



Contact: 097418 69722

28 November 2018

Daily News Pedia

Mission Raksha Gyan Shakti

As part of the ongoing initiatives to enhance self-reliance in defence, the Department of Defence Production has instituted a new framework titled 'Mission Raksha GyanShakti' which aims to provide a boost to the IPR culture in indigenous defence industry.

The Directorate General of Quality Assurance (DGQA) has been entrusted with the responsibility of coordinating and implementing the programme.

The event brought out that the end objective of 'Mission Raksha Gyan Shakti' is to inculcate IP culture in Indian defence manufacturing ecosystem. The IPR has emerged as a key ingredient of an ecosystem which stimulates innovation and ingenuity.

Defense IPRs in India: An IP Facilitation Cell was established in April this year which has worked tirelessly to achieve ambitious targets of training 10,000 personnel of OFB and DPSUs on IPR and to facilitate filing of at least 1,000 new IPR applications.

This has resulted in successful filing of Intellectual Property Right (IPR) applications.

Source: PIB.

Logix India 2019

The logistics event is being organized by the Federation of Indian Export Organisations (FIEO) as a major initiative to improve logistics cost effectiveness and operational efficiencies for India's global trade.

Over 20 countries are sending delegations to explore logistics partnerships with India and FIEO is focusing on logistical solutions for difficult to reach markets. Over 100 international delegates are expected to attend Logix India 2019.

FIEO will also focus on investment opportunities in infrastructure development, warehouse consolidation, technology integration and IT enablement and skilling of manpower at the three-day meet. Logix India will enable effective international trade logistics and help provide efficient and cost-effective flow of goods on which other commercial sectors depend.

India's Logistics Sector: India ranked 44 in the World Bank Logistics Performance Index 2018.

As per the Economic Survey 2017-18, India's logistics industry which is worth around USD 160 billion is likely to touch USD 215 billion in the next two years. This sector provides employment to more than 22 million people and is expected to grow at the rate of 10.5 per cent over the next 5 years.

Source: PIB.

Gene editing

Genes contain the bio-information that defines any individual.

Physical attributes like height, skin or hair colour, more subtle features and even behavioral traits can be attributed to information encoded in the genetic material. An ability to alter this information gives scientists the power to control some of these features.

Gene “editing” — sometimes expressed in related, but not always equivalent, terms like genetic modification, genetic manipulation or genetic engineering — is not new. It is widely practised in agriculture, to increase productivity or resistance to diseases, etc. But even in agriculture, genetic modification is a subject of major debate, especially in developing countries, including India.

CRISPR Technology

CRISPR (short for Clustered Regularly Interspaced Short Palindromic Repeats) technology is a new and the most efficient, tool for gene “editing” developed in the last one decade.

The technology replicates a natural defence mechanism in bacteria to fight virus attacks, using a special protein called Cas9. CRISPR-Cas9 is a simple, effective, and incredibly precise technology.

Source: The Hindu.



About Cyclone Gaja

It was the first cyclone to move towards Tamil Nadu in 2018.

The earlier two named Daye and Titli had made landfall along the Odisha coasts, brought heavy rainfall and damaged the coastal districts of Odisha and Andhra Pradesh.

Though most of the low pressure areas are formed in the Bay of Bengal or the Arabian sea, some have their roots elsewhere. Gaja is one such cyclone. Usually, such cyclones are formed when remnants of typhoons from the Pacific Ocean come into the Indian Ocean or the Bay of Bengal and re-intensify into cyclones when they find warm ocean waters in these regions.

Cyclone Gaja could have formed from a remnant of Super typhoon Yutu, which had devastated the Philippines in the last week of October.

Extent of damage caused by the cyclone:

- The suffering, the loss, and the displacement in the districts of Tiruvarur, Nagapattinam, Thanjavur and Pudukottai districts is of an enormous magnitude.
- In its report to the Centre, the Tamil Nadu government has estimated the number of people rendered homeless at 3.7 lakh, and houses destroyed at 3.4 lakh.
- The cyclone has crippled agriculture and livelihoods in a fertile region, felling thousands of productive trees and killing livestock.
- Between 60% and 80% of the coconut trees in the region have fallen, hobbling Tamil Nadu’s farmers, who contribute a quarter of India’s coconuts with the highest unit yield.

Source: The Hindu.

ISRO to launch new imaging satellite HysIS on Thursday

ISRO's workhorse rocket PSLV-C43 will carry India's earth observation satellite HysIS and 30 co-passenger satellites, including 23 from the US, from Sriharikota on November 29.

HysIS, the country's first hyperspectral imaging satellite for advanced Earth observation will be launched from Sriharikota. It is the primary satellite of the PSLV-C43 mission. The satellite will be placed in 636 km polar sun synchronous orbit (SSO) with mission life of five years.

The co-passengers of HysIS include one micro and 29 nano satellites from eight different countries, the agency said, adding, all these satellites will be placed in a 504 km orbit by PSLV-C43. The countries comprise United States of America (23 satellites), Australia, Canada, Columbia, Finland, Malaysia, Netherlands and Spain (one satellite each).

HysIS will be the third longest mission of PSLV. The longest mission, C-40 in 2018, lasted two hours and 21 minutes and put 31 satellites to orbit. In September 2016 and C-35 lifted eight satellites in a flight lasting two hours and 15 minutes.

Significance of the launch: The technology will be an added advantage of watching over India from space for a variety of purposes such as defence, agriculture, land use, minerals and so on. It can also be highly useful in marking out a suspect object or person and separate it from the background which could aid in detecting transborder or other stealthy movements.

