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MINISTRY OF SCIENCE AND TECHNOLOGY



MK Yadav Sir

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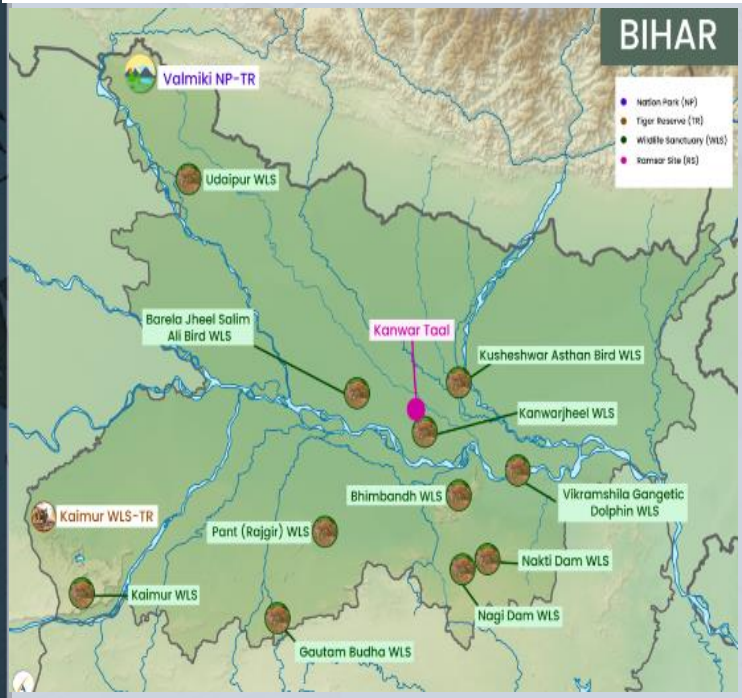
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DTE June 6

NAGI AND NAKTI BIRD SANCTUARIES

(Syllabus: GS Paper 3 – Env and Eco)

Bihar: Human-made wetlands Nagi & Nakti recognised under Ramsar Convention



Context: Amid an ongoing heatwave and drying water bodies across India, Bihar's Nagi and Nakti Bird Sanctuaries have been recognized as wetlands of international importance under the Ramsar Convention.

Nagi and Nakti Bird Sanctuaries

- **About:** These sanctuaries are built on human-made wetlands and provide a natural habitat for a wide variety of flora and fauna, especially flocks of birds.
  - The Nagi Dam and Nakti Dam are two sanctuaries so close to each other that they can be taken as one bird area.
- **Location**: Jamui district, Bihar.
- **Importance:** The wetland, which formed as a result of the construction of the Nagi dam, is a prime location for migrating birds in the winter season.
- **Bihar's First Ramsar Site**: Kanwar Lake in Begusarai district was designated as Bihar's first Ramsar Site in 2020.

Ramsar Convention

- **About**: is an international convention to conserve wetlands and was signed in 1971 in the Iranian city of Ramsar.
- With their inclusion in the Ramsar Convention, the total number of such wetlands in India has risen to 82.
- **Geographical Area:** India's Ramsar wetlands are spread over 13,000 sq km - around 12% of the total wetland area in the country - across 18 States.
- **Largest Ramsar Site of India:** Sundarbans (West Bengal).
- **Membership of India:** India is a part of the Ramsar Convention and signed in 1982.

THE HINDU Page 5

CENTRAL INFORMATION COMMISSION

(Syllabus GS Paper 2 – Polity)

CIC can't comment on how MPs spend their funds, says Delhi HC

The Hindu Bureau
NEW DELHI

The Delhi High Court has held that the Chief Information Commissioner (CIC) has "no jurisdiction" to comment on the utilisation of Members of Parliament Local Area Development Scheme (MPLADS) funds by MPs as the scope of the Right To Information (RTI) Act is limited to providing access to information under the control of public authorities.

The court expunged certain remarks made by the CIC while dealing with an RTI application seeking information relating to the utilisation of MPLADS funds.

