

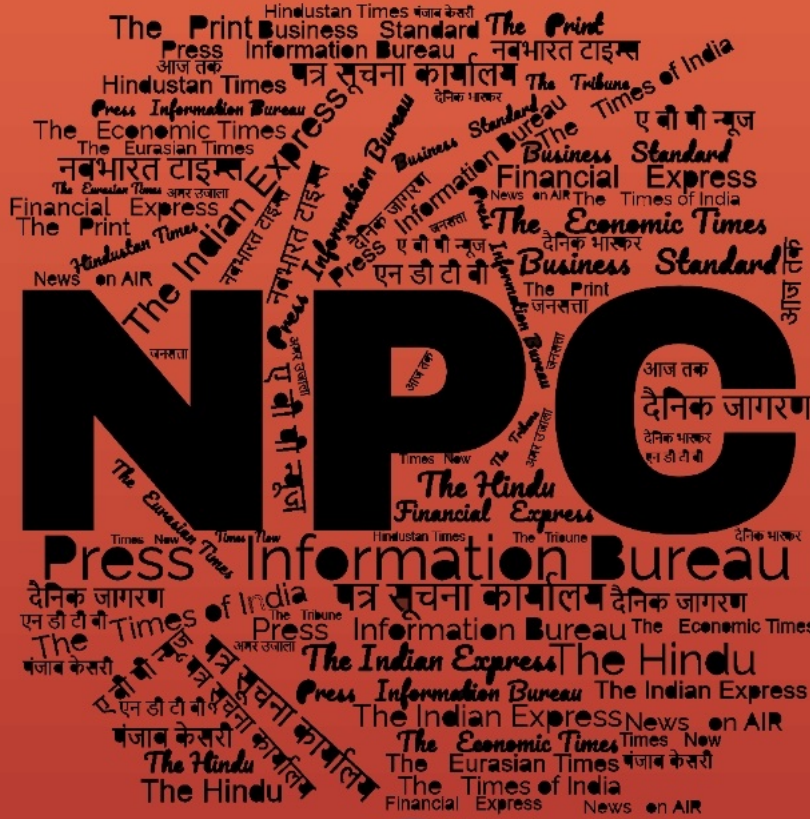
जनवरी  
JAN  
2026

खंड/Vol. : 51 अंक/Issue : 21  
30/01/2026

# 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

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



रक्षा विज्ञान पुस्तकालय  
Defence Science Library  
रक्षा वैज्ञानिक सूचना एवं प्रलेखन केंद्र  
Defence Scientific Information & Documentation Centre  
मेटकॉफ हाउस, दिल्ली - 110 054  
Metcalf House, Delhi - 110 054

## CONTENTS

S. No.	Title	Source	Page No.
<b>Defence News</b>			<b>1-4</b>
1	Indigenous AI, critical tech vital for defence: Survey	<i>The Tribune</i>	1
2	Government pact to clear way for \$10 billion submarine deal with Germany	<i>The Economic Times</i>	1
3	Indian Navy's First Training Squadron concludes visit to Phuket Deep Sea Port, Thailand	<i>Press Information Bureau</i>	3
4	China expands military ties with Bangladesh: Signs pact with Bangladesh Air Force for UAV plant	<i>The Economic Times</i>	4
<b>Science &amp; Technology News</b>			<b>4-9</b>
5	Implementation of National Science, Technology and Innovation Policy-2020	<i>Press Information Bureau</i>	4
6	Financing In Research	<i>Press Information Bureau</i>	6
7	Identifying Young Scientists and Encouraging Research	<i>Press Information Bureau</i>	7

# Defence News

## Indigenous AI, critical tech vital for defence: Survey

*Source: The Tribune, Dt. 30 Jan 2026*

Stressing the need for self-reliance, the Economic Survey on Friday highlighted the importance of developing indigenous artificial intelligence programmes for defence. It called for addressing “critical vulnerabilities with high strategic urgency”, including in critical defence technologies.

The survey said reliance on multinational companies for AI-based solutions could leave India vulnerable to geopolitical shifts, potentially constraining future diplomatic choices. Just as critical minerals and semiconductors have been used to shape foreign policy, AI capabilities and resources could similarly be leveraged in geostrategic negotiations. It also called for enabling computation to occur locally to ensure secure deployment in sensitive sectors such as defence and critical infrastructure.

