DAILY CURRENT AFFAIRS 19-07-2024

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1. Mackenzie River

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GS-2

3. India-Nepal relations

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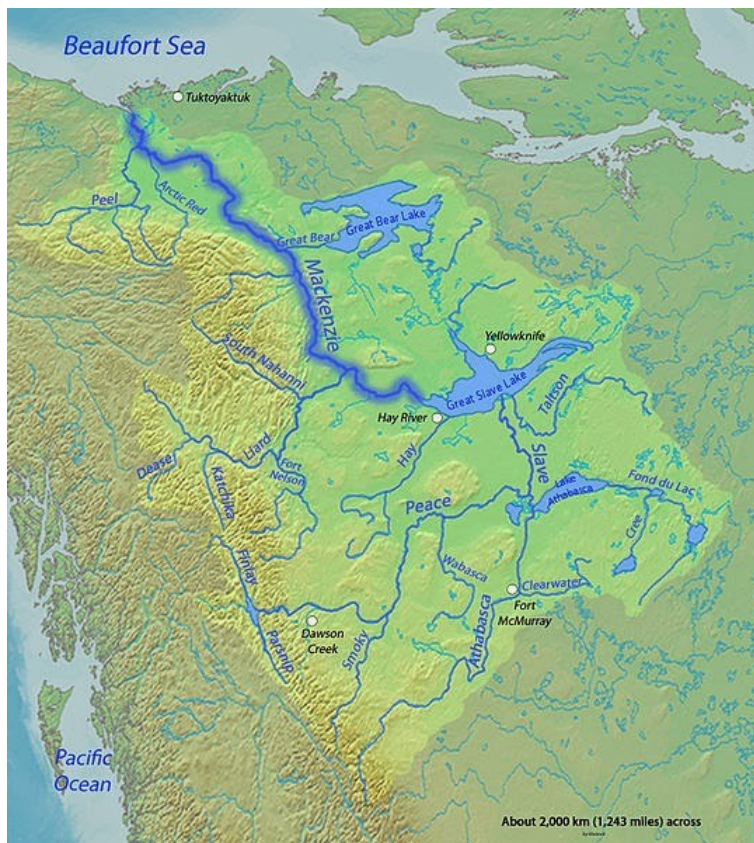
5. Sarus Crane

Mackenzie River

Syllabus: GS-1; Geography- Mapping

Context

➢ *Canada's longest river seeing historically low levels*

About

➢ *The Mackenzie River is a major river system in* **northwestern North America***, and it holds the title of the longest river in Canada.*

About

Length and Drainage Basin

➢ *The Mackenzie River itself stretches for 1,740 kilometers (1,080 mi), but the entire Mackenzie River system, which includes the* **Slave River, Peace River, and Finlay River,** *is much longer at 4,241 kilometers (2,635 mi), making it the longest river system in Canada.*

➢ *The Mackenzie's drainage basin is the* **largest in Canada and the second-largest in North America***, after the Mississippi-Missouri system.*

➢ *The basin covers a vast area of 1,805,200 square kilometers (697,000 sq mi) that stretches across six provinces and territories in northwestern Canada.*

Course

➢ *The river flows entirely within the Northwest Territories but its tributaries reach into* **Alberta, Saskatchewan, British Columbia, Yukon, and Nunavut**.
➢ *It starts at* **Great Slave Lake** *and travels in a northwesterly direction until it reaches the* **Arctic Ocean at the Beaufort Sea**.
➢ *The Mackenzie River picks up water from numerous large tributaries along the way, including the Peace River, Slave River, Liard River, and Nelson River.*

Basin Characteristics

➢ *The Mackenzie River flows through a vast, remote, and thinly populated region.*
➢ *The landscape is dominated by boreal forest and tundra, with some areas of wetlands and muskeg.*
➢ *The climate is subarctic, with long, cold winters and short, cool summers.*
➢ *The river is frozen for most of the year, typically from late November to early May.*

Significance

➢ *The Mackenzie River is an essential waterway for transportation and trade in northern Canada.*
➢ *It is also home to a variety of fish and wildlife, including salmon, whitefish, walleye, pike, bears, moose, caribou, and wolves.*
➢ *The river is an important part of the cultural heritage of the Dene people, who have lived along its shores for centuries.*

Regional Analysis of Indian Ocean (RAIN) system

Syllabus: GS-1; Geography

Context

➢ *Hyderabad-based* **Indian National Centre for Ocean Information Services (INCOIS)** *has upgraded its system for gathering information on the health of the Indian Ocean.*

