

1. Asian Dendrochronology Conference

Why in News?

- The 6th Asian Dendrochronology Conference being held at the Birbal Sahni Institute of Palaeosciences in Lucknow.
- It is the first time that the conference is being held in India.

Dendrochronology:

- It is the study of tree rings that hold a wealth of information about not only a tree's past but also that of the ecosystem in which it lives.
- The colour of old wood is always darker than a comparatively newer wood which creates a contrasting pattern of rings year on year.
- In years of good growth with a healthy supply of resources, the rings are thick.
- It is thin when the ecosystem has dearth of resources.
- It is much better than climate records as their density in a region is much greater than climate observatories and their information close enough to Actual Conditions.

2. Light Water Reactor

Why in News?

- India's recent decision for building light water reactors (LWRs) under 'Make in India' Program.

About the News:

- India is collaborating with Russia's Rostom State Atomic Energy Corporation for looking at the possibilities of localisation of LWR systems.
- In the international conference organised by Bhabha Atomic Research Centre (BARC) and Nuclear Power Corporation of India Limited (NPCIL), discussions were held over future utilization of LWRs in India to supplement existing plans of construction of heavy water pressurized reactors.
- The conference is attended by heads and management of Department of Atomic Energy (DAE), Atomic Energy Regulatory Board, BARC, HBNI and other organisations from India and other countries, that are involved in design, building and operations of LWRs.
- India is now manufacturing Pressurized Heavy Water reactor (PWHR). Only Kudankulam has imported LWRs reactors, for which India is dependent on Russia for equipment.

About Light-water reactor (LWR)

- Both Light Water Reactors [LWR] and Hard Water reactors [HWR] are reactors based on Coolant and Moderator.
- Both are the most common type of thermal-neutron reactor.
- It is a type of thermal-neutron reactor that uses NORMAL WATER, as opposed to heavy water, as both its coolant and neutron moderator.
- There are three types of light-water reactors: the pressurized water reactor (PWR), the boiling water reactor (BWR), and the supercritical water reactor (SCWR).

3. Jnanpith Award

Why in News?

- Eminent Malayalam poet Akkitham has been chosen for the 55th Jnanpith Award.

About:

- Born in 1926, Akkitham Achuthan Namboothiri, popularly known as Akkitham is one of the most revered names in Malayalam poetry.
- Apart from poetry, his literary excellence has footprints in genre like drama, reminiscence, critical essays, children literature, short stories and translations.
- Being a Padma Shri awardee, he has won several literary accolades including the Sahitya Akademi Award (1973), Kerala Sahitya Akademi Award (1972 and 1988), Mathrubhumi Award, Vayalar Award and Kabir Samman.
- **The Jnanpith award** is the highest literary award in India and can only be conferred upon an Indian citizen. English language was added to the list of languages for consideration after the 49th Jnanpith Award.
- The recipients of the award are given a cash prize of Rs 11 lakh, a citation plaque and a bronze replica of Goddess Saraswati.
- In 1965, famous Malayalam writer G Sankara Kurup became the first winner of the Jnanpith Award.

4. NAG Missiles

Why in News?

- DRDO has said that NAG, the Anti-Tank Guided Missile in the advanced stages of development.

About:

- The Nag Anti-Tank Guided Missile (ATGM) has been indigenously developed under the Indian Ministry of Defence's Integrated Guided Missile Development Programme (IGMDP), which also involved the development of four other missiles that are Agni, Akash, Trishul and Prithvi.
- Nag is a third-generation; fire-and-forget, anti-tank guided missile developed by India's state-owned Defence Research and Development Organisation (DRDO) to support both mechanised infantry and airborne forces of the Indian Army.
- It is an all-weather conditions with day and night capabilities and with a minimum range of 500m and maximum range of 4 km. Nag can be launched from land and air-based platforms. The land version is currently available for integration on the Nag missile carrier (NAMICA).
- The helicopter-launched configuration, designated as helicopter-launched NAG (HELINA), can be fired from Dhruv advanced light helicopter (ALH) and HAL Rudra (ALH WSI) attack helicopter. The Man Portable Anti-Tank Guided Missile (MPATGM), in an advanced stage of development, was a fourth generation ATGM. "In a year it will be ready for production."

5. Indian Metrological Department

Why in News?

- Indian Metrological Department has said that winter this year would be warmer than average over most parts of India.

About:

- Minimum temperatures over most parts of central and peninsular India are likely to be warmer than normal by ≥ 1 degree Celsius.
- India's 'core cold wave' zone covers Punjab, Himachal Pradesh, Uttarakhand, Delhi, Haryana, Rajasthan, Uttar Pradesh, Gujarat, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal, Odisha and Telangana.

What is Cold Wave?

