India signs the Final Act of Riyadh Design Law Treaty (DLT)

By signing this treaty, India reaffirms its commitment to foster inclusive growth and strengthening its intellectual property (IP) ecosystem.

- After nearly two decades of negotiations, member states of World Intellectual Property Organization (WIPO) have adopted the landmark DLT.
- Design is a category of IP consisting of a product's ornamental aspect.

Key provisions of DLT

- Allows applicants to include several designs in a single application, under certain conditions.
- **Set out requirements for granting of a filing date** as postponing filing date can result in loss of rights.
- Allows applicants to keep the design unpublished for at least six months after having secured a filing date.
- Provides a grace period of 12 months following a first disclosure of design, during which such disclosure will not affect its validity for registration.
- ▶ Introduction of e-filing systems for design and electronic exchange of priority documents.

Significance of DLT

- Empowers startups and SMEs by protecting their designs globally, improving their competitiveness and growth.
- Makes procedures more predictable, less complex and more affordable.
- ▶ Integrates design protection with traditional knowledge and cultural expressions, thus enhancing their protection.
- By standardizing procedural requirements, DLT streamlines application process across countries, reduces administrative burdens, thereby promoting global creativity in design.

About Intellectual Property

- ▶ It refers to creation of mind such as inventions, designs for industrial articles, literary, artistic work, symbols which are ultimately used in commerce.
- ▶ IP rights allow creators or owners to have benefits from their works when these are exploited commercially.
- These rights are **statutory rights** governed in accordance with provisions of corresponding legislations.
- **Other types of IP:** Patents, Copyrights, Trademarks, Trade secrets, Geographical Indicators.

About WIPO (HQ: Geneva, Switzerland)

- Specialized United Nations agency that promotes IP rights globally, established in 1967.
- **▶ Members:** 193 countries, including India.

Decision made at COP29 to ensure full operationalization of Loss and Damage Fund (LDF)

Under COP29 Presidency, several important agreements related to Loss and Damage Fund were signed.

- These include "Trustee Agreement" and "Secretariat Hosting Agreement (SHA)" between Fund's Board and World Bank as well as "Host Country Agreement" with the Republic of the Philippines.
- With these achievements, LDF will be able to start financing projects beginning in 2025.

About LDF:

- Establishment of LDF was agreed upon during COP27 held in Egypt and fund was operationalized in COP28, Dubai.
 - Fund aims to provide financial assistance to countries most vulnerable to climate change.
 - Total pledged financial support for Fund has exceeded \$730 million.
- "Loss and damage" refers to impacts of climate change that exceed limits of adaptation, as addressed in UN climate negotiations.
- Loss and damage includes both economic and non-economic (disappearance of cultures and ways of living etc.) losses.
- Under LDF, financial support will be provided in form of grants and concessional financing.

Issues involved in LDF

- ▶ Governance: Securing adequate and sustainable funding, who benefits, and where fund is located.
- Financial: Balancing interests of donor and recipient countries will be a delicate task.
- Scientific: Defining and assessing loss and damage.

Timeline of Loss and Damage Negotiations at UNFCCC 2007 2013 2015 Loss and damage Warsaw International Paris Agreement first appeared in Bali Mechanism established to includes Article 8 on **Action Plan** address loss and damage. loss and damage. 2019 2022 2023 Santiago Network on Loss Loss and Damage Fund Fund operationalized and Damage (SNLD) created at COP27. at COP28

Other funds dedicated to addressing climate change

- ▶ Green Climate Fund (GCF): Provides finance for low-emission and climate-resilient development in developing countries.
- Adaptation Fund: Supports concrete adaptation projects in developing countries.
- ▶ Least Developed Countries Fund (LDsCF): Provides grants to Least developed countries for climate adaptation.







President highlights importance of Constitution at 75th Constitution Day of India

Constitution Day, also known as 'Samvidhan Divas', is celebrated in our country on 26th November every year to commemorate the adoption of the Constitution of India.

- On 26th November 1949, Constituent Assembly of India adopted Constitution of India, which came into effect from 26th January 1950.
 - A constitution is a body of fundamental principles according to which a state is constituted or governed. It can be written (Ex-India, USA) and unwritten (Ex-Britain).

