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समाचार पत्रों से चयनित अंश
Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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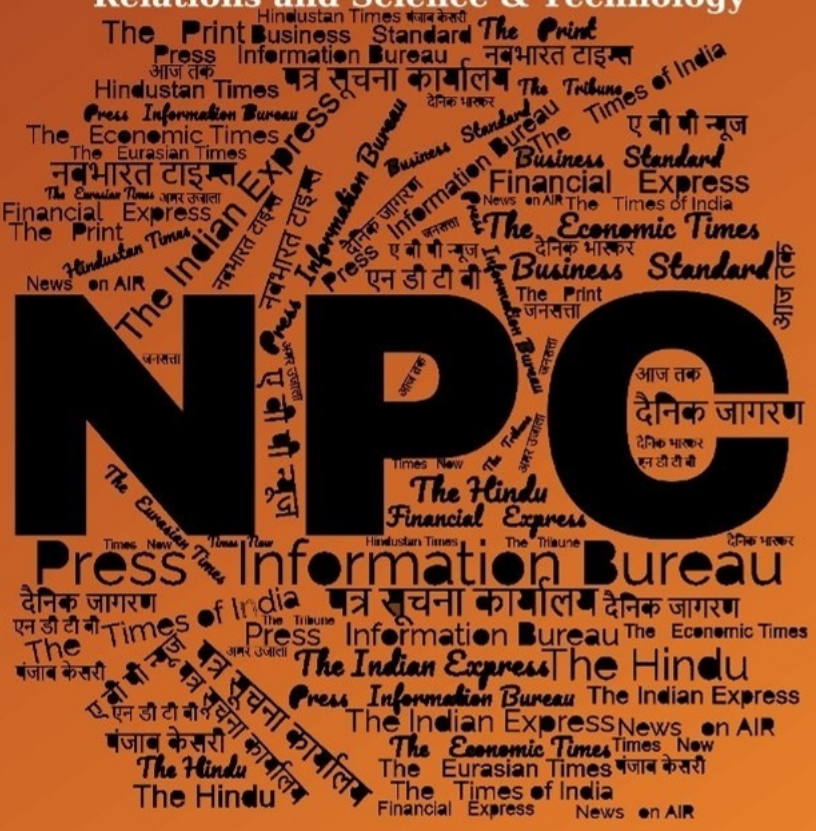

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Defence News

भारत में वैश्विक केंद्र बनाने की क्षमता

Source: Jansatta, Dt. 26 Nov 2025

जनसत्ता ब्यूरो
नई दिल्ली, 25 नवंबर।

रक्षा मंत्री राजनाथ सिंह ने वैश्विक रक्षा कंपनियों से भारत के जीवंत जहाज निर्माण उद्योग में अवसरों का लाभ उठाने और अगली पीढ़ी की समुद्री क्षमताओं का सह-विकास करने का मंगलवार को आह्वान किया। एक कार्यक्रम में अपने संबोधन में सिंह ने कहा कि भारत में जहाज निर्माण, जहाज मरम्मत और समुद्री नवाचार का वैश्विक केंद्र बनने की क्षमता है क्योंकि भारतीय जहाज निर्माण उद्योग पहले ही विमानवाहक पोत, अनुसंधान पोत और वाणिज्यिक जहाज बना चुका है। उन्होंने कहा कि भारत को जो चीज वास्तव में अलग बनाती है, वह है इसका एकीकृत जहाज निर्माण पारिस्थितिकी तंत्र। उन्होंने कहा कि भारत को वास्तव में अलग बनाने वाला इसका एकीकृत जहाज निर्माण पारिस्थितिकी तंत्र है।

सिंह ने कहा कि अवधारणा डिजाइन और माड्यूलर निर्माण से लेकर रखरखाव, मरम्मत तक, जहाज निर्माण प्रक्रिया का हर चरण स्वदेशी रूप से विकसित और क्रियान्वित किया जाता है। रक्षा मंत्री ने कहा कि भारतीय जहाज निर्माण उद्योग, जिसमें 'उत्साही' सार्वजनिक क्षेत्र के उपक्रम और 'गतिशील' निजी क्षेत्र के साझेदार शामिल हैं, क्षेत्रीय और वैश्विक स्तर पर राष्ट्रीय हितों की रक्षा करता है। उन्होंने कहा कि भारत न केवल जहाज, बल्कि विश्वास, न केवल साजो सामान, बल्कि साझेदारियां बनाकर 'समुद्री सदी' को आकार देने में मदद के लिए तैयार है।

सिंह ने कहा कि भारत का जहाज निर्माण पारिस्थितिकी तंत्र अनेक विश्वस्तरीय प्लेटफार्म की ताकत पर टिका है जो तकनीकी परिपक्वता और औद्योगिक गहराई को प्रतिबिंबित करते हैं। उन्होंने बताया कि भारत के पहले स्वदेशी विमानवाहक पोत आइएनएस विक्रांत, कलवरी श्रेणी की पनडुब्बियां और स्टील्थ फ्रिगेट (रडार को चकमा देने में सक्षम पोत) और विध्वंसक जहाज जैसी प्रमुख परियोजनाएं न केवल देश की नौसैनिक ताकत को रेखांकित करती हैं, बल्कि डिजाइन क्षमता और स्वचालन को भी बढ़ाती हैं। सिंह ने कहा कि हम विमानवाहक पोतों से लेकर उन्नत अनुसंधान पोतों और ऊर्जा-कुशल वाणिज्यिक जहाजों तक की आपूर्ति करने में सक्षम हैं। यह एकीकृत क्षमता भारत को आने वाले दशक में जहाज निर्माण, जहाज मरम्मत और समुद्री नवाचार का वैश्विक केंद्र बनने के लिए मजबूती से तैयार करती है।

