

LENTIL PRODUCTION

India is set to become the world's largest producer of lentils (masoor) during the 2023-24 crop years on account of higher acreage.



About Lentil:

- It is a valuable human food, mostly consumed as **dry seeds**.
- In India, it's mostly consumed as 'Dal' by removal of outer skin and separation of cotyledons.
- Lentil is also called Masur **and Malka** (bold-seeded).

Climatic condition

- Lentil requires a cold climate.
- It is very hardy and **can tolerate frost and severe winter** to a great extent.
- It requires cold temperature during its vegetative growth and warm temperature at the time of maturity.
- **Temperature:** The optimum temperature for growth is 18-30C. Its range of cultivation extends to an altitude of 3,500 m in north-west hills.
- **Soil: Well-drained, loam soils** with neutral reactions are best for lentil cultivation. **Acidic soils** are **not fit** for growing lentils.
- It is widely cultivated throughout **Europe, Asia, and North Africa**.
- The Lentil growing states in India are Madhya Pradesh, Uttar Pradesh, Bihar, Chattisgarh, Haryana, Punjab, Maharashtra, Rajasthan, etc
- It is easy to cook and **easily digestible with high biological value**. Dry leaves, stems, and empty and broken pods are used as valuable cattle feed.
- According to the Food and Agriculture Organization (FAO), the world's **top lentil growers in 2022** were **Canada, India**, Australia, Turkey, and Russia.
- Despite being the second largest producer of lentils, India has so far been importing mainly from **Australia, Canada, Russia, Singapore, and Turkey**.

PM-EBUS SEWA SCHEME

The Union Housing and Urban Affairs Minister recently said that the Ministry has floated tenders for procuring buses under the PM-eBus Sewa scheme.



About PM-eBus Sewa Scheme:

- Under the PM-eBus Sewa Scheme, **10,000 e-buses** will be deployed across cities in the country.
- The scheme was introduced to give a push to the **slow adoption of e-buses in public transport.**

Support for Operation:

- Under this scheme, city bus operations will be done on a **Public Private Partnership (PPP)** model.
- This scheme will **support bus operations for 10 years.**
- **States/Cities** shall be responsible for running the bus services and making payments to the bus operators.
- **The Central Government** will support these bus operations by providing **subsidies** to the extent specified in the proposed scheme.

Funding:

- It has been allocated a total funding of **Rs 57,613 crore.**
 - Out of this financial provision, the **central government will contribute Rs 20,000 crore**, while the remaining portion will be covered by the state governments.
 - **Coverage:** It will cover cities with a population of **300,000 and above** and will include all the capital cities of the 'Union Territories, North Eastern Region, and the Hill States'.
-

INDIA'S FIRST DARK SKY PARK

The Pench Tiger Reserve in Maharashtra has been designated as India's first Dark Sky Park and the fifth in Asia, protecting the night sky and preventing light pollution.



About India's First Dark Sky Park:

- The **Pench Tiger Reserve (PTR) in Maharashtra** is **India's first Dark Sky Park** within a tiger reserve for earmarking areas around the park that restrict light pollution for stargazers to access pristine dark skies.
- Dark Sky **Place certification focuses on lighting policy, dark sky-friendly retrofits, outreach and education, and monitoring the night sky.**
- This designation positions PTR as a sanctuary where tourists can witness celestial spectacles, shielded from the intrusion of artificial light pollution.
- PTR became the **fifth such park in Asia.**
- The certification was **given by the International Dark-Sky Association**, a global dark-sky movement to promote astronomy.

Key Facts about Pench Tiger Reserve (PTR):

- **Location:** The Reserve is located in the **southern reaches of the Satpura hills** in the Seoni and Chhindwara districts in **Madhya Pradesh** and continues in **Nagpur district in Maharashtra** as a separate Sanctuary.
- It is **named after the Pench River**, which flows from north to south through the Reserve.
- It comprises the **Indira Priyadarshini Pench National Park**, the **Pench Mowgli Sanctuary**, and a buffer.
- The area of the Pench Tiger Reserve and the surrounding area is the real **story area of Rudyard Kipling's famous "The Jungle Book"**.
- **Terrain:** It is **undulating**, with most of the area covered by **small hills and steep slopes on the sides.**

PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY) FINDS MORE TAKERS

Why in news?