Elaborating on the need to address “critical vulnerabilities with high strategic urgency”, the survey said the top tier includes goods, components and technologies where denial of access would impose immediate and asymmetric national costs, and where global supply is highly concentrated.

“Typical examples include defence-critical systems, core infrastructure inputs, energy security components, public health essentials and foundational industrial technologies,” it said, adding that the objective should be assured availability under stress, not short-term efficiency.

The survey highlighted the work of the Council of Scientific and Industrial Research (CSIR) in applied innovation, including successful test flights of solar-powered high-altitude pseudo satellites (HAPS) capable of long-endurance flight for border security.

It also noted indigenous developments in UAV propulsion engines, kamikaze drones and partnerships with Bharat Electronics Limited for sensor systems as evidence of growing linkages between public research and national defence capability. CSIR-NAL’s technology transfer for commercial production of the indigenously designed trainer aircraft HANSA-3 NG was cited as another milestone, marking the first time a homegrown civil aircraft platform is moving into commercial manufacturing.

<https://www.tribuneindia.com/news/business/indigenous-ai-critical-tech-vital-for-defence-survey/>

\*

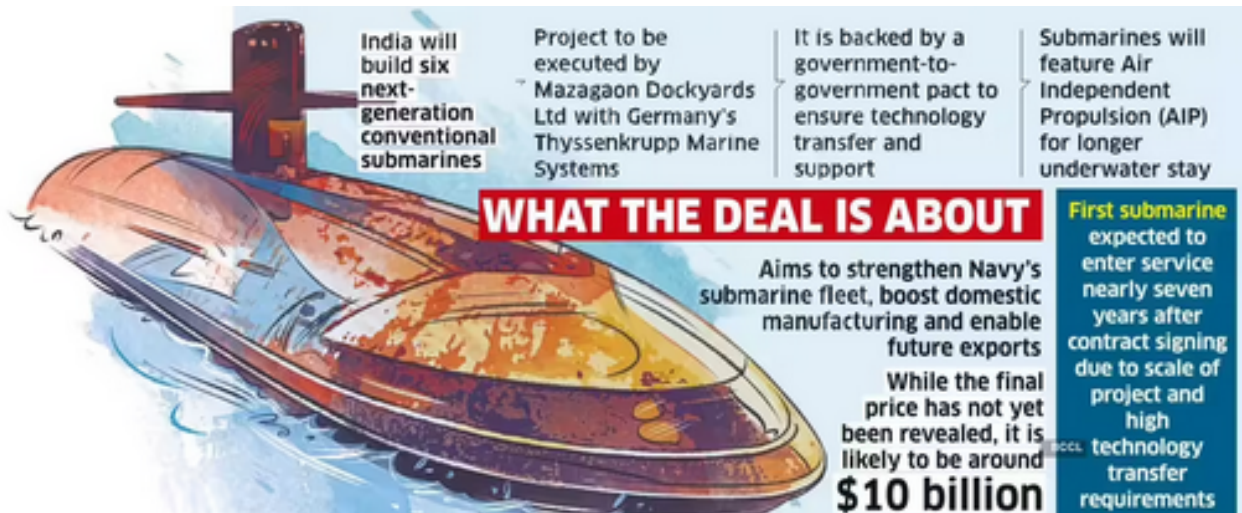
## Government pact to clear way for \$10 billion submarine deal with Germany

*Source: The Economic Times, Dt. 30 Jan 2026*

India is set to sign a multi-billion dollar deal to construct next-generation conventional submarines by the end of March, with an Intergovernmental Agreement (IGA) finalised with Germany for long-term support and export clearances and cost negotiations with Mazagaon Dockyards Limited (MDL) completed.

Sources said the IGA was finalised recently and the German defence minister is expected to visit India by end of March for the final signing. While the main contract will be signed between MDL and the defence ministry, the IGA will give a larger umbrella of assurances for technology transfer, training of personnel and administrative clearances.

As reported by ET, the bid by MDL in partnership with Germany's Thyssenkrupp Marine Systems (TKMS) had been given the go ahead in January 2025 by a technical oversight committee that looked into the bidding process. The past year was spent on finalising costs and technical details, with MDL taking the lead. While the final price of the contract has not yet been revealed, it is likely to be around \$10 billion, which would include significant technology transfer and create thousands of jobs in India by creating an industrial ecosystem.



Given the enormity of the project-six submarines have to be built in India with a high degree of technology transfer-the first of the new boats is expected to enter service almost seven years after signing of a contract. A key capability the new submarines will bring is the AIP system that will give the boats the ability to stay underwater for up to two weeks, greatly enhancing stealth.

