

## IMPORTANT NEWS

### Exercise Sea Dragon 23

#### Inside Story of the News:

- For "**Exercise Sea Dragon 23**," an Indian Navy P8I aircraft arrived in Guam, USA, on March 14.
- The US Navy's third coordinated multi-lateral ASW exercise for long-range MR ASW aircraft is called Exercise Sea Dragon 23.
- The exercise is scheduled from 15-30 March.
- Coordinated anti-submarine warfare between the participating nations would be emphasised.
- During the past few years, these drills' complexity and scope have steadily evolved to incorporate advanced ASW drills.
- Exercise Sea Dragon 23 will put the participating aircraft's tracking abilities to the test while also allowing for the exchange of expertise.
- An Indian Navy P8I would participate in the exercise, along with the US Navy's P8A, the Japanese Maritime Self-Defence Force's P1, the Royal Canadian Air Force's CP 140, and the RoKN's P3C.
- Based on their common principles and dedication to an open, inclusive Indo-Pacific, the friendly navies participating in the exercise hope to achieve high levels of coordination and synergy.

### Atal Vayo Abhyuday Yojana (AVYAY)

#### Inside Story of the News:

- The Department of Social Justice and Empowerment is implementing **Integrated Programme for Senior Citizens (IPsRC)** which is a component of **Atal Vayo Abhyuday Yojana (AVYAY)**.
- In accordance with this, NGOs and voluntary organisations (VOs) are given grants in help to operate and maintain senior citizens homes, continuous care homes, and other facilities.
- The elderly destitute residents of these homes are given free access to amenities like shelter, food, healthcare, and recreation.
- The Department has established a **Project Monitoring Unit (PMU)** to keep track of the projects getting grant funding under IPsRC.
- The PMU coordinators visit these initiatives to evaluate their effectiveness.
- The NGO in charge of the project is given the chance to defend its position in the event that the PMU issues an unfavourable report.
- The Department evaluates the NGO's response, and if it is deemed unsatisfactory, the project is terminated.

## Baal Swaraj portal

### Inside Story of the News:

- To aid in the rehabilitation of **Children in Street Situations (CiSS)**, the **National Commission for the Protection of Child Rights (NCPCR)** has launched a "CiSS application" under the **Baal Swaraj portal**.
- The NCPCR launched the Baal Swaraj portal to provide children in need of care and protection with an online tracking and real-time digital monitoring system.
- The portal has two functions- COVID Care and CiSS.
- Children who have lost one or both parents as a result of COVID-19 or for other reasons after March 2020 are taken care of by COVID Care link.
- It adheres to a six-stage paradigm for children's rehabilitation:
  - The first stage is gathering the child's information, which is done via the portal.
  - The second stage is the Social Investigating Report (SIR), which entails looking into the background of the child. The District Child Protection Officer (DCPO) engages the child in conversation and offers counselling while doing this under the direction of the District Child Protection Unit (DCPU).
  - The third stage is formulating an Individual Care Plan (ICP) for the child.
  - The fourth stage is the order of the Child Welfare Committee (CWC) based on the SIR submitted to the CWC.
  - The fifth stage is allocating the schemes and benefits that the beneficiary can avail of.
  - The sixth stage is a checklist designed for follow-ups, which are used to assess progress (Follow Ups).
- Every child who lives on the streets, whether alone, with their family, or during the day, is considered to be living in a "Children in Street Situation" according to the Standard Operating Procedure for Care and Protection of Children in Street Situations 2.0.
- Families moving from rural to urban regions in quest of a higher quality of living is the main source of this phenomena.
- This portal, created by NCPCR, is a pioneering effort in India to assist children living on the streets.
- The CiSS application is used to track the rescue and rehabilitation of children who are living on the streets by collecting data from all the states and union territories.
- The initiative is taken under the direction of the Supreme Court of India.

## NIPUN Bharat

### Inside Story of the News:

- Achieving fundamental literacy and numeracy for all children must become an urgent national objective, according to the National Education Policy 2020.

