

# **DAILY CURRENT AFFAIRS 09-10-2025**

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# **Manjeera River**

## Syllabus: GS-1; Geography

### **Context**

Two youths from Kukatpally were dramatically rescued after being **swept away by** the swollen Manjeera River.

### **About Manjeera River**

- > Tributary of: Godavari River
- > States covered: Maharashtra, Karnataka, and Telangana

## **Course and Origin**

- ➤ **Origin:** Balaghat Range, near **Ahmednagar district**, Maharashtra
  - o **Altitude:** ~823 metres (2,700 ft)
- > Flow Path:
  - Flows eastward through Bidar (Karnataka) → Sangareddy, Medak, and Nizamabad (Telangana)
- Confluence: Joins Godavari River near Basara, Nizamabad district, Telangana
- > Total Length: 724 km
- > Catchment Area: 30,844 sq. km
- ➤ Border Role: Forms a natural boundary between Maharashtra (west) and Telangana (east) in its final stretch

### **Major Tributaries**

- **Left-bank:** Haldi (Haridra), Lendi
- Right-bank: Nalla, Manyad, Terna, Tawarja, Gharni

### **Key Irrigation & Water Supply Projects**

- 1. Singur Dam / Singur Reservoir (Medak, Telangana)
  - o Supplies drinking water to **Hyderabad** and surrounding regions.
- 2. Nizam Sagar Project (Kamareddy district, Telangana)
  - One of the **oldest irrigation projects** on the Manjeera; commissioned in 1923.
- 3. **Manjeera Barrage** Important for **water regulation and distribution** to Medak and Sangareddy areas.

### **Know more**



# **PM-SETU Scheme**

Syllabus: GS-2; Government policies and Interventions

### **Context**

- ➤ During the **Kaushal Deekshant Samaroh** held at **Vigyan Bhawan, New Delhi**, the **Prime Minister launched the PM-SETU Scheme** *Pradhan Mantri Skilling and Employability Transformation through Upgraded ITIs*.
- ➤ This marks a major national initiative to **revamp India's skilling ecosystem** through modernization of Industrial Training Institutes (ITIs).

### **About the PM-SETU Scheme**

#### **Full Name:**

> Pradhan Mantri Skilling and Employability Transformation through Upgraded ITIs (PM-SETU)

## **Type:**

Centrally Sponsored Scheme

#### **Total Investment:**

**>** ₹ 60,000 crore

## **Objective:**

➤ To **transform 1,000 Government ITIs** across India into **modern, industry-aligned centres** for skill development, innovation, and entrepreneurship.

### **Key Features**

## 1. Hub-and-Spoke Model

- > 200 Hub ITIs → Advanced centres with innovation, incubation, and production facilities.
- $\gt$  800 Spoke ITIs  $\rightarrow$  Linked institutions for outreach, access, and local training delivery.
- > This model ensures **regional balance** and **industry linkage** in skilling.

### 2. Modernization & Industry Alignment

- ➤ Introduction of **new demand-driven courses** in collaboration with industry partners.
- ➤ **Revamping existing curricula** to align with emerging technologies (AI, robotics, renewable energy, EV maintenance, etc.).
- ➤ **Skill ecosystem** linked to employment and entrepreneurship outcomes.

#### 3. Institutional Mechanism

- Formation of **Special Purpose Vehicles (SPVs)** with **credible Anchor Industry Partners**.
- ➤ Each SPV will manage its cluster and ensure **outcome-based training** and employability.

## 4. Course Pathways

- Creation of multiple entry-exit pathways:
  - o Long-term diplomas
  - Short-term vocational courses
  - o Executive programs for upskilling and re-skilling

## **5. Centres of Excellence (CoEs)**

Five **National Skill Training Institutes (NSTIs)** will be strengthened as CoEs with **global partnerships**:

- Bhubaneswar (Odisha)
- > Chennai (Tamil Nadu)
- Hyderabad (Telangana)
- Kanpur (Uttar Pradesh)
- Ludhiana (Punjab)

## 6. Global Co-Financing

- > Supported by the **World Bank** and **Asian Development Bank (ADB)**.
- ➤ The **first phase** focuses on **Patna** and **Darbhanga ITIs** (Bihar), serving as pilot institutions.

### **Expected Outcomes**

- ➤ **Industry-ready youth workforce** aligned with 21st-century skills.
- **Employment generation** through local and global placement networks.
- **Enhanced innovation ecosystem** within ITIs.
- Integration of skill development with higher education pathways.
- ➤ Boost to MSMEs and local manufacturing through incubation and production units.

# **Ortolan Bunting**

Syllabus: GS-3; Biodiversity

#### **Context**

A rare European bird, the *Ortolan Bunting (Emberiza hortulana*), was recently spotted at **Baruipur**, on the southern periphery of Kolkata, West Bengal.

> This is significant because **it marks only the second recorded sighting** of the species in Bengal.



### **About Ortolan Bunting**

- > Scientific Name: Emberiza hortulana
- > **Type:** Small Palearctic migratory songbird.
- ➤ **Distribution:** Found across most of Europe and parts of Asia from the **Atlantic coast to Mongolia**, and northwards up to the **Arctic Circle**.

### **Habitat**

- > Prefers **open**, **cultivated or uncultivated areas** with sparse vegetation.
- > Occurs up to **2500 metres** in altitude.
- > **Avoids forested regions**, even during migration.
- > **Oceanic climates** are unsuitable for it.

