

'Indrajaal'



- Hyderabad-based technology R&D firm Grene Robotics has designed and developed India's first indigenous drone defence dome called "Indrajaal".

- As per the company, the drone defence dome has the capability to autonomously protect an area of 1000-2000 sq km against the aerial threats by assessing and acting on aerial threats such as Unmanned Aerial Vehicles (UAVs), loitering munitions, and Low- Radar Cross Section (RCS) targets.
- Considered as the 3rd revolution of warfare, the design principles of Indrajaal are based on delivering autonomy to the armed forces.
- The synergic combination of 9-10 modern technologies helmed by Artificial Intelligence (AI), cybersecurity and robotics.

- **Capable of real-time situational awareness, Indrajaal comprises all current weapons suite and infrastructure along with a honeycombed cell structure to provide a seamlessly built over a combination of 9-10 technologies for 24×7 persistent monitoring, tracking and action.**

Salient features of Indrajaal

- **- Real-time situational awareness**
- **- Integrated and Intelligent meshed network**
- **- Integrated all current weapons suite and infrastructure**
- **- Honeycombed cell structure for seamlessly built**
- **- Synergic combination of 9-10 technologies**
- **- 24×7 persistent and autonomous monitoring, action and tracking**



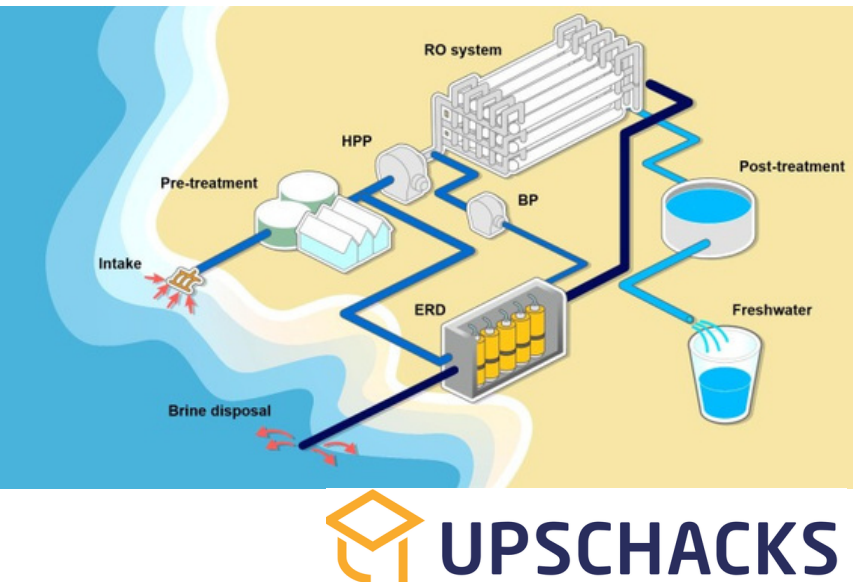
SEA SNOT OUTBREAK



- Turkey's Sea of Marmara, that connects the Black Sea to the Aegean Sea, has witnessed the largest outbreak of 'sea snot'.
- 'Sea snot' is marine mucilage, which floats up on the surface of the sea like a brown phlegm.
- This thick slimy layer of organic matter looks like a viscous, brown and foamy substance.
- It is formed when algae are overloaded with nutrients as a result of water pollution combined with the effects of climate change.
- The nutrient overload occurs when algae feast on warm weather caused by global warming. Water pollution adds to the problem.
- Overproduction of phytoplankton caused by climate change/rising temperatures and the uncontrolled dumping of household and industrial waste into the seas has led to the present crisis in turkey.

DESALINATION

- Narippaiyur, a village in Ramanathapuram District, a drought prone area situated in the South-East corner of Tamil Nadu will benefit from 20,000 litres per day of fresh water produced from sea water – thanks to the solar thermal Forward Osmosis (FO) sea water desalination system installed in the place.



- A desalination plant turns salt water into water that is fit to drink.
- The most commonly used technology used for the process is reverse osmosis where an external pressure is applied to push solvents from an area of high-solute concentration to an area of low-solute concentration through a membrane.
- The microscopic pores in the membranes allow water molecules through but leave salt and most other impurities behind, releasing clean water from the other side.

RURAL TOURISM



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- Ministry of tourism invites feedback on the draft national strategy and roadmap for development of rural tourism in India.