- The **National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat)** was officially launched by the Government on July 5, 2021, by the Department of School Education and Literacy.
- This is for ensuring that every child in the country necessarily attains foundational literacy and numeracy by the end of Grade 3, by 2026-27.
- **SamagraShiksha**, a centrally sponsored scheme, is the umbrella under which this Mission has been established.
- It will focus on following areas:
  - providing access and retaining children in foundational year of schooling
  - teacher capacity building
  - development of high quality and diversified Student and Teacher Resources/Learning Materials
  - tracking the progress of each child in achieving learning outcomes
- NIPUN Bharat is one of the components of the NEP 2020.
- It covers 3-year Foundational Literacy and Numeracy in the preschool and Grade 1, 2 and 3.

## New gecko species names after scientist Ganeshaiah

### Inside Story of the News:

- **Cnemaspis ganeshaiahi**, a brand-new species of **gecko**, was found in Chamarajanagar, **Karnataka's Male Mahadeshwara Hills** (MM Hills).
- This region's native gecko species bears KN Ganeshaiah's name, a well-known agricultural scientist and Kannada author.
- The finding of this new species was made public by researchers from the Ashoka Trust for Research in Ecology and Environment (ATREE).

### Habitat and Characteristics of Cnemaspis ganeshaiahi

- Cnemaspis ganeshaiahi is a diurnal gecko species that resides in dry deciduous and scrub forests.
- Usually, one can find these geckos in cracks in rocks or walls.
- Other closely similar species do not have the particular morphological and colour patterns that this species does.
- Researchers have found that the gecko seems to be confined to the MM Hills and the neighbouring Eastern Ghats.

### Recognition of Ganeshaiah's Contributions

- In honour of KN Ganeshaiah's contributions to ecology, evolutionary biology, and conservation biology, this species was given his name by researchers.
- For many years, Ganeshaiah taught plant genetics and breeding at the University of Agricultural Sciences, Bengaluru.
- This is the fourth species that scientists from various universities have named in his honour.

### Other Species Named After KN Ganeshiah

- Previously, researchers have named a grass species, *Centotheca ganeshiahiana*, at the Saddle Peak National Park, North Andaman.
- They also gave the name *Parasyscia ganeshiahi* to a little cryptic ant species that was discovered under decaying logs or under rocks.
- In addition, Ganeshiah's name has been given to a species of cycas, *Cycas uma-ganeshiahi*.

### Ganeshiah's Contributions to Ecology and Evolutionary Biology

- Professor of plant genetics and breeding at the University of Agricultural Sciences in Bengaluru, KN Ganeshiah is a well-known agricultural scientist and Kannada author.
- His contributions to ecology, evolution, and conservation biology are well-known.
- He has published many research papers and books, including "Biodiversity of the Western Ghats" and "Ecology, Evolution and Conservation of Plants."
- The scientific community has recognised his contributions to these domains, and his name is now synonymous with biodiversity study.

## Peptides from snake venom could prevent, treat Parkinson's, Alzheimer's

### Inside Story of the News:

- Indian researchers have discovered that **nerve growth factors found in snake venom** hold promise as **potential therapeutic applications for preventing and treating neurological disorders** like Parkinson's disease (PD) and Alzheimer's disease (AD).
- **Peptides** are amino acids that make up specific proteins needed by the skin.
- PD and AD are some of the most common neurodegenerative disorders.
- To stop, slow down, or prevent these diseases, there are yet no viable treatments or medications.
- The Department of Science and Technology's (DST) Institute of Advanced Study in Science and Technology (IASST) Director, Prof. Ashis Kumar Mukherjee, and his team have studied snake venom and discovered that it has a wealth of drug prototypes for diverse biomedical uses.
- These can be shaped into potential candidates for life-saving medication prototypes for conditions like cancer, heart disease, and COVID-19.
- They discovered potential in a tiny component of the venom described by Prof. Mukherjee and his team, the nerve growth factor from snake venom.
- By attaching to the high-affinity nerve growth factor receptor of rat pheochromocytoma PC-12 cells, Tropomyosin receptor kinase A (TrkA), it has neurogenesis capabilities (prompting the sprouting of neurites from a cell).
- Drug development from a native snake venom toxin is laborious, nevertheless.
- To solve this issue, Professor Mukherjee and his colleagues created two brand-new custom peptides called TNP and HNP that are commercially produced peptides for use in biomedical

