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SC VERDICT ON AMU'S MINORITY STATUS

In News

- The Supreme Court ruled that an institution founded by a minority community retains its minority status even when recognized by statute.

Case Background

- The judgment was in response to petitions seeking minority status for Aligarh Muslim University (AMU).
  - AMU's minority status, established in 1875, was restored by the AMU (Amendment) Act in 1981.
- Petitioners challenged the **1967 S. Azeez Basha v. Union of India case**, which had held that AMU could not be considered a minority institution.

Supreme Court's Observations

- Chief Justice D.Y. Chandrachud held that a minority institution could claim minority status, but the community must prove it was established to preserve its cultural identity.
- **Interpretation of Article 30(1):** Article 30(1) allows religious and linguistic minorities to establish and manage educational institutions.
  - The Chief Justice classified Article 30(1) as anti-discriminatory and a "special rights" provision for minorities.
  - Legislation or actions that discriminate against minority institutions are invalid under Article 30(1).
  - Minority institutions are guaranteed autonomy in administration under this provision.
- **Scope of Minority Status:** The protection under Article 30(1) also applies to universities established before the Constitution.
  - Institutions need not be exclusively for the minority community, but "predominantly" benefit them.
- **State Regulation:** State regulation of minority institutions is allowed but must not infringe on their minority character.
- **Right to Administer**: An institution's minority character is not lost if management is not directly run by the founding community.
  - Minority institutions can appoint others to manage the institution, especially in specialized fields like law or medicine, to ensure educational values are emphasized.

Source: IE

SCHEME FOR STRENGTHENING THE MEDICAL DEVICE INDUSTRY

Context

- Recently, the Union Minister Health & Family Welfare launched the Scheme for Strengthening the Medical Device Industry to enhance the manufacturing capabilities, infrastructure, and overall growth of the medical device industry in India.

About the Medical Device Industry in India

- Medical devices are integral to healthcare delivery, from diagnostic machines to surgical instruments to stents and prosthetics.
- India's medical device market is currently valued at approximately **$14 billion and is expected to grow to $30 billion by 2030** which is fueled by rising healthcare demands, increased investment in healthcare infrastructure, and a growing focus on innovation and technology.
- It is expected to enhance the availability and affordability of these devices, thereby improving healthcare outcomes.

Key Concerns and Challenges Ahead of the Medical Device Industry in India

- **Regulatory Challenges:** The industry has long called for streamlined and clear regulations. The **National Medical Devices Policy, 2023,** aims to address these issues by creating a more coherent policy framework.
  - However, the implementation and adaptation to these new regulations can be complex and time-consuming for manufacturers.
- **Infrastructure and Technology:** The lack of advanced infrastructure and technology for high-end medical equipment remains a significant hurdle.
  - While the government has approved the establishment of **medical device parks** to reduce manufacturing costs and optimise resources, the industry still faces challenges in **accessing cutting-edge technology and infrastructure.**
- **Skilled Workforce:** The medical device sector requires a highly skilled workforce, but there is a **notable gap** in the availability of trained professionals.
- **Market Dynamics:** India's medical device market is **heavily dependent on imports,** with a significant portion of high-end devices being sourced from countries like the **U.S., China, and Germany**.

- It not only affects the trade balance but also makes the industry vulnerable to global supply chain disruptions.

- **Research and Development (R&D):** Investment in R&D is crucial for innovation and competitiveness. However, the Indian medical device industry has historically **underinvested in R&D**.

Need For Strengthening the Medical Device Industry in India

- **Manufacturing Enhancement:** The scheme focuses on the production of key components and accessories essential for medical devices.
  - It includes support for setting up new manufacturing units and upgrading existing ones to meet global standards.
- **Skill Development:** Recognising the need for a skilled workforce, the scheme includes provisions for training and development programs.
  - These aim to equip individuals with the necessary skills to operate advanced medical device manufacturing technologies.
- **Support for Clinical Studies:** To ensure the safety and efficacy of medical devices, the scheme provides support for clinical trials and studies.
  - It aims to help in the development of innovative and reliable medical devices.
- **Infrastructure Development:** The scheme promotes the establishment of common infrastructure facilities such as testing centres, research and development hubs, and logistics centres.
  - These facilities are intended to support the entire medical device manufacturing ecosystem.
- **Industry Promotion:** Various promotional activities are planned under the scheme to boost the visibility and competitiveness of Indian medical devices in the global market.
  - It includes participation in international trade fairs, exhibitions, and other industry events.

