

TARGET4IAS: TOGETHER WE CAN



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Together We Can

## Weekly Current Affairs

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## SWAMITVA scheme

### In news

The Prime Minister launched the distribution of e-property cards under the SWAMITVA scheme on National Panchayati Raj Day(24th April 2021)

### About Swamitva Scheme

- SVAMITVA (Survey of Villages and Mapping with Improvised Technology in Village Areas) was launched by Prime Minister on 24th April 2020.
- **Central Sector Scheme** to promote a socio-economically empowered and self-reliant rural India.
- The scheme is piloted by the Panchayati Raj ministry.
- **Aim:** creating a record of property ownership of land in rural areas. The lands in rural areas are to be mapped using modern technology.
- It paves the way for using the property as a financial asset by villagers for availing loans and other financial benefits.
- The Scheme will cover around 6.62 Lakh villages of the entire country during 2021-2025.
- Under the scheme, the mapping is to be done in a phase-wise manner between 2020 and 2024.

## EXERCISE VARUNA – 2021

### In news

- The 19th edition of **the Indian and French Navy bilateral exercise**
- **Conducted in the Arabian Sea** from 25th to 27th April 2021.
- VARUNA-21 highlights growing bonhomie and showcases increased levels of synergy, coordination and inter-operability between the two friendly navies.

## Project DANTAK

### In news

Project DANTAK is commemorating its Diamond Jubilee in Bhutan.

### About Project DANTAK

- It was **established on April 24, 1961** as a result of the visionary leadership of the Third King of Bhutan and then Prime Minister of India JawaharLal Nehru.

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- DANTAK was tasked to construct the pioneering motorable roads in the Kingdom, Identifying the utmost importance of connectivity in spurring the socio-economic development and growth of Bhutan.
- **The Border Roads Organisation** (under Ministry of Defence) was tasked to build the roads in the Kingdom.

### Virafin

#### In news

Drug Controller General Of India (DCGI) gave a restricted emergency use approval to the ZydusCadila's 'Virafin' for treating the patients showing moderate COVID-19 symptoms.

#### Key takeaways

- Virafin is a pegylated interferon **alpha-2b (PegIFN)**, which when subcutaneously injected to the patient in the early stages of infection, resulted in their faster recovery.
- The studies reported that **Virafin reduces viral load and aid in managing the disease in a better way**, thereby reducing the respiratory tension caused due to low oxygen levels.
- The drug's safety profile is already well known as it is used in treating people with **chronic hepatitis B and C**. The drug has been repurposed for treating moderate COVID-19 disease.

#### About Drug Controller General of India

- DCGI is the head of department of the Central Drugs Standard Control Organization.
- It is responsible for approval of licences of specified categories of drugs such as blood and blood products, IV fluids, vaccines and sera in India.
- It comes under the **Ministry of Health & Family Welfare**.

### Cyber-Crime Volunteer Framework

#### In news

The Ministry of Home Affairs (MHA) has said it does not maintain a centralised list of volunteers enrolled under the cybercrime volunteer programme since police is a "State subject".

#### About Cyber Crime Volunteer Framework

- It is launched by Union Home Minister in January 2020.
- **Aims to raise a group of "cyber crime volunteers" to flag "unlawful content" on the Internet.**

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- Cyber Crime Volunteer Framework has been rolled out as an initiative **as a part of cyber hygiene promotion** to bring together citizens to contribute in the fight against cybercrime in the country and assist State/UT LEAs (law enforcement agencies).
- The National Cybercrime Ecosystem Management Unit, of which the cyber crime volunteer programme is a constituent, is part of the Indian Cybercrime Coordination Centre (I4C) scheme.

### Liquid Oxygen

#### In news

Invoking the Disaster Management Act, the **Union Home Secretary (who is the Chairman of the National Executive Committee under the Disaster Management Act, 2005)** has ordered states that all liquid oxygen, including the existing stock with private plants, **should be made available to the government and will be used for medical purposes only.**

#### About Liquid Oxygen

- Liquid oxygen has a **pale blue colour** and is strongly **paramagnetic** which means that it can be suspended between the poles of a powerful horseshoe magnet.
- Because of its cryogenic nature, liquid oxygen can cause the materials it touches to become extremely brittle.
- Liquid oxygen is also a very powerful **oxidising agent**.
- It is widely used for industrial and medical purposes. It is **obtained from the oxygen found naturally in air by fractional distillation in a cryogenic air separation plant.**
- It is the most **common cryogenic liquid oxidiser propellant for spacecraft rocket applications, usually in combination with liquid hydrogen, kerosene or methane.**

#### About 'Disaster Management Act, 2005'

- The Disaster Management Act, 2005 has been enacted as the **central act to deal with the management of disasters**. This act envisaged a **three tier Disaster Management Structure** in India at **National, States and District levels**.
- **Prime Minister is its ex-officio chairperson.**
- It lays down the policies on disaster management, approve the national plan, and approve plans developed by various ministries of the union, lay down the guidelines to be followed by the state authorities in drawing up state plans.
- Apart from NDMA, the central government also constitutes a **National Executive Committee** which is responsible for assisting NDMA in execution of various functions for disaster management.