In its October 2018 order, the CIC had observed that some MPs were "deliberately accumulating" their MPLADS funds for the last year of their term to gain an advantage during elections. It had suggested to the Ministry of Statistics and Programme Implementation that this "abuse" of the funds be prevented and guidelines be implemented for distributing the money equally for each year of the five-year term. The court expunged these observations by the CIC.

"The observations made by the CIC on how the Members of Parliament are utilising the MPLADS funds have to be expunged," Justice Subramonium Prasad said in his May 15 order.

The court's order came after the Centre's Ministry of Statistics and Programme Implementation challenged the CIC order.

Jurisdiction exceeded

The Ministry contended that the CIC exceeded its jurisdiction by commenting on the action taken by MPs in spending their MPLADS funds.

The court noted that as per Section 18 of the RTI Act, the CIC can only deal with issues relating to the information being sought or any other issue related to the dissemination of information.

Members of Parliament Local Area Development Scheme (MPLADS)

- **Introduction**: It was introduced by the Government of India on 23 December 1993.
  - The MPLAD Scheme is a Central Sector Scheme fully funded by the Government of India.
  - It allows Members of Parliament (MPs) to recommend developmental works in their constituencies, focusing on creating durable community assets based on locally felt needs.
- **Nodal Ministry:** Ministry of Statistics and Programme Implementation (MoSPI).
- **Objectives:** Enable MPs to suggest and execute developmental works emphasizing durable asset creation.

Context: Recently, the Delhi High Court ruled that the Chief Information Commissioner lacks jurisdiction to scrutinize the utilization of MPLADS funds by MPs, as the RTI Act's purview is confined to granting access to information held by public authorities.

Central Information Commission

- **About**: It is a statutory body constituted under Section 12 of the RTI Act, with effect from October 2005.
- **Composition**: It consists of the Chief Information Commissioner (CIC) and such number of Commissioners not exceeding 10 as may be deemed necessary.
- **Appointment:** By President of India on the recommendation of a selection committee.
- **Selection Committee Composition**: Prime Minister, Leader of Opposition in the Lok Sabha, and Union Cabinet Minister to be nominated by the Prime Minister.
- **Tenure**: CIC shall hold office for a term of five years from the date on which he/she enters upon the office.
  - Shall not be eligible for reappointment.
- **Jurisdiction**: It extends over all Central Public Authorities.
- **Power and Functions:** The Commission has certain powers and functions mentioned in Sections 18, 19, 20 and 25 of the RTI Act, 2005, and broadly relate to:
  - Adjudication in the second appeal for giving information.
  - Direction for record keeping, suo motu disclosures receiving and enquiring into a complaint on inability to file RTI, etc.
  - Imposition of penalties.
  - Monitoring and Reporting including preparation of an Annual Report.
  - The decisions of the Commission are final and binding.

DTE June 6

H5N2 STRAIN

(Syllabus: GS Paper 3 – Sci & Tech)

WHO confirms first death from bird flu strain H5N2 in Mexico

Context: World Health Organization (WHO) has confirmed the first-ever human death caused by the H5N2 strain of avian influenza.

H5N2 Strain

- **About**: It is just one of several kinds of avian influenza viruses.
  - H5 viruses have been circulating among poultry and wild birds in Mexico since the mid-1990s.
- **Human Infection**: Unlike other avian influenza strains that have caused outbreaks in humans, such as H1 and H3 viruses, H5 viruses rarely infect humans.
- **Classification of Viruses**: The viruses are classified based on two types of protein on their surfaces: hemagglutinin (H), which plays a crucial role in allowing the virus to infect cells, and neuraminidase (N), which helps the virus spread.
- **H5N2 and Wild Birds**: H5N2 belongs to a family of bird flu viruses called H5, which primarily infects wild birds.
  - H5N1, which was detected in dairy cows in the U.S. in March, also belongs to this family.
- **Symptoms:** Humans may cause mild to severe upper respiratory tract infections and can be fatal. Conjunctivitis, gastrointestinal symptoms, encephalitis, and encephalopathy have also been reported.
- **Diagnostic Methods**: The disease is diagnosed using molecular methods like Real-Time Polymerase Chain Reaction (RT-PCR).
- **Treatment**: Antiviral drugs, notably neuraminidase inhibitors (oseltamivir, zanamivir), can reduce the duration of viral replication.