Financial Outlay of The Scheme

- The scheme has **a total outlay of ₹500 crores** under **Sub-schemes** like C*ommon Facilities for Medical Devices Clusters; Marginal Investment Scheme for Reducing Import Dependence; Capacity Building and Skill Development for Medical Devices; Medical Device Clinical Studies Support Scheme; and Medical Device Promotion Scheme.*
- This significant investment underscores the government's commitment to making India a global hub for medical device manufacturing.

Key Features of the Scheme

- **Self-Reliance:** The scheme is a significant step towards making India self-reliant in the medical device sector, reducing dependency on imports1.
- **Economic Growth:** By boosting domestic manufacturing, the scheme aims to contribute to the overall economic growth and create job opportunities.
- **Innovation and Quality:** Emphasis on innovation and maintaining high-quality standards to compete globally.

Impact of the Scheme and Future Prospects

- It is expected to not only strengthen the domestic manufacturing capabilities but also reduce dependency on imports, thereby making India self-reliant in the medical device sector.
- The scheme is poised to create numerous job opportunities, foster innovation, and ensure the availability of high-quality medical devices at affordable prices.
- As the demand for medical devices continues to rise, this initiative will play a crucial role in meeting both domestic and international needs.

Conclusion

- The Scheme for Strengthening the Medical Device Industry is a strategic initiative to enhance the domestic manufacturing capabilities, promote innovation, and ensure the availability of high-quality medical devices.
- This scheme not only aims to make India self-reliant but also positions it as a global leader in the medical device sector.

Source: PIB

BIBEK DEBROY COMMITTEE ON RAILWAYS

In News

- The **Bibek Debroy Committee 2015 report** aimed to make Indian Railways economically viable and competitive, with a **focus on decentralization, safety, and modernization**, however, reforms are yet to be implemented completely.

Key Recommendations and Their Implementation

- **Liberalisation of Indian Railways:** Introduce private players to enhance competition and improve services.
  - **Implementation:** Partially implemented. Some PPP projects have been initiated, but full-scale liberalization is yet to be undertaken.

- **Empowering Railway Officials:** Grant more autonomy to GMs and DRMs for decision-making.
  - **Implementation:** Implemented. GMs and DRMs have been empowered to take independent decisions, leading to faster decision-making and improved efficiency.
- **Overhaul of Accounting System:** Implement accrual accounting to improve financial transparency and accountability.
  - **Implementation:** Implemented. The Indian Railways has adopted accrual accounting.
- **Establishment of Rail Development Authority (RDA):** Create an independent regulator to oversee railway operations and promote competition.
  - **Implementation:** Implemented. The RDA has been established to provide expert advice on pricing, non-fare revenue, and competition.
- **Focus on Safety:** Create a dedicated fund for safety-related investments.
  - **Implementation:** Implemented. The **Rashtriya Rail Sanraksha Kosh (RRSK)** was established for safety upgrades with a 1 lakh crore fund.
- Recommended modern technology, exemplified by **Vande Bharat trains and KAVACH systems.**

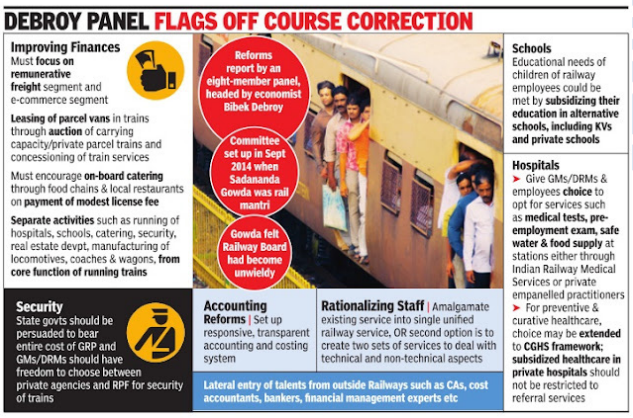


Image Courtesy: TOI

Source: IE

ROLE OF TECHNOLOGY IN MODERNISING FISHERIES SECTOR

In Context

- A workshop on drone technology in fisheries was held at ICAR-CMFRI, Kochi.

