



WBBCS 2022



SCIENCE

CONSERVATIONS

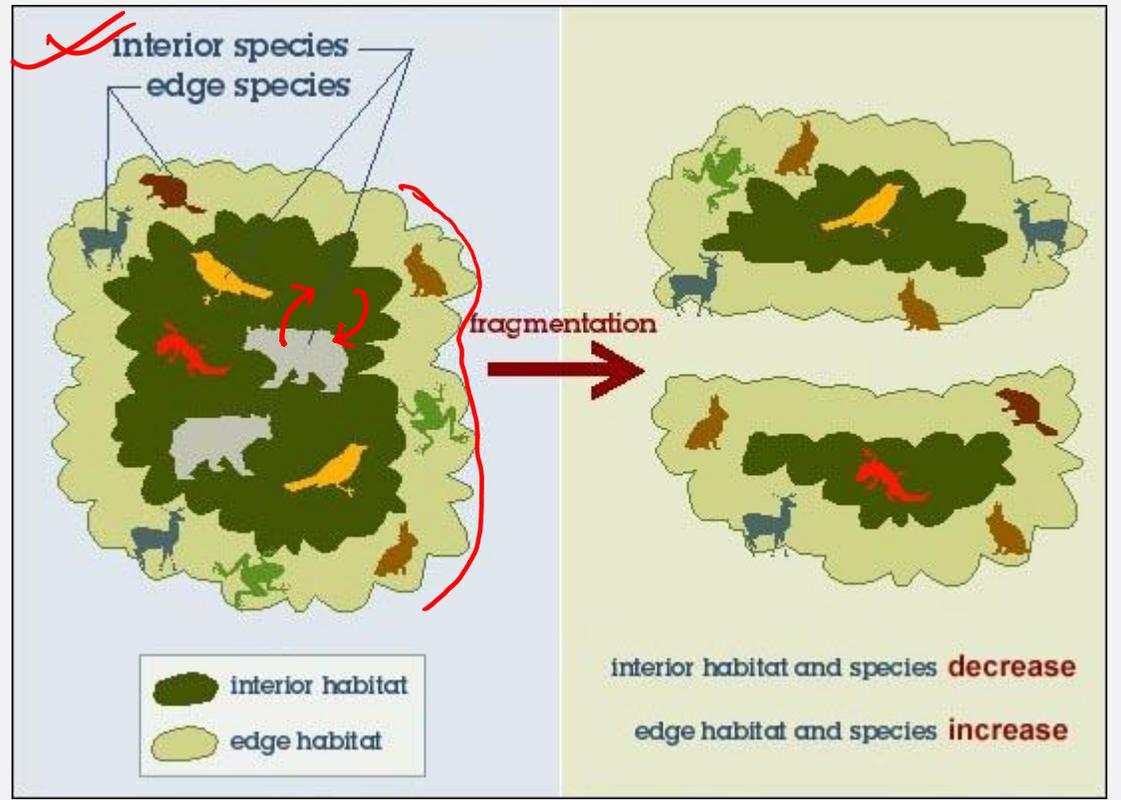


LIVE 12:00 PM

24 Feb 2022

CAUSES OF BIODIVERSITY LOSS

1. Habitat loss and fragmentation
2. Over-exploitation
3. Alien species invasions
4. Co-extinctions



Amazon → 14% Previously
,, → 6% Now



Steller's
Sea cow



Passenger Pigeon



[Alien Species] Nile Perch
↓
Lake Victoria
↙
Cat fish
extinct

→ over exploitation

Why Should We Conserve Biodiversity?

The narrowly utilitarian arguments for conserving biodiversity are obvious; Humans derive countless direct economic benefits from nature food (cereals, pulses, fruits), firewood, fibre, construction material, industrial products (tannins, lubricants, dyes, resins, perfumes) and products of medicinal importance.