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- The act envisages constitution of the National Disaster Response Force and National Disaster Mitigation Fund.

### Supply Chain Resilience Initiative (SCRI)

#### In news

**India, Japan and Australia** formally launched the Supply Chain Resilience Initiative (SCRI) to build resilient supply chains in the Indo-Pacific region as they seek to reduce dependence on China.

#### Key takeaways

- **Aim:** To create a virtuous cycle of enhancing supply chain resilience with a view to eventually attaining strong, sustainable, balanced and inclusive growth in the region.
- Some of the joint measures shall include:
  - Supporting the enhanced utilisation of digital technology
  - Trade and investment diversification
- It will also focus on sharing best practices on supply chain resilience, holding investment promotion events, buyer-seller matching events to provide opportunities for stakeholders to explore the possibility of diversification of their supply chains.
- Expansion of the SCRI may be considered based on consensus, if needed, in due course.

### Python-5

**In news:** DRDO conducts maiden trial of Python-5 Air to Air Missile.

#### About Python-5 Missiles

- Python-5 is a **fifth generation air-to-air missile (AAM)** manufactured by **Israeli defence company Rafael Advanced Defense Systems**.
- The missile can engage enemy aircraft from **very short ranges and near beyond visual range**.
- The development on the Python-5 began in the 1990s. The missile was **unveiled for the first time during the Paris Air Show in June 2003**.
- Python-5 is powered by a **solid propellant rocket engine**. The propulsion system provides a **speed of Mach 4** and an **operational range of more than 20 km**.
- It is a **dual use missile** suitable for **air-to-air and surface-to-air missions**. It integrates a fifth-generation imaging seeker, modern software, advanced infrared counter-countermeasure (IRCCM) and flight control systems.

## Human Rights Watch

### In news

Human Rights Watch said that Israel is committing the crime of “apartheid” by seeking to maintain Jewish “domination” over Palestinians and its own Arab population.

### Human Rights Watch (HRW)

- Human Rights Watch (HRW) is an **international non-governmental organisation, headquartered in New York City**, that conducts research and advocacy on human rights.
- The group pressures governments, policy makers, companies, and individual human rights abusers to denounce abuse and respect human rights
- It often works on behalf of refugees, children, migrants, and political prisoners.
- Human Rights Watch in 1997 shared in the Nobel Peace Prize as a founding member of the International Campaign to Ban Landmines and it played a leading role in the 2008 treaty banning cluster munitions.

## Integrated Solar Dryer and Pyrolysis pilot

### In news

Recently, foundation stone of the **Integrated Solar Dryer and Pyrolysis pilot** was laid down at Central Leather Research Institute (CLRI), Chennai.

### Key takeaways:

- The pilot is part of the **Indo-German project ‘Pyrasol’** launched to **transform urban organic waste into biochar and energy in smart cities**.
- It was awarded to **CSIR-CLRI by the Indo-German Science & Technology Centre (IGST)**.
- It will ultimately lead to technology development for the joint processing of **Fibrous Organic Waste (FOW) and Sewage Sludge (SS) of Indian smart cities into hygienic and highly valuable biochar associated with energy recovery**, carbon sequestration and environmental improvement.

## Large Area Certification Scheme

### In news

Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW) is working to **identify Traditional Organic Areas** to transform them into **certified organic production hubs**

### Key takeaways:

- 14,491 ha area **under Car Nicobar and Nancowry group of islands** in Union Territory of Andaman & Nicobar Islands **becomes the first large contiguous territory to be**

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conferred with organic certification under 'Large Area Certification' scheme of the PGS-India (Participatory Guarantee System) certification programme.

### About LAC Scheme

- Large Area Certification" (LAC) has been launched under Paramparagat Krishi Vikas Yojna (PKVY)
- LAC is a Quick certification process that is cost-effective and farmers do not have to wait for 2-3 years for marketing organic certified products.
- Under LAC, each village in the area is considered as one cluster/group. All farmers with their farmland and livestock need to adhere to the standard requirements and on being verified get certified without the need to go under conversion period.
- Certification is renewed on annual basis through annual verification by a process of peer appraisals.