- The Ministry of Tourism has the main objective of promoting and facilitating tourism both inbound and domestic in India.
- Ministry of Tourism has recognized the immense potential of Rural Tourism and has been actively working on promotion and development of this niche area of tourism.
- Identification, diversification, development, and promotion of niche tourism products in the country is the initiative of the Ministry to overcome the aspect of 'seasonality' and to promote India as a 365 days' destination, to attract tourists with specific interest, and to ensure repeat visits for the unique products in which India has a comparative advantage.

Hispid Hare



- The hispid hare is also called Assam rabbit and bristly rabbit.
- It is a native to South Asia, whose historic range extends along the southern foothills of the Himalayas.

- For the first time in two decades, it was spotted in Jaldapara National Park in West Bengal, in 2020.
- The animal is now restricted mainly to Assam and Jaldapara, Bangladesh, Nepal and possibly Bhutan.
- World population of the species is said to be below 300 individuals.
- IUCN Conservation status- Endangered.
- Populations have experienced a continuing decline in suitable habitat due to increasing agriculture, flood control, and human development.
- The species inhabits tracts of early successional tall grasslands and takes refuge in marshy areas or grasses adjacent to river banks during the dry season.

EU's 'Green pass'



- Those vaccinated with Covishield, the version of the AstraZeneca vaccine being manufactured in India by SII, are not eligible for the EU Digital Covid certificate or “green pass”

- It is an immunity document to ease travel within and to the 27-member bloc.
- It will be in place by July 1.
- It is digital proof that a person has either been vaccinated against Covid-19, received a negative test result or recovered from Covid-19.
- The certificate is both in digital and paper format, comes with a QR code is free of charge, is in the national language and English, is safe and secure and valid in all EU countries
- The EU Digital Covid Certificate contains necessary key information such as name, date of birth, date of issuance, relevant information about vaccine/ test/recovery and a unique identifier.

- **This data remains on the certificate and is not stored or retained when a certificate is verified in another member state.**
- **The EU Digital Covid Certificate will also prove the results of testing, which is often required under applicable public health restrictions.**



NATRAX- Longest high speed track of Asia



- The Minister of Heavy Industries and Public Enterprises inaugurated NATRAX- the High Speed Track(HST) in Indore which is the longest such track in Asia.

- NATRAX, developed in an area of 1000 acres of land , is a one stop solution for all sorts of high speed performance tests for widest categories of vehicles from 2 wheelers to heavy tractor trailers. It is a 11.3 km High Speed Track.
- HST is used for measuring the maximum speed capability of high-end cars like BMW, Mercedes, Audi, Ferrari, Lamborghini, Tesla and so forth which cannot be measured on any of the Indian test track.
- It can cater to the widest category of vehicles; say from two wheelers to the heaviest tractor trailers.
- Vehicle can achieve max speed of 375 Kmph on curves with steering control and it has less banking on ovals making it also one of the safest test track globally.

- **Moreover, the track benefits from the zero percent longitudinal slope that basically helps in improving the accuracy of the measurement of the performance of vehicle.**
- **Being centrally located in Madhya Pradesh, it is accessible to most of the major OEMs.**
- **The project NATRAX is being built under NATRiP (National Automotive Testing and R&D Infrastructure Project) of the Heavy Industries Ministry.**
- **NATRAX happens to be one of the automotive testing and certification centres in the country.**



Exercise Sea breeze



- Ukraine and the United States launched joint naval exercise Sea Breeze in the Black Sea with the largest number ever of participating countries.
- It was launched by both the countries in a show of Western cooperation with Kiev as it faces off with Russia.
- Focus: It focuses on amphibious warfare, land maneuver warfare, diving operations, maritime interdiction operations, air defense, special operations integration, anti-submarine warfare and search and rescue operations.
- Exercise Sea Breeze brings most Black Sea nations and NATO allies and partners together to train and operate in the pursuit of building increased capability.
- The Sea Breeze drills which have taken place 21 times since 1997 will involve some 5,000 military personnel from more than 30 countries.
- The exercises will last two weeks and involve around 30 ships, including the missile destroyer USS Ross.
- Russia annexed Crimea from Ukraine in 2014 and claims the waters around the peninsula as part of its territory.

- **The USA is a key ally of Kiev in its conflict with Moscow over Crimea and pro-Moscow separatist regions in eastern Ukraine.**



Kadaknath chicken



- The Kadaknath breed of chicken is changing lives of people in Odisha in the dark days of the COVID-19 pandemic.
- The Kadaknath breed is popular for its black meat and known as BMC (black meat chicken).

