

PRIME MINISTER'S VISIT TO USA

Why in news?

- PM Modi is on an Official State Visit to USA. This is his **first state visit to the country**.
- On the first day of his visit, PM led the celebrations of the 9th annual International Day of Yoga at the United Nations Headquarters on June 21.
 - In December 2014, the UN General Assembly had adopted a resolution proclaiming June 21 as the International Day of Yoga.
- On the second day of his visit, PM Modi will
 - meet President Biden to continue their high-level dialogue;
 - attend a State Dinner hosted by President Biden and First Lady Dr. Jill Biden;
 - address a Joint Sitting of the U.S. Congress

What is a State visit?

- **About**
 - State visits are the **highest-ranked category** of foreign visits to the US, where the head of a state visits the US on the formal invitation of the US President.
 - Before PM Modi, the only two state visits under President Joe Biden have been by France's President Emmanuel Macron and South Korea's President Yoon Suk Yeol.
 - Invitation for a state visit signifies that the US considers the guest nation an important friend and ally.
- **Key events that mark a state visit**
 - A state dinner is a crucial part of such a visit.
 - The state dinner is held at the White House, the residence of the US President.
 - It has the symbolic value of a visiting dignitary sharing a meal at the host's home.
 - The other key events that mark a state visit include:
 - 21-gun salute White House arrival ceremony and
 - an invitation to stay at the Blair House (the US President's guesthouse across Pennsylvania Avenue).

India-US Bilateral Relations

Trade & Economic Relations between India and US

- The U.S. has emerged as India's biggest trading partner in 2022-23 on account of increasing economic ties between the two countries.
- In 2022-23, the bilateral trade between India and the USA stood at a record US\$ 191 billion as against US\$ 119.42 billion in 2021-22.
- In 2022-23, **India had a trade surplus of ~US\$ 30 billion with the US.**
- In FY 2020-21, India received the highest ever FDI amounting to US\$ 81.72 billion.
- USA became India's second largest source of FDI during 2020-21 with inflows of US\$ 13.82 billion.
- US is one of the top 5 investment destinations for Indian FDI.

Challenges in India – US relation

- **Ukraine war and Indian stand**
 - The United States worries about the India-Russia relationship, especially that India's reliance on Russian military imports will continue.
 - Recently, India's oil imports from Russia have displaced Iraq as its top supplier.
- **Challenges in trade and technology relationships**
 - The US still has significant export controls on India (instituted after the 1998 nuclear test), which inhibits the free transfer of technology.
 - In 2019, USA terminated India's designations as a beneficiary developing country under the **Generalized System of Preferences (GSP) programme.**
 - GSP is the largest and oldest US trade preference programme.
 - It is designed to promote economic development by allowing duty-free entry for thousands of products from designated beneficiary countries.
 - The United States is concerned about India's turn towards protectionism.
 - India makes up only two percent of the United States' merchandise trade due to policies that protect domestic industry from foreign competition.
- **United States is concerned about the state of Indian democracy**

- Many members of Congress and officials in the Biden administration are following reports on civil liberties and minority rights in India.
- Furthermore, questions are being raised surrounding **data protection in India** and what the implications are vis-à-vis surveillance and censorship.
- **Protracted delays in the processing of visas for the United States**
- Since the Covid-19 pandemic, protracted delays in the processing of visas for the United States have been a persistent irritant in bilateral relationship.
- Data published by the US embassy in India shows that the wait for B1 and B2 visas still stretches beyond 400 days in many instances.

ANCIENT MAYAN CITY

Recently, a previously unknown ancient Mayan city has been discovered in the jungles of southern Mexico by anthropologists.



About Ancient Maya city:

- It is located in the Balamku ecological reserve on the country's **Yucatan Peninsula**.
- This city has been named **Ocomtun** - meaning "stone column" in the Yucatec Maya language.
- This would have been an important centre for the peninsula's central lowland region between 250 and 1000 AD.
- The city includes large **pyramid-like buildings, stone columns, three plazas** with "imposing buildings" and other structures arranged in almost-concentric circles.
- It has a core area located on high ground surrounded by extensive wetlands.

Key Facts about Mayan Civilization

- The Mayans are probably the best-known of the **classical civilizations of Mesoamerica**.
- Originating in the **Yucatán peninsula around 2600 B.C.**, they rose to prominence around A.D. 250 in present-day southern Mexico, Guatemala, northern Belize and western Honduras.
- Building on the inherited inventions and ideas of earlier civilizations, the Maya developed **astronomy, calendrical systems and hieroglyphic writing**.

