

Cold Wave And Severe Cold Wave:

❖ Context

- The MeT (**The Meteorological Office**) has issued a warning of severe cold conditions in northern and north western states of India.

What Is A Cold Wave?

- **The IMD records a cold wave when:**
 - **In the plains** the minimum temperature is equal to or less than 10 degree Celsius at a weather station, and is **4.5 degrees to 6.4 degrees** below the normal temperature for that period.
 - A cold wave may also be recorded at a station in the plains when the minimum temperature is less than or equal to **4 degree Celsius**.
 - **For hilly regions**, a cold wave is declared when the minimum temperature is less than or equal to 0 degree Celsius and the minimum temperature is **4.5 degrees to 6.4 degrees** below the normal.
 - **The IMD defines a cold wave qualitatively** as “a condition of air temperature which becomes fatal to the human body when exposed.”
 - **In ‘severe’ cold wave conditions**, where the minimum temperature is less than or equal to **10 degree Celsius, and departs from the normal by 6.5 degrees** or more, or if cold wave conditions persist for four days or more, the IMD’s impact matrix indicates an increased likelihood of illnesses like flu, due to prolonged exposure to the cold.

Why do cold waves occur?

- **According to the IMD**, the factors that bring cold waves to India include the movement of **cold air masses brought about by upper-level winds**.
- They can be triggered by **strong westerly winds** approaching northwest India and transporting cold air towards the southeast direction.
- **Buildup** of an extended area of relatively high pressure over northwest Asia can also bring cold waves.

Why cold wave condition in Northwest India?

- A **western disturbance** as a cyclonic circulation lies over north Pakistan and adjoining Jammu and Kashmir, according to an IMD bulletin.
- Western disturbances are storms that **originate in the Mediterranean region** and bring winter rainfall to northwest India.
- After this western disturbance moves, there is a brief gap. **In this gap** of five to six days, the IMD expects strong northwesterly and westerly cold winds over north India.
- “Like heat waves, cold waves are hazardous to those who are exposed to the cold.”

Rashtriya Gokul Mission

❖ Context

- Recently, Union Minister of Fisheries, Animal Husbandry & Dairying informed the Rajya Sabha that the **department is implementing Rashtriya Gokul Mission (RGM)**.

Rashtriya Gokul Mission (RGM)

- The Rashtriya Gokul Mission (RGM) is being implemented for development and conservation of indigenous bovine breeds since **December 2014**.
- It is also continued under umbrella scheme **Rashtriya Pashudhan Vikas Yojna** from 2021 to 2026 with a budget outlay of Rs.2400 crore.(Department of Animal Husbandry and Dairying: Nodal agency)
- **Implementing Agency**
 - Rashtriya Gokul Mission will be implemented through the “**State Implementing Agency (SIA** viz Livestock Development Boards).
- **Objectives**
 - To **enhance productivity** of bovines and **increasing milk production** in a sustainable manner using advance technologies.
 - To propagate use of **high genetic merit bulls** for breeding purposes.
 - To **enhance Artificial insemination coverage** through strengthening breeding network and delivery of Artificial insemination services at farmers doorstep.
 - To **promote indigenous cattle & buffalo rearing and conservation** in a scientific and holistic manner.

• **Components**

- Availability of High Genetic Merit Germplasm.
- Extension of Artificial Insemination Network.
- Development and Conservation of indigenous Breeds.
- Skill Development.
- Farmers Awareness.
- Research Development and Innovation in Bovine Breeding.

• **Gokul Gram**

- The Rashtriya Gokul Mission envisages the establishment of integrated cattle development centers, ‘**Gokul Grams**’ to develop indigenous breeds including up to 40% nondescript breeds.
- Gokul Grams will be established in.
 - The native breeding tracts and.
 - Near metropolitan cities for housing the urban cattle.

• **Significance**

- The scheme is important in enhancing milk production and productivity of bovines to meet growing demand of milk and **making dairying more remunerative** to the rural farmers of the country.
- This programme will also **benefit women** in particular since over 70% of the work involved in livestock farming is undertaken by women.

Face to Face Centres



News in Between the Lines

'Veer Bal Diwas'



❖ Context

- PM participated in historic programme marking 'Veer Bal Diwas' at Major Dhyan Chand National Stadium in Delhi.

❖ Key Highlights

- On 9th January 2022, the day of the Prakash Purab of Sri Guru Gobind Singh Ji, the Prime Minister had announced that 26th December would be observed as 'Veer Bal Diwas'.
- It is to mark the martyrdom of sons of Sri Guru Gobind Singh - Sahibzadas Baba Zorawar Singh Ji and Baba Fateh Singh Ji.

