

FUTURE WAR INTEGRATION

In an era marked by rapid technological advancement and increasingly complex security challenges, the concept of integrated warfighting has emerged as a cornerstone of modern military strategy. Integrated warfighting—where land, air, naval, space, and cyber capabilities operate in a coordinated, seamless manner—represents the evolution of traditional military operations into a unified, multi-domain approach. Its importance in future conflicts cannot be overstated.

Future wars are unlikely to be confined to a single domain. Hybrid threats, cyber-attacks, electronic warfare, and the use of artificial intelligence in decision-making have blurred the lines between conventional and unconventional conflict. In such a scenario, the effectiveness of isolated military branches diminishes significantly. Integrated warfighting ensures that all assets, from frontline infantry to unmanned drones and satellite-based surveillance, operate cohesively, providing commanders with a real-time, comprehensive operational picture. This synergy enhances situational awareness, speeds decision-making, and improves operational efficiency.

Furthermore, integrated warfighting strengthens deterrence. Potential adversaries are less likely to test a force that can rapidly coordinate across multiple domains, respond to emerging threats, and deliver precision effects with minimal delay. For instance, the ability to combine cyber operations with kinetic strikes or use space-based intelligence to guide land and naval forces can overwhelm opponents who rely on conventional strategies. This multi-domain coordination not only magnifies the force's combat power but also optimizes resource utilization, reducing redundancy and avoiding operational blind spots.

Modern conflicts also demand rapid adaptability. Integrated warfighting facilitates flexible response options, enabling militaries to transition smoothly between defensive, offensive, and humanitarian operations. In asymmetric warfare scenarios, where adversaries exploit vulnerabilities in communication, logistics, and command structures, a well-integrated force can maintain operational continuity and strategic advantage. Moreover, integration fosters innovation, as collaboration across domains encourages the development of advanced technologies, joint doctrines, and cross-training of personnel.

However, achieving true integration is not without challenges. It requires substantial investment in technology, secure communication networks, interoperable platforms, and joint training exercises. Equally important is the development of command structures capable of processing vast amounts of data and translating it into actionable strategies. Nations that fail to embrace this paradigm risk obsolescence in future high-intensity conflicts.

■ RAJESH AGRAWAL



India has shared a rich trading relationship with Europe that dates back to 250 BC, even predating the Silk Road. For most part of the next 2000 years, Indian muslins, cotton, handicrafts, spices, emeralds and gems had become the most coveted merchandise in international trade, a bulk of which made their way to Europe. In return, gold and silver poured into India to pay for these fabulous commodities. The Indo-Europe trade achieved great scale and proportions in its heyday days.

The efforts to cement this relationship through a comprehensive free trade agreement started in 2007. The negotiations had to be abandoned in 2013 due to serious differences in positions on both sides on multiple issues. The negotiations started afresh in 2022 and despite the enormity and complexity of the challenges could be completed only due to the strong commitment and visionary leadership of the two leaders. Importantly, the trade agreement that both sides have negotiated is a reaffirmation of the rules-based trading relationship in an increasingly fragile global economic order. The agreement is historic not merely because of the breadth and depth of the topics and disciplines; the agreement is historic because both sides had to reach a common ground on issues that were at the same time hard and difficult.

Most consequential trade agreement: The India-EU free trade agreement is perhaps the most consequential trade agreement concluded in recent times. It could create one of the largest free trade areas in the world com-

prising almost 2 billion people and 28 countries that represent 25 percent of the global GDP. In addition, the agreement is modern and novel in its treatment of issues and concerns. The agreement has up-to-date and substantive disciplines as well as procedural provisions for deepening trade relationship. The agreement establishes a new template for addressing market access and regulatory barriers both on goods and services, which reinforces traditional disciplines with innovative elements. For example, the Rules of Origin chapter ensures that only products with substantial processing or production in the partner countries are granted country of origin; this is achieved through detailed and intricate product specific rules that seek to align with existing and newer supply chains. In addition, the agreement replicates intellectual property protections with an added focus on promoting transfer of technology and information flows.