About Fisheries and Aquaculture sector

- They are a key source of food, nutrition, employment, income, and foreign exchange.
- Fish, rich in protein and omega-3 fatty acids, helps combat hunger and malnutrition.
- **India's Position** in Fisheries: 2nd largest fish-producing nation, with ~8% of global production.
  - **Top aquaculture producer**, 3rd largest in capture fisheries, and a leading shrimp exporter.
- **Record Fish Production:** Fish production grew from 7.52 lakh tonnes in 1950-51 to 175.45 lakh tonnes in 2022-23.
  - Inland fisheries and aquaculture production doubled since 2013-14, reaching 131.33 lakh tonnes in 2022-23.
- **Doubling of Exports:**Seafood exports increased from Rs 30,213 crore (2013-14) to Rs 60,523.89 crore (2023-24), with the USA as the largest market.
  - The sector contributes 1.069% to National GVA and 6.86% to Agriculture GVA, with steady growth from 2014-15 to 2021-22.
- **Government Efforts**: The Government of India has invested Rs 38,572 crore over the last decade to drive the Blue Revolution, transforming the fisheries sector.
  - **Pradhan Mantri Matsya Sampada Yojana (PMMSY**): PMMSY focuses on sustainable, inclusive growth in fisheries and aquaculture.
  - Other initiatives include modern aquaculture practices, satellite monitoring, and the exploration of drone technology for various applications.

Technology in Fisheries

- **Efficient application** of technology is essential for both fish production and utilization, covering fishing craft, gear, preservation, processing, and distribution.
  - Digital technologies like ICT, IoT, AI, machine learning, blockchain, and Cloud-edge computing can support the expansion and sustainability of the aquaculture and fisheries sectors.
- **Drone Technology in Fisheries**: Drones are used for water sampling, disease detection, feed management, aquaculture farm management, and fish marketing.
  - Underwater drones help monitor fish behavior and detect distress.

Importance

- **Increased Productivity**: Technology enables fishermen to catch more fish with fewer resources and time.
- **Enhanced Safet**y: Real-time updates on weather and sea conditions reduce risks for fishermen.
- **Reduced Waste:** Better storage and transportation reduce post-harvest losses, ensuring that more of the catch reaches consumers.

- **Sustainability**: Monitoring tools can help prevent overfishing and encourage responsible practices.
- **Economic Upliftment**: Improved efficiency and access to market data help fishermen earn better incomes.

Issues and Concerns

- **Slow development**: Technological advancements in fishing and processing have been slow in India, relying largely on inshore, small-scale fishing methods
- **High Initial Cost**: Many fishermen cannot afford the latest technologies, leading to inequalities within the sector.
- **Training and Adaptation:** Many fishers need training to use new technologies effectively, which may be challenging for older generations or those with limited literacy.
- **Environmental Concerns**: Certain technologies, if misused, can contribute to overfishing and disrupt marine ecosystems.
- **Dependency on Technology**: Over-reliance on technological tools can make fishers vulnerable if the technology fails or requires maintenance.

Conclusion and Way Forward

- Technology has great potential to revolutionize India's fisheries sector, making it more productive, sustainable, and resilient.
- However, the adoption of technology must be balanced with considerations of cost, environmental impact, and training to ensure long-term benefits for the sector and its stakeholders.

Source: TH

WORLD'S FIRST CO_2 TO METHANOL PLANT

In News

- At its Vindhyachal plant, NTPC achieved the **first-ever synthesis of CO_2 (captured from flue gas)** and **hydrogen (from a PEM electrolyzer)** into methanol. This pioneering carbon management technology aims to advance sustainable fuel production.

