

PRAYAS4IAS

AN INITIATIVE BY THE PRAYAS INDIA

SPECIAL ISSUE NOVEMBER WEEK 2



Special Issue

November (Week 2)

Contents

All about India's submarine strength	2
All about the Char Dham road debate.....	4





All about India's submarine strength

(Source: [Indian Express](#))

Context: Last week, the CBI filed two chargesheets against serving and retired naval officers, and some others, for allegedly sharing details of the ongoing modernisation project of India's Kilo Class submarines. The Kilo Class comprises imported submarines that are being retrofitted. Experts say India has lost a decade in modernising its submarine fleet, while China has marched ahead in its larger naval and more specific submarine capabilities.

How many submarines does India have?

- Currently, India has 15 conventional diesel-electric submarines, classified as SSKs, and one nuclear ballistic submarine, classified as SSBN.
- Of the SSKs, four are Shishumar Class, which were bought and then built in India in collaboration with the Germans starting 1980s; eight are Kilo Class or Sindhughosh Class bought from Russia (including erstwhile USSR) between 1984 and 2000; and three are Kalvari Class Scorpene submarines built at India's Mazagon Dock in partnership with France's Naval Group, earlier called DCNS.
- The SSBN, INS Arihant, is a nuclear-powered ballistic missile submarine, built indigenously. A second SSBN, INS Arighat, an upgraded version of Arihant, is likely to be commissioned within the next few months.
- Most of India's submarines are over 25 years old, and many are getting refitted.

What is the history of India's submarine acquisition?

- India got its first submarine, INS Kalvari of the Foxtrot Class, from the USSR in December 1967. By 1969, it had four of those.
- During the 1971 war with Pakistan, the submarines were baptised into war. Between 1971-74, India bought four more Foxtrot Class submarines.
- The eight Foxtrot submarines were a "good number at that point of time" and were "doing a great job, as contemporary as we could operate at that time", said Commodore (retired) Anil Jai Singh, who commanded four submarines, served in the Directorates of Naval Plans and Submarine Acquisition at Naval Headquarters, and was involved in drafting the Navy's 30-year submarine construction plan.
- After 1974, India did not get new submarines for a decade. In 1981, it signed a contract to buy two Type 209 submarines from West Germany, while two others were to be assembled at Mazgaon Dock. These formed the Shishumar Class, the first of which was commissioned in 1986.
- Parallely, Russia offered India its Kilo Class submarines. Singh, who was in the commissioning crew of the first Kilo Class submarine India got, INS Sindhughosh in 1986, said it was "probably the first time these boats were seen in the West". "we were the first to sail a Kilo so far from the Soviet Union."
- Between 1986 and 1992, India got eight submarines from the USSR and the two from Germany. In 1992 and 1994, two German submarines built in India were also commissioned, adding up to 12 new submarines in eight years from 1986. "By 1995, we probably had amongst the most modern submarine arms in the world," said Singh.
- India bought two more Kilo Class submarines from Russia in 1999 and 2000, taking the total submarine fleet to around 20.
- Soon after, the older Foxtrots started getting decommissioned. Of the ten Kilo Class submarines, INS Sindhurakshak sank off Mumbai after explosions caused by fire. Last year India gifted INS Sindhuvir to Myanmar.

Why have there been delays in modernisation?



- The 30-year plan (2000-30) for indigenous submarine construction, approved by the Cabinet Committee on Security in 1999, envisaged two production lines of six submarines each, built in India in partnership with a foreign Original Equipment Manufacturer (OEM). The projects were called P-75 and P-75I.
- The 30-year plan anticipated that India would get the 12 new submarines by 2012-15. Subsequently, India would make 12 of its own by 2030, taking the fleet size to 24, with the older submarines getting decommissioned.
- Singh said the intention was that India would maintain a force level of 18 to 20 submarines at any given time. But the contract for P-75 was signed only by 2005, with France's DCNS, now the Naval Group. "Ideally the contract for P75I should have also happened then," Singh said.

What are the current projects underway?

- Of the six being built, P-75 has delivered three Kalvari Class Scorpene submarines so far. P-75I is yet to take off; the first Request for Information was issued in 2008, then again in 2010, and the Request for Proposal was finally issued in July this year.
- The project will be India's first under the Strategic Partnership Model, which came up in 2015. The government will give the contract to an Indian Strategic Partner, which will then partner with a foreign OEM.
- The two selected SPs are MDL and Larsen and Toubro; the five selected OEMs are France's Naval Group, Germany's ThyssenKrupp Marine Systems, Russia's ROE, South Korea's Daewoo Shipbuilding and Marine Engineering, and Spain's Navantia.
- However, bids are yet to be finalised. The earliest that the first submarine under the project can be commissioned will be around 2032, according to experts.
- P-75, too, has been delayed. While the first boat should have been commissioned in 2012, it was commissioned in December 2017.

