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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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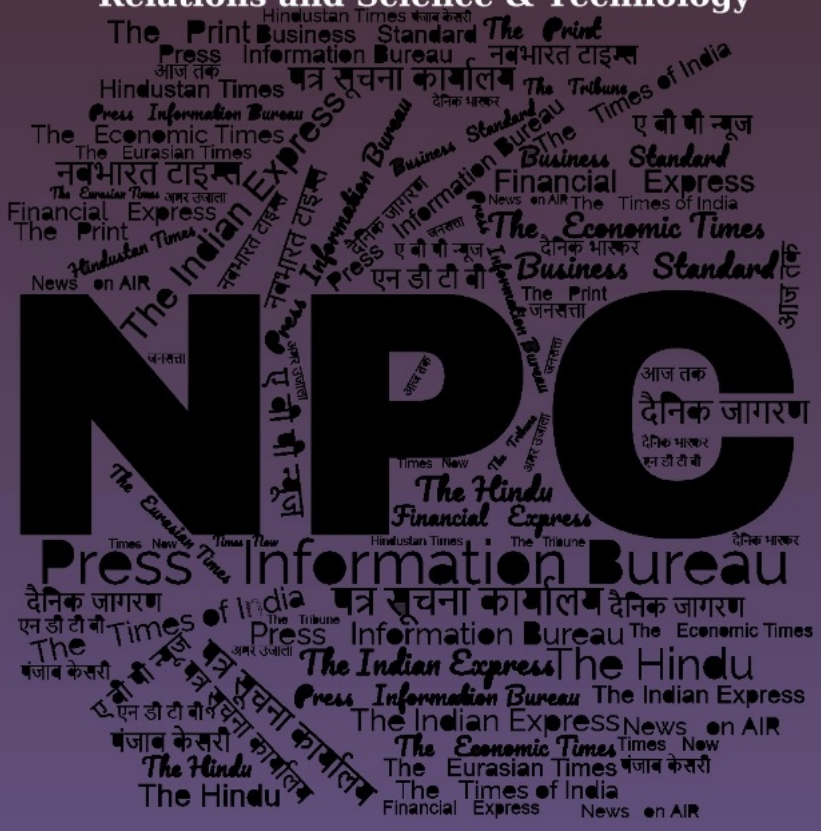


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# DRDO News

## UK or France? Cabinet waits for DRDO on combat aircraft engine

***Source: The Indian Express, Dt. 11 Jul 2025***

Realising the imperative to acquire expertise on engine technology, the government has decided to pursue this objective by pushing Defence Research & Development Organisation (DRDO) to join hands either with Britain's Rolls-Royce or France's Safran to co-develop aircraft engines in India. "Engines are a constraining factor… a strategic decision has to be taken. Both Rolls-Royce and Safran are contenders for fifth-generation Advanced Medium Combat Aircraft. A Cabinet note will be prepared from the DRDO side and circulated," an official told The Indian Express.

Both the companies have offered to collaborate with DRDO's Bengaluru-based Gas Turbine Research Establishment lab and provide full ToT and IPR, the government official said. A Cabinet note will be floated for this soon and the process has been initiated by the DRDO, the official said.

As India works to bolster its domestic defence manufacturing capacity, delays in engine supplies by GE to the Tejas aircraft due to supply-side issues, have led to a realisation that engine technology is a big constraining factor for the Indian defence forces. Amid efforts to develop aircraft engines indigenously, both Rolls-Royce and Safran have agreed to co-develop a new engine for AMCA, a twin-engine 5.5-generation stealth fighter.

This comes months after the Indian Navy issued a project sanction order for the design and development of a 6 MW-medium speed marine diesel engine with Kirloskar Oil Engines Ltd. The prototype diesel engine with indigenous content of over 50 per cent will be developed at a cost of Rs 270 crore with 70 per cent funding from the Centre. The developed engines will be used for main propulsion and power generation on ships of the Indian Navy and the Indian Coast Guard. Most of the diesel engines of higher capacity were being imported from foreign equipment manufacturers so far.

"Very few Indian companies actually own engine technology. For aircraft, ships or even automobiles, we still don't entirely own the engine technology. The engines are getting designed abroad. The Kirloskar project (marine engines) will start the process of achieving self-reliance in marine engine development in the country. We are keen to do the same in aircraft engines," the official said.

