

Hello everyone, I am Harshada Gauns  
from Government College Sakhli and  
In this session we're going to learn about  
In-situ methods of Wildlife Conservation.  
In this session we will learn about in-situ  
Wildlife Conservation and their types,  
which includes Biosphere Reserve, National  
Park, Wildlife Sanctuary and biodiversity  
Hotspot. at the end of this session  
you will be able to define in situ  
conservation and what are their objectives,  
determine importance of protected areas.  
You will be also able to recognize  
types of protected areas,  
and you can also differentiate between  
Biosphere Reserve, National Park, Wildlife  
Sanctuary and biodiversity hotspots.  
So let's begin.  
So what is in situ conservation?  
In situ conservation is on site conservation.  
That means you are not removing

species from its natural habitat,  
but you are giving all the conservation  
techniques or strategies or management  
plan in their natural spaces.

So it is the process of protecting  
an endangered plant or animal  
in its natural habitat,  
either by protecting or cleaning  
up the habitat or by defending  
the species from predators.

So what are objectives  
of in situ conservation?

The first objective is the  
creation of protected areas,  
so we will learn about  
protected areas in detail later.

But first let's try to  
understand the objectives.

So first one is, as I said,  
is creation of protected areas.

Second is the protection and

restoration of degraded species.

The development of strategies for the

conservation of marine environment.

So these are the three main objective

behind in situ conservation techniques.

The creation of natural corridors

linking areas of biological interests

to prevent habitat fragmentation,

information education and raised

awareness can be one of the objectives.

Next would be the employment of

local resources as we have discussed

in earlier session that without

involvement of local communities

any project will fail and hence

the aim of in situ conservation

is also to employ local resources,

specially human beings.

And the development of alternative

and sustainable economic mechanism

.

So let's try to understand what  
is protected areas before we try  
to understand what are different  
techniques of in situ conservation.

So protected Area is a cornerstone  
of in situ conservation.

That means it is one of the stepping  
stone and one of the main important  
stone of in situ conservation here.

These areas of land or sea  
especially dedicated.

To the protection and maintenance  
of biological diversity.

In this areas,  
protected area network may contribute  
to conservation targets through  
the maintenance of target species  
and their habitat,  
as well as the conservation of  
natural or semi natural ecosystems.

These areas are managed through

legal or other effective means.

For example,

National Park Biosphere Reserve or it's

also called as bio reserves and sanctuaries.

Now the World Conservation Union

has key role in promoting the

establishment of protected areas

throughout the world and in 1948 IUCN,

that is International Union for

Conservation of Nature and Natural Resources,

developed standard guidelines

for protected area management.

That means they have.

Come up with guidelines which tells

about how your particular area should be

and what are the pros and cons of having

that particular area as protected area.

And there are several benefits

of protected areas to list a few.

First is maintain viable population

of all native and subspecies. Next.

Is it maintain the number and  
distribution of communities and  
habitats and conserve the genetic  
diversity of all the present species.

It also prevent man-made  
introduction of alien species.

It also makes it possible for  
species or habitat to shift in  
response to any moment changes.

And for a general information.

India has over 600 protected areas  
which includes over 90 national parks,  
500 sanctuaries and 15 biosphere reserve.

So let's try to understand what are

These insitu techniques one by one.

So let's begin with Biosphere Reserve first.

So biosphere reserves are areas of  
terrestrial and coastal ecosystems  
which promotes solution to reconcile.

the conservation of biodiversity  
with its sustainable use.

Now their interest,  
internationally recognized,  
nominated by national government and  
remain under souvenir jurisdiction  
of the state where they are located.

So this biosphere reserves  
involve local communities and all  
interested stakeholders in planning  
and management of the same,  
and they have three main functions  
to do that is conservation of  
biodiversity and cultural diversity.

So here it is not only talking  
about animals and plants,  
but it also speaks about cultural and  
traditional diversity that human being  
practice in that particular area.

