

(A) In situ - Conservation :- ①

in situ conservation of biodiversity is the conservation of species within their ^{natural} habitat is called in situ - conservation. In this method, the natural ecosystem is maintained & protected.

It is divided in following groups (takes place) :-

- (1) National Parks
- (2) Wildlife Sanctuaries
- (3) Biosphere Reserves

About 4% of the total geographical area of the country is used for ~~in situ~~ in situ - conservation.

1) National Parks :-

The following methods are used for in situ - conservation -

In situ - Conservation	Number available.
National Parks	104
Biosphere reserve	08
Wild life Sanctuaries	543
Bio-diversity hot-spots	04.

1) National Parks :-

A national park is an area dedicated for the conservation of wildlife along with its environments. A national park is an area which is used to conserve scenery,

natural & historical objects. It is a
 small reserve covering an area of about
100 to 500 square kilometres. within biosphere
 reserves, one or more national parks may
 also exist. currently, there are 104 national
 parks in India. operations, such as plantation,
 cultivation, grazing are not allowed in national
 parks. Private ownership rights & habitat
 manipulation are also not permitted.

Jim Corbett National Park (1936)
 was the 1st national park in India. Popular
 National parks of India with their location
 area ~~and~~ ^{and} animals found are presented in the
 table.

Name of National Park	States	Important wildlife
Gir National Park	Gujarat	Indian lion
Kaziranga.	Assam	One-horned Rhino
Bandipur.	Karnataka	Elephant
Periyar	Kerala	Elephant, Tiger
Corbett	Uttarakhand	Tiger
Ranthambore National Park	Rajasthan	Tiger
Kanha	M.P.	Tiger
Dachigam	J & K	Hangul.

② Wild life Sanctuaries

A Sanctuary is an area reserved for the conservation of only animals. where killing, hunting & shooting & capturing of wildlife is prohibited. Operation, such as procuring timber and minor Forest Products & private ownership rights are allowed. But they don't affect the animals. Currently, there are 551 wildlife Sanctuaries in India. They are spread over an area of about 1,07,310 square kilometers. The popular Sanctuaries of India with their location, area & animals are given below in the table :-

Name of Sanctuary	State	Major wildlife
Hazaribagh Sanctuary	Jharkhand	Tiger, Leopard.
Ghana Bird Sanctuary	Rajasthan	300-species of birds.
Sultanpur Bird Sanctuary	Haryana	Migratory Birds.
Nal Sarovar Bird Sanctuary	Gujarat	Water birds.
Mudamalai Wildlife Sanctuary	Tamil Nadu	Tiger, elephant, Leopard.
Vedanthangal Bird Sanctuary	T.N.	Water birds.
Jaldapara Wildlife Sanctuary	W. Bengal	Rhinoceros, Elephant, Tiger.
Abohar Wildlife Sanctuary	Punjab	Black buck.
Wild Ass Sanctuary	Gujarat	Wild ass, wolf, nilgai, chinkara.

(3) Biosphere Reserves

The Concept of Biosphere Reserves has been evolved by UNESCO's Man and Biosphere Programme (MABP). A biosphere reserve is a ~~specialised~~ specified area in which multiple use of the land is permitted by dividing it into zones. Each zone is for a particular activity. ~~Bios~~

A biosphere reserve is divided into three zones :-

- Core Zone
- Buffer Zone. and
- Manipulation Zone.

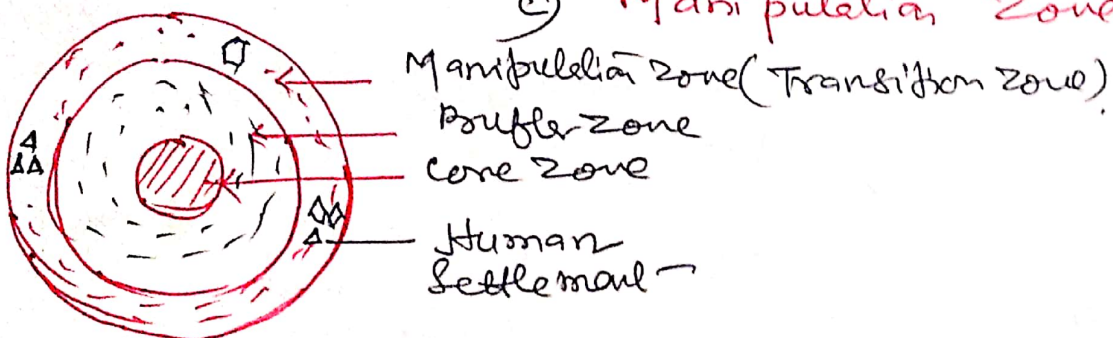


Fig- Biosphere reserve
in Terrestrial area

- Core Zone :- No human activity is allowed in the Core Zone
- Buffer Zone :- ~~limited~~ Limited human activity is permitted in this zone.
- Manipulation Zone :- Several human activities can occur in the manipulation zone.

Biosphere reserve are used to protect species for a long time. Currently, there are 18 Bio-sphere Reserve in India.

Some of the Biosphere of India are -

1. Nanda Devi
2. Manas Biosphere Reserve
3. Dehang Debang Biosphere Reserve
4. Sundarbans B.R.
5. Nilgiri B.R.
6. Great Nicobar B.R.
7. Kanha Biosphere Reserve
8. Panchmarhi
9. Simlipal B.R.
10. Agastha Agasthamalai

Role of Biosphere Reserve

Biosphere Reserve Preserves -

- i/ wild population
- ii/ life style of tribals and
- iii/ genetic resources of domesticated plants + animals

4) Sacred Grooves & Lakes

Sacred grooves are the sacred, forest patches around place of worship. These are held in high esteem by tribal communities & State or Central Government. These are most undisturbed forest patches, eg. island of Pristine forest, which is surrounded by degraded landscapes. Such sacred grooves are found in several regions in India. Such as Khasi & Jaintia hills of Meghalaya, Sarguja, Chanda & Bastar areas of M.P. Western Ghats regions of Maharashtra and Karnataka etc. Tribals have built temples in such patches eg. Deodar forest in Kumaon.

(12) (8) (6) (21)

region, Jaintia & Khasia in Meghalaya.
Tribals don't allow to cut even a single branch
of tree in these Sacred grooves. That's why
many endemic species (Rare species) are seen
to flourish in these Sacred grooves. Many
Prishnots tribes of Rajasthan protect Prosopis
cineraria & black buck religiously.
Many flora & fauna are naturally preserved.

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