The delays in delivery of the F404-IN20 engine by GE Aerospace to Hindustan Aeronautics Ltd for the Tejas Light Combat Aircraft Mk 1A fighter jet were attributed to problems faced by the American company in reviving its downstream supply chains, immediately after the Covid pandemic.

"The Tejas engine delays were caused by supply chain issues faced by the OEM (Original Equipment Manufacturer GE Aerospace). There is a need to have greater control of the engine procurement. As was done in the case of marine engines (with Kirloskar), the idea is to develop a local supply base for aircraft engines and we will do everything to develop an ecosystem here," the official said.

The RFI (request for information) has been issued by Aeronautical Development Agency (ADA) and preliminary rounds of discussion with prospective players have been held. The new engine for

the AMCA, with a thrust class of 110-130 kN, is crucial for the aircraft's capabilities like supercruise and stealth optimisation. It is targeting a first flight by 2029-2030 and induction by 2035. Initial AMCA prototypes and the first production batch (Mk1) will use imported GE F414 engines. The more powerful locally-produced engines are being planned for the AMCA Mk2 variant.

Rolls-Royce's proposal involves developing a range of high-thrust turbofan engines for potential use in transport and civilian aircraft while Safran's proposal entails a prototype derived from its Rafale fighter's M88 engine family. Safran, which has a base here, also proposes to leverage its offset obligations from the Rafale deal and potentially boost the indigenous Kaveri engine programme.

Alongside its AMCA push, the government is also examining proposals from Russia (Su-57) and the US (F-35) for procuring a batch of fifth generation aircraft as a short-term measure to meet the Indian Air Force's immediate needs, particularly in light of Pakistan procuring J-10C and newer fifth-gen fighters from China.

The problems with the American offer for the Lockheed Martin-built aircraft include invasive end-use monitoring clauses and interoperability issues with India's traditional French and Russian fleet that comprise Su-30MKIs, Rafales, Mirage 200s and the indigenous Tejas Mk1A. There is also renewed focus on mid-air refuellers and Airborne Early Warning and Control Systems or AWACS, with RFIs being initiated by the Ministry of Defence for both these categories of equipment, officials said.

https://indianexpress.com/article/business/uk-or-france-cabinet-waits-for-drdo-on-combat-aircraft-engine-10119118/

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# Defence News

## पोखरण में स्वदेशी गोला बारूद का सफल परीक्षण

***Source: Dainik Jagran, Dt. 11 Jul 2025***

जयपुर : भारतीय सेना ने आत्मनिर्भरता की दिशा में बड़ा कदम उठाते हुए जैसलमेर के पोखरण फील्ड फायरिंग रेंज में स्वदेशी गोला और बारूद का सफल परीक्षण किया। इस परीक्षण को 'सदा आगे' नाम दिया गया। दरअसल, सेना लंबे समय से तोपखाने के लिए आयातित गोला-बारूद पर निर्भर रही है। (जासं)

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# Ladakh to Arunachal, 30 Defence projects get wildlife panel nod

***Source: The Indian Express, Dt. 11 Jul 2025***

From infrastructure for a forward aviation base, facilities for missiles and vital road linkages along the Line of Actual Control, the standing committee of the National Board for Wildlife (SC-NBWL) has approved proposals for critical Defence projects along the boundary with China, stretching from eastern Ladakh to Sikkim to Arunachal Pradesh.

It has also cleared construction of the Arunachal Frontier Highway close to the Myanmar border, through the core zone of the Namdapha Tiger Reserve subject to mitigation measures to minimise impact on wildlife and their habitats. The project will divert 310 hectares of forest from the tiger reserve — committee members have noted it will also lead to tree felling.

One of the most significant projects approved was a 10.26-km road link between Daulat Beg Oldie (DBO) to the Border Personnel Meeting (BPM) Hut where senior Indian and Chinese Army officers meet to discuss border issues. At a height of 17,000 feet, DBO is the country's northernmost military outpost where the highest airstrip is also located. Last October, the SC-NBWL had approved an alternate route to DBO for quick movement of troops and resources.

The Ministry of Defence had told the wildlife board panel that no road exists between DBO and the Old BPM Hut, which is frequented often by the Indian Army and the Indo-Tibetan Border Police personnel. "On the other hand, the Chinese side is building a concrete road between TWD (akin to DBO on our side) to the Chinese temporary meeting point of 9-18 metre width," it stated.

The SC-NBWL took up over 30 defence and infrastructure projects – 26 of them located in Ladakh – for appraisal in their meeting on June 26 and approved all of them, minutes of the meeting show.