- laboratories and that are modelled after the neurotrophin found in snake venom. These peptides control the growth, upkeep, and operation of vertebrate nervous systems.
- The selectivity and specificity of drug molecules towards the receptor can be improved by these peptides, which also demonstrate selective binding to the human TrkA receptor of nerve cells. This increases the therapeutic potency of the drug molecules.
- Those with less symptomatic illness progression would benefit from the treatment the most.

## Elephant Whisperers, an Oscar-winning Indian documentary filmed at Asia's oldest camp, Theppakadu

### Inside Story of the News:

- **Theppakadu Elephant Camp**, located in the **Mudumalai Tiger Reserve** in the Nilgiri Mountains of Tamil Nadu, served as the backdrop for the **Oscar-winning short documentary "The Elephant Whisperers."**
- Kartiki Gonsalves, the film's director, stayed in the Mudumalai Tiger Reserve for five arduous years to film the documentary, and it paid off by earning her an Oscar.
- The 41-minute film explores the shaky but priceless friendship that develops between Raghu, an orphaned elephant, and his mahouts, Bomman and Bellie.

### About Theppakadu Elephant Camp:

- Theppakadu Elephant Camp, which was founded 105 years ago in Mudumalai Tiger Reserve, is the oldest elephant camp in Asia.
- It has 28 elephants at the moment and is located on the banks of the Moyar River.
- These elephants are being trained and cared after by a committed group of mahouts.

## Matua Maha Mela

### Inside Story of the News:

- The Prime Minister, Shri Narendra Modi, has praised **Shri Shri Harichand Thakur Ji** for teaching the way of kindness and service and invited people to attend the **Matua Maha Mela** in huge numbers.
- The mela is being held to commemorate Sri Sri Harichand Thakur ji's 212th birthday, who is the founder of the Matua sect.
- An estimated 45 lakh people are expected to attend the mela, which is put on by the All India Matua Mahasangha, during the course of the week to seek the blessings of the sect's founder.
- It is held at Sridham Thakurnagar, Thakurbari in North 24 Parganas of West Bengal.

### About Shri Shri Harichand Thakur Ji:

- Shri Shri Harichand Thakur Ji was born around 1811 to a peasant family of Thakur community in Orakandi, Gopalganj District of Bengal presidency (presently in Bangladesh).
- He devoted his entire life to helping the poor and oppressed find salvation.
- He performed his job in Bengal Presidency among the untouchables.
- The Matua Dharma, or "Matua" Vaishnavite Hinduism, was established in 1860 as a result of the social and religious movement he founded in Orakandi (now in Bangladesh).
- Members of the Namasudra community, who were at the time regarded as untouchables, adopted this.
- The Matua group fought against caste prejudice and promoted Dalit social and educational advancement.
- Following that, it drew followers from other caste communities, such as the Malis, Telis, and Chamars, who were cast aside by the upper castes.
- Guruchand Thakur (born 1846), the son of Sri Sri Harichand Thakur, assumed control of the Matua Mahasangha following his father's passing. He started several schools for the Dalit community's education.
- He was the exceptional leader that gave the Matua sect the doctrinal coherence and significant organisational drive that led to its association with the 1872-founded Namasudra social protest movement.
- Around the legacy of Thakur and Matua Mahasangha, a sizable body of Dalit writing that combines religious and secular topics has arisen.
- Currently, the Matua sect is a prominent group advocating for the advancement of Bengali Dalits living in Bangladesh and India.