About

- *The Regional Analysis of Indian Ocean (RAIN) system is a data assimilation system developed by the Indian National Centre for Ocean Information Services (INCOIS).*
- *It is used to* **create forecasts of the Indian Ocean** *by combining a number of different data sources.*
- **Regional Ocean Modeling System (ROMS***): This is a computer model that simulates the ocean's circulation.*
- **Local Ensemble Transform Kalman Filter (LETKF):** *This is a data assimilation technique that combines model output with observations from satellites, buoys, and other sources to create a more accurate picture of the ocean state.*
- *RAIN comprises of 80 ensemble members, which are essentially 80 replicas of the model that evolve in time starting from slightly different initial conditions.*
- *This ensemble approach helps to account for the uncertainties in the model and the observations.*
- *The ensemble members are forced every 6 hours by atmospheric data from the* **National Centre for Medium Range Weather Forecasting (NCMRWF).**
- *The RAIN system generates ocean state vectors of the Indian Ocean basin on a regular grid with a horizontal resolution of about 9 kilometers.*
- *The ocean is vertically sliced into 40 levels.*
- *The model ensemble runs for 5 days and the assimilation is performed every fifth day, thereby generating an ocean analysis.*

Applications

- **Monitoring and forecasting ocean currents, sea surface temperature, and salinity.**
  - *This information is important for a variety of purposes, including marine navigation, fisheries management, and climate research.*
- *Providing* **early warnings of tsunamis, storm surges***, and other ocean hazards.*
  - *INCOIS is the nodal agency for tsunami early warning in India and the Indian Ocean region, and the RAIN system plays a vital role in providing timely and accurate warnings.*
- **Assisting fisherfolk in locating areas of abundant fish***.*
  - *The RAIN system can provide information on sea surface temperature, chlorophyll concentration, and other factors that can influence fish distribution.*

Significance

- *The RAIN system is an important tool for understanding and predicting the state of the Indian Ocean.*

> ➢ *It provides valuable information for a variety of users, including scientists, mariners, and policymakers.*

India-Nepal relations

Syllabus: GS-2: India – Nepal Relations.

Context:

> ➢ *Relations between India and Nepal have* **dipped severely since 2015** *when Narendra Modi and Khadga Prasad Oli were both Prime Ministers.*

Background and Recent Developments

> ➢ **2015 Dip in Relations***: Relations between India and Nepal have declined since 2015 when Narendra Modi and Khadga Prasad Oli were both Prime Ministers.*

> ➢ **Current Leadership***: With Modi reclaiming the top post for a third time and Oli in collaboration with the Nepali Congress, there is an opportunity to upgrade the relationship to 'positive' and 'stable'.*

Causes of Bilateral Turbulence

> ➢ **Nepal's New Constitution (2015)***:*
>
>   o *Adoption of the new Constitution by* **Nepal's Constituent Assembly in 2015,** *which New Delhi wanted reworked.*
>
>   o *Promulgation of the draft unamended, despite perceived promises to Modi by some Nepali politicians.*

> ➢ **Indian Blockade***:*
>
>   o *A blockade imposed by New Delhi, ostensibly blaming* **Madhesi activists of the Tarai plains,** *lasting nearly six months.*
>
>   o *Resulted in long-lasting bad blood and Nepal signing 10 agreements with Beijing, including trade, transit, power, and transport.*

Key Incidents and Statements

> ➢ **Post-blockade Relations***:*

- o *Meetings between Modi and Oli post-blockade, with Oli making controversial statements about Ayodhya and suggesting a change in India's national motto.*

- o *Nepal amended its Constitution to add the* **Limpiyadhura-Kalapani triangle** *to its map following India's updated political map in October 2019.*

India's Involvement in Nepal

➤ **Political Interference***:*

- o *Increased involvement of New Delhi in Nepali governance and politics.*

- o *Engagement of Hindutva advocates like RSS and BJP to influence Nepal.*

➤ **Economic and Political Pressure***:*

- o **Hindutva activism***, economic stifling, and geopolitical coercion by India have created tension in Kathmandu.*

- o *New Delhi's power play against* **Nepal's political stability***.*

Moving Forward: Policy Suggestions

➤ **Principle of Non-interference***:*

- o *India should adhere to the* **Panchsheel doctrine's principle** *of non-interference.*

- o *A hands-off policy would lead to a politically stable and economically energized Nepal, benefiting India's national security and the Hindi heartland economy.*

