UPSC Daily Current Affairs 14 Jul 2021

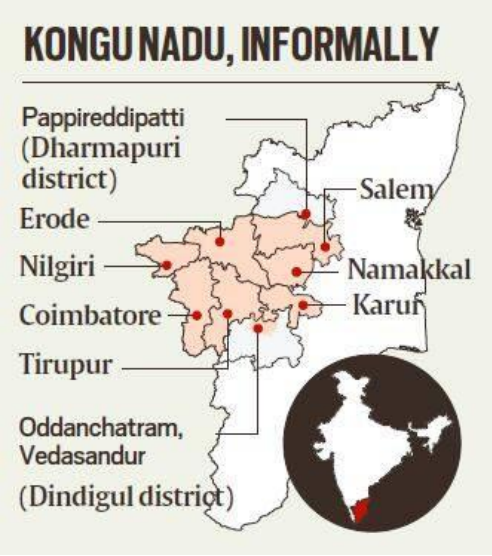
Kongu Nadu

(Topic- GS Paper I- Geography, Source- The Hindu)

Why in the news?

- Recently, the new list of Union Cabinet ministers has mentioned the name of 'Kongu Nadu', the informal name for a region in the western part of Tamil Nadu.

About Kongu Nadu



- Kongu Nadu is neither a place with a PIN code nor a name given formally to any region. It is a commonly used name for part of western Tamil Nadu.

Mention in Ancient literature

- In Tamil literature, it was referred to as one of the five regions of ancient Tamil Nadu.
- There were mentions of 'Kongu Nadu' in Sangam literature as a separate territory.
- In the present state of Tamil Nadu, the term is informally used to refer to a region that includes the districts of Nilgiris, Coimbatore, Tirupur, Erode, Karur, Namakkal and Salem, as well as Oddanchatram and Vedasandur in Dindigul district, and Pappireddipatti in Dharmapuri district.
- The name derives from Kongu Vellala Gounder, an Other Backward Caste (OBC) community with a significant presence in these districts.
- The region includes prominent businesses and industrial hubs at Namakkal, Salem, Tirupur and Coimbatore.

Lower Arun hydro electric project

(Topic- GS Paper I–Geography, Source- IE)

Why in the news?

- Recently, a memorandum of understanding (MoU) has been signed for execution of 679 MW Lower Arun Hydro Electric Project in Nepal between Satluj Jal Vidyut Nigam (SJVN) and Investment Board of Nepal (IBN) in Kathmandu Nepal.
- Satluj Jal Vidyut Nigam is a central public sector enterprise under Ministry of Power, Government of India

About Lower Arun hydro electric project

- It is a downstream development of Arun-3 HEP.

Location

- The Lower Arun Hydro Electric Project is located in **Sankhuwasabha and Bhojpur Districts of Nepal.**
- The project will not have any reservoir or dam and will be a tail race development of 900 MW Arun3 HEP.

About Arun 3 Hydro Electric Project

- This is the second project awarded to SJVN in Nepal.

- The first one being the 900 MW Arun 3 Hydro Electric Project in Sankhuwasabha District.
- Arun-3 Project is being implemented through wholly owned subsidiary company of SJVN i.e. SJVN Arun-3 Power Development Company Limited (SAPDC) incorporated in Nepal.

NTPC to set up India's single largest solar park at Rann of Kutch

(Topic- GS Paper III–Environment, Source- The Hindu)

Why in the news?

- NTPC Renewable Energy Ltd (NTPC REL) has recently the go-ahead from Ministry of New and Renewable Energy (MNRE) to set up 4750 MW renewable energy park at Rann of Kutch in Khavada, Gujarat.

More in the news

- **This will be India's largest solar park to be built by the largest power producer of the country.**
- It aims to build 60 GW Renewable Energy Capacity by 2032.
- Currently, the state owned power major has an installed capacity of 66 GW across 70 power projects with an additional 18 GW under construction.

