



INDIA 4 IASTM

For success in a changing world

DAILY CURRENT AFFAIRS 07-01-2026

Mapping Perspective

1. Melghat Tiger Reserve

Prelims Perspective

2. SHINE Scheme
3. W Ursae Majoris (W UMa) Star

Mains Perspective

4. China's proposal of the Global Governance Initiative (GGI)
5. India's Seafood Exports

Melghat Tiger Reserve

Syllabus: GS-3: Wildlife – Protected Areas.

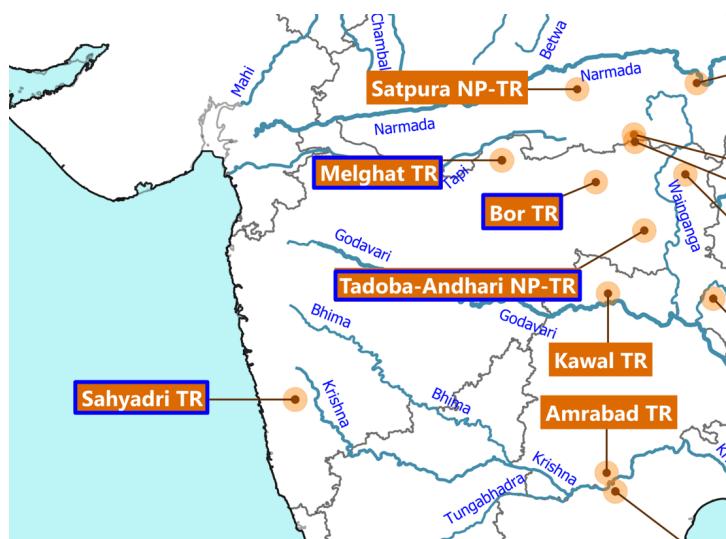
Context:

- The Bombay Natural History Society (BNHS) has released 15 critically endangered Indian vultures at **Melghat Tiger Reserve**, Maharashtra.
- Objective:
 - Strengthening **vulture conservation and reintroduction**
 - Restoring **ecological balance** (vultures as scavengers)
 - Improving **avian biodiversity** in central India

About Melghat Tiger Reserve

Location & Physiography

- Situated in **Amravati district, Maharashtra**
- Lies in the **southern offshoot of the Satpura Range**
- Part of the **Gavilgarh (Gawilgadh) hill system**
- **First Tiger Reserve of Maharashtra** (notified in 1973 under Project Tiger)
- Meaning of *Melghat*: Confluence of many 'ghats' or valleys



Boundaries

- **Tapti River** forms the northern boundary
- **Gawilgadh ridge of Satpura Range** forms the southern boundary

Climate & Vegetation

- Forest Type: **Tropical Dry Deciduous Forest**
- Dominant species:
 - **Teak (*Tectona grandis*)** – dominant
 - Mixed deciduous species

River System

- Acts as a **catchment area** for tributaries of the **Tapti River**
- Major rivers:
 - Khandu
 - Khapra
 - Sipna
 - Gadga
 - Dolar

Flora (Important Species)

- Teak
- *Lagerstroemia parviflora*
- *Terminalia tomentosa*
- *Ougeiniaoojeinensis*
- *Emblica officinalis* (Amla)
- Bamboo

Fauna

- Mammals:
 - Tiger
 - Sloth Bear
 - Indian Gaur
 - Sambar Deer
 - Leopard
 - Nilgai
 - Dhole
 - Hyena

- Jungle Cat
- Primates:
 - Langur
- Birds:
 - **Forest Owlet (Critically Endangered)** – stronghold population
 - Vultures (recent reintroduction)

Tribal Communities

- **Korkus** – largest tribal group
- Others:
 - Gond
 - Gawli community

Why Melghat is Important

- First tiger reserve of Maharashtra
- Stronghold of **Forest Owlet** (endemic & critically endangered)
- Key site for **vulture conservation**
- Located in **Satpura-Tapti ecological landscape**
- Rich tribal-cultural interface with conservation challenges

SHINE Scheme

Syllabus: GS -2; Governance, Social Justice, Women Empowerment

Context

At the **79th Foundation Day of the Bureau of Indian Standards (BIS)**, Union Ministers launched the **SHINE Scheme** in New Delhi.

About SHINE Scheme

- SHINE stands for **Standards Help Inform & Nurture Empowered Women**.
- It is an initiative of the **Bureau of Indian Standards (BIS)**.

