

March
मार्च
2025

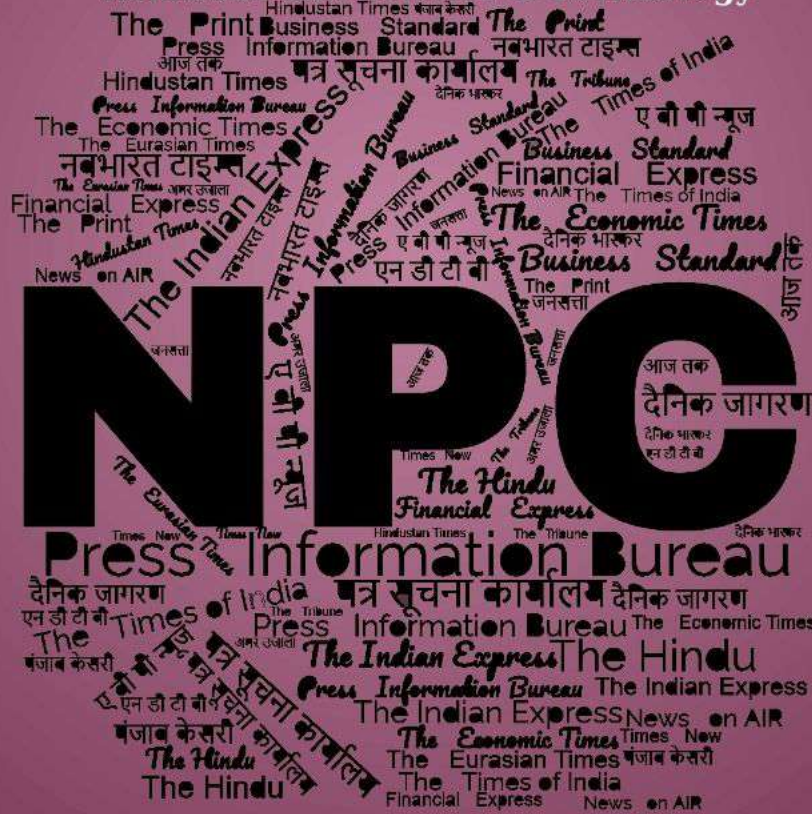
खंड/Vol. : 50 अंक/Issue : 44

05/03/2025

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

Metcalfe House, Delhi - 110 054

CONTENTS

S. No.	Title	Source	Page No.
DRDO News			1-
1	India's security apparatus must remain adaptive to emerging threats such as cyber warfare, hybrid warfare, space-based challenges, and transnational organised crime: Raksha Mantri Shri Rajnath Singh	<i>Press Information Bureau</i>	1
2	Rajnath Singh inaugurates DRDO-MHA conference, highlights emerging security challenges	<i>Press Information Bureau</i>	3
3	DRDO conducts high-altitude trials of Indigenous Integrated Life Support System for LCA Tejas	<i>Press Information Bureau</i>	4
Defence News			6-12
Defence Strategic: National/International			
4	INDIAN NAVAL SHIP KUTHAR ARRIVES AT COLOMBO, SRILANKA	<i>Press Information Bureau</i>	6
5	CAS INAUGURATES 16th JUMBO MAJUMDAR INTERNATIONAL SEMINAR	<i>Press Information Bureau</i>	7
6	World's top turret-making company to manufacture in India. Signs joint venture for light tanks' turrets	<i>Press Information Bureau</i>	7
7	Bangladesh Deploys Turkish Bayraktar TB-2 Drones For Surveillance Near Indian Border Amid Concerns Over Pakistan Ties	<i>Swarajaya</i>	9
8	Fortifying the Siliguri Corridor, Indian Army's Trishakti Corps Tests High-Altitude Warfare in Month-long Exercise	<i>The Economic Times</i>	10
Science & Technology News			12-15
9	"Obesity is a multifactorial challenge and needs multifactorial preventive strategies"	<i>Press Information Bureau</i>	12
10	National Workshop on 'Capacity Building in Indian Knowledge Systems': Documentation, Validation, and Communication	<i>The Times of India</i>	14

DRDO News

India's security apparatus must remain adaptive to emerging threats such as cyber warfare, hybrid warfare, space-based challenges, and transnational organised crime: Raksha Mantri Shri Rajnath Singh

Advanced systems & technologies must be leveraged not only for security operations but also for disaster management & humanitarian relief: RM

