

The Semiautomated Off side Technology (SAOT) has two parts to it — a sensor inside tophe match ball that is held using suspension technology and the 12 Hawkeye cameras set up around the turf that shadow both the ball and the players. FIFA has made it clear that SAOT is only a confirmatory tool. Experts believe that the wealth of tracking data generated by the technology will soon be used by coaches for tactical analyses and gauging individual athlete performances.

National Commission for Scheduled Tribes (NCST), along with the Union government, is now pushing for the “redocumentation” of the cultures and social practices of indigenous and tribal societies in India, existing scholarly literature on which, it says, is heavily reliant on the body of knowledge created by colonising governments. The plan is to encourage more sociologists, anthropologists and researchers from India’s indigenous and tribal communities to research and document the cultural, social and historical practices of their own communities in a bid to replace the colonial era body of work on this subject, NCST Chairperson Harsh Chouhan explained, adding that this will enable the government to understand tribal societies, identity and rights better.

SARAS 3, a radio telescope designed and built at the Raman Research Institute (RRI) here, has provided clues to the nature of the universe’s first stars and galaxies. Using data from the telescope which has been deployed over the Antigenically Lake and Sharavati backwaters since 2020, astronomers and researchers have been able to determine properties of radio luminous galaxies formed just 200 million years post the Big Bang, a period known as the Cosmic Dawn. The results of the findings have been published in the journal Nature Astronomy. In March, the SARAS 3 team used the same data to reject claims of the detection of an anomalous 21-cm signal from Cosmic Dawn made by the EDGES radio telescope developed by researchers from Arizona State University and MIT, the U.S.

The Supreme Court on Monday linked the bitter failure of the National Judicial Appointments Commission (NJAC) to the government’s willingness to “cross some Rubicons” and take on the judiciary by delaying Collegium recommendations. The top court had struck down the NJAC, which gave the government an equal say in judicial appointments, in 2015. The judgment had revived the Collegium system of judicial appointments. “There appears to be an unhappiness in the government of the fact that NJAC did not muster the constitutional mandate... That cannot be the reason to not comply with the law of the land,” a Bench of Justices Sanjay Kishan Kaul and A.S. Oka.

MUDRA LOAN NON-PERFORMING ASSETS (NPAs) AT JUST 3.3% IN 7 YEARS

1. NPAs 3.38% of the total disbursements of ₹13.64 lakh crore under Pradhan Mantri MUDRA Yojana (PMMY). It is almost half of the banking sector as a whole which stood at 5.97% in FY 2021-22. Overall, only 4.19% of loan accounts under MUDRA turned bad.
2. Mudra Loans are the loans provided under the PMMY in three categories: 'Shishu' (up to ₹50,000), 'Kishore' (₹50,001 to ₹5 lakh) and 'Tarun' (over ₹5 lakh up to ₹10 lakh). MUDRA (Micro Units Development & Refinance Agency Ltd) Bank is a refinancing Institution launched in 2015.
3. It aims to provide loans up to 10 lakh to non-corporate, non-farm small/micro enterprises. The loans are given by Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs. They do not require any collateral/ security.
4. **Significance of MUDRA-** Expand Formal loans to informal micro enterprises; Lower Cost of Finance; Employment Generation; Special concessions on interest rates for SC/ST entrepreneurs etc. More than 68% of the loan accounts have been sanctioned to women.

FOUR INITIATIVES LAUNCHED UNDER e-COURT PROJECT

1. **Newly launched Project include:** Virtual Justice Clock: Exhibits vital statistics at Court level giving the details of the cases instituted, cases disposed and pendency. JustIS Mobile App 2.0: Tool for judicial officers for effective court and case management by monitoring pendency and disposal of cases.
2. **Digital court:** Initiative to make court records available to judge in digitised form to enable the transition to Paperless Courts. S3WaaS Websites: To generate, configure, deploy and manage websites for publishing specified information and services related to district judiciary. e-Courts Mission Mode Project (2007) is a national e-Governance project for ICT enablement of district & subordinate courts.
3. It was conceptualised based on the report submitted by e-Committee, Supreme Court of India. E-Committee is the governing body headed by Chief Justice of India.
4. **Benefits of eCourts-** Make functioning of the courts accountable and transparent. Effective management of court and cases, bringing down of pendency. Will make the justice delivery system affordable, accessible and cost-effective. Other initiatives: National Judicial Data Grid NJDG, Virtual Courts, live-streaming of proceedings etc.

INDUSTRY URGES GOVERNMENT TO ESTABLISH INDIA RARE EARTH MISSION TO REDUCE RELIANCE ON CHINA

1. Confederation of Indian Industry has suggested following steps to build domestic capability and broad-base supply for strategic raw materials: Splitting state-run Indian Rare Earths Ltd. and tasking a new entity with overseeing mining, production of non-Thorium minerals.
2. **Set up an ‘India Rare Earths Mission’.** Support private sector mining in the critical sector. Diversify sources of supply. Rare Earth Elements (REE) are a set of seventeen metallic elements - fifteen lanthanides on the periodic table plus scandium and yttrium.
3. They are necessary components for critical sectors, like, cellular telephones, computer hard drives, electric vehicles, defense applications like guidance systems, lasers, etc. India produces only 1% of global output despite having around 6% of world’s reserves. Thus, India is highly dependent on imports. In 2018-19, 92% of REE imports by value and 97% by quantity were sourced from China.
4. **Steps by government:** Set up of Khanij Bidesh India Ltd. (KABIL) to identify and acquire overseas mineral assets of critical and strategic nature. Bilateral agreements like Australia-India Critical Minerals Investment Partnership.