सिंह रक्षा उत्पादन विभाग की ओर से आयोजित संगोष्ठी 'समुद्र उत्कर्ष' में मुख्य भाषण दे रहे थे, जिसमें भारतीय जहाज निर्माण उद्योग की क्षमताओं को प्रदर्शित किया गया। उन्होंने उद्योग के हितधारकों, विदेशी साझेदारों, प्रतिनिधियों और सशस्त्र बलों के अधिकारियों से कहा कि हजारों एमएसएमई द्वारा समर्थित शिपयार्ड शृंखला बनाई गई है।

'भारत रक्षा नवाचार के स्वर्णिम युग में प्रवेश कर रहा'

रक्षा मंत्री राजनाथ सिंह ने मंगलवार को कहा कि तेजी से बदलती दुनिया और भू-राजनीति के बीच, भारत को प्रतिक्रियावादी दृष्टिकोण से आगे बढ़कर खुद को भविष्य के लिए तैयार करने के वास्ते सक्रिय दृष्टिकोण अपनाना होगा। सिंह ने नवाचार और स्वदेशीकरण पर नौसेना के प्रमुख कार्यक्रम 'स्वावलंबन 2025' में अपने संबोधन में कहा कि भारत 'रक्षा नवाचार के स्वर्णिम युग' में प्रवेश कर रहा है। सिंह ने यहां मानेकशा सेंटर में आयोजित कार्यक्रम में कहा कि रक्षा क्षेत्र में हमें बड़े पैमाने पर, अधिक साहस के साथ और तेज गति से आगे बढ़ना होगा। सिंह ने निजी क्षेत्र से आग्रह किया कि वे केवल मुनाफा कमाने तक सीमित न रहें, बल्कि 'मुनाफे के साथ-साथ राष्ट्रहित' को भी ध्यान में रखें।

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Rajnath seeks global collaboration for boosting maritime capabilities

Source: The Hindu, Dt. 26 Nov 2025

Defence Minister Rajnath Singh on Tuesday (November 25, 2025) urged international partners to collaborate with India in developing next-generation maritime capabilities, highlighting the country's advancing shipbuilding ecosystem. Delivering the keynote address at Samudra Utkarsh, a seminar organised by the Department of Defence Production in Delhi, he asked global stakeholders to tap into India's potential in co-building sustainable technologies and resilient supply chains for an innovative, inclusive and secure maritime future.

The Minister said India was ready to help shape the "maritime century" by "building not only ships, but trust; not only platforms, but partnerships." He highlighted India's integrated end-to-end shipbuilding ecosystem, where every stage – from concept design and modular construction to outfitting, repairs and full lifecycle support – is indigenously developed and executed. This ecosystem, he noted, is powered by public and private shipyards supported by thousands of MSMEs that form a strong value chain.

Mr. Singh pointed to India's world-class platforms – such as the first indigenous aircraft carrier INS Vikrant, Kalvari-class submarines, and a variety of stealth frigates and destroyers – as evidence of the nation's growing technological maturity, design capability and systems integration expertise. He highlighted India's rise in the global commercial and dual-use maritime sector, noting the production of high-end passenger vessels, coastal ferries, pollution-control and research ships, and the world's most advanced deep-sea mining support vessel for ISRO and the National Institute

of Ocean Technology. The Minister commended the private sector for emerging as a force multiplier by building green-fuel vessels, LNG carriers, Ro-Ro ships and energy-efficient commercial platforms for domestic and international clients. This comprehensive capability, he said, positions India to become a major global hub for shipbuilding, ship repair and maritime innovation in the coming decade.

He emphasised that every ship currently under construction for the Indian Navy and Coast Guard is being built in Indian shipyards, reaffirming the vision of 'Aatmanirbhar Bharat'. This growth, he said, is supported by forward-looking reforms, including Maritime India Vision 2030, Maritime Amrit Kaal Vision 2047, the Defence Production & Export Promotion Policy, and the Defence Procurement Manual 2025. Mr. Singh said the Navy now has 262 indigenous design and development projects under progress, with some shipyards nearing 100% indigenous content, ensuring minimal supply-chain disruptions. He expressed confidence that India's commercial fleet too would soon be fully built domestically, supported by modern fabrication lines, digital shipyard technologies and automated design tools.

Highlighting India's role in the emerging Blue Economy, he noted that Indian shipyards produce specialised vessels for marine research, ecosystem monitoring, fisheries management and maritime law enforcement. He also emphasised India's shift toward green and sustainable shipbuilding practices, positioning it as a contributor to climate-resilient maritime growth. Citing humanitarian missions such as Operation Samudra Setu, Operation Brahma, and INS Vikrant's medical evacuation from MV Heilan Star, he said these operations demonstrate that Indian-built ships protect maritime borders, save lives and strengthen global maritime stability.

In another event, addressing start-ups, MSMEs, academia, industry partners and venture capitalists at the fourth edition of the Indian Navy's Swavlamban seminar in Delhi, he stressed the need for India to stay proactive and future-ready in a rapidly changing geopolitical environment. He credited innovators for delivering path-breaking solutions and helping India emerge as a builder, creator and leader, rather than merely a buyer. Mr. Singh said India is entering a "golden era of defence innovation", driven by young entrepreneurs and innovators who are combining economic strength, strategic thinking and technological advancement.

https://www.thehindu.com/news/national/rajnath-seeks-global-collaboration-on-indias-shipbuilding-sector/article70322643.ece

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Trishakti Corps adopts AMAR training

Source: The Pioneer, Dt. 26 Nov 2025

Trishakti Corps has commenced intensive AMAR (Army Martial Arts Routine) training at altitudes exceeding 14,000 ft, significantly enhancing close-combat readiness in some of the most demanding operational zones along the Northern Borders. Conducted amid sub-zero temperatures, rarefied air, and rugged terrain, this training prepares soldiers to respond effectively even when conventional weapons are not imm-ediately available. AMAR is a modern combat system that blends traditional Indian martial arts with globally proven close-combat techniques. The regimen covers bare hand engagements, weapon-based combat, stress response control and comprehensive physical mental conditioning all critical for high-altitude operations.

