

### WHAT ARE BUMBLEBEES?

According to a new study, bumblebees appear to be quite resistant to common pesticides.



**Bumblebees** are large, hairy, social bees belonging to the family Apidae (subfamily Bombinae).

- The family **Apidae** includes the well-known honey bees and bumble bees, as well as carpenter bees, cuckoo bees, digger bees, stingless bees, and orchid bees.

#### **Distribution:**

- They occur throughout much of the world but are most **common in temperate climates**. There are over 250 known species, existing primarily in the Northern Hemisphere.
- They are known for their ability to **collect nectar** from flowers **and pollinate plants**.

#### **Features:**

- They are **large, yellow and black** flying insects with a distinct buzz.
  - There is variation in coloration among bumblebees and some species have **bands of red, yellow and black**. They have **stocky bodies** that are covered with many hairs to which pollen adheres.
  - They have four wings; the two rear wings are small and usually attached to the fore wings by a row of hooks called hamuli.
  - They are **social insects that live in colonies**. The queen bee, drones and worker bees all have specific tasks to help support the colony.
  - Unlike the honeybee, bumblebees **do not make honey**, as they **do not need to store food for winter**. Instead, the season's new queens hibernate and emerge to find their own nests in the spring.
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## EXERCISE DUSTLIK-2024

The Indian Army contingent departed recently for the 5th edition of India- Uzbekistan joint military Exercise DUSTLIK.



- It is an annual **joint military exercise** between the **Indian Army and the Uzbekistan Army**. It is conducted alternately in India and Uzbekistan.
- The **first edition** of the exercise was held in Uzbekistan in November. The last edition was conducted in Pithoragarh in February 2023.
- **Dustlik-2024:**
  - The exercise will be conducted at **Termez in Uzbekistan**.
  - The aim of Exercise DUSTLIK is to **foster military cooperation** and enhance **combined capabilities to execute joint operations** in mountainous as well as semi urban terrain.
  - It would focus on a high degree of physical fitness, joint planning, joint tactical drills, and the basics of special arms skills.

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## NEW DATA LAW, A BARRIER TO JOURNALISTIC FREE SPEECH

### Context

- **In August 2023, the Indian government passed India's first comprehensive data protection law, the Digital Personal Data Protection (DPDP) Act, 2023.**
- While this law is a significant step towards ensuring the protection of personal data, its **potential implications on journalistic free speech raise concerns.**
- Therefore, it is crucial to examine **why the absence of exemptions for journalistic activities may threaten the foundational principles of a free press.**

### The Digital Personal Data Protection (DPDP) Act, 2023

- It is **an act that was passed to regulate the collection, processing, storage, and use of personal data** by individuals, organisations, and government entities in India.

- The act aims to protect the privacy and data rights of individuals and establish a framework for the lawful and transparent handling of personal data.

## Key Features of DPDP Act, 2023

- The act defines personal data as any data that can directly or indirectly identify an individual.
- The act outlines principles for data protection, including lawfulness, fairness, transparency, purpose limitation, data minimisation, accuracy, storage limitation, integrity, confidentiality, and accountability.
- The act distinguishes between data fiduciaries (entities that determine the purpose and means of processing personal data) and data processors (entities that process personal data on behalf of data fiduciaries).
- The act emphasises the importance of obtaining explicit consent from individuals before processing their personal data. It also provides provisions for the withdrawal of consent.
- Individuals are granted rights regarding their personal data, including the right to access, correct, erase, and transfer their data.
- The act may require certain types of data to be stored and processed within India, depending on the nature and sensitivity of the data.
- A Data Protection Board is established to oversee compliance with the act and handle data protection grievances.
- The act specifies penalties and sanctions for non-compliance, including fines and other legal consequences for violations of data protection principles.
- The act regulates the transfer of personal data across borders to ensure that data is protected to a similar standard as within India.
- The act sets out obligations for data fiduciaries and processors, including requirements for security measures, data breach notifications, and data impact assessments.

## Exemptions for Journalistic Activities

- Data protection laws **traditionally provide exemptions for journalistic activities**, allowing journalists to operate without constraints related to privacy obligations.
- **These exemptions enable journalists to freely access and report on personal data** for their investigative stories without the need for consent from the individuals involved.
- **Unfortunately, the DPDP Act, 2023, lacks such exemptions.** While previous drafts of the Act did contain provisions for journalistic activities, these were removed in the final law without clear explanations.
- This departure from earlier versions **could have a detrimental impact** on journalistic practices and the ability to uphold accountability.
- **Three previous drafts of the DPDP Act**, one released by an expert committee on data protection (2018), the other by the government (2019), and the third released by a Joint Parliamentary Committee in 2021, **contained clear exemptions for journalistic activities.**
- **In two subsequent drafts of the DPDP Act (2022 and 2023), the exemption given to journalistic activities was withdrawn** without reasons being given.

