

# समाचार पत्रों से चयित अंश Newspapers Clippings

A Daily service to keep DRDO Fraternity abreast with DRDO Technologies, Defence Technologies, Defence Policies, International Relations and Science & Technology

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## **DRDO News**

## **DRDO Technology News**



गुरुवार, 25 अगस्त 2022

## समीर वी कामत DRDO के अगले अध्यक्ष नियुक्त किए गए, सतीश रेड्डी बने रक्षामंत्री के वैज्ञानिक सलाहकार

डॉ समीर वी कामत को रक्षा अनुसंधान एवं विकास विभाग ( DDRD) के सचिव और रक्षा अनुसंधान विकास संगठन ( DRDO) के अध्यक्ष के रूप में नियुक्त किया गया है। वहीं , वर्तमान सचिव जी सतीश रेड्डी को रक्षा मंत्री का वैज्ञानिक सलाहकार नियुक्त किया गया है।

#### आईआईटी खड़गपुर से की पढ़ाई

डॉ समीर वी कामत 1 जुलाई 2017 से डीआरडीओ में महानिदेशक (नौसेना प्रणाली और सामग्री) के रूप में सेवा दे रहे हैं। उनका पूरा नाम डॉ समीर वेंकटपति कामत है। डॉ कामत ने 1985 में आईआईटी खड़गपुर से मेटलर्जिकल इंजीनियरिंग में बीटेक इंजीनियरिंग (ऑनर्स) की डिग्री प्राप्त की और सामग्रियों के यांत्रिक व्यवहार के क्षेत्र में विशेषज्ञता के साथ अमेरिका के द ओहियो स्टेट यूनिवर्सिटी से 1988 में सामग्री विज्ञान और इंजीनियरिंग में पीएचडी की डिग्री प्राप्त की। हाल ही के दिनों में डॉ कामत ने डीएमआरएल में दुर्लभ पृथ्वी स्थायी चुम्बक (आरईपीएम) के विकास में महत्वपूर्ण योगदान दिए हैं।

### रक्षा मंत्री के वैज्ञानिक सलाहकार बने सतीश रेड्डी

वहीं वर्तमान में रक्षा अनुसंधान एवं विकास विभाग के सचिव और रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) के अध्यक्ष डॉ जी सतीश रेड्डी को रक्षा मंत्री का वैज्ञानिक सलाहकार नियुक्त किया गया है। रेड्डी ने रक्षा प्रणालियों और प्रौद्योगिकियों के स्वदेशी विकास का नेतृत्व किया हैं।

देश में शीर्ष रक्षा वैज्ञानिक के तौर पर डॉ रेड्डी ने रक्षा परिसंपत्तियों के केन्द्रबिन्दु नेविगेशन तकनीक और प्रणालियाँ को कई प्लेटफार्मी के लिए और अत्यन्त महत्वपूर्ण क्षेत्रों में आत्मनिर्भरता प्राप्त करते हुए डिजाइन और विकसित किया है। युवावस्था से ही इलेक्ट्रॉनिक डिजाइन और सिस्टम इंजीनियरिंग पर काम करते हुए, डॉ रेड्डी ने कम समय में विभिन्न प्रमुख रक्षा प्रणालियों को तैयार किया।

https://www.jagran.com/news/national-samir-v-kamat-appointed-as-new-chairman-of-defenceresearch-development-organisation-23011036.html



Thu, 25 Aug 2022

### Samir V Kamat Appointed DRDO Chief, G Satheesh Reddy Named as Scientific Adviser to Rajnath Singh



Distinguished scientist Samir V Kamat was on Thursday appointed as Secretary of the Department of Defence Research and Development and Chairman of the Defence Research and Development Organisation (DRDO), according to a Personnel Ministry order.

Kamat, who is Director General, Naval Systems & Materials, at the DRDO will succeed G Satheesh Reddy who has been named as scientific adviser to the defence minister, it said. Kamat has been appointed to the post till he attains the age of 60 years or until further orders

https://www.timesnownews.com/india/samir-v-kamat-appointed-drdo-chief-g-satheesh-reddynamed-as-scientific-adviser-to-rajnath-singh-article-93776073

# **Business Standard**

Thu, 25 Aug 2022

### Distinguished Scientist Samir V Kamat Appointed DRDO Chairman: Ministry

The Defence Research and Development Organisation (DRDO) on Thursday appointed distinguished scientist, Dr Samir V Kamat, as chairman. Kamat, who is Director General, Naval Systems & Materials (NS&M), will succeed G Satheesh Reddy, who has been named as scientific adviser to Defence Minister Rajnath Singh, according to a Personnel Ministry order.

Reddy was appointed as DRDO chief in August 2018 for two years. He was given two years' extension in the post in August 2020.

The defence organisation is the research and development wing of the Ministry of Defence. The Appointments Committee of the Cabinet (ACC) has approved Kamat's appointment from the date of his assumption of charge till he attains the age of 60 years. He obtained B Tech. (Hons) in Metallurgical Engineering from IIT-Kharagpur in 1985 and PhD in Materials Science and Engineering from Ohio State University in 1988. He joined DRDO at DMRL, Hyderabad, in 1989. He took over as the director of the lab in 2015. Kamat assumed charge as NS&M Director in 2017.

