University of Southampton Becomes First Global University to open campus under new UGC Regulations

It has opened the campus in Gurugram under the University Grants Commission's (UGC) (Setting up and Operation of Campuses of Foreign Higher Educational Institutions in India) Regulations 2023.

- Earlier, Australia's Deakin and Wollongong university had opened campuses in GIFT city.
 - These universities were approved by the International Financial Services Centres Authority (IFSCA).

UGC's (Setting up and Operation of Campuses of Foreign Higher Educational Institutions in India) Regulations 2023:

- ➤ Objective: To facilitate the entry of Foreign Higher Educational Institutions (FHEIs) into India, in line with the National Education Policy 2020.
- ➤ Eligibility: Top 500 global universities in overall or subject-wise ranking or should possess outstanding expertise in a particular area.
- Does not allow online or distance learning: However, lectures in online mode not exceeding 10% of the programme requirements are allowed.



Benefits of foreign campuses in India

- 🕰 Challenges with foreign campuses in India
- Local Access to Global Degrees: It will help in stopping brain drain.
- Collaborative research and innovation: Collaborating with Indian institutions can improve research capabilities.
- Contributing to skill development and employability: By offering programs aligned with global industry standards
- Cultural and operational differences: Adapting to India's socio-cultural context requires a deep understanding of local values.
- Financial viability: Balancing costs with the need to offer affordable tuition fees.
- Legal uncertainties: Related to land acquisition, labour laws, and intellectual property rights.

Cabinet Approves the Prime Minister Dhan-Dhaanya Krishi Yojana (PMDDKY)

PMDDKY draws inspiration from NITI Aayog's Aspirational District Programme (ADP) and first of its kind focusing exclusively on agriculture and allied sectors.

➤ ADP (2018) was launched in the country's 112 most underdeveloped districts, with the aim of transforming them quickly and effectively.

Key Features of the Scheme

- Duration: Six years (starting 2025-26).
- Coverage: Target 100 districts.
- Sector Focus: Exclusively designed to enhance agricultural and allied sectors in underperforming districts.
- Implementation Strategy:
 - Convergence: 36 existing schemes across 11 Departments, other State schemes and local partnerships with the private sector.
 - Identification of Districts Based: Low productivity, low cropping intensity, and less credit disbursement.
 - The number of districts in each state/UT will be based on the share of Net Cropped Area and operational holdings.
 - ◆ However, a minimum of 1 district will be selected from each state.

Governance & Monitoring

- Committees will be formed at District, State and National level for effective planning, implementation and monitoring.
- Each district will have a dedicated plan developed by the District Dhan-Dhaanya Samiti, which will include progressive farmers.
 - The District Plans will align with national goals of crop diversification, water and soil conservation, self-sufficiency in agriculture, and the expansion of natural & organic farming.
- Monitoring:
 - Progress of the Scheme in each Dhan-Dhaanya district will be monitored on 117 key Performance Indicators.
 - NITI Aayog will review and guide the district plans.



Facilitate Availability of long-term & short-term credit



Enhance Agricultural Productivity

PMDDKY's Objectives



Increase Crop Diversification & sustainable agricultural practices



Augment Post-Harvest Storage at the panchayat and block levels



Improve Irrigation Facilities







Gujarat's Banni grasslands ready for translocation of cheetahs by year end

The forest department has increased the prey base in the area and also set-up an enclosure.

- > Earlier, Cheetahs had been relocated to Gandhi Sagar Sanctuary of Madhya Pradesh from Kuno National Park
- Other potential sites listed in the action plan for cheetah introduction: Guru Ghasidas National Park in Chhattisgarh; Dubri Wildlife Sanctuary, Sanjay National Park, Bagdara Wildlife Sanctuary, Veerangana Durgavati Tiger Reserve in MP; Desert National Park and Shahgarh grasslands in Rajasthan and Kaimur Wildlife Sanctuary in UP.

About Banni Grassland

- Located in Kutch district of Gujarat, this is a unique salt-tolerant grassland ecosystem.
- Asia's largest tropical grassland, which has emerged from the sea due to tectonic activities.
- Inhabited by various pastoral communities, such as the Maldharis, Rabaris, Mutwas, and Meghwals.

