



Daily PIB Summary

20 July, 2026

Welcome to PadhAI

Your Partner in Smart UPSC Preparation

You're holding a resource designed to cut through the noise and bring you *only what truly matters* for the exam. At PadhAI, we believe preparation should be clear, focused, and time-efficient — never overwhelming.

At PadhAI, we build everything around one philosophy:

"Learn only what matters.

Learn it the right way.

Learn it at the right time."

With a rapidly growing community of **2lakh+ aspirants**, PadhAI has become a trusted space for disciplined learning and daily practice.

We bring you:

- Concise Monthly Magazines
- Daily PIB Summaries @ 9 PM
- Daily MCQs + Mains Practice
- High-yield, exam-ready content
- APP features - duel competition, fast mains answer review, daily news article summary, PYQs, MCQs PRACTICE, AI tutor (based on highly yield content From UPSC topper insight, and various trusted websites). Many more feature which will improve your preparation and save your time automatically.

Join our Telegram community and download the PadhAI App to experience structured guidance, supportive peers, and consistent motivation — everything a serious aspirant needs

Welcome to a smarter way of preparing.

Welcome to PadhAI.



[Click here](#) to join to telegram channel

Scan the QR code or just click on it
to download the app

1. WHITE GOLD: INDIA'S COTTON STORY



- I. Cotton, popularly known as "**White Gold**," is one of India's most important commercial crops, supporting millions of farmers and workers.
- II. India has the **largest area under cotton cultivation** globally and is among the **largest producers and exporters** of cotton.
- III. The cotton sector contributes significantly to:
 - A. Agricultural income.
 - B. Employment generation.
 - C. Textile and apparel manufacturing.
 - D. Export earnings.
- IV. Government initiatives such as **Kasturi Cotton Bharat**, **PM MITRA Parks**, and **Bharat Tex** aim to improve quality, branding, value addition, and global competitiveness.
- V. Efforts are being made to promote high-yielding varieties, mechanization, sustainable farming, and modern ginning and processing facilities.
- VI. Cotton remains central to India's vision of becoming a global textile manufacturing hub under **Make in India** and **Atmanirbhar Bharat**.

BACKGROUND / CONTEXT

Cotton in India

- I. Cotton is a **kharif cash crop** cultivated in tropical and subtropical regions.

- II. India accounts for the **largest area under cotton cultivation** in the world.
- III. The sector supports:
 - A. Around **6 million cotton farmers**.
 - B. Approximately **40–50 million people** engaged in textiles, ginning, spinning, weaving, and garment manufacturing.

Major Cotton-Producing States

- Gujarat.
- Maharashtra.
- Telangana.
- Rajasthan.
- Punjab.
- Haryana.
- Madhya Pradesh.
- Karnataka.
- Andhra Pradesh.

Climatic Requirements

- **Temperature:** 21°C–30°C.
- **Rainfall:** 50–100 cm.
- **Soil:** Best suited to **black (regur) soil**, though also cultivated in alluvial and red soils with irrigation.

GOVERNMENT INITIATIVES

Cotton Corporation of India (CCI)

- **Established:** 1970.
- **Ministry:** Ministry of Textiles.
- Procures cotton under the **Minimum Support Price (MSP)** mechanism to protect farmers from distress sales.

Kasturi Cotton Bharat

- I. National branding initiative to promote **premium Indian cotton** with:
 - A. Quality assurance.
 - B. Traceability.
 - C. Sustainability.
- II. Enhances the global reputation of Indian cotton.

PM MITRA Parks

- **PM Mega Integrated Textile Region and Apparel (PM MITRA) Parks** aim to create integrated textile manufacturing ecosystems with world-class infrastructure.

Bharat Tex

- India's flagship global textile event showcasing the country's complete textile value chain, innovation, sustainability, and export potential.

