

Current Affairs search results for tag: Environment

1. Technology for Air Quality Monitoring System launched by MeitY (Jan. 18, 2023)

The Secretary, MeitY, **Alkesh Kumar Sharma** has launched the **Technology for Air Quality Monitoring System (AI-AQMS v1.0)** developed under MeitY supported projects on 17 January in **New Delhi**.

An overview of the news

- **Center for Development of Advanced Computing (C-DAC)**, Kolkata has developed an outdoor air quality monitoring station in collaboration with **TeXMIN, ISM, Dhanbad**.
- It has been developed under the '**National Program on Electronics and ICT Applications in Agriculture and Environment (AgriEnIcs)**'.
- It will monitor environmental pollutants which include parameters like **PM 1.0, PM 2.5, PM 10.0, SO2, NO2, CO, O2**, ambient temperature, relative humidity etc. for continuous air quality analysis of the environment.
- **The transfer of technology (ToT)** was done at MeitY, New Delhi in which a ToT agreement has been signed between Senior Director & Centre Head, C-DAC, Kolkata and Dr. Deepa Taneja, CEO, J.M.EnviroLab Private Limited.

2. Environment Ministry included Neelakurinji in the list of protected plants (Jan. 17, 2023)

Neelakurinji in the list of protected plants

The **Ministry of Environment, Forest and Climate Change (MoEF)** has listed **Neelakurinji (Strobilanthes kunthiana)** in the list of **protected plants** under **Schedule III** of the **Wildlife (Protection) Act, 1972**.

An overview of the news

- According to the Environment Ministry, those who uproot or destroy the plant will be **fined Rs 25,000** and **imprisoned for three years**.
- **Cultivation** and possession of this plant is not allowed.
- Neelakurinji has been included in the list after the Center expanded the earlier protected list of **six plant species to 19**.

About Neelakurunji

- Neelakurinji is a **tropical plant species** and is native to the **shola forests in the Western Ghats**.

- It is also found in **Shevaroy Hills in the Eastern Ghats, Annamalai Hills in Kerala and Sanduru Hills** in Karnataka.
- It grows on mountain slopes at an altitude of **1300 to 2400 meters** to a **height of 30 to 60 cm.**
- The flowers of Neelakurinji are **violet-blue in colour** and bloom once in 12 years. The flower has no scent or any medicinal value.
- Because of these flowers, the Nilgiri hills at the southern end of the Western Ghats are called the **Blue Mountains.**
- It is one of the **rarest plant species** that grows in the Western Ghats and does not grow in any other part of the world.
- It is classified as an **endangered species.**

3. CMPDIL Invents New Dust Control Technology (Jan. 12, 2023)

In order to minimize and control the **fugitive dust** in mining areas, **Central Mine Planning and Design Institute Limited (CMPDIL), Ranchi** has invented a "**System and Method for Controlling Generation and Movement of Fugitive Dust**".

An overview of the news

- CMPDIL, Ranchi is a consultancy subsidiary of **Coal India Limited.**
- It has obtained a **patent** for the invention in December, 2022 (Patent No. 416055).
- This system can be used in mines, thermal power plants, railway sidings, ports, construction sites where coal or other mineral/fugitive material is stored under open sky.

About invention

- The invention relates to the synchronized application of **windbreak (WB)** and **vertical greenery system (VGS)** for reducing generation and dispersion of fugitive dust.
- WB and VGS are positioned in the **upwind and downwind directions** with respect to the blown dust source, respectively.
- WB reduces the speed of the **oncoming wind towards the source** and hence, reduces the intensity of the ambient air to pick up dust while it blows over the source.
- The VGS acts as a filter and reduces the amount of **residual dust** moving towards the receptors in the downward direction along with the air.
- Therefore, there is a significant reduction in the dust concentration in the ambient air at various **receptors** located in the down-wind direction.

What is Fugitive Dust?

- Fugitive dust is a form of **particulate matter** that contributes to air pollution.

- It refers to the dust particles which like to run in the air without a directed place.
- It is produced from various sources that come in contact with the air.

4. Norway's Climate Investment Fund invests Rs 90 crore in ReNew Company's Karnataka transmission project (Jan. 4, 2023)

According to the Norwegian embassy in India “ **Norway's Climate Investment Fund**, managed by Norfund, together with **Norwegian pension fund KLP**, will invest **Rs 90 crore** in a transmission project in Karnataka being developed by [ReNew Power company](#). ”

The Norwegian fund together will hold 49% stake in the ReNew's transmission project in Koppel, Karnataka.

The Norwegian investment in Karnataka will connect 2.5 GW of renewable capacity to the national grid.

