

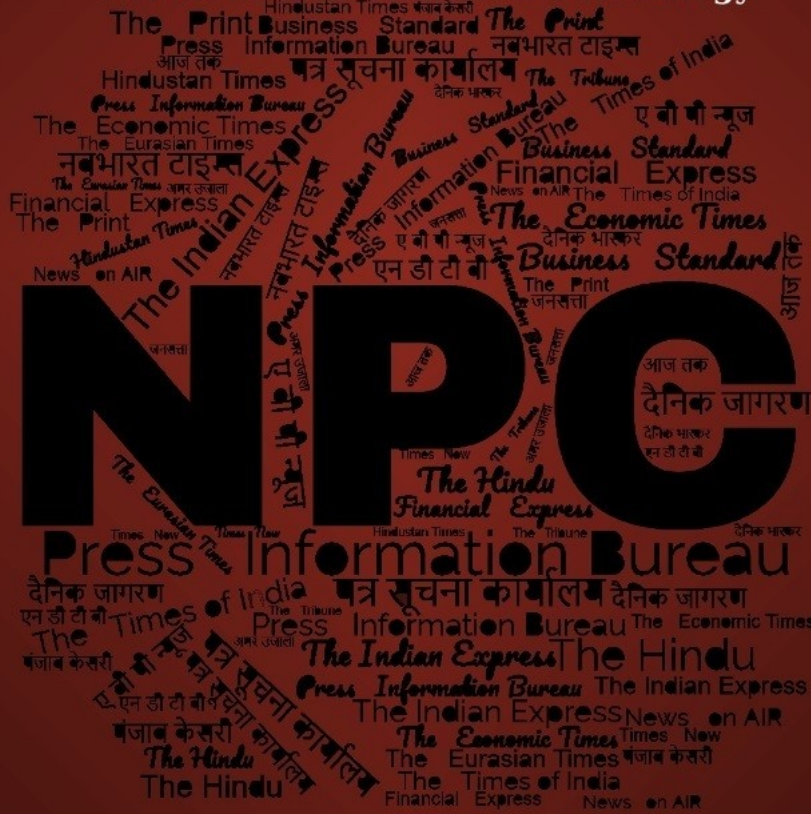
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# समाचार पत्रों से चयनित अंश Newspapers Clippings

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

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



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*Wed, 09 Aug 2024*

## **DRDO shares technology behind bio-degradable bags with over 40 firms**

The Defence Research and Development Organisation (DRDO) has shared the technology behind the packaging product that a team led by its scientist K. Veerabrahmam has developed using PBAT, a biodegradable polymer derived from petroleum products or plant oils, with more than 40 companies.

DRDO and its partners are committed to keeping the biodegradable bags cost-effective, notwithstanding the relatively higher cost of production. As compared to ₹140 per kg of conventional plastics bags, cost of production of the biodegradable bags ranges ₹160-₹180 per kg, Mr. Veerabrahmam said in a release on DRDO sharing the technology free of cost with the firms.

<https://www.thehindu.com/news/national/telangana/drdo-shares-tech-behind-biodegradable-bags-with-over-40-firms/article68498043.ece>



*Fri, 09 Aug 2024*

**Pinaka Rocket System: अब चीन-PAK सीमा पर बदल जाएगा सीन! DRDO बना रहा पिनाका-एमके3 रॉकेट लॉन्चर, जानें इसकी खासियत**

**Pinaka Rocket System:** भारत रक्षा क्षेत्र में एक बड़ी उपलब्धि हासिल करने वाला है. इस कड़ी में भारतीय सेना को जल्द ही पिनाका रॉकेट लॉन्चर (Pinaka Rocket System) का अपडेटेड वर्जन मिलने की बात कही जा रही है. रिपोर्ट्स के मुताबिक, डीआरडीओ (DRDO) ने पिनाका-एमके3 के फैब्रिकेशन का काम शुरू कर दिया है. ये मॉडल इस घातक एयर डिफेंस सिस्टम का तीसरा मॉडल बताया जा रहा है.

पिनाका-एमके3 रॉकेट लॉन्चर मिलने के बाद भारत की मारक क्षमता में बढ़त होगी और भारतीय सेना ज्यादा रेंज तक वार करने में सक्षम हो सकेगी. अहम ये है कि इसी रॉकेट लॉन्चर ने भारत का कारगिल युद्ध में काफी साथ दिया. कारगिल युद्ध के दौरान इसी की मदद से भारत चोटियों पर बैठे दुश्मनों के छक्के छुड़ाने में कामयाब हो सका था. अब इसी सिस्टम का एडवांस वर्जन भारतीय सेना को और भी मजबूत करेगा.

