



Conservation of Biodiversity

Conservation – Definition:

- The management of biosphere so that it will yield the greatest sustainable benefit to **present generation** while maintaining its potential to **meet the needs of future generation**.

Factors affecting biodiversity

- Biodiversity is generally disturbed by **human activities** such as **construction of dams** in forest areas, release of **industrials waste**, using **pesticides** and **insecticides** in the crop fields, **urbanization**, etc.
- **Poaching** of wild animals, **over exploitation** of natural resources, **degradation** of habitats affect biodiversity.
- The **marine ecosystem** are also disturbed due to **oil spills** and discharge of **effluents**
- The climate factors like **global warming**, **ozone depletion**, **acid rain** also affect the biodiversity.

Advantages (or) need of biodiversity conservation

- It provides immediate **benefits to the society** such as recreation and tourism
- **Drugs, herbs, food** and other important raw materials can be derived from plants and animals.
- It also **preserves** the generate diversity of plants and animals.
- It leads to conservation of essential ecological diversity and **life supporting system**.

Types of Biodiversity Conservation

1. **In-Situ** conservation (within habitat)
2. **Ex-Situ** conservation (outside habitat)

1. In –Situ Conservation

- In –Situ conservation involves **protection of fauna and flora within its natural habitat**, where the species normally occurs is called **in-situ conservation**.
- The natural habitats or ecosystem maintained under in-situ conservation are called “**protected areas**”
- **Important In-Situ Conservation** - Biosphere reserves, National parks, Wildlife sanctuaries, Gene sanctuary etc



Methods of in- situ conservation

In –Situ Conservation	Numbers Available
Biosphere reserves	7
National parks	80
Wild-life sanctuaries	420
Botanical gardens	120

1. Biosphere reserves

- Biosphere reserves cover large area, more than 5000 sq.km.
- It is used to protect species for long time.

Name of Biosphere	State
Nanda devi	U.P
Nokrek	Meghalaya
Manas	Assam

2. National park

- A national park is an area dedicated for the conservation of wildlife along with its environment.

Name of National Park	State	Important Wildlife
Periyar	Kerala	Tiger, Elephant
Gir national park	Gujarat	Indian lion
Bandipur	Karnataka	Elephant
Dachigam	J&K	Hangul

3. Wildlife sanctuaries

- A wildlife is an area , which is reserved for the conservation of animals only
- At present there are 492 wildlife sanctuaries in our country.

Name of Sanctuary	State	Major Wild Life
Mudumalai	Tamilnadu	Tiger, Elephant ,leopard
Vedanthangal	Tamilnadu	Water birds
Sultanpur bird	Haryana	Migratory birds

4. Gene sanctuary

- A gene sanctuary is an area, where the plants are conserved.

Examples

- In northern India ,two gene sanctuary are found available a) One gene sanctuary for citrus (Lemon family)
b) One gene sanctuary for pitcher plant (an insect eating plant).

5. Other projects for conservation of animals

- For the protection and conservation of **certain animals**, some special projects are framed in our country.

Examples: Project Tiger; Gir Lion Project; Crocodile Breeding Project



SNS College of Engineering
An Autonomous Institution
Accredited by NAAC – UGC with 'A' Grade
Approved by AICTE, New Delhi & Anna University, Chennai



Advantages

- It is **very cheap** and convenient method.
- The species gets **adjusted** to the natural disasters like drought, floods, forest. **Disadvantage**
 - A **large surface area** of earth is required to preserve the biodiversity.
 - Maintenance of habitats is not proper, due to **shortage of staff** and **pollution**.