Over the last 25 years, Kamat has made significant contributions in the area of microstructuremechanical property correlations in advanced materials such as particulate reinforced metal matrix composites, ceramic matrix composites, aluminium-lithium alloys, high strength aluminium alloys and titanium alloys which led to their development for various defence applications. He has also been instrumental in setting up state-of-the-art experimental facilities and expertise for characterisation of mechanical behaviour of materials in small volumes, especially for materials used in MEMS.

https://www.business-standard.com/article/current-affairs/distinguished-scientist-samir-v-kamat-appointed-drdo-chairman-ministry-122082500840\_1.html

## **Defence News**

## **Defence Strategic : National/International**



Press Information Bureau Government of India

**Ministry of Defence** 

Thu, 25 Aug 2022 6:29 PM

### **Curtain Raiser Commissioning of Indigenous Aircraft** Carrier

02 Sep 2022 will mark the historical milestone of realisation of Nation's commitment towards 'AatmaNirbharta', a landmark date for the Indian Navy and the entire Nation; with

Commissioning of first Indigenous Aircraft Carrier (IAC) 'Vikrant'. Hon'ble Prime Minister would be the Chief Guest on this momentous occasion. Vikrant is the largest warship to have ever been built in India. It is also the first indigenously designed and built Aircraft Carrier for the Indian Navy.

Designed by the Warship Design Bureau (WDB), Indian Navy's in-house organisation and built by M/s Cochin Shipyard Limited (CSL), a Public Sector Shipyard under Ministry of Ports, Shipping & Waterways, the Indigenous Aircraft Carrier is christened after her illustrious predecessor, India's first Aircraft Carrier which played a vital role in the 1971 war.

Vikrant meaning victorious and gallant, the foundation for prestigious IAC was firmly established in Apr 2005 by ceremonial Steel



Cutting. In order to push the indigenisation drive, the Warship grade steel required for construction of IAC was successfully indigenised through Steel Authority of India Limited (SAIL) in collaboration with Defence Research & Development Laboratory (DRDL) and Indian Navy. The hull fabrication was progressed thereafter and the ship's keel was laid in Feb 2009. The first phase of ship construction was completed with successful launch of the ship in Aug 2013.

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The 262 m long and 62 m wide Vikrant displaces approx 43000 T when fully loaded, having a maximum designed speed of 28 Knots with endurance of 7500 NM. The ship has around 2200 compartments, designed for a crew of around 1600 that include specialised cabins to accommodate women officers and sailors. The carrier is designed with a very high degree of automation for machinery operations, ship navigation and survivability. The carrier is equipped with the latest state of the art equipment and systems. (The ship boasts of a fully-fledged state of

the art Medical Complex with latest medical equipment facilities that includes major modular OT, emergency modular OT, physiotherapy clinic, ICU, laboratories, CT scanner, X-Ray machines, Dental complex, Isolation ward and telemedicine facilities etc.)

The ship would be capable of operating air wing consisting of 30 aircraft comprising of MiG-29K fighter jets, Kamov-31, MH-60R multi-role helicopters, in addition to indigenously manufactured Advanced Light Helicopters (ALH) and Light Combat Aircraft (LCA) (Navy). Using a novel aircraft-operation mode known as



Short Take Off But Arrested Recovery (STOBAR), the IAC is equipped with a ski-jump for launching aircraft, and a set of three 'arrester wires' for their recovery onboard.

Inspite of COVID related imponderables and restrictions, adversely affecting availability of OEMs & supply chain, readiness of ship's propulsion and Power generation equipment/ systems in harbour was tested as part of Basin Trials in Nov 20. 'Vikrant' has successfully completed multiple phases of Sea Trials from Aug 21 to till date, where the ship's performance, including response of ship's hull to various conditions of operations, manoeuvring trials, main propulsion, Power Generation and Distribution (PGD), ship's Navigation and Communication systems, endurance testing of propulsion machinery, electrical & electronic suites, deck machinery, lifesaving appliances, integrated trials of majority of equipment/ systems and trials of other auxiliary equipment were ascertained and proved to the satisfaction of Indian Navy's trials team and ship's crew.

In line with the prevailing practices being followed by other advanced countries having experience of building Aircraft Carrier, the deck integration trials of fixed wing aircraft and exploitation of Aviation Facility Complex will be carried out post commissioning of the ship when the operational command & control of the ship including flight safety is with the Navy. 'Vikrant' has large number of indigenous equipment and machinery, involving major industrial houses in the country viz. BEL, BHEL, GRSE, Keltron, Kirloskar, L&T, Wartsila India etc. as well as over 100 MSMEs. The indigenisation efforts has also led to development of ancillary industries, besides generation of employment opportunities for 2000 CSL personnel and about

13000 employees in ancillary industries thus bolstering plough back effect on Nation's economy. A major spin off of building an Indigenous Aircraft Carrier is the development and production of indigenous warship grade steel for the ship through partnership between Navy, DRDO and SAIL, which has enabled the country to become self-sufficient with respect to warship steel. Indigenous content of the project is approx. 76%. The Indigenous construction of Aircraft Carrier is a shining example in the Nation's quest for 'AatmaNirbhar Bharat' and 'Make in India' Initiative.