➤ **Mutual Benefits***:*

- o *Nepal is the* **seventh-largest remittance-sending** *country to India, providing livelihoods in states like Uttar Pradesh, Bihar, and Odisha.*

- o *A stable and* **economically strong Nepal** *is in India's interest.*

Challenges in Nepal

➤ **Political Chaos***:*

- o *Nepal's political class, civil society, and bureaucracy's ability to engage equally with Indian counterparts has diminished.*

- o *Weak leadership exemplified by Pushpa Kamal Dahal ('Prachanda') and his failure to raise key bilateral issues with India.*

Key Bilateral Issues

- ➤ **Pending Bilateral Matters***:*

  - o *Air routes for* **Nepal's international airports***, the territorial dispute over Limpiyadhura-Kalapani, and the report of the Eminent Persons' Group (EPG) need addressing.*

  - o *The need to revive the South Asian Association for Regional Cooperation* **(SAARC)** *for regional stability.*

India's Strategic Considerations

- • **Balancing Relationships***:*

  - o *New Delhi must recognize* **Nepal's non-negotiable friendship** *with Beijing but also its inability to sever ties with India.*

  - o *Despite pressures, China is emerging as India's largest trading partner.*

Path to Improvement

- ➤ **Reviving Bilateral Relations***:*

  - o *Modi and Oli should work on the implementation of the* **India-Nepal Eminent Persons' Group's consensus report** *to build a transparent, confident, and equal partnership.*

- ➤ **Policy of Non-interference***:*

  - o *Reflecting on failed interference policies and moving towards a balanced approach with Nepal finding its voice.*

Regional Peace and Cooperation

- ➤ **South Asia at Peace***:*

  - o *The* **open Nepal-India border** *as a prototype for peaceful regional cooperation.*

  - o *Recognizing the* **role of Nepal as a benign buffer** *and the potential gateway for connectivity to the Chinese mainland.*

- ➤ **Academic and Public Perception***:*

  - o **Promoting 'Nepal studies'** *in India to change misconceptions and foster better understanding between the two countries.*

Nepal Location:

- ➢ **Region:** *South Asia, primarily located in the Himalayas.*
- ➢ **Countries Surrounded:**
- ➢ **North:** *China (Tibet Autonomous Region)*
- ➢ **South, East, and West**: *India*

Indian States Surrounded:

- ➢ *Sikkim: To the east.*
- ➢ *West Bengal: To the southeast.*
- ➢ *Bihar: To the south.*
- ➢ *Uttar Pradesh: To the southwest.*
- ➢ *Uttarakhand: To the west.*

Key Points:

- ➢ *Nepal is a landlocked country, meaning* **it does not have any coastline.**
- ➢ *It has significant geographical features including the Himalayas, with Mount Everest, the world's highest peak, situated on the border with China.*
- ➢ **The Terai plains** *in the southern part of Nepal are an extension of the Gangetic plains of India.*

Intergenerational equity as tax devolution criteria

Syllabus: GS-3; Indian Economy- Taxation, Inclusive growth

Context:

➢ The **devolution of Union tax revenue** *to States has been a topic of recent political discussion and a constant subject of interest for economists.*

➢ *The* **Finance Commission** *(FC) determines the horizontal distribution of States' share in Union tax revenue every five years.*

➢ **Equity is often prioritized over efficiency** *in the distribution formula.*

Horizontal Distribution Formula

➢ *The distribution formula* **focuses on intragenerational equity**, *which aims to redistribute tax revenue among States.*

➢ *This approach may* **lead to intergenerational inequity within States**, *emphasizing the need for intergenerational equity in tax devolution.*

Intergenerational Fiscal Equity

➢ **Definition**: *Providing equal opportunities and outcomes to every generation, ensuring that current decisions or actions do not burden future generations.*

➢ **Public Finance Perspective**: *Every generation should pay for the public services it receives, avoiding the burden of future generations through borrowings.*

Tax and Borrowing

➢ *Governments raise revenue through* **taxation or borrowing**.

➢ *If current tax revenue equals current expenditure,* **the current taxpayers cover the cost of public services.**

➢ *Borrowing for current expenditure implies future generations will face higher taxes to repay the debt,* **creating intergenerational inequity**.