Climate Fund Investment in India

This will be the **third investment** of the Climate investment fund in India. The fund has already made two previous investments in India. It has invested in a large-scale solar park being developed by the Italian Enel **company in Rajasthan**. It has also invested in India's leading developer of distributed solar energy solutions, Fourth Partner Energy.

Norway's new Climate Investment Fund

Norway's new **Climate Investment Fund** which became operational in May 2022 has been set up by the Norway government to invest in developing countries to encourage the transition from fossil based fuels to renewable energy sources. This is expected to reduce the emission of greenhouse gasses and slow down global warming.

It is managed by **Norfund**. Norfund is a Norwegian Investment Fund owned by the government of Norway and it invests in developing countries.

ReNew Company

ReNew is one of the largest renewable energy independent power producers globally. ReNew develops, builds, owns and operates utility-scale wind energy, solar energy and hydro projects.

As of October 10, 2022, ReNew has a gross total portfolio of 13.4 GW of renewable energy projects across India, including commissioned and committed projects.

Founder Chairman and CEO of the Company: **Sumant Sinha**

5. Hyderabad to become India's first city with 100% sewerage facilities by May 2023 (Jan. 2, 2023)

According to the Minister of Municipal Administration and Urban Development, IT and Industries of [Telangana](#), **K. T. Rama Rao** said that **Hyderabad** will become the first city

in India to have **hundred per cent sewerage facilities** by next April-May. He made this statement on 1 January 2023 while inaugurating a flyover in Hyderabad.

He said that 31 new Sewage treatment plants (STP) are being built in the city with an investment of Rs ₹3,866 crores.

Rao said, "Keeping the floods of October 2020 in mind, we have developed the Strategic Nala development program with around ₹1000 crores. We will finish the project by March-April 2023. Hyderabad will be the first city in India to have 100 per cent sewerage facilities by April-May",

Chief Minister of Telangana: **K.Chandrashekhar Rao**

Governor of Telangana: **Tamilisai Soundararajan**

6. 225 kilometre journey to save the ending forests in Rajasthan (Dec. 27, 2022)

225 kilometre journey to save the ending forests in Rajasthan

A unique journey of **225 kilometres** was taken out from remote villages and hamlets of **western Rajasthan**. It ended at Jaisalmer district headquarters last week. The purpose of the journey was to demand the protection of the **Oran or the sacred groves**.

Important facts

- The participants travelled 225 km with a pledge to preserve the sacred groves as a **lifeline for the desert**.
- This raised a strong demand for the protection of Oran or the sacred groves that are facing the **threat of destruction**.
- The Oran or sacred groves face the threat of destruction as their land is being allocated for renewable energy infrastructure and **high-tension power lines**.
- [Great Indian Bustards](#) have died during the last few years because of collisions with power lines.

About Oran or the sacred groves

- 'Orans' are community forests that act as a store of biodiversity, enable effective water management and serve as a community based regeneration system.
- Oran has a rich diversity of **traditional flora and fauna and water bodies** and is considered sacred and protected by the local people.
- It also ensures sustainable extraction of **Non-Timber Forest Produce (NTFPs)** by villagers, in the world's oldest Aravali Mountain Range and in the Great Indian Desert of Rajasthan.
- Sacred groves have been a living expression of man's historical, cultural and emotional attachment to forests.
- Oran also forms the natural habitat for India's most critically endangered bird, the **Great Indian Bustard**.

7. Unique musical dance event held in New Delhi to recharge electric vehicle by dancing (Dec. 23, 2022)

recharge electric vehicle by dancing

The Union Ministry of Petroleum and Natural Gas organized a unique one-day event on 23 December 2022, called '**Dance to Decarbonise**', where renewable energy generated through dance was used to charge electric vehicles. This unique event was held at the **National Stadium, in New Delhi** as a run up to the India Energy Week that will be held in Bangalore in the month of February 2023.

One of the imperatives of this event was to build engagement around sustainability by leveraging dance and music. The activity involved setting up a state-of-the-art stage, which will harness renewable energy created by people dancing on it to charge an SUV and an e-auto rickshaw.

The event is seen as a commitment by the Government to achieve net-zero emissions by 2070 and the implementation of responsible energy sources over transformational energy systems for the future.

Union Ministry for Petroleum and Natural Gas: **Hardeep Singh Puri**

8. Over 190 nations adopt landmark biodiversity pact to restore natural ecosystems (Dec. 20, 2022)

Over 190 nations adopt landmark biodiversity pact to restore natural ecosystems

Chaired by **China** and hosted by **Canada**, the **15th Conference of the Parties (COP 15)** of the United Nations Convention on Biological Diversity adopted the "**Kunming-Montreal Global Biodiversity Framework**" (GBF), which sets **four goals and 23 targets for 2030**.