“It is not enough for security agencies and technology developers to take the lead. Every citizen should know how to respond in times of crisis”

Source: Press Information Bureau Dt. 04 March 2025,

URL: <https://pib.gov.in/PressReleasePage.aspx?PRID=2108036>

Raksha Mantri Shri Rajnath Singh inaugurated the Ministry of Home Affairs (MHA) - Defence Research and Development Organisation (DRDO) Collaboration Conference-Cum-Exhibition on 'Advanced Technologies for Internal Security and Disaster Relief Operations' at DRDO Bhawan, New Delhi on March 04, 2025. Organised by the Directorate of Low Intensity Conflict (DLIC) under DRDO, the two-day conference aims to equip Central Armed Police Forces (CAPFs) officers with the latest advancements in technology to address challenges in their operations. The event provided a platform for the exchange of ideas and collaboration to strengthen India's internal security and disaster response framework.

Addressing the gathering, Shri Rajnath Singh highlighted the growing complexities in global security and the increasing overlap between internal and external threats. "Security challenges in the modern world are evolving rapidly, and the overlap between internal and external security is increasing. It is imperative that our institutions break silos and work collaboratively to ensure a strong, secure, and self-reliant India," he stated. He stressed that India's national security must be viewed holistically, integrating efforts across different security agencies and leveraging the latest technological advancements.

Shri Rajnath Singh underscored that India's security apparatus must remain adaptive to emerging threats such as cyber warfare, hybrid warfare, space-based challenges, and transnational organised crime. He noted that India's internal security is not just about managing conventional threats like terrorism, separatist movements, and left-wing extremism but also about preparing for unconventional threats that can destabilise the nation's economic and strategic interests. "The adversaries of today do not always come with traditional weapons; cyber-attacks, misinformation campaigns, and space-based espionage are emerging as new-age threats that require advanced solutions," he stated.

“DRDO has played a pivotal role in enhancing India’s defence capabilities, and its contributions to internal security are equally commendable. From small arms and bulletproof jackets to surveillance and communication systems, DRDO’s innovations are empowering our security forces,” Raksha Mantri underlined. He urged DRDO and MHA to work together to create a common list of scalable products that can be jointly developed and deployed in a time-bound manner. “Our security forces require the best tools and technologies to remain ahead of the curve. It is encouraging to see DRDO’s focus on modernisation, with products like small arms, surveillance equipment and drone systems either inducted or undergoing evaluation for deployment in internal security agencies,” he highlighted.

Shri Rajnath Singh recalled his tenure as Home Minister, highlighting how the collaboration between security agencies and scientific institutions led to significant technological advancements. He cited examples of DRDO-developed technologies such as the corner shot weapon system, INSAS rifles, IED jammer vehicles and riot control vehicles, which were effectively integrated into the operations of CAPFs.

Shri Rajnath Singh also spoke about the importance of leveraging technology not just for security but also for disaster management and humanitarian relief. “The role of technology is not just in defence but also in ensuring peace and social welfare. Advanced systems like bulletproof jackets, drones, surveillance equipment and anti-drone technologies must be leveraged not only for security operations but also for disaster management and humanitarian relief,” he said. He cited the increasing frequency of natural calamities like cyclones, avalanches, earthquakes & cloud bursts and underscored the critical need for advanced rescue tools. He mentioned that the use of technologies such as thermal imaging cameras, drone-based detection systems, and victim locating devices can significantly reduce casualties and damage.

Referring to the recent avalanche in Mana, Uttarakhand, Raksha Mantri lauded the use of advanced rescue equipment in saving lives and reducing the impact of the disaster. He threw light on the fact that although disasters are tragic in themselves, their impact can be minimised with the use of advanced technology and how, in the recent avalanche, technologies like rotary rescue saws, thermal imaging, victim locating cameras, avalanche rods, and drone-based detection systems played a crucial role in saving lives.

Highlighting the importance of public awareness in disaster management, Shri Rajnath Singh called for greater involvement of civil society in disaster preparedness. “Today, India is a prospering nation, and disaster management must become an integral part of our preparedness. It is not enough for security agencies and technology developers to take the lead; we must also educate the general public. Every citizen should know how to respond in times of crisis,” he urged.

Raksha Mantri also stressed the need for focused conferences on specific security challenges faced by different regions of the country. “Security threats in India are not uniform. The issues faced in the Northeast due to insurgencies are different from those in Naxal-affected areas or border regions. Similarly, urban security concerns are different from those in rural areas. We need to organise dedicated conferences that focus on region-specific challenges and solutions,” he said.