❖ The Significance of December 26 in Sikh history

- December 26 holds much significance in Sikh history as it commemorates the valour of 'Chhote Sahibzaade' the two youngest sons of the tenth Sikh master Guru Gobind Singh.
- Guru Gobind Singh had four sons, the Chaar Sahibzaade, all of whom sacrificed their lives to uphold the identity and dignity of Khalsa Panth against the Mughals.
- The two elder ones, Ajit Singh and Jujhar Singh, died in the battle of Chamkaur Sahib.
- But the bravery and sacrifice of Zorawar Singh and Fateh Singh is considered unparalleled as they were bricked alive on the orders of Wazir Khan, the Mughal faujdar of Sirhind, for refusing to renounce their faith.
- Gurdwara Sri Fatehgarh Sahib stands on the site where the two Sahibzaadas were executed on December 12, 1705, which falls on December 26 as per the current calendar.

Srisailam Temple



❖ Context

- President of India inaugurated the project "Development of Srisailam Temple in the State of Andhra Pradesh"

❖ Key Highlights

- The components executed in the project include interventions like Amphitheatre, Illuminations and Sound and Light Shows, Toilet Complexes, Souvenir Shops, Food court etc.
- The project aims to make Srisailam Temple a world class pilgrimage and tourist destination.
- The project has been sanctioned and executed under PRASHAD scheme viz. National Mission on Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive of the Ministry of Tourism.

❖ Srisailam Sri Mallikarjuna Swamy Temple

- It is dedicated to Lord Shiva and his consort Goddess Parvati and the only temple in India significant to both Saivism and Shaktism.
- The presiding deity of the place is Brahmaramba Mallikarjuna Swamy in natural stone formations in the shape of Lingam and is considered one of the 12 Jyotirlingas of Lord Shiva and one of the 18 Maha Shakti Peethas of the Goddess, Parvati.
- Apart from being one of the 12 Jyotirlingas and Shakti Peethas of India, the temple is also classified as one of the Paadal Petra Sthalam.
- The idol of Lord Mallikarjuna Swamy and Goddess Bhramaramba Devi are thought to be 'Swayambhu' or self-manifested, and the unique combination of Jyothirlingam and Mahasakthi in one complex is one-of-a-kind.

National AVGC-XR Mission

❖ Context

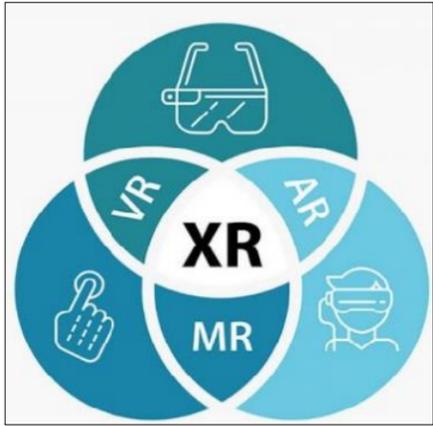
- The Animation, Visual Effects, Gaming and Comic (AVGC) Task Force has called for a National AVGC-XR Mission with a budget outlay to be created for integrated promotion & growth of the AVGC sector.

❖ Key Highlights

- The Union Budget had announced the constitution of a Task force on AVGC to identify interventions to build domestic capacity for serving our markets and the global demand.
- AVGC Task Force was constituted under the Chairmanship of Secretary, Ministry of I & B, Shri Apurva Chandra, to help realize the full potential of the AVGC sector in India, with key stakeholders from the Industry and the Government.

Face to Face Centres



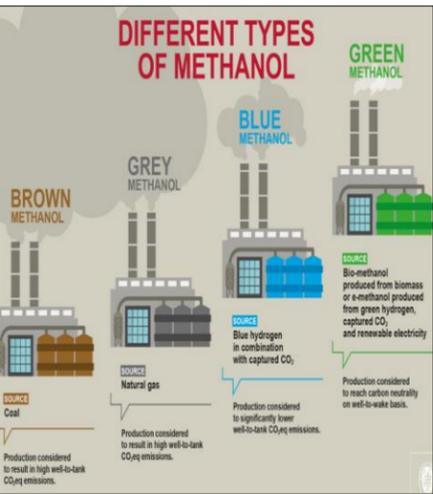


- **Task force recommends** 'Create in India' campaign with exclusive focus on content creation, In India, For India & For World!
- Develop Talent ecosystem, leverage Start-Up India, suggests Task Force.
- Report calls for **leveraging NEP** to develop creative thinking with dedicated AVGC course content at school levels.
- **The AVCG-XR sector** can provide immense employment opportunities to the youth who can serve the global market and the Indian talent can lead the way in this sector.

