

# **Prelim Bits 23-11-2023 | UPSC Daily Current Affairs**

# **Oriental Armyworm**

Continuous warm temperatures for prolonged periods have led to the serious armyworm infestation in Assam damaging around 28,000 hectares of paddy crop.

- Scientific name Mythimna separata
- Also known as the northern armyworm, ear head cutting caterpillar and rice earcutting caterpillar.
- 1<sup>st</sup> report Reported as a sporadic pest from Tamil Nadu during 1937 and Kerala and Odisha in 1957.
- **Key features** It is a *cyclical pest* that comes intermittently and was known to strike once every 10-12 years.
- They are *polyphagous* (feed on a range of host crop plants like paddy and wheat mainly and also on maize, millets, sunflower, sugarcane and groundnut)
- **Growing conditions** Pest population increases rapidly during <u>high temperatures</u> <u>and a humid atmosphere.</u>
- During an outbreak, they multiply largely and move in *swarms* from field to field, like an army, to attack the crops.

## Fall armyworm

- Scientific name Spodoptera frugiperda
- Native to- Tropical and subtropical regions of the Americas.
- Key features It is a *polyphagous insect* that feeds mainly on maize and more than 80 other crops.
- It is a *transboundary pest* (fly over 100 km in a single night).

# References

- 1. Down To Earth Armyworm attack in Assam
- 2. <u>Vikaspedia | Fall Armyworm</u>

# **AGNI Initiative**

Ministry of Ayush has launched AGNI Initiative for physicians practicing in the field of Ayurveda.

- AGNI Ayurveda Gyan Naipunya Initiative
- Objectives
  - To provide a platform to Ayurveda practitioners for *reporting their innovative practices* in various disease conditions.
  - $\circ$  To  $\underline{create\ of\ a\ database}$  by identifying and collaborating with interested practitioners.
  - To *mainstream pragmatic practices* through scientific validation and evidencebased appraisal.
- Nodal agency Central Council for Research in Ayurveda Sciences (CCRAS).
- It will <u>document and publish</u> the reported practices in consultation with National Commission for Indian System of Medicine (NCISM)

# **Central Council for Research in Ayurveda Sciences (CCRAS)**

- An *autonomous body under Ministry of AYUSH*.
- **Aim** To undertake, coordinate, formulate, develop and promote <u>research on scientific</u> <u>lines in Ayurveda</u>.
- **Research activities** Medicinal Plant Research, Drug Standardization, Pharmacological Research, Clinical Research, Literary Research & Documentation and Tribal Health Care Research Programme.
- Located at New Delhi
- Initiatives
  - $\circ$   $\mathbf{SPARK}$  Studentship Program for Ayurveda Research Ken for Undergraduate Scholars
  - PG-STAR Scheme for Training in Ayurveda Research for PG Scholars for PG Scholars
  - **SMART** Scope for Mainstreaming Ayurveda Research in Teaching Professionals program for teachers

## References

- 1. PIB AGNI Initiative
- 2. <u>CCRAS| Central Council for Research in Ayurvedic Sciences</u>

# Model Law on Adventure Tourism

Recently, the Union Tourism Ministry has circulated the model law on adventure tourism to all States and Union Territories for feedback.

- Adventure tourism A niche tourism where exploration or travel *involves some degree of risk.*
- It includes at least 2 among the 3 elements (physical activity, natural environment, and cultural immersion)
- **Types** <u>Hard adventure and soft adventure</u> covering land, air and water based activities.
- Model law It is a *part of the National Strategy for Adventure Tourism* covering

aspects of obligations, institutional framework, registration, penalties and insurance coverage.

Adventure tourism is considered a sunshine sector for India.

## **National Strategy for Adventure Tourism (2022)**

- **Aim** To develop adventure destinations, promote safety in adventure tourism, skill development, capacity building and marketing.
- Vision To position India as a preferred destination for adventure tourism globally.

# National Strategy has the following seven pillars

- State assessment, ranking and strategy
- Skills, capacity building and certification
- Marketing and promotion
- Strengthening adventure tourism safety management framework
- National and state level rescue and communication grid
- Destination and product Development
- Governance and Institutional Framework
- **National Board for Adventure Tourism** It is to guide the operationalization and implementation of the strategy.
- **Indian Mountaineering Foundation** IMF has a critical role in promoting adventure tourism particularly mountaineering and trekking in the Himalayas.