## **Physical Features**

- ➤ **Size:** 16–17 cm (6.3–6.7 inches); **Wingspan:** ~25 cm (10 inches).
- > **Male:** Greenish-grey head, yellow throat, distinctive yellow eye-ring and moustache, brown streaked back and rump.
- **Female & Juvenile:** Smaller, duller, with spotted belly.
- > **Beak:** Conical, adapted for **seed-cracking** typical of buntings.

### **Conservation Status**

- ➤ **IUCN Red List:** *Least Concern (LC)*
- > However, populations have **declined in parts of Europe** due to habitat loss and illegal hunting (especially in France).

## **Significance**

> The recent sighting in Bengal indicates **rare migratory movement** and possible **range expansion or drift** of Palearctic species into the Indian subcontinent, making it ecologically noteworthy.

# **Chlorophytum vanapushpam**

Syllabus: GS-3; Biodiversity

### **Context**

Researchers have discovered a new plant species of the genus *Chlorophytum* during a field exploration in **Vagamon hills**, Idukki district, Kerala.



## **About the Species**

> Scientific Name: Chlorophytum vanapushpam

Family: Asparagaceae

> **Type:** Perennial herb

Genus Relation: Close relative of Chlorophytum borivilianum (commonly known as Safed Musli)

### **Habitat & Distribution**

Location: Rocky hills of Vagamon and Neymakkad in the Western Ghats, Idukki district, Kerala

**▶ Altitude Range:** 700 m − 2124 m

➤ **Region Significance:** Western Ghats are considered the **centre of origin** of the *Chlorophytum* genus.

**Number of Species in the Region:** 18 (many with medicinal value)

#### **Distinctive Features**

➤ **Flowers:** White, small clusters

Leaves: SlenderHeight: Up to 90 cmSeeds: 4-5 mm across

➤ **Flowering & Fruiting:** September – December

➤ **Unique Trait:** Unlike *C. borivilianum, C. vanapushpam* **lacks tubers**.

## **Significance**

- > The discovery highlights the **biodiversity richness** of the Western Ghats.
- The genus *Chlorophytum* includes several species with **medicinal and nutraceutical importance**, e.g., *C. borivilianum* (Safed Musli), used in Ayurveda.

## **Etymology**

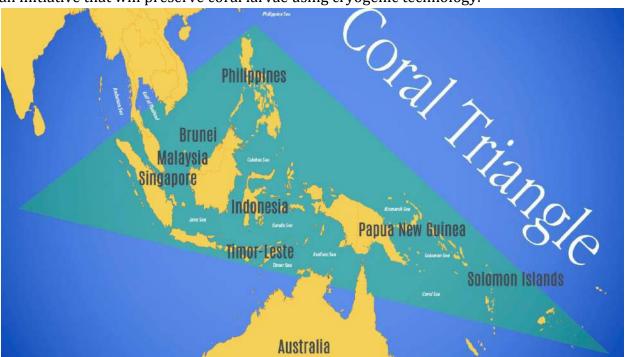
- ➤ The name "vanapushpam" combines Malayalam words:
  - *Vanam* = Forest
  - *Pushpam* = Flower
    - → Meaning "Forest Flower."

# **Coral Triangle**

Syllabus: GS-3; Environmental & Ecology

### **Context**

➤ The **Philippines** is preparing to host **Southeast Asia's first coral larvae cryobank**, an initiative that will preserve coral larvae using cryogenic technology.



### More to know

- ➤ This project connects research institutions from the **Philippines**, **Taiwan**, **Indonesia**, **Malaysia**, **and Thailand**, forming a **network of coral cryobanks** across the **Coral Triangle** region.
- ➤ The effort aims to safeguard coral biodiversity and support reef restoration in the face of rising ocean temperatures and coral bleaching.

## **About the Coral Triangle**

- ➤ **Nickname:** Often called the "Amazon of the Seas" for its extraordinary marine biodiversity.
- ➤ **Area Covered:** Spans over **10 million square kilometres** of ocean area.
- > Countries Included:
  - Indonesia
  - Malaysia

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- o Papua New Guinea
- Singapore
- The Philippines
- Timor-Leste
- Solomon Islands

## **Ecological Significance**

- ➤ Home to ~75% of the world's coral species.
- ➤ Contains ~33% of global reef fish species.
- Encompasses **vast mangrove forests** and **6 of the 7 known marine turtle species**.
- > Supports **food security and livelihoods** for more than **120 million people** in the region.

### **Threats**

- **Rising carbon emissions** → coral bleaching and ocean acidification.
- **Destructive fishing practices** → damage to coral reefs and marine ecosystems.
- **Pollution** (air, water, and soil) → degradation of coastal habitats.
- ➤ Climate change impacts → increased sea temperatures and extreme weather events leading to coral mortality.

### **About Corals**

- ➤ **Nature:** Corals are **marine animals** (not plants) that are **sessile**—they attach permanently to the ocean floor.
- **Structure:** Each coral is a **polyp**, and many polyps form a **colony**.
- > Symbiosis: Corals live in a mutualistic relationship with zooxanthellae (single-celled algae).
  - o **Algae's role:** Provide food and nutrients to the coral through **photosynthesis**.
  - o **Coral's role:** Offer the algae shelter and compounds necessary for photosynthesis.
- ➤ **Feeding:** Corals also capture plankton and small particles using their **tentacle-like structures**.