- The scheme places **women at the centre of India's quality and standards ecosystem.**
- It aims to empower women through:
 - Structured training programmes
 - Grassroots partnerships with **NGOs and Self-Help Groups (SHGs)**
 - Locally delivered, practical awareness initiatives
- Focus areas include **standards, safety, and quality awareness** at the household and community level.
- The scheme helps in **protecting families and strengthening livelihoods** through informed choices.

Bureau of Indian Standards (BIS): Key Facts

- BIS is the **National Standards Body of India**.
- Established under the **BIS Act, 2016**.
- **Objective:** Harmonious development of standardisation, marking, and quality certification of goods.
- Successor to the **Indian Standards Institution (ISI)** (1947).
- Represents India at:
 - **International Organization for Standardization (ISO)**
 - **International Electrotechnical Commission (IEC)**
- **Nodal Ministry:** Ministry of Consumer Affairs, Food and Public Distribution
- **Headquarters:** New Delhi
- Has regional and branch offices across India.

W Ursae Majoris (W UMa) Star

Syllabus: GS-3; Science and Technology (Space & Astronomy)

Context

Astronomers from the **Aryabhatta Research Institute of Observational Sciences (ARIES)** used data from the **Devasthal Fast Optical Telescope (DFOT)** and NASA's **TESS space telescope** to generate detailed light curves of a **W Ursae Majoris (W UMa)** star, revealing insights into its magnetic activity and orbital behaviour.

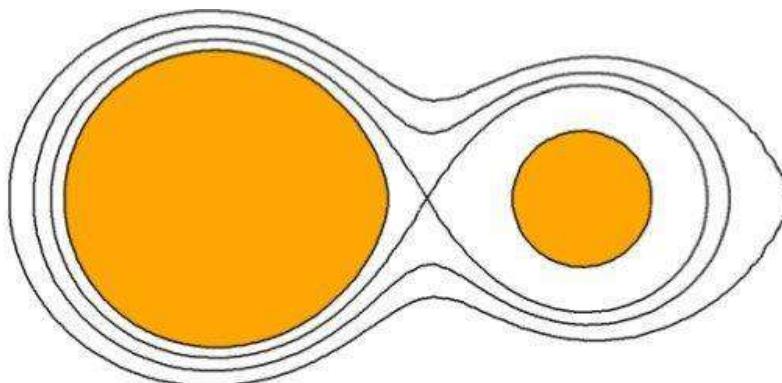


About W Ursae Majoris Star

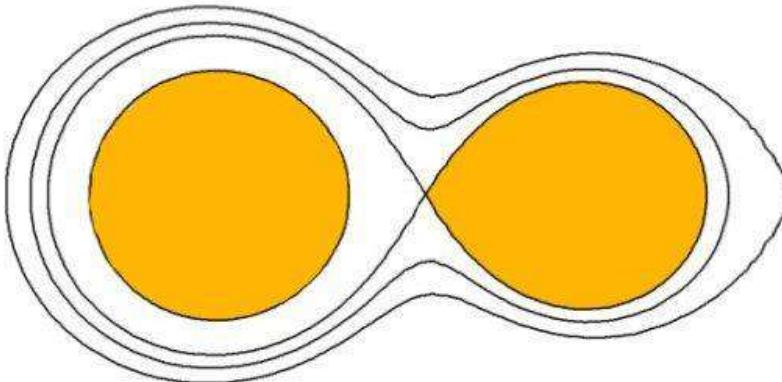
- W Ursae Majoris stars are **low-mass contact binary systems** and belong to the category of **eclipsing binary variable stars**.
- Both stars **share a common outer envelope** and orbit very close to each other.
- They are characterised by **continuous light variation** with **nearly equal primary and secondary minima** in their light curves.
- **Brightness variation** ranges from a few tenths to slightly over one magnitude.
- **Orbital period** is very short, typically ranging from **0.25 to 1.0 days**.

Origin and Theory

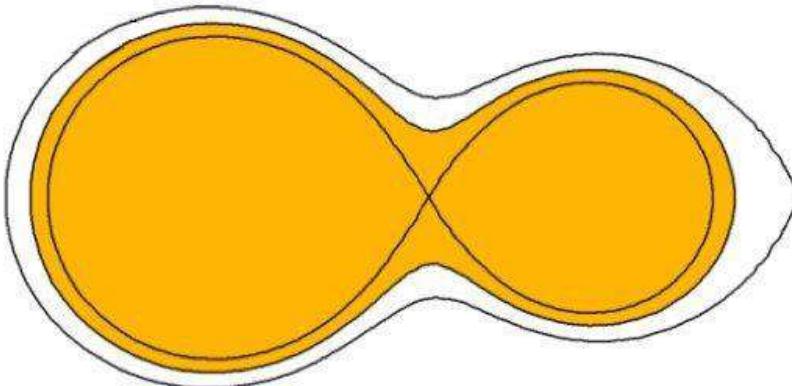
- According to the traditional theory, W UMa systems evolve from **detached binary systems** through **orbital decay caused by angular momentum loss**.
- The concept of contact binaries was first proposed by **Gerard Kuiper in 1941**.