With the commissioning of 'Vikrant' on 02 Sep 22, India would join the select group of nations having the niche capability to indigenously design and build an Aircraft Carrier, which will be a real testimony to the Make in India thrust of Government of India. Commissioning of 'Vikrant' would be a proud and landmark moment for the Nation showcasing our AatmaNirbhar credentials during 'AzadikaAmritMahotsav', a true testament to the country's zeal and fervour in pursuing capability build up towards enhanced maritime security in the Indian Ocean Region and shall demonstrate Indian Navy's unwavering commitment to contribute towards peace and stability in the region.

The induction and reincarnation of 'Vikrant' is thus not only another step towards strengthening our defence preparedness but also our humble tribute to the sacrifices made by our freedom fighters for the independence of the nation and our brave soldiers during the 1971 war.

https://pib.gov.in/PressReleasePage.aspx?PRID=1854457



**Ministry of Defence** 

Thu, 25 Aug 2022 6:52 PM

## RakshaMantri to Hold Bilateral Talks with His Tanzanian Counterpart in New Delhi on 26 Aug 22 to Further Enhance Defence Cooperation

RakshaMantriShriRajnath Singh will hold bilateral talks with Tanzanian Minister of Defence and National Service Dr.Stergomena Lawrence Tax in New Delhi on 26 Aug 2022. During the bilateral talks, the two Ministers will review the defence cooperation between the two countries and explore new avenues including Defence Industry Cooperation to further strengthen bilateral engagements. The over-arching framework for progressing activities for defence cooperation is the MoU signed between both countries in 2003. Dr. Tax will also be visiting Hyderabad during her stay in India, where she would be interacting with Indian Defence Industries.

https://pib.gov.in/PressReleasePage.aspx?PRID=1854459



Thu, 25 Aug 2022

## INS Vikrant to Add to Navy's 'Reach'; Russian Mig-29K to Remain till Indigenously Produced Fighter is Commissioned

The INS Vikrant, the largest warship (42,800 tonnes) made in India is ready and will be commissioned by Prime Minister NarendraModi on September 2, but till the indigenously produced twin-engined fighter is developed and ready in a minimum of five to seven years and till the Rafale or the F-18 for the interim period is purchased, the Russian MiG-29K will have to deliver. As Vice Admiral SN Ghormade, Vice-Chief of Naval Staff said, there would be a dozen MiG-29K fighters on the Vikrant of the 40-odd currently available. The Vikramaditya (formerly the Admiral Gorshkov) also has the same fighter on board. The Vikrant, to be commissioned after five rounds of sea-trials, will be a particularly welcome to the Navy as it will give it "reach" The only other carrier, the Vikramaditya, has been undergoing repairs for the last year or so. This is the era of increasing Chinese naval presence in the Indian Ocean, the Navy has been looking for a carrier to ensure proper surveillance of vast areas.

The carrier, 76 per cent indigenous, gives the navy range, as it has an endurance of about 7,500 nautical miles. Some of the numbers are truly staggering; for a ship of this size, it has a maximum speed of 28 knots. Apart from the 12-14 fighters, it will carry helicopters that can be used for anti-submarine warfare and other activities. The total number of warplanes and choppers at any given time will be over 30 There is already talk of a follow-on carrier, perhaps larger (about 65,000 tonnes) andVice Admiral Ghormade said that discussions were going on with the government. There is a view, including within the armed forces, that a third carrier isn't really necessary, but the government is still to take a final decision. He said it was "a matter of discussion." What does not require discussion is that the next ship will be 100 per cent indigenous.

Work on the carrier began in 2009 with the keel laying. It was launched in 2013 and the basin trials were concluded in 2020. sea trials, including one in the Arabian Sea during the Monsoons, have been completed. It is quite a ship>For the crew of about 2,600 there is a chapati maker that makes 10,000 of them every day. The wiring inside the ship, put together, can stretch to Brazil, on the other side of the globe. And importantly, a carrier can last anything between 40 to 50 years. This is the Navy's fourth carrier, after the original INS Vikrant, the INS Viraat and the INS Vikramaditya.

https://www.timesnownews.com/india/ins-vikrant-to-add-to-navys-reach-russian-mig-29k-toremain-till-indigenously-produced-fighter-is-commissioned-article-93776052

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# The Tribune

Thu, 25 Aug 2022

### Navy Cooperation Significant for India-US Ties, Says Sandhu

The cooperation between the navies of India and the US is one of the most dynamic and significant components of the bilateral defence ties, India's envoy here said, underlining that the defence sector had emerged as a major pillar between the two countries, especially in the context of the Indo-Pacific.

