



For success in a changing world

DAILY CURRENT AFFAIRS 21-06-2025

GS-1

1. Bajau Tribe

GS-3

2. New FASTag-Based Annual Pass
3. Russell's Viper
4. Idukki Wildlife Sanctuary
5. Gharial Conservation Programme

Bajau Tribe

Syllabus: GS-1; Tribes-- Intangible Cultural Heritage

Context

- **The Bajau tribe, resides in the coastal areas of Indonesia, Malaysia, and the Philippines, leading a unique lifestyle that revolves around the sea.**

- **Research has revealed that the Bajau's spleens are, on an average, 50% larger than those of the general population, a natural adaptation that allows them to live longer and deep diver.**



1. Who are the Bajau People?

- **Nomadic Seafaring Tribe:** Traditionally live on houseboats (*lepa-lepa*) or stilt houses in coastal regions.

- **Geographical Spread:** Found in the **Philippines, Malaysia (Sabah), Indonesia, and Brunei**.
- **Three Main Groups:**
 - **Bajau Laut** (True sea nomads)
 - **Bajau Darat** (Land-dwelling Bajau)
 - **West Coast Bajau** (Mixed settlements)

2. Unique Features & Lifestyle

- **Free-Diving Abilities:** Known for exceptional diving skills (up to **70 meters deep**) due to **enlarged spleens** (genetic adaptation).
- **Subsistence:** Rely on **fishing, pearl diving, and trading**.
- **Religion:** Mostly **Sunni Muslims**, but some practice animism.
- **Language:** **Sama-Bajau languages** (part of the Austronesian family).

3. Bajau & the Environment

- **Threats to Lifestyle:**
 - Overfishing & marine resource depletion.
 - Government policies forcing sedentarization.
 - Climate change affecting coral reefs.
- **Conservation Efforts:** Some Bajau participate in **marine conservation projects**.

4. Challenges

- **Statelessness:** Many lack citizenship due to nomadic lifestyle.
- **Human Rights Issues:** Face discrimination & limited access to education/healthcare.
- **Cultural Erosion:** Younger generations are moving to cities, abandoning traditions.

Practice Question

1. "The Bajau tribe exemplifies the challenges faced by nomadic communities in a modernizing world." Discuss. (GS1 - Society)
2. How does the Bajau tribe's lifestyle reflect human adaptation to marine ecosystems? (GS3 - Environment)

New FASTag-Based Annual Pass

Syllabus: GS-3: Indian Economy – Payment Methods.

Context:

- Announced by the **Union Minister of Road Transport and Highways**.
- Scheduled for **rollout on August 15**.
- Aimed at enhancing toll efficiency and reducing congestion on **national highways**, especially for **private vehicles**.

What is FASTag?

- An **electronic toll collection system** based on **RFID (Radio Frequency Identification)** technology.
- Allows **automatic toll deduction** without vehicle stoppage.
- **Launched:** Pilot in 2014 on the Ahmedabad-Mumbai corridor.
- **Mandatory since:** February 15, 2021, for all four-wheelers.

Implementing Bodies:

- **Ministry:** Ministry of Road Transport and Highways (MoRTH)
- **Agency:** National Highways Authority of India (NHAI)

How it Works:

- RFID-enabled **sticker (FASTag)** affixed to the windshield.
- Linked to a **prepaid wallet or bank account**.
- Toll deducted **automatically** at toll plazas.

Key Features of FASTag

- **Cashless & Contactless:** No physical toll payments.
- **Reduced Congestion:** Faster movement at toll plazas.
- **Fuel Efficiency:** Less idle time and fuel consumption.
- **Digital Push:** Supports **Digital India** initiative.
- **Vehicle-specific:** One FASTag per vehicle; **non-transferable**.
- **Easy Access:** Available via banks, e-commerce, apps, and NHAI outlets.

About the FASTag-Based Annual Pass

What is it?

- A **prepaid annual toll pass** worth ₹3,000.
- Applicable only for **non-commercial private vehicles** (e.g., cars, jeeps, vans).

Key Features:

- **Validity:**
 - **1 year** from activation
 - Or **200 highway trips**, whichever comes first
- Activation through:
 - **Rajmarg Yatra App**
 - **MoRTH/NHAI websites**
- Beneficial for **short-stretch travel** (within 60 km between toll plazas).
- **Reduces:**
 - Toll expenses on short commutes
 - Waiting time and congestion
 - Disputes at toll booths
- **Promotes seamless travel** for frequent private highway users.

Significance

- Encourages the use of **digital tolling infrastructure**.
- Supports smoother **inter-city travel** for private users.
- Contributes to **decongesting toll plazas**.
- Enhances the **efficiency of highway infrastructure** in India.

Russell's Viper

Syllabus: GS-3; Environment & Ecology

Context

- Two existing drugs offer hope to cure Russell's viper bites.