As part of the event, the Transfer of Technology (ToT) of the ASMI 9x19mm Machine Pistol was handed over by DRDO to Lokesh Machinery Tool, marking a step forward in the ‘Aatmanirbhar Bharat’ initiative. Shri Rajnath Singh also inaugurated an exhibition showcasing DRDO-designed technologies developed in collaboration with the Indian defence industry, highlighting achievements in indigenisation. Three significant documents were also released to strengthen cooperation and technological advancements in internal security and disaster management. These include:

1. Compendium of DRDO Products for Internal Security
2. Compendium of DRDO Products for Police Operations
3. Compendium of DRDO Products for Disaster Relief Operations

The conference includes seven technical sessions focusing on key areas such as Left-Wing Extremism, border management, advanced weapon technologies, drone & counter-drone solutions, disaster management, policing & crowd control, and futuristic communication technologies.

Secretary DDR&D and Chairman DRDO Dr Samir V Kamat during the conference stated that more than 100 products from DRDO developed technologies have been or soon will be inducted into various agencies of MHA. He further mentioned that the technologies which DRDO develops for the services are also being utilised in internal security as well as disaster relief operations. Chief of the Army Staff General Upendra Dwivedi, Secretary (Border Management) MHA Shri Rajendra Kumar, Secretary (Defence Production) Shri Sanjeev Kumar, DG (Production, Coordination & Services Interaction) Dr Chandrika Kaushik, senior officials from Ministry of Defence and MHA were also present on the occasion.

*

Rajnath Singh inaugurates DRDO-MHA conference, highlights emerging security challenges

Source: DD News, Dt. 04 March 2025,

URL: <https://ddnews.gov.in/en/rajnath-singh-inaugurates-drdo-mha-conference-highlights-emerging-security-challenges/>

Defence Minister Rajnath Singh on Tuesday inaugurated the DRDO-MHA Collaboration Conference-cum-Exhibition in the national capital, emphasizing the evolving nature of security threats and the need for adaptive policies.

Speaking at the Seminar on Advanced Technologies for Internal Security, Singh underscored the interconnectedness of internal and external security, stating that both are “two sides of the same coin.” He stressed the importance of understanding emerging challenges to shape effective security strategies.



“As far as internal security is concerned, we are facing threats like terrorism, separatist movements, left-wing extremism, communal tensions, trans-border illegal immigration, and organized crimes,” Singh said. “Externally, we have our own set of challenges.”

The Defence Minister noted that traditional security threats were primarily conventional, but modern challenges include hybrid warfare, cyber threats, and space-based vulnerabilities. “Earlier, these threats were only conventional, but in recent times, we are also seeing unconventional threats in large numbers,” he added.



Dr. Samir V Kamat, Secretary, DRDO, highlighted the significance of joint discussions between security agencies and technology developers. “This conference is crucial as it allows users and developers to openly discuss requirements and challenges,” Kamat said, adding that DRDO is working on both weapon systems and countermeasures to neutralize emerging threats.

*

DRDO conducts high-altitude trials of Indigenous Integrated Life Support System for LCA Tejas

Source: Press Information Bureau, Dt. 05 March 2025,

URL: <https://pib.gov.in/PressReleasePage.aspx?PRID=2108147>

The Defence Bio-Engineering & Electro Medical Laboratory (DEBEL), a Bengaluru-based lab under the Defence Research and Development Organisation (DRDO), successfully conducted high-altitude trials of the Indigenous On-Board Oxygen Generating System (OBOGS)-based Integrated Life Support System (ILSS) for the LCA Tejas aircraft, on March 04, 2025.

The OBOGS-based ILSS is a cutting-edge system designed to generate and regulate breathable oxygen for pilots during flight, eliminating dependence on traditional liquid oxygen cylinder-based systems. The ILSS underwent rigorous testing on the LCA-Prototype Vehicle-3 aircraft of Hindustan Aeronautics Limited (HAL)/ Aeronautical Development Agency (ADA), meeting stringent aeromedical standards in varied flight conditions, including altitudes of up to 50,000 feet Above Mean Sea Level and high-G maneuvers.

