LIVING PLANET INDEX ASIA AND THE PACIFIC

The Living Planet Index (LPI) is a measure of biodiversity based on the population sizes of species over time.

By Bobby Carter

+40%

BIODIVERSITY

- Biodiversity is the variety of life on Earth, and is essential to our well being.
- It provides services like pollination, food, water, and nutrient cycling.
- Biodiversity is threatened by habitat loss, pollution, and over-exploitation.



- 60% average population decline since 1970 (73% globally).
- Freshwater species declined by the most.



A FEW LIMITATIONS

- Easy to misinterpret average population change, not the proportion of all wildlife lost.
- Not globally representative limited data on the tropics, which are a biodiversity hotspot.
- Only a small number of species analysed no insects, plants, coral, or fungi.

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MAKING THE LPI

- Data is collected on the size of populations (individuals of a species living together) from 1970 onwards.
- Data is sourced from scientific articles, databases, and government reports.
- 768 species (in 4,622 populations) were included from Asia and The Pacific.

1990

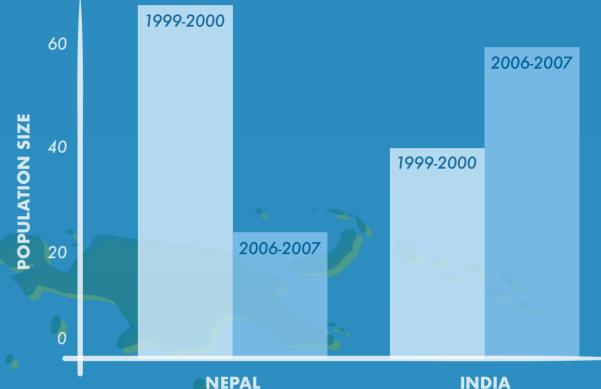
WHAT DOES IT MEAN?

- It's difficult to compile global biodiversity trends into a single number.
- About half the populations analysed are stable or growing; half are declining.
- Therefore, the magnitude of the declining populations outweighs those growing.

2000

HOW THE LPI CAN HIDE TRENDS IN SPECIFIC POPULATIONS...

- Let's look closely at two small populations of the Indian rhino: one in Nepal, and one in India.
- Poaching has decimated rhino populations seen here in Nepal. But populations have rebounded in some areas seen here in India.



64% decrease in

INDIA

48% increase in population size

- The LPI uses the geometric mean to calculate the average population change. In these populations, there's a 27% average decline in the rhinos.
- But this number misses two important outcomes:
 - The Nepal population urgently needs protecting.
- The India population might teach us how increase endangered rhino populations.
- Ultimately, we need a more population-specific approach to conservation.

Example adapted from Ritchie (2022)



REFERENCES

WWF (2024) Living Planet Report 2024: A System in Peril. WWF, Gland, Switzerland Ritchie, H. (2022) Living Planet Index: What Does It Really Mean? Our World In Data Accessed from https://www.ourworldindata.org/living-planet-index-decline [Online].

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