The high value contract can also place India as a warship building hub for the German company that is seeking new markets and estimates that Indian shipbuilders can bring down costs significantly, enabling joint exports in the region.

The navy is keen to sign the contract in the current financial year, given that it is facing a severe shortage in underwater platforms. The mainstay Kilo class submarines are being retired as they have reached end of service life and the only additions in the past two decades have been six of the Kalvari class submarines, also manufactured by MDL. The navy also has financial provisions in the current year that need to be utilised and would be used for the first payments to MDL for the mega contract.

<https://economictimes.indiatimes.com/news/defence/government-pact-to-clear-way-for-10-billion-submarine-deal-with-germany/articleshow/127784682.cms?from=mdr>

\*

## Indian Navy's First Training Squadron concludes visit to Phuket Deep Sea Port, Thailand

*Source: Press Information Bureau, Dt. 29 Jan 2026*

The visit of Indian Navy's First Training Squadron (1TS)—comprising INS Tir, INS Sujata, INS Shardul, and ICGS Sarathi—to Phuket Deep Sea Port, Thailand, concluded successfully with a Passage Exercise (PASSEX) in the company of HTMS Huahin on 28 Jan 26.

During the harbour phase, a wide range of bilateral activities were undertaken between the Indian Navy and the Royal Thai Navy (RTN), including professional exchanges, training interactions, and social engagements further strengthening Navy-to-Navy ties.



Captain Tijo K Joseph, Senior Officer, 1TS, along with the Commanding Officers of visiting ships, called on VAdm Veerudome Muangchean, Commander, 3rd Naval Area Command (NAC), RTN. Discussions focused on regional maritime security, training philosophies of RTN, and avenues for enhanced joint training between the two Navies.

Sea trainees of 1TS visited the 3rd Naval Area Command and Phang Nga Naval Port. In addition, RTN personnel were hosted onboard INS Sujata and familiarised with the roles and capabilities of 1TS, providing valuable opportunities for training interaction and exchange of Best Practices. Other highlights of the visit included a combined yoga session and friendly sports fixtures between personnel of both Navies. An onboard reception, co-hosted by the Indian Embassy and the Senior Officer, 1TS, was attended by senior RTN leadership, members of the Indian diaspora, diplomats, and other distinguished guests. The visit reinforced the strong bonds of friendship between the two Navies and underscored Indian Navy's commitment to enhancing maritime cooperation with regional partners, in line with the vision of MAHASAGAR (Mutual and Holistic Advancement for Security and Growth Across Regions).

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2220316&reg=3&lang=1>

\*

## China expands military ties with Bangladesh: Signs pact with Bangladesh Air Force for UAV plant

Source: *The Economic Times*, Dt. 30 Jan 2026

China has expanded its military ties with Dhaka with the signing of a pact between Bangladesh Air Force (BAF) and China Electronics Technology Group Corporation (CETC) International for establishing a new unmanned aerial vehicle (UAV) manufacturing and assembly plant in Bangladesh, along with the provision for technology transfer.

Under the agreement, BAF and CETC International will jointly set up the state-of-the-art plant, said Dhaka-based people familiar with the matter. The signing ceremony was held at the BAF headquarters, with Air Chief Marshal Hasan Mahmood Khan attending as the chief guest, according to a statement posted on BAF's verified Facebook page. "This will include technology transfer, capacity building, industrial skill development, and joint technical cooperation, which will help achieve long-term self-reliance in UAV production," the statement said. Initially, BAF will acquire the capability to produce and assemble medium altitude long endurance UAVs with vertical take-off and landing capabilities.

The statement added that BAF would also produce its own UAVs, which will play a significant role not only in military operations but also in humanitarian assistance and disaster management. The agreement is expected to expand capacity to achieve full self-reliance in domestic UAV production in Bangladesh. "At the same time, it will make a significant contribution to national technological advancement by developing a skilled aerospace workforce through specialised training, knowledge exchange, and capacity building," BAF said.

China is the largest supplier of arms to Bangladesh, providing tanks, frigates, missiles, and Type 035G Ming-class submarines. China built the BNS Sheikh Hasina, Bangladesh's first submarine base, commissioned between 2018 and 2023. Since the 2002 defence pact, bilateral cooperation has expanded to include training, joint production, and maintenance of platforms, along with increased training of Bangladeshi officers by the People's Liberation Army (PLA).