Market openings in goods and services: The critical focus of the agreement is opening up their vast and expansive markets to each other. The agreement offers market access for more than 99 percent of India's export trade by value of which at least 90 percent of India's exports will receive immediate duty elimination upon entry into force of the agreement. Notably, the labour intensive items such as textiles and clothing, leather, gems and jewellery, wood and wooden crafts, and marine products will receive early gains. It will also enable industries such as chemicals, electronics, agri-processing industries, and minerals to diversify their exports in the vibrant EU common market. While India has allowed market access for EU's automobiles, this has been done in a phased and calibrated manner

through tariff quotas. Likewise, India's concessions on EU's wine seeks to protect the interests of the domestic industry, while encouraging competition in higher price segments.

Services trade offers significant potential in India-EU trade relationship. India has received commitments from the EU across 144 services sectors under the agreement, which is unprecedented. In addition, the chapter on mobility ensures that temporary entry and stay of professionals and contractual service suppliers will be smoother and more assured, implying that India's talented service professionals can establish their presence in the EU market. The annex on Financial Services provides for greater engagement between India and EU on electronic payment systems, including leveraging India's technological expertise in digital payment systems such as the UPI. The agreement also provides the possibility for the practitioners of AYUSH and Traditional Medicine to provide their services in the EU with greater certainty.

Enhancing freer and fairer trade: The free trade agreement seeks to enhance freer, fairer and mutually beneficial relationship between the two large markets. The trade and sustainable development chapter sets a new model of cooperation in relation to sustainability concerns. The chapter holistically integrates the objective of sustainable development in their trade relationship, without seeking to harmonise the labour or environmental standards of the Parties. The thrust of the engagement is on policy dialogue, technical assistance and mobilization of financial tools and resources. Both sides have also negotiated mechanisms such as the rapid reaction

mechanism, non-violation complaints and standalone annexes that could address their specific concerns with respect to certain policy measures or product specific measures.

The real challenge is in achieving the high ambition on market opening without compromising the concerns and sensitivities of some of the key stakeholders, for example, the dairy and agricultural sector. The income and livelihood concerns of the small and marginal farmers and certain industry segments were uppermost in our minds. To be fair, the EU also demonstrated the much needed flexibility in this regard.

Complementing India's FTA strategy: In an era of supply chain disruptions, the India-EU free trade agreement will complement the gains from the India-UK FTA, EFTA and other comprehensive trade agreements. Since 2021, India has concluded 9 comprehensive trade agreements and is holding negotiations to complete several key economic partnership agreements in the next few months. The conclusion of the India-EU trade agreement will serve as a catalyst for hastening India's newer economic and trade engagements.

The India-EU free trade agreement is a major step in achieving expanded market access, closer economic integration and achieving strategic autonomy and resilience, especially in an uncertain and volatile global economy. As economic historians note, economic prosperity can best be achieved when nations trade based on fair, rule-based and predictable legal frameworks and institutions. The India-EU free trade agreement seeks to uphold this time-tested principle.

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Advancing Agriculture through Artificial Intelligence (AI)

■ DR. PARVEEN KUMAR

Shri-Kashmir University of Agricultural Sciences & Technology of Jammu under the dynamic leadership of Prof. B. N. Tripathi, Hon'ble Vice Chancellor is witnessing a huge metamorphosis in the form of distinct and transformative initiatives focusing on profitability and sustainability, inclusivity and outreach, innovation and entrepreneurship and mobilization & empowerment. The target group comprises of the farmers, including farm women, innovators, entrepreneurs and aspiring youths. Ensuring that the vision and mission of Hon'ble Vice Chancellor percolates deeper down to the grassroots level, Directorate of Extension headed by Prof. Amritpal Singh has been leading from the front through its nine Krishi Vigyan Kendras working in different districts of the division in different agro-climatic zones. The KVAs are entrusted with the responsibility of extension and dissemination of sustainable technologies, refinement of technologies, awareness of different government schemes, mobilization of farming communities through various collectives, facilitating marketing support, partnerships and convergence with line departments and all other works as allotted to these front line extension institutes from time to time. One of important platform for dissemination of technologies and sensitization and awareness of the farmers is the Farmers' Fair or Kisan Mela. Every agriculture university uses this