KEY HIGHLIGHTS

- **Crop:** Cotton ("White Gold").
- **Season:** Kharif.
- **Economic Significance:** Major contributor to agriculture, industry, exports, and employment.
- **Industrial Significance:** Backbone of India's textile and apparel sector.
- **Export Significance:** Strengthens India's position in global textile trade.
- **Challenges:** Pest attacks (especially pink bollworm), climate change, water stress, fluctuating international prices, and productivity gaps.
- **Way Forward:** Promote climate-resilient cotton varieties, strengthen extension services, improve irrigation efficiency, expand mechanization, enhance branding through Kasturi Cotton Bharat, and increase value addition in textiles.

PRELIMS BOOSTER BOX

- **Cotton:** Popularly known as "**White Gold.**"
- **Scientific Name:** *Gossypium* spp.
- **Crop Season:** Kharif.
- **Best Soil:** Black (Regur) soil.
- **Ideal Temperature:** 21°C–30°C.
- **Rainfall Requirement:** 50–100 cm.
- **Cotton Corporation of India (CCI):** Established in 1970 under the **Ministry of Textiles** for MSP procurement.

- **Kasturi Cotton Bharat:** Branding initiative for premium Indian cotton with traceability and sustainability.
- **PM MITRA Parks:** Integrated textile manufacturing parks to strengthen India's textile ecosystem.
- **Bharat Tex:** India's flagship international textile exhibition promoting the entire textile value chain.
- **Major Cotton-Producing States:** Gujarat, Maharashtra, Telangana, Rajasthan, Punjab, Haryana, Madhya Pradesh, Karnataka, and Andhra Pradesh.
- **Major Pest: Pink Bollworm (*Pectinophora gossypiella*)**—one of the most destructive pests affecting cotton production.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

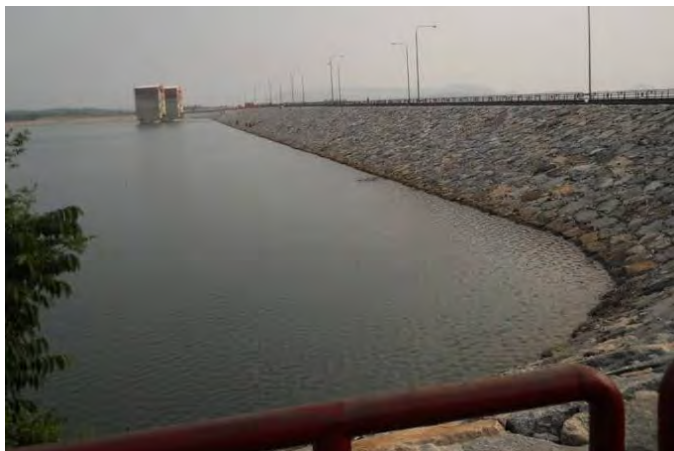
1. Cotton is a **kharif cash crop** best suited to **black (regur) soil**.
2. The **Cotton Corporation of India (CCI)** procures cotton under the **Minimum Support Price (MSP)** mechanism.
3. **Kasturi Cotton Bharat** is an initiative to promote premium Indian cotton with quality assurance, traceability, and sustainability.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Answer: (d)

2. STATUS OF PUMPED STORAGE PROJECTS (PSPs) IN INDIA



- Pumped Storage Projects (PSPs) are hydroelectric energy storage systems that store surplus electricity by pumping water from a lower reservoir to an upper reservoir during periods of low demand.
- During peak electricity demand, the stored water is released to generate electricity.
- PSPs help balance intermittent renewable energy sources such as **solar and wind power**.
- They improve **grid stability, frequency regulation, and peak load management**.
- The Government is facilitating the development of new PSPs through policy support, faster clearances, and private sector participation.
- PSPs are expected to play a crucial role in achieving India's renewable energy and **Net Zero** commitments.
- They complement battery energy storage systems (BESS) by providing long-duration energy storage.
- Several PSPs are under construction, while many more are in different stages of survey and planning across States.

BACKGROUND / CONTEXT

What is a Pumped Storage Project (PSP)?

A Pumped Storage Project is a type of **hydroelectric energy storage system** consisting of:

- **Upper Reservoir**
- **Lower Reservoir**
- **Pump-Turbine**
- **Generator/Motor**

Working Principle

1. During periods of **low electricity demand**, excess electricity is used to pump water from the lower reservoir to the upper reservoir.
2. During **peak demand**, water flows back through turbines to generate electricity.