The meeting was chaired by Bhupender Yadav, Union Minister for Environment, Forest and Climate Change. The projects require wildlife clearance since they are located across the Karakoram wildlife sanctuary and Changthang Cold Desert sanctuary in Ladakh, Dibang wildlife sanctuary in Arunachal Pradesh and Pangolakha sanctuary in Sikkim.

The Karakoram sanctuary is home to the Tibetan antelope, Shapo, Wild Yak, Bharal, snow leopard, Himalayan grey wolf, lynx and marmot. The Dibang sanctuary is home to the leopard and tiger while the Asiatic Black Bear, among other fauna, resides in the Pangolakha sanctuary.

Other critical projects accorded approval include those for housing troops of artillery regiment and a field hospital; housing troops for reconnaissance and observation flight and holding of helicopters; construction of aviation infrastructure for a forward aviation base at Shyok and creation of technical infrastructure to locate equipment of short-range surface-to-air missiles.

The approval for housing troops engaged in reconnaissance and observation flights duty and holding of helicopters at Partapur will be important for flying operations in the Siachen Glacier, the Defence ministry said in its proposal.

The missile unit facility will include a command and control for operational activities, shelters for troops and training spaces.

For infrastructure along the LAC in the North-East, the wildlife board panel cleared the Malinye-Balua-Kapuda road over 121 hectares of forest land in the Anini forest division subject to conditions. The SC-NBWL said that the project has to include an animal passage plan to mitigate

the project's impact on faunal biodiversity. The road project was proposed to strengthen security infrastructure along the China border.

In Sikkim, a border outpost at Pangola in Pakyong district and the Rishi-Rongli-Kupup road improvement have been approved, subject to mitigation measures such as animal passage plans. Under Project Swastik, the Border Roads Organisation has proposed improvement of the Rishi-Rongli-Kupuo road to a national highway double-lane specification.

https://indianexpress.com/article/india/ladakh-to-arunachal-30-defence-projects-get-wildlife-panel-nod-10119131/

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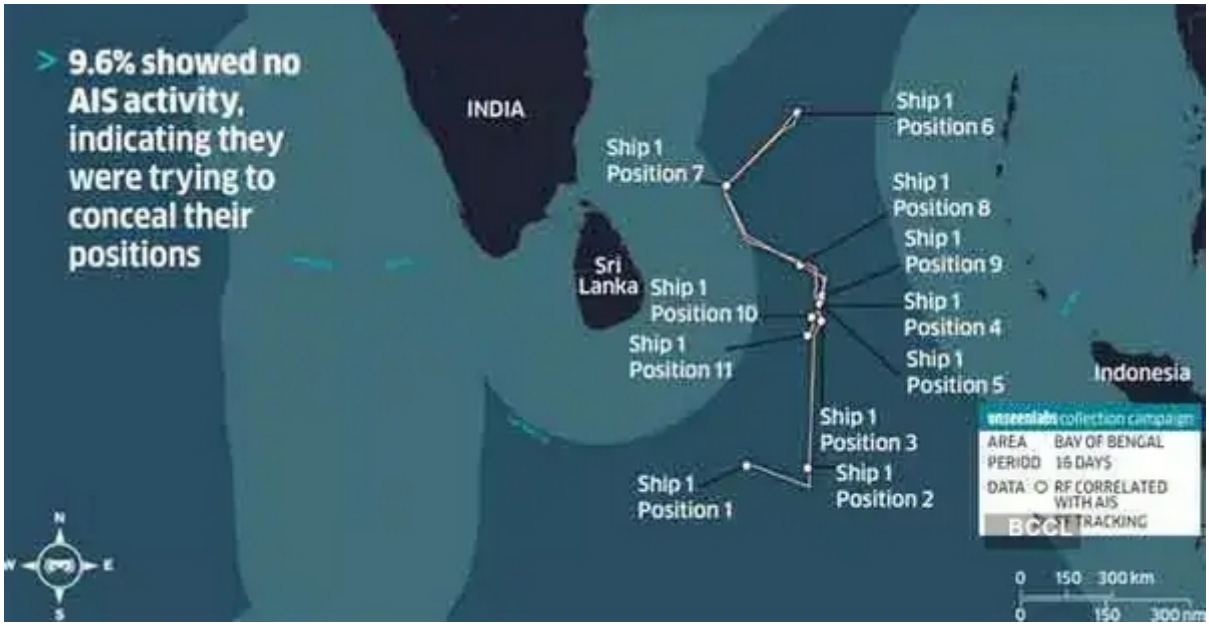
## 'Hidden' Chinese research vessel in Bay of Bengal

***Source: The Economic Times, Dt. 11 Jul 2025***

A French maritime intelligence company, which uses satellites to track ships in the high seas, has pointed to a 'hidden' Chinese research vessel that was active in the Bay of Bengal for several days near Indian waters and attempted to hide its presence by switching off its Automatic Identification System.