What is China's capability, and why is that a worry for India?

- Singh said India needs more submarines for two reasons. "First, we need it for our own maritime security. Second, Chinese are going to be positioning a lot more ships and submarines in the Indian Ocean in the coming years."
- He said China is giving Pakistan eight submarines and four destroyers, which can be used as proxy by China. "We need to handle that very soon, and move on P75I as fast as we can."
- According to a 2020 report by the Pentagon, China currently operates four SSBNs and is fitting two additional hulls. It has six SSNs and, and 50 diesel-powered attack submarines (SSs). According to the report, Chinese Navy will "likely maintain between 65 and 70 submarines through the 2020s, replacing older units with more capable units on a near one-to-one basis".
- China has constructed 12 nuclear submarines in the last 15 years. It is expected to have up to eight SSBNs by 2030, the report said.

Why are nuclear submarines so coveted?

- SSNs have infinite capacity to stay dived. As they are not propelled by batteries, they need not emerge for charging by a diesel engine.
- Propelled by a nuclear-powered engine, these submarines only need to come to the surface for replenishing supplies for the crew.
- SSNs are also able to move faster underwater than conventional submarines. All this allows a navy to deploy them at farther distances, and quicker. They are like the fighter jets of the underwater world.

How many does India have?

- India is among six nations that have SSNs, alongside the US, the UK, Russia, France and China. India got its first SSN in 1987 from the Soviet Navy, which it rechristened INS Chakra, which was



decommissioned in 1991. In 2012, India got another Russian SSN on a ten-year lease, called INS Chakra 2, which has since been returned to Russia.

- The government has also decided that of the 12 submarines to be built indigenously after the P75 and P75i projects, six would be SSNs instead of SSK. Singh called this decision a “very, very positive development”, but cautioned about “a question mark” over how quickly the project moves. Even if all things move smoothly, Singh said the first SSN won’t enter service until 2035 or 2040.
- India is taking two SSNs on lease from Russia, but the first of them is expected to be delivered only by 2025.
- But, during this time India has developed its own SSBNs, INS Arihant and INS Arighat. Unlike the other submarines, the SSBNs are strategic programmes and fall under the Strategic Forces Command, the tri-services command responsible for India’s nuclear weapons. “That’s not a war fighting machine. It should not be counted as a submarine war fighting capability, because it is a deterrent,” said Singh.
- India is building at least two larger SSBNs that will have bigger missiles, called S4 and S4* projects. The four SSBNs are expected to be commissioned before 2030, Singh said.

All about the Char Dham road debate

(Source: [Indian Express](https://www.indianexpress.com))

Context: *The Supreme Court reserved its judgment on an appeal by the Ministry of Defence (MoD) for relaxing its September 2021 order that specified the road width under the Char Dham Mahamarg Vikas Pariyojana (Char Dham Highway Development Project) of the Ministry of Road Transport and Highways (MoRTH). “There is no such defence versus environment argument at all... You have to balance both concerns,” the court observed.*

A flagship initiative of the Centre, the Rs 12,000-crore highway expansion project was envisaged in 2016 to widen 889 km of hill roads to provide all-weather connectivity in the Char Dham circuit, covering Uttarakhand’s four major shrines — Badrinath, Kedarnath, Gangotri and Yamunotri — in the upper Himalayas.

The controversy

- In 2018, the road-expansion project was challenged by an NGO for its potential impact on the Himalayan ecology due to felling trees, cutting hills and dumping muck (excavated material). The Supreme Court formed a high-powered committee (HPC) under environmentalist Ravi Chopra to examine the issues.
- In July 2020, the HPC submitted two reports after members disagreed on the ideal width for hill roads. In September, the Supreme Court upheld the recommendation of four HPC members, including Chopra, to limit the carriageway width to 5.5 m (along with 1.5 m raised footpath), based on a March 2018 guideline issued by MoRTH for mountain highways.
- The majority report by 21 HPC members, 14 of them government officials, favoured a width of 12m as envisaged in the project following national highway double-lane with paved shoulder standards: 7 m carriageway, 1.5 m paved shoulders on both sides, and 1 m earthen shoulders on either side for drains and utilities (hillside) and crash barrier (valley side).
- A wider road requires additional slope cutting, blasting, tunnelling, dumping and deforestation – all of which will further destabilise the Himalayan terrain, and increase vulnerability to landslides and flash floods.