opportunity and organizes such type of melas at different periodicity for the farming community of their region. Carrying forward its tradition of pro-farming endeavors, SKUAST-Jammu also being the leading university of north India is also organizing a three days long Agriculture Summit and Farmers' Fair w.e.f. Feb. 11-13 at its main campus Chatha, Jammu.

AI-enabled Advanced Agriculture: The visionary Vice Chancellor of the University has decided to organize the mela with the theme 'AI-enabled Advanced Agriculture.' The theme of the mela thus specifies that special focus will be on technologies which are based on Artificial Intelligence and that come with the added advantage of precision, timeliness, resource use efficiency and real time solutions for the issues confronting the farming community in agriculture and allied sectors in the country. Digital technologies like Artificial Intelligence have given the world a new developmental paradigm. With more than 9 billion people predicted to populate the planet by 2050, finding better and smarter ways to grow food is essential. We thus need new ways to grow more food more sustainably and profitably by applying digital technologies such as data science, advanced sensors in the field and from space, digital communication channels, and automation on the field. Today agriculture is also witnessing what is called 'Digital Farming or Digitalisation'. Digital Farming encompasses ICT and data ecosystems to support the development and delivery of timely, targeted information and services to make farming profitable and sustainable while delivering safe nutritious and affordable food for all. Use of various AI tools in agriculture has also emerged as another revolution, more so for the large numbers of the world's smallholder farmers. Nearly a third of the global population relies on agriculture for a living, and growth in this sector has been shown to be at least twice as effective at reducing poverty as growth coming from other sectors. Thus use of AI in agriculture has to be promoted for advancement of agriculture. Among various AI tools are Internet of Things (IoT), precision Farming, Drones and Robots. The use of sensors, cameras, and other devices to turn every element and action involved in farming into data. Weather, moisture, plant health, mineral status, chemical applications, pest presence and much more can all be turned into large data sets that allow big data engineers to draw out insights about the farm at varying levels of granularity via software algorithms. The AI technologies also ensure that information collected about that unit is measured, collected, analyzed, and actioned for the same location and is differentiated from all of the other surrounding assets. AI technologies have the potential to improve agricultural productivity even in areas with limited resources.

The three days long event of the University besides focusing on AI

enabled agriculture will also provide a platform to all the relevant stakeholders including farmers, farm women, students, youths, entrepreneurs, private players, and input dealers, officers/officials from line departments and financial institutions and of different agencies from all across the country where they can witness, exchange, sell, purchase and showcase their products ideas and sustainable technologies. With the SKUAST-Jammu having important MoUs with leading foreign universities, international participation is also expected in the summit. Organized with the active collaboration of all its faculties, Krishi Vigyan Kendras, research institutes and all the constituent units of the University, it is expected that the mela will witness a footfall of many thousands.

The event will specially focus on sustainable agricultural practices and approaches like Organic and Natural Farming.

The present government is also focusing a lot on Natural Farming. In the next 2 years, one crore farmers will be initiated into natural farming supported by certification and branding. A flower show, a vegetable & fruit show at the mela will also be a point of attraction where the growers will display their products. Dog show will also be a great fun and learning experience for the pet lovers. The participants can win exciting prizes also. Sports are also an important part of our day to day lives. The Mela will also host sports events and chaff cutting competitions especially for rural youths

where they will get engaged in various sports to prove how much physically fit they are.