A detached system has both stars smaller than their Roche lobes.



In a semidetached system, one star fills its Roche lobe while the other is smaller than the Roche lobe.



In overcontact systems both stars are contained within a common envelope of material.

Significance of W UMa Star Studies

- Helps in accurate determination of **stellar masses, radii, and temperatures**.
- Provides critical evidence to **test and refine theories of stellar evolution**.

Key Findings from the Study

- The stars **share outer layers**, with their orbits showing gradual shifts due to mutual gravitational interaction.
- Observations reveal **uneven brightness**, indicating surface asymmetry.
- Presence of **dark magnetic star spots**, similar to sunspots, was detected.
- These star spots rotate in and out of view, producing **bumps in light curves**.
- Strong **magnetic activity** was inferred from spectral signatures.
- Detection of **H-alpha and H-beta emission lines** confirms active stellar atmospheres, linked to **magnetic flares and star spots**.

China's proposal of the Global Governance Initiative (GGI)

Syllabus: GS-2: International Relations.

Context:

China has reiterated its **four global initiatives**, placing the **Global Governance Initiative (GGI)** at the core, and projecting them as a **people-centred framework** for peace, security, and development—particularly addressing concerns of the **Global South**.

What is the Global Governance Initiative (GGI)?

- A Chinese proposal to **reform and improve the existing global governance system**.
- Seeks to make global governance:
 - More inclusive and representative
 - People-centred rather than elite-driven
 - Responsive to developing countries' priorities
- Aims to ensure that **globalisation and international cooperation deliver tangible benefits** to all nations and peoples.

Four Major Global Initiatives (China's Framework)

Global Development Initiative (GDI)

- Focus: **Shared and inclusive development**
- Key thrust areas:
 - Poverty alleviation
 - Livelihood security

- Food, health, and education access
- Core idea: **Development outcomes must directly benefit people**, not merely aggregate growth.

Global Security Initiative (GSI)

- Security philosophy: **Common, comprehensive, cooperative, and sustainable security**
- Emphasises:
 - Peaceful dialogue over coercion
 - Respect for sovereignty and territorial integrity
 - Non-interference in internal affairs
- Rejects bloc politics and Cold-War style alliances.

Global Civilization Initiative (GCI)

- Civilisational outlook:
 - Mutual respect among civilisations
 - Dialogue instead of confrontation
- Rejects:
 - Civilisational hierarchy
 - Cultural superiority narratives
- Promotes diversity as a **shared human asset**.

Global Governance Initiative (GGI) – Core Pillar

- Advocates:
 - **People-centred global governance**
 - Greater voice and participation of **developing countries**
- Calls for reforms in:
 - Multilateral institutions (UN, Bretton Woods system)
 - Global financial architecture
- Cooperation domains:
 - Climate change
 - Artificial Intelligence and digital governance
 - International finance

- Trade and supply chains



Significance of GGI

Strategic and Political

- Presents an **alternative vision** to Western-led liberal international order.
- Challenges:
 - Rule-based order dominated by advanced economies
 - Conditionality-based governance models

Global South Appeal

- Emphasises:
 - Sovereignty
 - Inclusiveness
 - Development before political conditionalities
- Resonates with:
 - Developing countries
 - Least Developed Countries (LDCs)
 - Countries wary of interventionist norms

China's Global Positioning

- Projects China as:
 - A **provider of global public goods**
 - A leader in development finance
 - A norm-shaper in climate and digital governance

- Reinforces China's aspiration for **normative leadership** in the 21st century.