A young officer participating in the training shared his experience: “At 14,000 ft, the mountains challenge your stamina, focus and resolve. AMAR helps us stay calm under pressure and gives us the confidence that even without a weapon in hand, we are fully prepared for any close quarter threat.” The training enhances reflexes, balance, stamina, situational awareness and controlled aggression essential attributes for success in close-quarters battle in mountainous terrain. In simple words, AMAR ensures every soldier of the Indian Army becomes a weapon - ready to fight and win, anytime, anywhere.

https://www.dailypioneer.com/2025/india/trishakti-corps-adopts-amar-training.html

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हथियार न होने पर भी जवान अब करीबी खतरे को करेंगे नेस्तनाबूद

Source: Dainik Jagran, Dt. 26 Nov 2025

नई दिल्ली, प्रेट्र : भारतीय सेना की त्रिशक्ति कोर ने 14 हजार फीट से अधिक की ऊंचाई पर आर्मी मार्शल आर्ट्स रूटीन (अमर) युद्ध प्रशिक्षण शुरू किया है। इसका उद्देश्य उत्तरी सीमा पर सबसे मुश्किल पहाड़ी क्षेत्रों में हाथ में हथियार न होने पर भी किसी भी करीबी खतरे को नेस्तनाबूद करने के लिए जवानों की पूरी तरह तैयार करना है। यह प्रशिक्षण शून्य से नीचे के तापमान और दुर्गम इलाकों में आयोजित किया जाता है जो सैनिकों को हथियार तुरंत उपलब्ध न होने की स्थिति में दुश्मन को जवाब देने की क्षमता देता है।

पीआरओ डिफेंस के अनुसार, ‘अमर’ एक आधुनिक युद्ध प्रणाली है जो पारंपरिक भारतीय मार्शल आर्ट को ‘क्लोज-कॉम्बैट टेक्नीक’ के साथ सामंजस्य स्थापित करता है। इसमें नंगे हाथों से मुकाबला, हथियार से लड़ाई, तनाव की स्थिति में नियंत्रित रहना और पूरी फिजिकल और मेंटल कंडीशनिंग शामिल है।

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ऑपरेशन सिंदूर के बाद बड़ी ब्रह्मोस की मांग, चार हजार करोड़ का सौदा जल्द

Source: Dainik Jagran, Dt. 26 Nov 2025

नई दिल्ली, एएनआइ: आपरेशन सिंदूर में ब्रह्मोस की मारक क्षमता साबित होने के बाद दुनियाभर के देश इसे अपने हथियारों में शामिल करने पर गंभीरता से विचार करने लगे हैं। इसके चलते भारत जल्द ही करीब 45 करोड़ डालर (करीब चार हजार करोड़ रुपये) के ब्रह्मोस सुपरसोनिक क्रूज मिसाइलों के निर्यात सौदों को अंतिम रूप दे सकता है। यह सौदा केंद्र सरकार की रक्षा निर्यात बढ़ाने की रणनीति को मजबूत करने वाला साबित हो सकता है। संयुक्त रूप से डीआरडीओ और रूस द्वारा विकसित ब्रह्मोस मिसाइल ने हालिया आपरेशन सिंदूर में अत्यधिक सटीकता के साथ कई पाकिस्तानी एयरबेस को निशाना बनाकर अपनी

- रक्षा निर्यात बढ़ाने की रणनीति को मजबूत करने वाला साबित हो सकता है सौदा
- रक्षा मंत्रालय ने नौसेना और वायुसेना के लिए ब्रह्मोस की बड़ी खरीद को दी है मंजूरी

क्षमता का प्रदर्शन किया था, जिसके बाद कई मिसाइल-खरीदार देशों की दिलचस्पी तेजी से बढ़ी है। रक्षा सूत्रों के मुताबिक, "करीब 45 करोड़ डालर मूल्य के सौदे अंतिम चरण में हैं और जल्द ही इन पर हस्ताक्षर होने की उम्मीद है। कई अन्य देशों ने भी ब्रह्मोस में गहरी रुचि दिखाई है, जिससे आगे और अनुबंध होने की संभावना है।" दुबई एयर शो में मिसाइल के प्रदर्शन ने भी कई संभावित खरीदार देशों का ध्यान आकर्षित किया। आपरेशन सिंदूर के बाद रक्षा मंत्रालय ने नौसेना व वायुसेना के लिए ब्रह्मोस की बड़ी मात्रा में खरीद को मंजूरी दी। मिसाइल का उपयोग पाकिस्तानी एयरबेस और सेना ठिकानों पर अत्यधिक सटीक प्रहारों में किया गया, जिससे कई सैन्य ढांचे लंबे समय तक निष्क्रिय रहे। वायुसेना इसे अपने सुखोई-30 एमकेआइ लड़ाकू बेड़े पर एकीकृत कर रही है।

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India's carrier fleet at crossroads as China accelerates naval expansion

-by Dinakar Peri (Fellow, Security Studies at Carnegie India)

Source: The Pioneer, Dt. 26 Nov 2025

On 5 November, China commissioned its third aircraft carrier, Fujian, at its home port in Sanya on Hainan Island in the presence of President Xi Jinping. Displacing 80,000 tonnes, the carrier is capable of launching fifth-generation J-35 fighter jets and KJ-600 Airborne Early Warning and Control aircraft using the Electromagnetic Aircraft Launch System (EMALS). This marks a significant moment in global carrier aviation and shipbuilding.

