New 'Guidelines for Import of Live Seaweeds into India' Notified

It has been notified by **Ministry of Fisheries, Animal Husbandry and Dairying.**

- It aims to facilitate **import of high-quality seed materials from abroad,** promote **seaweed enterprises in coastal villages,** uphold **environmental protection and address biosecurity concerns** related to the sector.

Need of Guidelines

- **Unique characteristics of seaweeds:** Seaweeds are submerged in water and are exposed to different environmental conditions (e.g. varying salinity levels,temperature fluctuations).
- **Biosecurity risks:** Seaweeds can harbour various diseases, pests, and pathogens.
- **Biological factors:** Differences in reproductive strategies and genetics can lead to persistence of seaweed in new environments.

Guidelines

- **No import of the seaweed live material shall be allowed** if it is known to be a vector or carrier of pathogens or **listed under CITES or in the threatened list of IUCN** or that of the exporting country's threatened list **unless certified by the exporting country's competent authority.**
- **Import of seaweed live material** would require a valid permit from **Department of Fisheries, Government of India and** clearance from **National Committee on Introduction of Exotic Aquatic Species into Indian Waters.**
- **Direct sale** of imported seaweed in the domestic market or international market shall **not be allowed.**
- **Neither the exporter nor the importer** shall claim any **intellectual property or other right on the imported material.**

About Seaweeds

- It is a common name for species of marine plants and algae that grow in the ocean as well as in rivers, lakes, and other water bodies.
- **Examples:** Kappaphycus alvarezii, Red Algae Gelidiella acerosa, Gracilaria edulis.
- **Applications:** laboratories, pharmaceuticals, cosmetics, cardboard, paper, paint and processed foods.
- **India's current seaweed production:** It is only 34000 tonnes against potential of around **9.7 million tonnes of seaweed per year.**
- **Pradhan Mantri Matsya sampada Yojana (PMMSY) is an flagship scheme** which aims to increase seaweed production of the country to **over 1.12 million tonnes by 2025.**

Pradhan Mantri Mudra Yojana (PMMY) loan limit increased to 20 lakh

It is in sync with the announcement made by the Finance Minister in the Union Budget 2024-25

- It aims to achieve the objective of **Funding the Unfunded** and facilitate upcoming entrepreneurs with a robust entrepreneurial ecosystem.

Key Changes

- A new **'Tarun Plus' category** has been created for loans above **Rs. 10 lakh and upto Rs. 20 lakh .**
  - **Eligibility:** Loans under Tarun Plus are available to **entrepreneurs** who have availed and successfully repaid previous loans under **Tarun category.**
  - **Guarantee Coverage:** for loans **upto Rs. 20 lakh** will be provided under **Credit Guarantee Fund for Micro Units (CGFMU).**
    - **The Fund (at its discretion)** may approve a list of Institutions or their schemes, for which the guarantee cover will be available/unavailable
    - **CGFMU** was set up in 2016 under **National Credit Guarantee Trustee Company Ltd.,** a wholly-owned company of Government of India.

About Pradhan Mantri Mudra Yojana (launched in **2015).**

- **Objective:** facilitate easy collateral-free micro credit of **up to ₹10 lakh**
- **Eligibility :** Any Indian citizen who has a business plan for **non-corporate, non-farm income generating activity** such as **manufacturing, processing, trading or service sector.**
- **MUDRA (Micro Units Development & Refinance Agency Ltd.)** provides funding to financial institutions like Banks, Non-Banking Financial Institutions (NBFC) and Micro Finance Institutions (MFI).
- **Various types of loan options available:**
  - **Shishu:** Covers loans upto **50,000.**
  - **Kishor:** Covers loans above **50,000** and upto **5 lakh.**
  - **Tarun:** Covers loans above **5 lakh** and upto **10 lakh.**

Seventh India-Germany Inter-Governmental Consultations (IGC) Concluded

It was co-chaired by the Prime Minister of India and the Federal Chancellor of Germany (who visited India).

- It had the motto **"Growing Together with Innovation, Mobility and Sustainability".**

Outcomes of IGC

- Demand for UN Security Council reform and urged **text-based negotiations at the Intergovernmental Negotiations (IGN)** within a **fixed timeframe.**

- **Emphasized respect for UN Charter principles,** condemning any threats or use of force against nations' sovereignty and territorial integrity.