‘No rule of law’



- HPC chairman Chopra wrote to the Environment Ministry in August 2020, underlining how the project was being implemented in brazen violation of statutory norms “as if the Rule of Law does not exist”. These include:
- **WORK WITHOUT VALID PERMISSION:** Project work and felling of trees on different stretches, adding up to over 250 km, has been continuing illegally since 2017-18. A work order issued by the state Forest Department in September 2018 was not only post facto but also legally untenable. In fact, the department had written to the developer back in February 2018: “Char Dham project is related to the ambitious plan of the Honourable PM... considering the importance of the project... tree felling in the stretches quoted above is almost complete even though doing so without complying with the conditions of the in-principle approval is a clear violation.”
- **MISUSING OLD CLEARANCES:** Work started on stretches adding up to over 200 km on the basis of old forest clearances issued to the Border Roads Organisation during 2002-2012. This is illegal and defeats the regulatory purpose since the scope of work has changed drastically with “enormous hill cutting” undertaken. Muck has just been pushed down the slope along NH-125, posing a serious threat to the environment and local habitat.
- **FALSE DECLARATION:** Tree felling, hill cutting and muck dumping on stretches adding up to over 200 km commenced by falsely declaring that these stretches did not fall in the Eco Sensitive Zones of Kedarnath Wildlife Sanctuary, Rajaji National Park, Valley of Flowers National Park etc.
- **WORK WITHOUT SEEKING CLEARANCE:** Work began on various stretches, adding up to at least 60 km, after withdrawing applications for forest clearance without furnishing reasons.
- **VIOLATION OF SC DIRECTIVE:** Work started on stretches adding up to at least 50 km, even though the state government said in an affidavit in April 2019 that stretches where work had not already begun would be subject to the direction of the SC.

The defence angle

- Even as the project grappled to come clean, it garnered support from the MoD that moved an appeal before the Supreme Court in November, seeking “a double-lane road having a carriageway width of 7 m (or 7.5 m in case there is a raised kerb)” with 8-10 m formation width to “meet the requirement of the Army”.
- While conceived primarily to facilitate the Char Dham yatras (pilgrimage) and to boost tourism, the project always had a strategic angle to it as the highways would facilitate troop movement to areas closer to the China border. Suddenly, this became the sole justification for building wider roads.
- But the MoD went a step further. Its affidavit on January 15 said that “unfortunately, notwithstanding the security of the country and the need of the defence forces to resist external aggression, if any, at the Indo-China Border”, the HPC chairman and two members had recommended that “no credence should be given to the needs of the armed forces”.
- Chopra reacted immediately. Emphasising that “no convincing argument exists in the recent affidavit of the MoD to ignore and override the profound and irreversible ecological damage to the Himalayas that will impact each and every one of us and generations to come”, he urged the Supreme Court to ask the MoD to “withdraw imputations” of “insincerity of motive” against him and two other HPC members.



DEC 2016: PM laid foundation stone for Chardham Mahamarg Vikas Pariyojna in Dehradun.

MARCH 2018: Ministry of Road Transport and Highways (MoRTH) set standard specification of carriageway width of 5.5 m with 2-lane structures (7m) for national highways and roads in hilly and mountainous terrains.

AUG 2018: SC started hearing the case after an NGO, Citizens for Green Doon, flagged the impact on ecology.

AUG 2019: SC formed a high-powered committee (HPC), which submitted two reports in July 2020 after members disagreed on the ideal width for hill roads.

SEPT 2020: SC upheld the minority recommendation of the HPC to limit carriageway width to 5.5 m.

NOV 2020: Ministry of Defence (MoD) filed an appeal seeking "a double-lane

road having a carriageway width of 7 m (or 7.5 m in case there is a raised kerb)" with 8-10 m formation width to "meet the requirement of the Army".

DEC 2020: MoRTH amended specifications to a 10-m tarred surface for mountain highways.

JAN 2021: MoD changed its position, now seeking a 10-m carriageway with 12-14 m formation width.

FEB 2021: Attorney General told SC that there was no link between the Char Dham Highway development project and the recent flash floods on Dhauliganga river.

APRIL 2021: SC decided to hear only urgent matters due to the pandemic; government in May sought expeditious hearing of matters related to border routes.

NOVEMBER 2021: Daily hearing begins on November 8.

Speed versus stability

- The wider the road, the quicker the defence deployment and supplies. But widening a mountain highway, particularly on the young, still-unsettled Himalayas, runs the risk of leaving the slopes more unstable.
- In fact, the HPC argued that "a disaster-resilient road is much more critical" than a wider road "prone to frequent blockages, landslides and recurring slope failures", concluding that an intermediate width for Himalayan highways was more judicious even for the country's defence needs.
- During the hearing, the counsel for the NGO pointed out how three valleys in Pithoragarh situated close to the China border were cut off due to landslides for two months, pleading that the Army, as well as civilians, required a safe, reliable road and not one that remained blocked or got washed away periodically.

The way things stand

- Both parties concluded their arguments on Thursday. While the NGO underlined the government's disregard for the September 2020 court order when MoRTH unilaterally relaxed its guideline for hill roads last December, the government furnished a two-page report on the steps taken for landslide mitigation.
- The judgment is likely to serve as a benchmark for "balancing both concerns" within the legal framework, and draw a not-so-fine line between vanity projects and strategic imperative.