

# DPG POLICY BRIEF

# Operationalising SAGAR: Bridging the Gap between Policy and Execution

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# Cover Photographs:

Prime Minister Narendra Modi unveiling his vision of SAGAR at Port Louis, Mauritius on March 12, 2015. Source: Flickr/MEAPhotogallery

India's Chief of Defence Staff, General Bipin Rawat. Source: Times of India INS Kalvari undergoing sea trials. Source: Indian Navy

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# Operationalising SAGAR: Bridging the Gap between Policy and Execution by Lalit Kapur

## Introduction

At the 4<sup>th</sup> Ramnath Goenka Lecture on November 14, 2019, India's Foreign Minister Dr S Jaishankar<sup>1</sup> had observed that "the real obstacle to the rise of India is not any more the barriers of the world, but the dogmas of Delhi". His words were a timely reminder that India's strategic, defence and security establishment must put aside lingering dogmas, bureaucratic inertia, and parochial considerations to carry forward the vision articulated at the highest level of the land to catapult India into the league of the world's leading powers.



Prime Minister Narendra Modi unveiling his vision of SAGAR at Port Louis, Mauritius on March 12, 2015. Source: Flickr/MEAPhotogallery

On March 12, 2015, Prime Minister Modi unveiled SAGAR<sup>2</sup> (Security and Growth for all in the Region). His speech stated, inter alia, that the Indian Ocean Region

<sup>&</sup>lt;sup>1</sup> External Affairs Minister's speech at the 4<sup>th</sup> Ramnath Goenka Lecture, November 14, 2019, https://mea.gov.in/Speeches-

Statements.htm?dtl/32038/External\_Affairs\_Ministers\_speech\_at\_the\_4th\_Ramnath\_Goenka \_Lecture\_2019

<sup>&</sup>lt;sup>2</sup> Text of speech by PM Modi, March 12, 2015,

http://www.pib.gov.in/newsite/erelcontent.aspx?relid=116881



was at the top of India's policy priorities<sup>3</sup>. Described as India's first integrated maritime outlook<sup>4</sup>, the first element of SAGAR is the defence of our mainland and islands, safeguarding our interests, ensuring a safe, secure and stable Indian Ocean and making available our residual capability to help others in the region<sup>5</sup>. Doing this in today's complex, rapidly changing and increasingly contested security environment, one in which China's challenge has become increasingly apparent, requires determination and visionary planning. It also necessitates acquisition of diverse capabilities that can shape the regional environment, deter revisionism and effectively respond to threats on land, at sea, in the air, in the information and cyber domains, and in space. In this context, the statements of India's Chief of Defence Staff (CDS), who bears the responsibility of prioritising the capital acquisition proposals of the three services<sup>6</sup>that will define their future capabilities, indicate the line of thought of the nation's military leadership.



India's Chief of Defence Staff, General Bipin Rawat. Source: Times of India

<sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> Keynote speech by External Affairs Minister at Indian Ocean Conference in Maldives, September 03, 2019, https://www.mea.gov.in/Speeches-Statements.htm?dtl/31915/Keynote\_Speech\_by\_External\_Affairs\_Minister\_at\_Indian\_Ocean\_

Statements.htm?dtl/31915/Keynote\_Speech\_by\_External\_Affairs\_Minister\_at\_Indian\_Ocean\_ Conference\_in\_Maldives\_September\_03\_2019

<sup>&</sup>lt;sup>5</sup> Ibid

<sup>&</sup>lt;sup>6</sup> "Deciphering the CDS", Arun Prakash, Indian Express, January 10, 2020



On May 10, 2020, the CDS, General Bipin Rawat, was widely reported to have said, "We are not expeditionary forces that have to fight around the globe. We have to guard and fight only along our borders and, of course, dominate the Indian Ocean Region"<sup>7</sup>. He went on to state, "Anything on the surface can be picked off by satellites and knocked off by missiles. I think the Navy needs more submarines than aircraft carriers, which themselves require their own individual armadas for protection"<sup>8</sup>.

That the Indian Ocean, the only ocean to bear a country's name, must be "dominated" by India is unquestionable. Domination, in this context, means not allowing adversarial power or influences to gain primacy in the Indian Ocean. History has, however, shown that domination stems from commanding the heights. The statements cited above indicate that the CDS is contemplating dominating the Indian Ocean from the ocean deeps, while discounting platforms that could reach heights in the air. Is this newfound wisdom realistic? To answer that question, it is necessary to delve into three entrenched beliefs, widely shared by India's territorially obsessed strategic establishment, which are as follows:

- Submarines are better suited for domination.
- Anti-access and Area Denial (A2/AD) weapons have ended the day of surface ships, including aircraft carriers.
- Expeditionary forces are not needed to "dominate" the Indian Ocean.