Source: The Hindu.

Hyper spectral imaging camera (HysIS)

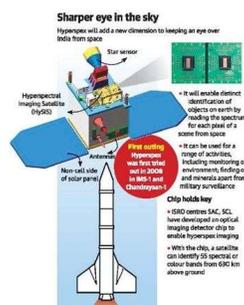
The primary goal of HysIS is to study the Earth's surface in visible, near-infrared and shortwave infrared regions of the electromagnetic spectrum.

HysIS in space can provide well-defined images that can help to identify objects on Earth far more clearly than regular optical or remote sensing cameras.

In 2008, a small 83-kg demonstration microsatellite called IMS-1 (Indian Mini Satellite-1) was launched as a secondary passenger with Cartosat-2A. In the same year, it put a HysIS or Hyper spectral Imager on the first lunar mission Chandrayaan-1 and used it to scan Moon's surface for minerals.

PSLV: PSLV is ISRO's third generation launch vehicle and is a four-stage launch vehicle with alternating solid and liquid stages and engines. It can carry up to 1,750 kg of payload into polar SSO of 600 km altitude. Additionally, PSLV has been used to launch planetary missions and also satellites into Geosynchronous Transfer Orbit.

Source: The Hindu.



Editorial

To Read

A reinstated right to property will protect the poor

Indian political parties have mostly steered clear of making any commitment to a reinstated fundamental right to property, perhaps because of the belief that they would be seen to represent the interests of the rich rather than the poor. It is time to break this misconception. The impoverished farmers who won a million hearts in Mumbai with their quiet dignity this summer are on the march again. They are now on their way to New Delhi to make their voice heard outside national Parliament. The list of demands is a long one, which is not surprising given the intensity of rural distress. However, one of their demands shows why it is now time to reinstate the right to property as a fundamental constitutional right.

The farmers from Nashik district of Maharashtra have been demanding that the government should recognize their legal rights over the land they till. A friend from Nashik who works with farmers there told me that many of the protesters are tribals who have been cultivating land controlled by the forest department. The Forest Rights Act of 2006 seeks to correct a historical wrong cemented during the colonial era. The lack of land rights has ensured that generations of tribal cultivators have got a raw deal from governments as well as banks. Hence the demand for property rights from the marching farmers.

It is well known that the Indian Constitution originally recognized the right to property as a fundamental right. That right came under attack beginning with the first amendment in 1951. Many of the subsequent laws that undermined property rights were hidden away from judicial scrutiny in the Ninth Schedule. Another big blow came during the epic legal battles after the nationalization of banks in 1969. The Morarji Desai government eventually scrapped the fundamental right to property with the forty-fourth amendment in 1978. In its place came Article 300-A that makes it possible for a citizen to be dispossessed without compensation through an act of legislation.

No major political party has made the reinstatement of the right to property as a campaign issue, though the Swatantra Party was galvanised by the proposal of the Jawaharlal Nehru government to replace small farmers with collective farms controlled by the state. There is a good reason why property rights is not a mainstream political hot button issue. The optics have been so bad that no rational politician would have liked to be identified with a campaign to protect property rights, for to do so would have made him appear to be a lobbyist of the rich.

Successive governments chipped away at the right to property by arguing that it was an obstacle in the way of pursuing the social justice agenda embedded in the directive principles of state policy. Consider the issue of farm land. It was very unequally divided when India became an independent country because of the colonial institution of zamindari. The estates kept growing in size as indebted peasants were dispossessed after loan defaults. Think of *Do Bigha Zameen*, the heart-wrenching 1953 movie directed by Bimal Roy. Even liberals saw the value in land reforms. The implicit assumption all the way till the right to property was removed from the list of fundamental rights was that it was essentially a concern of the rich. The poor had little stake in property rights; in fact, property rights were an obstacle in the battle against mass poverty. It is now time to turn the argument on its head.

It is the poor who have the biggest reason to cheer a reinstated fundamental right to property. There are two reasons for this. First, the poor have neither the legal resources nor the political heft to fight laws or administrative orders that allow governments take over their land. Second, the poor do not have enough opportunities to make a living in formal jobs in case they are forcibly separated from their property. It is important to reiterate that the most resonant battles for property rights over the past decade have been fought by the poor rather than the rich. The showdown in Singur a few years ago is a useful case in point.

There is now a lot of research that shows how property rights help the poor. The security of property provides incentives for a small farmer to invest in his land or a slum dweller to spend on basic infrastructure. The Peruvian economist Hernando De Soto has also shown how secure property rights allow the poor to raise capital by offering the property as collateral to formal lenders.

Meanwhile, the Odisha state government has recently begun offering formal property rights to slum dwellers. (Niloufer Memon and Soumitra Pandey of the Bridgespan Group recently wrote in this newspaper about how Odisha is using technology to deliver land rights.)

The elections season is upon us now. Indian political parties have mostly steered clear of making any commitment to a reinstated fundamental right to property, perhaps because of the belief that they would be seen to represent the interests of the rich rather than the poor. It is time to break this misconception. The poor also have a stake in better property rights—from land titling to legal safeguards.

Sharad Joshi of the Shetkari Sanghatana was a voice in the wilderness. He pushed the envelope even further. He argued on the one hand that property rights should also mean the freedom to sell farm land to the highest bidder; and he said on the other hand that women need to be equal partners in property. His message needs to enter the mainstream of Indian policy discourse. After all, property rights today are a tool of inclusion rather than exclusion.

Mains Question

Q: Right to property should be a fundamental right. Do you agree?