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Arctic Terns

The annual migration of birds including the Arctic Terns from the Arctic to the Gulf of Mannar Marine Biosphere Reserve has begun.

The seasonal migration occurs every year over the Central Asian Flyway (CAF).

- Arctic Terns (*Sterna paradisaea*) are small water-loving birds with angular wings.
- They are well known for its **long yearly migration**. It migrates from pole to pole (Arctic to Antarctica); travelling 70,000 km each year.
    1. The arctic tern hatches during summer in the Arctic Circle.
    2. During the unbearably cold arctic winter, the arctic tern flies south, following the summer season all the way to the Antarctic Circle.
- Arctic Terns are **social birds**, foraging in groups and **nesting on the ground** in colonies. They often rest on ice and fly on buoyant wings.
- Habitat - Shorelines
- Nesting - Ground (This bird has a circumpolar breeding distribution.)
- IUCN Conservation - Least Concern

Central Asian Flyway

- The Central Asian Flyway (CAF) is the shortest flyway out of the 9 flyways in the world.
- This flyway comprises 29 countries including Iraq, Kuwait, Qatar, Kyrgyzstan, Nepal, India, Bhutan, Myanmar and Maldives
- On this route, the migratory birds travelling on the east of CAF also halt at the adjoining sanctuary habitats in Dhanushkodi and other water bodies and inter-tidal shores.
- To know more about Migratory Flyways, click here.

Journey in India

- The Arctic birds take the long non-stop haul from the Arctic and European regions to winter in South Asia.
- They usually stopover in the coastal swamps of the Gulf of Mannar between October and December.
- The birds begin their journey through India from the Bhitarkanika National Park, Odisha, and fly over to Kanniyakumari, the southern-most tip of coastal Tamil Nadu.
- The flocks again return in March on their way back.

Migration of Birds

- Migration of bird species **occurs annually** when the birds live in places that get too cold during the winter, and food supply becomes sparse.

- Birds migrate from the breeding area to a wintering area.
    - Breeding area is where they stay during the warmer seasons such as spring and summer.
    - Wintering area is where they will spend the winter months, and return after the season ends.
- Their route is set and generation after generation, follow the path.
- Birds use different techniques:
    1. **Visual cues -** Mountain ranges and rivers.
    2. **Aural cues -** Birds can hear low-frequency sounds, a skill that allows them to pick up sounds of waves or winds from the mountains and deserts from great distances away.
    3. **Earth's magnetic field –** Birds' eyes work like a magnetic compass, and direct them while detecting the angle and intensity of the magnetic field.

Sugar Surplus & Exports may Drop

According to estimates by the Indian Sugar Mills Association (ISMA), there may be a drop in sugar production and exports this year.

- **Production** - The possible reasons for the drop in sugar production may include,
    1. Heavy unseasonal rains in Uttar Pradesh (Maharashtra may overtake U.P. as the highest sugar producing State this year, due to good monsoon rainfall & sufficient water in the reservoirs) and
    2. A higher diversion of sugarcane juice and B-molasses to ethanol production.
- With average retail sugar prices also on the rise, a reduction in surplus sugar could help speed up cane payments by mills and reduce their pending arrears to farmers this season.
- There is an increase in the acreage, but it is unlikely to translate into higher production.
- **Exports** - Along with decrease in surplus, the export market for India would get squeezed because of higher exports expected from Thailand.

Reasons for Extreme Weather in India

- Even as the southwest monsoon began to retreat from the subcontinent, Kerala and Uttarakhand received record rainfall in October, 2021.
- The rain-bearing '**low pressure system**' that is active in the Arabian Sea contributed to the heavy rain in Kerala.
- **Western disturbances** are what caused the rain in northern India.
    - Western disturbances are periodic influxes of moisture-laden clouds from the Mediterranean that are common during winter.
- As the Bay of Bengal is still warm, strong winds from there are reaching as far as Uttarakhand and will cause rainfall in north-eastern India.
- **Global Warming** - Both low pressures, and the western disturbances, are tangentially connected to the larger pattern of global warming.
    - The Bay of Bengal is historically the warmer ocean that seeds low pressures and cyclones that bring rain to India.
    - In recent years, however, the Arabian Sea, too, has been warmer than normal, leading to significant cyclonic activity.
- Overall elevated temperatures are contributing to warmer waters in the Arctic Ocean & drawing colder air from the poles with greater intensity.
- This has added to the increased moisture, thereby seeding more intense western disturbance activity over north India.

Polycystic Ovary Syndrome

- Polycystic Ovary Syndrome (PCOS) or Polycystic Ovary Disorder (PCOD) is a health problem caused by an imbalance of reproductive hormones.
- It creates problems in the ovaries. The ovaries may develop numerous small collections of fluid (follicles) and fail to regularly release eggs.
- PCOS can happen at any age after puberty. Mostly, women between the age of 15 and 44, or during the years they can have children, have PCOS.
- **Causes** - The exact cause of PCOS is not known.
- But experts think that several factors play a role, including genetics, high levels of androgens (male hormones) and high levels of insulin.
- **Symptoms** - PCOS can cause missed or irregular menstrual periods, which can lead to,
    1. Infertility (inability to get pregnant).
    2. Development of cysts (small fluid-filled sacs) in the ovaries
- Other symptoms such as hirsutism (excess facial and body hair), weight gain, insulin resistance, and hair loss.
- In India, PCOS is a tabooed disorder; the discourse around it being more reductive in the past decades due to its link with infertility.

Fiscal Data from CGA

The Controller General of Accounts (CGA) has released certain financial data of the Union Government.

- **Fiscal deficit** or gap between expenditure and revenue of the Union Government worked out to be Rs. 5.26 lakh crore at the end of September, 2021. It has touched 35% of annual budget target.
- The deficit figures in the current fiscal appear better than the previous financial year when it had soared to 114.8% of the estimates mainly due to a jump in expenditure to deal with the Covid-19 pandemic.
- For the current fiscal, the government expects deficit at 6.8% of GDP.
- **Total receipts** of the Centre stood at 55.6% of corresponding budget estimates (BE) FY22 up to September. It was 25.2% of BE a year earlier.
- Of the total receipts, tax revenue was 59.6% of BE, compared with 28% a year earlier.
- **Expenditure** - The Centre's total expenditure (i.e., revenue account and capital account) at the end of the first half stood at 46.7% of the current fiscal's BE. It also includes Interest payments and subsidies.
- **Related Link -** Government Borrowings for FY 2021

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