<https://economictimes.indiatimes.com/news/defence/china-expands-military-ties-with-bangladesh-signs-pact-with-bangladesh-air-force-for-uav-plant/articleshow/127777613.cms?from=mdr>

\*

## Science & Technology News

### Implementation of National Science, Technology and Innovation Policy-2020

Source: *Press Information Bureau*, Dt. 29 Jan 2026

The National Science, Technology and Innovation Policy – 2020 was only a draft document, therefore, no budget allocation or expenditure was made under it. Subsequent to this draft, however, the government has introduced several new initiatives, schemes and missions to strengthen country's research and development ecosystem. These include: Research,

Development and Innovation (RDI) Scheme, with a financial pool of ₹1 lakh crore over six years; establishment of the Anusandhan National Research Foundation (ANRF) with a budgetary provision of Rs. 14,000 crore from Central Government and additional funding to be explored and sourced from non-governmental sources; National Quantum Mission (budget outlay: ₹6,003.65 crore); etc.

As per the Directory of R&D Institutions, 2025 brought out by the Department of Science and Technology (DST), there are 622 national laboratories & research institutions across diverse sectors such as science, technology, agriculture, medicine, defence, space, etc. India's national laboratories and research institutes are steadily evolving from being purely knowledge generators to active contributors in innovation-led economic growth. Over the years, the mechanisms for commercialization of innovations from national laboratories and research institutes has been actively strengthened through the Technology Transfer Offices (TTOs), incubation centers, public-private partnerships, and structured licensing models. As per a recent report on Evaluation of Innovation Excellence Indicators brought out by Office of the Principal Scientific Adviser to the Govt. of India, some of the notable achievements in this area are:

The research from the national labs/institutes contributes to various sectors such as healthcare, agriculture, energy and environment, transport and infrastructure, livestock and industries like food processing, textiles etc. Public R&D labs/institutes are leading national missions such as the Deep Ocean Exploration Mission, AI (Artificial Intelligence) Mission, National Quantum Mission etc. There have been 1622 patents filed from 233 institutes during 2021-22 to 2022-23, while 1356 granted to 232 institutes. On the other hand, 1839 technologies were transferred, 1014 new products & 1746 new services were introduced over the two years period. The efforts made by the government, including international collaborations such as exchange of information, generation of new knowledge, sharing of expertise, optimal utilization of resources, etc. have helped in significantly improving India's position in global scientific standings. India now ranks 3rd in terms of total number of research publications; 3rd in terms of the total number of startups; 4th in number of PhD degrees awarded; 6th in patent filing activity; a significant jump in its Global Innovation Index (GII) ranking from 81st in the year 2015 to 38th in 2025 among 139 economies of the world; etc.

As part of the strategy for encouraging indigenous technological development and innovation for a self-reliant India, the government has been orienting its R&D activities in line with national priorities through its new initiatives, missions and programmes like: launch of ₹1.0 lakh crore Research, Development and Innovation (RDI) Fund; establishment of the Anusandhan National Research Foundation (ANRF); National Quantum Missions (NQM); National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS); National Supercomputing Mission; etc.

In addition, programmes have been implemented to foster science- and technology-based innovation and entrepreneurship in academic and research institutions, such as the National Initiative for Developing and Harnessing Innovations (NIDHI), Biotechnology Industry Research Assistance Council (BIRAC) programmes, Innovations for Defence Excellence (iDEX), Technology Development Fund (TDF), and TIDE 2.0 (Technology Incubation and Development of Entrepreneurs). All these initiatives are aligned with various national priorities to generate technological prowess, technological solutions, indigenization, livelihood & employment for its citizens and position India at competitive levels vis-à-vis global peers.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2220189&reg=3&lang=1>

\*

## Financing In Research

*Source: Press Information Bureau, Dt. 29 Jan 2026*

The following sunrise sectors have been initially identified under the ₹1 lakh crore Research, Development and Innovation Fund for prioritizing deep-tech initiatives. However, there is scope to include additional sectors based on the recommendations of the Executive Council (EC) of Anusandhan National Research Foundation (ANRF), subject to approval by the Empowered Group of Secretaries (EGoS).

Energy security and transition, and climate action; “Deep Technology” including quantum computing, robotics and space; Artificial Intelligence and its application to Indian problems, including in agriculture, health, and education; Biotechnology, biomanufacturing, synthetic biology, pharma, medical devices; Digital economy, including digital agriculture. Technologies whose indigenization is important for strategic reasons or for economic security and Atmanirbharta.