- The insured gross cropped area of non-loanee farmers under Pradhan Mantri Fasal Bima Yojana (PMFBY) has reached a new high.
- This indicates a growing acceptance of the Centre's crop insurance scheme.

Pradhan Mantri Fasal Bima Yojana (PMFBY)

- **About:**
 - A scheme of the Ministry of Agriculture & Farmers Welfare, PMFBY is an insurance service for farmers for their yields, launched in 2016.
 - The new Crop Insurance Scheme is in line with the One Nation One Scheme theme.
 - The PMFBY replaced the previous two schemes: the National Agricultural Insurance Scheme (NAIS) and the Modified NAIS.
- **Objectives:**
 - To provide insurance coverage and financial support to the farmers in the event of failure of any of the **notified crops** as a result of natural calamities, pests, and diseases.
 - To stabilize the income of farmers to ensure their continuance in farming.
 - To encourage farmers to adopt innovative and modern agricultural practices.
 - To ensure the flow of credit to the agriculture sector.

Key features of the PMFBY

- **Premium rates**
 - There will be a uniform premium of only 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops (winter-sown).
 - In the case of annual commercial and horticultural crops, the premium to be paid by farmers will be only 5%.

- The balance premium will be paid by the Government (to be shared equally by central and state governments).
- **Area based approach**
 - The Scheme will be implemented on an 'Area Approach basis,' i.e., Defined Areas for each notified crop for widespread calamities,
- **No upper limit to subsidy**
 - There is no upper limit on Government subsidy. This means, that even if the balance premium is 90%, it will be borne by the Government.
- **Use of technology**
 - Crop Insurance App: Provides for easy enrollment of farmers. It facilitates easier reporting of crop loss within 72 hours of the occurrence of any event.
- **Exemptions from tax liabilities**
 - There will be an exemption from Service Tax liability for all the services involved in the implementation of the scheme.
- **Beneficiaries to be covered**
 - All farmers growing notified crops in a notified area during the season who have an insurable interest in the crop are eligible.

Risks covered under the scheme:

- Comprehensive risk insurance is provided to cover yield losses due to non-preventable risks, such as Natural Fire and Lightning, Storm, Hailstorm, Cyclone, Typhoon, Tempest, Hurricane, and Tornado.
- Risks due to Flood, Inundation and Landslide, Drought, Dry spells, Pests, and Diseases will also be covered.
- Loss and damage resulting from the occurrence of identified localized risks like hailstorms, landslides, and Inundation affecting isolated farms in the notified area would also be covered.

ARMY ADOPTS TOPA PIR AS MODEL VILLAGE

Why in news?

- The Army has adopted Topa Pir village in Poonch district as a model village under the Sadbhavana scheme.

Background

- Topa Pir village came to the limelight after a video of the alleged torture of civilians went viral in December 2023, in the wake of four soldiers being killed in an ambush by militants in the Dera Ki Gali area on December 21.
- Three civilians were found dead after they were taken into custody for questioning by the Army.
- The incident evoked widespread criticism and dented the goodwill among the Gujjars and Bakarwals, who mainly inhabit areas close to the LoC in the region.
- Three Army officers, including the Brigadier in charge, were attached until pending inquiry after the incident.
- Against this backdrop, the Indian Army has launched this scheme to reach out to the locals in Pir Panjal valley.

Operation Sadbhavana

- **About**
 - Operation Sadbhavana (Goodwill) launched in February 2023 is a unique humane initiative undertaken by the Indian Army in Ladakh to address the aspirations of people affected by terrorism, sponsored and abetted by Pakistan.
 - Under this, the Indian Army is undertaking multiple welfare activities such as running Army Goodwill Schools, Infrastructure Development Projects, Education Tours, etc.
 - The objectives achieved through this scheme are national integration tours, women empowerment, employment generation, education, and development activities towards nation-building.

INDIA'S OLDEST LIVING CITY FOUND IN GUJARAT

Why in News?