# Are Submarines Better Suited?

Submarine technology has no doubt evolved immensely from the days of the "wolf pack" refined by Karl Donitz in World War II. Today's submarines can remain submerged for prolonged periods, dive to great depths, launch a formidable variety of weapons, and even move at speeds equivalent to or greater than surface ships. They do, however, have limitations that severely inhibit their ability to 'dominate 'an entire ocean, or even significant parts of one.

<sup>&</sup>lt;sup>7</sup> Forces must shun imports, go for 'Make in India', says Gen Bipin Rawat, Rajat Pandit, Times of India, May 10, 2020, https://timesofindia.indiatimes.com/india/forces-must-shun-imports-go-for-make-in-india-says-gen-bipin-rawat/articleshow/75652962.cms?from=mdr





INS Kalvari undergoing sea trials. Source: Indian Navy

The foremost is their need to hide. The submarine is effective only so long as it remains underwater. On surface, it is a sitting duck. This prevents usage of submarines to demonstrate the visible "presence" that most effectively dissuades or deters a transgressor, since visibility portends death. But if presence is not demonstrated, a revisionist adversary will invariably be able to spring strategic surprise by establishing himself and forcing a game of chicken to roll back the transgression, which is always difficult when the adversary is a great power. The vital importance of presence has been proven time and again, in Aksai China, during Kargil, in Ladakh and in the South China Sea. The cost of not demonstrating presence is thus a firefight to roll back the occupation, accompanied by post crisis acquisitions of weapons and ammunition, or merely accepting a fait accompli and then finding ways to explain this reality to a questioning public.

The submarine's need to hide in turn imposes limitations related to speed, mobility, sensors and weapons, communications and teamwork. High speed results in cavitation<sup>9</sup>, a source of sound which acts as a beacon for search teams on the surface and in the air. The need to remain below cavitation speed impairs mobility; speed can no longer be used to outrun the pursuer. In any case, a submarine cannot hope to outrun aircraft or helicopters. It possesses neither the sensors to locate nor the weapons to target aircraft. A submarine can receive signals underwater, but transmission risks revealing its position. This prevents two way communication, essential for tactical coordination,

<sup>&</sup>lt;sup>9</sup> For an understanding of what this term means, see

https://www.britannica.com/science/cavitation.



forcing the submarine to operate individually. It cannot fight as part of a team. This in turn means that our submarines can cooperate with partners only to hone their Anti-Submarine Warfare (ASW) skills in structured exercises, but not for any operational purpose.

The submarine is thus like a terrorist or a guerrilla, emerging in unexpected areas to carry out a strike and then disappearing into hiding again. It is effective only if allowed a free run. Just as terrorists have occasionally used surprise to successfully strike defended locations (such as at Pathankot and Uri), submarines too have occasionally been successful against high capability warships. But exceptions do not make a norm. We do not hear talk about discarding defended bases merely because terrorists have occasionally succeeded in penetrating them. The obvious solution is to tighten defences.

China has submarines in large numbers and they can effectively be used to terrorise the Indian Ocean sea lanes and littoral, to deny India and others the ability to use the oceans for their legitimate purposes. Pakistan too has developed submarine-centric sea denial capability. But this capability doesn't confer the ability to dominate the ocean, it at best permits denial of usage to others. Dominating the ocean requires more: the capability to seek out and destroy adversary submarines engaged in interdicting our own traffic or coercing littoral nations with their land attack missiles. Hunting cannot be done by other submarines: their handicaps in speed, mobility, tactical communications and teamwork prevent it. Surface ships, as the next section will bring out, are vital for this purpose.

## Surface Ships

Domination of any space (including oceanic) necessitates possessing the ability to carry out three basic tasks: maintaining presence, protection and strike. The first, maintaining presence, is somewhat akin to the 'occupation of territory 'task that the infantry performs to deter revisionist adversaries. It signifies the state's interest in holding territory and determination not to give it up without a fight. It provides the hard security backdrop for the state to administer its own territory and deal with challenges beyond the normal constabulary, or policing, tasks. It provides the ability to familiarise oneself with the area in question, to know what happens there from time to time, and discern the undercurrents. Lack of a deterrent presence resulted in the loss of Aksai Chin post-independence, the conflict at Kargil, and in China's island building and militarisation in the South China Sea. Only surface warships can maintain a long duration presence in disputed or contested waters. The warship may thus be seen as the equivalent of the mechanised infantry.