- They were also noted for elaborate and highly decorated ceremonial architecture, including temple pyramids, palaces and observatories, all built without metal tools.
- They were also skilled farmers, clearing large sections of tropical rainforest and, where groundwater was scarce, building sizable underground reservoirs for the storage of rainwater.

Where is Yucatan Peninsula?

- It is a Northeastern projection of Central America which is lying **between the Gulf of Mexico to the west and north and the Caribbean Sea to the east.**
- The peninsula is almost wholly composed of beds of **coralline and porous limestone rocks.**

TITANIC TOURIST SUBMERSIBLE

Recently, the Titan, the vessel that went missing in the area of the Titanic wreck in the North Atlantic.



About Titanic tourist submersible:

- **What it is?** A submersible is a small boat or other craft, designed especially for research and exploration.
- It is more **limited in its movement and how long** it can stay underwater.
- A submersible **needs a mother ship** that can launch and recover it.
- These are small, limited-range watercrafts designed for a set mission, that are built with characteristics that allow them to operate in a specific environment
- These vessels are **typically able to be fully submerged in water** and cruise using their own power supply and air renewal system.
- While some submersibles are **remotely operated and essentially manually controlled** or programmed robots, these usually operate unmanned.
- Vessels like the missing Titan are known as human-occupied vehicles.

What is a submarine?

- It is a watercraft that is capable of **independent operation under the sea.**
- It does **not require support ships** because submarines can renew their air and power supplies independently.

- When the submarine is to dive water is filled in water tanks and it is made heavier.
 - As soon as the average density of a submarine becomes greater than the density of seawater it sinks.
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CENTRE WITHDRAWS CONTROVERSIAL LIVESTOCK BILL

Why in news?

- Facing criticism, the Centre has withdrawn the draft Live-stock and Live-stock Products [Importation and Exportation] Bill, 2023.

Livestock Bill 2023

- **About**

- The Bill is meant to replace the Live-stock Importation Act, 1898, and the Live-stock Importation (Amendment) Act, 2001.
- It frames guidelines for the **import and export** of live animals.
- It is different from the existing law in three key aspects:
 - It allows export of live animals,
 - It widens the scope of animal import-export (including cats and dogs among ‘live-stock’), and
 - It takes away state governments’ powers to regulate this area.

- **Draft prepared by**

- The Department of Animal Husbandry and Dairying (DAHD), under the Ministry of Fisheries, Animal Husbandry and Dairying.

- **Need for a new bill**

- The present law that regulates import of live-stock is 125 years old.
- The Live-stock Importation Act, 1898, being the pre-constitutional/pre-independence Central Act. Hence, a need has been felt to align it with the contemporary requirements and prevailing circumstances related to **sanitary and phyto-sanitary measures**.

What is new in the proposed draft?

- **Development of exports of live-stock and live-stock products**

- The earlier law regulates only importation of live-stock, while the proposed draft Bill has provisions to regulate live-stock exports also.
- The Section 4 of the proposed Bill provides the government the power to make arrangements for promotion and development of exports of live-stock and live-stock products.
- **Expanded the definition of live-stock**
 - The proposed draft bill has 10 Sections, and has expanded the definition of live-stock to include feline and canines also.
 - As per the 1898 act, live-stock includes horses, kine, camels, sheep and any other animal which may be specified by the Central Government by notification in the Official Gazette.
- **Live-stocks and live-stock products as commodity**
 - The Centre has defined the live-stocks and live-stock products as commodity in the proposed draft Bill.
 - Commodity means live-stock, products of live-stock origin, live-stock genetic material, biological products and pathological material of live-stock origin.
- **Takes away some power of state government**
 - The proposed draft bill takes away some powers of state governments to regulate this area.

Criticism faced by the proposed draft Bill

- Animal rights organisations have said that allowing the live export of animals from India is a blanket free pass for the abuse of millions of animals farmed for food and other uses.
- According to 2021 figures released by the United Nations, almost 2 billion of the 80 billion land animals raised for food around the world are exported alive to different countries.

WHAT IS THE NEW COLLECTIVE QUANTIFIED GOAL?

What is the New Collective Quantified Goal?

- A commitment of ‘\$100 billion per year till 2020’ to developing nations from developed countries was a target set at the **Conference of Parties (COP) in 2009**.
- But estimates since then show addressing climate change may cost billions, and even, trillions of dollars.

