Center for International Strategic Studies
Islamabad

INDIAN NAVAL MODERNIZATION

Info Brief

By

Saad Riaz (Research Intern)

Supervised by
Malik Muhammad Kashif
Research Assistant

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The evolving character of warfare and rapid technological advancements have driven a transformation in military affairs. With these developments, contemporary navies are modernizing to retain control of the high seas and dominate major choke points. Similarly, the Indian Navy has the same intent: to maintain dominance and weaponize the Indian Ocean.[i] Their maritime development and advancement simultaneously aim to challenge Pakistan's maritime sovereignty after procuring advanced military technologies. This posture was clearly visible during the May 2025 conflict, when the Indian Navy tried to attack Pakistan mainland.[ii] However, Pakistan's Naval presence and continuous patrolling deterrent Indian Navy. In the aftermath, of the May conflict, the Indian Navy has been rapidly modernizing its fleet to prepare for potential amphibious landings and operations.[iii] The Indian intention can be reiterated from the Indian Defence Minister Rajnath Singh's statement regarding Sir Creek, where he threatened Pakistan with serious consequences. Furthermore, the Indian Chief of Defence Staff (CDS) also stated that "the Indian Navy is commissioning warships or submarines every forty days." This reflects India's shifts in its strategy and potentially calibrating the sea denial strategy against Pakistan. [iv]

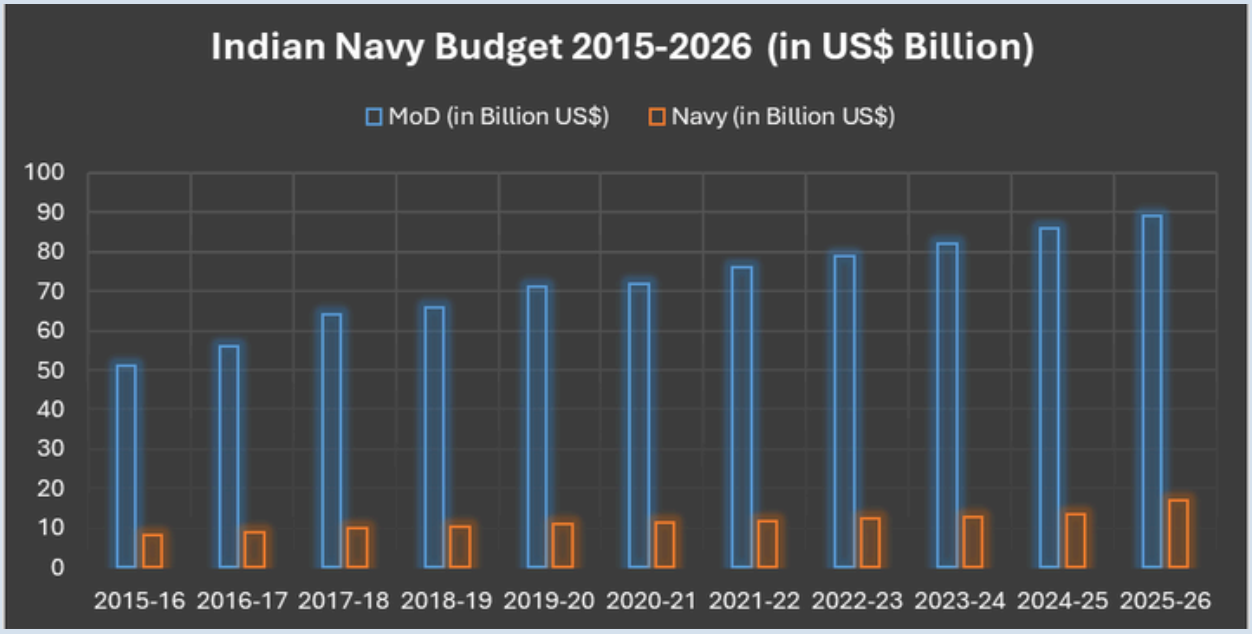
This info brief provides details on the Indian Naval Budget from 2015 to the present. Table II provides brief details on potential acquisitions, developed systems, and underdeveloped systems for the Indian Navy in the near term and over the coming years.

Indian Naval Budget

For almost a decade, the Navy's share of the total defence budget remained relatively constant at around 15.47%. However, recently a significant surge has been observed in Indian Naval budget. This year the share has increased sharply, rising to 18.9%, indicating a substantial boost in India's naval spending.
The Table-I represents the total defence spending and the navy's share.[v]

Table-I

Fiscal Year	Indian Defence Spending (Billion USD)	Indian Navy Total (Billion USD)	Indian Navy Share %
2015–16	51	8	15.47
2016–17	56	8.79	15.47
2017–18	64	9.90	15.47
2018–19	66	10.2	15.47
2019–20	71	10.98	15.47
2020–21	72	11.14	15.47
2021–22	76	11.76	15.47
2022–23	79	12.22	15.47
2023–24	82	12.68	15.47
2024–25	86	13.30	15.47
2025-26	89	16.82	18.9



