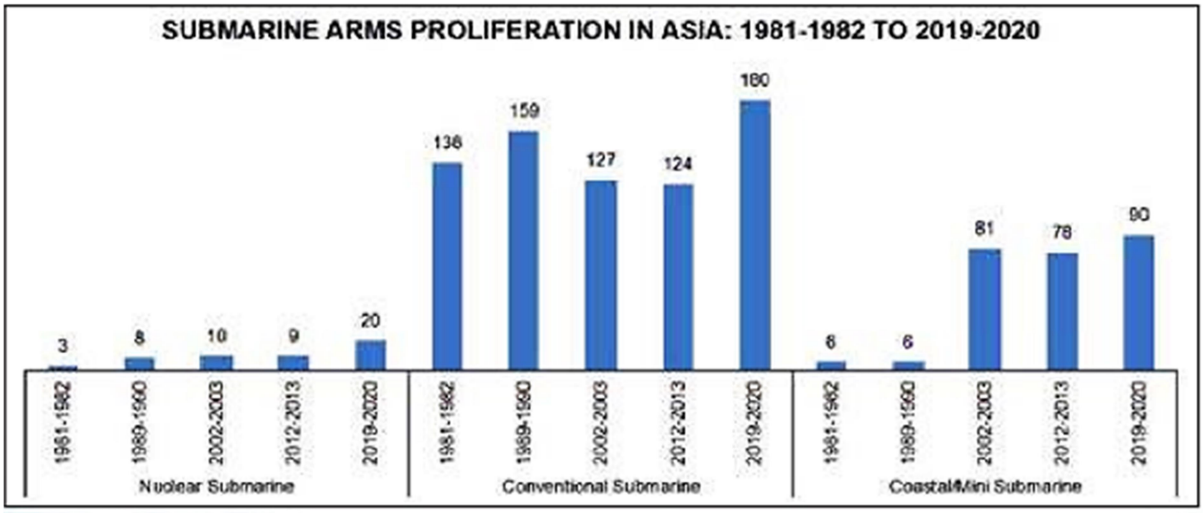
In currently operates fifteen diesel-electric and two nuclear submarines. Nuclear submarines include one Ballistic Missile Submarine (SSBN) and one Nuclear Powered Attack Submarine (SSN). India conceived the idea of a nuclear submarine in the 1960s. India in 1988 took INS CHAKRA-I (Akula II class nuclear submarine) on ten years lease from the former USSR to gain operating experience. Indian Navy, in collaboration with France's Naval Group, is building six new Scorpène-class submarine at the Mazagon Dock Ltd. (MDL).

India has also a couple of programmes to upgrade its existing submarine fleet. ARIHANT's sister boat ARIGHAT was launched in 2017 and expected to join the navy in 2021/2022. IN signed another 10 year lease contract with Russia for CHAKRA-III to join the navy in 2025. IN's strategic naval development programmes like nuclear submarine and aircraft carrier have been suffering from 'policy, financial and technology deficits' which have persistently kept the gap between desire and practicality.

In the Persian Gulf region, Iran has a fleet of four diesel-electric submarines and 27 coastal/mini-submarines. Iran has been facing heightened challenges for the last couple of decades from the USA and Israel. Diesel-electric submarines operate in the deeper waters of the Persian Gulf, the Gulf of Oman and the Arabian Sea. Mini-submarines are for deployment in the shallow waters in the Persian Gulf. Both the Islamic Republic of Iran Navy and Islamic Revolutionary Guard Corps Navy operate mini-submarines.

Israeli Navy had three submarines in 1981-1982. Currently, it operates five Dolphin-class diesel-electric attack submarines received from Germany.
Israel joined submarine club in the 1950s with British S-class submarines and one of the oldest operators of submarines in Asia. Two of the five submarines are equipped with Air