LIVEMINT

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DIGITAL INDIA ACT, 2023

(Syllabus: GS Paper 2 – Polity)



New govt may put tech laws, policies on the back-burner

Bigger influence of allies in coalition could play spoilsport for tech regulations of NDA

Shouvik Das
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NEW DELHI

Policymakers and legal experts fear unfinished technology policies and laws, including the overarching Digital India Act (DIA), to go on the back-burner, as a coalition government in the potential third term of the National Democratic Alliance (NDA) may focus on pressing political issues. A key factor behind this could be a bigger influence on political agenda by independent parties within NDA, which could play spoilsport for a number of tech regulations that peppered the second term of NDA.

"With a new coalition government, priorities will vary from how it worked in the previous term. The general understanding is that existing legislations that were at an advanced stage are likely to continue in the same vein, while new and proposed tech regulations that were at an early stage may see a fresh legislative approach, once the new government forms," said Supratim Chakraborty, partner at law firm, Khaitan & Co.

Chakraborty's assessment is largely in line with what other industry stakeholders are expecting of the upcoming government. While the second NDA term introduced a spate of technology regulations, many remain unfinished.

Laws that have been passed in Parliament include the Digital Personal Data Protection Act, 2023 and the Telecommunications Act, 2023. However, the Digital Competition Bill, 2024 remains at a draft stage, while the proposed umbrella regulation, the DIA, could not proceed beyond preliminary industry consultations with the previous government.

Now, stakeholders expect unfinished regulatory work to be considerably affected. A senior policy official who works closely with the ministry of electronics and information technology (Meity) said on condition of anonymity, "Given that this is a coalition government, what is likely going to come under the scanner are more contentious political issues. Driven by a broader, more encouraged Opposition, the Centre will likely focus on such points to begin with. As such, it is unlikely that the erstwhile proposed technology regulations such as the DIA will simply resume from where they had left off."

The overarching DIA was already confirmed to be resumed from scratch by the to-be-formed government at the Centre, former Union minister of state for IT, Rajeev Chandrasekhar, had told *Mint* in November. Now, two senior policy officials who work closely with Meity told *Mint* that the Act itself could be revised and replaced.

Prioritization of tech policy, as a result, remains a concern. One of the two senior policy officials who work closely with Meity said that "it will depend entirely upon the incumbent cabinet minister for IT, and their personal interest in it, to bring tech legislation to the fore—at present, this looks unlikely, and this does not spell confidence for the DIA."

Policy consultants also raised concerns around how this may impact the future of India's tech ecosystem. Isha Suri, research lead for technology and telecommunications at policy think-tank Centre for Internet and Society, said, "It is definitely an encouraging prospect to have substantial opposition in Parliament. The previous government went through multiple tech and telecom policies, but left much to be desired in the actual implementation of what the impact of these policies on the ground could be. For instance, the Telecommunications Act, 2023 saw the previous government promise to replace the previously draconian laws in the telecom space, but questions have been raised in terms of the on-ground impact and implementation of this Bill."

Prioritization of tech policy remains a concern. BTG/PHOTO

WAITING IN THE WINGS

THE second NDA term introduced a spate of tech norms, but many remain unfinished

NOW, stakeholders expect unfinished regulatory work to be considerably affected

THE DIA was already confirmed to be resumed from scratch by the to-be-formed govt

EXPERTS also raised concerns around how this may impact the future of India's tech ecosystem

Context: Policymakers and legal experts recently expressed concerns that unfinished technology policies and laws, including the overarching Digital India Act (DIA), may be sidelined.