In a 16-day survey carried out in the Bay of Bengal, where it tracked vessels using radio frequency emissions, the company found that nearly 10% of ships were operating without an active AIS, flagging off security concerns that has seen enhanced Chinese activity and signs of growing Sino-Bangladesh ties.

The survey by Unseenlabs tracked 1,897 vessels over the period, most of which were broadcasting legitimate AIS signals. However, 9.6% showed no AIS activity, indicating they were trying to conceal their positions.

In its report, the company has pointed to one particular Chinese research vessel that drew attention due to its proximity to areas of recent naval activity and its recurring presence in the Indian Ocean.

"While not broadcasting AIS, its RF signature was consistent and traceable, enabling our systems to monitor its movement over several days... We suspect that this prominent Chinese research vessel was likely operating with strategic intent," it said.

The French firm further said the Chinese vessel's mission appeared to include seafloor mapping, acoustic environment analysis and the identification of submarine transit corridors, which can be used for surveillance operations and anti-submarine warfare readiness.

The Indian Navy and Coast Guard closely monitor traffic around Indian waters and have also reported a constant presence of Chinese research vessels over the past few years. In this particular case, the Chinese ship was operating in international waters off the eastern coast, at a distance of 120 nautical miles from military zones. While Chinese warships and submarines operate in the Indian Ocean, naval planners believe it is only a matter of time before Beijing deploys its aircraft carriers in the region.

https://economictimes.indiatimes.com/news/defence/hidden-chinese-research-vessel-in-bay-of-bengal/articleshow/122372005.cms?from=mdr

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# Defence Ministry identifies domestic firm for S-400 maintenance

***Source: The Hindu, Dt. 11 Jul 2025***

The Ministry of Defence has identified an Indian firm to establish a maintenance repair and overhaul (MRO) facility for the S-400 air defence system in the country. India presently has three S-400 missile systems. Officially named ‘Sudarshan Chakra’, the S-400 had played a crucial role in taking down Pakistani drones and missiles fired towards more than 15 Indian cities, in retaliation for Operation Sindoor launched by India in May.

A senior official in the Defence Ministry has confirmed that the plan to establish an MRO facility was in the pipeline for some time but after Operation Sindoor, it was fast-tracked and an Indian firm has been identified for the job. The selection was done after several phases of security

clearance and capability testing. Rules of engagement (RoE) have been drafted. Russia's Almaz-Antey, the manufacturer of the S-400 system, will collaborate with an Indian firm to establish the facility in India. A formal announcement will made soon.

"It is a huge step for the armed forces as the role of S-400 was appreciated in Operation Sindoor and it was a long-pending demand to establish a maintenance facility for S-400 firing units in India. It will ensure operational readiness and reduce the dependence on foreign support," the official added.

**'Landmark move'**

Another official who was aware of the development said that it is a landmark achievement under India-Russia military technical cooperation. "Now India will be self-reliant in maintaining advance air defence systems and it aligns with the 'Make In India' initiative of the government. It will help to overcome the challenges posed by international sanctions and supply chain disruption," the official said.

India launched Operation Sindoor in the first week of May targeting terror camps in Pakistan, in response to the attack on tourists in Pahalgam on April 22. On the intervening night of May 7-8, Pakistan attempted to engage more than 15 military targets using drones and missiles in northern and western part of the country. The Integrated Counter UAS Grid and Air Defence systems intercepted and neutralised the ballistic missiles and drones aimed at military installations.

**Three delivered**

On June 26 on the sidelines of the Shanghai Cooperation Organisation (SCO) Defence Ministers' meeting in China, Defence Minister Rajnath Singh held a comprehensive bilateral meeting with Russian Defence Minister Andrey Belousov, over cooperation in defence and aviation sector between the two countries.