Ambassador Taranjit Singh Sandhu's remarks came during the historic visit of INS Satpura to San Diego last week. INS Satpura is an indigenously designed and built 6,000-tonne guided missile stealth frigate equipped to seek and destroy adversaries in air, surface, and underwater. Reflective of the growing defence ties between India and the US, this is for the first time that an Indian Naval Warship docked itself on the US West Coast and maybe two decades after that an Indian ship came to the US. "Navy-to-Navy cooperation is one of the most dynamic components of our partnership. This is strengthening further, in the context of the Indo-Pacific," Sandhu said in San Diego.

https://www.tribuneindia.com/news/world/navy-cooperation-significant-for-india-us-ties-sayssandhu-425473

# THE ECONOMIC TIMES

Thu, 25 Aug 2022

### India-US Joint Military Drills Near LAC Totally Different: India

As China opposes the third party meddling in the India-China border issue in reference to India-US joint millitary drills YudhAbhyas, India on Thursday said that millitary exercise near the Line of Actual Control (LAC) is "totally different".Speaking at a weekly presser, Ministry of External Affairs spokesperson ArindamBagchi said the two sides should stick to agreements of the past. "I don't understand the reference to third-party interference. India US exercise is totally different and I don't know what colour has been given to that. It is targeted and a violation of agreements," he said. China on Thursday strongly opposed the war games scheduled between India and the US near the disputed Sino-India border in October, stating that it is an interference in the bilateral boundary issue and a violation of agreements between New Delhi and Beijing that no military drill will be held near the LAC. "We firmly oppose any third party to meddle in the China-India border issue in any form," said Senior Colonel Tan Kefei, a spokesperson for China's Ministry of National Defense (MND) at a regular press conference in Beijing on Thursday when being asked about his comments on the ongoing and future US-India joint military exercises near the China-India border.

As the spokesperson said, the China-India border issue is a matter between the two countries. Both sides have maintained effective communications at all levels and agreed to properly handle the situation through bilateral dialogues. In light of the relevant agreements signed by China and India in 1993 and 1996, neither side is allowed to conduct military exercise against the other in areas near the Line of Actual Control, Tan stressed.In the end, the spokesperson called out to the Indian side to keep its commitment. "It is hoped that the Indian side will strictly abide by the important consensus reached by the leaders of the two countries and the relevant agreements, uphold its commitment to resolving border issues through bilateral channels, and maintain peace and tranquillity in the border area with practical actions."

India and US would be holding their regular Yudhabhyas series of wargames in the Auli area in Uttarakhand near the China border. The exercise would be held from October 18 to 31 in the mountainous terrain in the area which has seen the additional deployment of assets and troops in the last two years, the official said. The Americans are in a tense relationship with the Chinese due to the Taiwan issue while the Indian military has been in a standoff with them since May 2020 timeframe. This would be the 18th of the Yudhabhyaswargames between India and the US to help enhance interoperability between the two sides. The two armies had last held the wargames in Alaska where they carried out drills in extremely cold conditions.

<u>https://economictimes.indiatimes.com/news/defence/india-us-joint-military-drills-near-lac-totally-different-india/articleshow/93783314.cms</u>

# THE ECONOMIC TIMES

Thu, 25 Aug 2022

## China Objects to US-India Military Drills; Says Firmly Opposed to Third Party Meddling on Border Issue

China's defence ministry on Thursday said it was firmly opposed to any third party "meddling" in the border issue and hoped India will abide by the bilateral agreements not to hold military

drills near the Line of Actual Control (LAC), the very pacts it has been accused of violating in eastern Ladakh leading to a prolonged standoff.Senior Colonel Tan Kefei, a spokesperson for China's Ministry of National Defence (MND), made the comments while replying to question about reports of special forces of the US and India recently holding a joint combat exercise in the southern foothills of the Himalayas and their plans to conduct a joint military exercise codenamed "War Exercise" (YudhAbhyas) in October close to the border.

"We firmly oppose any third party to meddle in the China-India border issue in any form," Tan told an online press conference here.Tan said that China has always stressed that military cooperation of relevant countries, especially on exercises and training activities, should not be targeted at any third party, but rather serve to help maintain regional peace and stability.The China-India border issue is a matter between the two countries. Both sides have maintained effective communications at all levels and agreed to properly handle the situation through bilateral dialogues, he said.In light of the relevant agreements signed by China and India in 1993 and 1996, neither side is allowed to conduct military exercises against the other in areas near the Line of Actual Control, he was quoted as saying by the Chinese Defence Ministry online.

"It is hoped that the Indian side will strictly abide by the important consensus reached by the leaders of the two countries and the relevant agreements, uphold its commitment to resolving border issues through bilateral channels, and maintain peace and tranquility in the border area with practical actions," he said. The Chinese Defence Ministry's reference to 1993 and 1996 agreements is interesting as the People's Liberation Army (PLA) attempts to move a large number of troops to the disputed areas in the LAC in eastern Ladakh in May 2020 has sparked a major military standoff which is still continuing.India has said the PLA's actions were in violation of the bilateral agreements.As a result of a series of military and diplomatic talks, the two sides completed the disengagement process last year on the north and south banks of the Pangonglake and in the Gogra area.So far, the two sides held 16 rounds of Commanders' level talks to resolve the standoff.

India has been consistently maintaining that peace and tranquillity along the LAC were key for the overall development of bilateral ties.External Affairs Minister S Jaishankar, who is currently in Latin America on a six-day visit, last week said that China has disregarded the border pacts with India, casting a shadow on the bilateral ties. He asserted that a lasting relationship cannot be a one-way street and there has to be mutual respect.