#### India's Geographical Advantage in Adventure Tourism

- 70% of the Himalayas
- 7,000 km of coastline
- One of the 3 countries in the world with both hot and cold deserts
- ${\mbox{\cdot}}\ {\rm Ranks}\ {\rm 10}^{\rm th}$  in total area under forest cover
- Ranks 6<sup>th</sup> in terms of number of recognized UNESCO Natural Heritage sites

#### References

- 1. PIB| Circulation of Model Law on Adventure Tourism
- 2. Ministry of Tourism | National Strategy for Adventure Tourism

## **Psyche Mission**

Psyche mission fires lasers at Earth from 16 million kilometres away, successfully demonstrating the future of communication in space.

- Launched by NASA in 2023.
- Aim To study the *metallic asteroid called '16 Psyche'*, located in the main asteroid belt between Mars and Jupiter.
- Type- Orbiter
- **Mission** <u>By 2029</u>, the spacecraft will begin exploring the asteroid and will spend about <u>2 years</u> orbiting the asteroid.
- It will *take pictures, map the surface, and collect data* to determine Psyche's composition.

Psyche was discovered in 1852 by Italian astronomer Annibale de Gasparis. It is sometimes referred to as 16 Psyche.

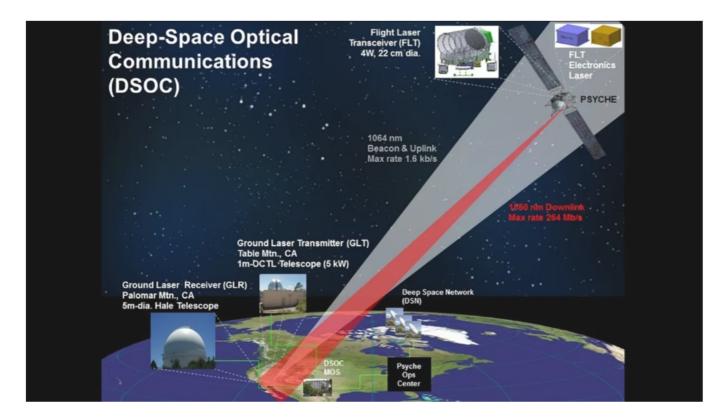
- Scientific instruments Multispectral Imager, Gamma-Ray and Neutron Spectrometer, Magnetometer, Deep Space Optical Communications (DSOC).
- It uses solar electric propulsion and communicates with Earth through the <u>Deep Space</u> <u>Network (DSN)</u> of NASA.
- **Significance** It will help to unlock the secrets of planets formation and evolution.

## **Deep Space Optical Communications (DSOC) - Psyche Mission**

- It is a new laser communication technology that encodes data in photons at <u>near-infrared wavelengths</u> (rather than radio waves) to communicate between a probe in deep space and Earth.
- Using light instead of radio allows the spacecraft to communicate more data in a given amount of time.
- It is planned for the  $1^{st}$  2 years of the spacecraft's cruise and so it does <u>not relay</u> <u>Psyche mission data</u> to earth.

Optical communications have been demonstrated previously in Low-Earth Orbit and even to the Moon but DSOC of Psyche mission is NASA's 1<sup>st</sup> test between Earth and distances far exceeding the Moon (deep space).

• **Significance** - If proven successful, it will may pave the way for <u>broadband</u> <u>communications</u> that will help support humans when sent to Mars.



## References

- 1. Indian Express| Psyche Mission
- 2. NASA DSOC

# **Ghol fish**

Ghol fish was declared as State fish of Gujarat owing to its economic value and its uniqueness.

- Scientific name Protonibea diacanthus.
- It is also called as *black-spotted croake*.
- **Habitat** Usually found in the Indo-Pacific region that stretches from the Persian Gulf to the Pacific Ocean.
- In India, this fish is found mostly in Gujarat and Maharashtra.
- **Threat** Pollution and relentless fishing have pushed its population to deep sea which makes it hard to catch it.
- Usage It has nutritional and medicinal properties.
  - It is used in *pharmaceutical and cosmetic industry*.
  - $\circ$  To make threads used for making <u>dissolvable surgery stitches</u>
  - Its air bladder is used in the *production of wine and beer*.
- Fisherman's lottery It is also known as 'Sea Gold' for its high market value.
  - $\circ$  Locally, it costs Rs. 5,000 to 15,000 per kg and in export market, dried air bladder can fetch as high as Rs. 25,000 per kg.