### About Paramparagat Krishi Vikas Yojana

- It is a component of Soil Health Management (SHM) of major project National Mission for Sustainable Agriculture (NMSA).
- Under PKVY Organic farming is promoted through the adoption of the organic village by cluster approach and Participatory Guarantee System of certification (PGS ).
- Fifty or more farmers will form a cluster having 50-acre land to take up the organic farming under the scheme.
- The produce will be pesticide residue free and will contribute to improving the health of the consumer.

## Deep submergence rescue vessel (DSRV)

### In news

The Indian Navy dispatched its deep submergence rescue vessel (DSRV) from Visakhapatnam to support the Indonesian Navy in the search and rescue efforts for its submarine KRI Nanggala that went missing with 53 personnel aboard.

### About DSRV

- India is amongst the few countries in the world capable of undertaking search and rescue of a disabled submarine through a DSRV.
- Indian Navy's DSRV system can locate a submarine up to 1,000-metre depth utilising its state-of-the-art side scan sonar and remotely operated vehicle.
- After the submarine is successfully located, another sub module of DSRV — the submarine rescue vehicle (SRV) — links with the submarine to rescue the trapped personnel.
- The SRV can also be used to provide emergency supplies to the submarine.

## New variety of soybean

### In news

Indian Scientists have developed a **high-yielding and pest-resistant variety of soybean**. Scientists from MACS- Agharkar Research Institute (ARI), Pune, an autonomous institute of the Department of Science & Technology, in collaboration with Indian Council of Agricultural Research (ICAR) have developed this variety.

### Key takeaways

- This newly developed variety is called **MACS 1407**.
- It is **suitable for cultivation in Assam, West Bengal, Jharkhand, Chhattisgarh and North-Eastern states**.
- Its seeds will be made available to farmers for sowing during the 2022 Kharif season.
- It requires an average of 43 days for 50 % flowering. Further, it takes 104 days to mature from the date of sowing.
- **In 2019, India produced around 90 million tons of soybean**.
- **MACS 1407** having high yielding, disease-resistant characteristics can help India to achieve its target to be among the world's major producers of soybean.

## Foreign Portfolio Investments

### In news

Foreign portfolio investors (FPIs) have pulled out \$2 billion from Indian equities as they are getting fidgety amid surging pandemic case loads and are likely to withdraw \$3-4 billion more in the short-term, foreign brokerage warns. FPIs had pumped in a record \$39 billion in FY21.

### About FPI

- The intent with FPI is generally to invest money into another country's stock market with the hope of generating a quick return.
- Such an investment is made with the **aim of making short term financial gain and not for obtaining significant control over managerial operations** of the enterprise.
- These include **investments via equity instruments (stocks) or debt (bonds)** of a foreign enterprise which does not necessarily represent a long-term interest.
- On a macro-level, **foreign portfolio investment is part of a country's capital account** and shown on its balance of payments (BOP).



### Tianhe Module

#### In news

China launched the core module of its space station, starting a series of key launch missions that aim to complete the construction of the station by the end of next year.

#### Key takeaways

- The Long March-5B Y2 rocket, carrying the Tianhe module was launched from the coast of a southern island province of Hainan.
- The Tianhe module will act as the management and control hub of the space station **Tiangong, meaning Heavenly Palace**, with a node that could dock with up to three spacecraft at a time for short stays, or two for long.
- The Tianhe launch is the first of 11 missions needed to complete the space station.
- Tianhe is the largest spacecraft developed by China.
- The station will operate in the low-Earth orbit at an altitude from 340 km to 450 km.
- It has a designed lifespan of 10 years, but experts believe it could last more than 15 years with appropriate maintenance and repairs.

### NEO-01

#### In news

The Chinese government has launched a **robot prototype named 'NEO-01'** in the Low Earth Orbit through its Long March 6 rocket.

#### About 'NEO-01':

- It is a robot prototype developed by China-based space mining start-up 'Origin Space'.
- It aims to observe small celestial bodies in deep space and to experiment with a novel approach to clearing up space debris.
- NEO-01 will use a large net to capture debris left behind by other spacecraft. After collection, it will burn them **using its electric propulsion system**.

**Electric Propulsion (EP)** is a class of space propulsion. This propulsion will make use of electrical power to accelerate a propellant. These technologies generate electrical energy either from a solar source or from a nuclear source.

### Deep Time Project

#### In news

The Deep Time project in **France's Lombrives Cave** has come to an end.

#### About Deep Time Project

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- The Deep Time Project was led by the scientists of the Human Adaptation Institute in partnership with labs in France and Switzerland.
- The project aimed to test how people adapt to changes in living conditions and environments.
- It will help scientists understand how people can adapt to extreme living conditions.
- The brain activity and cognitive function of volunteers were analysed before they entered the cave. This data is used for comparative studies after they leave the cave.



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