CHINA-PLUS-ONE STRATEGY: INDIAN ACTIVE PHARMACEUTICAL INGREDIENTS (APIS) FIRMS START TO REAP BENEFITS

1. Indian companies are emerging a clear favourite for China Plus One strategy. China-plus-one strategy is a global business

75 percentage of hypertension patients in India who have uncontrolled high blood pressure (BP), according to a study published in The Lancet Regional Health journal. High BP is an important modifiable risk factor for cardiovascular diseases, making it a significant contributor to premature death and morbidity.

300 candidates out of the total 1,621 candidates, contesting the Gujarat Assembly elections, who have criminal cases registered against them, the Association for Democratic Reforms (ADR) informed. AAP tops the list with 61 such candidates. A total of 192 candidates are booked for serious offences.

\$1 billion, the worth of the aid package to be provided to Yemen by the Arab Monetary Fund, according to their state media. Yemen's government signed a deal with the Abu Dhabi based fund, paving the way for them to receive economic aid from 2022 to 2025. Yemen's civil war, entering its eighth year, has decimated the country's economy, pushing its population to the brink of famine.

On November 14, Google reached an agreement with the Attorney Generals of 40 U.S. States to pay a historic \$391.5 million settlement, over its location tracking practices. Google was found to violate state consumer protection laws by misleading its users about its location tracking practices since at least 2014. The company misled consumers into thinking they had turned off location tracking, when, in fact, the company continued to collect their location information and use that for advertising. Google has agreed to significantly improve its location tracking disclosures and user controls starting next year.

India and France on Monday discussed defence industrial cooperation with a focus on 'Make in India' and means to strengthen maritime cooperation and increase the scope and complexity of bilateral exercises. This was discussed during the fourth India France annual defence dialogue chaired by Defence Minister Rajnath Singh and his French counterpart, Sebastien Lecornu, in Delhi.

strategy in which companies avoid investing only in China and diversify their businesses to alternative destinations.

2. It is to de risk dependency on China. API is the biologically active component of a drug product (tablet, capsule, cream, injectable) that produces the intended effects. In 2020, China was the world's largest API manufacturer followed by the US and India. India's API industry was estimated at ₹79,800 crore (2020) and likely to reach ₹131,000 crore by 2026.

3. **Factors Favouring Indian API Industry (along with the China Plus One Strategy)**-Increase in cost of APIs and Intermediates by China. Increased Drug Standards and Rising Labour wages in China. Pandemic-led supply chain disruptions. Proven track record of high-quality research capabilities from the Indian API industry. Large workforce in India with low wage cost.

4. **Initiatives by government**-Production Linked Incentive Scheme for domestic manufacturing of critical Key Starting Materials/ Drug Intermediates and APIs. Scheme for Promotion of Bulk Drug Parks.

OCEANSAT-3 EARTH OBSERVATION SATELLITE (EOS) LAUNCHED BY ISRO

1. **PSLV-C54 rocket successfully placed Oceansat-3** and eight other nanosatellites into sun-synchronous orbits (SSO). Satellites in SSO or polar orbits usually travel past Earth from north to south passing roughly over Earth's poles. Oceansat-3 is third-generation satellite in Ocean Sat series, designed and developed for ocean studies. It is follow up to OceanSat-1 and OceanSat-2 launched in 1999 and 2009, respectively.

2. **Key payloads include:** Ocean Colour Monitor (OCM-3): Expected to provide improved accuracy in daily monitoring of phytoplankton. Sea Surface Temperature Monitor (SSTM): To provide various forecasts ranging from fish aggregation to cyclone genesis and movement. Ku-Band scatter meter (SCAT-3): Will provide a high-resolution wind vector (speed and direction) at ocean surface.

3. **EOS are also known as the Earth remote sensing satellites.** These satellites observe the planet Earth from space for several purposes. Useful in areas like environmental monitoring, cartography, navigation, environment & eco-system management, ocean & atmospheric studies, and disaster mitigation etc. Military also use EOS for spying and communication.

COASTAL REGULATION ZONE(CRZ)

1. Ministry of Environment, Forest and Climate Change has legalized the functioning of beach shacks across all coastal states, by amending CRZ rules of 2019.

2. It is expected to boost tourism and the coastal economy. CRZ refers to the coastal land up to 500 metres from the high-tide line and a stage of 100 m along banks of creeks, estuaries, backwaters and rivers. CRZ rules regulate human and industrial activities in such areas to protect fragile ecosystems.



“Locate the normal so that you can stay away.”

DR. KHAN
(KSG)