About CO_2-to-methanol conversion

- **Carbon Dioxide Capture:** CO2 is captured from industrial sources like power plants or directly from the atmosphere.
- **Hydrogen Production:** Renewable energy sources, such as solar or wind power, are used to produce hydrogen through electrolysis of water.
- **Methanol Synthesis:** The captured CO2 is combined with hydrogen in the presence of a catalyst to produce methanol. This process typically occurs at high pressure and temperature.

Benefits of CO2-to-Methanol Conversion

- **Carbon Capture and Utilization (CCU):** It provides a way to utilize CO2, reducing its impact on the atmosphere.
- **Renewable Fuel Source:** Methanol can be used as a fuel for transportation, power generation, or as a feedstock for chemicals.
- **Energy Storage:** Methanol can be stored and transported more easily than hydrogen, making it a potential energy storage solution and supporting a transition to hydrogen-based energy systems.
- **Versatile Feedstock:** Methanol is widely used in producing chemicals, solvents, and plastics, supporting diverse industrial applications.

What is Methanol?

- **Brief:** Methanol, also known as methyl alcohol or wood alcohol, is the simplest alcohol. It's a clear, colorless, and flammable liquid with a distinctive odor.
- **Key Properties:** Colorless**,** Miscibility (mixes completely with water), Toxic if ingested, Flammability.

Source: ET

DISCOVERY OF X-RAYS

In News

- 129 years ago on 8 November, X-rays were discovered.

Discovery of X-rays

- **Wilhelm Conrad Röntgen** discovered X-rays in 1895, noticing that they could produce images of bones by passing through flesh and other soft tissues.
  - Named "X-rays" to denote their unknown nature.
  - Immediate public interest and intense research began in early 1896.
- **Properties of X-rays:** X-rays have much **higher energy** and **much shorter wavelengths than ultraviolet light**, ranging from 0.03 to 3 nanometers, about the size of an atom.
  - Scientists usually refer to X-rays by their energy levels rather than wavelengths.
  - High temperatures (millions of degrees Celsius) emit X-rays, as seen in objects like pulsars, supernova remnants, and black hole accretion disks.
- **Further Scientific Discoveries:** J.J. Thomson discovered X-rays ionized gases, leading to the discovery of electrons in 1897.

- H. Becquerel's research led to the discovery of radioactivity in March 1896.

Applications

- **Medical Applications**: Physicians started using X-rays in January 1896 to examine bones and organs.
  - X-rays create images by shooting rays through the body, where bones absorb more rays and cast shadows on X-ray film, making the bones visible.
- **X-rays in Astronomy:** The Sun's corona, which is hotter than its surface, emits mostly X-rays.
  - Satellites like Japan's Hinode collect X-ray data from the Sun to study its corona.
  - X-ray telescopes in space (due to Earth's atmosphere blocking X-rays) use grazing incidence mirrors to focus high-energy X-rays onto detectors.
  - X-ray data from space telescopes provide information about the temperature, composition, and density of celestial objects.
- **X-rays in Planetary Exploration:** NASA's Mars rover, Spirit, used X-rays to detect zinc and nickel in Martian rocks using the Alpha Proton X-Ray Spectrometer (APXS).
- **X-rays in Earth's Aurora:** Solar storms send energetic particles to Earth, creating geomagnetic storms that result in auroras and X-ray emissions.
  - These X-rays from auroras are absorbed by Earth's atmosphere, making them harmless to people on the ground.

Source: IE

RAINFORESTS INTO RUBBER PLANTATIONS ALTERS SOIL'S PROPERTIES

Context

- A study found that deforestation and conversion of erstwhile rainforests into rubber plantations is detrimental to the soil health.

Cultivation of Natural Rubber

- Natural rubber is derived from the **latex of Hevea brasiliensis**, a tree native to the **Amazon Basin.**
- Rubber cultivation has proliferated in Southeast Asia and other tropical regions due to high global demand.