Related Information

- Recently, NTPC has also commissioned India's largest Floating Solar of 10 MW (ac) on the reservoir of Simhadri Thermal Power Plant, Andhra Pradesh. An additional 15 MW (ac) would be commissioned by August 2021.
- Further, a 100 MW Floating Solar Project on the reservoir of Ramagundam Thermal Power Plant, Telangana is in the advanced stage of implementation.
- The Government of India has set a target of installing of installing 175 GW of renewable energy capacity by the year 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power.
- India's nationally determined contributions (NDC) at the Paris UNFCCC conference of parties (COP) in 2015 imply 350 GW of renewable energy capacity.
- **In the Climate Week in New York in 2019, the aspirations have increased to 450 GW of renewable energy capacity.**

Intended Nationally determined contributions

- The Paris Agreement requires all Parties to put forward their best efforts through nationally determined contributions (NDCs) and to strengthen these efforts in the years ahead.
- This includes requirements that all Parties report regularly on their emissions and on their implementation efforts.

- **It is not legally binding.**
- India also reaffirmed its **Intended Nationally Determined Contributions** commitments to meeting the goals under the Agreement in order to combat the climate change.

India's INDC, to be achieved primarily, by 2030

- India promised to reduce the "emissions intensity of its GDP by 33-35 % by 2030 from 2005 level.
- It will achieve about "40% cumulative electric power installed capacity from non-fossil fuel based energy resources (mainly renewable like wind and solar power) by 2030" with the help of transfer of technology and low-cost international finance, including from the Green Climate Fund.
- India also promised an additional carbon sink (a means to absorb carbon dioxide from the atmosphere) of 2.5 to 3 billion tonnes of carbon dioxide equivalent through additional forest and tree cover by the year 2030.

Planetary conjunction

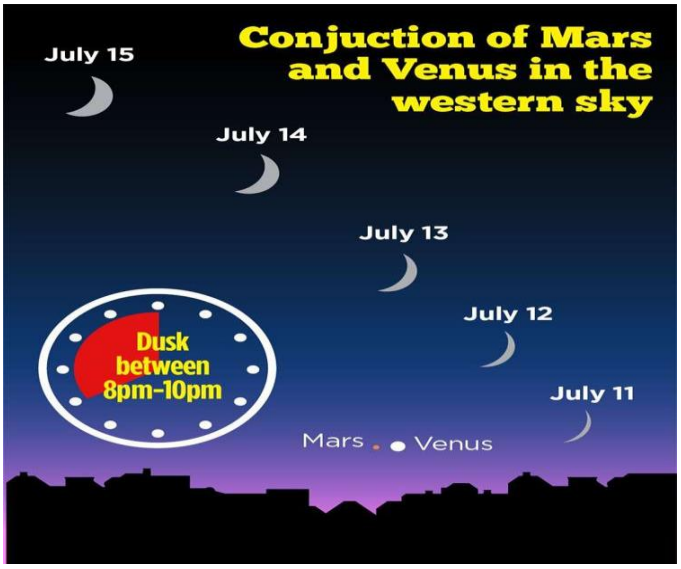
(Topic- GS Paper III–Science and Technology, Source- The Hindu)

Why in the news?

- According to a release from Anna Science Centre-Planetarium, the Mars, Venus and the Moon are set to line up for a "planetary conjunction" that can be viewed with the naked eyes, after the sunset in the western sky.

More on the news

- **According to experts, this would be the first of three conjunctions of Venus and Mars.**
- Mars and Venus will appear to be just 0.5º from each other from Earth.
- The next two are slated to happen on 12th February 2022 and 12th March 2022.



Triple Conjunction

- A triple conjunction is an astronomical event where two planets or a planet and a star meet each other three times in a short period, either in opposition or at the time of inferior conjunction, if an inferior planet is involved.

Deep Ocean Mission

(Topic- GS Paper III–Science and Technology + Economics, Source- The Hindu)

Why in the news?

- Recently government has aims to target over 100 billion "Blue Economy" through its Deep Ocean Mission (DOM) and ocean resources.

About "Deep Ocean Mission"

- Deep Ocean Mission will be a mission mode project to support the Blue Economy Initiatives of the Government of India.
- The estimated cost of the Mission will be Rs. 4077 crore for a period of 5 years to be implemented in a phase-wise manner.
- This mission will make India one among the handful of powerful nations that already have dedicated ocean studies and missions, including the US, Japan, France, Russia and China.

Nodal agency

- **Ministry of Earth Science** will be the **nodal ministry** implementing this mission.

