

# समाचार पत्रों से चयित अंश Newspapers Clippings

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## Unmanned vehicles will hold sway, says DRDO chief

**‘Tremendous transformation taking place in unmanned systems and associated technologies’**

Unmanned vehicles would play a major role in both defence and civilian sectors, and hence, there was an urgent need for industries to work in these areas, said G. Sathesh Reddy, Secretary, Department of Defence (R&D), DRDO Chairman and the present Chairman of Aeronautical Society of India (AeSI), here on Sunday. “There is a tremendous transformation taking place in unmanned systems and associated technologies. Indigenous development of sensors will play a major role and will revolutionise applications like UAVs for commercial and defence applications, greatly impacting our daily lives in future,” said Dr. Reddy, at a national conference on ‘Unmanned Aircraft Systems: Opportunities and Challenges’ held at the Indian Institute of Chemical Technology (IICT) here.

The DRDO chief highlighted the contributions of defence labs in design and development of state-of-the-art UAVs and informed that a contest called ‘Drone Olympics’ was being organised by the Ministry of Defence during the forthcoming Aero India event. The AeSI comprising eminent scientists and engineers is a professional body dedicated to the growth of aerospace in India. The society was founded to promote the advancement and dissemination of knowledge of diversified aeronautical and aerospace sciences/technologies.

“Artificial Intelligence (AI) is one of the disruptive technologies which will impact efficiency, productivity, speed and innovation in the emerging industries. Aerospace 4.0 will encompass all the features of AI in the next 15 years to cut down cost and cycle time of design, optimisation, simulation, prototyping, manufacturing, supply chain, maintenance and product updates,” said V.K. Saraswat, a member of NITI Aayog.

Attending the event as chief guest, he delivered a talk on ‘Artificial Intelligence in Aerospace 4.0’. Over 500 delegates, including scientists, engineers and industrialists, took part in the conference. V.V. Rao, Agni programme director and chairman of the organising committee, said, “The aerospace sensor technologies will play a vital role in futuristic unmanned systems. The scenario is changing fast with the emergence of nano technologies and miniaturised embedded systems. Unmanned systems will also revolutionise agriculture, medical and environment management apart from space and defence”.

AeSI president R.K. Tyagi shared the details of various branch activities in the last one year. He informed that the government formed a UAV policy last year which would be implemented in 2019. AeSI secretary Y. Sreenivas Rao spoke on the role played by AeSI in the promotion of aerospace sector in India. The AeSI also held its annual general meeting on the occasion. Former ISRO Chairman A.S. Kiran Kumar and others took part.

<https://www.thehindu.com/news/cities/Hyderabad/unmanned-vehicles-will-hold-sway-says-drdo-chief/article26105569.ece>

## **Drones to keep watch on Bangla border in Assam**

**Due to the land boundary agreement between the two countries in 1974, a fence has to be constructed beyond 150 yards from Zero Line.**

*By MANOJ ANAND*

The ministry of home affairs has decided to induct Unmanned Aerial Vehicles (UAV) besides other technical gadgets for effective border management along the unfenced international border of India with Bangladesh in Assam. The plan to upgrade frontier surveillance comes amid an uproar over identification of illegal foreigners in the state and governor Jagdish Mukhi's remark that there is no place for illegal foreigners and only the indigenous people of the state have the right on its resources.

Informing that fencing the entire stretch of the India-Bangladesh border is not feasible due to several geographical barriers, security sources said that fencing on stretch of nearly 61 km in Assam was pending. Pointing out that the ministry of home affairs has decided to manage about 48 kms of such stretch by non-physical barriers, security sources said that India has more than 4,000 kms of international border with Bangladesh and construction of physical barriers all along the border is not feasible because of geographical constrains like riverine border, elephant corridors, soil erosion and objections from Bangladesh.

Pointing out that the Border Security Force (BSF) has identified the vulnerable stretches of the border and the gaps in fencing, security sources said that various agencies engaged in border guarding have started using technological solutions to deal with the problem. A comprehensive border management system is being introduced to deal with infiltration and smuggling. The system, which is also called smart fencing, will be introduced all along the border starting with the vulnerable patches. Security sources said that technical gadgets, including night vision goggles, advanced telescopes, search lights, hand-held metal detectors, hand-held thermal imagers, have already been used and unmanned aerial vehicles would also be inducted soon for effective border management.