Digital India Act, 2023

- **About:** It is designed to address the challenges and opportunities presented by the dramatic growth of the internet and emerging technologies.
- **Replaced:** Two-decade-old Information Technology Act of 2000 (IT Act).
- **Key Components of DIA:**
  - **Open Internet:** It should have Choice, Competition, Online diversity, Fair market access, and Ease of Doing Business and Ease of Compliance for Startups.
  - **Online Safety and Trust:** Addressing user harm issues such as revenge porn, cyber-flashing, and cyber-bullying, along with age-gating to regulate addictive tech and protect minors' data. Ensuring digital user rights, including the right to be forgotten and secure electronic communication.
  - **Accountable Internet**: Establish adjudicatory and appellate mechanisms for accountable digital operators and update the intermediary framework. Implement disclosure norms for data collected by intermediaries exceeding a certain threshold.
- **Objective**: Accelerate innovation and technology ecosystem growth.
  - Manage internet complexities and expanding intermediaries.
  - Create a framework for digitalizing government and strengthening democracy.
  - Protect citizens' rights and address emerging technologies and risks.
  - Ensure systems are future-proof and future-ready.

TIMES OF INDIA

June 6

MAHARANI TEMPLE

(Syllabus: GS Paper 1 – Art & Culture)

Gulmarg: Iconic 106-year-old Maharani Temple gutted in massive fire

Context: In a tragic event, the iconic Maharani Temple in Gulmarg, located atop a hillock was gutted in a blaze.

Maharani Temple

- **Location**: Situated on a small hillock in the heart of Gulmarg town in the Baramulla district of Jammu and Kashmir.
- **Also known as**: Rani Temple or Mohineshwar Shivalaya, the temple is dedicated to Lord Shiva and his consort, Parvati.
- **Constructed in**: 1915 by Mohini Bai Sisodia, wife of the former ruler of Kashmir, Maharaja Hari Singh.
- **Connection**: Once a royal temple of the Dogra dynasty of the erstwhile princely state of Jammu and Kashmir.
- **Architecture**: Intricate carvings and designs reflect a beautiful blend of Indian and Persian styles.
    - Examples of religions intertwined with a Muslim priest performing rituals in the temple.
- **Restoration Efforts:** In 2021, the Indian Army collaborated with local communities to restore the 106-year-old temple, including renovating the structure and redesigning pathways leading to it.

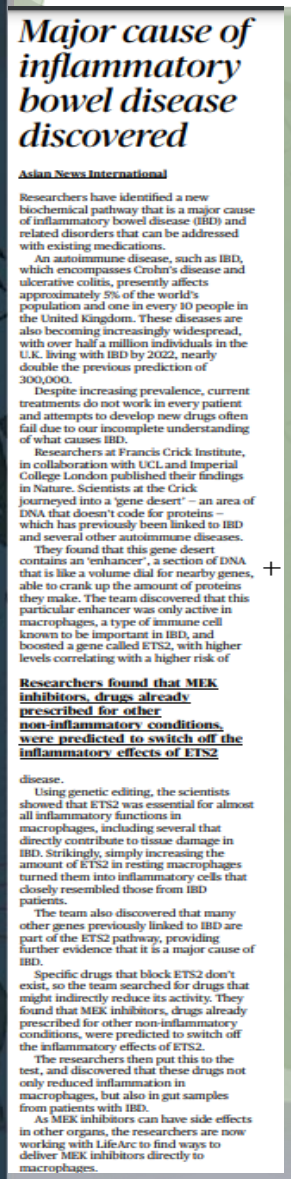
Dogra Dynasty

- **About:** This dynasty, hailing from the Shivalik hills, emerged during the period when the East India Company was consolidating its control over dynastic kingdoms in India.
- **Establishment:** Dogra Rajputs formed the region of Jammu and Kashmir, carving out a distinct entity.
- **Recognition by**: The Sikh Empire acknowledged Jammu as a vassal state in 1820, solidifying the Dogras' position within the political framework of the time.
- **Expansion**: Through strategic alliances and negotiations, particularly exemplified by the Treaty of Amritsar in 1846, the Dogra rulers expanded their domain to include Kashmir.