## PM MITRA Parks

### Inside Story of the News:

- The locations for the construction of **7 PM Mega Integrated Textile Regions and Apparel (PM MITRA) Parks** for the textile sector have been revealed by the Indian government.
- The Parks will come up in **Tamil Nadu, Telangana, Gujarat, Karnataka, Madhya Pradesh, Uttar Pradesh and Maharashtra.**
- The PM MITRA Parks are a significant step in achieving the Government's goal of making India a global centre for textile manufacture and exports.
- They are inspired by the Hon'ble Prime Minister's 5F vision, which stands for Farm to Fibre to Factory to Fashion to Foreign.
- These parks are anticipated to increase the textile industry's competitiveness by facilitating economies of scale and luring foreign manufacturers to India.
- PM MITRA Parks will contribute to building top-notch industrial infrastructure that will draw significant investment, including FDI, and support innovation and job growth in the industry.

- PM MITRA Parks represent a distinctive paradigm in which the Central and State Governments would collaborate to boost investment, foster innovation, create job opportunities, and ultimately turn India into a major centre for textile production and exports.
- The Ministry of Textiles will oversee the execution of these projects.
- An SPV owned by Centre and State Government will be set up for each park which will oversee the implementation of the project.
- The Park SPV will receive financial assistance from the Ministry of Textiles in the form of Development Capital Assistance up to Rs. 500 crore per park.
- To encourage prompt implementation, units in PM MITRA Park will also receive Competitive Incentive Support (CIS) up to Rs 300 crore per park.
- To provide Master Developer and investor units with extra incentives, convergence with other GOI schemes must also be made possible.
- State governments shall provide a contiguous, unencumbered land parcel of at least 1000 acres, as well as enable the provision of all utilities, a reliable single window clearance process, an available water supply, a reliable water availability system, and a stable industrial/textile policy.
- The parks will include a top-notch infrastructure, plug-and-play features, as well as industry training and research facilities.
- With these parks, an investment of around 70,000 crores of rupees and the creation of 20 lakh jobs are anticipated.

## Starberry-Sense

### Inside Story of the News:

- Astronomers at the city's Indian Institute of Astrophysics (IIA) have created a **low-cost star sensor** in collaboration with others.
- It can help tiny spacecraft of the **CubeSat** class figure out their orientation in space.
- The **Starberry-Sense** instrument, which was created using commercially available off-the-shelf (COTS) components, is getting ready to launch on Polar Satellite Launch Vehicle's stage 4. It can also be used for CubeSat and other future small satellite missions.
- The popularity of CubeSats and other small satellite missions has greatly increased recently, according to astronomers.
- The cost of a commercially available star sensor typically exceeds the budget for a CubeSat, they pointed out, despite the fact that these missions use widely accessible components in their design and development. Starberry-Sense can assist in resolving this issue.
- The sensor developed by IIA researchers, and their collaborators is less expensive—less than 10%—than others on the market.

### The Instrument's Brain - Raspberry Pi:

- According to a statement from the Department of Science and Technology (DST), of which IIA is an independent organisation, **the instrument's brain is the Raspberry Pi**, a single-board Linux computer that is well-liked among electronics enthusiasts.
- According to Bharat Chandra, a PhD student at IIA and the study's lead author, the team coupled a Raspberry Pi with a few highly optimised algorithms to turn it into a potent star sensor.
- The research was published in the Journal of Astronomical Telescopes, Instruments, and Systems.
- They could demonstrate that tools manufactured from easily accessible components are capable of being space qualified.
- Quick and simple customisation for diverse requirements is possible with modular design.
- A modified version of StarBerry-Sense, for instance, will interface with the Major Atmospheric Cherenkov Experiment (MACE), which is housed at the Indian Astronomical Observatory (IAO), Hanle, Ladakh, despite the fact that it is intended for space-based applications.

## REACHOUT Scheme

### Inside Story of the News:

- The Ministry of Earth Sciences is putting an umbrella scheme called **Research, Education and Training Outreach (REACHOUT)** into place to build capacity.
- It consists of the following sub-schemes:
  - R&D in Earth System Science (RDESS)
  - International Training Centre for Operational Oceanography (ITCOcean)
  - Program for Development of Skilled manpower in Earth System Sciences (DESK)
- The main objectives of the above sub-schemes are:
  - Supporting various R&D activities in the thrust areas of different components of Earth System Sciences that are theme and need based and that would help in attaining the National goals set up for MoES.
  - Create fruitful partnerships with international organisations for the exchange of cutting-edge Earth scientific and technological information and the provision of services to underdeveloped nations.
  - Create a professional and knowledgeable workforce in the Earth Sciences with the assistance of domestic and international academic institutions.

