

**EVERYDAY CURRENT AFFAIRS – NOVEMBER 24,
2020**

TAMIL NADU

- **Researchers from IIT, Madras - have developed a solar-powered unmanned autonomous survey craft to do hydrographic and oceanographic surveys**



- ✓ The unmanned survey craft will be used in Indian ports and inland waterways.
- ✓ The new invention could prove to be an indigenous alternative to the expensive foreign vessels used currently.
- ✓ The boat-like craft can be operated in manual mode by a remote control or as a fully autonomous vessel
- ✓ It can be used for autonomous surveys to measure depth of water and underwater topography at ports, harbours, waterways, dams, lakes, lagoons and other shallow water zones and transmit data real-time over longer distances 'precisely and accurately'
- ✓ The craft is fully solar-powered and can endure over five hours in sea, depending on user requirements, to study different properties of the ocean
- ✓ It was tested recently off Chennai coast at Kamarajar port and further field trials under tougher environments have been scheduled this month at Kolkata port.
- ✓ The craft is equipped with echo sounder, GPS system and broadband communication technology to make precise depth measurements and transmit the data.

- ✓ It can also be integrated with other equipment to measure current and velocity, a 360-degree camera, LiDAR for seamless topography and for bathymetry measurements.
- ✓ The craft will also help port administrators to overcome challenges like slowing down of traffic and accidents due to surveys, need for vessels to carry out surveys in shallow areas and the high cost of doing periodic survey of shipping channels.
- ✓ The autonomous craft was developed by a research team at National Technology Centre for Ports, Waterways and Coasts (NTCPWC) in IIT Madras.
- ✓ They are in the process of commercializing the technology with the help of the ministry of shipping and IIT Madras Incubation Cell.

STATES

- **On November 23, the Kerala government - decided to withdraw 118A amendment of the Kerala Police Act, 2011 protecting women against cyberbullying.**
- ✓ The amendment was aimed at giving arbitrary powers to police to prosecute persons spreading defamatory content
- ✓ The government's withdrawal followed widespread condemnation from civil society and the media against freedom of expression

THE UNDOING

- Ordinance became law when gov signed it and even CM can't say it won't be implemented
- CMO sources said cabinet will recommend to governor withdrawal of ordinance or home ministry will direct police to not take action under it
- Constitutional expert Kaleeswaram Raj says only way to withdraw it is by way of another ordinance

- ✓ However, it is unclear if the government will promulgate a new ordinance to withdraw the 118A amendment or present a new bill in the next session.
- ✓ The state government had announced the ordinance on October 21 and was officially notified on November 21.
- ✓ Earlier, the Supreme Court had struck down in 2015 a similar amendment — Section 118(d) of the Kerala Police Act — terming it to be in breach of right to free speech.
- ✓ The newly added clause 118A envisages imprisonment for a term which may extend to three years or with fine which may extend to Rs 10,000 or with both to offenders involved in cyber attacks against women and children

- On November 23, Andhra Pradesh Chief Minister Y.S. Jagan Mohan Reddy - launched “Abhayam” mobile phone application



- ✓ The App is designed to help women and children travelling in taxis and autorickshaws to raise an alarm in case of any emergency.
- ✓ Initially, 1,000 autorickshaws equipped with Internet of Things (IoT)-enabled GPS devices would be rolled out in Visakhapatnam city.
- ✓ The state is planning to bring around 5,000 vehicles to the platform by February 1, another 50,000 by July 1 and 1 lakh by November 2021 covering Vijayawada and Tirupati and other towns later.
- ✓ Andhra Pradesh was the first State to bring out legislation (Disha Bill) for the security of women.

NATIONAL

- **The interim findings of the AstraZeneca-Oxford Covid-19 vaccine trials – indicated 70% effectiveness in preventing people from getting infected**
- ✓ The British drugmaker will have as many as 200 million doses by the end of 2020, around four times as many as U.S. competitor Pfizer, and 700 million does by the end of first quarter of 2021
- ✓ Following the results, Pune-based Serum Institute of India (SII) is all set to apply for the emergency license soon and obtain regulatory approval for the vaccine by the year-end.

REGULAR REFRIGERATION SUFFICIENT	
<ul style="list-style-type: none"> ➤ Pune-based Serum Institute hopes to get emergency licence in a month to use AstraZeneca-Oxford Covid-19 vaccine ➤ Two doses will be required. Set to be cheaper than Pfizer (₹1,500) & Moderna (₹2,775) vaccines ➤ 4 crore doses already with Serum. To have 10cr doses by Jan. "Priority will be India," 	<p>CEO Adar Poonawalla says</p> <ul style="list-style-type: none"> ➤ Efficacy of this vaccine rises to 90% if half dose is followed by a full one, but it's lower than 95% of Pfizer & Moderna ➤ Oxford shot can be transported & stored at 2°C to 8°C (normal fridge temp), unlike the other two, making it easier to distribute in remote parts of India

