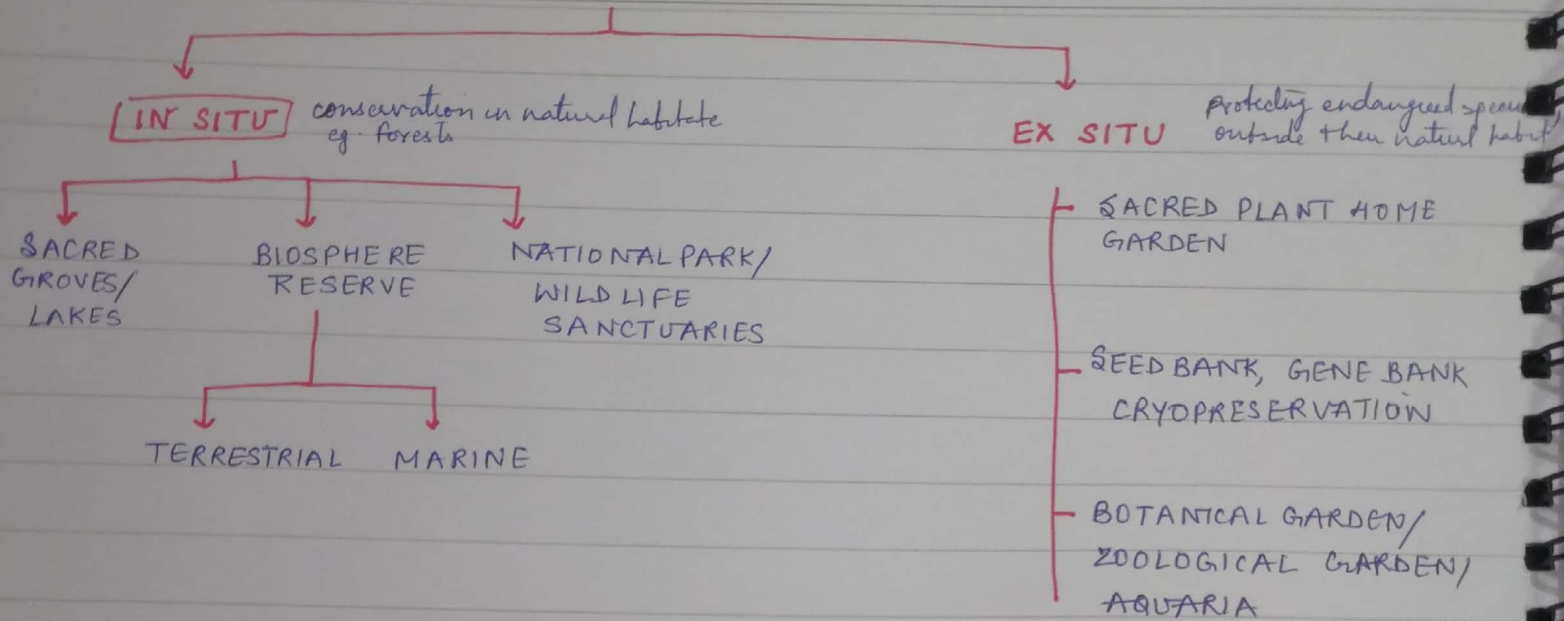


"BIODIVERSITY CONSERVATION"



1) Advantages of in situ conservatⁿ -

- Plants r conserved in natural environment
- Biodiversity is permanently protected
- Natural & cultural heritage is permanently protected.

Disadvantage -

- Threatening condition for the organism in area may still be present eg - diseases
- Poachers & eco tourist may see the th^r way area as an opportunity & may cause damage
- Genetic diversity may be decreased.

2) Advantages of ex situ conservatⁿ -

- Organisms r completely protected from predat^r & poaching.
- Health of individual can be monitored.
- Plants can breed to increase their no. if endangered.
- Conservation sites can be used for educatⁿ
- Easier to supply plant material for propagatⁿ

Disadvantage -

- Conserved species may suffer genetic erosion
- Need continued human care
- Method is often costly
- Correct surviving environmental conditⁿ may be difficult to achieve.

Ebast-M

Endangered species is the 2nd most severe conservation status for wild populatⁿ in IUCN scheme after critically endangered (CR)

Endangered Medicinal plant Species -

Major threatened species under IUCN - 5

[International union for conservation of nature]

- ① **Extinct** - Species not found in areas where they recently been inhabited
Eg - *Drosera indica*
- ② **Critically Endangered** - Species facing extremely high risk of extinction in immediate future
Eg - *Aconitum heterophyllum*
Coscinium fenestratum
- ③ **Endangered Species** - Species $\bar{c}$ low population no. & are in considerable danger of becoming extinct
or a species being categorised as likely to become extinct
They r very imp. because if a species become extinct, there is a chain reactⁿ that can affect the whole world & as human too
Eg - *Betula utilis* (शीतपत्र)
Angelica glauca
Picrostiza kurroo
Polygonatum cirrhifolium
Taxus wallichiana
Polygonatum
Belladonna (*Atropa acuminata*)
Carum carvi (कोलत जीरा)
Hedychium acuminatum (अमरकमर)

Medicinal plants prohibited to export from India since 1998 by Govt of India -

Rauwolfia serpentina

Aconitum species

Crentiana kurroo

Sivertia chirata

Pterocarpus santalinus

Abutilon indicum

Chlorophytum tuberosum (श्वेत मूलक)

Reason of becoming extinct -

- ① Over exploitation
- ② Ignorance about life cycle of species
- ③ $\uparrow$ demand all over the world leading to over harvesting
- ④ $\uparrow$ population, trade, export & habitat loss due to wild fire, clearing of forest, drought
- ⑤ Lack of applicatⁿ of scientific methods in systematic cultivatⁿ

Pollution, hunting, global warming / climate change / domino effect

④ **Vulnerable species** - Species actually declining in no. or are under threat -

eg - *Embelia ribes*
Polygonatum verticillatum
P. multiflorum

⑤ **Rare species** - Species with small population, restricted geographically, & localised habitat. [Not in immediate danger of extinction]
Eg - *Saraca indica*