Significance/Role of Indian Constitution

- ▶ Protecting Fundamental Rights: Articles 12 to 35 contained in Part III of the Constitution deal with Fundamental Rights.
 - E.g. SC in Justice K.S. Puttaswamy vs Union of India stated that right to privacy is part of right to life and personal liberty (Article 21).
- **Promoting Social Justice:** Such as abolition of untouchability (Article 17), protection of minority rights (Article 25 to 28) etc.
- ➤ Fulfilling aspirations of a society: Protecting and improving environment (Article 48A), education for all children (Article 45) etc.
- Allowing minimal coordination amongst members of a society: It establishes a framework of laws, principles, and institutions that define structure and functions of government.
- ▶ **Protecting Secularism:** Articles 25 to 28 guarantee right to religious freedom.
 - SC in S.R.Bommai case (1994) stated that Secularism is a part of basic structure of Constitution.

High-Level Committee (HLC) approved National Landslide Risk Mitigation (NLRM) Project in 15 States

HLC, under chairmanship of Union Home Minister, has approved funding from **National Disaster Mitigation Fund (NDMF)** for disaster mitigation projects for various states.

▶ HLC also approved project for training and capacity building of civil defense in all States/UTs under Preparedness and Capacity Building component of National Disaster Response Fund.

Need for NLRM project

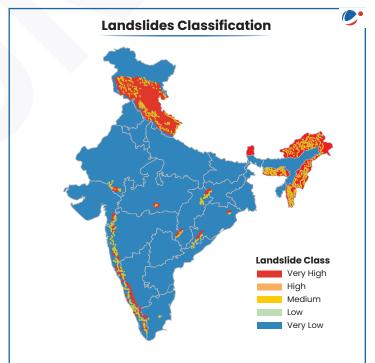
- Unlike earthquakes and tsunamis, it is possible to prevent and predict landslides.
- ➤ To promote culture of scientific investigation, analysis and management.

About NDMF

- In 2021, Central Government had constituted NDMF under Disaster Management Act, 2005 based on recommendation of 15th Finance Commission.
- It shall be applied by National Disaster Management Authority (NDMA).
- It is exclusively for purpose of mitigation projects in respect of disasters.

Landslide Management in India

- ▶ Use of remote sensing and GIS to conduct landslide hazard zonation mapping and identify high-risk zones.
- ▶ Real-time landslide monitoring using sensors, satellite data, and drones, to develop early warning systems.
- Use of structural measures (retaining walls, slope stabilization), and non-structural measures (land use regulation, prevent deforestation) to prevent landslides.
- ➤ Enhance coordination among agencies like NDMA, Geological Survey of India (GSI), and State Disaster Management Authorities.



About Landslides in India

- Movement of a mass of rock, debris, or earth down a slope due to force of gravity. Example: Kerala (Wayanad) etc.
- > India is among top four countries with highest landslide risk (ISRO Landslide Atlas of India).
- Factors: Natural (Intense rainfall, Seismic activities etc.); Anthropogenic (Deforestation, Unplanned construction, etc.).

Other Measures taken to Manage Landslides

- ➤ National Landslide Susceptibility Mapping Program initiated by Geological Survey of India in 2014-15.
- ➤ Landslide Risk Mitigation Scheme envisages financial support for site specific Landslide Mitigation Projects.
- Guidelines on Management of Landslides and Snow Avalanches issued by National Disaster Management Authority.







Ministry of Fisheries, Animal Husbandry & Dairying released Basic Animal Husbandry Statistics (BAHS) 2024

It was released on National Milk Day (26th November) to celebrate birth anniversary of Dr. Verghese Kurien (Father of White Revolution in India).

Key Findings for 2023-24

- ➤ Total Milk production: Estimated as 239.30 million tonnes and registered a growth of 5.62% over past 10 years (2014-15).
 - Top three milk producing States: Uttar Pradesh, Rajasthan and, Madhya Pradesh.
- ➤ Egg Production: Estimated as 142.77 billion number and registered growth of 6.8% over past 10 years. Major contribution comes from Andhra Pradesh followed by Tamilnadu.
 - India is leading in milk production globally whereas 2nd in Egg production.
- ➤ Wool Production: Estimated as 33.69 million kg during and registered a slight growth of 0.22% over last year.

About Animal Husbandry

- Refers to livestock raising and selective breeding, in which genetic qualities and behavior of animals are further developed for profit.
- Significance of Animal Husbandry
 - Livestock sector has contributed around 30.19% during 2021-22 in total agriculture and allied sector GVA (at constant prices).
 - Provide livelihood to 8 crore farmers and landless labourers and contributes to food security by producing milk, meat, eggs, etc.
- Challenges related to Animal Husbandry
 - Rising diseases like Lumpy Skin disease, Foot and mouth disease etc.; Low Productivity of indigenous breeds; Inadequate vaccination coverage, etc.