About Project Cheetah

- ➤ About: Launched in 2022 for the translocation of African cheetahs into India (Kuno National Park) from Namibia and South Africa.
 - First intercontinental reintroduction of a wild, large carnivore species.
- **Implementing agency:** National Tiger Conservation Authority (NTCA).
- > Cheetah Project Steering Committee: Established by NTCA in 2023 to oversee, evaluate, and advise on implementation of Project Cheetah.
 - **Environment, Forests and Climate Change** constituted under enabling provisions of Wildlife (Protection) Act, 1972, as amended in 2006.

About Cheetah

- World's fastest Mammal and the only large carnivore to be extinct in India (1952).
- > Unlike other big cats (lions, tigers, leopards, and jaguars) cheetahs don't roar.
- > Two Species of Cheetahs exists:
 - African Cheetah (IUCN Status- Vulnerable).
 - Asiatic Cheetah (IUCN Status-Critically Endangered).
- Found only in the arid regions of eastern Iran in Asia, and in Africa.

Groundbreaking Trial in UK Reported of the First Babies Born after Mitochondrial **Donation Treatment**

A new clinical trial successfully protected eight babies, at high risk of inheriting 'mitochondrial diseases' from their moms, through mitochondrial donation or Mitochondrial Replacement Therapy (MRT)

What is Mitochondrial Disease?

- ▶ Mitochondria: They are tiny "power plants" inside almost every cell in our body. They generate more than 90% of the energy in cells.
- Mitochondrial DNA: Mitochondria have their own DNA, distinct from nuclear DNA. Affects energy production but not physical characteristics.
- Mitochondrial Disease: When the mitochondria are not working properly, cells don't have enough energy and they begin to die. When too many cells die, whole organ systems can fail, which can be life-threatening.
 - Mitochondrial diseases are exclusively inherited from the child's mother.

About Mitochondrial donation or Mitochondrial Replacement Therapy (MRT)

- **Definition of MRT:** It is a new form of reproductive in vitro fertilization (IVF) which works on the principle of replacing a women's abnormal mitochondrial DNA (mt-DNA) with the donor's healthy one.
- In MRT an embryo contains:
 - man and a woman (the prospective mother)
 - an egg donated by another woman (the mitochondrial donor).
- Since, the child born will have three distinct genetic materials, it is called a "Three-Parent Baby".

Pronuclear Transfer Technique (PNT)

- Done after fertilization.
- Parents' genetic material is moved from their fertilized egg into the donor's egg with healthy mitochondria.
- Results in embryo with parents' DNA and donor's healthy mitochondria.
- Less than 5% carryover of defective mitochondria.

Maternal Spindle Transfer(MST) **Technique**

- Done before fertilization.
- Mother's genetic material is moved from her egg into donor's egg with healthy mitochondria.
- Reconstructed egg is then fertilized with the father's sperm.
- Preferred method due to lower risk of defective mitochondria carryover.







Agricultural Outlook 2025-2034 released by OECD-FAO

It provides a comprehensive assessment of the ten-year prospects for agricultural commodities (Including fish) and their markets at national, regional, and global levels.

Global Market Trends (2024) according to the report

- Biofuels: Its demand is projected to grow at 0.9% annually, led by India, Brazil and Indonesia.
- ➤ Cotton: Global use increased; India is set to overtake China as the top producer.

In this backdrop, **India's agricultural marketing system** plays a crucial role in ensuring that farm produce reaches consumers efficiently.

Agriculture Marketing in India

It encompasses all activities and organizations engaged in the flow of farm-produced goods, raw materials, and derivatives, such as textiles, from farms to customers.

Issues pertaining to Agriculture Markets in India

- Weak Infrastructure: Inadequate cold storage and transport lead to ₹92,000 crore in post-harvest losses (according to Central Institute of Post-Harvest Engineering & Technology).
- ▶ Lack of a National Integrated Market: Agricultural Produce Market Committee markets are fragmented.
 - Agriculture marketing falls under state list and is regulated by APMCs established by state governments under the respective APMC Acts.
- ▶ Limited market access: Small farmers in remote and rural areas lack access to markets or are dependent on local traders who offer low prices.