- **Concluded Mutual Legal Assistance Treaty in Criminal Matters** that will enable the sharing of information and evidence, mutual capacity building, and the sharing of best practices.

- **Concluded Agreement on the Exchange and Mutual Protection of Classified Information** thereby creating a legal framework and providing guidance on how classified information should be handled, protected and transmitted.

> **India and Germany Relations**
> India and Germany have a **'Strategic Partnership' since 2000,** which has been further strengthened with the launch of **IGC in 2011.**
> **Areas of Cooperations**
> - **Multilateral Cooperation:** Support each other on **UNSC reforms within the framework of the G4.**
> - **Economic Relations:** Germany was the 12th largest trading partner for India in 2022-23.
>   - India constitutes about **1% of Germany's total foreign trade (2022).**
> - **Sustainability: The Indo-German Energy Forum (IGEF)** has been promoting cooperation in the priority areas of energy security, energy efficiency, renewable energy, etc.

- **Established Regional Consultations on West Asia and North Africa (WANA)** between the respective Foreign Ministries, which would be in addition to long-standing dialogue mechanisms on Africa and East Asia.

- **Committed to promoting a free, open, inclusive, peaceful and prosperous Indo-Pacific** built on international law.

- Both nations pledged to fully implement the **Migration and Mobility Partnership Agreement (MMPA).**
  - MMPA is an agreement between two countries that aims **to improve mobility and employment opportunities for people,** while also addressing irregular migration and human trafficking.

Ministry of Fisheries, Animal Husbandry & Dairying launches Pandemic Fund Project

It focuses on "Animal Health Security Strengthening in India for Pandemic Preparedness and Response"

- The minister also released documents on **Standard Veterinary Treatment Guidelines (SVTG) and Crisis Management Plan (CMP)** for animal diseases.

About Pandemic Fund Project

- It is a **$25 Million initiative funded by the G20 Pandemic Fund** and was established under **Indonesia's G20 Presidency (2022).**

- **Aim:** Enhance **low- and middle-income country's** capacity to respond to animal health threats and pandemic through **financing investments**

- **Implementing Entities: Asian Development Bank (ADB), World Bank, Food and Agriculture Organization (FAO).**

- **Need to focus on animal disease outbreaks**
  - **Prevent Zoonotic Diseases: 5 of 6 public health emergencies** declared by WHO had animal origin
  - **Minimize socio-economic impacts:** E.g. SARS and Avian flu are estimated to have caused global economic loss of $50 B, and $30 B, respectively.

- **Major Interventions under the Project includes:-**

> **India's initiatives to improve Animal Health**
> - **National Animal Disease Control Program (NADCP):** To control and eradicate Foot and Mouth Disease (FMD) and Brucellosis.
> - **Rashtriya Gokul Mission:** Aims at development and conservation of indigenous bovine breeds improving their productivity.

  - **Upgradation and expansion of animal health laboratories** and **vaccine manufacturing facilities.**
  - **Enhancing early warning** and **surveillance mechanisms** to detect outbreaks and facilitate timely interventions.
  - **Upgrading Data Management and Analytical systems** to enable better risk assessment.
  - **Addressing Cross-Cutting Institutional Capacity Gaps at National and Regional Levels** through a disaster management framework for the livestock sector.

Meta and 'IndiaAI' unveiled the Centre for Generative AI, Shrijan at IIT Jodhpur

Meta, in collaboration with MeitY and the All India Council for Technical Education (AICTE), also launched the **"YuvaAI initiative for Skilling and Capacity Building"** .

About Center for Generative AI, Shrijan

- **Aim:** It will Identify & empower the next generation of AI innovators and entrepreneurs using **open-source AI & exploring possibilities in the Large Language Model (LLMs)**.
  - It will nurture **1 lakh youth developers & entrepreneurs** in AI skills over the next **3 years.**

About "YuvAI initiative for Skilling and Capacity Building"

- **Aims:** To bridge the **AI talent gap in the country by empowering 100,000 students and young developers** aged 18-30 to leverage open-source LLMs to address real-world challenges.