## Conclusion

- While the DPDP Act, 2023, is a **crucial step in protecting personal data in India**, its **impact on journalistic free speech is concerning.**
- **By ensuring exemptions for journalists and promoting transparent consultation processes, the government can strike a balance between protecting individual privacy and upholding the fundamental principles of a free press.**

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## SPACE TOURISM

**Why in News?** Gopi Thotakura is set to become the first Indian to become a space tourist on the NS-25 mission of Blue Origin, a company founded by Jeff Bezos.

**What is Space Tourism?** It seeks to provide tourists with the opportunity to become astronauts and experience space travel for recreational, leisure, or business purposes and is of two types: **sub-orbital and orbital.** The sub-orbital spacecraft takes passengers just beyond

the **Kármán line** (boundary between Earth's atmosphere and outer space (~100 kilometers)) for a few minutes and then comes back to Earth. The NS-25 mission is a sub-orbital mission. The orbital space craft takes passengers much further than the Kármán line where they can spend from a couple of days to more than a week at an altitude of nearly 1.3 million feet. Space X's Falcon 9 in 2021 took four passengers to an altitude of 160 km for three days.

**What are the Challenges Involved?** It is expensive and requires a passenger to spend at least a million dollars to reach outer space which is not feasible for everyone wishing to do space travel. As per several studies, it may lead to environmental damage as rockets emit gaseous and solid chemicals directly into the upper atmosphere. According to a 2022 study by University College London (UCL), the University of Cambridge and the Massachusetts Institute of Technology (MIT), the soot emissions from rocket launches are far more effective at warming the atmosphere compared to other sources. Safety is another concern, despite having high safety standards, out of the total 676 people who flew into space, 19 died, as per a 2023 report by Astronomy Magazine i.e. approximately 3% of astronauts died during their space flight which is quite a high fatality rate.

## THE STRATEGIC IMPORTANCE OF ANDAMAN AND NICOBAR ISLANDS

### Why in News?

The recent thrust on developing strategic infrastructure, both civilian and military, on the Andaman and Nicobar (A&N) islands is welcome and decades overdue.

The way this important group of islands has been neglected during the decades following Independence indicates a lack of strategic maritime vision.

### Strategic Location of the A&N Islands:



- The islands are located **700 nautical miles (1,300 km)** southeast of the Indian mainland.

- **The Malacca Strait**, the main waterway that connects the Indian

Ocean to the Pacific, is less than a day's steaming from Port Blair.

- **Sabang in Indonesia is 90 nautical miles** southeast of Indira Point (on Great Nicobar island), and **Coco Island (Myanmar)** is barely 18 nautical miles from the northernmost tip of the Andamans.
- **The mouth of the Kra Canal** (to be built by Thailand to connect the Gulf of Thailand with the Andaman Sea) would be located roughly 350 nautical miles east of Port Blair.
- The islands **share four of India's international maritime zonedelimitations** with Myanmar, Thailand, Indonesia and Bangladesh.
- They also give India substantial ocean space under the United Nations Conference on the Laws of the Sea (UNCLOS) in terms of exclusive economic zone and continental shelf.

## What is the Strategic Significance of the A&N Islands?

- The following has brought a degree of seriousness to the imperative of developing the A&N group of Islands -
  - The transformation of India's Look East policy into a robust **Act East policy**,
  - A realisation of the critical importance of **ocean power**, and
  - The rapid enhancement in the capabilities of the **Chinese PLA Navy**.
- In the foreseeable future, a serious challenge could emanate from **a build-up of Chinese maritime forces at the eastern choke points of the Indo-Pacific**, namely
  - The Malacca (between Sumatra and the Malay peninsula),
  - Sunda (between Java and Sumatra),
  - Lombok (between Bali and Lombok), and
  - Ombai-Wetar (off East Timor) straits.
- The A&N Islands should be the **first line of offence** against any attempt from the East to undermine India's maritime security.
- While some effort was made to leverage this locational advantage with the A&N Command (ANC) being constituted as a tri-services command in 2001, subsequent efforts have been grossly inadequate.