"They (Chinese) have disregarded that. You know what happened in the Galwan Valley a few years ago. That problem has not been resolved and that is clearly casting a shadow," Jaishankar said in Sao Paulo, Brazil on Saturday. India and the US will kick-start an over two-week-long mega military exercise in Uttarakhand'sAuli in October amid the fast-evolving regional security scenario. The 18th edition of exercise "YudhAbhyas" is scheduled to take place from October 14 to 31, sources in the defence and military establishment said early this month. A number of

complex drills are being planned for the mega exercise, they said. The last edition of the exercise took place in October last year in Alaska in the US.

https://economictimes.indiatimes.com/news/defence/china-objects-to-us-india-military-drillssays-firmly-opposed-to-third-party-meddling-on-border-issue/printarticle/93779282.cms



*Thu, 25 Aug 2022* 

### **Top Navy Official Says Predator Drones Deal is On**

The long awaited deal for 30 drones from the US-based General Atomics is expected to be finalised soon. The deal which is pegged at under \$3 billion will be government to government, through Foreign Military Sales (FMS) route.Financial Express Online has reported earlier this month that the deal is on and the US side has offered technology to enable the Indian Navy to make High Altitude Long Endurance (HALE) drones locally in India. These drones will help the Indian Navy in beefing up its surveillance in the Indian Ocean region.

### Is the Predator deal off the table?

No, said the Vice Chief of Indian Navy Vice Admiral SN Ghormade. He was responding to a question if the Predator Drones Deal was off the table, raised during a press conference on the eve of the commissioning of the IAC `Vikrant'. He said the focus is on indigenous solutions for drones like Predator Drones, "We would want the research and development organisation to develop its own capabilities of a High Altitude Long Endurance unmanned aerial vehicle."

The VCNS added, "I think we are very clear that we have to make everything in India and we are progressing in that. However, there always has to be a balanced decision in doing that. Not all countries are making everything in their own countries and I think that is understood by everyone because there is something which is not cost effective, you have to pay and source. But you have to source it from the right sources so that it is available to you when required in emergencies and useful.. and not dependent on others."

The talks between India and the US on the deal are already in advanced stages and are expected to be sealed soon. "These drones are expected to replace the Israeli Herons which have completed their life cycle," said a source in the Defence establishment.India has plans to buy 10+10+10 Predator (MQ-9) series UAVs for all the three services – Army, Navy and the Air Force. For the procurement of these drones the Indian Navy is the lead service. And once these are inducted in the services it will help the forces in ramping up their surveillance along the Line of Actual Control (LAC) in eastern Ladakh as well as Line of Control as well as the Indian

Ocean.Following the Galwan Valley clashes, where the armies of India and China continue to be locked in a standoff, the Indian side not only stepped up its surveillance apparatus along the LAC by deploying the Indian Navy's assets of P-8i and MQ-9B Sea Guardian drones were leased from General Atomics in 2020 for a year. However, the lease period has been extended as the services are very satisfied with the performance of the leased drones.

Dr VivekLall, the Chief Executive for the General Atomics Global Corporation, has been leading the negotiations for these drones and has been quoted in the media stating: "We understand that the MQ-9B acquisition programme is at an advanced stage of discussion between the US and Indian governments." Also, according to reports he said that from the company perspective, "General Atomics is ready to support India and values our longtime relationship."

### Indian Navy's Sea Guardians

The MQ-9B has two variants – SkyGuardian and SeaGuardian. The MQ-9B Sea Guardian drones which are on lease from the US based General Atomics have flown close to 3,000 hours patrolling the country's maritime borders and were used by the Indian Army too to keep a watch on the belligerent China.

### China & Drones

China too has been developing its own drones and exporting to countries in Africa and the Middle East. However, as Financial Express Online has reported earlier there is no other drone in the world except the MQ-9B which are best in terms of technology, endurance and payloads.

https://www.financialexpress.com/defence/top-navy-official-says-predator-drones-deal-ison/2644361



Thu, 25 Aug 2022

### Why Does the Indian Navy Need New Fighter Jets?

On September 2, 2022, the Indigenous Aircraft Carrier `Vikrant' will be commissioned into the Indian Navy. Though the focus is on inducting indigenous fighter jets on board the new carrier, for the time being the Russian MiG-29 K will be on board. The Indian Navy has already conducted demonstration trials for the deck based fighter jets for which the US based Boeing Company sent in two F/A-18E Super Hornet fighters and French Dassault Aviation sent their marine version of Rafale fighters to INS Hansa, Goa.

#### Multi-Role Carrier Borne Fighters (MRCBF)

After the retirement of the INS Viraat aircraft carrier, the carrier carrying Sea Harrier vertical take-off and landing (VTOL) aircraft, Indian carrier-based aviation is now flying the Russian MiG-29K and MiG-29KUB fighters (single and twin seaters, respectively). These are operated from INS Vikramaditya, the former Admiral Gorshkov, a Soviet-built cruiser that was rebuilt in Russia at the end of the 2000s and became part of the Indian Navy fleet. Today, in New Delhi, at a press conference in response to a question regarding another indigenous aircraft carrier, the Vice Chief of the Indian Navy Vice Admiral SN Ghormade said: "Deliberations are on over it."

### Larger tonnage carrier 'Vishal'

Will be indigenously built together with the Indian Navy, at the Cochin Shipyard in Kochi, and the Indian industry. The Indian Navy wants it to have catapults for launching aircraft – and it plans to install ultra-modern electromagnetic installations in collaboration with the Americans. The planes will not be ready immediately following the order, though RFI formally specifies tight deadlines – to begin aircraft deliveries within three years of contract signing and to deliver 26 aircraft over the next three years. This implies — the highest development rates (for aircraft modifications created specifically for MRCBF) and the highest production rates.

