Prelim Bits 10-03-2023 | UPSC Daily Current Affairs

Macquarie Island

The Federal government of Australia proposed the expansion of the marine park covering Macquarie Island's Economic Exclusion Zone.

- Macquarie Island is located around 1,500km southeast of Tasmania.
- Macquarie Island is the exposed crest of the 1,600km-long undersea Macquarie Ridge.
- Macquarie Island the only piece of land in the world formed entirely of oceanic crust.
- **Oceanography** - Macquarie Ridge is one of only 3 such ridges that impede the Antarctic Circumpolar Circulation.
- This results in distinct differences between the west and east sides of the ridge, which are used in different ways by different species.
- The Sub-Antarctic Front and the Polar Front creates 3 distinct bodies of water.
- They interact with the Macquarie Ridge create at least 6 different large-scale oceanographic habitats.



- **Diversity** - It has a diverse set of habitats supporting vast variety of wildlife.
- Including 4 species of penguins and 4 species of albatross, the island recorded 57 seabird species.
- **Protection**- Macquarie Island and its surrounding seas are already protected as a Tasmanian reserve.
- The area is also a World Heritage Area.
- The Australian federal government proposed expansion of the marine park covering the island's Economic Exclusion Zone.

References

1. Down to Earth - Why Macquarie Island deserves a bigger marine park

Project Greensand

Project Greensand will be the world's first cross-border carbon storage project.

- Project Greensand is a carbon storage project in Denmark's North Sea.
- The project aims to bury vast amounts of planet-heating carbon dioxide gas beneath the North Sea floor.
- It hopes that it can help the Nordic nation and others meet climate targets.
- It reverses the traffic in the pipes by pumping CO_2 into the depleted reservoir of the Nini West oil field in Denmark.
- **CCS** - Capture and storage of CO_2 goes under the name Carbon Capture Storage

(CCS).
- CO_2 is captured and stored underground.
- The UN climate panel points out that CCS has the potential to contribute significantly to achieving the goal of reducing CO_2 emissions.

References

1. The Hindu - Denmark hopes to pump some climate gas beneath the sea floor
2. Project Greensand

Sodium intake reduction

The World Health Organisation (WHO) Global report on Sodium Intake Reduction shows, the world is off-track to achieve its global target of reducing sodium intake by 30%, by 2025.

- The World Health Organisation (WHO) has set the global target of reducing sodium intake by 30% by 2025.
- Countries are encouraged to establish sodium content targets for processed foods, in line with the WHO Global Sodium Benchmarks
- Reducing salt intake has been identified as one of the most cost-effective measures countries can take to improve population health outcomes.

Report Findings

- Only 5% of WHO Member States are protected by mandatory and comprehensive sodium reduction policies.
- 73% of WHO Member States lack full range of implementation of such policies.
- Only 9 countries (Brazil, Chile, Czech Republic, Lithuania, Malaysia, Mexico, Saudi Arabia, Spain and Uruguay) have a comprehensive package of recommended policies, according to the UN health body.
- WHO has developed a Sodium country score card for Member States based on the type and number of sodium reduction policies they have in place.
- A sodium country score from 1 (the lowest level) to 4 (the highest level) to each member state based on the level of implementation of sodium reduction policies and other measures is allocated.
- Of the 194 WHO member states, 56 remain in score 1 in the sodium country score card.

Sodium (Na)

- Sodium is an essential nutrient.
- It increases the risk of heart disease, stroke and premature death when eaten in excess.
- The main source of sodium is table salt (sodium chloride), but it is also contained in other condiments such as sodium glutamate.

References

1. TOI - World off track for 30% cut in sodium intake by 2025

2. Down To Earth - Salt to taste? Reduce your sodium intake
3. WHO - Massive efforts needed to reduce salt intake and protect lives

Antarctic sea ice cover

The European Union's climate monitoring service said that the Antarctic sea ice has reached its lowest extent in the 45-year satellite data record.

- The Antarctic Ocean area is covered by ice.
- The ocean surface covered by ice around the frozen continent shrank to 2.09 million square kilometres, the lowest level since satellite records began.
- Sea-ice concentrations during the southern hemisphere summer were well below average in all sectors of the Southern Ocean.



- **Implications** - Polar ice caps are a sensitive indicator of the climate crisis.
- Low sea-ice have implications for the stability of Antarctic ice shelves.
- Melting sea ice global sea level and rise accelerates global warming.
- White sea ice bounces up to 90% of the Sun's energy back into space (albedo).
- When white sea ice is replaced by dark, unfrozen sea, the water absorbs a similar percentage of the Sun's heat instead.

India and Antarctica

- India has 2 active research centres in Antarctica: Maitri and Bharati. The third centre is Dakshin Gangotri is not active and is used as a supply base.
- India enacted Indian Antarctic Act, 2022 for protection of Antarctica.
- To know more about India's Antarctica activities, click here.
- **Related Topics** - Protection of Antarctic Ecosystems, Antarctica's Doomsday Glacier, Antarctica Treaty System

References

1. The Hindu - Antarctic sea ice cover at record low

Mimeusemia ceylonic

Two researchers from Tamil Nadu have spotted a rare moth species for the first time in India in the buffer zone of Kalakkad–Mundanthurai Tiger Reserve (KMTR) after 127 years ago.

- *Mimeusemia ceylonica* is a moth species belonging to the subfamily *Agaristinae* and family *Noctuidae*.
- The species was last sighted 127 years ago at Trincomalee in Sri Lanka in 1893.
- It was illustrated and described by English entomologist George Hampson.
- The species was rediscovered during a moth survey conducted at the Agasthyamalai Community-based Conservation Centre (ACCC) situated in the buffer zone of KMTR, Tirunelveli district in 2020.
- It was again spotted at the Vallanaadu Blackbuck Sanctuary in Thoothukudi district in

2022.

References

1. The Hindu - Moth found in Tirunelveli, Thoothukudi districts after 127 years

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