

**SUNDARBANS CONSERVATION**

**Prelims:** Environment- Biodiversity, Ecology

**Mains:** GS-III- Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

**Why in News?**

- ▶▶ **Discovery India and World Wide Fund (WWF) India** have partnered with the **Government of West Bengal and local communities** in the Sundarban to help save the world's only mangrove tiger habitat.

**The Project:**

- ▶▶ The project will use technology to solve several of the issues faced in the region. This includes building datasets on impacts of climate change on estuarine ecosystem.
- ▶▶ The initiative focuses on enhancing farmland productivity through low-cost measures and adjusting crop calendars to deal with climate change.
- ▶▶ The initiative will also include work towards securing habitats for tigers and prey species.
- ▶▶ The project at Sundarbans is part of a global movement, Project CAT (Conserving Acres for Tigers), aimed at building healthy habitats for Tigers by conserving six million acres of protected land across four countries.

**Project CAT (Conserving Acres for Tigers):**

- ▶▶ Discovery Communications is working with World Wildlife Fund and others to support a worldwide effort to double the number of tigers in the wild by 2022.
- ▶▶ It is a mission to ensure a future for tigers and other endangered wildlife by conserving nearly a million acres of protected land on the border of India and Bhutan.
- ▶▶ Tigers face multiple threats from poaching, habitat loss and fragmentation, conflict with humans and overhunting of their prey species.

**Umbrella Species:**

- ▶▶ Umbrella Species are species that are selected for conservation-related decisions because the conservation and protection of these species indirectly affect the conservation and protection of other species within their ecosystem.
- ▶▶ Umbrella species help in the selection of potential reserve locations, as well as the determination of the composition of the reserve.

- ▶▶ These species usually have a large area requirement for which the conservation of the species extends the protection to other species sharing the same habitat.
- ▶▶ Umbrella species are representative of other species in their habitat since they are known species, and they also determine the area of conservation.

### Keystone Species:

- ▶▶ A keystone species is an organism that helps define an entire ecosystem. Without its keystone species, the ecosystem would be dramatically different or cease to exist altogether.
- ▶▶ Keystone species have low functional redundancy.
- ▶▶ Any organism, from plants to fungi, may be a keystone species; they are not always the largest or most abundant species in an ecosystem.

### Sundarbans:

- ▶▶ The Sundarbans mangrove forest, one of the largest such forests in the world, lies across India and Bangladesh on the delta of the Ganges, Brahmaputra and Meghna rivers on the Bay of Bengal.
- ▶▶ It is adjacent to the border of India's Sundarbans World Heritage site inscribed in 1987.
- ▶▶ The site is intersected by a complex network of tidal waterways, mudflats and small islands of salt-tolerant mangrove forests, and presents an excellent example of ongoing ecological processes.
- ▶▶ The area is known for its wide range of fauna, including 260 bird species, the Bengal tiger and other threatened species such as the estuarine crocodile and the Indian python.

GATEWAY