Impact of rubber plantations

- **Increased DOC Production:** Studies indicate that rubber plantations produce higher levels of **dissolved organic carbon (DOC)** across seasons, surpassing natural rainforest levels.
  - **DOC is a key component** in the carbon cycle, influencing carbon transformation and migration. However, excessive DOC leaching can be problematic.
- **Altered Carbon-Nitrogen ratio:** Rubber plantations display a higher DOC to dissolved nitrogen ratio, disrupting the balance needed for optimal soil health.
  - This **imbalance affects microbial activity**, leading to limited utilization of DOC and greater leaching.
- **Nutrient Demands:** Rubber trees have high nutrient requirements, depleting soil fertility over time.
- **Soil Organic Matter (OM) Changes:** These changes alter the physicochemical and biochemical properties of the soil, particularly the topsoil, which is vital for sustaining diverse ecosystems.

Solutions

- **Optimizing Plant Density:** Maintaining an optimal number of rubber trees per unit area helps balance nutrient uptake and reduces the stress on soil properties.
- **Legume Intercropping:** Integrating legume crops in rubber plantations can improve soil nitrogen levels, enhancing microbial activity and nutrient cycling.
- **Sustainable Land Management:** Employing soil conservation techniques such as mulching, cover cropping, and reduced tillage can protect soil structure and organic matter content.

Conclusion

- Ensuring soil health in rubber plantation areas is critical not only for long-term agricultural productivity but also for broader environmental conservation.
- The findings stress the need for integrated land management strategies to harmonize economic interests with ecological integrity.

Geographical Conditions for Rubber production

- **Climate:** Hot and humid conditions with temperatures between 25-35°C.
- **Rainfall:** Annual precipitation between 1,800-2,500 mm.
- **Soil Type:** Deep, well-drained loamy or lateritic soils with good water-holding capacity.
- **Altitude:** Generally grown up to 300 meters above sea level.

Rubber Production in India

- **Kerala:** The leading state in rubber production, contributing over 70% of India's total output.
- Other states are **Tamil Nadu, Karnataka, Tripura, and Assam.**

Source: DTE

NEWS IN SHORT

FALL OF BERLIN WALL

Context

- The fall of the Berlin Wall on November 9, 1989, marked a pivotal moment in world history.

Berlin Wall Construction

- **Erected in 1961** by the **German Democratic Republic (East Germany)**, the Berlin Wall physically and ideologically divided East and West Berlin.
- It was built to stop the mass exodus of East Germans to the more prosperous West, symbolizing the **"Iron Curtain"** that separated the Eastern Bloc and Western Europe.

Events Leading to the Fall

- **Soviet Reforms:** Mikhail Gorbachev's policies of Glasnost (openness) and Perestroika (restructuring) signaled more liberal approaches, contributing to the weakening control of communist governments.
- **Growing Protests:** Civil unrest and widespread protests for freedom and political reform erupted across Eastern Europe throughout 1989, especially in countries like Poland and Czechoslovakia.

Significance

- **End of the Cold War:** The fall paved the way for German reunification, which formally took place on October 3, 1990.
- **Global Impact:** The event shifted the balance of global power, diminishing Soviet influence and fostering the expansion of democracy and market economies in former communist states.

Source: IE

MOUNT LEWOTOBI

Context

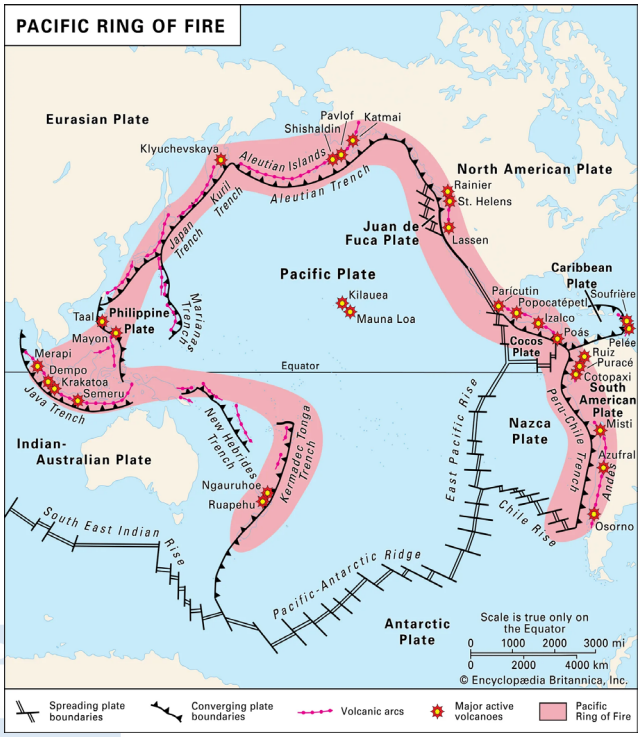
- Mount Lewotobi Erupts in Indonesia.