At the same time, China is rapidly constructing a fourth aircraft carrier-a nuclear-powered supercarrier equipped with an EMALS system. In contrast, India, despite its long history of carrier aviation, inducted its first Indigenous Aircraft Carrier (IAC-I), INS Vikrant, only in September 2022, while the next indigenous carrier is yet to take shape. Until now, the United States was the only country to have deployed EMALS, on the Gerald R Ford-class carrier. However, it has faced major issues with the reliability of both the catapults and the weapons elevators. Commissioned in 2017, the Ford undertook its first combat deployment only in 2023. Three more carriers of this class, intended to replace the ageing Nimitz-class, are under various stages of construction. The Ford currently operates F-18s and not the fifth-generation F-35s. Amid these delays, in late October, US President Donald Trump stated that he intended to sign an executive order requiring steam-

powered catapults and hydraulic elevators on future carriers. The order has not been issued, but the remark highlights the continuing teething troubles. China, meanwhile, appears to have resolved similar challenges by directly adopting EMALS and bypassing steam catapults.

China's pace of shipbuilding is unmatched. The People's Liberation Army Navy (PLAN) is already the world's largest fleet numerically, with more than 370 platforms, and is projected to field about 435 ships by 2030. China's first carrier, Liaoning, was commissioned in 2012; the second, Shandong, was launched in 2017 and commissioned in 2019; and Fujian was launched in 2022. In January this year, China also unveiled its first Type 076 amphibious assault ship, displacing more than 40,000 tonnes-roughly the size of a medium carrier — and capable of launching fixed-wing aircraft.

India's Navy, which has decades of experience in carrier operations, currently operates two mid-sized carriers-INS Vikramaditya and INS Vikrant. However, both carriers face a shortage of fighter jets. This has been a persistent irony: earlier, India had jets but no carrier; now it has two carriers but insufficient aircraft to operate from both simultaneously. Unless urgent decisions are taken, the cycle is likely to continue. Work on the Indigenous Aircraft Carrier (IAC-I) began with design efforts in 1999. The keel was laid in 2009, and the ship was launched in 2013 as Vikrant, named after India's first aircraft carrier, which was decommissioned in 1997. The project represented a steep learning curve in carrier design and construction.

Speaking aboard INS Vikrant on Diwali, Prime Minister Narendra Modi said the ship represents Bharat's military strength, noting that even its name had caused concern in Pakistan in recent months. Soon after Vikrant entered service, the Navy proposed IAC-II, conceived as a repeat of the current design with modest upgrades, at an estimated cost of `40,000 crore. The Defence Procurement Board examined the proposal in September 2023, but no progress has been made since. Cochin Shipyard Limited, which built Vikrant, has stated that a similar carrier would take 8-10 years to construct.

A critical misconception must be corrected: IAC-II will not serve as India's third operational carrier. By the time it is inducted, INS Vikramaditya will be nearing the end of its service life. Former Navy Chief Admiral R. Hari Kumar acknowledged this during Aero India 2023, stressing that an aircraft carrier is central to command and control of maritime operations and to projecting power on land, at sea, and in the air. A carrier remains the ultimate instrument of power projection. Sea control is essential for India, as sea denial occurs only during wartime. Earlier, the Navy envisioned IAC-II as a larger 65,000-tonne carrier with a steam catapult system and possibly electric propulsion. However, such a design would involve a long developmental timeline and higher technological risks. This was one reason the Navy shifted to the more practical option of repeating the Vikrant design.

The Technology Perspective and Capability Roadmap (TPCR) 2025, released recently, lists several capabilities for future development and procurement, including an aircraft carrier, an Automatic Carrier Landing System, two EMALS systems, restraining and arresting gear, nuclear propulsion for future carriers and large warships, among other technologies. However, most of these systems will not be ready in time for IAC-II and are more appropriate for a future IAC-III.

The Fighter Aircraft Crisis

Both Indian carriers currently operate MiG-29K jets. Fewer than 40 of the 45 aircraft procured from Russia remain in service. Because the refurbishment of Vikramaditya was delayed, the jets operated from shore until 2013. Since induction, the MiG-29K fleet has faced persistent technical

issues and low availability rates. Their phase-out is scheduled to begin in 2034. Given these limitations, the Navy issued a tender in 2017 for 54 carrier-borne fighter aircraft. This was later reduced to 26 after DRDO proposed developing the indigenous Twin Engine Deck-Based Fighter (TEDBF), building on experience from the Naval Light Combat Aircraft programme. At DefExpo 2022, officials announced an ambitious schedule aiming for induction around 2035. However, there is still no clarity on the programme, as formal project approval remains pending.

In April, India signed a nearly `64,000-crore Inter-Governmental Agreement with France for 26 Rafale-M fighters: 22 single-seat carrier-capable jets and four twin-seat trainers, which cannot operate from carriers. Deliveries are expected between mid-2028 and 2030. However, by the early 2040s, the Navy may again face a shortage of aircraft if the MiG-29K phase-out proceeds on schedule. The alternative would be to retain some ageing jets in service, similar to how the Indian Air Force extended the life of the MiG-21 fleet.