## 120 किलोमीटर या उससे ज्यादा होगी रेंज

बताया गया कि पिनाका-एमके3 रॉकेट लॉन्चर की रेंज 120 किलोमीटर या उससे और भी कई ज्यादा होने वाली है. लॉन्ग रेंज गाइडेड रॉकेट सिस्टम पिनाका-एमके3 के दो वेरिएंट्स तैयार किए जाने की बात सामने आई है. जहां पहले वेरिएंट्स के 120 किलोमीटर तो वहीं दूसरे वेरिएंट्स के 300 किलोमीटर रेंज के होने की खबरें हैं.

## चीन-पाकिस्तान को देगा कड़ी चुनौती

भारत को इस रॉकेट लॉन्चर सिस्टम की जरूरत पड़ोसी खतरे को देखते हुए महसूस हुई. दरअसल, चीन ने लाइन ऑफ एक्चुअल कंट्रोल के पास 300 किलोमीटर की मारक क्षमता वाले रॉकेट लॉन्चर खड़े किए हुए हैं. हालांकि, अब पिनाका-एमके3 रॉकेट लॉन्चर चीन की नींद उड़ाने के लिए तैयार है.

## क्या है इसकी खासियत?

पिनाका रॉकेट लॉन्चर की स्पीड इसे दुश्मनों के लिए मौत बनाती है. इसकी गति 5757.70 किलोमीटर प्रति घंटा है यानी कि पलक झपकते ही दुश्मन को नेस्तनाबूद करने की हिम्मत रखता है. इसकी गति इतनी है कि महज एक सेकेंड में ये 1.61 किलोमीटर की गति से हमला करने में सक्षम है.

पूरी तरह से स्वदेशी इस रॉकेट सिस्टम को किसी भी मौसम में चलाया जा सकता है. बीते साल इसके 24 टेस्ट किए गए और पाया गया कि ये पल भल में दुश्मन के ठिकाने को कब्रिस्तान बनाने की हिम्मत रखता है. पिनाका रॉकेट लॉन्चर के पहले ही दो वर्जन भारतीय सेना की ताकत बढ़ा रहे हैं. अब इसका तीसरा वर्जन सेना को और भी अधिक मजबूत करेगा.

<https://www.abplive.com/news/india/drdo-started-fabrication-of-pinaka-mk-3-long-range-guided-rocket-know-specifications-china-pakistan-border-2756652>

### Business Standard

*Fri, 09 Aug 2024*

## **India's path to defence manufacturing hub passes through ammunition market**

India's stated aim of becoming a global powerhouse in defence manufacturing can begin with consolidating its position in the ammunition market, says AMMO India 2024, a collaborative report that FICCI and KPMG released on Thursday.

The report underscores the opportunities that lie ahead for India's ammunition industry, given the "prevailing geopolitical conflicts, increase in military spending and rising insurgency."

In 2023, the global market size for ammunition was pegged at Rs 1,29,260 crores (US\$ 15.5 billion) with heavy calibre ammunition accounting for 53.48 per cent of the global demand. This was followed by grenades, mines and mortars at 23.27 per cent and medium calibres at 12.84 per cent.

Fuelled by these demand drivers, global ammunition production is expected to increase to Rs 1,84,092 crores (US\$ 22.0 billion) in 2032, increasing at a compound annual growth rate (CAGR) of 3.95 per cent.

The report says "Indian ammunition is on a fast track to grow, driven by a combination of strategic initiatives and pressing security needs."

According to KPMG: "Given the ammunition market is witnessing substantial growth we estimate the current market was worth Rs 7,057 crore (US\$ 844 million) in 2023, which is about 5.5 per cent of the global ammunition industry."

[https://www.business-standard.com/external-affairs-defence-security/news/india-aims-for-defence-power-with-strong-ammunition-market-position-124080801670\\_1.html](https://www.business-standard.com/external-affairs-defence-security/news/india-aims-for-defence-power-with-strong-ammunition-market-position-124080801670_1.html)



*Fri, 09 Aug 2024*

## **Instability in India's neighbourhood is 'cause of concern', says Chief of Defence**

New Delhi: The proxy war by Pakistan in Jammu and Kashmir, whose "sudden escalation" we are seeing in south of Pir Panjal, and prolonged border dispute with China are two major security challenges that India faces, while the issue of instability in "our neighbourhood" is another "cause of concern" for the nation, Chief of Defence Staff General Anil Chauhan said on Thursday.

His remarks come in the backdrop of the ongoing political situation in Bangladesh. Addressing a conference hosted by industry body FICCI in New Delhi, General Chauhan said the "global geopolitical environment is in a state of a flux".

