

BEES ARE ON THE DECLINE WHAT'S HAPPENING?

World Scenario–Population decline of honeybees (source: Gallai et al., 2009)

Country	Decline %	Duration
Germany	57	Last 15 years
UK	61	Last 10 years
USA	> 50	Last 20 years
Poland	> 35	Last 15 years
India	> 40	Last 25 years
Brazil	> 53	Last 15 years
Netherland	58-65	Last 25 years
China	> 50	Last 20 years

- As per IUCN report (2014) the status of most of the bee remains unknown, one in 10 wild bee species face extinction in Europe.
- The European wild bee species shows that 9.2% are threatened with extinction, while 5.2% are considered likely to be threatened in the near future. A total of 56.7% of the species are classified as Data Deficient.
- The report shows that 7.7% of the species have declining populations, 12.6% are stable and 0.7% are increasing. Population trends for the remaining 79% of bee species are unknown.
- The most well-known Western Honeybee (*Apis mellifera*) – has been assessed as Data Deficient. As the Redlist assessment covers species in the wild- it is uncertain whether it currently occurs as truly wild, rather than domesticated species.
- *Apis karinjodian*, a recently described from Western Ghats, India is the only honeybees assessed as per IUCN category as Near Threatened (NT).

THREATS TO BEE POPULATIONS-

- **Loss of habitat – degradation and fragmentation:** When overall plant diversity is reduced – forests, hedges, meadows are destroyed. Bees migrate and need resting places along the way where they can forage and rest.
- **Large scale use of pesticides and herbicides:** The use of pesticide reduces the breeding ability and resistance to disease. Neonicotinoids are harmful for bees
- **Drastic changes in weather patterns:** Disrupts nesting behaviour of bees. Changes in the weather are affecting the timing of flowering of plants that bees forage as food resources.
- **Loss of genetic diversity:** Selection breeding for specific traits is causing loss of genetic pool of native bees.
- **Virus and other pathogens:** Varroa mite, Thai sac brood virus effect bee colonies globally.

WHAT CAN WE DO TO STOP THESE THREATS?

- Plant more native plants – not just trees – to support bee nesting and foraging sites.
- Promote more chemical free farming to reduce the impact on bees.
- Conserve native bee populations in the wild.
- Beekeepers can allow a small percentage of their bees to swarm to add to the genetic pool in the wild.
- Create bee gardens provides nectar and pollen-nutrition food source to bees.