Performance evaluations covered critical aspects such as oxygen concentration, demand breathing, availability of 100% oxygen, aerobatic maneuvers at required altitudes for full functional testing of Anti – G Valve, Breathing Oxygen System (BOS) ON during taxiing, Take off, Cruise, G turns and rejoin approach & landing. Following flight clearance from Centre for Military Airworthiness & Certification (CEMILAC), the system successfully met all specified parameters. Beyond OBOGS, the ILSS integrates 10 Line Replaceable Units, including the Low-Pressure Breathing Regulator, BOS, Emergency Oxygen System, Oxygen Sensor, Anti-G valve, and other advanced components. This would ensure real-time oxygen generation, enhancing pilot endurance and operational effectiveness.

The system has been manufactured by L&T as a Development cum Production Partner, reflecting a significant collaboration between DRDO and Indian defence industries. Notably, the ILSS has 90% indigenous content, furthering India's self-reliance in aerospace technology. With appropriate modifications, the system can also be adapted for use in MiG-29K and other aircraft. This milestone has been achieved through the collaborative efforts of DEBEL, ADA, HAL, CEMILAC, National Flight Test Center, Directorate General of Aeronautical Quality Assurance, and the Indian Air Force (IAF).

Raksha Mantri Shri Rajnath Singh congratulated DRDO, IAF, Public Sector Undertakings, and industry partners on this remarkable achievement, emphasising that this development reinforces India's commitment to cutting-edge defence technologies and aligns with the vision of 'Viksit Bharat 2047.'

Secretary, Department of Defence R&D and Chairman DRDO Dr Samir V Kamat also lauded the DRDO team, the IAF, and industry partners for their contributions towards the successful high-altitude trial of the Indigenous ILSS for LCA Tejas.

Defence News

Defence Strategic: National/International

INDIAN NAVAL SHIP KUTHAR ARRIVES AT COLOMBO, SRILANKA

Source: Press Information Bureau, Dt. 05 March 2025,

URL: <https://pib.gov.in/PressReleasePage.aspx?PRID=2108147>

Towards strengthening maritime ties, INS Kuthar, Eastern Fleet Ship under the aegis of Eastern Naval Command is on mission deployment in Indian Ocean Region and arrived at Colombo, Sri Lanka. Commander Nitin Sharma, the Commanding Officer of the ship called on RAdm MHCJ Silva, Commander Western Naval Area, Sri Lanka Navy.



As part of the visit, personnel from both navies will engage in professional interactions, knowledge-sharing sessions, and joint activities to enhance operational synergy between the two navies.

The visit underscores the longstanding partnership between the two nations, furthering cooperation under GoI's '*Neighbourhood First*' and '**Security and Growth for All in the Region (SAGAR)**' initiatives.

*

CAS INAUGURATES 16th JUMBO MAJUMDAR INTERNATIONAL SEMINAR

Source: Press Information Bureau, Dt. 05 March 2025,

URL: <https://pib.gov.in/PressReleasePage.aspx?PRID=2108093>

Air Chief Marshal AP Singh, Chief of the Air Staff, inaugurated the 16th 'JUMBO' Majumdar International Seminar organised by the Centre for Air Power Studies (CAPS) on 04 March 2025 at Air Force Auditorium. The theme for the Seminar was 'EVOLVING DYNAMICS OF AEROSPACE POWER'. The welcome remarks were delivered by Air Vice Marshal Anil Golani (Retd), Director General, CAPS.

'Jumbo' Majumdar International Seminar is an annual event organised by CAPS in commemoration of late Wg Cdr Karun Krishna Majumdar, an ace fighter pilot of pre-Independence India.

A host of topics ranging from Integrated Aerospace Management, Effective Space Exploitation for gaining 'Control of the Air', exploitation of Drones and Manned Unmanned Teams (MUMT) in future conflicts, impact of EW and Cyber on Aerial Warfare, the Way Forward for induction of Emerging and Niche Technologies to 5th gen aircraft by IAF, were discussed by the eminent panellist. The Seminar was attended by officials, researchers and aviation enthusiasts from varied fields and experiences. The Seminar reignited interest and excitement amongst the young and veterans alike and paved the way for future engagements in Aerospace domain.

*

World's top turret-making company to manufacture in India. Signs joint venture for light tanks' turrets

Source: The Print Dt. 05 March 2025,

URL: <https://theprint.in/defence/worlds-top-turret-making-company-to-manufacture-in-india-signs-joint-venture-for-light-tanks-turrets/2532468/>

Belgium-based John Cockerill Defense, one of the world's top turret-making companies, has tied up with an Indian firm to manufacture, assemble and commission the critical component for the Indian Army's Indian Light Tank (I.L.T) programme, Project Zorawar.