"And, I believe that we are passing through an era of great global disruption. It encompasses technological disruption, economic, environmental whether it is climate change, demographic, migration of people or whether it is peace and security," Gener...

<https://www.deccanherald.com/india/instability-in-indias-neighbourhood-is-cause-of-concern-says-chief-of-defence-3143426>

**Science & Technology News**



*Thurs, 08 Aug 2024*

## **33 named for country's highest science honour**

This is the first national Vigyan awards announced by the government. Till 2023, the Shanti Swarup Bhatnagar award was India's top science honour. The team behind India's maiden moon landing and a pioneering biochemist were among the 33 scientists honoured with India's highest science awards announced by the government on Wednesday.

The science and technology ministry released a consolidated list of final awardees of the first-ever Vigyan Puruskar. The team of Chandrayaan-3 mission won the team award. Biochemist Govindarajan Padmanabhan, former director of the Indian Institute of Science-Bengaluru and Padma Bhushan laureate, won the Vigyan Ratna Puraskar, a lifetime achievement award.

Thirteen scientists won the Vigyan Shri award and 18 scientists won the Vigyan Yuva-Shanti Swarup Bhatnagar awards.

This is the first national Vigyan awards announced by the government. Till 2023, the Shanti Swarup Bhatnagar award was India's top science honour. It was named after Bhatnagar, a renowned chemist who was the first chairman of the University Grants Commission and the Council for Scientific and Industrial Research, and in whose name the awards were instituted in 1958. Scientists under 45 were eligible for the SSB award.

This year, the government consolidated the awards under the Vigyan Ratna (lifetime achievement), Vigyan Shri (distinguished contributions), Vigyan Yuva-Shanti Swarup Bhatnagar (for young scientists under 45) and Vigyan Team (exceptional contribution in a team) across 13 domains.

<https://www.hindustantimes.com/india-news/33-named-for-country-s-highest-science-honour-101723053639698.html>

*Fri, 09 Aug 2024*

## **Chandrayaan-3 team, ex-IISc director win national science awards**

The government has announced the first set of Rashtriya Vigyan Puraskar, or national awards for scientists, ever since it controversially cut down the number of such awards in 2022. Thirty-three of these awards are slated to be given on August 23, the National Space Day to mark Chandrayaan 3's moon landing, and were announced on Wednesday (August 7, 2024).

Following the rehaul of the scientific awards scheme, the Ministry of Science and Technology in January this year had notified four categories of awards, comprising a maximum of 56, for scientists. These are up to three Vigyan Ratna to recognise life-time achievements and contributions made in a given field of science and technology, up to 25 Vigyan Shri to recognise distinguished contributions, up to 25 Vigyan Yuva: Shanti Swarup Bhatnagar award to recognise and encourage young scientists who made an exceptional contribution, and up to three Vigyan Team awards to recognise a team of three or more scientists/researchers/innovators who have made an exceptional contribution working in a team.

<https://www.thehindu.com/sci-tech/science/chandrayaan-3-team-ex-iisc-director-win-national-science-awards/article68497903.ece>

INDIA  
TODAY

*Fri, 09 Aug 2024*

## **Isro SSLV-D3 mission: Why it could forever change India's satellite launch market**

The Indian Space Research Organisation (Isro) is set to forever change the satellite launch market with its Small Satellite Launch Vehicle (SSLV).



Scheduled for its third and final development flight on August 15, 2024, the SSLV is designed to meet the growing global demand for launching small satellites, offering a cost-effective and flexible solution.

## **WHAT IS SSLV?**

The SSLV is a compact, three-stage launch vehicle configured with solid propulsion stages and a liquid propulsion-based Velocity Trimming Module (VTM) as its terminal stage.

It stands 34 meters tall, has a diameter of 2 meters, and a lift-off weight of approximately 120 tonnes. The SSLV can carry payloads of up to 500 kg to a 500 km planar orbit or 300 kg to a Sun-synchronous orbit (SSO).

One of the SSLV's most significant advantages is its low cost and quick turnaround time. Unlike the Polar Satellite Launch Vehicle (PSLV), which takes about 70 days to integrate, the SSLV can be assembled in just 72 hours with a team of only six people.

The SSLV offers flexibility in accommodating multiple satellites, making it ideal for launching constellations of small satellites. It supports launch-on-demand capabilities, requiring minimal launch infrastructure.

The vehicle can manage multiple orbital drop-offs, allowing it to deploy several satellites in a single mission. This feature is particularly beneficial for commercial satellite operators and research institutions.

<https://www.indiatoday.in/science/story/isro-sslv-d3-mission-why-it-could-forever-change-indias-satellite-launch-market-2578997-2024-08-08>

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