The mela will also provide an opportunity to visitors to purchase all kinds of inputs/planting material and farm implements being displayed by many input dealers and private agencies. The summit will focus on technologies demonstrating the organic inputs like Bio fertilizers, Bio-control agents, bio organic nutrient management, organic waste treatment and microbial preparations like Brijamrita, and Jeevanamrita. Farmers of the region including farm women and youths who have earned a name through development of various products/technologies/practices will also be a part of this mela depicting and showcasing their innovations/products. Different collective organizations i.e. Self Help groups/Farmer Producer Companies and Farmer Producer Organizations will also participate in this event with various kinds of prototypes/products they have developed. Students from different educational institutes of the region will also be attending the mela to learn more about agriculture. Shri Anna i.e. Millets called as 'Super Foods' and 'Food of Future' will also be an important feature of this summit. Various types of ethnic value added food products made from different traditional crops including millets will be at display. The country has become the Startup capital of world with so many startups coming up in agriculture and allied sectors. The startups have an important role in

employment and income generation. This mela will also give an opportunity to the young entrepreneurs to depict their business models and prototypes.

Lack of awareness about different government schemes is an important constraint for the farming community to avail the benefits of these schemes. SKUAST-Jammu has taken special care of this. To ensure that the farming community becomes aware of all schemes related to them, different allied departments as well as financial institutions like NABARD, J&K Bank, SBI, JKEDA, IFFCO, Department of Rural Development and Panchayati Raj, Jammu Kashmir Academy of Arts Culture and Languages (JKAACL) and many other organizations will be there to guide and aware all. The farming community will be able to avail the benefits by on spot registration.

There will be expert sessions between farmers and scientists and live demonstrations including use of Drones in Agriculture, Farmer Scientist interactions, Field visits, Special sessions on empowerment of women in Agriculture, Industry-Academia Linkages, Post-harvest processing and value addition and on many other aspects related to farm sector will also be a key feature of the mela. To conclude, the mega event is going to be a one stop solution for the farming community. All of must save the date and be a part of this grand occasion to learn, update and explore new ideas, skills and opportunities.

(The author writes on agriculture and social issues)

Pariksha Pe Charcha 2026: PM's Exam Mantra

■ BAIJAJ CHAWALGAMI

The Prime minister Narendra Modi's unique interactive program with students, Pariksha Pe Charcha [PPC], was back with its 9th edition on Friday, 6th February at 10 am to discussed exam stress and celebrate examinations as an Utsav and an integral part of life. Examinations should not be taken as worrisome but as a mirror of life and should be regarded as inseparable part of the student's life and as an enjoyment. There should be no examination stress, tension among the students writing the examination. Modi's Pariksha Pe Charcha 2026 focused on stress-free exams, learning, and student well-being. It is a flagship student interaction program. The interactive program continues to serve as a powerful platform where students, parents, and teachers from across India came together and discussed examinations, academic pressure, and holistic learning. With the board examinations approaching and at places begun, PPC 2026 aims to motivate students, encourage confidence, and reduce exam-related stress and tension. The nationwide live telecast featured PM Modi responding directly to students, questions and offered practical advice on exam preparation, time management, mental well-being, and maintaining focus during the crucial exam season. Over the years, Pariksha Pe Charcha emerged as a key national education event, widely followed by CBSE, ICSE, and

state board students. Participation in PPC 2026 has reached a historic high, surpassing the 2025 Guinness World Record. This year alone, more than 4.5 crore students, parents, and teachers registered for the program, underlining its growing relevance in India's education ecosystem. This year's PPC featured very interesting topics relating to examinations, notably the need to remain stress-free, focus on learning and more. PM Modi posted on X: "This is a platform I have always enjoyed, as it gives me an opportunity to interact with bright minds from across the country." 2026 PPC theme includes Make Exam as 'Contribution of our freedom fighters a celebration', Save the Environment & Clean India. Aligned with NEP2020, PPC Focused on transforming the exam experience into a positive, confidence-building journey. The initiative promotes mental well-being, creativity, and lifelong learning, encouraging students to view examinations as a celebration or Festival rather than a burden. Prime Minister Narendra Modi has once again interacted with the students, teachers, parents and initiated his Pariksha Pe Charcha 2026. The interaction every youngster was waiting for its back Pariksha Pe Charcha programme with Prime Minister. Students should leave stress and nervousness behind and get ready to set those butterflies in your stomach free. On popular demand, this time, the prime minister's massively popular interac-