1. Basic Information

- **Scientific Name:** *Daboia russelii*
- **Common Names:** Russell's Viper, Chain Viper
- **Family:** Viperidae
- **Type:** Highly venomous snake

2. Physical Characteristics

- **Length:** 1 to 1.5 meters (can grow up to 1.8 meters).
- **Color:** Yellowish-brown, tan, or gray with dark brown oval spots (chain-like pattern).
- **Head:** Triangular, distinct from the neck.
- **Eyes:** Vertical pupils (indicates nocturnal nature).
- **Scales:** Keeled (rough texture).



3. Habitat & Distribution

- **Found in:** India, Pakistan, Sri Lanka, Bangladesh, Nepal, Myanmar.
- **In India:** Widespread (except Northeast & high-altitude regions). Common in Karnataka, Maharashtra, Tamil Nadu, Andhra Pradesh, Odisha.
- **Habitat:** Grasslands, farmlands, scrub forests, rocky areas. Often found near human settlements (leading to snakebite incidents).

4. Behavior & Diet

- **Nature:** Aggressive when provoked; nocturnal (active at night).
- **Diet:** Rodents, lizards, small mammals (helps control pest populations).
- **Reproduction:** Ovoviparous (gives birth to live young, 20-40 at a time).

5. Venom & Snakebite

- **Venom Type:** Hemotoxic (destroys blood cells, tissues, causes clotting disorders).
- **Effects of Bite:**
 - Severe pain, swelling, necrosis.
 - Bleeding from gums, kidneys, vomiting.
 - Can lead to kidney failure, death if untreated.
- **Antivenom:** Polyvalent antivenom (effective if administered quickly).
- **Medical Importance:** One of the "Big Four" venomous snakes in India (responsible for most snakebite deaths).

6. Conservation Status

- **IUCN Status:** Least Concern (but habitat loss is a threat).
- **Wildlife Protection Act, 1972:** Schedule II (protected species).

Prelims Practice Question

1. **Which of the following is NOT one of the "Big Four" venomous snakes of India?**
 - a) Russell's Viper
 - b) King Cobra
 - c) Common Krait

d) Indian Cobra

Answer: (b) King Cobra

Idukki Wildlife Sanctuary

Syllabus: GS-3; Biodiversity, GS-2; Tribal welfare initiatives

Context

- Tribal students and residents of Kannampadi within the Idukki Wildlife Sanctuary are about to open a new chapter in their life, with three new libraries set to open in the tribal settlement.

1. Basic Info

- **Location:** Idukki, Kerala
- **Established:** 1976 | **Area:** 77 sq.km
- **Type:** Wildlife Sanctuary (Buffer for Periyar Tiger Reserve)
- **River:** Periyar | **Peaks:** Cheruthoni, Kuravanmala

2. Ecology

- **Forests:** Evergreen, Semi-evergreen, Moist deciduous, Shola grasslands
- **Flora:** Teak, Rosewood, Bamboo, Medicinal plants
- **Fauna:**
 - Mammals: Elephants, Tigers, Gaur, Lion-tailed Macaque (Endangered)
 - Birds: Malabar Hornbills, Nilgiri Wood Pigeon
 - Reptiles: King Cobra, Python

3. Conservation

- Part of Western Ghats (UNESCO Site) & Anamalai Sub-Cluster
- Protects endangered species like Nilgiri Tahr

4. Recent Tribal Initiative (2025)

- **3 Libraries** in Kannampadi settlement (Memari, Kathitheppan, Kollathikkavu)
- **Theme:** "Reading is the true addiction"
- **Managed by:** Eco-Development Committees (EDCs)
- **Features:**
 - ₹1 lakh worth books (Children's lit, novels, exam materials)
 - Future: PSC coaching, newspapers, tribal librarians
- **Impact:** Benefits 623 families across 12 settlements

5. Threats

- Human-wildlife conflict (Elephants)
- Illegal logging, Climate change affecting Sholas

Gharial Conservation Programme

Syllabus: GS-3: Wildlife Conservation.

Context:

- *Etawah* celebrated the **50th anniversary** of the gharial conservation initiative on **World Crocodile Day (June 17, 2025)**.
- Marks five decades of focused conservation efforts for the **gharial (Gavialis gangeticus)** in the **Chambal River**.

Overview of the Programme

- **Initiated:** 1975
- **Launched by:**
 - **Forest Department of Uttar Pradesh**
 - **Society for Conservation of Nature (SCON)**
- **Supported by:** UNDP, FAO, and Government of India

Geographical Scope & Habitat

- **Primary Region:** Chambal River, Etawah district, Uttar Pradesh
- **Ideal Habitat:**
 - Deep, pristine river stretches
 - Minimal human disturbance
- **Captive Breeding Centre:** Kukrail Gharial Rehabilitation Centre, Lucknow