The following table lists planned acquisitions, potential deployments, and under-construction systems scheduled for deployment in the near future or within 5 to 10 years. The data for the table has been retrieved from the following sources. [vi]

Name	Class / Type	Status	Commissioned	Weapons & Capacity
Naval Base				
INS Varsha	Secret Submarine Base in the Eastern Naval Command Headquarters at Visakhapatnam	Under Construction	Expected to be operational in 2026	• Potential capacity to house 12 SSBNs and SSNs. • This includes INS Arihant, Arighaat and Aridhaman.
INS Aravali	Inland Naval Base, Western Command	Operational	September 2025	• Strategic significance, close to the International Maritime Boundary Line (IMBL) with Pakistan • Provides support to the Offshore Patrol Vessels (OPV) and Fast-Attack Craft.
INS Jatayu	Southern Naval Command in the Lakshadweep Archipelago	Operational	March 2024	• Monitor Sea Line of Communications (SLOC) for Intelligence, Surveillance and Reconnaissance (ISR). • Dornier Do-228 (Naval Variant) deployed for ISR and Maritime Patrolling.

Name	Class / Type	Status	Commissioned	Weapons & Capacity
Surface Capabilities (Ships)				
INS Vishaal	IAC-3 Vikrant-Class Aircraft Carrier	Planned	Underdevelopment	• Conventional Propulsion System • Catapult-Assisted Take-Off But Arrested Recovery (CATOBAR) and Electro-Magnetic Aircraft Launching (EMAL) Systems • Potentially carrying 40-50 aircraft, which include Fixed and Rotary Wings.
Next Generation Corvette	Anti-Surface Warfare (ASuW) Class Corvettes	Planned	Finalized in 2025	• OTO Melara 76 mm Super Rapid Gun Mount (SRGM) • AK-630M CIWS • 24 Barak VIII • Vertical Launching System (VLS) Capability (BrahMos Missile System) • Anti-Ship Missile-Medium Range • Quad 533 mm Torpedo Tubes (Varunastra) • VSHORAD Anti-Drone System
Next Generation Missile Vessels (NGMV)	ASuW Class Corvettes	Planned	Underdevelopment	• Six to be developed, • Brahmos Anti-Ship Cruise Missiles (ASCM) • Vertical Launch-Short Range Surface-to-Air Missiles (VL-SRSAM) and • Very Short-Range Air-Defence (VSHORAD) Anti-Drone Systems

Name	Class / Type	Status	Commissioned	Weapons & Capacity
Surface Capabilities (Ships)				
Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)	Mahe Class, Abhay Class and Kamorta Class Vessels for Sub-Surface Operations	Planned; Total 16, 5 active, and 11 in the development phase	Underdevelopment	• RBU-6000 Anti Submarine Rocket Launcher • Equipped with The Advanced Light Weight Torpedo (ALWT) • Anti-Submarine Mines using Mine-Laying Rails, • Guns include the Naval Surface Gun (30mm) and the OFT 12.7 mm M2 Stabilized Remote Controlled Gun.
Project 11356 (Talwar Class Batch IV-Frigates)	Talwar-Class Frigates	Under-Induction/Sea Trails	In-developing Phase	• Brahmos ASCM • Shtil-1 Surface-to-Air Missiles (SAM) • Radars include, Garpun-B I-Band Surface Search • Radar, MR-212/201-1 I-Band Navigation Radar. • MR-90 Orekh Fire-Control System (for Shtil-1) • BEL Hull Mounted Sonar Array (HUMSA) NG • Platform for Ka-28/Ka-31 Helicopters
Project 18-Class Destroyer	Next-Generation Destroyers	Planned	To be commissioned in 5-10 years	• Total 144 VLS cells and 8 Slant Launchers • Surface to Air Missiles (SAM) Kusha and Barak 8 system, • Cruise Missiles include Nirbhay Subsonic, BrahMos Supersonic and potentially BrahMos II Hypersonic Missiles • Anti-Submarine Missile (SMART Missile).

Name	Class / Type	Status	Commissioned	Weapons & Capacity
Surface Capabilities (Ships)				
Project-17 A	Guided Missiles Nilgri-Class Frigates, INS Udaygiri and INS Himgiri, Commissioned in 2025, 3-4 are underdeveloped	Operational	January 2025 (Nilgri-Class), August 2019 (Udaygiri and Himgiri Commissioned)	• VLS, for 32 Barak 8 SAM, • 8-cell VLS for 8 BrahMos Anti-Ship Missiles • Triple-tube Torpedo Launchers for Torpedo • Torpedo Advanced Light Shyena • RBU-6000 Anti-Submarine Rocket Launchers.
Project-17 B	Stealth and Next-Generation Frigates to be equipped with Guided Missiles.	Planned	Later in 2025 or earlier in 2026	• Potential acquisition of 7-8 Stealth Guided Missile Frigates • 48 VLS cells, which might include Barak 8 SAM, Nirbhay Subsonic Cruise Missile and BrahMos Supersonic Cruise Missile
Sub-Surface Capabilities (Submarines)				
Project-75I	AIP Conventional Submarines (SSKs)	Planned		• Next generation SSKs • Fuel-based cell and Scorpène AIP tech
INS Kalvari (SSK)	Kalvari-Class Conventional Submarine	Operational	December 2017	• 6 Scorpène Class Conventional Submarines. • INS Kalvari, INS Khanderi, INS Karanj, INS Vela, INS Vagir, INS Vagsheer
INS Arighaat (SSBN)	Arihant-class (SSBN)	Operational	Commissioned August 2024	• 4 VLS tubes, which can carry K-15 and K-4 SLBMs. • K-4 tests from Arighaat in 2024.
INS Aridhaman S4 (SSBN)	Arihant-class (SSBN)	Under Sea Trails	To be commissioned in 2026	• 8 VLS tubes • Could carry 24 Missiles, including K-15 Sagarika (700-750 Km), K-4 (3500 km) and K-5 (6000 Km)