There is also a probability that the Navy needs to buy it now because the era of fourth-generation fighters is slowly fading away. Production of the F / A-18E / F Super Hornet deck carrier and French Rafale M may close in this decade itself. And the indigenous fighters from Hindustan Aeronautics Limited (HAL) are not expected to be ready for another few years.

#### So what is the way forward?

The F / A-18E / F Super Hornet deck carrier and French Rafale M have already undergone testing and are awaiting the Indian Navy's decision, which according to the VCNS is expected soon. According to sources, the final decision as has been reported by the Financial Express Online is expected to be announced before the year ends. The Indian Navy has a tough decision to take as the selected aircraft can be used for both `Vikrant' and `Vishal' carriers. Fitting Hornets and Rafales into Vikrant may be of a challenge as it was built for operating MiG-29K's.

It will take a lot of time to master the machines, which will include training on the ground on aircraft carrier simulators simulating take-offs from ground-based catapults and landings on arresters. "It would be ideal if the Vishal fighters could also be operated on existing aircraft carriers – judging by the RFI, the Indians would be happy to receive an aircraft capable of taking off both from a ski jump and from a catapult," a naval officer explained. The F/A-18E/F Super Hornet and the French Rafale M have potentially good chances that "Vishal" will almost certainly be equipped with them. It is possible that the aircraft carrier itself will be developed in cooperation with the US or French shipbuilders and engineers.

#### **Boeing Team in India to pitch Super Hornet**

In New Delhi on Wednesday (August 24, 2022), Boeing team headed by SalilGupte, India president pitched the Super Hornets Block III for the aircraft carrier. He told the media along with heads of three other US based Companies – General Electric, Raytheon and Northrop Grumman, that the US Navy depends on the Super Hornet Block III for its operational requirements.

On the delivery date, once the contract is inked, Alain Garcia, vice president, India Business Development, Boeing Defense, Space and Security and Global Services, told the media the delivery usually starts in a time frame of three years. Another top Boeing official however said that the delivery of the aircraft could be earlier than the three years, depending on the requirement of the Indian Navy.

#### Rafale-M Vs F/A-18 Super Hornet

Both these fighter aircraft are designed to operate from aircraft carriers which have catapult mechanisms. Financial Express Online had reported that once down selected minor modifications will have to be made to the IAC `Vikrant'. While the US Company has offered its electronic warfare version which is a twin seater, the French Rafale-M is a single seater. The size of the aircraft will also be considered when the down selection process starts. At any given time the new aircraft carrier can hold 30 aircraft — (fighters + helicopters).

https://www.financialexpress.com/defence/why-does-the-indian-navy-need-new-fighterjets/2644365



गुरुवार, 25 अगस्त 2022

# भारत को बदलनी होगी अपनी चीन नीति, ड्रैगन के अड़ियल रुख के कारण ही द्विपक्षीय वार्ता में नहीं मिली सफलता

### डा. अभिषेक श्रीवास्तव

पिछले सात दशकों से भारत-चीन संबंध उतार-चढ़ाव भरे रहे हैं। भारत के तमाम शांति प्रयासों के बावजूद चीन द्वारा भारतीय सीमाओं और हितों पर चोट करना लगातार जारी है। जून 2020 में गलवन घाटी में हुई झड़प ने दोनों देशों के बीच कड़वाहट को और गहरा कर दिया है। चाहे 1962 का युद्ध हो और उसके पश्चात सीमा विवाद के समाधान के प्रयास हों या संयुक्त राष्ट्र सुरक्षा परिषद में भारत के स्थायी सदस्य बनने का, चीन लगातार अड़ियल रुख अपनाए हुए है। चीन हिंद महासागर में 'स्ट्रिंग आफ पर्ल्स' नीति के तहत भारत के चारों तरफ अपने सैन्य अड्डे का विस्तार करता रहा है। इसके साथ ही वैश्विक आतंकवाद के विरुद्ध भारत के प्रस्तावों पर भी रोड़ा लगाता रहा है। इससे चीन की नई दिल्ली के प्रति दुर्भावना स्पष्ट रूप से प्रकट होती है। चीन के अड़ियल रुख के कारण ही द्विपक्षीय स्तर पर लगातार वार्ता के बाद भी भारत-चीन के बीच सीमा विवाद मामले में कोई सफलता प्राप्त नहीं हो रही है। अब यह साफ है कि वह सीमा विवाद सुलझाने का इच्छुक ही नहीं।