INS Kolkata seen operating with UAE Navy fast attack craft Mubarraz during the 2018 IN-UAE bilateral naval exercise. Source: Twitter/@indiannavy

Protection is necessary both for traffic moving along oceanic highways (SLOCs) as well as to maintain the stability of smaller nations facing state coercion, described in the past as gunboat diplomacy. When dealing with expansionist or revisionist powers, it must extend to all dimensions of maritime warfare – on the surface, in the air, and underwater. The submarine, as brought out earlier, cannot protect, it can only terrorise. Aircraft, on the other hand, lack the staying power to sustain themselves in a distant area without an airbase in the proximity. So, notwithstanding their perceived vulnerability, there is no alternative to the essentiality of potent surface warships if India is to maintain a safe, secure and stable Indian Ocean region.



INS Tabar operating Kamov 28 Anti-Submarine Warfare Helicopters (file photo). Source: Twitter/@indiannavy



Protection in the underwater dimension also requires effectively tackling submarines. The strategy for this is essentially the same as for tackling a terrorist group - saturate the operating area with a highly trained and networked team that can seek out and destroy the target. Ideally, the ASW team should use airborne assets, both fixed wing aircraft and helicopters, to minimise the risk. Air resources can only be carried by surface ships present in the area: adversary submarines cannot be corralled to patiently await the arrival of land based resources. And just as counter-terror operations require highly trained and well-resourced teams, ASW operations similarly require highly trained and well-resourced teams. Developing the hunting capability required takes time, familiarity with high quality equipment made available in sufficient quantity and adequate operational experience to derive necessary lessons. An acute paucity of resources (such as ASW helicopters on board warships which the Indian Navy currently faces) is not conducive to the development of requisite capability. On the other hand, an adversarial great power operating in the Indian Ocean will come fully equipped and will presumably gain the requisite operational experience quickly. The ability of own submarines to survive actual operations against such a power will depend on the eventual outcome of the contest.



INS Kolkata (in background) and HMS Dragon during the Sea Phase of Konkan 2018, operating off the coast of Goa. Source: Twitter/@indiannavy



In the surface dimension, protection in this missile age requires the ability to strike adversary units preferably before they can launch their missiles, as well as the ability to take down enemy missiles. This requires marrying domain awareness provided by satellites, air and surface assets with identification, target allocation, missile launch and follow up. Surface ships are better equipped than submarines for this task. They could be seen as carrying out the same task as the army's missile and artillery regiments. The Carrier Battle Group (CBG) enables execution of the complete kill-chain before adversary surface ships can get within usable range of their missiles, not an advantage to be discarded lightly in the vast oceanic spaces of the Indian Ocean. India unquestionably requires two operational CBGs if it is to be the dominant power in the Indian Ocean Region (IOR).



Integral air power: MiG-29K fighters operating from the deck of INS Vikramaditya. Source: Twitter/@indiannavy

The protective task in the air dimension is best performed by a combination of capabilities, including integral air, electronic warfare, surface-to-air missiles and terminal defences. The Battle of Longewala proves beyond doubt that terminal defences alone are of little value against strike aircraft. The years ahead will certainly see at least one, if not more Chinese CBGs equipped with strike



aircraft operating in the Indian Ocean. Those who talk blithely of dealing with this challenge without our own aircraft carriers must convincingly answer how they expect submarines to protect our own maritime traffic and respond to the adversary CBG.

The strike task of navies is similar to the task performed by the erstwhile cavalry or modern day armour – to use mobility and inherent protection to appear in unexpected places, create shock and awe, and vanish thereafter. Submarines can no doubt perform this task, but their inability to act as part of a team limits the firepower than they can deliver. A CBG can deliver far more. The Integrated Battle Group (IBG) propagated by the CDS when he led the Indian Army is conceptually akin to the Navy's CBG: a combination of units with diverse capabilities acting as a cohesive team under single command to project the nation's power, with added advantage that air power is also integrated into it. The contradiction in the CDS having led the charge to integrate attack helicopters into the Army force<sup>10</sup> structure while propagating that the Navy does not need integrated air capability is evident. Is this disconnect due to analysis, or merely parochial considerations regarding budget share?