Given the current trajectory, this goal remains distant. Further delays in decision-making could risk India losing the hard-earned capability of designing, constructing, and operating carriers, similar to the setback in submarine building experienced in the 1980s. This situation calls for a three-fold plan. First, accelerate the construction of IAC-II without further delays or procedural hurdles. Second, urgently advance the development of the TEDBF, given the significant time required to design, test, and operationalise a carrier-borne fighter. Third, based on progress in the first two areas, plan and synchronise the development of critical technologies-such as nuclear or electric propulsion and EMALS-for a future larger carrier that can operate indigenous fighters.

The Indo-Pacific region is expected to be crowded with aircraft carriers within a decade. For India to maintain its strategic relevance and maritime edge well into the 2040s, the time to plan, prioritise, and act is now.

https://www.dailypioneer.com/2025/columnists/india-s-carrier-fleet-at-crossroads-as-china-accelerates-naval-expansion.html

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India-Nepal joint military exercise begins in Uttarakhand

Source: The Pioneer, Dt. 26 Nov 2025

The 19th edition of the India-Nepal bilateral military exercise, ‘Suryakiran’, began in Uttarakhand’s Pithoragarh on Tuesday with an aim to strengthen battalion-level synergy in jungle warfare, counter-terrorism operations in mountainous terrain, and integrated ground-aviation operations, the defence ministry said.

The Indian contingent, consisting of 334 personnel, is being represented mainly by troops from the Assam Regiment, while the Nepal side is being represented by 334 troops from the Devi Datta Regiment. The aim of the exercise, which will conclude on December 8, is to jointly rehearse the conduct of sub-conventional operations under Chapter VII of the United Nations Mandate, the defence ministry said in a statement.

“The scope of the exercise is to strengthen battalion-level synergy in jungle warfare, counter-terrorism operations in mountainous terrain, humanitarian assistance and disaster relief (HADR), medical response, environmental conservation and integrated ground-aviation operations,” it said.

This edition of the exercise will focus on incorporating niche and emerging technologies, including Unmanned Aerial Systems, drone-based ISR, AI-enabled decision support tools, unmanned logistic vehicles and armoured protection platforms, enabling both the armies to refine and adapt tactics, techniques and procedures for operating in a counter-terrorism environment aligned to prevailing global dynamics.

Collective efforts will focus on achieving an enhanced level of interoperability among the troops and reducing the risk of life and property loss while keeping the interests and agenda of the UN at the forefront during peacekeeping operations, the ministry said.

Both sides will exchange views and practices of joint drills on a wide spectrum of combat skills.

Sharing of best practices will further enhance the level of defence cooperation between the two armies. The exercise will also foster strong bilateral relations between the two neighbouring nations, the statement said.

https://www.dailypioneer.com/2025/india/india-nepal-joint-military-exercise-begins-in-uttarakhand.html

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India and Morocco discuss strengthening maritime ties

Source: The Pioneer, Dt. 26 Nov 2025

A top official of the Royal Moroccan Navy held a bilateral meeting with Navy Chief Admiral Dinesh K Tripathi to explore avenues for enhancing naval engagement, structured training exchanges and collaboration in maritime domain awareness, officials said on Tuesday.

https://www.dailypioneer.com/2025/india/india-and-morocco-discuss-strengthening-maritime-ties.html

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Troop shortfall, Army looks to raise Agniveer vacancies to 1 lakh a year

Source: The Indian Express, Dt. 26 Nov 2025

In a bid to reduce a shortfall of nearly 1.8 lakh soldiers, the Army is looking to increase vacancies for recruitment of Agniveers to over 1 lakh every year, from the existing 45,000-50,000, The Indian Express has learnt. During the two years of the Covid pandemic in 2020 and 2021, the Army put recruitment of soldiers on hold while 60,000-65,000 soldiers continued to retire per year during this period. This was before the launch of the Agnipath scheme in 2022, when soldiers were recruited through the usual route.

When Agnipath was launched on June 14, 2022 — recruitment was to be for a period of four years — a total of approximately 46,000 vacancies were allotted for recruitment that year to the Army, Navy and Indian Air Force. Out of this, 40,000 vacancies were for the Army and the rest for the Navy and the IAF.

According to plans at that time, over the next four years, the intake of Agniveers for the Army was to increase progressively, with capping at 1.75 lakh. The recruitment figures for the Navy and the IAF were also set to increase progressively over the next four years to around 28,700.

Despite the recruitment of a limited number of soldiers starting in 2022 with the Agnipath scheme, the retiring strength of soldiers continued to be 60,000-65,000 every year, adding to the overall deficiency by 20,000-25,000 a year. Currently, the overall deficiency of soldiers is nearly 1.8 lakh.

According to sources, the Army is looking at releasing additional vacancies for recruitment of Agniveers to approximately 1 lakh annually this year onward, considering the soldiers retiring and the percentage of Agniveers likely to be phased out December 2026 onward. The release of additional vacancies will be made keeping in mind the training infrastructure of all regimental centres to ensure that there is no compromise in standards and optimal usage of facilities.

Responding to queries from The Indian Express on the matter, the Army said that in the first four years of the Agnipath scheme, 1.75 lakh Agniveers were being recruited (until 2025-end). “Recruitment of Agniveers will be undertaken to cater for existing deficiencies and accordingly, the vacancies will be released,” the Army said.

Sources said that over the next few years, soldiers recruited until 2020 – before the launch of the Agnipath scheme – would continue to retire at the rate of 60,000 per year. Moreover, 2026-end onward, a certain percentage of Agniveers would also start retiring since the first batch would complete the four-year tenure.