What is Generative AI?

- It refers to **deep-learning models** that can generate high-quality text, images, and other content **based on the data they were trained on.**
- It builds on existing technologies, like **large language models (LLMs)** which uses **machine learning** and **is capable** of **recognizing and interpreting human languages.**
- **Significance**
  - **Employment:** overall AI employment in India is estimated at about **416,000** professionals.
  - **Growth:** The growth rate for the sector is estimated at about **20-25%.**
  - **Investment:** Expected to contribute an additional **$957 billion** to India's economy by 2035.
- **Challenges:** Data privacy and security, lack of regulation, Inadequate availability of AI Experts, etc.

United Kingdom (UK) became first country to stop electricity production from Coal

The closure of its last coal-based power plant marked the end of **142 years of coal-generated electricity,** which formed 40% of its electricity needs in 2012.

- The world's first **coal plant opened in London (UK) in 1882** whereas India installed its first major thermal power plant, the **Hussain Sagar Thermal Power Station in Hyderabad in 1920.**

Need for closing coal-based electricity production

- **Pollution:** Energy sector contributes to around three-quarters of greenhouse gas emissions (IEA).
- **Limitation of existing commitments:** As per IEA, even with the full achievement of existing pledges, it would be difficult to achieve the Paris Commitment (limiting temperature rise to 1.5 °C).
- **Feasibility of Renewable Technologies:** They are now sufficiently scalable with fast-growing investments in Research, Energy storage technologies, etc.

Constraint in closing coal-based power plants

- **Reliance on Coal:** Low and Middle Income and Fast growing Countries like India and China rely heavily on coal to meet energy and employment needs.
- **Economic Impact:** The fleet of coal-fired power plants in countries like China and India is relatively new, hence shifting would cause financial loss.
- **Issues with renewable energy:** Like intermittency; capital cost; lack of policy clarity, etc.

Status in India
- **Current Status:** Coal constitutes **around 70%** of total generation capacity (September, 2024)
- India aims to achieve **Net Zero by 2070.**
- **Key Government Initiatives for Renewable Energy Adoption:** National Green Hydrogen Mission, PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan), **PM Surya Ghar, and PLI schemes for solar PV modules,** etc.

Also in News

Asiatic Golden Cat

Recently **Asiatic Golden Cat (Catopuma temminckii)** was spotted at Assam's Manas National Park.

About the Asiatic Golden Cat

- **Habitat:** Found in forests ranging from tropical/subtropical **evergreen forests, mixed and dry deciduous forests and tropical rainforests.**
- **Range Countries:** It is native to the **northeastern Indian subcontinent, Southeast Asia and China.**
- **Characteristics**
  - Common coat colour is **golden or red brown,** but it may also be **dark brown or even grey.**
  - Its size is **medium with relatively long legs.**
  - Mainly Nocturnal but recent data indicates that it may be **diurnal.**
- **Protection status**
  - **IUCN status: Near Threatened.**
  - **India's Wildlife (Protection) Act, 1972:** Schedule I and Schedule IV.

21st Livestock Census

The Union Minister of Fisheries, Animal Husbandry and Dairying launched **21st Livestock Census** to have updated data on livestock population, allowing government to address key issues like disease control, breed improvement, and rural livelihoods

About 21st Livestock Census

- **Schedule:** To be conducted during October, 2024- February, 2025.
- **Key Features:**
  - **Fully digitized** (similar to **20th census);**
  - Data on **16 species of livestocks and their 219 indigenous breeds** are going to be captured
  - **Covers data on pastoralists** for the **first time.**
  - Focus on **Gender Roles** in Livestock Rearing
- Livestock census has been conducted **every five years since** 1919 (last being in 2019).

SPICE (Smart, Precise Impact, Cost-Effective) 2000 Bomb

Israel launched a **SPICE 2000 bomb** to destroy a building in Lebanon.

About SPICE 2000 Bomb

- **It is a guidance kit** that can be attached to **2,0000-pound** bombs to carry out precision strikes.
- It is made by **Israel's government-owned** Rafael Advanced Defense Systems.
- **Key-features:**
  - Autonomous operation.
  - Tactical flexibility in trajectory.
  - Low collateral damage.
  - Simple mission planning.
  - Pinpoint accuracy and effective target destruction.