THE HINDU Science II

INFLAMMATORY BOWEL DISEASE

(Syllabus: GS Paper 3 – Sci and Tech)



Major cause of inflammatory bowel disease discovered

Asian News International

Researchers have identified a new biochemical pathway that is a major cause of inflammatory bowel disease (IBD) and related disorders that can be addressed with existing medications.

An autoimmune disease, such as IBD, which encompasses Crohn's disease and ulcerative colitis, presently affects approximately 5% of the world's population and one in every 10 people in the United Kingdom. These diseases are also becoming increasingly widespread, with over half a million individuals in the U.K. living with IBD by 2022, nearly double the previous prediction of 300,000.

Despite increasing prevalence, current treatments do not work in every patient and attempts to develop new drugs often fail due to our incomplete understanding of what causes IBD.

Researchers at Francis Crick Institute, in collaboration with UCL and Imperial College London published their findings in Nature. Scientists at the Crick journeyed into a 'gene desert' -- an area of DNA that doesn't code for proteins -- which has previously been linked to IBD and several other autoimmune diseases.

They found that this gene desert contains an 'enhancer', a section of DNA that is like a volume dial for nearby genes, able to crank up the amount of proteins they make. The team discovered that this particular enhancer was only active in macrophages, a type of immune cell known to be important in IBD, and boosted a gene called ETS2, with higher levels correlating with a higher risk of

Researchers found that MEK inhibitors, drugs already prescribed for other non-inflammatory conditions, were predicted to switch off the inflammatory effects of ETS2

disease.

Using genetic editing, the scientists showed that ETS2 was essential for almost all inflammatory functions in macrophages, including several that directly contribute to tissue damage in IBD. Strikingly, simply increasing the amount of ETS2 in resting macrophages turned them into inflammatory cells that closely resembled those from IBD patients.

The team also discovered that many other genes previously linked to IBD are part of the ETS2 pathway, providing further evidence that it is a major cause of IBD.

Specific drugs that block ETS2 don't exist, so the team searched for drugs that might indirectly reduce its activity. They found that MEK inhibitors, drugs already prescribed for other non-inflammatory conditions, were predicted to switch off the inflammatory effects of ETS2.

The researchers then put this to the test, and discovered that these drugs not only reduced inflammation in macrophages, but also in gut samples from patients with IBD.

As MEK inhibitors can have side effects in other organs, the researchers are now working with LifeArc to find ways to deliver MEK inhibitors directly to macrophages.

Context: Researchers at the Francis Crick Institute have found a major new cause of Inflammatory Bowel Disease (IBD).

Inflammatory Bowel Disease (IBD)

- **About:** IBD refers to chronic inflammatory conditions of the digestive tract.
- **Types:** Ulcerative Colitis and Crohn's Disease.
- **Causes:** The exact cause of IBD is unknown, but IBD is the result of a weakened immune system. Possible causes are:
  - The immune system responds incorrectly to environmental triggers, such as a virus or bacteria, which causes inflammation of the gastrointestinal tract.
  - There also appears to be a genetic component. Someone with a family history of IBD is more likely to develop this inappropriate immune response.
- **Symptoms:** Diarrhoea, fatigue, abdominal pain, rectal bleeding, reduced appetite, and unintended weight loss.
- **Treatment:**
  - Treatment aims to control inflammation, relieve symptoms, and prevent complications.
  - Medications such as anti-inflammatory drugs, immunosuppressants, and biologics are commonly used.
  - Lifestyle modifications including dietary changes, stress management, and regular exercise may help manage symptoms.

Finding a Major Cause

- **Identification of Active DNA Section**: Researchers have pinpointed a segment of genetic code (DNA) exhibiting activity within macrophages.
- **Role of Macrophages**: Macrophages, immune cells, are implicated in causing inflammation, particularly in individuals with Inflammatory Bowel Disease (IBD).
  - The identified DNA section serves as a significant regulator for macrophages' functioning.
- **ETS2 Gene:** This DNA section enhances the expression of the ETS2 gene, pivotal in governing the release of inflammatory substances by macrophages.
  - Presently, there are no pharmaceuticals exclusively designed to inhibit ETS2 activity.

