



Megafauna Bias Hampers Carnivore Conservation Efforts

For Prelims: carnivores, Project Tiger, tiger reserves, Ken-Betwa River interlinking project, Indian Wildlife Protection Act (1972), Indian leopard, Indian Biological Diversity Act (2002).

For Mains: Challenges in wildlife conservation in India, Conservation and management of carnivores in India, Biodiversity conservation in India, Role of ecological data in conservation efforts. Human-animal-animal conflict.

Why In News?

India's **carnivore research is focusing too much on larger and more popular species**, leading to a lack of understanding of smaller and less well-known carnivores. This gap in knowledge is hindering conservation efforts in the country.

Why are Carnivores Important for Conservation?

- **Carnivores dominate the food web, playing a crucial role in maintaining ecological balance.** Despite their importance, **carnivores are among the most threatened mammals in the world.**
- Hence, substantial research and conservation resources are invested in studying, protecting, and managing carnivore populations, globally.

What is India's Carnivore Conservation Status?

- **India is home to 23% of the world's carnivore population, belonging to 60 species.**
- However, a review of studies published since 1947 shows that the impact of the 70 years of research on charismatic species on their conservation status and policies in the country has been far from satisfactory.
- **The wild cat family, particularly the tiger, dominates carnivore literature** in the country. Other top carnivores that have received a substantial research focus include the Indian leopard, golden jackal, **dhole**, and jungle cat.
 - However, **the quality of studies on smaller and less charismatic carnivores has generally been poor.**

What is the Impact of Research on Carnivores in India?

- Scientific research on **tigers has led to the establishment of [Project Tiger](#) in 1973 and helped in the establishment of tiger reserves in 50 locations across the country.**
- Research has provided **evidence against the construction or expansion of highways through tiger habitats in litigation, such as through [Bandipur Tiger Reserve](#), [Kanha-Pench tiger corridor](#), and [Bhagwan Mahavir Wildlife Sanctuary](#).**
 - Research data has contested the ambitious **[Ken-Betwa river interlinking project](#), which is likely to submerge a major portion of the core area of the [Panna Tiger Reserve in Madhya Pradesh](#).**

- **Research on the Indian leopard has resulted in the formulation of national guidelines on human-leopard conflict mitigation.**
- It is found that the wild cat family, particularly the tiger, dominates carnivore literature in the country. **The Indian leopard, golden jackal, dhole, and jungle cat** are the other top carnivores that have received a substantial research focus.
- But the quality of studies on smaller and less charismatic carnivores has generally been poor.

Why is Research on Smaller and Less Charismatic Carnivores Important?

- Research on smaller and less charismatic carnivores is **important as it helps in understanding the important link between carnivores and their ecological communities** and ecosystems, which has implications for human sustenance.
- Small cat carnivores execute important ecological **functions like controlling rodent populations, known to be agricultural pests and disease carriers**, dispersing seeds, and maintaining forest ecosystems.
 - **Civets are known to disperse seeds and help in maintaining forest ecosystems.**

Note

- **Charismatic megafauna** is a term used to **describe large, iconic animal species that are popularly perceived as being charismatic or appealing**, such as elephants, tigers, lions, pandas, and polar bears. These animals often receive a lot of attention and conservation efforts due to their cultural and aesthetic significance.

What are the Challenges in Carnivore Research and Conservation in India?

- **Wetland conservation remains under-prioritized**, and grassland ecosystems, which give refuge to critically threatened species like the [caracal](#), are also sidelined in research and conservation.
- There is a decline in **natural history studies, the basic steppingstone to understanding species ecology, expedited by a parallel reduction in journals that publish such studies.**
- Policies are often driven by **political influences and misplaced priorities, and scientific recommendations are disregarded.**
- Limited interdisciplinary studies in carnivore literature hinder the development of socio-ecologically sensitive policies.
- Bureaucratic hurdles need to be eliminated to benefit non-government agencies and independent researchers.

What Steps can be Taken to Improve Carnivore Conservation in India?

- **Increased funding for research on smaller and less charismatic carnivores** to raise their profile and focus attention on their vulnerable and threatened habitats in India's conservation policies.
- **Interdisciplinary research with a collaborative and constructive approach** by roping in communities to encourage socio-ecologically sensitive policies.
- Frameworks like biodiversity heritage sites under the Indian [Biological Diversity Act \(2002\)](#) or community reserves under the Indian [Wildlife Protection Act \(1972\)](#) facilitate the maintenance of socio-ecological systems by fostering local stewardship and ultimately democratising carnivore research.

[Source: DTE](#)