This allows energy to be stored and released when required.

IMPORTANCE OF PSPs

Energy Security

- Provides reliable long-duration electricity storage.

Renewable Energy Integration

- Supports higher penetration of solar and wind energy.

Grid Stability

- I. Offers:
 - A. Frequency regulation.
 - B. Voltage support.
 - C. Peak load management.
 - D. Black start capability.

Environmental Benefits

- Reduces dependence on fossil fuel-based peaking power plants.
- Helps lower greenhouse gas emissions.

KEY HIGHLIGHTS

- **Technology:** Pumped Storage Hydropower.
- **Sector:** Renewable Energy Storage.
- **Lead Ministry:** Ministry of Power.
- **Primary Objective:** Store surplus electricity and supply power during peak demand.
- **Strategic Significance:** Enhances energy security and supports renewable energy expansion.



- **Economic Significance:** Improves grid efficiency and reduces reliance on expensive peak-time thermal generation.
- **Challenges:** High initial investment, land acquisition, environmental clearances, and long gestation periods.
- **Way Forward:** Fast-track approvals, encourage private investment, modernize existing hydro plants, integrate PSPs with renewable energy parks, and strengthen interstate transmission infrastructure.

PRELIMS BOOSTER BOX

- **Pumped Storage Project (PSP):** A hydroelectric energy storage system that stores electricity by pumping water to an upper reservoir and generates power by releasing it back through turbines.
- **Lead Ministry: Ministry of Power.**
- **Type of Storage: Long-duration energy storage.**
- **Round-Trip Efficiency:** Typically **70–80%**, depending on plant design and operating conditions.
- **Black Start Capability:** Ability of a power plant to restart the electricity grid without relying on external power.
- **Battery Energy Storage System (BESS):** Electrochemical energy storage technology; complements PSPs, especially for shorter-duration storage.
- **National Electricity Plan (NEP):** Prepared by the **Central Electricity Authority (CEA)** to guide capacity addition and transmission planning.
- **Central Electricity Authority (CEA):** Statutory body under the **Ministry of Power** responsible for planning and coordination of India's power sector.
- **Renewable Energy Target:** India aims to achieve **500 GW of non-fossil fuel-based installed electricity capacity by 2030.**

- **Net Zero Target:** India has committed to achieving **net-zero greenhouse gas emissions by 2070.**

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. A **Pumped Storage Project (PSP)** stores surplus electricity by pumping water from a lower reservoir to an upper reservoir.
2. PSPs help integrate renewable energy sources such as solar and wind by providing grid balancing and peak load management.
3. The **Central Electricity Authority (CEA)** is a statutory body under the **Ministry of Power.**

Which of the statements given above is/are correct?

- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Answer: (d)

3. MITIGATING THE URBAN HEAT ISLAND (UHI) EFFECT IN INDIAN CITIES



- I. The **Urban Heat Island (UHI) Effect** refers to the phenomenon where urban areas experience significantly higher temperatures than surrounding rural areas due to human activities and built-up infrastructure.
- II. Major causes include:



- A. Expansion of concrete and asphalt surfaces.
 - B. Loss of green cover.
 - C. High building density.
 - D. Vehicular and industrial emissions.
 - E. Waste heat from air conditioners and industries.
- III. UHI increases energy demand, worsens air pollution, and poses serious public health risks, especially during heatwaves.
- IV. Mitigation measures include:
- A. Increasing urban forests and green spaces.
 - B. Promoting **cool roofs** and reflective building materials.
 - C. Developing blue-green infrastructure (lakes, wetlands, parks).
 - D. Improving urban ventilation.
 - E. Expanding permeable surfaces and rainwater harvesting.
- V. These measures enhance climate resilience and improve the livability of cities.
- VI. UHI mitigation supports India's commitments under the **National Action Plan on Climate Change (NAPCC)** and **Sustainable Development Goal (SDG) 11**.

BACKGROUND / CONTEXT

Urban Heat Island (UHI) Effect

- Urban areas absorb and retain more heat than surrounding rural areas due to the predominance of buildings, roads, and other impervious surfaces.
- Temperatures in cities can be several degrees Celsius higher, especially during the night.