About: Mount Lewotobi

- **Mount Lewotobi is one of Indonesia's** active volcanoes.
  - Indonesia lies along the **"Pacific Ring of Fire,"** an area of high seismic activity where multiple tectonic plates meet.

Pacific Ring of Fire

- A horseshoe-shaped region around the Pacific Ocean.
- Characterized by frequent earthquakes and volcanic eruptions.
- Caused by the interaction of the massive Pacific Plate with surrounding plates (Nazca, Juan de Fuca).



Source: AIR

INDIA'S NUTRACEUTICAL INDUSTRY

In News

- India is emerging as a strong player in nutraceuticals, leveraging traditional knowledge like Ayurveda and biodiversity. However, India's market share is below 2%.

About Nutraceutical Industry

- Nutraceuticals include dietary supplements, functional foods, beverages, and fortified foods that aim to support health, prevent chronic diseases, and promote well-being.
- The US, Japan, and Europe currently dominate the global nutraceutical market, accounting for over 90% of the total market share.
- India's nutraceutical market is prepped to be a global leader at USD 4-5 billion. It is expected to grow approximately USD 18 billion by 2025.

India's Competitive Advantages

- **Traditional Knowledge**: A deep-rooted legacy in health sciences, particularly Ayurveda.
- **Agro Climatic Diversity:** India's 52 agroclimatic zones make it ideal for cultivating various medicinal plants.

- **Rich Plant Biodiversity:** Home to 1,700 medicinal plants, including curcumin, bacopa, and ashwagandha, needing further scientific validation.
- **Pharmaceutical Expertise:** India's robust pharmaceutical formulation expertise sets high standards for nutraceuticals.
- **Startup Ecosystem:** A growing number of startups and companies in nutraceuticals drive innovation.

Challenges

- **Regulatory Clarity:** Lack of defined industry classification limits targeted sector support.
- **Scientific Validation:** Many traditional ingredients require rigorous scientific studies to meet international regulatory standards.
- **Research and Development**: Investing in research and development to innovate and create new products.

Source: PIB

ALLULOSE

In News

- South Korea has become a top testing ground for the sweetener allulose, which is gaining popularity as a strong contender to other sugar substitutes like stevia.

About: Allulose

- **Production:** Also known as **D-allulose and d-psicose**, it is naturally present in only certain foods like **wheat, raisins, figs, molasses**. It is commercially produced from beet sugar or corn using specific enzymes.
- **Similarity and difference:** It is **70% as sweet** as sugar and does not have the **bitter aftertaste** found in some sweeteners, like **aspartame**.

Benefits

- Controls blood sugar spikes, helps in weight loss and reduces health risks associated with added sugar.

Do you know?

- The **World Health Organization** (WHO) in 2023, issued a guideline advising **against using non-sugar sweeteners** for weight control purposes, citing potential undesirable long-term effects.
- Also, the WHO has also classified **aspartame** as a **"possible carcinogen"** but maintained that it remains safe to consume within established intake limits.

Source: TOI

SEAPLANE SERVICE

In News

- Kerala to launch seaplane service to boost tourism.

About Seaplane

- **Brief:**
  - A seaplane is a type of aircraft that can take off and land on water.
- **Types of Seaplanes:**
  - **Floatplanes:** These aircraft have floats attached to the wings or fuselage, allowing them to land on water.
  - **Flying Boats:** These have a boat-like hull that serves as the main structure of the aircraft, enabling it to take off and land on water.

- **Working Principle:**
  - They rely on buoyancy provided by floats or a hull to take off and land. Once airborne, they function similarly to conventional aircraft.

Advantages of Seaplanes

- **Access to Remote Locations:** Seaplanes can access remote areas with limited land-based infrastructure.
- **Versatility:** They can operate from both water and land (in the case of amphibious seaplanes).
- **Reduced Infrastructure Requirements:** They don't need traditional runways, making them suitable for various environments.