The company has formed a 60:40 joint venture with Indian firm Electro Pneumatics & Hydraulics (India) Pvt Ltd to manufacture turrets in Chakan, Pune.

This will be the first time that the Belgium company will set up a manufacturing facility for turrets outside its country. The DRDO and private firm L&T have come up with the Zorawar light tank, which is currently undergoing tests in-house. For the tank, L&T used the John Cockerill turret.

7

Under Project Zorawar, the Indian Army will buy 59 light tanks if found satisfactory, and then L&T will compete with other firms for a larger order.

The initial demand of the Army is roughly 350 light tanks to take on the Chinese in the mountainous borders.



Light tank Zorawar developed jointly by DRDO and L&T

“The joint venture that we have is not limited to just the 59 light tanks. Our reading is that the overall demand will be much higher than 350 ... Moreover, as the joint venture stabilises, we will look at other programmes of the Indian Army—like the Future Infantry Combat Vehicle (FICV) and the futuristic main battle tank called the Future Ready Combat Vehicle (FRCV),” Thierry Renaudin, Chief Executive Officer, John Cockerill Defense, said in the national capital responding to a query by ThePrint.

Project Zorawar, he said, is not just limited to manufacturing the light tanks for Indian orders but eventually making them at the Chakan plant and exporting them around the world.

Ingrid Rasquinha, Joint Managing Director, Electro Pneumatics and Hydraulics (India) Pvt Ltd, said the company plans to roll out the first India-made turret in 2027.

The company has made the launchers for the Akash Next Generation, and the same, along with the hydraulics for the Indian Advanced Towed Artillery Gun (ATAGS), are under trial.

Ashley Rasquinha, Joint Managing Director of the Indian firm, said the joint venture would look at exports, as the John Cockerill executive pointed out that the company already sells turrets to nearly half a dozen countries.

Vivek Bhide, Regional President, India and Group Transformation Officer, John Cockerill, said the defence sector is critical to national security. “And therefore, it is important to encourage and develop India’s defence manufacturing capabilities. This JV aims to equip India’s armed forces with advanced defence solutions for diverse and challenging combat environments. Importantly, it

also answers the ‘Make in India’ call in a sector where India is working to embellish its global credentials,” he said.

*

Bangladesh Deploys Turkish Bayraktar TB-2 Drones For Surveillance Near Indian Border Amid Concerns Over Pakistan Ties

Source: Swarajya, Dt. 04 March 2025,

URL: <https://swarajyamag.com/news-brief/bangladesh-deploys-turkish-bayraktar-tb-2-drones-for-surveillance-near-indian-border-amid-concerns-over-pakistan-ties>

Amid growing concerns over Bangladesh’s deepening military ties with Pakistan, it has now come to light that the Bangladesh Armed Forces have acquired Turkish TB-2 Bayraktar drones and are actively using them for surveillance operations near the Indian border, according to a report by ANI.

Defence sources confirmed to ANI that Indian intelligence agencies have detected the drones in operation and are closely monitoring their movements.

The drones have been observed carrying out reconnaissance missions within Bangladeshi airspace, particularly in regions bordering India, over the past few months.



Turkish Bayraktar drone (Representative Image)

Some of these sorties have lasted more than 20 hours, demonstrating the drones’ endurance and capabilities. In response, India has deployed radars and other monitoring systems to keep a vigilant watch over these activities.

The Bayraktar TB-2, a Medium Altitude Long Endurance (MALE) drone, has emerged as a significant achievement for Turkey’s defence industry.

Widely deployed in modern conflicts, this unmanned aerial system is capable of carrying air-to-ground weaponry, adding to concerns over its operational role near India’s borders.

Adding to these tensions, the administration of Bangladeshi Prime Minister Mohammed Yunus has been seen strengthening ties with Pakistan’s intelligence agencies.

Reports suggest that Pakistani military officials have visited strategically sensitive areas near the Indian border, including the Chicken's Neck corridor in Siliguri, West Bengal, a narrow land strip of crucial importance to India's territorial integrity.

Indian Army Chief General Upendra Dwivedi recently expressed apprehensions regarding the increasing presence of Pakistani military and intelligence officers in Bangladesh.