The Department of Science & Technology (DST) is the nodal ministry responsible for the implementation of the RDI Scheme. The Scheme will be operationalized through a Special Purpose Fund (SPF) under the Anusandhan National Research Foundation (ANRF), adopting a two-tier funding structure:

First Level: The SPF within ANRF will serve as the custodian of funds.

Second Level: Implementation will be carried out through 2nd-Level Fund Managers, which may include Alternative Investment Funds (AIFs), Development Finance Institutions (DFIs), Non-Banking Finance Companies (NBFCs), and Focused Research Organizations (FROs).

The RDI Scheme primarily aims to encourage the private sector to scale up research, development, and innovation (RDI) in sunrise sectors at Technology Readiness Levels (TRL) 4 and above. Under the new framework, ANRF programmes emphasize strengthening industry-academia collaboration and promoting translational, mission-driven research with active industry participation. To ensure effective engagement, initiatives such as the MAHA–EV Mission and the Critical Raw Materials Research (CRM) Programme mandate participation from relevant industries.

Similarly, Mission AI for Science and Engineering (AI-SE) and the MAHA MedTech Mission strongly encourage participation from relevant industries, PSUs, and start-ups, including financial or in-kind contributions from industry partners. Under the ANRF Translational Research and Innovation (ATRI) programme, each proposal is required to have at least one committed industry partner relevant to the proposed technology, identified at the time of submission.

Long-term, low-interest financing will be provided to private innovators with up to 50% contribution from the RDI Fund through Second-Level Fund Managers (SLFMs). Such financing may be extended in the form of loans or equity. Financing to projects shall ordinarily be provided as long-term loans at low interest rates, which are expected to be unsecured. Financing in the form of equity may also be provided, particularly in the case of start-ups.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2220192&reg=3&lang=1>

\*

## Identifying Young Scientists and Encouraging Research

*Source: Press Information Bureau, Dt. 29 Jan 2026*

Department of Science and Technology has taken several initiatives to support young scientists which include:

Scheme for Young Scientists and Technologists programme (SYST) focusses on encouraging young scientists and technologists to work towards delivery of science and technology (S&T) led solutions for identified socioeconomic challenges. In the last five years (2021 through 2025, inclusive), 120 young scientists have been supported under SYST.

WISE – Fellowship for Ph.D. programme aims to provide opportunity to carry out doctoral research in basic and applied sciences to women scientists and technologists between the age group of 27-45 years who want to pursue research in STEM fields as bench-level scientist. It provides opportunity to women to pursue higher education, i.e., Ph.D. through independent project grant. In the last five years, 241 young scientists have been supported through WISE Fellowship for Ph.D.

Vigyan Jyoti Programme aims to inspire and empower girls to pursue careers in STEM, bridging the gender gap. It provides a supportive ecosystem for girls pursuing science from school to college and enhances Access to Knowledge & Opportunities by collaborating with Knowledge Partners (KPs) including IITs, CSIR labs, NITs, IISERs, AIIMS, and other esteemed institutions. Through periodic activities, Vigyan Jyoti provides exposure to cutting-edge advancements and facilitate interactions with experts, inspiring VJ scholars to pursue careers in STEM. In the last five years, 1,12,682 students have been supported under the Vigyan Jyoti Programme.

CSRI-Post-Doctoral Fellowship (CSRI-PDF) Programme under the 'Cognitive Science Research Initiative' provides opportunities to young scientists (below 40 years) for pursuing innovative research in frontier areas of Cognitive Science. In the last five years, 20 young scientists have been supported under CSRI-PDF.

The Innovation in Science Pursuit for Inspired Research (INSPIRE) scheme aims to attract meritorious youth to study basic and natural sciences at the college and university level and to pursue research careers in both basic and applied science areas including engineering, medicine, agriculture and veterinary sciences spread across all States/UTs across the country. The ultimate aim is to expand the R&D base of the country. It has the following fellowships aimed specifically at young scientists:

Scholarship for Higher Education (SHE) which aims to enhance the rate of attachment of talented youth to undertake higher education in science intensive programs by providing scholarships and mentoring through summer attachment with leading researchers. The scheme offers 12,000 Scholarships every year of Rs 0.80 lakh per year for 5 years for undertaking Bachelor and Masters level education in natural and basic sciences for the talented youth in the age group 17-22 years. In the last five years, 53,097 students have been supported through SHE.