Mains Perspective

GS Paper II - International Relations

- Reform of global governance and multilateral institutions
- Competing models of world order
- India–China relations and China's outreach to the Global South

GS Paper III - Security & Globalisation

- Non-traditional security concepts
- Cooperative security frameworks
- Impact on trade, climate action, technology governance

GS Paper IV - Ethics

- People-centred governance
- Global justice and equity
- Ethical dimensions of diplomacy
- Values of inclusiveness, dignity, and shared prosperity

Analytical Note (for Mains Enrichment)

- GGI reflects a shift from **rule-based governance to outcome-based governance**, prioritising development and stability.
- Raises questions on:
 - Compatibility with liberal democratic norms
 - Transparency and accountability in alternative governance models
- For India: requires **strategic balancing**—engagement on Global South reforms without diluting democratic and rules-based principles.

India's Seafood Exports

Syllabus: GS-3: Indian Economy -Exports.

Context:

- India's seafood exports registered **robust growth in FY 2025–26** despite **higher U.S. tariffs**.

- Growth driven by **market diversification**, especially towards **East Asia and Europe**.
- Reflects rising **resilience and competitiveness** of India's fisheries sector.



India's Seafood Sector: Scale & Significance

Resource Base

- **Coastline:** Over 7,500 km
- Extensive **inland waters:** rivers, reservoirs, ponds, wetlands
- Strong **aquaculture ecosystem**

Global Position

- **3rd largest fish producer** globally
- **2nd largest aquaculture producer**
- Aquaculture (especially shrimp) dominates **export value and volume**

Economic Importance

- Major source of **employment and livelihoods** (coastal & rural)
- Significant **foreign exchange earner**
- Supports **nutritional security**

Production Structure

Marine Fisheries

- Concentrated along **eastern and western coasts**
- Key species: marine fish, cephalopods (squid, cuttlefish)

Inland Fisheries & Aquaculture

- Rivers, ponds, tanks, reservoirs
- **Shrimp farming** (Vannamei) is export backbone
- Increasing use of **scientific and intensive practices**

Export Composition

- **Shrimp**: Largest share (especially frozen Vannamei shrimp)
- Other products:
 - Frozen fish
 - Cuttlefish & squid
 - Crabs
 - Value-added marine products
- Rising share of **processed and value-added exports**
- Enabled by:
 - Cold-chain expansion
 - Compliance with **global food safety & traceability norms**

Major Export Markets

Traditional Markets

- **United States** (largest single destination)
- China
- Japan
- European Union
- Southeast Asia

Emerging Trend

- Strategic **diversification away from over-dependence on the U.S.**
- Greater focus on **China, Southeast Asia, and Europe**

Latest Export Performance (FY 2025-26: April-October)

Key Data

- **Export Value:**
 - Increased by **16%**
 - From **\$4.19 billion → \$4.87 billion**

➤ **Export Volume:**

- Increased by 12%
- From **9.62 lakh MT → 10.73 lakh MT**

Despite U.S. Tariffs

- Exports to the **U.S. declined marginally**
- Tariff-related trade barriers impacted volumes and value

Market Diversification Highlights

➤ **China:**

- Imports rose to **\$845.67 million**
- Now a **key destination**

➤ **Vietnam:**

- Over **100% growth in value**
- Over **90% growth in volume**

➤ **Belgium:**

- Nearly **90% growth**

➤ Other growing markets:

- Malaysia
- Germany

Inference:

- Clear **eastward and European pivot**
- Reduced vulnerability to **single-market shocks**

Institutional & Policy Support

Marine Products Export Development Authority (MPEDA)

➤ Under **Ministry of Commerce**

➤ Functions:

- Export promotion
- Quality control & traceability
- Market access facilitation
- Compliance with SPS standards

Pradhan Mantri Matsya Sampada Yojana (PMMSY)

- Strengthens:
 - Fisheries infrastructure
 - Processing & cold chains
 - Sustainability and productivity
- Supports **export competitiveness**

Government Actions

- Regular consultations with exporters
- Addressing **non-tariff barriers**
- Market intelligence and diversification strategy

Significance of the Trend

- Demonstrates **resilience and adaptability** of India's seafood sector
- Enhances **export stability amid global trade uncertainties**
- Supports India's goal of **agricultural export diversification**
- Aligns with **Atmanirbhar Bharat + Global integration**

Challenges Ahead (Brief)

- Persistent **trade protectionism**
- Rising input costs (feed, energy)
- Disease risks in aquaculture
- Sustainability & environmental concerns
- Need to retain **U.S. market share** alongside diversification

Conclusion

India's seafood export performance in FY 2025–26 signals a **structural shift from market dependence to diversification**, backed by institutional support and policy responsiveness. While the U.S. remains critical, India's expanding footprint in **Asia and Europe** positions the sector for **long-term resilience and growth**.