Initiatives taken to Boost Animal Husbandry Sector

- Rashtriya Gokul Mission: Launched in 2014 to conserve and develop Indigenous bovine Breeds.
- Animal Husbandry Infrastructure Development Fund: To incentivize investments for Dairy processing and product diversification, Meat processing, etc.
- ▶ National Livestock Mission: For employment generation through entrepreneurship development in small ruminants, poultry and piggery sector; Increase per animal productivity through breed improvement etc.

ISRO gets government approval for Venus mission "Shukrayaan"

Mission Shukrayaan or **Venus Orbiter Mission (VOM) by Department of Space** will explore the atmosphere and surface of Venus, and its interaction with sun.

About VOM:

- Launch: ISRO is set to launch it in 2028.
- > Key objectives of VOM:
 - Examining dust in Venusian atmosphere, mapping its surface topography, studying the solar x- ray spectrum near Venus and analyzing Venusian airglow.
 - To serve as technology demonstration for ISRO, testing aero breaking and thermal management techniques in harsh environments.
 - Aero-braking is a technique that uses a planet's atmosphere to slow down a spacecraft and adjust its orbit.
- Payloads of Mission:
 - Sixteen Indian payloads, two Indian and international collaborative payloads (VISWAS and RAVI), and one international payload (VIRAL) have been recommended.

Significance of mission:

- ➤ Scientific Exploration: Better understanding the evolution of the solar system as well as dynamics of the planetary atmosphere.
- ▶ Understanding Climate Change: Atmosphere of Venus is mainly composed of CO₂ so studying its composition could shed light on greenhouse effect and other environmental issues.
- Others: Understanding Atmospheric composition, Earth's evolution etc.

Challenges for mission:

- ➤ Extreme conditions: Extreme temperature and pressure can damage spacecraft components.
- ➤ Corrosive Atmosphere: Sulphuric acid clouds that dominate venusian surface can potentially corrode the components made of steel and titanium.
- Other Challenges: Harsh terrain, lack of sunlight for solar panels, technological challenges etc.

Missions To Venus

- ▶ Past missions: Mariner 2(USA, 1962), Venus express (ESA), Magellan(NASA), Akatsuki (Japan) etc.
- Future missions: Venus life finder mission(Rocket Lab and MIT), DAVINCI and VERITAS(NASA), EnVision(ESA)

Also in News



Antibiotic Nafithromycin

Ministry of Science & Technology has formally launched India's first indigenous antibiotic "Nafithromycin" for tackling Antimicrobial Resistance (AMR).

About Nafithromycin

- It has been developed with the support of Biotechnology Industry Research Assistance Council (BIRAC), under its Biotechnology Industry Partnership Program (BIPP).
- ▶ It has been brought to market under trade name "Miqnaf" by pharma company "Wolkardt".
- ▶ It is designed to treat Community-Acquired Bacterial Pneumonia (CABP), a severe illness caused by drug-resistant bacteria, which affects vulnerable populations (children, elderly etc.).
- Ten times more effective than current options and offers safer, faster, and more tolerable solution for patients.



National Federation of State Co-operative Banks Limited (NAFSCOB)

Union Home Minister and Minister of Cooperation attended Diamond Jubilee Celebrations of **NAFSCOB**.

About NAFSCOB

- Genesis: Established in 1964 with a view to facilitate the operations of State and Central Co-operative Banks in general and Development of Co-operative Credit in particular.
- Objective:
 - To facilitate thes growth and development of cooperative banking in India, ensuring financial inclusion and supporting the rural economy.
 - Promote and protect the interests of the member banks in all spheres of their activities and to give expression to the views of the member banks.
- ▶ Three wings of NAFSCOB: Planning, Research and Development, All India Mutual Arrangement Schemes and Computer Services Division









'Nayi Chetna – Pahal Badlaav Ki' Campaign

Union Minister of Rural Development and Agriculture & Farmers' Welfare has launched third edition of national campaign 'Nayi Chetna - Pahal Badlaav Ki'.

About Nayi Chetna - Pahal Badlaav Ki campaign

- It aims to raise awareness and promote targeted action against all forms of gender-based violence through grassroots initiatives.
- Organized by Deendayal Antyodaya Yojana National Rural Livelihoods Mission (DAY-NRLM) under aegis of Ministry of Rural Development.
- As part of initiative, 227 new Gender Resource Centers were inaugurated across 13 states.
- Campaign's slogan: "Ek Saath, Ek Awaaz, Hinsa Ke Khilaaf."