Major Causes

- Rapid urbanization.
- Reduction in vegetation and tree cover.
- Dark-colored construction materials with low reflectivity.

- Heat generated by vehicles, industries, and air-conditioning systems.
- Limited airflow due to dense urban construction.

Impacts

- Increased heat stress and heat-related illnesses.
- Higher electricity demand for cooling.
- Poor air quality due to enhanced ozone formation.
- Reduced worker productivity.
- Stress on water resources and urban ecosystems.

GOVERNMENT INITIATIVES

National Action Plan on Climate Change (NAPCC)

- Launched in **2008**.
- Includes the **National Mission for Sustainable Habitat**, which promotes climate-resilient urban planning.

National Mission for Sustainable Habitat (NMSH)

- I. Focuses on:
- A. Energy-efficient buildings.
 - B. Sustainable urban transport.
 - C. Urban waste management.
 - D. Climate-resilient urban development.

Smart Cities Mission

- Launched in **2015**.
- Encourages green infrastructure, smart mobility, energy efficiency, and sustainable urban planning.

AMRUT

- **Atal Mission for Rejuvenation and Urban Transformation**.
- Supports development of urban green spaces, water supply, drainage, and urban resilience.

KEY HIGHLIGHTS

- **Concept:** Urban Heat Island (UHI) Effect.
- **Primary Cause:** Rapid urbanization and replacement of natural surfaces with heat-absorbing built-up areas.
- **Environmental Significance:** Affects urban climate, biodiversity, and air quality.
- **Health Significance:** Increases heat-related illnesses, especially among vulnerable populations.
- **Economic Significance:** Raises cooling costs and reduces labour productivity.
- **Mitigation Measures:** Urban greening, cool roofs, reflective materials, permeable pavements, blue-green infrastructure, and climate-sensitive urban planning.
- **Challenges:** Limited urban green spaces, unplanned development, funding constraints, and weak enforcement of building regulations.
- **Way Forward:** Integrate UHI mitigation into city master plans, expand urban forests, promote heat-resilient building codes, strengthen Heat Action Plans, and increase community participation.

PRELIMS BOOSTER BOX

- **Urban Heat Island (UHI):** Phenomenon where urban areas are warmer than surrounding rural areas due to built-up surfaces and human activities.
- **Cool Roofs:** Roofs made with reflective materials or coatings that reduce heat absorption and indoor temperatures.
- **Blue-Green Infrastructure:** Integration of water bodies (blue) and vegetation (green) to improve urban climate resilience.
- **National Action Plan on Climate Change (NAPCC):** Launched in 2008 with eight National Missions to address climate change.
- **National Mission for Sustainable Habitat (NMSH):** One of the eight NAPCC missions; focuses on sustainable urban development.

- **Smart Cities Mission:** Launched in 2015 to improve urban infrastructure, sustainability, and quality of life.
- **AMRUT: Atal Mission for Rejuvenation and Urban Transformation,** launched in 2015 to improve basic urban infrastructure and promote sustainable urban development.
- **Heat Action Plan (HAP):** A city or state-level strategy to reduce the impact of heatwaves through early warning systems, public awareness, and emergency response.
- **Nature-based Solutions (Nbs):** Actions that protect, restore, or sustainably manage ecosystems to address societal challenges such as climate change and disaster risk.
- **SDG 11: Sustainable Cities and Communities**—aims to make cities inclusive, safe, resilient, and sustainable.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. The **Urban Heat Island (UHI) Effect** refers to urban areas experiencing higher temperatures than nearby rural areas due to built-up infrastructure and human activities.
2. The **National Mission for Sustainable Habitat** is one of the **eight missions** under the **National Action Plan on Climate Change (NAPCC)**.
3. **Cool roofs** reduce heat absorption by using highly reflective materials or coatings.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Answer: (d)