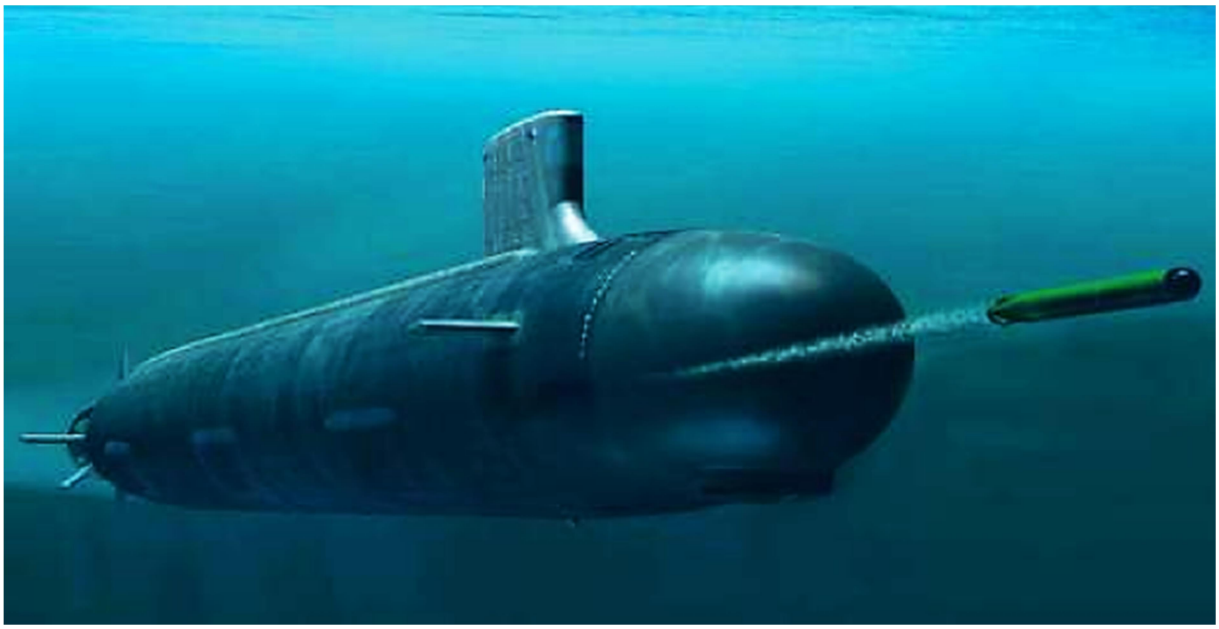
Independent Propulsion (AIP) system. There is suspicion that Israeli navy has modified submarines to fire cruise missile with nuclear warhead.



North Korean Navy reportedly has a submarine fleet of eighty-three boats. Twenty are conventional submarines and two have the capacity to fire ballistic and cruise missiles with nuclear warhead. Sixty boats are coastal and mini-submarines to deliver Special Forces into neighbouring coasts. These boats can also fire torpedoes. There is inference that actual availability of submarines or small boats for operational deployment could be much smaller number than projected in the inventory.

Japan is the oldest country in Asia to operate submarine. On 7 December 1941, the day Peral harbor was bombed, Imperial Japanese navy had 37 submarines in active service and 29 under construction. Nothing was left to float at the end of the war. After the war, Imperial Japanese Navy was designated Japan Maritime Self Defence Force (JMSDF) limiting its operation to 1,000 nautical miles. The operational limit was waived in 1991. JMSDF has 21 attack submarines in the fleet.

Asian navies' submarine inventory revealed increase in the number of countries and submarine since 1981-1982. Submarine arms had maximum proliferation in SEA, from two in 1981 to eighteen in 2019-2020.



Conventional submarines had a 36% proliferation from 138 to 180. Increase in nuclear submarine is 3 to 20 (566%).

China has seen the largest increment in nuclear submarines numbers. During 1981-1982, China had only 3 nuclear submarines and it had no ballistic missile submarine. Now, it has eighteen nuclear submarines including 7 ballistic missile submarines. India did not have a nuclear submarine in 1981-1982, now it has two. Nuclear submarine matrix tends to go up at a quicker pace both in China and India. In the context of changing strategic scenario in the Indo-Pacific resulting from China's rapid expansion of fleet, Indian Navy approached Modi govemment to make change in the 30 year submarine building plan which was approved by the Cabinet Committee on Security (CCS) in 1999. Indian Navy proposed to add six nuclear submarines and drop six conventional submarines from the approved list.

Most navies in the SEA, the Persian Gulf and South Asia are likely to remain import dependent with occasional ventures to build submarine. Submarines in these navies are poised to offer significant deterrence against incursions into respective maritime domain. Submarines will be in demand due to its inherent strategic value in offence, defence and deterrence. Changing geopolitics underscoring the competition for maritime economy, availability of technology and countries stable economic growth are likely to be catalysts in the proliferation of submarine arms in the future.

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