Kunming-Montreal Global Biodiversity Framework" (GBF)

- Over **190 nations** of the world on 19 December agreed on a historic package of measures deemed critical to addressing the dangerous loss of biodiversity and restoring natural ecosystems.
- The Kunming-Montreal Global Biodiversity Framework provides a global roadmap for the conservation, restoration and sustainable management of biodiversity and ecosystems for the next decade.
- The **objective** of the Framework is to catalyze, enable and inspire urgent and transformative action by governments and local governments, with civil society participation, to prevent biodiversity loss.
- In this, four goals and 23 targets have been set which are to be achieved by 2030.

Four global goals**Goal 1**

- Maintain, enhance or restore the integrity, connectivity and resilience of all ecosystems, while significantly increasing the area of natural ecosystems by 2050.
- Stop human-induced extinction of known threatened species and reduce the extinction rate and risk of all species tenfold by 2050.

Goal 2

- By 2050, the sustainable use and management of biodiversity for the benefit of present and future generations and the valuing and promotion of nature's contribution to people, including ecosystem functions and services.

Goal 3

- Monetary and non-monetary benefits from the use of genetic resources, and digital sequence information on genetic resources, and traditional knowledge associated with genetic resources, to be shared fairly and equitably with indigenous peoples and local communities.

Goal 4

- Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access and transfer of technology to fully implement the Kunmin-Montreal Global Biodiversity Framework in a safe and secure way for all parties, especially developing countries be equally accessible.

Global targets

- **Effective conservation and management of at least 30 per cent of the world's lands, inland waters, coastal areas and oceans**, with emphasis on areas of particular importance for biodiversity and ecosystem functioning and services. At present, only about 17% of land and 7% of oceans are protected.

9. A non-paper on what would become the post-2020 Global Biodiversity Framework (GBF) was released (Dec. 19, 2022)

the post-2020 Global Biodiversity Framework (GBF) was released

A non-paper on what would become the **post-2020 Global Biodiversity Framework (GBF)** was released at a **UN summit in Montreal** on 18 December, seeking to reconcile the demands of developing and developed countries.

Important facts

- If agreed to by China, it will be a historic moment when the world agrees to **conserve global biodiversity by 2030**.
- The draft GBF will be discussed on the last day of the conference. There needs to be a consensus on the framework to be adopted.
- One of the **GBF's 23 goals** is to reach **near-zero emissions by 2030**, while respecting the rights of indigenous peoples and local communities.
- Another goal of the GBF is to substantially increase the level of financial resources and mobilise at least **US\$200 billion per year** by 2030 from all sources, including domestic, international, public and private resources, in an effective and easily accessible manner.
- **Goal 3** of the GBF, also known as the **30x30 goal**, is also present. It requires and enables states to ensure that at least 30 percent of terrestrial, inland waters, and coastal and marine areas are areas of special importance for biodiversity and ecosystem functions by 2030.
- The GBF calls upon member countries to protect **30% combined land** and sea for biodiversity conservation.

10. Three Himalayan medicinal plants enter IUCN Red List (Dec. 12, 2022)

Three Himalayan medicinal plants enter IUCN Red List

Three medicinal plant species found in the **Himalayas** have recently been placed on the **IUCN Red List of Threatened Species** following an assessment.

Important facts

- These species are found in the Himalayan region spread across **Nepal, India, China, Sikkim, Afghanistan, and Pakistan**.
- IUCN is an international organisation (NGO) working in the field of nature conservation and sustainable use of natural resources.

These three species are as follows-

About the three species

1. Meizotropis pellita

- Commonly known as **Patwa**, it is a perennial shrub that is **endemic to Uttarakhand**.
- "The species is listed as '**critically endangered**' on the basis of being found in a limited area (less than 10 sq km)," the study said.
- This species is threatened by deforestation, habitat fragmentation, and wildfires.

- The oil extracted from its leaves contains strong antioxidants and can be a natural alternative to **synthetic antioxidants** in the pharmaceutical industries.

1. **Fritillaria cirrhosa**

- It is a **perennial bulbous herb**.
- According to the study, its numbers **declined by 30%** during the assessment period (22 to 26 years).
- This species is listed as '**Vulnerable**' in view of its rate of decline, length, poor germination capacity, high trade value, extensive harvesting pressure and illegal trade.
- In China this species is used to treat **bronchial disorders and pneumonia**.
- This plant is also a strong **cough suppressant**.

1. **Dactylorhiza hatagirea**

- This species, also called the **salampanza**, is threatened by habitat loss, livestock grazing, deforestation, and climate change.
- It is used extensively in **Ayurveda, Siddha, Unani and other alternative systems of medicine** to cure dysentery, gastritis, chronic fever, cough and **abdominal pain**.
- This species is listed as '**endangered**'.