Objectives

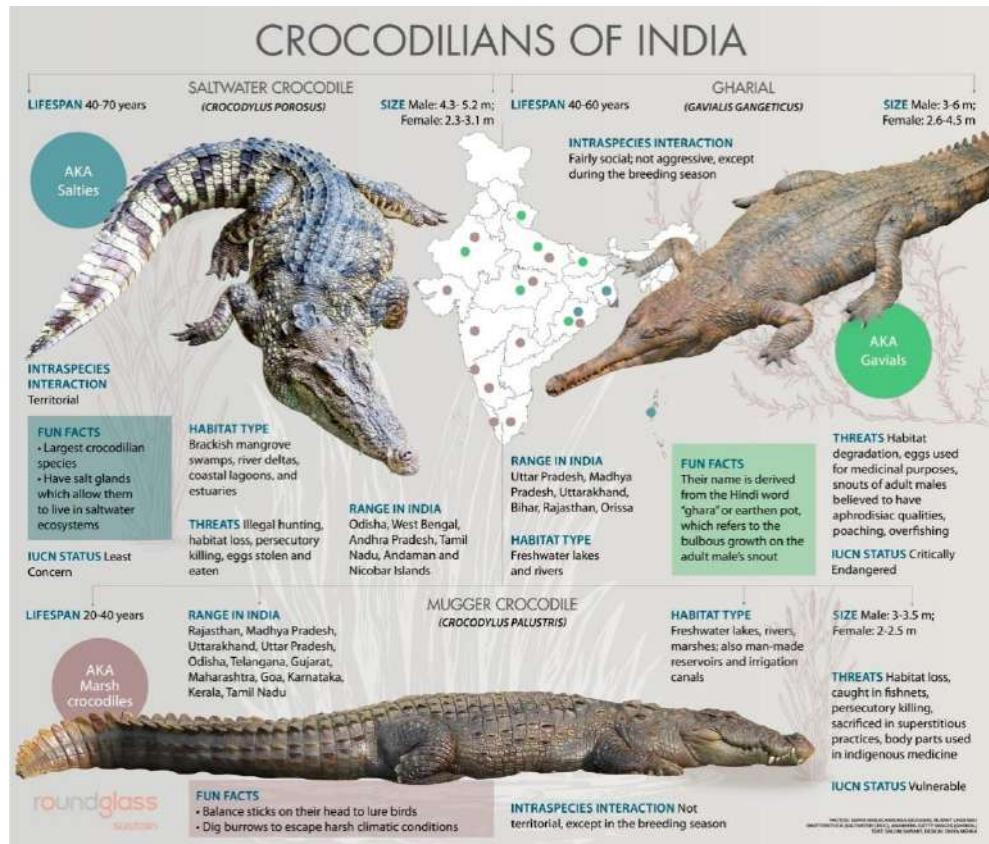
- **Protect** natural gharial populations.
- **Enhance** wild population via *captive breeding* and *rear-and-release*.
- **Research** habitat and behavioural ecology of gharials.
- **Promote coexistence** with local fishing communities.
- **Involve communities** in sustainable and conservation-friendly livelihoods.

Key Features & Methodology

- **Egg Collection:** From natural nests along Chambal River.
- **Artificial Incubation:** Maintains optimal temperature and humidity.
- **Captive Rearing:** Juveniles raised for **3–5 years** at Kukrail Centre.
- **Mark and Release:** Tagged juveniles released in **protected** stretches of Chambal.
- **Community Involvement:** Local fishermen incentivized and trained for conservation roles.

Significance of Gharial

- **Scientific Name:** *Gavialis gangeticus*
- **IUCN Status:** *Critically Endangered*
- **Endemic to:** Indian subcontinent
- **Ecological Role:** Apex predator and river ecosystem health indicator



Gharial vs Mugger vs Saltwater Crocodile

Feature	Gharial (<i>Gavialis gangeticus</i>)	Mugger (<i>Crocodylus palustris</i>)	Saltwater Crocodile (<i>Crocodylus porosus</i>)
Common Name	Gharial or Fish-eating Crocodile	Marsh Crocodile or Mugger	Saltwater Crocodile
Snout Shape	Very long, narrow snout with bulb in males	Broad, V-shaped snout	Long, broad snout
Teeth Visibility	Teeth interlocking, visible even when mouth closed	Less prominent	Teeth prominent when mouth closed
Size	Up to 6 meters	Up to 4-5 meters	Largest; up to 7 meters
Habitat	Fast-flowing rivers	Freshwater habitats: lakes, rivers,	Estuaries, deltas, brackish and coastal

Feature	Gharial (<i>Gavialis gangeticus</i>)	Mugger (<i>Crocodylus palustris</i>)	Saltwater Crocodile (<i>Crocodylus porosus</i>)
		marshes	waters
Distribution (India)	Chambal, Yamuna, Gandak, Ghaghara rivers	Throughout Indian subcontinent	Eastern coast: Odisha, Sundarbans, Andaman & Nicobar
Diet	Primarily fish	Carnivorous; generalist feeder	Carnivorous; large mammals, fish, birds
Social Behaviour	Mostly solitary	Semi-social	Territorial and aggressive
Conservation Status (IUCN)	Critically Endangered	Vulnerable	Least Concern
Protection (India)	Schedule I – WPA, 1972	Schedule I – WPA, 1972	Schedule I – WPA, 1972
Breeding Site (Notable)	Kukrail (UP), National Chambal Sanctuary	Various wetlands across India	Bhitarkanika (Odisha)
Special Feature	Gular sac ("ghara") in males	Adaptable to varied water bodies	Largest living reptile; known for salt tolerance