- ✓ The Astra-Zeneca data exceeds the 50% primary efficacy standard set by Indian drug regulator DCGI as part of its draft guidelines for Covid-19 vaccines.
 - ✓ The company has so far produced and stocked around four crore doses, and will have around 10 crore doses by January 2021.
 - ✓ A majority of these will be marked under 'priority category' for India
 - ✓ Covishield will be made available in the market at ₹500-600 per dose, and at ₹220-300 (\$3-4) for the government
 - ✓ Overall, for every patient, two doses of the vaccine will be required.
 - ✓ Competing vaccines from Pfizer and Moderna are expected to be priced higher.
 - ✓ The Moderna vaccine may cost up to \$37 or ₹2,775 per dose, while Pfizer could price its shot around \$20 or ₹1,500.
 - ✓ The low-cost Covishield vaccine or 'AZD1222' is projected to offer protection up to 90% in one type of dosage regime and 62% in the other dosage regime, based on the clinical trials
 - ✓ The combined analysis from both dosing regimens resulted in an average efficacy of 70%.
 - ✓ Though the efficacy of the vaccine is much lower than the around 95% achieved by both Pfizer and Moderna, the vaccine holds potential for India because of its price and simpler supply chain.
 - ✓ The vaccine can be stored in normal refrigerated temperature (2-8°C), and does not require the set-up of a sub-zero cooling chain
 - ✓ This makes it easier to transport, store and distribute even in remote areas.
 - ✓ The Phase-III clinical trials of Covishield on 1,600 participants are ongoing across India since October and are expected to be completed by mid-December.
 - ✓ Bangladesh has collaborated with India to procure 30 million doses of the AstraZeneca vaccine made in India
 - ✓ The AstraZeneca vaccine uses a modified version of a chimpanzee cold virus to deliver instructions to cells to fight the target virus
 - ✓ This is different from the approach used by Pfizer and Moderna, which rely on new technology known as messenger RNA (mRNA).
 - ✓ Among the 54 vaccine candidates that are currently undergoing clinical trials, 13 are in the Phase III trials and 6 are approved for limited use.
- **The government - is planning to set up at least one electric vehicle charging kiosk in 69,000 petrol pumps across the country**
- ✓ This was announced by the Union road transport minister Nitin Gadkari on November 23, while addressing a virtual conference on electric mobility
 - ✓ The government is trying to create an ecosystem to accelerate the off-take of electric vehicles in the country, as per the Minister
 - ✓ The minister said battery charging ecosystem is crucial for the success of accelerating the electric mobility.
 - ✓ Currently, the charging points for electric vehicles are confined only to a few areas in metro cities.

- ✓ According to the Minister, the government is working towards making a portion of the upcoming Delhi-Mumbai Expressway an electric highway allowing electric “road trains”, which can replace two to three trucks.
- ✓ The road transport ministry has notified the dimensions for such vehicles, which can ply on expressways.
- **Coal India Ltd, - has become the latest Indian entity to enter the renewable energy sector by pledging ₹5,650 crore for building 3,000 MW (megawatt) of solar power projects**
- ✓ This is part of a plan of the world’s biggest coal miner and India’s single-largest greenhouse gas emitter to become a net-zero energy company by 2023-24.
- ✓ The state-run major’s entry is part of Centre’s larger strategy for meeting — rather exceeding — the commitment made at the Paris climate meet, or COP-21, to reduce India’s carbon footprint.
- ✓ Coal India has been ranked eighth among the top 20 companies responsible for global carbon emissions from 1965-2017
- ✓ This is based on the data released by US-based Climate Accountability Institute in December 2019.
- ✓ A million unit (MU) of solar power generation brings down Co2 emissions by a little over 700 tonnes.
- ✓ Roughly 55% of electricity in the country comes from coal-fired power stations, even though renewables now account for a quarter of the 3,73,436 MW installed capacity.
- ✓ Another largest generation utility, NTPC has already announced a target of building 10,000 MW of solar capacity at an investment of ₹50,000 crore by 2022.

DEFENCE

- **India – to launch multiple operational firings of the BrahMos supersonic cruise missile this week**
- ✓ The “live missile tests” of the 290-km range BrahMos will be carried out by the Army, Navy and IAF in the Indian Ocean Region.
- ✓ The Brahmos is a deadly conventional, non-nuclear weapon that is capable of flying at almost three times the speed of sound at Mach 2.8,
- ✓ The first test of the missile is likely to take place on November 24.
- ✓ The BrahMos land-attack missile batteries have already been deployed in Ladakh and Arunachal Pradesh, along with tanks, howitzers, surface-to-air missiles and other weapons
- ✓ Similarly, some Sukhoi-30MKI fighters armed with BrahMos missiles are also deployed in airbases closer to the line of actual control (LAC)
- ✓ Further, the enhanced version of BrahMos with a strike range of almost 450-km, which has been successfully tested three to four times, will be soon made operational

OBITUARY

- **Tarun Gogoi, three-time former Assam CM – died on November 23 due to multi-organ dysfunction, after three weeks of battling post-Covid complications**



- ✓ The 86-year old Congress veteran was active in politics until he tested positive for the virus on August 25
- ✓ In his political career spanning more than 50 years, he represented the Congress as an MP from Assam six times and led the party to a record three straight electoral victories from 2001 to 2016
- ✓ As Assam's longest-serving CM with three consecutive terms starting 2001, Gogoi's 5,487 days in office marked an era of change and new challenges for the state as well as Congress.
- ✓ Gogoi's two consecutive electoral victories after his first were based on his two achievements — turning around the state's economy from a state of bankruptcy to eliminating militancy.
- ✓ In his first term from 2001, he had ensured Assam's financial recovery, besides laying the roadmap for peace talks with militant outfits
- ✓ The big achievement of Gogoi's first term was the signing of the first Bodo peace accord in 2003 with the erstwhile Bodo Liberation Tiger.
- ✓ Later, Ulfa joined the peace process in 2010 in a significant breakthrough.
- ✓ The highlight of Gogoi's third term as CM since 2011 was setting in motion the process of resolving the problem of illegal migration from Bangladesh.
- ✓ The National Register of Citizens (NRC) was said to be the brainchild of Gogoi
- ✓ Gogoi was first elected to Parliament in 1971 from Jorhat and served as MLA for four terms
- ✓ Later, he served as the party's general secretary from 1985 to 1990 and became a Minister in the Cabinet of former Prime Minister P.V. Narasimha Rao in 1991.