BBC June 6

STARSHIP ROCKET
(Syllabus: GS Paper 3 – Sci and Tech)

Space X Starship makes successful splashdown

Context: SpaceX's Starship rocket blasted off to space and plunged through Earth's atmosphere for an ocean landing, notching a key objective on its fourth major test flight.

Starship Rocket

- **About:** Starship spacecraft and Super Heavy rocket – collectively referred to as Starship – represent a fully reusable transportation system designed to carry both crew and cargo to Earth orbit, the Moon, Mars, and beyond.
    - It is the fully reusable spacecraft and second stage of the Starship system.
- **Launch Vehicle**: Starship is the world's most powerful launch vehicle ever developed, capable of carrying up to 150 metric tonnes fully reusable and 250 metric tonnes expendable.
- **Configurations**: The vehicle comes in several different configurations, offers an integrated payload section, and is capable of carrying crew and cargo to Earth orbit, the Moon, Mars, and beyond.
- **Point-to-Point Earth Transport**: Starship is also capable of point-to-point transport on Earth, enabling travel to anywhere in the world in one hour or less.
- **First Stage:** Super Heavy is the first stage, or booster, of the Starship launch system.
- **Raptor Engines**: Powered by 33 Raptor engines using sub-cooled liquid methane (CH_4) and liquid oxygen (LOX), Super Heavy is fully reusable and will re-enter Earth's atmosphere to land back at the launch site.
    - The Raptor engine is a reusable methane-oxygen staged-combustion engine that powers the Starship system and has twice the thrust of the Falcon 9 Merlin engine.
- **Engine Configuration**: Starship will be powered by six engines, three Raptor engines, and three Raptor Vacuum (RVac) engines, which are designed for use in the vacuum of space.

LIVEMINT

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NATIONAL MEDICAL COMMISSION

(Syllabus: GS Paper 2 – Health)

NMC tells medical schools to mandate ABHA IDs for patients

There are nearly 700 medical colleges in India that have to follow the new directives

Priyanka Sharma
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NEW DELHI

The medical education regulator has directed all medical colleges to make Ayushman Bharat Health Accounts (ABHA)—or digital IDs—mandatory for seeing patients.

The move has two objectives, an official said—to help patients "share and access their health records digitally" and to get a better handle on how many patients a medical college is seeing when assessing them. The new assessment criteria for medical colleges will be dependent upon the number or patients registered by these medical institutions through their ABHA IDs.

There are nearly 700 medical colleges (including both private and government) which have to follow this new directives of the National Medical Commission (NMC).

ABHA ID is an initiative under the Ayushman Bharat Digital Mission which aims to a digital health ecosystem is being implemented by National Health Authority.

So far, more than 622 million ABHA IDs have been created across the country.

Starting from academic year 2025-26, all decisions for medical colleges—from increasing the number of seats for undergraduate and postgraduate courses, annual renewals and recognition by the NMC—will be considered on the basis of registration of patients done through these digital health IDs.

"The NMC in its 14th meeting held on 1 May, 2024 had decided that all medical colleges must ensure ABHA ID as pre-requisite for registration of patients visiting for OPD/IPD/emergency services in the hospitals attached to them. All patients OP/IP, must have registration done with ABHA ID in addition to hospital's registration number," said Dr B. Srinivas, Secretary, NMC to all medical colleges in a communication seen by *Mint*.

> The move allows patients to share and access their records digitally; regulator will get data on how many patients a medical college is treating

"The creation of ABHA ID is very simple process and can be facilitated conveniently with possession of Adhaar card that has already been extended to people on a large scale," he said. "However, no patient should be denied treatment without ABHA ID" Srinivas added.