Gujarat has a coastal belt of over 1600 km and contributes the largest share in

fish production in the country.

## Reference

Indian Express| State Fish of Gujarat

#### **Other Important News**

New Education for New India Campaign

• President of India recently launched an education campaign 'New Education for New India' of Brahma kumaris of Sambalpur, Odisha recently.

• This campaign is envisaged to inculcate values and uplift the consciousness of the students for better society.

#### ASEAN-India Millet Festival 2023

• ASEAN-India Millet Festival 2023 was recently held at *South Jakarta, Indonesia*.

• **Organized by** - *Indian Mission to ASEAN* in collaboration with *Ministry of Agriculture and Farmers' Welfare*.

• **Aim** - To raise awareness and create a market for millets and millets-based products among the ASEAN Member states in line with International year of Millets - 2023.

• **ASEAN Member states -** Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

#### **EXERCISE AUSTRAHIND-23**

• The 2<sup>nd</sup> edition of AUSTRAHIND-23 will be held at *Perth, Australia*.

• It is a Joint Military Exercise between *Australia and India*.

#### **Digital Twins**

• In a first-of-its-kind initiative, the Survey of India (SoI), has signed an agreement with a Mumbai-based private company, Genesys International, to prepare 'Digital Twins'.

• **Digital Twins** - It aims to prepare 3D maps of several cities and towns which can be used in a variety of planning applications.

• **Survey of India (SoI)** – It is a historical repository of maps and the arbiter of national and State boundaries.

• It is the National Mapping Agency (NMA) of the country that works under the **Department of Science & Technology.** 

#### **UN Panel of External Auditors**

• Comptroller and Auditor General of India, Girish Chandra Murmu, has been elected as vice-chair of the UN Panel of External Auditors recently.

• The United Nations Panel of External Auditors was established in 1959 by the UN General Assembly Resolution.

• The panel's purpose is to coordinate audits and share information about audit methods and findings.

• The Panel of External Auditors, composed of heads of 12 Supreme Audit Institutions (SAIs) globally.

• It oversees the external audit of the UN Secretariat, funds and programmes, and specialised agencies.

#### Nugu Wildlife Sanctuary

• The National Tiger Conservation Authority (NTCA) has recommended the Nugu Wildlife Sanctuary bordering the Bandipur Tiger Reserve be declared as a core critical tiger habitat.

• Nugu Wildlife Sanctuary is located in the Mysore District of *Karnataka*.

• It's situated north of *Bandipur National Park* which includes the Lakshmanapura State Forest and adjacent revenue lands.

• The Nugu Reservoir occupies the northern part of the sanctuary. It is built across the Nugu River, a tributary of the Cauvery.

#### Same sex marriages in Thailand

• Thailand recently approves a marriage equality bill to grant same-sex couples <u>equal</u> <u>rights.</u>

• If it becomes law after Parliament's approval, Thailand will be the 3<sup>rd</sup> country in Asia to allow same-sex marriage.

• Other Asian countries that legalized same-sex marriages were **Taiwan and Nepal**.

## **Euclid Space Telescope**

• The Euclid space telescope was launched in 2023.

• It was developed by the *European Space Agency (ESA) and the Euclid Consortium* (*includes NASA*).

• The telescope's mission is to study the composition and evolution of the dark universe.

#### Adi-vyakhyan

• The <u>National Tribal Research Institute (NTRI)</u> has recently organized Adi-Vyakhyan, a conference on Tribal Development at New Delhi as part of Jan Jatiya Gaurav Diwas.

## Indira Gandhi Peace Prize

The Indira Gandhi Prize for Peace for the year 2022 was jointly awarded to the *Indian Medical Association (IMA) and Trained Nurses Association* of India recently.
The Indira Gandhi Peace Prize, also known as the Indira Gandhi Prize for Peace,

Disarmament and Development, is an *annual award* established in 1986.

• **Aim** - To honour women, men and institutions that have done exemplary work in the service of humanity and the planet.





**A Shankar IAS Academy Initiative**