India had earlier placed an order with Russia for five S-400 missile systems, and three have been delivered. During the SCO meeting, Russia confirmed that of the remaining two S-400s, one will be delivered in 2026 and the last in 2027.

In Indian service, the S-400 was officially named 'Sudarshan Chakra' after the mythological weapon of Lord Vishnu. It has capability of engaging targets at ranges of up to 400 km.

https://www.thehindu.com/news/national/defence-ministry-identifies-domestic-firm-for-s-400-maintenance/article69796670.ece

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# Science & Technology News

## शुभांशु शुक्ला 14 को धरती लौटेंगे

*Source: Jansatta, Dt. 11 Jul 2025*

जनसत्ता ब्यूरो
नई दिल्ली, 10 जुलाई।

भारतीय अंतरिक्ष यात्री शुभांशु शुक्ला और एक्सिओम-4 मिशन के चालक दल के तीन अन्य सदस्य 14 जुलाई को अंतरराष्ट्रीय अंतरिक्ष स्टेशन से पृथ्वी पर लौटने के लिए तैयार हैं। नासा ने गुरुवार को यह जानकारी दी।

'नेशनल एरोनाटिक्स एंड स्पेस एडमिनिस्ट्रेशन' (नासा) कमर्शियल क्रू प्रोग्राम के मैनेजर स्टीव स्टिच ने एक संवाददाता सम्मेलन में कहा कि हम स्टेशन प्रोग्राम पर काम कर रहे हैं और एक्सिओम-4 की प्रगति पर बारीकी से नजर रख रहे हैं। मुझे लगता है कि हमें उस मिशन को अनडाक (अलग करना) करना होगा और इसका मौजूदा लक्ष्य


फाइल।

14 जुलाई है। एक्सिओम-4 मिशन को 25 जून को फ्लोरिडा के कैनेडी अंतरिक्ष केंद्र से प्रक्षेपित किया गया था और ड्रैगन अंतरिक्ष यान 28 घंटे की यात्रा के बाद 26 जून को अंतरराष्ट्रीय अंतरिक्ष स्टेशन पर पहुंचा।

अंतरिक्ष यात्री शुभांशु शुक्ला और उनके एक्सिओम-4 चालक दल ने अंतरराष्ट्रीय अंतरिक्ष स्टेशन (आइएसएस) पर 230 सूर्योदय देखे हैं और कक्षीय प्रयोगशाला में दो सप्ताह के अंत में अंतरिक्ष में लगभग 100 लाख किलोमीटर की यात्रा की है। शुक्ला, पैगी व्हिटसन, स्लावोज उज्नांस्की-विस्नीवस्की और टिबोर कापू सहित एक्सिओम-4 चालक दल ने भी आईएसएस पर अपना अंतिम अवकाश दिवस बिताया, तथा पृथ्वी पर वापसी की तारीख की नासा द्वारा घोषणा की प्रतीक्षा की।

एक्सिओम स्पेस के एक बयान में कहा गया है कि एक्सिओम मिशन 4 (एक्स-4) के चालक दल ने पृथ्वी के चारों ओर लगभग 230 परिक्रमाएं पूरी कर ली हैं और साठ लाख मील (96.5 लाख किलोमीटर) से अधिक की यात्रा की है। पृथ्वी से लगभग 250 मील ऊपर से चालक दल ने अपना खाली समय तस्वीरें और वीडियो लेने, धरती का नजारा देखने और प्रियजनों से फिर से जुड़ने में बिताया।

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## Axiom-4 mission likely to undock on July 14: NASA

*Source: The Hindu, Dt. 11 Jul 2025*

Indian astronaut Group Captain Shubhanshu Shukla, who is part of the Axiom-4 (Ax-04) mission at the International Space Station (ISS), and his three crew members are expected to undock from the orbiting laboratory on July 14.

"...the targeted time to undock the mission is July 14," said Steve Stich, manager, NASA Commercial Crew Program.

During their stay at the ISS, the Ax-4 research complement included around 60 scientific studies, experiments and activities representing 31 countries, including the U.S., India, Poland, Hungary, Saudi Arabia, Brazil, Nigeria, the United Arab Emirates, and several nations across Europe.