Name	Class / Type	Status	Commissioned	Weapons & Capacity
Sub-Surface Capabilities (Submarines)				
INS Arihant (SSBN)	Arihant-class Nuclear-powered ballistic missile submarine (SSBN)	Operational	Commissioned Aug 2016	• 4 Vertical Launching System (VLS) tubes (can carry K-15 Sagarika SLBMs or fewer longer K-4s) • K-15 (700–750 km); K-4 (3500 km)
S4* (SSBN)	Next Generation Arihant-class (SSBN)	Planned	Expected induction in Mid/Late 2026	• K-6 MIRV and K-4 SLBMs • 533mm Torpedo Tubes
INS Chakra-III	Akula-class (Russian SSN) Nuclear-Powered attack sub	Planned, lease signed in 2019	Not delivered	• Nuclear-powered Submarine armed with conventional weapons (torpedoes, potential Kalibr missiles after refit); • Can also be used for anti-surface operations in the Indian Ocean.
Nuclear-Powered Attack Submarines (SSN)	Project 75-Alpha SSNs	Planned	Planned to be commissioned by 2036	• Potentially equipped with BrahMos missiles • Six SSNs to be developed under this programme.
S-5 Class (SSBN)	Advanced SSBNs	Planned	Construction to begin in 2027	• 3 are to be developed • 12-16 VLS • Equipped with K-5 and K-6 and expected K-7 and K-8 (to be developed till 2035)

Name	Class / Type	Status	Commissioned	Weapons & Capacity
Air Capabilities (Aircrafts)				
P-8I	Poseidon Maritime Patrol Aircraft (MPA), Anti-Submarine Warfare (ASW)	Operational	Since 2009, four were given in 2016, and 6 more are to be provided.	• Advanced Electronic Warfare (EW) systems • MAC Sonar, GaN EO/IR systems • Enhanced SATCOM, AIP optimised acoustics • 129 A-size sonobuoys • AI-driven CCR and Petabyte Fusion • 1,200+ nautical miles >4-hour time on station (2,225+ kilometers)
MH-60R Seahawks	ASW and ASuW Operations	19 Operational	5 more to be delivered	• Capable of performing Anti-Submarine, Anti-Surface Operations. • Naval Special Warfare (NSW) insertion, Search and Rescue (SAR), Combat Search and Rescue (CSAR), Vertical Replenishment (VERTREP), and Medical Evacuation (MEDEVAC)
MQ-9B Drones (Sea-Guardian)	Airborne Anti-Submarine Warfare (ASW)	Planned	To be delivered by 2029	• ·Performs Maritime Surveillance and Targeting • 1350kg payload capacity • AN/ZPY-1 STARLite Radar for Maritime Surveillance • Equipped with lightweight torpedoes for ASW.
Rafale-M	The Navy version to operate from INS Vikrant and INS Vikramaditya	Planned	Deal signed in 2025 and to be delivered in 2028	• Equipped with BrahMos cruise missiles • HAMMER air-to-ground missiles

Name	Class / Type	Status	Commissioned	Weapons & Capacity
Air Capabilities (Aircrafts)				
SMART Torpedo System	Supersonic Missile Assisted Release Torpedo (SMART), which is an Anti-Submarine Missile	Tested in 2020-23	Induction Phase Underway	• Canister-based long-range missiles, which have a 650km range, • Lightweight ASW torpedo for Anti-Submarine. • The missile is Supersonic, having a speed of Mach 2+. • Can be launched from frigates and destroyers.
BrahMos Coastal Defence System	Land-Based Mobile Anti-Ship Missile System	Planned	Induction to begin in 2027	• Missiles have an expected range of ~400km. • Performs high-altitude cruise and sea-skimming in terminal phase. • Specifically designed for ship-kill • Ensures Area Access/Area Denial (A2/AD)

The aforementioned acquisitions are collectively aimed at enhancing Indian Naval capabilities. It will enable the Indian Navy to have a persistent presence across the maritime domain and to maintain dominance at sea and offshore, primarily in the Indian Ocean Region (IOR). However, it is important to note that modernization extends far beyond merely increasing the number of platforms. It reflects a broader strategic intent, one that signals interests in constraining the maritime operations of others, pursuing regional hegemonic ambitions, dominating critical sea lines of communication, and enabling strategic brinkmanship.

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