DAILY CURRENT AFFAIRS 20-06-2026

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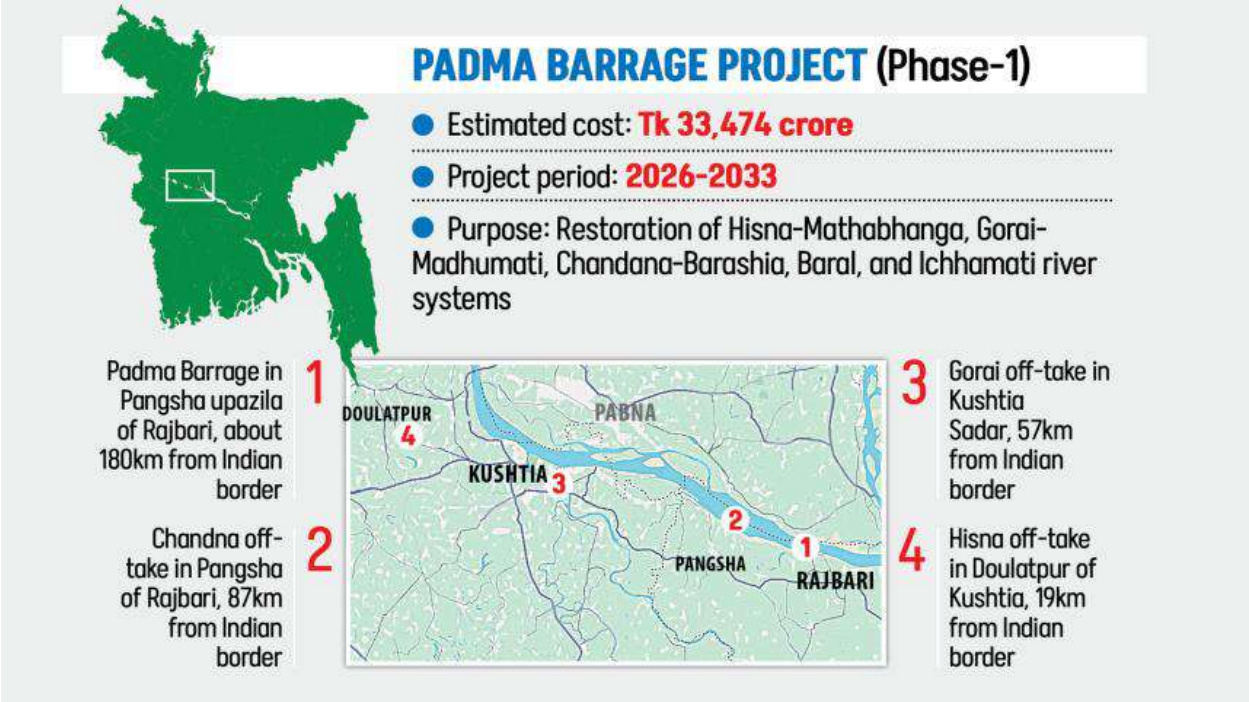
Padma Barrage

Syllabus: GS-1; Geography (Rivers and Water Resources); GS-2; India and Neighborhood Relations; GS-3; Water Resource Management

Context

Bangladesh has formally approved the construction of the **Padma Barrage**, a major water-management project estimated at **Tk 50,443 crore (approximately ₹39,170 crore)**. The project is intended to address seasonal water shortages, improve water storage capacity, and enhance Bangladesh's control over downstream river flows amid concerns regarding upstream water diversions.

About the Padma Barrage



What is it?

- The Padma Barrage is a large-scale water-management structure planned across the **Padma River** in Bangladesh.
- It is designed to function as a major freshwater reservoir that can regulate river flows, improve groundwater recharge, and ensure equitable water distribution.
- The project is also viewed as a strategic response to upstream interventions, particularly the **Farakka Barrage** in India.

Location

- The barrage will be constructed across the main channel of the **Padma River**.
- It is situated approximately **180 km downstream of the Farakka Barrage** in West Bengal and close to the India–Bangladesh border.

Key Features

- Length: **2.1 km concrete-anchored barrage**.
- Reservoir storage capacity: **2,900 million cubic metres (MCM)**.
- Expected beneficiaries: Around **6.5 crore people** in southwestern and northern Bangladesh.
- Estimated cost: **Tk 50,443 crore (₹39,170 crore)**.
- Project duration: **Seven years**.