- An archaeological excavation at Gujarat's Vadnagar has discovered evidence of human settlement dating back to **1,400 BCE**.

About the Excavation:

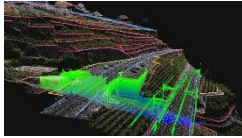
- The excavation was done by a team of scientists from IIT Kharagpur, the Archaeological Survey of India, the Physical Research Laboratory, Jawaharlal Nehru University, and **Deccan College**
- The study was funded by Infosys Foundation and the Gujarat government's Directorate of Archaeology & Museums which is entrusted with building India's first experiential digital museum at Vadnagar.
- The excavation at Vadnagar was carried out from 2016 till early 2023.

Archaeological Survey of India (ASI):

- The Archaeological Survey of India (ASI) was established in the year 1861 by **Alexander Cunningham**.
- After independence, it was established as a **statutory body** under the **Ancient Monuments and Archaeological Sites and Remains Act, 1958**.
- ASI is responsible for archaeological research and the conservation and preservation of cultural monuments in the country.
- Its activities include carrying out surveys of antiquarian remains, exploration and excavation of archaeological sites, conservation and maintenance of protected monuments, etc.
- Concerned Ministry: **Ministry of Culture**

WHAT IS LIDAR?

A huge city hidden by the luxuriant vegetation of the Amazon rainforest was recently discovered in Ecuador by a LiDAR survey.



About LiDAR:

- Lidar, which stands for **Light Detection and Ranging**, is a **remote sensing method** that uses **light in the form of a pulsed laser** to measure **ranges** (variable distances) to the Earth.
- These light pulses—combined with other data recorded by the airborne system — **generate precise, three-dimensional information about the shape of the Earth** and its surface characteristics.
- A lidar instrument principally **consists of a laser, a scanner, and a specialized GPS receiver**.
- **Airplanes and helicopters** are the **most commonly used platforms** for acquiring lidar data over broad areas.

How Does it Work?

- A LiDAR system **calculates how long it takes for beams of light to hit an object or surface and reflect** to the laser scanner.
- The **distance is then calculated using the velocity of light**. These are known as ‘Time of Flight’ measurements.
- **What is the difference between Radar and LiDAR?**
 - LiDAR works similarly **to Radar and Sonar** yet uses **light waves** from a laser, instead of radio or sound waves.

CHITTORGARH FORT

Taking note of the history and legacy of the Chittorgarh Fort, Rajasthan, the Supreme Court recently issued directions for its protection against blasting activities.



- **Built by local Maurya rulers in the 7th century A.D.**, the Chittorgarh Fort in Rajasthan is one of the largest forts in India.

- The common belief is that **Chitrangada Mori**, the local Maurya ruler, **developed the fort** Later, the fort was **captured by the Mewar rulers in 728 CE**.
- It used to be the **capital of the Mewar rulers**.
- It is **situated on a 180-meter-high hill** that rises from the banks of the river Berach.
- The Fort has been **witness to several legendary warriors** in Indian history, including **Badal, Gora, Maharana Pratap, Rana Kumbha, Patta**, and Jaimal, among others.
- It was declared a **UNESCO World Heritage Site** in 2013.

Features:

- Sprawling across 700 acres and a circumference of 13 km, the fort **has a kilometer-long road that takes up to the rampart** after passing through the seven gates.
- The **walls are made of lime mortar** and rise to 500 meters above ground level.
- The fort houses **four palaces, 19 temples**, including Jain and Hindu temples, **20 water bodies**, and four memorials.

Jauhar Mela:

- Every year, a **Jauhar Mela is held in Chittorgarh**.
- This Rajput festival celebrates the **anniversary of one of the jauhars**.
- Though there's no specific name given, it is believed that the fair **commemorates Rani Padmini's jauhar** and celebrates Rajputana valor.

What is Jauhar?

- Jauhar was a **Hindu tradition practiced by Rajput women** who wanted to **avoid falling into the hands of the enemy**.
- **Instead of consuming poison, they preferred to burn in flames**, as fire symbolized purity.
- It is said that the practice was **performed only during wars**. The women did this to **avoid being enslaved and raped by the invaders**.