- It is famous for its meat quality, texture and taste.
- These birds bear great medicinal value in homeopathy and are useful in treating a particular nervous disorder.
- They are mainly reared by tribal communities in Bhil and Bhilala in the districts Jhabua and Dhar in the state of Madhya Pradesh(MP).
- Kadaknath chickens are best suited for backyard farming rather than growing on commercial scales.
- There are 3 different breeds of Black Meat Chicken (BMC) available in the world.
- Kadaknath – Native to Madhya Pradesh, India.
- Silkie – Native to China.
- Ayyam Cemani – Native to Indonesia

International Day of Parliamentarism:

30 June



- **International Day of Parliamentarism is observed globally on 30 June every year.**

- **The International Day of Parliamentarism is a time to review the progress that parliaments have made in achieving some key goals to be more representative and move with the times, including carrying out self-assessments, working to include more women and young MPs, and adapting to new technologies.**
- **The Day was established in 2018 through a United Nations General Assembly Resolution.**
- **This day also acknowledges the formation of the Inter-Parliamentary Union, the global organization of parliaments that was established in 1889.**

'Itat e-Dwar'



- Union Minister for Law & Justice, Communications and Electronics & IT, has formally launched the e-filing portal of Income Tax Appellate Tribunal (ITAT), 'itat e-dwar', in New Delhi.
- The newly developed e-Filing Portal would enable the parties to file their Appeals, Miscellaneous Applications, documents, paper books, etc., electronically.
- The portal will enable the online filing of appeals, applications and documents by various parties.
- The 'ITAT e-dwar' portal aims to enhance accessibility, accountability and transparency in the day-to-day working of the ITAT.
- It would not only result in economization of the use of paper and cost savings but also rationalization of the fixation of cases leading to quicker disposal of cases.
- The e-Filing Portal will enable the parties to electronically file their Appeals, Miscellaneous Applications, documents and paper books.

- **All the communication regarding their appeals, like filing of appeal or hearing date, adjournments, pronouncements and disposals will be sent to the appellant's Mobile and E-Mail Id.**
- **The tribunal orders will also be sent on the given E-Mail Id.**
- **The ITAT in its next phase aims to designate specific benches as Paperless Benches and touch screens will be provided in these Paperless Benches to enable members to access their e-Appeals.**



Philippines included in FATF grey list



- Philippines has been included in the grey list of the Financial Action Task Force (FATF). FATF has released its grey list of jurisdictions that will be subjected to increased monitoring.
- In addition to the Philippines, Haiti, Malta, and South Sudan have also been added to the grey list.
- Now, these jurisdictions will be required to submit progress reports to the FATF thrice a year.
- The Philippines was removed from the blacklist of FATF in 2005. It was previously included in FATF's blacklist in 2000.
- FATF grey list is the list in which jurisdictions under increased monitoring are placed.
- If a jurisdiction is placed under increased monitoring, this means that jurisdiction is committed to resolving strategic deficiencies within agreed timeframes.
- Jurisdictions under the FATF grey list actively work with FATF to address strategic deficiencies in their regime to fight against money laundering and terrorist financing.

- **FATF blacklist is the list of countries judged by FATF as non-cooperative in the global fight against money laundering and terrorist financing.**



Glacial lake atlas in Ganga basin



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- The Ministry of Jal Shakti has released an updated atlas of glacial lakes that are part of the Ganga river basin.
- About 4,707 glacial lakes have been mapped in the Ganga basin.
- Glacial lakes with water spread area greater than 0.25 ha were mapped using Resourcesat-2 (RS-2) Linear Imaging Self Scanning Sensor-IV (LISS-IV) satellite data.
- Based on its process of lake formation, location, and type of damming material, glacial lakes are identified in nine different types, majorly grouped into four categories.
- The study portion of Ganga River basin covers part of India and transboundary region.
- The Atlas is available on the Bhuvan portal of National Remote Sensing Centre (NRSC), ISRO.
- The atlas could be used as reference for carrying out changes in the lakes over time, the spatial extent (expansion/shrinkage), and formation of new lakes.

- **The information on glacial lakes including their type, hydrological, topographical, and associated glaciers are useful in identifying the potential critical glacial lakes and consequent GLOF (Glacial Lake Outburst Flood) events.**
- **It can be used as reference data for carrying out change analysis, both with respect to historical and future time periods.**
- **The atlas can also be used in conjunction with glacier information for their retreat and climate impact studies.**
- **Central and State Disaster Management Authorities can make use of the atlas for disaster mitigation planning and related programs.**
- **In December, 2020, Glacial lakes in the Indus river basin were mapped**