

HESARAGHATTA GRASSLANDS: ENVIRONMENT

NEWS: Hesaraghatta grasslands will remain untouched

WHAT'S IN THE NEWS?

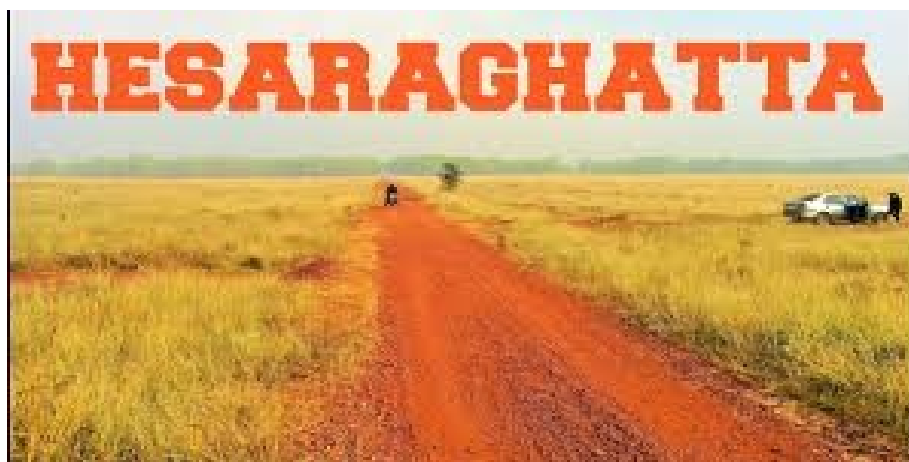
The Karnataka government has notified Hesaraghatta as a Conservation Reserve to protect one of Bengaluru's last remaining grassland-wetland ecosystems, crucial for biodiversity and groundwater recharge. This move marks a major step toward preserving India's vanishing semi-arid savanna landscapes.

Context: Notification of Greater Hesaraghatta Grassland Conservation Reserve

- The **Government of Karnataka** has formally declared **5,678 acres** of the **Hesaraghatta grasslands** near Bengaluru as a **Conservation Reserve**.
- This landmark move is aimed at **preserving one of the last remaining grassland ecosystems** near an expanding urban center threatened by **real estate development, encroachment, and degradation**.
- It marks a significant step in **urban biodiversity conservation** in India.

About Hesaraghatta Grassland

- **Location:** Surrounds the **Hesaraghatta Lake**, situated to the northwest of **Bengaluru, Karnataka**.
- **Ecosystem Type:** Comprises a **savanna grassland interspersed with wetland elements**, forming a **semi-arid, open ecosystem**.
- It is one of the **last intact dry grassland habitats** near a major metropolitan area in India.



Ecological and Strategic Significance

1. Hydrological Role

- Acts as a **catchment zone** for the **Arkavathy River**, a tributary of the **Cauvery River**.
- Helps in **groundwater recharge** and functions like a **natural sponge**, soaking up **monsoon runoff** and preventing flash floods.
- Its preservation directly impacts **water security** for Bengaluru and surrounding areas.

2. Migratory Importance

- Serves as a **vital stopover site for migratory birds** traveling from:
 - **Europe**,
 - **Central Asia**, and
 - **The Himalayas** during winter seasons.
- Supports **seasonal movement and survival** of many **rare and endangered avian species**.

Flora and Fauna Diversity

Mammals

- Home to **several endangered and threatened species**, including:
 - **Leopards**,
 - **Slender lorises**,
 - **Indian foxes**,
 - **Smooth-coated otters**,
 - **Golden jackals**.

Bird Species

- Hosts over **285 species of birds**, many of which are globally threatened.
- Notable sightings include:
 - **Lesser florican** (*Critically Endangered*),
 - **Greater spotted eagle** (*Vulnerable*),

- **Red-necked falcon,**
 - **Marsh harriers,** and
 - **Indian courser.**
- The grassland has been a **birdwatching hotspot and citizen science site** for decades.

About Conservation Reserve – Legal and Institutional Framework

1. Legal Status

- Declared under **Section 36A** of the **Wildlife Protection Act (WPA), 1972.**
- Recognized as a **Protected Area (PA)** category in India, alongside national parks and wildlife sanctuaries.

2. Declaration Authority

- Can be **notified by either State Governments or the Central Government.**
- Typically used to protect **ecologically sensitive areas outside core forests** that are not already under strict protection.

3. Purpose and Function

- Designed to act as:
 - **Buffer zones** for existing protected areas,
 - **Wildlife corridors,**
 - **Connectors between fragmented ecosystems.**
- Supports **biodiversity conservation** without heavily displacing local communities.

4. Governance Mechanism

- Managed by a **Conservation Reserve Management Committee (CRMC)**, formed by the **State Government.**
- This committee includes **local stakeholders, NGOs, scientists,** and is supervised by the **Chief Wildlife Warden.**
- Advises and monitors **conservation action plans, enforcement, and local engagement.**

Understanding Grassland Ecosystems

Definition

- **Grasslands** are **open landscapes dominated by grasses**, with sparse or no tree cover.
- Typically occur in **semi-arid and dry tropical or temperate climates**.

Global Importance

- Cover **20–40% of Earth's terrestrial area**.
- Play a vital role in **carbon storage, livestock grazing, and biodiversity conservation**.

India's Grassland Coverage

- India has **approximately 24% of its geographical area** under various types of **grassland ecosystems**.
- These areas are often **undervalued and unprotected**, yet support key ecological functions and rural economies.

Types of Grasslands

1. Tropical Savannas

- Found in **tropical regions with seasonal rainfall**.
- Characterized by **grasses with scattered trees or shrubs**.
- Examples:
 - **Shola grasslands** of the **Western Ghats**,
 - **Banni grasslands** of Gujarat.
- Support **seasonal grazing** and are sensitive to fire and overgrazing.

2. Temperate Grasslands

- Located in **temperate zones**, with **cold winters and warm summers**.
- Dominated by **perennial grasses and shrubs**, with few trees.
- Known for **fertile soils and extreme seasonal variation**.
- Global examples:
 - **Prairies** in North America,
 - **Pampas** in South America.

3. Steppes

- **Semi-arid, treeless grasslands** of the **temperate zone**, found in regions with **low rainfall**.
- Sparse vegetation dominated by **short grasses**.
- Examples:
 - **Eurasian steppes**,
 - Some parts of **Mongolia, Central Asia**, and **cold desert zones of Ladakh**.

Source: <https://www.thehindu.com/sci-tech/energy-and-environment/pristine-hesaraghatta-grasslands-will-remain-untouched/article69503834.ece>