Steps taken by govt to improve Agri-Marketing

- ➤ National Agriculture Market (e-NAM): Enables farmers to sell produce online to buyers across multiple markets, ensuring price transparency and wider reach.
- 10,000 FPOs Scheme: Strengthen market linkages, especially for small and marginal farmers.
- ➤ Agriculture Infrastructure Fund: Supports post-harvest infrastructure like warehouses, cold chains, and community assets with interest subvention and financial aid.
- Agricultural Marketing Infrastructure (AMI): Enhance rural storage capacity through construction of godowns/ warehouses

Central Water Commission (CWC) Informs NGT of Rising Water Spread in Glacial Lakes Across India

The CWC report states that of the 100 glacial lakes over 10 hectares in size, there was an increasing trend in water spread area in 34, a decreasing trend in 20, a "no change trend" in 44.

- CWC monitors 902 glacial lakes and water bodies across states and transboundary areas using remote sensing.
 - 90 GLOF (Glacial Lake Outburst Flood) project-based studies are approved under the National GLOF Risk Mitigation Program (2021-2026).
- National GLOF Risk Mitigation Program is being implemented in four states-Arunachal Pradesh, Himachal Pradesh, Sikkim and Uttarakhand.

About Glacial Lake and Glacial Lake outburst flood (GLOFs)

- Glacial lakes: It is water formed by melting glaciers, usually at or near the glacier's base.
- GLOFs: A GLOF is a flood resulting from the sudden and rapid release of water from a glacial lake, often caused by the failure of a moraine dam or ice dam.
 - E.g., the 2023 South Lhonak GLOF that damaged Teesta III Dam in Sikkim.
- ▶ Geographical Distribution: Commonly associated with glacial regions, especially in mountainous areas with significant glacial activity. E.g., the Himalayas, Andes, and Alps.
- Impacts: GLOFs can result in devastating downstream flooding, destruction of infrastructure, and loss of life.
- ➤ Triggering Mechanism: The primary trigger for a GLOF is the collapse or breach of a moraine dam or ice dam holding back water in a glacial lake.

Major Causes of Glacial Lake Outburst Floods (GLOFs)

- Glacial Surging: It is the rapid, short-term advance of a glacier, unlike its usual slow movement. E.g., Gilkey Glacier, Alaska.
- Moraine Dam Failure: Collapse of unstable loose debris. E.g., South Lhonak Lake, Sikkim.
- **Seismic Activity:** Earthquakes destabilize glacier structures.
- ▶ Human Activity: Unplanned development, mining deforestation and emissions disrupt drainage and slopes.

Also In News



Pacific Ring of Fire

A 7.3-magnitude earthquake strikes off Alaska, which is part of the seismically active Pacific Ring of Fire.

About Pacific Ring of Fire

- It is a string of volcanoes and sites of seismic activity, or earthquakes, around the edges of the Pacific Ocean.
 - Spans over 15 countries including western Americas, Alaska, Russia, Japan, Philippines, Indonesia, Papua New Guinea, New Zealand, and Antarctica
- Roughly 90 percent of all earthquakes occur along the Ring of

Fire, and the ring is dotted with 75 percent of all active volcanoes on Earth.

- It is the result of plate tectonics.
- It has also led to the formation of deep underwater trenches, like the Mariana Trench (world's deepest spot).





Common service Center (CSC)

CSC e-Governance Services India Limited (CSC SPC) celebrates 10 Years of Digital India

In this occasion the Minister announced Free Al training for 10 lakh individuals, with priority for all Village Level Entrepreneurs

- About Common service Center (CSC)
- Established in 2006 under the Ministry of Electronics and Information Technology (MeitY)
- Vision: To deliver digital services to the last mile and to create a robust ICT-based network across India.
- Expansion of CSC Network
 - From 83,000 CSCs in 2014 to over 5.5 lakh CSCs across India today.
 It has reached nearly 90% of villages in the country.
- Key Services Offered at CSCs: Aadhaar enrollment and update, PAN card processing, passport applications, banking and insurance service, etc.
- Village Level Entrepreneurs (VLEs) playing a key role in delivering digital services at the grassroots.