## Why has the Pace of Developing Strategic Infrastructure in A&N Been Slow?

- **Non-realisation of strategic importance for India’s security:** Political decision-makers have very recently realised how vitally important the islands are. This is because of the PLA Navy's unprecedented expansion.
- **The distance from the mainland:** It has been used as an excuse to delay and stall various projects.
- **Complex procedures for obtaining environmental clearances:** Regulations on the conservation of forests and native tribes have complicated issues of land acquisition.
- **Coordination challenges:** The development of islands and strategic infrastructure is a multi-dimensional project involving several ministries, departments, and agencies.
- **Not a political issue:** The conflict between a long-term strategic vision and immediate political gains has often tilted in favour of the latter.

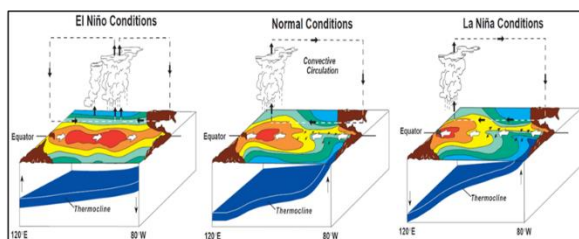
## MONSOON TO BE ABOVE NORMAL, PREDICTS IMD

### Why in news?

India is likely to experience an “above normal” monsoon rainfall between June and September this year. This was predicted by the India Meteorological Department (IMD) in its long-range forecast.

This is the first time in a decade that the IMD has predicted “above normal” rainfall at the first stage itself, nearly 45 days ahead of the beginning of the four-month monsoon season.

### El Nino and La Nina



- **El Nino:**
  - A warming of the ocean surface, or above-average sea surface temperatures (SST), in the central and eastern tropical Pacific Ocean.
  - It is associated with lower than normal monsoon rainfall in India.
- **La Nina:**

- A cooling of the ocean surface, or below-average SSTs, in the central and eastern tropical Pacific Ocean.
- It is associated with a **comparatively better monsoon** rainfall in India.
- **Neutral:**
  - Neither El Nino nor La Nina.
  - Often tropical Pacific SSTs are generally close to average.

## Indian Ocean Dipole (IOD)

- The Indian Ocean Dipole (IOD) is defined by the difference in sea surface temperature between two areas (or poles, hence a dipole) – a western pole in the Arabian Sea (western Indian Ocean) and an eastern pole in the eastern Indian Ocean south of Indonesia.
- In scientific terms, the IOD is a **coupled ocean and atmosphere phenomenon**, similar to ENSO but in the **equatorial Indian Ocean**.
- A ‘**positive IOD**’ — or simply ‘IOD’ — is associated with **cooler than normal sea-surface** temperatures in the eastern equatorial Indian Ocean and warmer than normal sea-surface temperatures in the western tropical Indian Ocean.
- The opposite phenomenon is called a ‘**negative IOD**’, and is characterised by **warmer than normal SSTs** in the eastern equatorial Indian Ocean and cooler than normal SSTs in the western tropical Indian Ocean.
- The IOD was identified as an independent system only in 1999.
- **India’s normal rainfall**
  - India, as a whole, normally receives 870 mm of rainfall during the monsoon season.
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## Factors indicating above normal rainfall

- Forecast of ‘good rainfall’ is attributed to weakening of El Nino, eventual development of the **La Nina conditions during the second half of the season (Aug-Sep) and a positive Indian Ocean Dipole (IOD)**.



## UN PERMANENT FORUM ON INDIGENOUS ISSUES (UNPFII)

The 23rd session of the UN Permanent Forum on Indigenous Issues recently commenced in New York, United States.



### About UN Permanent Forum on Indigenous Issues (UNPFII):

- It was created in 2000 as an **advisory body** to the United Nations Economic and Social Council (ECOSOC) with a mandate to **discuss indigenous issues** related to economic and social development, culture, environment, education, health and human rights.
- According to its mandate, the **Permanent Forum will:**
  - Provide expert **advice and recommendations** to the Council, as well as to programmes, funds and agencies of the United Nations, through the Council.
  - **Raise awareness** and promote the integration and **coordination of activities** related to indigenous issues within the UN system.
  - Prepare and **disseminate information** on indigenous issues.
- It is **one of three UN bodies** that is mandated to deal specifically with Indigenous Peoples' issues.
  - The others are the Expert Mechanism on the Rights of Indigenous Peoples and the Special Rapporteur on the Rights of Indigenous Peoples.

### Members:

- It is comprised of **sixteen independent experts**, functioning in their personal capacity, who serve for a term of three years as members and may be re-elected or re-appointed for one additional term.
- Eight of the members are **nominated by governments** and eight are **nominated directly by indigenous organisations** in their regions.
- It prepares a report of the session containing recommendations and draft decisions, which is submitted to the ECOSOC.