Ricardian Equivalence Theory

➢ *Suggests households increase savings when the government borrows for current expenditure,* **enabling future generations to pay higher taxes** *and maintaining constant aggregate demand.*

➢ *In reality, in India's federal system,* **developed States pay more taxes not fully utilized within those States**, *forcing them to borrow more or reduce expenditure.*

> ➢ **Developing States pay fewer taxes** *and receive higher financial transfers from the Union government.*

Intragenerational Equity vs. Intergenerational Equity

> ➢ **High-Income States***: Tamil Nadu, Kerala, Karnataka, Maharashtra, Gujarat, and Haryana.*

> ➢ **Low-Income States***: Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Odisha, and Jharkhand.*

Analysis of the 14th Finance Commission Period (2015-20)

> ➢ *High-income States financed 59.3% of revenue expenditure* **through their own tax revenue,** *while low-income States financed only 35.9%.*

> ➢ *Revenue Expenditure to GSDP ratio was* **10.9% for high-income States** *and 18.3% for low-income States.*

> ➢ *High-income States received 27.6% of revenue expenditure from* **Union financial transfers,** *whereas low-income States received 57.7%.*

Federal Finances Aspects

> 1. **Low-Income States***: Finance a smaller portion of revenue expenditure with their own tax revenue and receive larger Union financial transfers.*

> 2. **High-Income States***: Finance a substantial portion of revenue expenditure with their own tax revenue but receive fewer Union financial transfers.*

> 3. **Deficits***: High-income States incur higher deficits due to lower Union financial transfers compared to low-income States.*

Balancing Equity and Efficiency

> ➢ *Citizens expect public services equivalent to the taxes they pay.*

> ➢ *Intragenerational equity across States is essential for a unified market.*

> ➢ *Balancing both intragenerational and intergenerational equity is crucial, highlighting the need for a fair distribution formula by the FC.*

Addressing Conflicting Equities

> ➢ **Indicators Used by FC***: Per capita income, population, and area, reflecting demand for public services and the size of public revenue.*

> ➢ **Equity Variables***: Ensure equity in Union financial transfers among States.*

➢ **Efficiency Indicators**: *Tax effort and fiscal discipline carry smaller weight in the distribution formula.*

Improving the Distribution Formula

➢ **Include more fiscal variables** *in the tax devolution criterion to influence States' fiscal behavior positively.*

➢ **Assign larger weight to fiscal indicators** *to incentivize tax effort and expenditure efficiency.*

➢ **Ensure intergenerational fiscal equity** *and sustainable debt management by States through increased Union financial transfers based on fiscal performance.*

Practice Question

Q. Discuss the implications of prioritizing intragenerational equity over intergenerational equity in the horizontal distribution of Union tax revenue among States, considering both economic efficiency and fiscal sustainability. (10 marks, 250 words)
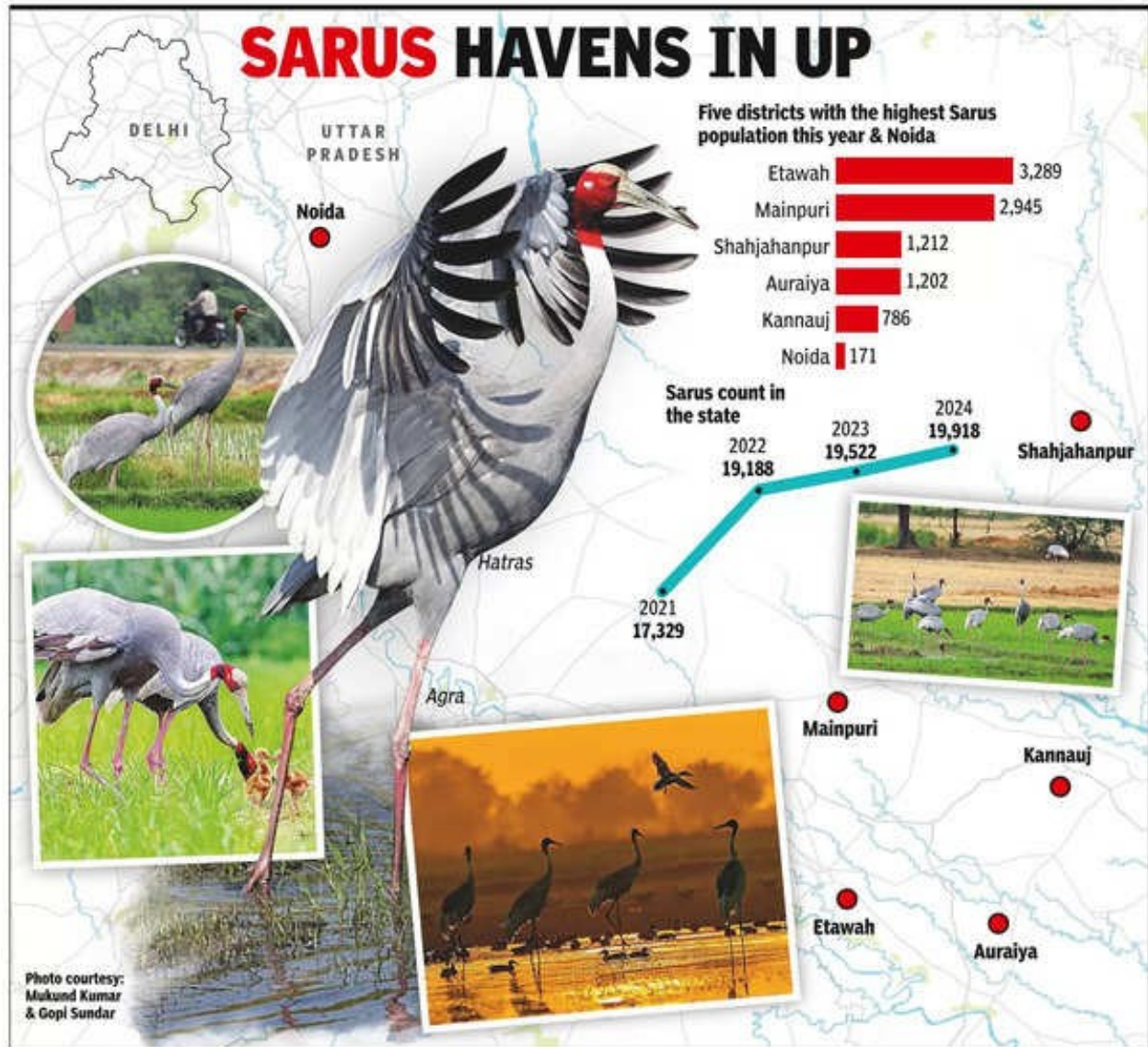
Sarus Crane