tion will not only have students but also parents and teachers and thus this time made a departure from only students participating in the popular programme. Pariksha Pe Charcha is part of the larger movement -Exam Warriors led by Prime Minister Narendra Modi, to create a stress-free atmosphere for youngsters. It is a movement that is driven by the prime minister Narendra Modi's efforts to bring together students, parents and teachers and society to foster an environment where the unique individuality of each child is celebrated, encouraged and allowed to express itself fully inspiring this movement is PM Modi's path breaking, bestselling book 'Exam Warriors.' Through this book PM outlined a refreshing approach to education, knowledge and holistic development of students are given primary importance. The PM urges everyone to put exams in the right perspective, rather than making it a life and death situation by undue stress and pressure. Learning should be an enjoyable, fulfilling and endless journey—this is the message of PM Modi's book. How do you (a student, parent or teacher) get a chance to participate in the ninth edition of Pariksha Pe Charcha? It is very simple, following are the steps—Participate in Pariksha Pe Charcha competition hosted by MyGov innovation platform. Remember, the competition is open for school students of classes 6 to 12. Students can submit their responses. Students can

also submit their questions to Honourable Prime Minister in a maximum of 500 characters. Parents and teachers can also participate and submit their entries in the online activities designed exclusively for them. The Exam Warriors module on NaMo App adds an interactive tech element to the Exam Warriors movement. It communicates the core messages of each mantra that PM has written in the book 'Exam Warriors.' This module is not just for youngsters but also for parents and teachers. Every one can imbibe the mantras and concepts that prime minister wrote in Exam Warriors since each mantra is pictorially represented. The module also has thought provoking but enjoyable activities that help absorb concepts through practical means. Content owned, updated and maintained by the My Gov cell. My Gov platform is designed, developed and hosted by National Informatics Centre and this website belongs to My Gov, Ministry of Electronics and Information Technology, Government of India. Prime minister Narendra Modi on Monday said trust deficit between parents and children is a serious issue and that the distance created by it can push children into depression. Teachers should keep the channels of communication open with the students and avoid favoritism. The 9th edition of Praksha Pe Charcha held Friday in New Delhi, where PM Narendra Modi interacted with the students, teachers and parents, witnessed overwhelming response across the union territory of Jammu and Kashmir. Special arrangements were made by the school education department in all schools and prominent places to witness the historical event with special screening arrangements made in schools at District headquarters. MP Jugal Kishore, secretary school education Dr Piyush Singh, Project director Samagra Shiksha Deep Raj, Director School Education Jammu, Ashok Kumar, Director Finance, SED, Iftikar Hussain, CEO Jammu, besides coordinators/ASCs and teachers attended the event at teachers Bhawan Jammu.

Dr Singh said that 'Pariksha Pe Charcha' 2026 is not just an event, it is a collective commitment for creating a transformative, stress-free educational experience for the students and today's interaction is a significant step in nurturing an environment where each student can unfold his/her unique potential. He reiterated that this unique initiative of prime minister Modi aims to bring together students, parents, teachers and the society to create an environment that values and supports each child's unique qualities. The secretary further added that this movement was inspired by PM's influential and popular book Exam Warrior and strives to cultivate a stress-free environment for young minds bringing together students, parents, teachers and the society. PPC gives a platform where the unique individuality of each child is celebrated, encouraged and allowed to express itself fully. To conclude it can be said that the prime ministers Pariksha Pe Charcha initiative got a good and encouraging response all over the country including Jammu and Kashmir UT and it strives to create a stress-free and trust deficit-free educational environment where students can grow to the fullest potential and the balanced personalities are formed so that the collective educational efforts can lead to the individual development of each student. Thus a stress-free educational atmosphere is sought to be created by this initiative which got tremendous response across the country.