Significance

- Enhances water availability during dry seasons.
- Supports agricultural irrigation and drinking water supply.
- Improves groundwater recharge and flood management.
- Strengthens Bangladesh's capacity to manage downstream water resources.
- Addresses concerns arising from reduced river flows and sedimentation.

About the Padma River

Overview

- The **Padma River** is the principal distributary of the **Ganga River** in Bangladesh and one of South Asia's most important transboundary rivers.

Origin and Course

- The Ganga originates at **Devprayag** through the confluence of the **Bhagirathi** and **Alaknanda** rivers.
- Upon entering Bangladesh near **Shibganj**, the river is known as the **Padma**.
- The Padma joins the **Jamuna River** at **Goalundo** and later merges with the **Meghna River** near **Chandpur** before emptying into the **Bay of Bengal**.

Important Geographical and Ecological Features

- Flows through low-lying deltaic plains vulnerable to flooding and sea-level rise.

- Reduced flows often result in significant silt deposition, raising the riverbed and increasing flood risks.
- Sediments carried by the river enhance soil fertility and support fisheries.
- Freshwater discharge from the Padma helps maintain the ecological balance and salinity levels of the **Sundarbans**, sustaining its unique mangrove ecosystem.

India–Bangladesh Water Sharing Context

- Water sharing of the Ganga is governed by the **1996 Ganga Water Sharing Treaty** between India and Bangladesh.
- The Farakka Barrage has remained a recurring issue in bilateral discussions due to concerns over dry-season water availability downstream.
- The Padma Barrage represents Bangladesh's latest effort to strengthen long-term water security while managing transboundary river resources effectively.

Smart Seed Coating Technology

Syllabus: GS-3; Agriculture, Science & Technology, Climate-Resilient Agriculture

Context

The **ICAR–Indian Institute of Oilseeds Research (ICAR-IIOR), Hyderabad**, has developed **Smart Seed Coating Technology** to improve seed performance, enhance crop establishment, and increase resilience against climatic and environmental stresses.

About Smart Seed Coating Technology

- An innovative **biopolymer-based seed enhancement technology**.
- Developed by **ICAR-IIOR, Hyderabad**.
- Uses biodegradable materials to create a protective and functional coating around seeds.

Key Features

- **Multifunctional Protective Layer**
  - Forms a biodegradable coating around seeds.
  - Protects seeds during germination and early growth stages.
- **Targeted Delivery Platform**

- Delivers beneficial microorganisms, nutrients, micronutrients, and crop-protection agents directly at the seed-soil interface.

- **Enhanced Crop Establishment**
  - Improves germination rates.
  - Promotes stronger seedling growth and root development.
- **Stress Tolerance**
  - Enhances resistance to:
    - **Biotic stresses** (pests and diseases)
    - **Abiotic stresses** (drought, heat, moisture stress)
- **Wide Applicability**
  - Suitable for cereals, millets, pulses, oilseeds, vegetables, and horticultural crops.

Significance

- Particularly useful for **rainfed agriculture**, which constitutes a major share of India's cultivated area.
- Helps address challenges arising from climate variability and uncertain rainfall.
- Improves resource-use efficiency through targeted nutrient delivery.
- Supports sustainable and climate-resilient agriculture.

National Internet Exchange of India (NIXI)

Syllabus: GS-3; (Science & Technology, Digital Infrastructure, IT & Computers)

Context

The **National Internet Exchange of India (NIXI)** celebrated its **23rd Foundation Day on 19 June 2026**, reaffirming its commitment to strengthening India's digital infrastructure, promoting internet accessibility, and supporting a secure and self-reliant digital ecosystem.

About NIXI

- A **not-for-profit organization** under the aegis of the **Ministry of Electronics and Information Technology (MeitY)**.
- Incorporated as a **Section 8 Company** under the Companies Act, 2013.
- Established in **2003** to improve internet infrastructure and promote internet penetration across India.

Objectives

- Promote internet penetration throughout the country.
- Facilitate efficient routing of domestic internet traffic.
- Reduce dependence on international bandwidth.
- Improve internet speed, quality, and security.

Key Functions

- Facilitates exchange of domestic internet traffic among ISPs, content providers, and organizations with Autonomous System (AS) Numbers.
- Manages India's country-code top-level domains:
  - **.IN**
  - **.भारत (.Bharat)**
- Operates the **Indian Registry for Internet Names and Numbers (IRINN)** for allocation of IPv4 and IPv6 addresses.
- Provides Internet Exchange Services through a nationwide network of Internet Exchange Points (IXPs).