Syllabus: GS-3; Environment and Ecology

Context

➢ *The latest bird census shows there are 19,918 Sarus cranes in UP, marking an increase of 396 from last year's count.*

Census

➢ *The census, conducted biannually, once in June and again in December, found that in at least 10 forest divisions, the Sarus population had surpassed 500.*
➢ *After nearly a decade, six Sarus were also spotted in the Mau division.*

SARUS HAVENS IN UP

Five districts with the highest Sarus population this year & Noida

- Etawah — 3,289
- Mainpuri — 2,945
- Shahjahanpur — 1,212
- Auraiya — 1,202
- Kannauj — 786
- Noida — 171

Sarus count in the state
- 2021: 17,329
- 2022: 19,188
- 2023: 19,522
- 2024: 19,918

Photo courtesy: Mukund Kumar & Gopi Sundar

About

- The Sarus crane (Antigone antigone) is a majestic bird that holds the title of the **tallest flying bird in the world.**
- These giants can stand up to 1.8 meters (5 feet 11 inches) tall, with a wingspan of up to 2.4 meters (8 feet).
- Adults have a predominantly grey plumage with black wingtips.
- Their head and upper neck are bare and a bright red color, with a greyish crown and a long, greenish-grey bill.
- They have long red legs and a patch of grey feathers covering the ears.
- Juveniles are similar in build but appear duller and browner, with their head fully feathered.

Habitat

➢ *They are found in parts of the* **Indian subcontinent, Southeast Asia, and northern Australia.**

➢ *They prefer open wetlands, seasonally flooded* **Dipterocarpus forests, and Eucalyptus-dominated woodlands and grasslands.**

Behavior

➢ *Sarus cranes are social creatures, but not highly so.*

➢ *They are typically found in pairs or small groups of three or four.*

➢ *They are known to mate for life with a single partner, and their breeding season coincides with the heavy rainfall of the monsoon season.*

➢ *Nests are constructed on water in natural wetlands or flooded paddy fields.*

➢ *A clutch typically has only one or two eggs, which are incubated by both parents for a period of 26 to 35 days.*

Threats

➢ *The Sarus crane is listed as* ***"*Vulnerable"** *on the IUCN Red List due to habitat loss, pesticide ingestion, and overhunting.*

Interesting Facts

➢ *In India, these birds are considered symbols of marital fidelity, believed to mate for life and pine for the loss of their mates.*

➢ *They perform elaborate courtship dances that involve bowing, trumpeting, and jumping.*