Speaking at the ANI podcast, he had stated, "I had used the word epicentre of terrorism for a particular country (Pakistan). Now those countrymen, if they go to any other place and they happen to be our neighbour, as far as I am concerned, I should be concerned about it. That they should not be able to use that soil to send terrorists to India. That is as far as that is concerned."

The development raises fresh security challenges for India, particularly given the history of cross-border concerns in the region. Indian defence officials remain on high alert, ensuring that strategic measures are in place to counter any potential threats arising from these new developments.

*

Fortifying the Siliguri Corridor, Indian Army's Trishakti Corps Tests High-Altitude Warfare in Month-long Exercise

Source: The Republic World, Dt. 05 March

URL: <https://www.republicworld.com/defence/indian-armed-forces/fortifying-the-siliguri-corridor-indian-armys-trishakti-corps-tests-high-altitude-warfare-in-month-long-exercise>

The Indian Army's Trishakti Corps has just wrapped up a month-long live-firing exercise featuring its most formidable battle machines—T-90 tanks. The exercise, designed to refine armoured warfare tactics in high-altitude terrain, underscores India's commitment to bolstering its defences along the volatile Sikkim sector and the Siliguri Corridor, a vital lifeline linking mainland India to its northeastern states.

The drills, held at classified forward locations, focused on precision firepower, night combat, and integration of new battlefield technologies. From guided missile launches to unmanned aerial vehicle (UAV) reconnaissance, the exercise simulated real-time combat conditions, pushing both men and machines to their limits.

T-90: The Spearhead of India's Armoured Might

At the heart of the war games were T-90 Bhishma tanks, the backbone of India's armoured fleet. With their superior mobility, next-generation fire control systems, and enhanced protection, these Russian-origin machines are built to dominate the battlefield.

A defining feature of the T-90 is its ability to fire anti-tank guided missiles (ATGMs) with pinpoint accuracy, allowing it to destroy enemy armour at extended ranges. Equipped with thermal imaging sights and advanced sensors, the tank remains fully combat-capable in pitch-dark conditions, ensuring round-the-clock operational readiness—a crucial advantage in the mountains, where visibility can change in minutes.

“The high-altitude adaptation of armoured warfare is a key focus area. T-90s, when integrated with aerial assets and real-time surveillance technologies, become an unstoppable force,” a senior defence official told Republic.

This month-long high-intensity battle drill tested several advanced warfare elements:

- **Precision strike validation** – Troops fired advanced ammunition and guided missiles, assessing hit accuracy and lethality in rugged terrain.
- **Man-machine teaming** – Tank crews trained alongside UAVs, ensuring seamless coordination between human decision-making and real-time data from drones.
- **Night combat capabilities** – The Army validated 24/7 warfighting ability by deploying thermal imaging-assisted strikes, a game-changer in no-light scenarios.
- **Aatmanirbharta in Defence** – Indigenous systems, including locally manufactured ammunition and surveillance assets, were tested as part of India’s push for self-reliance in military preparedness.

A New Theatre of Modern Warfare

With rising security challenges along India’s northern borders, the Indian Army is fast-tracking multi-domain warfare strategies. Trishakti Corps' latest war games come on the heels of Exercise Devil Strike, an airborne and special forces drill designed to sharpen rapid deployment and precision-strike capabilities.

The back-to-back execution of these high-intensity exercises highlights India’s evolving military doctrine, which aims to integrate armour, aerial, and special forces into a single, cohesive strike force capable of operating in diverse combat environments.

A senior Army officer described the exercise as a decisive step in modernizing India's armoured forces.

“This exercise tested our ability to operate in dynamic combat conditions. The integration of T-90s with UAV reconnaissance and precision-guided firepower has added a new edge to our battlefield strategy. Our troops have demonstrated exceptional combat readiness, ensuring that the Indian Army can effectively respond to any operational contingency,” he said.

Siliguri Corridor: A Critical Flashpoint

The significance of Trishakti Corps' operational readiness cannot be overstated. The Siliguri Corridor, also known as the Chicken’s Neck, is a narrow 22-km-wide strategic lifeline connecting the rest of India to the Northeast. With Chinese military activity intensifying in the Tibet Autonomous Region, Indian forces are fortifying this region to thwart any potential encroachments.

Tensions along the Line of Actual Control (LAC) have remained high, with multiple face-offs between Indian and Chinese troops in recent years. China’s rapid militarization of Tibet, coupled with its aggressive posturing, has led India to bolster its high-altitude defences, ensuring its ability to mobilize forces rapidly in the event of any incursion.