SAREX-24

Indian Coast Guard (ICG) is conducting 11th Edition of National Maritime Search and Rescue Exercises & Workshop (SAREX-24) under National Maritime Search and Rescue (NMSAR) Board at Kochi.

- Theme: Enhancing Search and Rescue capabilities through Regional collaboration.
- It signifies ICG's commitment to provide help during large scale contingencies regardless of location, Nationality or circumstances in Indian Search and Rescue Region (ISRR) and beyond.



Biofloc Technology (BFT) and Recirculating Aquaculture Systems (RAS)

India's aquaculture sector is increasingly adopting Biofloc Technology (BFT) and Recirculating Aquaculture Systems (RAS) to enhance production, sustainability, and minimize environmental impact in aquaculture.

Biofloc Technology (BFT)

- BFT is a closed, tank-based fish farming method that utilizes beneficial microbes, called flocs, to maintain water quality.
- Heterotrophic bacterias are used to convert organic waste in the tanks into microbial biomass, which can serve as an additional food source for fish or shrimp.
- This system reduces the need for frequent water changes by naturally cleaning the water.

Recirculating Aquaculture Systems (RAS)

- RAS is also a closed-loop, tank-based aquaculture technique that recycles water through advanced filtration systems.
- The setup includes automated culture tanks equipped with mechanical and biological filtration units, ensuring efficient water use and a controlled environment for aquaculture.

IPSN≣

International Pathogen Surveillance Network

IPSN has announced first round of grants towards understanding disease threats.

About IPSN

- It is brought together by WHO Hub for Pandemic and Epidemic Intelligence, established in 2021 in Berlin, to provide world with better data, analytics and decisions to detect and respond to health emergencies.
- It is a new global network of pathogen genomic surveillance (PGS) actors that accelerates work of its members to improve access and equity.
 - PGS is monitoring and analysis of genetic material (genome) of pathogens, like viruses, bacteria, fungi, and parasites.
- **IPSN catalytic grant fund** support partners from low- and middleincome countries to build their capacities in pathogen genomic analysis.



Pennaiyar/ Ponnaiyar River

Supreme Court seeks Union government report prepared by a committee negotiating a dispute between Tamilnadu and Karnataka over sharing of Pennaiyar river water.

About Pennaiyar River

- Pennaiyar Basin is second largest interstate East flowing river basin. Its basin is bounded in north by Palar basin, on west and south by Cauvery basin and on east by Bay of Bengal.
- It covers a large area in Tamilnadu besides the areas covered in Karnataka and Andhra Pradesh.
- It is known as Dakshina Pinakini in Kannada and Thenpennai in Tamil.
- It originates near Nandidurg in Kolar district of Karnataka.



Surface Hydrokinetic Turbine Technology (SHKT)

Central Electricity Authority has recognized SHKT technology under Hydro Category to drive innovations in alternate technologies.

About SHKT:

- Unlike conventional hydroelectric systems that rely on potential energy of water, It harnesses kinetic energy of flowing water with minimal potential.
- This enables generation of electricity without the need of large dams.

Significance of SHKT

- It is a cost effective and scalable solution for generating renewable energy.
- Turbines are easy to install, making them highly suitable for **locations** like canals, hydropower tailrace channels.
- They can be deployed in remote locations where powergrid might be absent.

Place in News



Tanzania (Capital: Dodoma)

Recently, 3rd India-Tanzania Joint Defence Cooperation Committee meeting was held in Goa to further expand bilateral ties.

Political features

- **Location:** East African country situated just south of Equator
- Bordering nations: Kenya and Uganda to North; Burundi, Democratic Republic of Congo and Rwanda to the West; Zambia, Malawi and Mozambique to the South.
- Bordering water bodies: Lake Victoria in North; Indian Ocean in the East; Lake Tanganyika in West; and Lake Nyasa in Southwest.

Geographical features

- Climate: Tropical climate (With a long dry season and two rainy seasons.)
- Major lakes: Lake Tanganyika (World's second deepest lake).
- Highest Peak: Mountain Kilimanjaro(Dormant volcano and highest mountain in Africa).
- Major Rivers: Ruvuma, Rufiji





























AHMEDABAD

BENGALURU

BHOPAL

CHANDIGARH

DELHI

GUWAHATI

HYDERABAD

JODHPUR

LUCKNOW

PRAYAGRAJ

PUNE

RANCHI 4/4