Another senior official said that creation of ABHA ID for patients will help to deal with the problem of "ghost patients"—made-up names to impress the regulator with inflated numbers.

Ayushman Bharat Health Account (ABHA) ID

- **About:** It is a randomly generated 14-digit number designed to uniquely identify individuals, authenticate them, and interconnect their health records across various systems and stakeholders.
- **Launched:** In 2021, by NHA (National Health Authority)
- **Nodal Agency**: Ministry of Health and Family Welfare
- **Part of:** Ayushman Bharat Yojana.
- **Features:**
  - **Cashless Transactions:** It enables cashless transactions for eligible beneficiaries seeking treatment at empanelled healthcare facilities.
  - **Electronic Health Records (EHR):** It integrates electronic health records, facilitating the storage and retrieval of patient information.
  - **Portability:** The accounts are designed to be portable across various healthcare providers empanelled under the Ayushman Bharat scheme.

Context: The medical education regulator has directed all medical colleges to make Ayushman Bharat Health Accounts or digital IDs mandatory for seeing patients.

National Medical Commission (NMC)

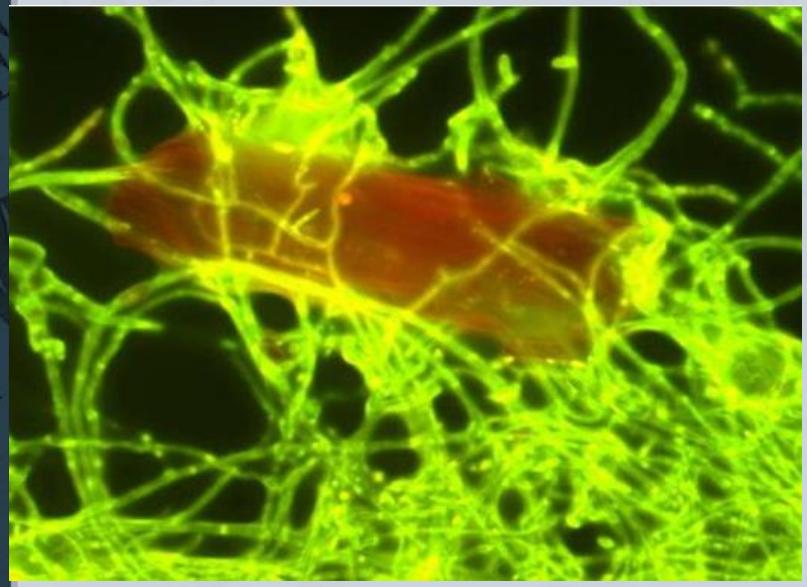
- **About**: The NMC stands as India's primary regulatory authority for medical education and practice, ensuring adherence to the highest standards in healthcare education and training nationwide.
- **Established by**: National Medical Commission Act, 2019, the NMC commenced its operations on September 25, 2020, following a gazette notification dated September 24, 2020.
- This act dissolved the Board of Governors previously established under the Indian Medical Council Act, 1956.
- **Replaced:** NITI Aayog recommended the replacement of Medical Council of India (MCI) with National Medical Commission (NMC).
- **Mission**: Improving access to quality and affordable medical education, striving for equitable distribution of medical professionals across the nation.
- **Aim**: To promote universal healthcare by fostering a community health perspective, making medical services accessible to all citizens.

PHY.ORG June 6

PARENGYODONTIUM ALBUM

(Syllabus: GS Paper 3 – Env and Eco)

Study identifies fungus that breaks down ocean plastic



Context: Researchers recently found that a Parengyodontium album fungus living in the sea can break down the plastic polyethylene.