A Legacy of Strength: The Trishakti Corps

The Trishakti Corps (XXXIII Corps) has a storied history, tracing its origins back to the British Indian Army’s XXXIII Corps, which played a pivotal role in World War II. Re-raised in 1960 at

Shillong, the corps now operates under the Eastern Command, with its headquarters at Sukna, West Bengal.

Commanded by a three-star Lieutenant General, the 45,000-60,000-strong corps is one of India's most crucial mountain warfare formations, responsible for securing the borders of Sikkim, Bhutan, and the Siliguri Corridor. For now, as the dust settles over the exercise zone, the message is clear—India's armoured spearhead stands ready to meet any challenge, whether in the icy heights of Sikkim or the diffusion of tensions. However, that has failed to drastically alter the dynamics in the region.

"As warfare -Cambodia war games that were held in May 2024. The armed "robodogs" came equipped with remote-controlled drone soldiers with back-mounted machine guns and demonstrated exceptional mobility, even though no live-fire test was conducted.

The PLA has been put through a groundbreaking modernization drive since President Xi Jinping came to power in 2013, with the integration of cutting-edge technology and automation in combat forming a major part of this effort. This high-tech military force is only expected to become bigger and better, as evidenced by the recent drills.

*

Science & Technology News

"Obesity is a multifactorial challenge and needs multifactorial preventive strategies"

Obesity Needs Multifactorial Effort with Collective Endeavour: Dr. Jitendra Singh

India's Growing Obesity Challenge: Minister Urges Unified Response from Govt, Industry & Medical Fraternity

Tackling Obesity Needs Policy, Awareness, and Industry Support: Minister at CII Summit

Source: Press Information Bureau, Dt. 04 Jan 2025,

URL: <https://pib.gov.in/PressReleasePage.aspx?PRID=2108129>

Obesity is a multifactorial challenge and needs multifactorial preventive strategies".

This was stated here today by Union Minister Dr. Jitendra Singh, who is also a Professor of Medicine and a renowned Diabetologist, while underscoring the urgent need for a multifaceted and collective approach to combat the growing obesity crisis in India.

Addressing the 'National Obesity Summit', organized by the Confederation of Indian Industry (CII) on the occasion of "World Obesity Day", the Minister emphasised that obesity is not just a lifestyle issue but a major public health challenge that requires coordinated efforts from the government, industry, the medical fraternity and also the society.

Citing alarming statistics, Dr. Jitendra Singh pointed out that India ranks second globally in childhood obesity, with over 1.4 crore children affected. "We often take pride in having chubby babies, but this comes at a cost. Central obesity, particularly among Indians, is an independent and a serious health risk factor," he said. He further elaborated that obesity significantly contributes to non-communicable diseases such as type-2 diabetes mellitus, cardiovascular disorders, and fatty liver disease, making it imperative to take preventive action.

The Union Minister acknowledged the Indian phenotype's unique vulnerability to central obesity, citing studies that show even lean-looking Indians carry a higher percentage of visceral fat compared to their Western counterparts. "Our traditional attire may mask central obesity, but that does not eliminate the associated health risks," he remarked.



Highlighting Prime Minister Narendra Modi's advocacy for healthier lifestyles, Dr. Jitendra Singh recalled how the Prime Minister has frequently addressed obesity in his Mann Ki Baat broadcasts and public interactions, even urging citizens to reduce their food intake by 10%. "PM Modi has a remarkable ability to transform messages into mass movements, as seen in campaigns like Swachh Bharat and the COVID-19 response. A similar approach is needed to tackle obesity," he said.

Dr. Jitendra Singh expressed concern over the rising prevalence of obesity despite widespread awareness campaigns and medical advancements. "On one hand, we talk about fitness and wellness, but on the other, obesity rates continue to surge. This paradox must be addressed with scientific rigor and societal commitment," he noted. He also highlighted the economic burden obesity places on families, with many patients struggling to afford long-term treatment for metabolic disorders.

Emphasizing the need for a strategic response, Dr. Jitendra Singh called for an industry-government partnership to develop cost-effective, universal screening models for obesity and metabolic diseases. "We cannot leave this fight solely to diabetologists or obesity specialists. It requires a national commitment involving policymakers, medical experts, and industry leaders," he

asserted. He suggested a public-private model where routine health screenings include obesity markers, particularly in hospital settings, to facilitate early diagnosis and intervention.