Significance

- Operates **79 Internet Exchange Points (IXPs)** across India.
- Supports domain names in **22 Indian languages**.
- Strengthens India's digital sovereignty and internet resilience.
- Contributes significantly to the objectives of **Digital India**.

RBI Surplus Transfer: Understanding the RBI's Growing Fiscal Role

Syllabus: GS-3: Indian Economy

Context:

- RBI approved a record surplus transfer of **₹2.87 lakh crore** to the Union Government for **FY 2025–26**.
- Highest-ever transfer:
  - FY 2024–25: ₹2.69 lakh crore
  - FY 2023–24: ₹2.11 lakh crore

- FY 2022–23: ₹87,416 crore

- The scale of transfer has triggered debate on the evolving role of RBI—from a **monetary authority** to a **fiscal instrument** of the government.

How Does RBI Generate Surplus?

Major Sources of Income

- Interest on government securities held in its portfolio.
- Foreign exchange transactions (buying and selling currencies).
- Returns on foreign assets, including gold and foreign currency holdings.
- Reserve management operations and portfolio rebalancing.

Recent Trends

- RBI's balance sheet grew by **20.6%** in one year to **₹91.97 lakh crore** by March 2026.
- Gross income increased by over **26%** during the same period.
- Recent surplus included gains from:
  - Reported sale of nearly **$12 billion worth of gold**.
  - Purchase of about **$7.5 billion in foreign currency assets** to manage rupee pressures.

Economic Capital Framework (ECF): Legal Basis

- Surplus transfer is governed by the **Economic Capital Framework (ECF)**.
- Revised in **2019** following recommendations of the **Bimal Jalan Committee**.
- ECF determines:
  - Capital required to be retained by RBI as risk buffers.
  - Surplus amount eligible for transfer to the government.
- Transfer is legally valid and fully within the framework.
- Debate centres on **scale and systemic implications**, not legality.

Structural Shift: Monetary Guardian to Fiscal Instrument

Traditional Sources of Government Financing

- Taxation – requires political consent.
- Borrowing – constrained by markets and repayment obligations.

- Economic growth – depends on productive capacity expansion.

Why RBI Surplus Transfers Matter

- Create fiscal space without:
  - New taxes,
  - Additional borrowing,
  - Real economic growth.
- ₹2.87 lakh crore transfer exceeds annual budgets of several Indian States.
- Raises the question: **When does a stabilising institution begin functioning as a fiscal instrument?**

India vs Advanced Economies

Advanced Economies

- In the US and EU, central banks became linked to fiscal policy through **Quantitative Easing (QE)**.
- QE involved large-scale purchase of government bonds to inject liquidity.

India's Experience

- Fiscal-monetary linkage emerged through:
  - Earnings from reserve management,
  - Foreign exchange reserves,
  - Foreign assets.
- Not through large-scale bond-buying programmes.
- Pathway differs, but outcome is similar: **increasing fiscal dependence on central bank resources**.

Federal Blind Spot: States Left Out

Nature of RBI Surplus

- Classified as **non-tax revenue** of the Union Government.
- Falls outside the **divisible pool** shared with States through Finance Commission recommendations.

Implications

- States receive no automatic share of RBI surplus transfers.

- States bear major expenditure responsibilities:
  - Health,
  - Education,
  - Welfare schemes.
- States face borrowing constraints under **Article 293**.
- One of the largest public resource transfers bypasses fiscal federal sharing mechanisms.

Core Concern

- States have no legal claim over RBI profits.
- However, debate centres on whether a national monetary institution should indirectly contribute to greater fiscal centralisation without corresponding accountability or federal balance.

Emerging Pattern of Fiscal Centralisation

Key Elements

- **Cesses and surcharges** – retained by Centre and kept outside divisible pool.
- **RBI dividend/surplus transfers** – non-tax revenue not shared with States.
- **Borrowing restrictions** on States under Article 293.
- **Finance Commission devolution** – subject to periodic recommendations and negotiations.

Broader Trend

- Indicates a gradual shift in India's fiscal architecture towards the Centre.
- Raises concerns regarding **cooperative fiscal federalism**.

Central Bank Independence: The Key Question

Importance

- Central bank independence requires institutional distance from government fiscal pressures.
- Independence depends not only on legal provisions but also on operational culture and practice.

Emerging Concern

- Rising surplus transfers may deepen government reliance on RBI earnings.

- Greater fiscal dependence can make preservation of independence more challenging.

Present Position

- RBI continues to enjoy substantial operational autonomy.
- Functions within a well-defined institutional framework.
- However, the long-term trend warrants close monitoring.