4. GOVERNMENT AND RBI STRENGTHEN FINTECH ECOSYSTEM WITH ENHANCED REGULATORY FRAMEWORKS & CONSUMER PROTECTION ACTIONS



- I. India has emerged as one of the world's fastest-growing fintech ecosystems, driven by **Digital Public Infrastructure (DPI)** such as **Aadhaar, UPI, DigiLocker, and Account Aggregator**.
- II. The Government and RBI are strengthening regulations to ensure:
 - A. Secure digital payments.
 - B. Responsible digital lending.
 - C. Consumer protection.
 - D. Cybersecurity.
 - E. Data privacy.
 - F. Financial stability.
- III. RBI has introduced guidelines on:
 - A. Digital lending.
 - B. Payment aggregators.
 - C. Payment gateways.
 - D. Prepaid Payment Instruments (PPIs).
 - E. Account Aggregator Framework.

- IV. Consumer awareness campaigns, grievance redressal mechanisms, and fraud prevention measures have been strengthened.
- V. Regulatory innovation through the **RBI Regulatory Sandbox** encourages responsible experimentation with emerging financial technologies.
- VI. These initiatives support **Digital India, financial inclusion**, and India's transition towards a trusted digital economy.

BACKGROUND / CONTEXT

Fintech

- I. **Financial Technology (Fintech)** refers to the use of technology to deliver financial services efficiently and innovatively.
- II. Major segments include:
 - A. Digital payments.
 - B. Digital lending.
 - C. InsurTech.
 - D. WealthTech.
 - E. RegTech.
 - F. Blockchain-based financial services.

India's Digital Public Infrastructure (DPI)

Key pillars include:

- **Aadhaar.**
- **Unified Payments Interface (UPI).**
- **DigiLocker.**
- **Account Aggregator (AA).**
- **e-KYC.**

These platforms have significantly expanded access to digital financial services.

KEY REGULATORY INITIATIVES

Digital Lending Guidelines (RBI)

- Promote transparency in lending.
- Ensure direct loan disbursement and repayment between borrower and regulated entity.
- Strengthen consumer protection and grievance redressal.

Account Aggregator (AA) Framework

- RBI-regulated consent-based data-sharing system enabling secure sharing of financial information with customer consent.

RBI Regulatory Sandbox

- Controlled environment for testing innovative fintech products under regulatory supervision.

Payment Aggregator Framework

- Regulates entities facilitating online merchant payments and strengthens security standards.

KEY HIGHLIGHTS

- **Lead Institutions:** Government of India and Reserve Bank of India (RBI).
- **Focus:** Safe, innovative, and inclusive fintech ecosystem.
- **Economic Significance:** Expands digital financial services and supports economic growth.
- **Governance Significance:** Strengthens financial regulation, consumer protection, and market integrity.
- **Technological Significance:** Promotes innovation using Digital Public Infrastructure (DPI).
- **Challenges:** Cybersecurity threats, digital fraud, data privacy concerns, regulatory arbitrage, and digital literacy gaps.
- **Way Forward:** Strengthen cyber resilience, improve financial literacy, enhance regulatory coordination, encourage responsible AI in finance, expand digital financial inclusion, and promote secure cross-border digital payments.

PRELIMS BOOSTER BOX

- **Fintech:** Application of technology to deliver innovative financial services such as payments, lending, insurance, and investments.
- **Reserve Bank of India (RBI):** India's central bank established under the **Reserve Bank of India Act, 1934**; commenced operations in **1935**.

- **Unified Payments Interface (UPI):** Real-time payment system developed by the **National Payments Corporation of India (NPCI)**.
- **NPCI:** Umbrella organization for retail payment systems in India, established in **2008** under the guidance of the RBI and the **Indian Banks' Association (IBA)**.
- **Account Aggregator (AA):** RBI-regulated consent-based framework for secure sharing of financial information.
- **Digital Lending Guidelines:** RBI guidelines ensuring transparent and responsible digital lending practices.
- **Payment Aggregator (PA):** Entity that enables merchants to accept online payments by facilitating transactions between customers and banks.
- **Regulatory Sandbox:** Framework allowing fintech firms to test innovative financial products in a controlled regulatory environment.
- **Digital Public Infrastructure (DPI):** Foundational digital platforms such as Aadhaar, UPI, DigiLocker, and Account Aggregator that enable secure and interoperable digital services.
- **Financial Inclusion:** Ensuring affordable access to banking, credit, insurance, and payment services for all sections of society.