With the number of regular troops and Agniveers retiring every year, it would add to the existing shortfall of troops in the Army. The additional vacancies, which are planned to be released over the next three to five years, would make up for the outgoing personnel and reduce the existing shortfall.

https://indianexpress.com/article/india/troop-shortfall-army-looks-to-raise-agniveer-vacancies-to-1-lakh-a-year-10386195/

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तिब्बत में सैन्य ढांचे का विस्तार कर रहा है चीन

Source: Dainik Jagran, Dt. 26 Nov 2025

नई दिल्ली, एएनआइ: डोकलाम गतिरोध एवं गलवन झड़प के बाद रिश्तों में सुधार की कवायद के बीच अब चीन की एक नई चाल सामने आई है जो भारत के लिए बड़ी चुनौती तथा चिंता का सबब बन सकती है। तिब्बत में भारतीय सीमा के निकट चीन अपने सैन्य बुनियादी ढांचे का तेजी से विस्तार कर रहा है। वास्तविक नियंत्रण रेखा (एलएसी) पर अपनी स्थिति मजबूत करने के लिए पीपल्स लिबरेशन आर्मी (पीएलए) ने लगातार सैन्य सुविधाएं, लाजिस्टिक्स हब और कनेक्टिविटी बढ़ाना जारी रखा है।

हाल ही में चीन ने तिब्बत में एक ड्रोन (यूएवी) परीक्षण केंद्र की

हाल में चीन ने तिब्बत में 14,000 फीट की ऊंचाई पर एक ड्रोन यानी यूएवी परीक्षण केंद्र की स्थापना की है

स्थापना की है जो 14,000 फीट से भी अधिक की ऊंचाई पर बनी है। इस अत्यधिक ऊंचाई वाले परीक्षण केंद्र से पीएलए व चीनी ड्रोन निर्माताओं को खराब मौसम एवं ज्यादा ऊंचाई वाली परिस्थितियों में भी यूएवी परीक्षण करने में मदद मिलने की उम्मीद है। एक नवनिर्मित हवाई क्षेत्र में 720 मीटर का रनवे, चार हैंगर और प्रशासनिक भवन भी बने हैं।

भारतीय सीमा पर चीन की हरकतें दक्षिण चीन सागर में उसकी हरकतों जैसी ही हैं, जहां उसने कब्जे वाली जमीन पर सैन्य सुविधाएं बनाईं, हथियार जमा किए और वहां लगातार अपनी मौजूदगी बनाकर खास इलाकों पर नियंत्रण कर लिया। एलएसी पर विवाद अभी बना हुआ है और इधर चीन तिब्बत तथा शिनजियांग में अपने सैन्य बुनियादी ढांचे को मजबूत कर रहा है जो पीएलए के वेस्टर्न थिएटर कमान के तहत आते हैं।

तिब्बत में और उसके आसपास सड़क, हवाई और रेल नेटवर्क के हालिया विस्तार ने सीमाई इलाके में पीएलए की क्षमता को बढ़ाया है। सूत्रों के अनुसार, राष्ट्रपति शी चिनफिंग ने तिब्बत के राजमार्ग नेटवर्क को लगभग दोगुना कर दिया है।

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Science & Technology News

Dr. Jitendra Singh hails "BharatGen" as India's first sovereign multilingual and multimodal AI driven Large Language Model

Source: Press Information Bureau, Dt. 25 Nov 2025

Union Minister of State (Independent Charge) for Science & Technology; Minister of State (Independent Charge) for Earth Sciences; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr. Jitendra Singh today hailed "BharatGen" as India's first sovereign multilingual and multimodal AI driven Large Language Model, during his visit to IIT Bombay.

The Minister interacted with the core team of "BharatGen", reviewed the ongoing work under the project, and also received an extensive presentation.

During the briefing, Prof. Ganesh Ramakrishnan, Professor-in-Charge of BharatGen, explained in detail how the model functions, what it seeks to achieve, and how it is being developed as a national AI asset for the future. The presentation was attended by Prof. Shireesh Kedare, Director, IIT Bombay; Prof. Abhay Karandikar, Secretary, Department of Science and Technology; and Prof. Kasturi Saha from the Quantum Sensing & Metrology Hub, along with members of the BharatGen team.

Dr. Jitendra Singh was briefed that BharatGen is India's first sovereign effort to create a Large Language Model that truly reflects the linguistic, cultural and social diversity of the nation. Built to support over twenty-two Indian languages, BharatGen integrates three major modalities- text, speech and document vision, so that it can understand, generate and interpret information in the same way Indian citizens naturally communicate. The Minister was told that this mission has been conceived in the spirit of building an inclusive digital future, where every Indian language, dialect and regional context is represented in the country's AI capabilities. The project aligns with the broader national vision of making India a global leader in frontier technologies, an objective consistently emphasised by Prime Minister Narendra Modi, who has repeatedly called for developing technology that is rooted in India's strengths, addresses India's needs, and contributes to the world from an Indian lens.

The presentation highlighted that BharatGen is supported under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) of the Department of Science and Technology, with ₹235 crore being channelled through the Technology Innovation Hub at IIT Bombay. The consortium, led by IIT Bombay, includes leading institutions such as IIT Madras, IIT Kanpur, IIIT Hyderabad, IIT Mandi, IIT Hyderabad, IIM Indore, IIT Kharagpur and IIIT Delhi. Dr. Singh noted that the coming together of such institutions signals a new era of collaborative, mission-driven research, and reflects India's growing strength in deep-tech innovation.

