

NEWS TODAY

NITI AAYOG PITCHES FOR REFORMS ON AGRICULTURE SECTOR

- NITI Aayog's working paper '**From Green Revolution to Amrit Kaal**' emphasizes agriculture's key role in achieving **Viksit Bharat, inclusive development, green growth, and generating employment in the Amrit Kaal**.
 - As per NITI Aayog, **11 and 17 Sustainable Development Goals** are directly connected to agriculture.
- **Challenges to Agriculture sector:** Low Efficiency, linking Food to Health and Nutrition- and lesser Export Competitiveness.
- **Emerging Opportunities**
 - Use of **Agri-produce like grains, oilseeds, and sugarcane** as biofuel.
 - **Increasing demand for therapeutic food and medicinal plants.**
 - Agri-produce with **specific attributes (like high zinc or high protein levels)**, require **special market chains** with **traceability and labelling**.
 - **Agri start-ups as a catalytic** in implementing technology like biotechnology, nanotechnology, GPS tools in agriculture.
- **Recommendations**
 - Creation of a **conducive regulatory environment** and **responsible investments**, both public and private.
 - Introducing a **competitive framework** among **states to enhance the ease of doing** farming and farm business.
 - Use a **combination of procurement and price deficiency payment**, to pay Minimum Support Price to farmers.
 - **Other:** Promoting liberalized output markets, fostering an active land lease market, and prioritizing efficiency.

GLOBAL TROPICAL PRIMARY FOREST COVER CONTINUED TO DECLINE UNABATED IN 2022: WORLD RESOURCES INSTITUTE (WRI)

- According to a new research by the WRI's Global Forest Watch, **Tropical areas lost 4.1 million hectares of forest cover** resulting in emission of **2.7 billion tonnes of carbon dioxide**.
 - The need is to reduce **global deforestation by at least 10% every year** to meet the 2030 target (ending deforestation and restoring 350 Mha by 2030).
- However, the total **global tree cover loss, including primary, secondary, and planted forests**, in 2022 **declined by 10%**.
 - **Primary forests:** **Mature, natural forests** that have remained **undisturbed in recent history**. They store more carbon than other forests and are **rich sources of biodiversity**. Their **loss is almost irreversible**.
 - **Secondary forest:** Forest that **grows naturally at the place of primary forest after its deforestation**. It is more homogeneous than a natural forest, with a **limited number of species**, and usually even aged stands.
 - **Planted forests:** Forests predominantly established by **planting seedlings or seeds**. The trees usually belong to **the same species** (whether native or introduced), **have the same age**.
- **India lost 43.9 thousand hectares of humid primary forest** between 2021 and 2022.

ABOUT WRI

- It is a **global nonprofit organization** established in 1997.
- **Mandate:** works globally and in focused countries to meet people's essential needs; **to protect and restore nature; and to stabilize the climate and build more resilient communities**.
- WRI established Global Forest Watch in 1997 as part of the **Forest Frontiers Initiative**.
 - It started as a network of NGOs producing up-to-date reports about the state of forests. As of 2019 it provides data on 82 countries (Including India).



HEAVY RAINFALL IN INDIA DUE TO WESTERN DISTURBANCE, MONSOON SURGE INTERACTION: INDIA METEOROLOGICAL DEPARTMENT

- An **interaction between a Western Disturbance and the monsoon trough** led to extremely heavy rainfall over Himachal Pradesh, Uttarakhand, Punjab, etc.
- **Western Disturbance are extra-tropical cyclones** that originate in the Caspian Sea or the Mediterranean Sea.
 - While travelling towards India **along** the high altitude **westerly winds they pick up moisture** from the Mediterranean sea, Black sea, etc. and cause rainfall when they come up **against the Himalayas**.
 - Sometimes, they **move along the northern mountainous states** of Jammu and Kashmir, Himachal Pradesh, Uttarakhand towards the north eastern.
 - While other times they **may move along more southward regions** through Punjab, Haryana, Rajasthan, Uttar Pradesh and Bihar.
- **Most winter and pre-monsoon season rainfall** in North-West India is due to Western Disturbances.
 - During this time, **pre-monsoon rain is caused by instability in the atmosphere following heating of the surface**.
 - This year, **long spells of rain or thundershowers are also rare** because the pre-monsoon activity is normally brief and intermittent in north India.
- Some of the regions over India where extreme rains have increased are such places where the rains happen due to **orographic lifting**.

• **Orographic precipitation**, rain, snow, or other precipitation produced when moist air is lifted as it moves over a mountain range.