INSPIRE Fellowship is offered to students having secured 1st rank in Basic & Applied Sciences including engineering, medicine, agriculture, veterinary at the University/ academic institute of national importance i.e. IITs, NITs, IISERs level examination as well as Inspire Scholars having secured 70% marks in aggregate at the MSc level who are eligible for admission to the PhD Program in any recognized university/ academic institution in the country. In the last five years, 3101 young scientists have been supported through INSPIRE fellowship.

INSPIRE Faculty Fellowship provides opportunities to the post-doctoral researchers in the age group of 27-32 years for 5 years in both basic and applied sciences area including engineering, agriculture, veterinary and medicine. In the last five years, 482 young scientists have been supported through INSPIRE Faculty Fellowship.

Anusandhan National Research Foundation (ANRF) is implementing the Prime Minister Early Career Research Grant (PMECRG), National Postdoctoral Fellowship (NPDF), Ramanujan Fellowship and International Travel Support (ITS) to identify and support young scientists in India.

Also, ANRF (erstwhile SERB) had programs like Start-up Research Grant (SRG), SERB Research Scientist (SRS), Teachers Associateship for Research Excellence (TARE) to encourage young scientists to engage themselves with scientific activities/undertake research work. The number of young scientists benefitted under these programs in the last five years are given below:

- Prime Minister Early Career Research Grant (PMECRG): 712
- Start-up Research Grant (SRG): 1887
- National Postdoctoral Fellowship (NPDF): 1561
- Ramanujan Fellowship: 168

Council of Scientific and Industrial Research (CSIR) under its Capacity Building and Human Research Development Programme provides fellowship to young researchers to pursue doctoral and postdoctoral research. During last five years, 9880 young researchers have been provided fellowship for pursuing doctoral and postdoctoral research under this programme. Further, CSIR operates the Raman Research Fellowships (RRF) Programme to provide an opportunity for advanced exposure and training to the bright young scientists of CSIR by availing short-term research stints at leading global research centres abroad. During the last five years, 65 young scientists of CSIR were awarded the Raman Research Fellowship to pursue research in 22 countries.

Department of Biotechnology has implemented various programmes to identify young scientists across the nation with selection of more than 500 scientists in the last five years under the following programmes:

- DBT Ramalingaswami Re-entry Fellowship
- Biotechnology Career Advancement and Re-orientation (BioCARE)
- MK Bhan – Young Researchers Fellowship Programme

Indian Council of Agricultural Research (ICAR) has sanctioned 21 National Fellow Programme and 50 Young Scientists Projects, through a competitive selection process for young scientists of ICAR Institutes. The projects commenced on 1st January, 2026 and will continue up to 31st December, 2028 with a total approved outlay of Rs. 22.4377 crore in the last five years.

All the above schemes/ programmes are implemented on a competitive basis nationwide, including Bihar. A number of youth from Bihar, including those from rural and backward/aspirational districts are supported through these programmes to pursue scientific research. INSPIRE programme of DST has supported 1033 students from Bihar in the last five years for undertaking higher education under science intensive programs through the SHE scholarship. Moreover, 48 young researchers have been awarded the INSPIRE fellowship and 8 postdoctoral researchers have been awarded the INSPIRE faculty fellowship. 4084 girls were supported in Bihar under Vigyan

Jyoti program. ANRF supported 32 young scientists through Start-up Research Grant, 8 Prime Minister Early Career Research Grant (PMECRG) and 4 National Post Doctoral Fellowship (N-PDF) were awarded in State of Bihar.

Additionally, in the aspirational district of Nawada, Bihar, under a DST-funded project, two Science, Technology and Innovation (STI) hubs have been established in Sirdala and Meskaur blocks by ICAR-RCER, Patna. Selected rural youths have been trained in the use of digital technologies and ICT tools to enable them to deliver timely, location-specific agricultural advisories to around 40 farmers.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2220196&reg=3&lang=1>

\*

The Tribune  
The Statesman  
ਪੰਜਾਬ ਕੇਸਰੀ ਜਨਸੱਤਾ  
The Hindu  
The Economic Times  
Press Information Bureau  
The Indian Express  
The Times of India  
Hindustan Times  
नवभारत टाइम्स  
दैनिक जागरण  
The Asian Age  
The Pioneer