- Therefore, the **2015 Paris Climate Agreement** agreed on setting a New Collective Quantified Goal (NCGQ) for climate financing prior to 2025 — a reference point which accounts for the needs and priorities of developing nations.
- The NCGQ is thus, termed the “most important climate goal”. **It pulls up the ceiling on commitment from developed countries.**
- The NCGQ is **expected to be finalised by 2024**. It will replace the current climate finance goal of \$100 billion annually from developed countries.

What is the Need for a New Finance Goal?

- Out of the promised \$100 billion per year, developed countries provided \$83.3 billion in 2020, as per a report by the Organisation for Economic Co-operation and Development.
 - These figures may be misleading and inflated by as much as 225%, an Oxfam analysis found, as “there is too much dishonest and shady reporting”.
- Moreover, the \$100 billion target set in 2009 was seen more as a political goal, since there was no effort to clarify the definition or source of ‘climate finance’.
- **The economic growth of developed countries has come at the cost of high carbon emissions, and thus they are obligated to shoulder greater responsibility.**

What do Developed Countries Say?

- Developed countries argue that NCQG must be viewed as a “**collective goal**” for all developed and developing countries.
- Experts worry this argument pushes the “**net zero**” pathways onto developing countries, which cannot feasibly pay for mitigation, adaptation, loss and damage, along with sustainably developing key elements of infrastructure.
 - Net zero refers to the **balance between the amount of greenhouse gas (GHG) that's produced and the amount that's removed from the atmosphere.**
 - It can be achieved through a combination of emission reduction and emission removal.
- Countries also argue for mobilising private-sector investments and loans as the critical component of climate finance.

DEENDAYAL ANTYODAYA YOJANA-NATIONAL URBAN LIVELIHOODS MISSION (DAY-NULM)

Recently, the United Nations Development Programme (UNDP) and the Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) entered into a collaborative partnership.



About the UNDP and DAY-NULM Partnership:

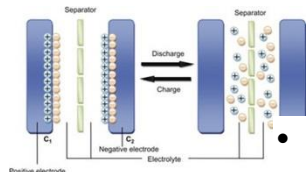
- **Aim:** To **empower women** to make **well-informed career choices** in the field of entrepreneurship.
- It will provide support for women looking to start and expand their enterprises such as the **care economy, digital economy, electric mobility, waste management, food packaging** and more.
- Focused on fostering entrepreneurship development and accelerating enterprise growth.
- **Time-Period:** It is a **three-year project, extendable beyond 2025** which will cover eight cities in the initial phase.
- UNDP will offer national-level capacity-building support to DAY-NULM.
- This support will focus on knowledge generation and management, such as compiling compendiums of best practices related to urban poverty, to enhance the implementation of national-level schemes.
- UNDP will also contribute to the initiative by **developing community business mentors called Biz-Sakhis** in selected project locations.
- These mentors, who possess valuable business knowledge, can support new and existing enterprises, and serve as a resource for DAY-NULM at a later stage.

Key facts about the DAY-NULM

- It is a flagship mission under the Union **Ministry of Housing and Urban Affairs**.
- It has the aim to uplift the urban poor by enhancing **sustainable livelihood opportunities through skill development**.
- **Funding:** It will be shared between the Centre and the States in the ratio of 75:25. For North Eastern and Special Categories – the ratio will be 90:10.

BIODEGRADABLE SUPERCAPACITOR

Recently, scientists at Gujarat Energy Research and Management Institute (GERMI) have developed the thinnest, lightweight and biodegradable paper-based supercapacitor.



About Biodegradable Supercapacitor:

• A supercapacitor is an **electrochemical charge storage device** with a fast charging/discharging cycle, **high power density and a longer lifecycle**.

• Features

- This supercapacitor which can fully charge a device within 10 seconds, has been **developed from seaweed** (marine macroalgae).
- The device is of **high tensile strength and performance**, as well as cost-effective, according to the researchers.
- The product **can be used in electronics, memory backup systems, airbags, heavy machines, electric vehicles, etc.**; hence, it holds a huge business prospect.

What is Seaweed?

- Seaweeds are **macroalgae attached** to rock or other substrata and are found in coastal areas.
- They are classified as **Chlorophyta** (green), **Rhodophyta** (red) and **Phaeophyta** (brown) based on their pigmentation.
- Among them, Chlorophyta holds more potential components like carbohydrates, lipids, proteins and bioactive compounds in the cell wall.
- Green seaweed has a high amount of a particular type of cellulose in its cell wall.