CENTRE BROUGHT THE GOODS AND SERVICES TAX NETWORK (GSTN) UNDER THE AMBIT OF THE PREVENTION OF MONEY LAUNDERING ACT (PMLA), 2002

- The government notified changes to **Section 66 of the PMLA Act** to **add GSTN as the of the entity to the list mandated to share information** with the Enforcement Directorate (ED) and the Financial Intelligence Unit (FIU).
- The move follows an **ED probe into a fake GST registration case involving stolen PAN** and Aadhaar for money laundering.
- GSTN is a **Special Purpose Vehicle** which was established in 2013 for the implementation of Goods and Services Tax (GST).
 - It provides **shared IT infrastructure** and **services** to taxpayers, the Central Government and the State/Union Territory Governments.
- **Initially, Private players own a 51% share in the GSTN**, and the government owns the rest.
 - The Board of GSTN in its 49th Board Meeting held on 30th June, 2022 has approved the conversion of GSTN into Government Company and hence **100% of the shareholding being held by Government** (50% with Union Government and 50% jointly with State Governments & UTs) in GSTN
- **Major functions of the GSTN:**
 - Facilitating registration.
 - Forwarding the returns to Central and State authorities.
 - Computation and settlement of IGST.
 - Matching of tax payment details with banking network.
 - Providing various MIS reports to the Central and the State Governments based on the taxpayer return information.
 - Providing analysis of taxpayers' profile.

• The **Prevention of Money Laundering Act** is to prevent money-laundering and to provide for confiscation of property derived from, or involved in, money-laundering and for matters connected therewith or incidental thereto.

DELHI HIGH COURT DISMISSES PEPSICO'S APPEAL AGAINST REVOCATION OF FC5 POTATO PATENT BY PPVFR AUTHORITY IN 2021

- In 2019, **PepsiCo had sued some Indian farmers** for cultivating the FC5 potato variety, accusing them of infringing its patent.
 - PepsiCo maintained that **it exclusively developed the FC5 variety and registered the trait in 2016**.
 - It **supplied the FC5 seed variety to a group of farmers** who in turn sold their produce to it at a fixed price.
- In 2021, the **Plant Varieties and Farmers' Rights (PPVFR) Authority** revoked the patent for FC5 potato, stating that India's regulations do not permit patents on seed varieties and that the certificate was issued based on inaccurate information.
- The 2021 revocation judgment **upheld farmers' seed freedom** as contained in Section 39 of the PPV&FR Act.
- The **PPV&FR Act 2001** was enacted to **introduce intellectual property rights in Indian agriculture after India joined the WTO in 1995** and agreed to implement the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).
- **The Act provides right to**
 - **Breeders to produce, sell, market**, etc. of the protected variety
 - **Researcher to use registered variety** for conducting experiment or research.
 - **Farmer** who has evolved or developed a new variety **for registration and protection in like manner as a breeder of a variety**.

• The **FC5 variety has a lower moisture content** required to make snacks such as potato chips.

CHINA TO IMPLEMENT EXPORT CONTROLS ON ITEMS RELATED TO GALLIUM AND GERMANIUM

- China will impose export restrictions from August on some **gallium and germanium products**, metals on the grounds of national security.
 - The move is apparently a **retaliatory measure after the US and Europe restricted chip exports to China**.
- Both are considered as key to manufacture **electronics and semiconductors** and the announcement led to increase in their prices.
 - **China produces around 60% of the world's germanium** and rest comes from Canada, Finland, Russia and the US.
 - **80% of gallium production takes place in China**.
- The actions may lead to **disruption in the supply chain of the two critical metals** which will also affect **India's chip-making plans** in the short term.
- However, the long-term impact on India would depend on **several factors, including alternative supply sources, domestic semiconductor production capabilities, etc.**
- **Initiatives by India to enhance its resilience for critical minerals**
 - **India-U.S. Initiative on Critical and Emerging Technology (iCET)**
 - **India joined Mineral Security Partnership (MSP)**, a US-led collaboration of 14 countries
 - **Khanij Bidesh India Ltd. (KABIL)** to identify and acquire overseas mineral assets of critical and strategic nature.

ALSO IN NEWS



Group of Global Crisis Response Group (GCRG)

- India has joined **United Nation's GCRG**.
- The GCRG was set up by the **UN Secretary General (UNSG)** in 2022 to address urgent and critical global issues pertaining to **interlinked crises in food security, energy, and finance** and to **coordinate a global response**.
- It is overseen by the **Champions Group** comprising of Head of state/Head of government of Bangladesh, Barbados, Denmark, Germany, Indonesia and Senegal.
- It will help **decision-makers** to **mobilize solutions** and develop strategies to help vulnerable countries.



One District One Product (ODOP) Awards

- Department for Promotion of Industry and Internal Trade (DPIIT), Under the Ministry of Commerce, launched the ODOP Awards.
- **Awards are Constituted to:**
 - **Encourage constructive** competition, innovation, and efficient public service delivery.
 - **Promote replication** and institutionalization of best practices.
 - **Recognizing innovations** done for successful identification and solving bottlenecks in supply chain.
- ODOP was first launched by Uttar Pradesh in 2018, later adopted by Union with the aim of fostering **balanced regional development** across **all districts** of the country.
 - ODOP selects, brand and promotes One Product from each District.