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# 'सरकार की सीमाएं हैं, अनुसंधान और विकास के लिए धन मुहैय्या कराएं निजी क्षेत्र'

***Source: Jansatta, Dt. 11 Jul 2025***

केंद्रीय विज्ञान एवं प्रौद्योगिकी मंत्री जितेंद्र सिंह ने गुरुवार को अनुसंधान पहलों के वित्तपोषण में निजी क्षेत्र की भूमिका को रेखांकित करते हुए कहा कि सरकार की अपनी सीमाएं हैं और निजी क्षेत्र को इस मामले में सहायक की भूमिका निभानी चाहिए।

सिंह 'राज्य विज्ञान एवं प्रौद्योगिकी परिषदों के सुदृढ़ीकरण की रूपरेखा' को लेकर नीति आयोग की रपट के अनावरण के लिए आयोजित एक समारोह को संबोधित कर रहे थे। रपट में कहा गया है कि भारत के करीब 67 फीसद शोध, प्रकाशन में केंद्र सरकार द्वारा वित्तपोषित 450 संस्थान किए जाते हैं।

निजी क्षेत्र की भागीदारी का समर्थन करते हुए केंद्रीय मंत्री जितेंद्र सिंह ने कहा कि हमें अपनी सोच बदलने की जरूरत है।

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# NITI Aayog suggests reduced 'core' grant support for State S&T bodies

***Source: The Hindu, Dt. 11 Jul 2025***

The NITI Aayog has recommended that the Department of Science and Technology (DST) cut its 'core grant support' for State Science and Technology Councils and pare them down to 'project-based support'. The recommendations are part of a report, 'Roadmap for Strengthening State Science and Technology Councils', made public on Thursday (July 10, 2025).

The State S&T Councils are a vital source of funding for scientific research, science popularisation, patent applications and scientific policy-support activities in states. Since the 1970s, such councils have acted to 'decentralise' scientific governance such that States can execute science and research in tune with their specific socioeconomic conditions.

Funds from the Central government, primarily the DST, are already a minuscule source of revenue. For instance, of the ₹300 crore annual budget in Gujarat's State Science and Technology Council, only ₹1.07 crore came from the Centre. In the case of Kerala's ₹150 crore, the Centre's (DST) contribution was zero.

From 2016-2022, the DST notes, 28 States and 3 Union Territories have been supported this way. However, the bulk of India's scientific output and productivity was coming from Centrally funded

institutions, with the NITI Aayog, in its report, saying that in recent decades, the State S&T Councils have been facing an “uphill task” of keeping up with rapid changes in the research and development (R&D) landscape.

“As evident from some recent reports, a significant part of India’s S&T research outcomes come from Central government institutions, and the State-administered institutions are yet to make a meaningful contribution. India’s advances in S&T can be significantly accelerated through collective effort of all the institutions in the country, both Central and State institutions. The State S&T Councils may play a major role here,” the report notes.


*NITI Aayog vice-chairperson Suman Bery with member V.K. Saraswat and Union Minister of State Jitendra Singh during release of a report on ‘A Roadmap for Strengthening State S&T Councils’ in New Delhi on July 10, 2025.*

The report, which was a result of a two-month consultation with representatives from State Councils, has several findings and makes many recommendations. The comparative budget analysis of State Science & Technology (S&T) Councils for 2023-24 and 2024-25, it says, revealed a 17.65% increase in total funding, reflecting growing investment in scientific research and innovation at the State level.

However, the disparity in allocations “raised concerns” about regional imbalances in S&T development. Kerala (₹173.34 crore), Haryana (₹130 crore), and Uttar Pradesh (₹140 crore) utilised higher budgets. While Maharashtra’s budget surged by 130%, States like Sikkim (-16.16%), Tamil Nadu (-4%), and Uttarakhand (-5%) saw budget cuts, potentially hindering ongoing projects and indicating a stark neglect of S&T infrastructure in some regions, the report noted.

While some States received “better” partial Central assistance, the overall allocation from the Central government (mainly from DST) was quite “small”, and State S&T Councils were unable to tap the various other funding support structures at the Centre. “Over-reliance on core grants and inadequate efforts to attract project-based grants from various ministries, departments and agencies of the Central government have been a major weakness of most of the State S&T Councils,” the report notes.

The report recommends that governance structures in these councils improve, have a greater connection with industrial units and public sector enterprises located within a State and as far as possible, direct resources to State-funded universities rather than to Centrally funded research institutes.

https://www.thehindu.com/news/national/niti-aayog-suggests-reduced-core-financial-support-for-states-from-centre/article69797130.ece

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The Tribune
The Statesman
पंजाब केसरी जनसत्ता
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The Times of India
Hindustan Times
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