A key component of BharatGen- Bharat Data Sagar- was explained as one of the most ambitious data initiatives undertaken in the country. The Minister was informed that Bharat Data Sagar is being developed to ensure India's complete ownership and control over its digital knowledge resources. Through large-scale, India-centric data collection and curation, involving individuals, institutions and organisations across sectors, the initiative aims to build datasets that capture India's lived realities, cultural nuance, and regional diversity. This ensures not only accurate AI performance but also strengthens India's long-term digital sovereignty.

The Minister reviewed the BharatGen models released so far. The team presented Param-1, a foundational text model of 2.9 billion parameters trained on 7.5 trillion tokens, with over one-third of the training data representing Indian content. BharatGen has also built Speech models such as Shrutam, a 30-million-parameter Automatic Speech Recognition system, and Sooktam, a 150-million-parameter Text-to-Speech model available in nine Indic languages. Additionally, the project has delivered Patram, India's first document-vision model with seven billion parameters, trained on 2.5 billion tokens, designed to understand and interpret complex documents in Indian formats. Dr. Singh appreciated that these models together create a complete AI stack for India- text, speech and vision, capable of supporting governance, industry, education, agriculture, healthcare and digital inclusion.

During the interaction, the team demonstrated proof-of-concept applications built on BharatGen. These included Krishi Sathi, a voice-enabled WhatsApp advisory tool that allows farmers to ask questions in their own language and receive instant support; e-VikrAI, which can automatically generate product descriptions from a single image to help small sellers expand their digital presence; and Docbodh, a document Q&A platform powered by Patram that makes complex texts understandable for citizens. The Minister observed that such applications clearly show how AI can directly improve everyday life and make public services more accessible to people at the last mile.

The team informed Dr. Singh that BharatGen is being strengthened through deep industry partnerships with IBM, Zoho, NASSCOM and several ministries, including the Ministry of Water and Sanitation (WASH), as well as with state governments such as Maharashtra. These

collaborations bring together India's domain expertise, local datasets, and sector-specific challenges, enabling BharatGen to evolve into a scalable, deployable and impactful AI ecosystem for the country. The Minister noted that this whole-of-government and whole-of-industry approach reflects India's commitment to building technology that is collaborative, transparent and nationally owned—an approach that resonates strongly with the Prime Minister's call for "Technology for People, Technology by People and Technology of People."

It was also highlighted that BharatGen has recently received additional support of ₹1,058 crore from MeitY under the India AI Mission, expanding it into a nationwide effort to build India's sovereign AI stack. This combined support from DST and MeitY signals the government's long-term commitment to positioning India as a major contributor to global AI development. Dr. Singh remarked that such missions demonstrate India's readiness to drive the next wave of digital transformation, and reaffirm the country's ability to lead in sectors such as AI, quantum, space, cyber-physical systems, and deep technology.

Dr. Singh appreciated the scale, ambition, and technical depth of the BharatGen initiative, describing it as a turning point in India's journey toward technological self-reliance. He said that BharatGen is not just a technological project but a national effort to ensure that the future of AI reflects the aspirations, languages and lived experiences of 1.4 billion Indians. He also emphasised that initiatives like BharatGen embody the Prime Minister's vision of empowering every citizen through science and technology, building systems that are inclusive, trustworthy, and locally grounded, and ensuring that India's digital narrative is written by Indians themselves.

The Minister concluded by encouraging the BharatGen team to continue building models that are globally benchmarked yet uniquely Indian, scalable yet accessible, and technologically advanced yet simple enough for citizens to benefit from. He said that BharatGen will play a defining role in shaping India's digital decade and enabling the country to contribute meaningfully to the global AI landscape.

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As a part of countrywide outreach through a series of meets in different cities regarding ₹1 lakh crore Research, Development and Innovation (RDI) Fund, Union Minister Dr. Jitendra Singh today held an over two-hour interaction with the Mumbai Industry

Source: Press Information Bureau, Dt. 25 Nov 2025

As a part of countrywide outreach through a series of meets in different cities, Union Minister of State (Independent Charge) for Science & Technology, Dr. Jitendra Singh today held an over two hour interaction with the Mumbai Industry wherein he underlined the landmark ₹1 lakh crore Research, Development and Innovation (RDI) Fund announced by PM Narendra Modi on 3rd November this year as a transformational catalyst for private-sector driven R&D, IP creation, and commercialization in sunrise technologies.

Addressing the first Outreach Programme of the RDI Fund at the Jio Convention Centre, Mumbai, the Minister said that India's economic rise in the coming decades will be powered by "science, technology and innovation-led growth", and called upon Indian industry, investors, and start-ups to "step forward with ambition, risk appetite and long-term commitment". India is set to emerge as a global leader in deep-tech innovation, he said.

The event was organised by the Research, Development and Innovation (RDI) Fund, a Special Purpose Fund, and Independent Business Unit under the Anusandhan National Research Foundation (ANRF). The programme brought together fund managers, industry leaders, investors, start-ups, researchers, and several other stakeholders. The session saw remarks by Dr. Jyoti Sharma, Head, RDI Cell, DST; Prof. Abhay Karandikar, Secretary, DST; and by Shri Nishant Verma, Joint Secretary, ANRF.

Dr. Jitendra Singh explained the mechanism through which the Government is implementing the historic Fund, following its formal roll-out by the Prime Minister. He said that the Union Cabinet's approval on July 1, 2025 for establishing this bold and forward-looking ₹1 lakh crore Fund reflects the Government's resolve to build a robust, private sector-led innovation ecosystem. Highlighting that the Budget 2025–26 allocated ₹20,000 crore for the Fund's initial implementation, he said these efforts mark a decisive shift towards boosting India's capacity in high-impact R&D, deep-tech product development and global competitiveness.