Ground Penetrating Radar (GPR) technology

A team from IIT Kanpur has used GPR to detect ancient Buddhist stupas and buried structures in Haryana's Yamuna Nagar district. About GPR technology

- It is a high-resolution geophysical method that uses highfrequency electromagnetic waves to detect underground features.
- Waves are reflected, refracted, or scattered based on subsurface materials (e.g., soil, rock, buried objects).
- Depth range: Typically it is limited to depths of approximately 10 meters
- Use: It helps detect: Depth to bedrock, water table, and soil layers, Buried stream channels, cavities, and fractures etc.



Tribal genome project initiative

Gujarat launches India's first tribal genome project to tackle inherited diseases.

About Tribal Genome Sequencing Project

- **Objective:** To identify genetic health risks and enable precision healthcare for tribal populations.
- **Scope:** It will sequence the genomes of 2,000 individuals from tribal communities across 17 districts in the State.
- Implemented by: The Gujarat Biotechnology Research Centre (GBRC).
- Focus: Early detection and targeted treatment of genetic disorders such as sickle cell anaemia, thalassaemia, and certain hereditary cancers.



Earthquake Swarm

Lava erupted from a massive fissure in Iceland after a series of powerful earthquake swarms struck.

About Earthquake Swarm

- **Definition:** Earthquake swarms are sequences of many earthquakes that occur in a relatively short period without a specific main shock.
- Swarms can last weeks and produce many thousands of earthquakes.
- Swarms are observed in volcanic environments, hydrothermal systems, and other active geothermal areas.

Why is Iceland Prone to Earthquakes?

- Iceland stands out for its seismic activity not just because it's situated on a tectonic ridge (Mid-Atlantic Ridge), but also due to the presence of a mantle plume beneath it.
- Iceland experiences volcanic activity at the intersection of both a mantle plume and a tectonic boundary.



Right to Rehabilitation

In a recent judgement (Estate Officer, Haryana Urban Development Authority vs landowners) the Supreme Court claimed that Rehabilitation is not a fundamental right.

About the Judgement

- ➤ Article 21 Limitation: Deprivation of livelihood under Article 21 is not a sustainable ground in land acquisition cases.
- Compensation vs Rehabilitation: Fair monetary compensation is constitutionally guaranteed, but rehabilitation beyond legal provisions is not mandatory.

Limited Scope of Right to Rehabilitation

- Rehabilitation is not a constitutionally recognized right under the Land Acquisition Act. (Amarjit Singh vs State of Punjab
- The state cannot be compelled to provide alternative accommodation. (State of MP vs Narmada Bachao Andolan (2011).



Group of Friends (GoF)

India has reiterated its commitment to ensuring justice for crimes committed against UN peacekeepers at the meeting of the Group of Friends (GOF).

About GOF

- > It is Indian-led and seeks to facilitate the promotion of accountability for all acts of violence against UN peacekeepers.
- Launched in 2022.
- The Group is a driving force of United Nations Alliance of Civilizations (UNAOC) and plays a vital role in UNAOC's strategic planning and implementation process.



Coronal Mass Ejections (CMEs)

Astronomers have revealed the story behind powerful Coronal Mass Ejections, sparking rare northern lights over Ladakh in May 2024.

CMEs change their thermal behaviour mid-journey. Initially, the CMEs release heat but then enter a state where they actually absorb and hold onto it.

About CMEs

- ➤ They are large expulsions of plasma and magnetic field from the Sun's corona.
- ➤ They can eject billions of tons of coronal material and carry an embedded magnetic field.
- The fastest Earth-directed CMEs can reach our planet in as little as 15-18 hours. Slower CMEs can take several days to arrive
- When such solar blasts are directed toward the Earth, they can cause geomagnetic storms capable of disrupting satellite operations, communication systems and power grids

Place in News



Syria (Capital: Damascus)

- Violence erupted between Sunni Bedouin tribal fighters and Druze militias in Sweida, Syria
- **Political Features**
 - Location: In the Middle East and is a part of Levant Region.
 - Bordering Nations: Iraq, Israel, Jordan, Lebanon, and Turkey.
 - Bordering Water bodies: Mediterranean Sea
- **Geographical Features**
 - Important River: The Euphrates
 - ⊕ Its area includes territory in the Golan Heights that has been occupied by Israel since 1967.





























BENGALURU

BHOPAL

CHANDIGARH



GUWAHATI

HYDERABAD

JODHPUR

LUCKNOW **PRAYAGRAJ**

PUNE