



Threats to Biodiversity

- ✓ Extinction or elimination of a species is a natural process of evolution.
- ✓ In the geologic period the earth has experienced mass extinctions.
- ✓ During evolution, species have died out and have been replaced by others.
- ✓ The process of extinction has become particularly fast in the recent years of human civilization.
- ✓ One of the estimates by the noted ecologist, E.O. Wilson puts the figure of extinction at 10,000 species per year or 27 per day! This startling figure raises an alarm regarding the serious threat to biodiversity.

Let us consider some of the major causes and issues related to threats to biodiversity.

(i) Loss of Habitat

- Destruction and loss of natural habitat is the single largest cause of biodiversity loss. Billions of hectares of forests and grasslands have been cleared over the past 10,000 years for conversion into agriculture lands, pastures, settlement areas or development projects.
- There has been a rapid disappearance of tropical forests in our country also, at a rate of about 0.6% per year.
- With the current rate of loss of forest habitat, it is estimated that 20-25% of the global flora would be lost within a few years.
- Marine biodiversity is also under serious threat due to large scale destruction of the fragile breeding and feeding grounds of our oceanic fish and other species, as a result of human intervention.

(ii) Poaching

- ❖ Illegal trade of wildlife products by killing prohibited endangered animals i.e. poaching is another threat to wildlife.
- ❖ Despite international ban on trade in products from endangered species, smuggling of wild life items like furs, hides, horns, tusks, live specimens and herbal products worth millions of dollars per year continues.
- ❖ The cost of elephant tusks can go up to \$100 per kg; the leopard fur coat is sold at \$ 100,000 in Japan while bird catchers can fetch up to \$ 10,000 for a rare hyacinth macaw, a beautiful coloured bird, from Brazil.



(iii) Man-Wildlife conflict

- ◆ Instances of man animal conflicts keep on coming to lime light from several states in our country.
- ◆ In Sambalpur, Orissa 195 humans were killed in the last 5 years by elephants.
- ◆ In retaliation the villagers killed 98 elephants and badly injured 30 elephants.
- ◆ Several instances of killing of elephants in the border regions of Kote-Chamarajanagar belt in Mysore have been reported recently.
- ◆ The man-elephant conflict in this region has arisen because of the massive damage done by the elephants to the farmer's cotton and sugarcane crops.
- ◆ The agonized villagers electrocute the elephants and sometimes hide explosives in the sugarcane fields, which explode as the elephants intrude into their fields.
- ◆ In the early 2004, a man-eating tiger was reported to kill 16 Nepalese people and one 4-year old child inside the Royal Chitwan National Park of Kathmandu.
- ◆ In June, 2004 two men were killed by the leopards in Powai, Mumbai.

Cause of Man-animal conflicts:

- (i) Dwindling habitats of tigers, elephants and bears due to shrinking forest cover compels them to move outside the forest and attack the field or sometimes even humans.
- (ii) Usually the ill, weak and injured animals have tendency to attack man. Also, the female tigress attacks the human if she feels that her newborn cubs are in danger. But the biggest problem is that if human-flesh is tasted once then the tiger does not eat any other animal.
- (iii) Earlier, forest departments used to cultivate paddy, sugarcane etc. within the sanctuaries when the favourite staple food of elephants i.e. bamboo leaves were not available. Now due to lack of such practices the animals move out of the forest in search of food.
- (iv) Very often the villagers put electric wiring around their ripe crop fields. The elephants get injured, suffer in pain and turn violent.
- (v) The cash compensation paid by the government in lieu of the damage caused to the farmers crop is not enough. The agonized farmer therefore gets revengeful and kills the wild animals.