Exploitation of Green Certification Systems

Greenwashing, free riding, and outdated certification systems raise questions about sustainable certifications systems.

- **Greenwashing:** Involves making **false claims** on **eco-friendly credentials** of a company without meeting required standards.
- **Free Riding:** Allows businesses to **benefit from the positive image** of certifications without genuinely implementing sustainable practices.
- **Solution:** These practices could be avoided through the use of **disruptive green technologies** like **Biophilic Designs.**
  - Biophilic design creates spaces that connect people with nature, thereby producing a positive environmental impact.
  - They inherently **support green building practices** by utilizing natural materials and mimicking natural processes reducing the ecological footprint of a building. E.g., Green Roofs.

Doctrine of Coverture

Supreme Court (SC) is to hear petitions challenging **Marital Rape Exception (MRE)** under **Section 375** and **Section 63** of the Indian Penal Code and Bharatiya Nyaya Sanhita (BNS), 2023 respectively.

- SC in **Joseph Shine Vs Union of India (2018)** held that MRE stems from the **doctrine of coverture.**

Doctrine of Coverture

- **Legal doctrine** under English common law, that places a married woman under the cover of her husband treating them as a **single entity.**
- It suspends the very being or legal existence of a woman after marriage.
- In theory, it seeks to pass on her property to the husband, **restricting her ability to hold property, enter into contract, etc.**

Flue Gas Desulfurization

NITI Aayog recently raised questions about the necessity of flue gas desulfurization installations in India's thermal power plants.

About Flue Gas Desulfurization(FGD)

- **It is a scrubbing technique which uses an alkaline reagent (sodium or calcium based) to remove SO2 from flue gas** of fossil-fueled power stations or coal-fired power plants.
  - Flue gas also called as exhaust gas/stack gas emanates from combustion plants and contains particulate matter (dust), sulfur oxides, nitrogen oxides, and carbon monoxide etc.
- It is of various types(e.g dry sorbent injection, wet limestone based, sea water based)
- **The Ministry of Environment, Forest & Climate Change has mandated** FGD installation in thermal power plants and set sulfur dioxide emission standards.

Nature Conservation Index(NCI), 2024

Recently, the Nature Conservation Index(2024) was released.

About NCI

- **India's Rank: 176 out of 180 countries.**
- **Developed by:** Goldman Sonnenfeldt School of Sustainability and Climate Change at Ben-Gurion University of Negev and BioDB.com
- It evaluates conservation efforts using **four markers:**
  - **Land management,**
  - **Threats to biodiversity,**
  - **Capacity and governance, and**
  - **Future trends.**
- It is a data-driven analysis of each country's progress in **balancing conservation and development.**

Laser Interferometer Space Antenna (LISA)

NASA unveiled Prototype (called the Engineering Development Unit Telescope).

- The telescope was **built as part of LISA.**

About LISA

- The mission is led by **ESA (European Space Agency) in partnership with NASA .**
- It will be the first space-based observatory dedicated to studying gravitational waves.
  - **Gravitational Waves** are ripples in the fabric of space-time emitted during the most powerful events in the Universe, such as pairs of black holes coming together and merging.
- **Launch:** Mid 2030s.
- It will consist of **three identical spacecraft** that will trail **Earth in its orbit around the Sun.**

Places in News   📰 Italy (Capital:Rome)

First India-Italy bilateral cyber dialogue was held in India.

Political Features:

- **Location: South-central Europe.**
- **Land boundaries:** France, Switzerland Austria and Slovenia (on the Northern side).
- **Maritime Boundaries:** Mediterranean Sea and Ionian Sea(South), Adriatic Sea (East), Tyrrhenian Sea (West),

Geographical features:

- **Major Rivers:** Po,Adige,Tiber.
- **Highest point:** Monte Bianco (Mont Blanc).
- **Climate:** majorly **Mediterranean climate.**

AHMEDABAD BENGALURU BHOPAL CHANDIGARH DELHI GUWAHATI HYDERABAD JAIPUR JODHPUR LUCKNOW PRAYAGRAJ PUNE RANCHI