Major Components of the Deep Ocean Mission

- Development of Technologies for Deep Sea Mining, and Manned Submersible.
- Development of Ocean Climate Change Advisory Services.
- Technological innovations for exploration and conservation of deep-sea biodiversity.
- Deep Ocean Survey and Exploration
- Energy and freshwater from the Ocean
- Advanced Marine Station for Ocean Biology

Significance of Mission:

- Oceans, which cover 70 percent of the globe, remain a key part of our life.
- About 95 percent of the Deep Ocean remains unexplored.
- For India, with its three sides surrounded by the oceans and around 30 percent of the country's population living in coastal areas, the ocean is a major economic factor supporting fisheries and aquaculture, tourism, livelihoods and blue trade.
- India's 7517 km long coastline is home to nine coastal states and 1382 islands.
- Considering the importance of the oceans on sustainability, the United Nations has declared the decade, 2021-2030 as the Decade of Ocean Science for Sustainable Development.

About Blue Economy

- The blue economy is the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem.

Other Blue Economy Initiatives:

a. Ocean Services, Modelling, Applications, Resources and Technology (OSMART) Scheme
b. India-Norway Task Force on Blue Economy for Sustainable Development
c. Sagarmala Project
d. National Fisheries Policy
e. Integrated Coastal Zone Management

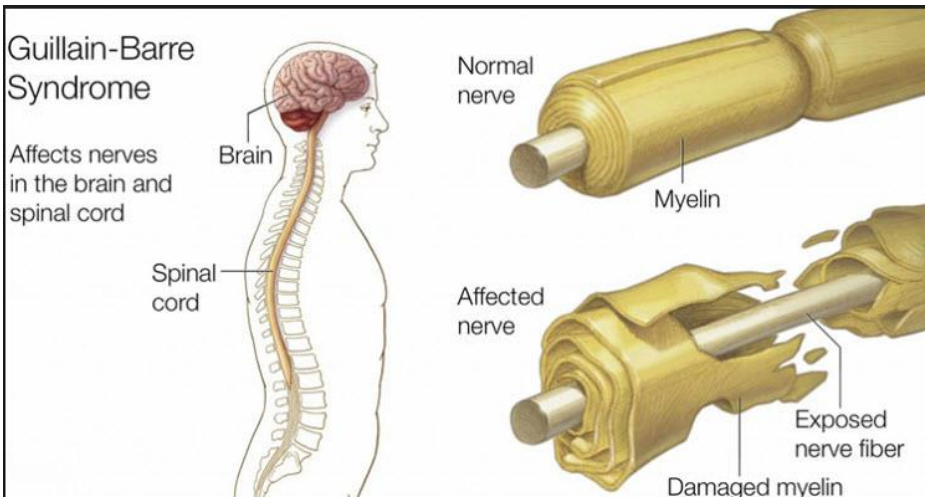
Guillain-Barré syndrome

(Topic- GS Paper III–Science and Technology, Source- The Hindu)

Why in the news ?

- Recently, the Johnson & Johnson's beleaguered COVID-19 vaccine may be associated with a small increased risk of Guillain-Barré syndrome.
- The Food and Drug Administration has added a warning about the potential side effect to its fact sheets about the vaccine.

About Guillain-Barré syndrome



- Guillain-Barré is a rare condition in which the body's immune system attacks nerve cells.
- It can cause muscle weakness and paralysis.
- It is most common in adults over 50.

Cause

- According to the CDC, the causes of GBS are not yet fully known but in most cases, GBS is preceded by an infection.
- This could be a bacterial or viral infection.
- GBS may also be triggered by vaccine administration or surgery.

India's First Cryptogamic Garden

(Topic- GS Paper III–Environment, Source- The Hindu)

Why in the news?

- Recently, India's first cryptogamic garden housing nearly 50 species of lichens, ferns and fungi was inaugurated in Uttarakhand's Dehradun district.

About Cryptogams

- Cryptogamae means "hidden reproduction" referring to the fact that no seed, no flowers are produced.
- Thus, cryptogams represent the non-seed bearing plants.

Best Known Cryptogams

- Algae, bryophytes (moss, liverworts), lichens, ferns and fungi are the best-known groups of cryptogams that require moist conditions to survive.

Bryophytes

- They are the simplest and primitive land plants that occupy an intermediate position between algae and pteridophytes.
- They are also called amphibian of plant kingdom.

Lichens

- They are a complex life form that is a symbiotic partnership of two separate organisms, a fungus and algae.

Ferns

- They are the largest living group of primitive vascular plants while fungi are a kingdom of usually multicellular eukaryotic organisms that are heterotrophs.