## AFINDEX-2023

### Inside Story of the News:

- The second edition of **Africa-India Field Training Exercise, AFINDEX-2023**, will be held from March 21-30 in Pune.
- The event is significant in terms of relations between India and Africa because it will be attended by army chiefs as well as chiefs from 21 different African nations.



- The main goals of the exercise are to promote Indian defence industries and give the participating contingents the opportunity to improve their tactical abilities, exercises, and procedures for joint operations for peacekeeping under UN mandate.
- An inaugural ceremony will kick off the 10-day exercise at the Foreign Training Node in Aundh, Pune.
- A comprehensive validation exercise with the UN mandate on the subject of "**Humanitarian Mine Actions and Peace Keeping Operations**" is also planned.
- Through detailed and practical discussions, a tactical exercise, and promotion of the concept of "**Africa-India Militaries for Regional Unity (AMRUT)**," the joint exercise would emphasise combining the current dynamics of UN peacekeeping operations (UNPKF).
- Twenty African countries participated in the inaugural AFINDEX, which took place in Pune in March 2019.
- The India-Africa Defence Ministers Conference took place in Lucknow in 2020 with DEFEXPO.

## Trichrysis poseidonia

### Inside Story of the News:

- Researchers from the Shadpada Entomology Research Lab at Christ College, Irinjalakuda, have made an intriguing discovery in southern India – **a new species of cuckoo wasp**.
- Because of the striking likeness between the apical abdominal teeth and Poseidon's trident, the species has been given the name **Trichrysis poseidonia** after the Greek God of the Sea.

### About Cuckoo Wasps:

- **Jewel wasps**, commonly referred to as cuckoo wasps, are a group of insects in the Chrysididae family.
- They are renowned for their kleptoparasitic behaviour and beautiful metallic colours.
- These wasps lay their eggs in the nests of other wasps or bees instead of making their own nests or gathering their own food.
- The cuckoo wasp larva feeds on the food meant for the host's young after the egg hatches.

### Discovery of Trichrysis poseidonia:

- Trichrysis poseidonia was discovered by scientists from the Shadpada Entomology Research Lab while conducting surveys of the insect flora in the Western Ghats, a mountain area in southern India.
- Their attention was quickly drawn to the wasp's distinctive features, such as the three-pointed belly teeth that resembled Poseidon's trident.
- The new species was thoroughly examined by the researchers, who also contrasted it with existing cuckoo wasp species.
- They concluded that it belonged to a unique, unreported species.

## Existence of Zealandia confirmed

### Inside Story of the News:

- Scientists have now conclusively shown that **Zealandia**, a "lost" continent, exists after 375 years of conjecture and research.
- **Gondwana**, an ancient supercontinent that includes Zealandia, which is 1.89 million square miles in size, Western Antarctica, and Eastern Australia, existed more than 500 million years ago.
- Yet about 105 million years ago, it started to "pull apart" from Gondwana for reasons that geologists are still debating.
- Almost 94% of the landmass remained underwater for centuries as a result of this steady sinking beneath the waves.
- It is called as **Te Riu-a-Māui** in the Māori language.
- Abel Tasman, a Dutch businessman and sailor who was searching for the Terra Australis or "great Southern Continent," first mentioned Zealandia in 1642.
- Geologists from GNS eventually confirmed Zealandia's existence in 2017, after years of it remaining undetected.
- The vast majority of this "new" continent is located underwater, lying beneath 6,560 feet (2 km) of water.
- Although Zealandia is today regarded as the eighth continent in the world, it differs from the other continents due to its distinct features.
- While every other continent has a number of countries, Zealandia only has three territories.
- Although being submerged, Zealandia is a significant find that provides insight into the planet's geological past and the forces that produced the world as we know it today.