Dr. Jitendra Singh also cautioned against new quick-fix solutions, such as weight-loss injections and fad diets, stressing the importance of sustainable lifestyle changes. "The real solution lies in self-discipline—understanding our body, regulating our diet, and adopting a balanced approach to health," he said. He humorously pointed out how dietary habits have evolved, with intermittent fasting and exotic diet plans becoming fashionable trends. "Our grandmothers would have been amused by the concept of '5 PM eating schedules' and calorie counting apps," he quipped.

Concluding his address, Dr. Jitendra Singh called upon all stakeholders to take immediate action rather than waiting for annual summits to reiterate the same concerns. "Obesity is not just a personal concern; it is a national responsibility. As we envision India in 2047, we must ensure that our young population remains healthy, productive, and free from preventable lifestyle diseases," he asserted.

The summit saw participation from leading medical experts, policymakers, and industry representatives, all of whom echoed the need for collective action to address obesity at a systemic level.

*

National Workshop on 'Capacity Building in Indian Knowledge Systems': Documentation, Validation, and Communication

Source: Press Information Bureau, Dt. 04 Jan 2025,

URL: <https://pib.gov.in/PressReleasePage.aspx?PRID=2108280>

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), in collaboration with Dwarka Doss Goverdhan Doss Vaishnav College, successfully organized a one-day National Workshop on 'Capacity Building in Indian Knowledge Systems (IKS): Documentation, Validation, and Communication' at DDGD Vaishnav College, Chennai as a part of the CSIR-NIScPR's national initiative SVASTIK (Scientifically Validated Societal Traditional Knowledge) to communicate scientifically validated Indian traditional knowledge to the society. The workshop aimed to give an insight to the participants including faculty members, teachers, scientists, and science communicators, on various aspects of IKS and its documentation, validation, and dissemination.

The workshop was inaugurated by Padma Shri Prof M D Srinivas, Chairman, Centre for Policy Research, Chennai and Chief Guest of the session, Dr K Vijayalakshmi, Research Director, Centre for Indian Knowledge System, Dr. S. Santhosh Baboo, Principal of DDGD Vaishnav College, and the Coordinators from CSIR-NIScPR and DDGD Vaishnav College.

Dr. Uthra Dorairajan, Associate Professor, DDGD Vaishnav College, Chennai welcomed the speakers and participants and emphasised on the integration of Indian traditional knowledge with modern science. Dr. S. Santhosh Baboo, Principal of DDGD Vaishnav College, highlighted the various initiatives of the college's to promote IKS and its importance in education.

Padma Shri Prof M D Srinivas, a renowned expert in theoretical physics delivered the keynote address. He highlighted India's rich intellectual traditions, the relevance of IKS in modern science, and emphasised on collaborative efforts and initiatives aimed at bridging the gap between ancient knowledge and present-day advancements.

First technical session on India's Science & Technology Heritage chaired by Prof M S Sriram, President, Prof K V Sarma Research Foundation, Chennai featured plenary talks by Dr K Vijayalakshmi, Research Director, Centre for Indian Knowledge Systems, Chennai and Dr V Aarthi, Research officer (Siddha), Central Council for Research in Siddha, Chennai, and Dr Charu Lata, Principal Scientist and Coordinator SVASTIK, CSIR-NIScPR, New Delhi. Dr K Vijayalakshmi emphasised about the indigenous knowledge in agriculture for sustainable development. She mentioned about various traditional rice landraces and the need to conserve them. Dr V Aarthi delivered an engaging talk on the Traditional Siddha Medicine. She highlighted various aspects of the Siddha system of medicine and ways to integrate this traditional medicine system with modern sciences. Dr Charu Lata gave insights on the ongoing activities of the national initiative SVASTIK. She talked about the process, challenges and way forward in the area of disseminating IKS to the masses. The second session on Hands-on Training on IKS Communication was led by Dr Paramananda Barman, Senior Scientist, CSIR-NIScPR, New Delhi and Team SVASTIK, who provided interactive learning experiences on effective science communication strategies. They introduced attendees to various science communication tools and the ways to use them for designing infographics and short videos. The workshop concluded with a feedback session from the participants where many of them shared their learning experiences from the workshop. An exhibition of SVASTIK stories and publications was also put up by the team for the participants and dignitaries attending the workshop.

Dr Uthra Dorairajan expressed gratitude to all participants and emphasized the significance of such initiatives in preserving and promoting India's rich scientific heritage.

*

