

# CROCODILE CENSUS: ENVIRONMENT

## NEWS: *Marsh Crocodile Census in Vishwamitri River*

### WHAT'S IN THE NEWS?

A recent two-day census of marsh crocodiles (muggers) in the Vishwamitri River, Gujarat, has concluded, and the data is being analyzed. This river, home to a large mugger population, is highly polluted due to sewage and industrial waste, posing ecological challenges.

### 1. Vishwamitri River: A Vital but Polluted Habitat

#### Geographical Overview

- **Origin:** Pavagadh hills, Panchmahal district, Gujarat.
- **Length:** ~80 km.
- **Course:**
  - Merges with **Dhadhar River**.
  - Drains into the **Gulf of Khambhat, Arabian Sea**.
- **Ecological Importance:** Supports a large population of mugger crocodiles in the Vadodara stretch.

#### Pollution Concerns

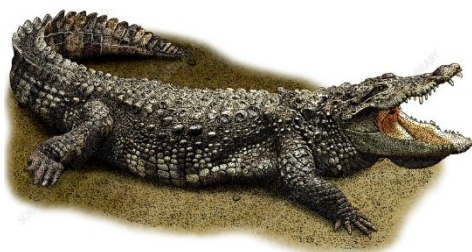
- The river is highly polluted due to industrial waste and untreated sewage discharge.
- Pollution threatens the survival of crocodiles and other aquatic species.

### 2. Crocodiles in India: Diversity and Conservation

#### India's Three Crocodile Species

Species	Habitat	Distinct Features	IUCN Status
<b>Mugger Crocodile (Marsh Crocodile)</b>	Freshwater rivers, lakes, estuaries	Broad snout, digs burrows for nesting	<b>Vulnerable</b>
<b>Gharial</b>	Rivers (Chambal, Ganges, Mahanadi)	Long, narrow snout, fish-eater	<b>Critically Endangered</b>
<b>Saltwater Crocodile</b>	Estuaries, coastal waters (Sundarbans, Bhitarkanika)	Largest crocodile, aggressive	<b>Least Concern</b>

**MUGGER**



**GHARIAL**



**SALT WATER CROCODILE**



### **Mugger Crocodile (Marsh Crocodile)**

- Found in **rivers, estuaries, and marshy areas**.
- **Broad snout**, strong legs for basking on steep slopes.
- **Sensitive keratin scales** detect the slightest water movement, aiding in prey detection.
- **IUCN Status: Vulnerable.**

### **Conservation Efforts**

- **Crocodile Conservation Project (1975):** Launched in Odisha's **Bhitarkanika National Park** with UNDP aid.
- **Legal Protection:** All **three crocodile species** in India are listed under **Schedule I of the Wildlife Protection Act, 1972.**

## **3. Importance of Crocodiles in Ecosystem**

### **Keystone Species**

- **Apex predators:** Control populations of **fish and other aquatic animals**, maintaining biodiversity.
- **Ecosystem health:** Presence indicates a **balanced aquatic ecosystem.**

### **Threats to Crocodile Population**

- **Pollution** (sewage, industrial waste).
- **Habitat destruction** due to river encroachments.
- **Human-wildlife conflict** (crocodile attacks in urban areas).

**Source:** <https://www.downtoearth.org.in/wildlife-biodiversity/crocodile-river-how-many-muggers-does-the-vishwamitri-river-of-vadodara-currently-have-we-will-soon-find-out>