- Cold wave is characterized by a rapid and marked fall of temperature. The term ‘cold’ describes an unusual fall in temperature that is triggered by the transport of cold air masses into a specific area.
- The “wave” in cold wave is apparent in the upper-air flow (the Jetstream), which is usually amplified into a strong ridge-trough pattern during a major cold outbreak.
- Cold waves affect much larger areas than blizzards, ice storms, and other winter hazards.

About IMD:

- It is an agency of Union Ministry of Earth Sciences.
- It is responsible for meteorological observations, seismology and weather and climate related forecasts for the country.
- It is mandated to warn against severe weather phenomenon like cold and heat-waves, dust storms, cyclones, heavy rain and snow and others.

6. UNDP Accelerator Lab

Why in News?

- The UNDP Accelerator Lab India project was recently launched in collaboration with the government’s Atal Innovation Mission.

Accelerator Lab:

- It seeks to address some of the most pressing issues facing India, including air pollution, through innovation.
- The laboratory will be housed in the UNDP India office has partnered with the Indian government’s Atal Innovation Mission to achieve its objectives.
- Other issues that the laboratory will seek to address include sustainable water management and client-resilient livelihood.
- The vision is to make faster progress in meeting the ambitious Sustainable Development Goals (SDGs) of the U.N. by 2030.

7. Yuwaah Youth Skilling Initiative

Why in News?

- UNICEF has informed that they have launched 'YuWaah' Generation Unlimited in India.

YuWaah:

- YuWaah is a multi-stakeholder alliance which aims to facilitate youth to gain relevant skills for productive lives and the future of work.
- The target age group of YuWaah includes adolescent girls and boys and its key mission is to promote access to foundational, transferable and 21st century skills for youth inside and outside formal education systems.
- This includes defining foundational skills, life skills and flexible learning and identifying and scaling impactful delivery models.
- It intends to create platforms to guide youth to market opportunities (career guidance, mentorship, internships, apprenticeships) and facilitate integration of career guidance in school education.

8. Exercise Mitra Shakthi - VII

Why in News?

- Seventh edition of **Mitra Shakthi**, joint military exercise between the **Indian Army** and the **Sri Lanka Army** is to be held in Pune, Maharashtra, this year.

Exercise Mitra Shakthi - VII

- The exercise aims to bolster existing bonds of understanding and close working relationship between the two forces.
- It is an annually conducted between both organizations since 2012.
- The exercise can enhance capacity among participants and promote interoperability, military cooperation, the conduct of joint tactical operations, sharing of experiences and explore possibilities for any potential security threats in future.

9. Paddy Stubble Burning: Pollutes both the Air and the Soil

Why in News?

- Agriculture and Farmers Welfare Minister had said that paddy stubble burning not only creates **air pollution** but it also adversely affects the **quality and fertility of soil**.

Paddy Stubble Burning

- Stubble burning refers to the post-harvest practice of intentionally setting fire to the straw stubble that remains after grains (like paddy and wheat) have been harvested.
 - ✓ The practice mostly carried out in **Punjab, Haryana and UP** contributes to air pollution crises in **New Delhi** and its surroundings.
 - ✓ For farmers, burning of the residues is **the easiest and the cheapest** way of disposing it owing to lack of time, equipment and awareness.
 - ✓ One ton of paddy straw contains around 5.5 kg nitrogen, 2.3 kg phosphorus pentoxide, 25 kg potassium oxide, 1.2 sulphur, which are lost due to burning of paddy straw.
 - ✓ Around 50 to 70 percent of micro nutrients absorbed by rice and 400 kg of carbon also lost due to burning. Also, some of the soil properties like soil temperature, moisture and soil organic matter are greatly affected due to burning.

10. Child-Migrant Crisis in Greece

Why in News?

- United Nations High Commissioner for Refugees has asked, Europe to help tackle a crisis situation in Greece, where roughly 5,000 child migrants live in danger of exploitation and violence.

Child-Migrant crisis in Greece:

- Hundreds of migrants arrive on the Greek islands from Turkey every day.
- Around 39,000 are already housed in island camps and 22,000 more on the mainland.
- The living conditions in the camps on the island of Lesbos are poor with generalised tension often resulting in violence, especially against minors.
- Protests have also taken place in several towns in northern Greece, where the locals stood against the relocations of asylum seekers.

11. Line of Credit

Why in News?

- Prime Minister Narendra Modi has announced a 400million dollar Line of Credit of to Sri Lanka to boost development in Sri Lanka.

Line of Credit:

- The Line of Credit is not a grant but a '**soft loan**' provided on concessional interest rates to developing countries, which **has to be repaid by the borrowing government**.
- The LOCs also **helps to promote exports of Indian goods and services**, as certain value of the contract must be sourced from India.
- The projects under LOCs are spread over different sectors (Agriculture, Infrastructure, Telecom, Railway, Transmission/Power, Renewable Energy etc.)
- The actual implementation of LOC projects in various countries is dependent on local factors, such as prevailing political & social conditions in the borrowing countries.