गलवन में हुई झड़प के बाद 16 दौर की सैन्य वार्ता और अन्य मंचों पर द्विपक्षीय वार्ताओं के बाद भी सीमा पर तनाव की स्थिति में कोई विशेष बदलाव नहीं आया है। भारत लगातार कह रहा है कि समग्र द्विपक्षीय संबंधों में प्रगति के लिए सीमा पर शांति एवं स्थिरता पूर्व शर्त है। इसके बाद भी पूर्वी लद्दाख में टकराव वाले सभी स्थानों में चीन अपनी सैन्य उपस्थिति बनाए हुए है। यह स्थिति चीन द्वारा संबंध सुधार के दावों को पूरी तरह खोखला साबित करती है। चीन द्वारा हिंद महासागर क्षेत्र में अंतरराष्ट्रीय नियमों और छोटे देशों की संप्रभुता का उल्लंघन जारी है। यह क्षेत्रीय अशांति का कारण बन रहा है। हिंद महासागर के अफ्रीकी देश जिबूती में चीन द्वारा 2016 से नौसैनिक अड्डा का निर्माण किया जा रहा है , जिससे स्वेज नहर से आने जाने वाले व्यापारिक जहाजों पर चीन को रणनीतिक बढ़त हासिल हो सकती है। यह हिंद महासागर में भारतीय हितों के विपरीत है। हाल में भारत की आपत्तियों के बावजूद चीन का जासूसी जहाज 'युआन वांग 5' श्रीलंका के हंबनटोटा द्वीप पर गया , जबकि श्रीलंका के विदेश मंत्रालय ने आधिकारिक अनुमति भी नहीं दी थी। चीन के जासूसी जहाज का इस क्षेत्र में आना भारत-चीन संबंधों के गिरते ग्राफ को ही दर्शाता है।

अनेक वैश्विक मुद्दों पर भारत-चीन में आम सहमति नहीं है। वैश्विक आतंकवाद के विरुद्ध युद्ध में चीन द्वारा भारत के प्रयासों में बार-बार रोड़ा अटकाया जा रहा है। पिछले दिनों भारत और अमेरिका ने संयुक्त राष्ट्र सुरक्षा परिषद में अब्दुल रहमान मक्की को वैश्विक आतंकी घोषित करने का प्रस्ताव रखा, लेकिन चीन ने मक्की को सूचीबद्ध करने के प्रस्ताव पर 'तकनीकी रोक' लगा दी। यही हरकत उसने एक अन्य आतंकी अब्दुल रउफ अजहर के मामले में भी की। गलवन की घटना के बाद स्थितियां काफी बदल गई हैं। भारत में चीनी विरोध की लहर चल रही है। भारत सरकार द्वारा सैकड़ों चीनी एप को प्रतिबंधित किया गया है। अब भारत को वर्तमान अंतरराष्ट्रीय परिस्थितियों को ध्यान में रखते हुए अपनी चीन नीति का समग्र विश्लेषण करना चाहिए और उसमें बुनियादी बदलाव लाना चाहिए। हाल में भारतीय विदेश मंत्री एस जयशंकर ने यह चिंता प्रकट की कि बीजिंग ने भारत-चीन सीमा पर जो किया, उसके बाद दोनों देशों के बीच संबंध 'बेहद कठिन दौर' से गुजर रहे हैं। यदि दोनों देश हाथ नहीं मिला सके तो यह क्षेत्र एशिया की सदी बनने से चूक जाएगा।

द्वितीय विश्व युद्ध के बाद से वैश्विक राजनीति आजकल अपने सबसे अनिश्चित दौर में है। कुछ विश्लेषक शी चिनफिंग के नेतृत्व वाले चीन की तुलना हिटलर के नेतृत्व वाले जर्मनी से कर रहे हैं। चीन की विस्तारवादी नीतियों ने हिंद-प्रशांत क्षेत्र को अशांत कर दिया है। चीन द्वारा अपने पड़ोसी देशों के क्षेत्रों पर दावा करना और अंतरराष्ट्रीय समुद्री सीमाओं एवं कानूनों के लगातार उल्लंघन से इस क्षेत्र में अशांति और युद्ध की आशंका प्रबल होती जा रही है। ऐसी परिस्थितियों को ध्यान में रखते हुए भारत को चीन के प्रति अपनी नीति में कुछ बड़े बदलाव करने की आवश्यकता है।

भारत को व्यापक वैश्विक समर्थन हासिल करना चाहिए , जिससे चीन की वैश्विक पहुंच को संतुलित किया जा सके। भारत को अपने अन्य सहयोगियों के साथ मिलकर हिंद-प्रशांत क्षेत्र की सुरक्षा में और सक्रिय होना चाहिए। इसके साथ वैश्विक एवं क्षेत्रीय आपूर्ति चेन को नियमित रखने के प्रयासों पर लगातार ध्यान देना चाहिए , जिससे चीन की व्यापारिक तानाशाही को नियंत्रित किया जा सके। क्षेत्रीय आपूर्ति चेन के लिए नए सिरे से विचार करना चाहिए , जिसमें दक्षिण एशिया और दक्षिण पूर्व एशिया के देशों को मिलकर एक आर्थिक गलियारे के निर्माण पर विचार करना चाहिए।

ताइवान मुद्दे पर चीन लगातार विश्व के सभी देशों से 'वन चाइना पालिसी' पर समर्थन मांग रहा है। यदि चीन को 'वन चाइना पालिसी' की वैधता की चिंता है तो उसे अपने पड़ोसी देशों की संप्रभुता का भी सम्मान करना चाहिए। चीन को भारत की जमीन पर अपनी अनधिकृत उपस्थिति को समाप्त करते हुए भारत की संप्रभुता और हिंद-प्रशांत क्षेत्र को खुला एवं मुक्त रखने में सहयोग करना चाहिए।

