# Living Planet Report 2022

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**In news**– World Wide Fund for Nature (WWF) has recently published the Living Planet Report 2022.

**Key findings-**

- In just over 50 years, there has been a **69% drop in the wildlife population globally** with **Latin America** and the **Caribbean** being the **worst hit** (94% loss since 1970).
- Among species, **freshwater ones have seen the most decline in this period (83%).**
- **Th**e Asia-Pacific region that includes India has seen a 55% loss.
- **The causes:** habitat degradation and loss, exploitation, the introduction of invasive species, pollution, the climate crisis and disease.
- The biennial report published by the World Wide Fund for Nature (WWF) does not have India-specific data but WWF India representatives said the country is also extremely vulnerable to massive biodiversity loss:
    - Over **12% of wild mammal species in India are facing extinction.**
    - More than **40% of honey bees** have **disappeared** in the past 25 years.
    - Over 50% of 867 bird species will see population declines in the long term while 146 are at great risk even in the short term.
    - Nearly 150 species of amphibians are under threat.
    - Most of **India's river systems are not free flowing and hence their biodiversity has**

**declined**.

- In 2019, 205 species from India were in the 'endangered', **81 in the 'critically endangered'** and 394 in the 'vulnerable' category on the 'red list' of the International Union for Conservation of Nature (IUCN).

- Globally, **only 37% of the rivers longer than 1000 km remain free flowing** over the entire length.
- When some fish species migrate along these swim-ways, the presence of dams and reservoirs pose a threat to their survival.
- **The report has used the Living Planet Index (LPI),** a global dataset featuring 32,000 populations of 5,230 species **provided by the Zoological Society of London to arrive at findings**.
- The data shows that i**n tropical regions vertebrate wildlife populations are declining at a staggering rate.**
- The report indicates that the **main drivers of wildlife population decline are habitat degradation and loss,** exploitation, the introduction of invasive species, pollution, climate change and disease.
- The report also warns that if the world breaches the 1.5 degree global warming threshold, the climate crisis is likely to become the dominant cause of biodiversity loss in the coming decades.
- Thus far, the world has already warmed 1.1 degrees over pre-industrial levels and some studies believe the 1.5 degree threshold could be crossed in the next 10 to 20 years.
- **Currently, the dominant driver of biodiversity loss is land-use change** but the cascading impacts of climate change are already being documented on biodiversity.
- For example, 50% of warm water corals have already

been lost due to a variety of causes. A warming of 1.5 degree C will lead to loss of 70 to 90% of warm water corals and 2 degree C warming will lead to loss over 99%.

- **Already the first extinctions of entire species are being recorded. For example, the Golden Toad went extinct in 1989** mainly due to more and more days without fog normal to Costa Rican cloud forests.
- **The Bramble Cay Melomys,** a small rodent found between Australia and Papua New Guinea, **was declared extinct in 2016** after sea level rise and a series of heavy storms destroyed its habitat.
- A single hot day in 2014 killed 45,000 flying fox bats in Australia. Every degree of warming is expected to cause biodiversity loss.
- The projections provided in the report shows that at **2 degree C warming, 25- 50% of India's species could be vulnerable to loss.**
- Not all species are suffering losses due to climate change. Beetles and moths that attack the northern forests are surviving better in warmer winters and producing more generations per year.
- Many insects and worms that cause diseases in both wildlife and humans have moved into new areas and are causing new diseases to emerge in the high Arctic and Himalayan highlands.
- Combining expert information from the IUCN red list and special distribution, threats to a total of 23,271 terrestrial species, **WWF generated global maps of the threats to these groups from agriculture, hunting, trapping, logging, pollution, invasive species and climate change.**

- **These maps indicate that the entire Himalayas and the Western Ghats region in India are among global hotspots of risk.**

- Compared to all other biodiversity, populations of fresh-water species have declined the maximum globally: by 83%.
- **In India also the fresh-water biome and ecosystems in them are the most threatened**.
- **On invasive species which the report identifies as a major threat to native biodiversity, India is severely impacted in both terrestrial and aquatic ecosystems.**
- It is important to note that **Tamil Nadu is the first state with a policy on invasive species** and with management plans for regulation and restoration.

**Biodiversity loss by region-**