About India's Seaplane Project

- **Objective:** To boost regional air connectivity and promote tourism through water-based aviation under India's RCS-UDAN scheme.
- **India's First Seaplane Project:** Launched in Gujarat, 2020, connecting the Sabarmati Riverfront in Ahmedabad to the Statue of Unity in Kevadia.
  - Later the service was suspended due to high operational cost.
- **Recent Development:** In August 2024, the Union Minister for Civil Aviation launched guidelines for seaplane operations in India, emphasizing the country's 7,517 km coastline and extensive

network of rivers and lakes as opportunities for seaplane development. The guidelines aim to **integrate seaplane operations into India's aviation landscape.**

Source: TOI

CYANOBACTERIA

Context

- Recently, a novel strain named "Chonkus" of Cyanobacteria has been discovered noteworthy for its carbon capture potential.

About

- Cyanobacteria, often termed "**blue-green algae,**" are a group of photosynthetic microorganisms that play a vital role in Earth's ecosystems.
- Cyanobacteria are unique due to their **ability to photosynthesize like plants,** converting sunlight and carbon dioxide (CO_2) into food.
- These microorganisms **can thrive in diverse and extreme environments,** such as hot springs and volcanic vents, due to their remarkable resilience.

Significance of discovery

- **Carbon Sequestration Projects:** Its efficient CO_2 absorption and ability to settle at the bottom of bodies of water could help in long-term carbon storage.
- **Bioproduction:** The strain's properties could be harnessed for producing biofuels, food supplements, and other valuable commodities.

Source: Science News

ANIMAL CELLS CAPABLE OF PHOTOSYNTHESIS CREATED

Context

- Recently scientists have successfully engineered animal cells that are capable of photosynthesis.

About

- **Photosynthesis**, a process fundamental to life on Earth, has long been exclusive to plants, algae, and certain bacteria.
- **This process transforms sunlight into energy**, converting water and carbon dioxide into oxygen and sugars.

Animal Cells with Photosynthetic Ability

- Traditionally, when **chloroplasts** are forcibly introduced into animal cells, the animal's immune response perceives them as foreign, leading to their rapid degradation.
- However, researchers have discovered a novel method where chloroplasts are introduced as "food" rather than injected, allowing them to be maintained within animal cells for a limited period (up to two days) and enabling photosynthetic activity.

Potential Applications

- **Bioengineering New Life Forms:** Creating organisms that can self-sustain or enhance their nutritional profiles could revolutionize food security.
- **Bioactive Compounds Production:** Photosynthesis in animal cells may be harnessed to produce vital compounds and medications, reducing reliance on traditional methods.
- **CO2 Absorption:** Engineering animal cells or symbiotic organisms capable of photosynthesis could contribute to carbon capture efforts, assisting in the reduction of greenhouse gases.

Source: Earth.com

MANAS NATIONAL PARK

In News

- Recent studies have shown an increase in the tiger population in **Manas National Park.**

About Manas National Park

- **Location:** Situated in the Himalayan foothills in Assam, contiguous with Bhutan's Royal Manas National Park.
- **UNESCO Status:** Declared a UNESCO World Heritage Site and recognized as a **Project Tiger reserve**, elephant reserve, and biosphere reserve.
- **Etymology:** Named after the Manas River, which flows through the park and is a major tributary of the Brahmaputra River.
- **Significance:** Known for its rare and endangered species, including the Assam roofed turtle, hispid hare, golden langur, and pygmy hog. It is also famous for a significant population of wild water buffalo.

Source: TH

EXERCISE AUSTRAHIND

Context

- The 3rd edition of joint military Exercise AUSTRAHIND commenced at Foreign Training Node, Maharashtra (India).

About

- **Started in 2022**, is an annual exercise conducted alternatively in India and Australia.
- **Aim of Exercise AUSTRAHIND** is to promote military cooperation between India and Australia through enhancement of interoperability in conduct of joint sub conventional operations in semi-urban environments in semi-desert terrain under **Chapter VII of the UN mandate**.

Source: PIB