Conclusion

- RBI's record surplus transfer is **not a crisis, but an important signal**.
- Growing use of RBI earnings as a fiscal cushion may blur the distinction between:
  - Monetary independence, and
  - Government financing.
- Combined with exclusion from federal revenue-sharing arrangements, it raises a critical policy question:
  - **How much fiscal responsibility should a monetary institution be expected to bear?**

World Day to Combat Desertification and Drought 2026

Syllabus: GS-3: Environment – Land Degradation.

Context:

- World Day to Combat Desertification and Drought was observed globally on **17 June 2026**.

About the Day

- Observed annually on **June 17** to spread awareness about **international cooperation to combat desertification and the effects of drought**.

History

- **Desertification** was identified as one of the greatest challenges to sustainable development during the **Rio Earth Summit (1992)**.
- In **1994**, the **United Nations General Assembly** established the **United Nations Convention to Combat Desertification (UNCCD)**.

- UNCCD is a **legally binding international agreement** linking **environment and development** to **sustainable land management**.
- The UN also proclaimed **17 June** as the **World Day to Combat Desertification and Drought**.

Theme (2026)

- **"Rangelands: Recognize. Respect. Restore."**
- Highlights the importance of **rangelands**, ecosystems long undervalued despite their critical ecological and socio-economic role.
- Aligns with the **International Year of Rangelands and Pastoralists (2026)**.

Rangelands

Meaning

- Expansive natural areas primarily characterized by **native vegetation** such as **grasses, shrubs, and forbs**.
- Cover about **50% of the Earth's land surface**.

Importance

- Support **livestock, wildlife, and diverse ecosystems**.
- Generally unsuitable for intensive agriculture due to **low precipitation** and **poor soil quality**.
- Provide **habitats for animal species**, **recreational opportunities**, **watersheds**, and **mining locations**.
- Store vast amounts of **carbon** and either originate or serve as **freshwater catchment areas** for many of the world's largest rivers and wetlands.
- Support the livelihoods of around **2 billion people**, including **pastoralists and Indigenous Peoples**.
- Provide nearly **70% of global livestock feed**, making them critical to food systems.

Factors Influencing Rangelands

- Climate changes
- Grazing practices
- Human encroachment

Indian Scenario

- Indian rangelands occupy about **121 million hectares**, ranging from the **Thar Desert** to the **alpine meadows of the Himalayas**.
- As per the **UNCCD Global Land Outlook Thematic Report**, grazing area constitutes around **40% of India's total land surface**, including:
    - **Grasslands – 17%**
    - **Forests – 23%**
- Around **70% of rangelands** are in the temperate region.
- Nearly **100 million hectares** are considered underutilised, including:
    - Degraded forest lands
    - Land unsuitable for crop production

- Ravines
- Wastelands

International Year of Rangelands and Pastoralists (2026)

- Declared by the **United Nations** for **2026**.
- Led by **Mongolia** with support from a broad coalition of organisations.
- Aims to:
  - Raise awareness about rangelands and pastoralism
  - Encourage responsible investments
  - Shape policies safeguarding rangelands and pastoralist livelihoods
- Pastoralists are present in **more than 75% of countries** and manage at least **one-fourth of the world's land**.
- They herd around **1 billion animals globally**.

United Nations Convention to Combat Desertification (UNCCD)

Overview

- Only **legally binding international agreement** linking **environment and development** to **sustainable land management**.
- Established to address **desertification** and the **effects of drought**.

Timeline

- **Adopted:** 17 June 1994
- **Entered into force:** 26 December 1996 (after the 50th ratification)

Rio Convention Status

- One of the **three Rio Conventions**:
  - United Nations Convention to Combat Desertification
  - United Nations Framework Convention on Climate Change
  - Convention on Biological Diversity
- Called for under **Agenda 21** adopted at the **United Nations Conference on Environment and Development**.

Membership

- **197 Parties**:

- 196 Country Parties
- **European Union**

Objectives

- Improve living conditions in drylands.
- Maintain and restore land and soil productivity.
- Mitigate the effects of drought.

Institutional Mechanism

- Parties meet through the **Conference of the Parties (COP)** every two years.
- Technical meetings are held throughout the year.
- Permanent Secretariat located in **Bonn**, **Germany**.

National Reporting

- Success of the Convention depends on reliable and updated information on:
  - Drought
  - Desertification
  - Land degradation
- Parties are required to submit implementation reports **every four years**.