Candida auris

- **Candida auris, 1st reported in Japan in 2009, have been** isolated in the ear canals of stray dogs in Delhi.
 - **The research suggests that** pets can act as reservoirs for superbugs, **potentially transmitting infections to humans**.
- **It is an** emerging multidrug-resistant **oval-shaped fungus** causing life-threatening outbreaks.
- **It has been classified as a** critical priority group by the WHO.
- It belongs to the genus **Candida** which causes **candidiasis in humans**
 - Often, candidiasis is acquired in hospitals by patients with weakened immune systems.



Klotho protein

- Injecting ageing **monkeys** with **Klotho** can **improve their cognitive function**, a study published in Nature Aging reveals.
 - The findings could lead to **new treatments for neurodegenerative diseases**.
- **Klotho is a 'longevity factor' protein, a naturally** occurring protein that **declines in our bodies with age**.
- Previous research on mice had shown **that injections of klotho can extend the animals' lives and increase synaptic plasticity** (the **capacity to control communication** between neurons, at junctions called synapses).

 <p>Performance Grading Index for Districts (PGI-D).</p>	<ul style="list-style-type: none"> • Department of School Education and Literacy (DoSE&L) under Ministry of Education released PGI-D for the year 2020-21 & 2021-22 • It grades the districts into ten grades viz., Daksh being the highest grade and lowest performance grade is Akanshi-3. • Highlights <ul style="list-style-type: none"> ➢ None of the districts secured top two grades — Daksh and Utkarsh. ➢ Most districts were in the bottom three grades (less than 10% to 30%). • It grouped under 6 categories viz., Outcomes, Effective Classroom Transaction, Infrastructure Facilities & Student's Entitlements, School Safety & Child Protection, Digital Learning and Governance Process. <p><i>To read about PGI for States/UT, kindly refer to article 'MINISTRY OF EDUCATION RELEASED PERFORMANCE GRADING INDEX (PGI) 2.0 FOR STATES/UTS FOR 2021-22' of 8th July 2023 News Today.</i></p>
 <p>In a first, Milky Way seen through neutrino particles</p>	<ul style="list-style-type: none"> • The IceCube Neutrino Observatory that is buried several kilometres deep in the Antarctic ice cap has produced the first view of the Milky Way galaxy through the lens of neutrino particles. <ul style="list-style-type: none"> ➢ So far, Milky Way galaxy seen in many different wavelengths of light (radio, infrared, X-rays and gamma-rays). • Neutrinos are very low mass fundamental particles and they only interact very weakly with other matter (hence called as "ghost particles"). • They are emitted from our galaxy when cosmic rays collide with interstellar matter or they are also produced by some exploding stars, supernovas, gamma-ray bursts and quasars. • Hence, they can provide us an unprecedented view of highly energetic processes in our galaxy (a view that we can't get from using light alone).
 <p>Porpanaikottai site</p>	<ul style="list-style-type: none"> • A gold stud, a bone point and a carnelian bead belonging to Sangam Age have been excavated at Porpanaikottai site in Pudukottai district of Tamil Nadu. • Sangam Age refers to the period of history of ancient Tamil Nadu, Kerala spanning from 6th century BCE to c. 3rd century CE. • Excavation site had indicated a burial site, and fort area showed signs of waterbodies inside the site. • The discovery of a carnelian bead (generally found in Northern part of India) Indicated a trade with in country. • Discovery of bone point tools indicated a Porpanaikottai was a site of weaving industry.
 <p>Lambani Embroidery Patches</p>	<ul style="list-style-type: none"> • It has been named after the Lambani tribe. • It is an amalgam of pattern darning, mirror work, cross stitch, and overlaid and quilting stitches with borders of "Kangura" patchwork. • It is done on loosely woven dark blue or red handloom base fabric. • It received the status of Geographic Indication (GI) tag in 2010 from Karnataka. 
 <p>Place in News</p>	<p>Tanzania (Capital: Dodoma)</p> <ul style="list-style-type: none"> • As a measure to boost bilateral ties, India and Tanzania start trade settlements in local currencies. • Location: In East African situated just south of the Equator. <ul style="list-style-type: none"> ➢ Bounded by Uganda, Lake Victoria, and Kenya to the north, by the Indian Ocean to the east, ➢ Lake Tanganyika, Burundi, and Rwanda to the west. • Geographical features <ul style="list-style-type: none"> ➢ East African Rift System runs in two north-south- branches through mainland Tanzania. ➢ Africa's highest mountain, Kilimanjaro lies in North East. ➢ Rives: Ruvuma, the Rufiji, the Wami, and the Pangani—drain into the Indian Ocean. 



DELHI



LUCKNOW



JAIPUR



HYDERABAD



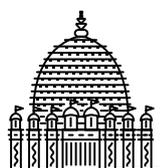
PUNE



AHMEDABAD



CHANDIGARH



GUWAHATI