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. The **Unified Payments Interface (UPI)** was developed by the **National Payments Corporation of India (NPCI)**.
2. The **Account Aggregator (AA)** framework enables consent-based sharing of financial information.
3. The **RBI Regulatory Sandbox** provides a controlled environment for testing innovative fintech products under regulatory supervision.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Answer: (d)

5. TEXT OF THE OBITUARY

REFERENCES MADE BY THE HON'BLE CHAIRMAN IN THE HOUSE TODAY



- I. The Chairman expressed deep sorrow over the demise of eminent personalities and conveyed condolences to their bereaved families.
- II. Members of the House paid homage by observing **silence** as a mark of respect.
- III. Obituary references are a long-standing parliamentary practice followed at the commencement of proceedings whenever the House records the passing away of:
 - A. Sitting Members.
 - B. Former Members.
 - C. National leaders.
 - D. Eminent personalities.
 - E. Individuals who have rendered distinguished public service.
- IV. These references symbolize the dignity of Parliament and its recognition of contributions made to the nation.
- V. After the obituary references, the House may adjourn for the day or continue its scheduled business depending on the decision of the Chair.

BACKGROUND / CONTEXT

Obituary Reference

- An obituary reference is a formal statement made by the **Presiding Officer** of the House expressing grief over the death of a distinguished person.
- It is entered into the official parliamentary records.

Purpose

- Pay tribute to the deceased.
- Recognize contributions to the nation and society.
- Express sympathy to the bereaved family.
- Uphold parliamentary traditions and decorum.

Parliamentary Procedure

- The Presiding Officer reads the obituary reference.
- Members stand in silence, usually for a minute.
- Depending on the significance of the occasion, the House may be adjourned as a mark of respect.

KEY HIGHLIGHTS

- **Event:** Obituary References in the House.
- **Presiding Officer:** Chairman (Rajya Sabha) / Speaker (Lok Sabha), as applicable.
- **Purpose:** To pay tribute and express condolences on behalf of Parliament.
- **Parliamentary Significance:** Reflects parliamentary traditions, dignity, and respect for public service.
- **Constitutional Significance:** Though not specifically mentioned in the Constitution, obituary references are governed by established parliamentary conventions and rules of procedure.
- **Challenges:** Maintaining neutrality, ensuring due recognition, and balancing parliamentary business with ceremonial practices.
- **Way Forward:** Continue preserving parliamentary traditions while documenting



the contributions of distinguished personalities for future generations.

PRELIMS BOOSTER BOX

- **Rajya Sabha Chairman:** The **Vice-President of India** is the **ex officio Chairman of the Rajya Sabha** under **Article 64** of the Constitution.
- **Lok Sabha Speaker:** Presides over the proceedings of the Lok Sabha and maintains order and decorum.
- **Article 64:** Provides that the **Vice-President shall be the ex officio Chairman of the Council of States (Rajya Sabha)**.
- **Article 89:** Provides for the **Chairman and Deputy Chairman of the Rajya Sabha**.
- **Parliamentary Conventions:** Practices and customs followed by Parliament that are not necessarily codified but are essential for its functioning.
- **Question Hour:** First hour of a parliamentary sitting during which Members ask questions to Ministers.
- **Zero Hour:** Informal period immediately after Question Hour when Members raise matters of urgent public importance.
- **Adjournment:** Temporary suspension of a sitting of the House by the Presiding Officer.
- **Prorogation:** Termination of a session of Parliament by the President.
- **Dissolution:** Applies only to the **Lok Sabha** and ends its tenure; the **Rajya Sabha** is a permanent House and is not dissolved.

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Answer: (a)

PadhAI-GENERATED UPSC MCQ

Consider the following statements:

1. Under **Article 64** of the Constitution, the **Vice-President of India** is the **ex officio Chairman of the Rajya Sabha**.
2. The **Rajya Sabha** is a permanent House and is **not subject to dissolution**.
3. **Obituary references** are expressly provided for in the Constitution of India.

Which of the statements given above is/are correct?