The Minister pointed out that India has rapidly climbed the global innovation ladder, now ranked 3rd in scientific research output, 6th in patent grants, and 39th in the Global Innovation Index. India also ranks among the top 5 countries in 45 of 64 critical technology domains. He said India's capabilities in AI, semiconductors, 5G/6G, quantum technologies, biotechnology, space technology, and clean energy reflect a new phase of scientific self-reliance. "Science is not merely the pursuit of knowledge; it is the engine of nation-building, social progress and economic growth," he said.

Describing the RDI Fund as a "historic commitment" to strengthen the innovation value chain from discovery to development to deployment, Dr. Jitendra Singh underlined that long-term, low-interest loans and equity-based risk capital will support private-sector R&D in sectors such as AI, semiconductors, clean energy, biotechnology, space, and other strategic areas. He announced that the first tranche of the RDI Fund is being allocated to Technology Development Board (TDB) and BIRAC as second-level fund managers, and welcomed additional entities to apply through the structured selection process.

The Minister highlighted that India's start-up ecosystem has grown to more than 1.7 lakh start-ups, including 6,000 deep-tech ventures, with nearly 60% emerging from Tier-2 and Tier-3 cities, creating over 17 lakh jobs. He said this demonstrates that innovation in India is no longer metro-centric but has become a nationwide movement, driven by an aspirational young population and expanding technology-led opportunities.

Dr. Jitendra Singh also emphasized the convergence between the RDI Fund and the Anusandhan National Research Foundation (ANRF), which has initiated missions in EVs, 2D materials, MedTech, and AI for Science and Engineering, while supporting frontier research, early-career scientists, state universities, and diaspora researchers. He said that India's National Research Foundation has been modelled after global best practices but improved further by incorporating India's unique strengths including traditional knowledge systems.

Referring to India's opening in ocean research, Himalayan studies, biotechnology, and space-sector reforms, the Minister said the Government under the leadership of the Prime Minister has taken bold, out-of-the-box decisions to unlock the country's natural and intellectual capital. Initiatives such as Biotechnology Policy, Deep Ocean Mission, Aroma and Floriculture Missions, and the facilitation framework of IN-SPACe were cited as examples of India's transition towards a future-ready, knowledge-driven economy.

The Minister urged industry, investors, researchers, and start-ups to fully utilize this historic opportunity. "This is the time to co-create, co-invest, and collaborate. India is no longer the India of yesterday, our aspiration is to not only participate in the technologies of the future but to lead them," he said.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2194203

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CSIR-NIScPR and CSIR-NPL jointly organise Curtain Raiser for India International Science Festival (IISF 2025)

Source: Press Information Bureau, Dt. 25 Nov 2025

The Curtain Raiser for the India International Science Festival (IISF) 2025 was held today at Vivekananda Hall, CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), Pusa Campus, New Delhi. The event was jointly organised by CSIR-NIScPR and CSIR-National Physical Laboratory (CSIR-NPL). During the event, the institutes also commemorated the Janjatiya Gaurav Diwas.

In her Welcome Address, Dr. Geetha Vani Rayasam, Director, CSIR-NIScPR, highlighted the vision of IISF 2025 and briefed the audience on its key thematic events. She underscored the significance of the IISF events, Science & Technology Media Conclave and Vigyanika – Science Literature Festival, both coordinated by CSIR-NIScPR.

Delivering the Introductory Remarks, Dr. Sanjay R. Dhakate, Officiating Director, CSIR-NPL, spoke about the 11th edition of IISF and reiterated the role of science in national development. He also emphasised the importance of India's time standard, maintained by the National Physical Laboratory.

Shri R.K.S. Roushan, Controller of Administration, CSIR-NIScPR, addressed the gathering on the significance of the Janjatiya Gaurav Diwas. He highlighted the need for observing this day and reflected on the scientific knowledge and practices followed by tribal communities since ancient times.

Invited Expert Dr. Rakesh Tripathi, Education Officer, National Science Centre, New Delhi, delivered an engaging address on the essence of science and its relevance to everyday life. He demonstrated exciting experiments to the students and explained the distinction between scientific principles, tricks, and illusions. Students from PM SHRI Kendriya Vidyalaya also participated in the programme, adding youthful enthusiasm and curiosity to the Curtain Raiser event.

Dr. Manish Mohan Gore, Coordinator, Science & Technology Media Conclave, highlighted the major features of the 11th edition of IISF. He introduced the objectives of the S&T Media Conclave, and spoke about the expanding role of science and technology across diverse sectors, including

the new science journalism trends related session and deployment of AI tools in military operations such as Operation Sindoor.

Dr. Paramananda Barman, Coordinator, Vigyanika, spoke about the NIScPR's contributions to science communication and the importance of science for all. He provided an overview of Vigyanika – Science Literature Festival, a major component of IISF 2025. In his Special Address, Dr. Jagvir Singh, Scientist G & Adviser, Ministry of Earth Sciences (MoES), highlighted the wide spectrum of science—including earth sciences. He spoke about the role of science in daily life, IISF's national impact, and India's achievements in various science Olympiads.

Prof. Avinash Chandra Pandey, Director, Inter-University Accelerator Centre (IUAC), delivered another Special Address, focusing on IISF, India's scientific capabilities, and major national missions such as Gaganyaan and Samudrayaan. The event concluded with a Vote of Thanks by Dr. Sumit Mishra, Senior Principal Scientist, CSIR-NPL, who acknowledged the contributions of organisers, speakers, and participants, and reaffirmed the importance of IISF 2025 in strengthening scientific temper across the nation.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2194437

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