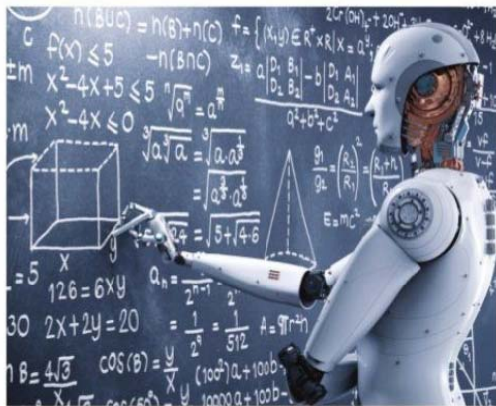
The Indian government has also started taking steps for strengthening the institutional framework to improve guarding of the border with Bangladesh. Standing committees, headed by the chief secretaries of the states having international border with Bangladesh, have been constituted to evolve a standard operating procedure of the border protection grid. All the stakeholders are included in the grid for proper response in case of a border defence breach, security sources added. Sources said that some other measures, including increasing the strength of the BSF, have also been taken. Informing that at present, 81 battalions of the BSF are deployed in over 900 border outposts constructed along the border, security sources said that steps have been taken to increase the strength of the BSF. Moreover, the BSF personnel deployed along the international border with Bangladesh have also been directed to sensitise the local people and NGOs about the need to help the forces in dealing with infiltration. Admitting that the topography of the border makes international border between Assam and Bangladesh vulnerable to infiltration and smuggling, security sources said that dense population right up to the zero line is another problem in ensuring border management.

The illegal migrants cross over, mingle with the population of the border areas by taking advantage of ethnic similarities, particularly in Assam and West Bengal, and stay on in India. Moreover, due to the land boundary agreement between the two countries in 1974, the fencing has to be constructed beyond 150 yards from the zero line and in view of the habitation right up to the zero line, in some places it is not possible to put fencing.

<http://www.asianage.com/india/all-india/290119/drones-to-keep-watch-on-bangla-border-in-assam-1.html>

# A revolution in academic research

**Artificial Intelligence must be embraced as an enhancement of human thinking and augmentation to the educational process**

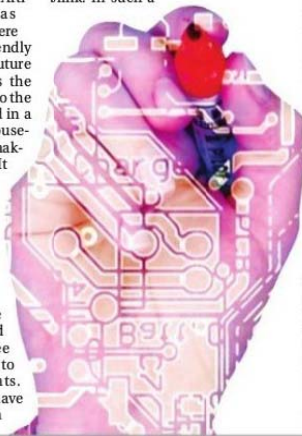


**JITENDRA K DAS**

Over the past few years, Artificial Intelligence has evolved from being a mere buzz-word in tech-friendly circles, to making headlines on future of work in newsrooms across the world. The world is opening up to the fact that AI can be incorporated in a variety of tasks, from simple household chores to major decision making processes in top corporate. It is no surprise that the education sector is also seeing remarkable uses of these AI technologies. As these technologies develop, we shall continue to see their impact and reap benefits in both teaching and learning techniques.

The ability of AI to analyse vast amount of data would enable higher education to see beyond smart classrooms — to smarter teachers and students. Imagine when a student can have smart devices implanted in

her/his eye and all information is readily available and readable at a blink. In such a



scenario how should he/she be evaluated in a course? The onslaught of technology and AI, in particular, therefore, will force us to redo our pedagogical solutions, change assessment methods, and will even aid in automating and fastening administrative tasks for both institutions and individual academicians.

The higher education world is quickly moving beyond classrooms and printed textbooks. AI can help in this digitisation - by enabling smarter books, customisable learning interfaces and possibly help teachers and students to craft courses that are customised to their needs.

Going beyond the learning process, AI could also assist in the evaluation and assessment of students. There are already technologies that help in the evaluation of objective tests; advancements in AI could push these boundaries further and we could even see an automated evaluation of narrative and subjective contents.

This technology would also allow a student to have continuous and individually customised inputs that would be required at her/his stage of learning. It could help flag issues early on, and help in the feedback process between the teacher and students - thereby enabling healthy and relevant communication. Students would get access to relevant additional tools and teachers would be able to know the efficacy of different pedagogies quickly.

AI would not just hold teachers accountable, but also strengthen their teaching practices. Current systems have the ability to analyse when a large group of students make a mistake in a question - this can be expected to improve to the point where the AI system could provide live hints or suggest corrective action in a customised manner. With such a technology, students would be able to learn from anywhere and anytime, and still receive individual output and maybe even other elements of a traditional classroom.

Another upcoming

innovation is the use of Block chain technology.

Use of this in universities could remarkably alter how evaluations and credits are maintained and transferred - both within and across universities. Academic research within these institutions would also see increased protection, and their due share of recognition. This would incentivise academicians to pursue their research without worrying about the administrative hassles, and truly revolutionise the impact of academic research.

Looking at AI as

just another tool for content delivery and assessment would be undermining this revolution in front of us.

All of us as teachers, students and administration must start to look at such developments as an enhancement of human thinking and an augmentation to the educational process.

For any institution that promises to prepare young talent to face tomorrow's challenges, it is imperative that they familiarise themselves and whole-heartedly embrace these new technologies.

The writer is director, FORE School of Management