Parengyodontium Album

- **About:** It is a marine fungus with the remarkable ability to degrade polyethylene (PE), the most prevalent type of plastic.
- **Discovered by**: Marine microbiologists from the Royal Netherlands Institute for Sea Research (NIOZ).
- **Dependency**: Sunlight plays a crucial role in enabling the fungus to utilize PE as an energy source.
- **Bioremediation Process**: Through bioremediation, the carbon from PE is transformed into fungal biomass known as album, serving as energy.
- **Importance:** Initial photodegradation of PE by UV sunlight is essential, making the fungus effective in degrading oceanic plastic litter.
- **Magnitude of Plastic Pollution**: With over 400 billion kilograms of plastic produced annually, much of it ends up polluting the ocean.
- **Fungal Digestive Enzymes:** Recognizing fungi as potent degraders due to their array of digestive enzymes, researchers anticipate the existence of more plastic-degrading fungi in deeper oceanic regions.

Fungus

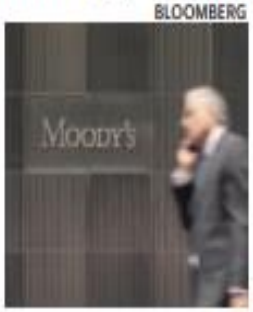
- **About:** Fungus is a diverse group of organisms belonging to the kingdom Fungi, encompassing yeasts, rusts, smuts, mildews, molds, and mushrooms.
- **Characteristics**: Fungi are characterized by their eukaryotic nature, possessing cells with membrane-bound organelles and distinct nuclei.
- **Habitat:** Soil or water, while others engage in parasitic or symbiotic relationships with plants or animals.
- **Decomposers**: Fungi excel as decomposers, breaking down organic matter in their surroundings and utilizing it as a source of nutrition, thus earning them the title of decomposers.

RENEWABLE ENERGY IN INDIA

(Syllabus: GS Paper 3 – Env & Eco)

India needs to invest $385 bn to meet RE target: Moody's

Bengaluru: India will have to invest as much as $385 billion to meet its target of 500 gigawatt (GW) of renewable energy by 2030, but coal will remain a key source of electricity generation for the next decade, Moody's Ratings said on Thursday. India, a major greenhouse gas emitter, has said it aims to ramp up non-fossil fuel capacity set by 50 GW each year to help meet its 500 GW target. It has already missed the target of 175 GW by 2022.



Context: Moody's Ratings forecasts that India needs a $385 billion investment to achieve its 500 GW renewable energy target by 2030, while acknowledging coal's continued significance in electricity generation over the next decade.

Renewable Energy

- **About:** It encompasses energy derived from natural resources that replenish themselves over time.
- **Source of Renewable Energy:** Wind power, solar power, bioenergy (organic matter burned as a fuel) and hydroelectric, including tidal energy.
- **Current Scenario in India**:
  - **India's Energy Consumption Ranking**: India ranks as the 3rd largest energy-consuming country globally.
  - **Renewable Energy Installed Capacity**: India stands 4th globally in Renewable Energy Installed Capacity, including Large Hydro.
  - **Wind Power Capacity**: India holds the 4th position in Wind Power capacity worldwide.
  - **Solar Power Capacity**: India ranks 5th globally in Solar Power capacity.
  - **COP26 Target:** At COP26, India set an ambitious target of achieving 500 GW of non-fossil fuel-based energy by 2030.

Government Initiatives

- **Ambitious Capacity Expansion**: India has aimed to achieve 450 GW of installed renewable energy capacity by 2030.
- **Production Linked Incentive Scheme (PLI)**: The government's PLI scheme aims to enhance the manufacturing sector by incentivizing the production of raw materials for renewable energy.
- **PM-KUSUM:** The Pradhan Mantri-Kisan Urja Suraksha evam Utthaan Mahabhiyan aims to ensure financial and water security for farmers by harnessing 30,800 MW of solar energy capacity by 2022, including the solarization of water pumps for distributed power supply.
- **Akshay Urja Portal and India Renewable Idea Exchange (IRIX) Portal**: These online platforms, hosted by the Ministry of New and Renewable Energy, facilitate the exchange of ideas and collaboration among energy-conscious individuals and the global community.
- **SRISTI:** It is a program for sustainable rooftop implementation for solar transformation in India, providing financial incentives from the central government to beneficiaries establishing solar power plant rooftops.

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