The Malabar Exercise underway in 2017. Source: Twitter/@indiannavy

<sup>&</sup>lt;sup>10</sup> Snehesh Alex Phillip, in "The Print", February 28, 2020, https://theprint.in/opinion/brahmastra/army-and-iaf-fought-over-apache-chopperscosting-us-rs-2500-crore-more-blame-their-silos/372553/



There has been much hype regarding anti-access and area denial (A2/AD), leading to the belief that "anything on the surface can easily be picked up by satellites and knocked off by missiles". Conceptually, however, A2/AD on land is perhaps easier than A2/AD at sea, given the much smaller area involved. If land based ballistic and cruise missiles can be equipped with warheads to target surface ships at sea, they can also be equipped with sub-munitions to target tanks, logistic support vehicles, aircraft sitting inside shelters and even ground troops on land. The truth is that A2/AD remains an unproven concept, never tested against a moving target. That is why one does not hear of A2/AD being used as an argument to give up missile, armoured or mechanised units on land.

The other arguments against the CBG are its vulnerability and cost. If aircraft carriers are to be ruled out only due to vulnerability, why not also rule out advanced weaponry like fourth or fifth generation fighter aircraft, armour and artillery, and indeed manpower for the same reason? The less you have, the less you are vulnerable. Ongoing global naval construction programmes indicate that existing and aspiring great powers see no merit in this argument. The USN has the John F. Kennedy fitting out, with the Enterprise and another carrier in the pipeline. China commissioned the Shandong in December 2019; reports indicate that anything from 3-7 more will be built. The UK commissioned the HMS Prince of Wales in December 2019. Japan is modifying its two Izumo class helicopter destroyers to carry F-35B fighters, technically making them aircraft carriers. Italy is building the Trieste, which will also carry F-35Bs. South Korea is also considering modifying its Dokdo class ships to carry the F-35B.

The aircraft carrier based CBG constitutes a 'strategic capability'. My usage of this term is in the context of a capability whose possession opens up choices of strategy to attain the desired outcome, which would otherwise not have been available. It should be apparent that possession of the aircraft carrier creates the ability to carry out the range of activities undertaken by the Air Force on land, ranging from strike against defended targets (both land and maritime) to air defence, reconnaissance and anti-submarine warfare. Like every strategic asset, whether an armoured division or nuclear weapons, a CBG has strengths and vulnerabilities. Mobility and the strengthening of defensive capability are the means nations typically adopt to mitigate them. So nuclear powers the world over have chosen to move strategic nuclear assets from silos to mobile platforms, including road and rail mobile launchers and nuclear submarines. One cannot help but wonder if apprehensions about the carrier's survivability are driven more by extraneous factors, including inter-service resource competition, rather than dispassionate analysis.





Indian Navy carrier battle group in the North Arabian Sea. Source: Defence Point

Finally, the cost argument. Potent blue water navies intended to prevent armtwisting by great powers will necessarily be costly. The aircraft carrier, which is essentially a high mobility air base, is certainly among the more expensive elements. The cost is dictated by the number and capability of aircraft it carries. The more capable varieties, which can launch and recover heavy, highperformance aircraft, must necessarily be larger in size and therefore cost more. The logic that high-performance aircraft are required only on land and not at sea is difficult to comprehend, let alone buy. A nation that aspires to be counted in the big league and to dominate an entire ocean must pay the required costs, or curtail its ambition. The yardsticks for decision making need to be strategic, not bureaucratic process driven.

#### **Expeditionary Forces**

The third belief, about expeditionary forces not being needed by India, stems from secondary knowledge and inertial dogma, not rigorous analysis. It represents a continental view of India's security, which does not encompass either India's island territories which are to be defended, as mandated by the SAGAR vision, or the need to preserve the Indian Ocean as a zone of influence. Operationalising SAGAR: Bridging the Gap between Policy and Execution





INS Jalashwa en route to the Maldives for Operation Samudra Setu. Source: Indian Navy

Independent India has already experienced at least three traditional expeditionary operations, Ops VIJAY (Goa, 1961), PAWAN (Sri Lanka, 1987) and CACTUS (Maldives, 1988). All occurred in a relatively benign era when there was limited or no great power opposition. As China puts into practice its stated doctrine "The traditional mentality that land outweighs sea must be abandoned, and great importance has to be attached to managing seas and oceans"<sup>11</sup>, the future will inevitably involve great power contests in the Indian Ocean. It would be overly optimistic to assume that our adversaries in future operations, which could occur in our own island territories or in the Indian Ocean islands, will be thoughtful enough to leave runways open for the use of our transport aircraft, or uncontested zones for our paratroopers to land in. The fact is that the heavy lifting, both in the Indian Ocean and on the continental front, will have to be done by India. The inability of the leadership charged with our force planning to see the coming challenge sends a far louder strategic message to both China and India's partners than rhetorical posturing or signalling.