❖ **Recommendations**

- The main recommendations of the Task Force **categorized broadly under 4 categories are as under.**
 1. Domestic Industry Development for Global Access.
 2. Developing Talent ecosystem to realize Demographic Dividends.
 3. Enhancing Technology & Financial Viability for Indian AVGC Industry.
 4. Raising India's soft power through an Inclusive growth.

Green Methanol



❖ **Context**

- NTPC and Tecnimont sign MOU to explore possibility to develop Green Methanol Production.

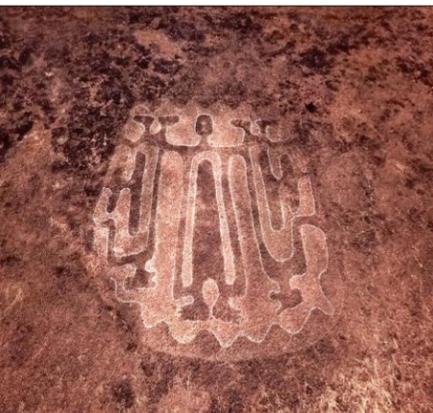
Key Highlights

- **Objective of MOU** is to jointly evaluate and explore the possibility to develop commercial scale Green Methanol Production facility at NTPC project in India.
- Green Methanol Project involves **capturing carbon from NTPC power plants** and converting it into a green fuel.
- Green Methanol has a **wide range of applications**, including serving as a base material for the **chemical industry**, storing **renewable electricity**, and even as a transportation fuel.
- It is also considered as a **substitute fuel for maritime fuel applications**.
- Green Methanol project aligns with **NTPC's commitment to sustainability** and renewable energy, and will significantly contribute to India's energy transition.

❖ **Different Ways Of Producing Methanol**

- **Brown methanol** is produced from coal and may not significantly reduce well-to-wake carbon dioxide emissions.
- **Grey methanol** is produced from natural gas and may not significantly reduce well-to-wake carbon dioxide emissions.
- **Blue methanol** is produced using blue hydrogen in combination with carbon capture technology, vastly reducing well-to-tank carbon dioxide emissions.
- **Green methanol** may be bio-methanol produced from biomass or e-methanol produced from green hydrogen, captured CO2 and renewable electricity. Both ways may be considered as enabling neutral well-to-wake carbon dioxide emissions.

Ratnagiri Prehistoric Rock Art



❖ **Context**

- Experts and conservationists have raised concerns over the proposed location for a **mega oil refinery in Barsu village** of Maharashtra's Ratnagiri district.
- They claim that the refinery might damage **prehistoric geoglyphs** found in the area.

❖ **Key Highlights**

- The sites are protected by the state archaeology department and the Archaeological Survey of India (ASI).
- In April, these sites in the Konkan region were **added to a tentative list of UNESCO's world heritage sites**.
- The UNESCO listing dates these sites to be over 12,000 years old.
- Ratnagiri's prehistoric sites are **among three Indian attractions that may soon become World Heritage Sites**.
 - The other two include Jingkieng Jri, the living root bridge in Meghalaya, and Sri Veerabhadra Temple in Andhra Pradesh's Lepakshi.

❖ **Geoglyphs**

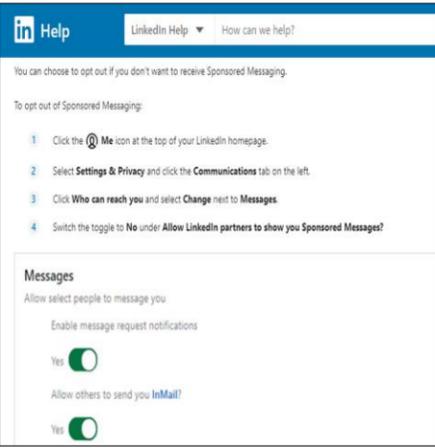
- Geoglyphs are a form of prehistoric rock art, created on the surface of laterite plateaus (Sada in Marathi).

Face to Face Centres



- They are made by removing a part of the rock surface through an incision, picking, carving or abrading.
- They can be in the form of rock paintings, etchings, cup marks and ring marks.
- Ratnagiri district has more than 1,500 pieces of such art, also called “Katal shilpa,” spread across 70 sites.
- **Significance**
 - Ratnagiri’s rock art is evidence of the continued existence of human settlements from the Mesolithic (middle stone age) to the early historic era.
 - The geoglyphs also show the existence of certain types of fauna that are no longer present in the region today.