Next is economic development  
that is socio-culturally,  
and environmentally sustainable.

Third one is logistic support

underpinning development.

Through research, monitoring,

education and training.

And there are currently 714

biosphere reserves in 129 different

countries all over the world.

And this number also has 21

transboundary sites and that belongs

to World Network of Biosphere Reserve

and these biosphere reserves covers

a very large area and more often

more than 5000 square kilometers.

And they are used to protect

species for a long time.

Currently there are.

18 biosphere reserves in

India and to name a few,

we have Nanda Devi in Uttarakhand

Norkek in Meghalaya,

Manas in Assam and Sunderban

In west Bengal

The next in list of in situ

conservation is national parks,

so let's see what is National Park and how

it is different from Biosphere Reserve.

So National Park is an area,

whether within a sanctuary or not,

can be notified by the state government

to be constituted as a National Park

by the reasons of its ecological,

faunal,

floral, geomorphological or

zoological association or important.

And this is needed to for the

purpose of protecting and propagating

or developing wildlife therein

or its environment.

Now in case of National Park,

no human activity is permitted inside

the National Park except for those.

Permitted by chief wildlife.

Warden of the state under the

conditions given in chapter four

of Wildlife Protection Act 1972.

Now in this

Areas are of scientific beauty,

historical importance,

and it is owned and maintained

by national government.

An international organization that is

IUCN and we have already spoken about.

As seen earlier.

That is,

it is an International Union for

Conservation of Nature and its

World Commission on Protected Areas.

Has defined National Park as

category two type of protected areas.

That means it is being given

a specific importance in order

to conservation. the United States.

Established the first public park

or pleasuring ground for the

benefit and enjoyment of people.

Yellowstone National Park, in.

1872, India's first National Park

was established in 1936 as Haley

National Park and now it is known

as Jim Corbett National Park,

which is situated in Uttarakhand.

A National Park is an area dedicated

for the conservation of wildlife

along with its environment.

It is usually a small reserve covering an

area of about 100 to 500 square kilometers.

Now within Biosphere reserves,

one or more national parks may also exist.

Currently there are 103 national parks

in India and here are some listed ones

that is Kaziranga National Park in

Assam, Gir National Park in Gujarat,

Bandipur in Karnataka and Bhagwan Mahaveer

National Park which is situated in Goa.

The next in line,

we have wildlife sanctuaries,  
so wildlife Sanctuary is any area other  
than area comprised with any reserve  
forests or the territorial water can  
be notified by the state government  
to constitute as a sanctuary. if  
such area is of adequate ecological,  
faunal, floral, geomorphological,  
natural or geological significance  
for the purpose of protecting,  
propagating or developing  
wildlife or its environment.

Here are some restricted human activity  
are allowed inside the sanctuary areas,  
details which are given in chapter  
four of Wildlife Protection Act  
1972 and a Wildlife sanctuary is  
an area which is reserved for the  
conservation of animals only.

Currently there are 551

Wildlife sanctuaries in India.

And following are the other wildlife sanctuary

which are present in Goa and

namely they are Madei wildlife sanctuary.

Dr Salim Ali Bird Sanctuary

Netravali wildlife sanctuary,

Bondla wildlife sanctuary.

Chotigao Wildlife Sanctuary and

Bhagwan Mahaveer Wildlife sanctuary.

And the last conservation strategy in in

situ conservation is biodiversity hotspots.

So what is biodiversity Hotspot is,

according to Conservation International.

To qualify as a hotspot or

region must meet two criteria.

That is,

first one is it must contain at least 1500

species of vascular plants as endemic,

and it has to have lost at least

70% of its original habitat.

Biodiversity hotspot in India are namely as

Below. first is Himalayas,

second is Western ghats,

third is Indo Burma region and

the 4th one is Sundaland.

So these are the references y'all

can refer for in situ conservation

to study in detail.