यह उल्लेखनीय है कि भारत ने 2010 के बाद से अब तक एक बार भी आधिकारिक मंचों से 'वन चाइना पालिसी' का जिक्र नहीं किया है। यह चीन के लिए चिंता का कारण बनता जा रहा है। अब समय आ गया है कि भारत यह स्पष्ट करे कि वह इन-इन कारणों से इस नीति का समर्थन नहीं कर सकता। यदि चीन को भारत की संवेदनशीलता की परवाह नहीं तो फिर भारत को भी उसकी संवेदनशीलता की चिंता करना छोड़ देना चाहिए। इसी तरह यदि चीन द्वपक्षीय समझौतों का पालन नहीं कर रहा है तो फिर भारत को भी यह स्पष्ट करना होगा कि वह उन्हें मानने के लिए बाध्य नहीं, क्योंकि ताली एक हाथ से नहीं बज सकती।

<u>https://www.jagran.com/editorial/apnibaat-india-will-have-to-change-its-china-policy-due-to-</u> <u>the-stubborn-stance-of-the-dragon-there-was-no-success-in-bilateral-talks-23012777.html</u>

## **Science & Technology News**



Ministry of Science & Technology

Thu, 25 Aug 2022 2:56 PM

## Newly Identified Gene Could be Clue to Treatment of Fungal Infection in Immuno-Compromised Patients

A newly identified gene can hold the key to prevent fungal infection Candidiasis that often affects intensive-care unit (ICU) patients, cancer patients and patients receiving immunosuppressive therapy. The gene called *CSA6* has been identified in *Candida albicans* a fungal species infamous for causing high rates of morbidity and mortality under certain immuno-compromised conditions such as AIDS or during cancer treatment. The fungal species residing in mucosal linings of the gastrointestinal and urogenital tract of healthy individuals turns into a pathogen under immuno-compromised conditions breaching the host defense causing superficial as well as life-threatening systemic infection.



Contrasting aberrant mitotic spindle structures upon Csa6 overexpression (left) and depletion (right) in the elongated bud cells of Candida albicans.

In a recent collaborative study between Professor KaustuvSanyal's group at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore, India and Christophe d'Enfert's group at Institut Pasteur, Paris, France (Jaitly et al, 2022), authors carried out a large-scale screen to identify regulators of chromosome stability in *C. albicans*, a clinically relevant fungal model system.

The authors from JNCASR, an autonomous institute of Department of Science and Technology (DST), individually screened the effect of overexpression of more than a thousand genes of C. *albicans* on genome stability and were successful in identifying set of а six chromosome stability (CSA) genes that are important for maintaining genome integrity. While five of the CSA genes identified in the study are known to be important for cell division in other species, the sixth CSA gene, named CSA6 encoded for a protein that is essential for viability in C. albicans. They found that Csa6 was a critical regulator of cell cycle progression wherein both overexpression and deletion of Csa6 lead to reduced growth of C. albicans cells.

The study published in the journal *Nature Communications* represents the first-ever report of such an extensive screen in the human fungal pathogen *C. albicans*. It identifies and elucidates the functions of a novel regulator of chromosome stability that is exclusively present in a group of medically relevant human fungal pathogens. Besides, it also provides a systematic scheme for identifying genes whose products may serve as potential therapeutic interventions for fungal infections by posing lesser adverse effects on humans. Hence, small molecule modulators that alter expression levels of the gene called Csa6 offer potential avenues for treatment with no side effects in humans.

https://pib.gov.in/PressReleasePage.aspx?PRID=1854357

# **Business Standard**

Fri, 26 Aug 2022

### India Poised to Become Next Global SaaS Capital, Says EY-CII Study

The Indian software-as-a-services (SaaS) market is expected to grow multi-fold by 2025, accounting for almost 7 to 10 per cent of the global market from 2 to 4 per cent currently, said a report. According to a study by EY and CII titled "India: The next global SaaS capital", India is poised to become the next SaaS capital over the next few years, mainly driven by small and medium businesses with a focus on large enterprises.

The report also stated that according to industry estimates, the market is expected to reach \$20-25 billion by 2025 from \$4-7 billion in 2020.

"Macro-economic environment notwithstanding, the funding activity in the first two quarters of this year surpassed the funding activity in 2021 – which was a breakout year with over \$4.3 bn in funding for SaaS start-ups", said Nitin Bhatt, Technology Sector Leader at EY.

Almost 50% of SaaS providers interviewed in the study stated that driving higher awareness for SaaS products continues to be a prerequisite for customer acquisition, EY said in a statement.

"As entrepreneurs double down on scaling their ventures, they would do well to sharpen the focus on account centricity, customer success and partner with educational institutions and the government to build a SaaS talent pipeline and continue investing in product functionality and innovation", added Bhatt.Compared to only 1 SaaS unicorn in 2018, India now has a total of 18, taking the third spot among the largest SaaS ecosystems in the world. The study also highlights that India more than doubled the number of its SaaS companies in 2021 in contrast to 2019. Further, funding has increased from \$2.6 billion to \$6 billion in the span of these two years, stated EY.

<u>https://www.business-standard.com/article/economy-policy/india-poised-to-become-next-global-saas-capital-ey-cii-study-122082501159\_1.htm</u>

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