Dark Patterns



❖ Context

- Some Internet-based firms have been tricking users into agreeing to certain conditions or clicking a few links.

❖ About Dark Patterns

- The unsuspecting users would not have accepted such terms or clicked URLs (uniform resource locator), but for the **deceptive tactics deployed by tech firms**.
- Such acceptances and clicks are **flooding inboxes of the users with promotional emails they never wanted**, making it hard to unsubscribe or request deletion.
- These are examples of “dark patterns,” also known as “deceptive patterns.”
- Such patterns are unethical user interface designs that deliberately make your Internet experience harder or even exploit users.
- In turn, they benefit the company or platform employing the designs.
- By using dark patterns, digital platforms take away a user’s right to full information about the services they are using, and reduce their control over their browsing experience.
- The term is credited to UI/UX (user interface/user experience) researcher and designer Harry Brignull, who has been working to catalogue such patterns and the companies using them since around 2010.

Kala Azar Disease

WHAT IS KALA-AZAR	
<ul style="list-style-type: none"> • A slow progressing indigenous disease • Caused by protozoan parasite of genus <i>Leishmania</i> • In India, <i>Leishmania donovani</i> is the only parasite causing the disease • The parasite primarily infects reticuloendothelial system 	<p>Signs & Symptoms</p> <ul style="list-style-type: none"> ➤ Recurrent fever ➤ Loss of appetite ➤ Weakness ➤ Spleen enlargement ➤ Anaemia
Transmission	
<ul style="list-style-type: none"> • Sandfly of genus <i>Phlebotomus argentipes</i> only known vector of kala-azar in India 	<ul style="list-style-type: none"> • Indian kala-azar has a unique epidemiological feature of being anthroponotic • Female sandflies pick up parasite while feeding on infected human host
<ul style="list-style-type: none"> • Development and multiplication in the gut of sandflies and move to mouthparts 	<ul style="list-style-type: none"> • Parasite undergoes morphological change to become flagellate • Healthy human hosts get infection when an infective sandfly vector bites them

❖ Context

- Recently, Prime Minister of India emphasised that India has eradicated diseases like Smallpox, Polio and 'Guinea Worm'. He spoke about **Kala Azar, another disease which is about to be eradicated**.

❖ Kala Azar Disease

- **About**
 - It is also known as **Black death or Visceral leishmaniasis**.
 - It is caused by protozoan parasites which are transmitted by the bite of infected female phlebotomine sandflies.
 - **In India Leishmania donovani** is the only parasite that causes this disease.
 - The **female sandflies** feed on human blood to produce eggs.
 - The vector is known to **live in cracks and crevices of muddy houses**, especially in **dark and humid** corners.
- **Symptoms**
 - Kala-azar is characterized by irregular bouts of fever, weight loss, enlargement of the spleen and liver, and anaemia.
 - If not treated the disease is almost always fatal.
- **Distribution**
 - Most cases occur in Brazil, East Africa and in India.
 - An estimated 50 000 to 90 000 new cases of VL occur worldwide annually, with only between 25 to 45% reported to WHO.
- The disease affects some of the poorest people and is associated with malnutrition, population displacement, poor housing, a weak immune system and lack of financial resources.
- This is also linked to environmental changes such as deforestation, building of dams, irrigation schemes and urbanization.

Face to Face Centres



Trademark



❖ Context

- Recently, the Delhi High Court, in the case of Hamdard National Foundation (India) vs Sadar Laboratories Pvt. Ltd., restrained Sadar Laboratories from manufacturing and selling beverages under the **impugned trademark 'Dil Afza'**.
- The court observed that the trademark '**Rooh Afza**' is prima facie a strong mark requiring a high degree of protection as it has acquired immense goodwill.

❖ Trademark

- A trademark is a distinctive sign or indicator used by a business organisation to distinguish its products or services from those of other entities.
- It serves as a badge of origin exclusively identifying a particular business as a source of goods or services.
- Trademark infringement is the unauthorised usage of a sign that is identical or deceptively similar to a registered trademark.
- In India, trademarks are **governed under Trademarks Act, 1999** (it deals with precise nature of rights one can acquire in respect of trademarks), under aegis of **Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce**.
- The implementing body is **Controller General of Patents, Designs and Trademarks**.

Face to Face Centres