<sup>&</sup>lt;sup>11</sup> China's Military Strategy White Paper, May 26, 2015, http://eng.mod.gov.cn/Press/2015-05/26/content\_4586805.htm





*Exercise Tiger Triumph 2019: The run to the shore. Ships and helicopters from the Indian and US Navies. Source: US Department of State* 

The Indian Navy's future force structure will have to be planned accordingly. Platforms than can deliver force on occupied or contested territories must be acquired if the mandated SAGAR imperative of defending India's territories and interests is to be fulfilled. These will necessarily include platforms like LPDs, which can carry out over-the-horizon launch of an assault force using high speed vessels impervious to mines. Traditional landing ships can be brought into use for a build-up once the beachhead has been secured. There is need to invest in new options, such as China's AVID AG600 Kunlong<sup>12</sup> seaplane that can deliver 50 personnel at a place of it's choosing. The fact that these platforms are also extremely useful for non-combat evacuation or Humanitarian Assistance/Disaster Relief (HA/DR) operations, such as the ongoing Operations Samudra Setu and Sagar, is a secondary bonus.

## Conclusion

While constraints to India's rise are primarily continental, its strategic opportunities and economic lifelines are primarily maritime. India's energy pipeline across the seas to the West is among the vulnerabilities that must be

<sup>&</sup>lt;sup>12</sup> https://en.wikipedia.org/wiki/AVIC\_AG600



defended. India's connect with the world's fastest growing economic regions and thus future prosperity, across the seas to the South East (Asia-Pacific) and South West (Africa), cannot be placed at risk. Much like continental power is required to deal with territorial defence, maritime power is needed to safeguard our vast interests at sea. India's force structure must be shaped with this broader perspective in mind.

The very idea of dominating the Indian Ocean using submarines or without integral air power is like believing that mountain tops can be dominated from valleys. Integral air provides the high ground required for domain awareness, as well as the speed, mobility and firepower required for successful strike. If, on the other hand, there is a conscious strategic choice to focus on a guerrilla-equivalent submarine force at sea, as people believe Hitler's Germany did in World War II (ignoring the existence of ships like the Tirpitz, Bismarck, Scharnhost, Gneisenau and others), then the least that should be done is to build them by the dozens, while thinking through the consequences of domination through usage of instruments of terror and how to overcome their limitations. A handful of submarines has about as much chance of dominating the Indian Ocean as a terrorist has of succeeding against a competent and well-resourced CT team.



The inaugural India-US joint tri-services amphibious exercise 'Tiger Triumph' was held from November 13-21, 2019. Source: Twitter/@indiannavy



It is thus difficult to marry the reported views of the CDS on India's future maritime force structure with the Prime Minister's SAGAR vision. They reflect two completely divergent mindsets: one a limited outlook which remains fixated on India's continental constraints, the other a far-reaching vision that seeks to advance India's breakout strategy for regional and global standing. India's army dominated defence establishment does not appear to be taking SAGAR seriously, and certainly not using it as a guide for naval force planning.

At the same time, an integrated oceanic vision is not enough. A holistic national security vision, marrying both continental and maritime aspects and crafting a balance between the two, is required. Until such time as this is mandated by the requisite political backing, old mindsets and parochial considerations will prevail. Also essential is a long term financial commitment to boost defence expenditure. Australia's defence update<sup>13</sup> of July 01, 2020, spelling out the financial outlays the country will make for defence over the next decade, sets a timely example for India's leadership and defence establishment.

The continued neglect of the maritime dimension will result in the strategic humiliation of India in 1962 being repeated at sea. Is the risk acceptable? The answer rests in the hands of our decision makers.

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<sup>&</sup>lt;sup>13</sup> 2020 Defence Update Fact Sheet, https://www.defence.gov.au/StrategicUpdate-2020/docs/Factsheet\_Strategic\_Update.pdf



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