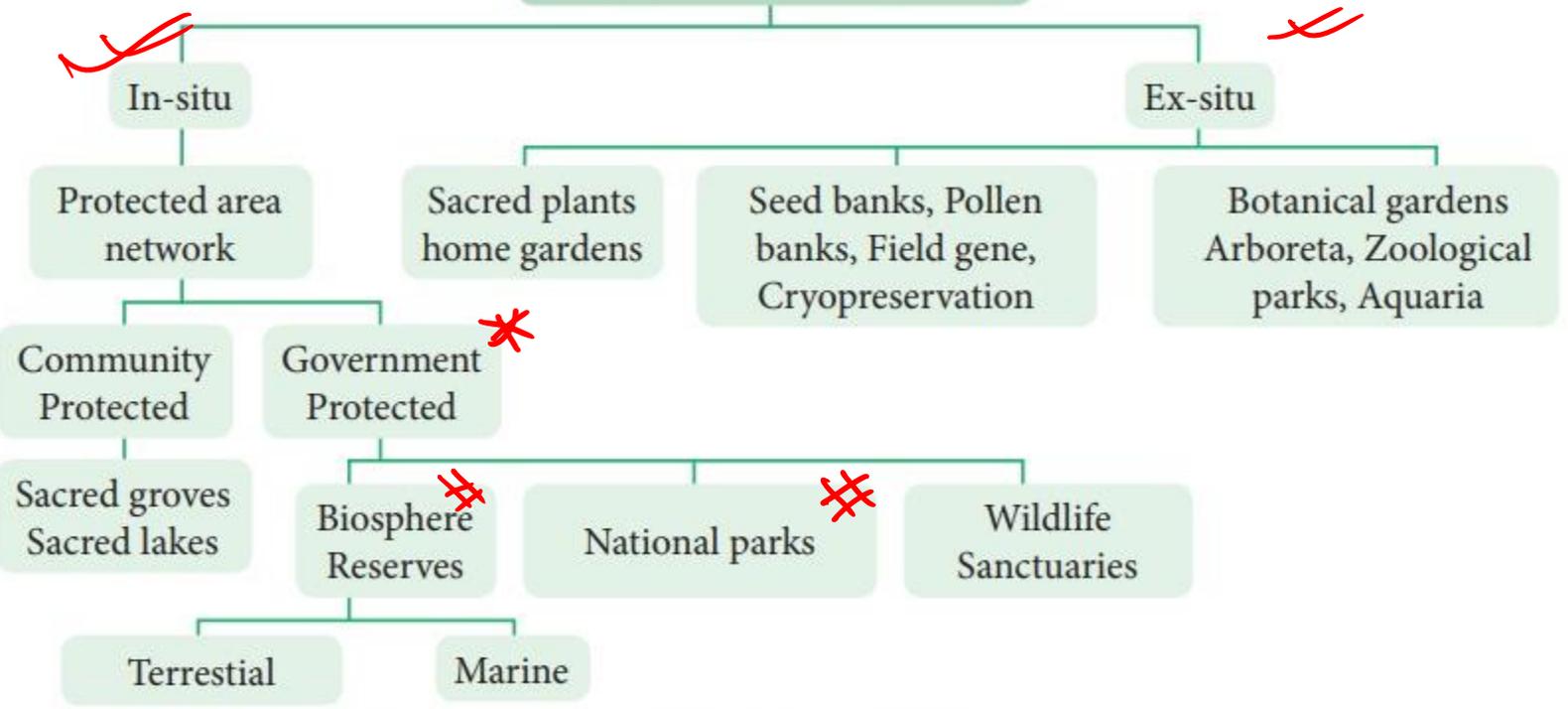
More than 25 per cent of the drugs currently sold in the market worldwide are derived from plants and 25,000 species of plants contribute to the traditional medicines used by native peoples around the world

Why Should We Conserve Biodiversity?

The broadly utilitarian argument says that biodiversity plays a major role in many ecosystem services that nature provides. The fast dwindling Amazon forest is estimated to produce, through photosynthesis, 20 per cent of the total oxygen in the earth's atmosphere.

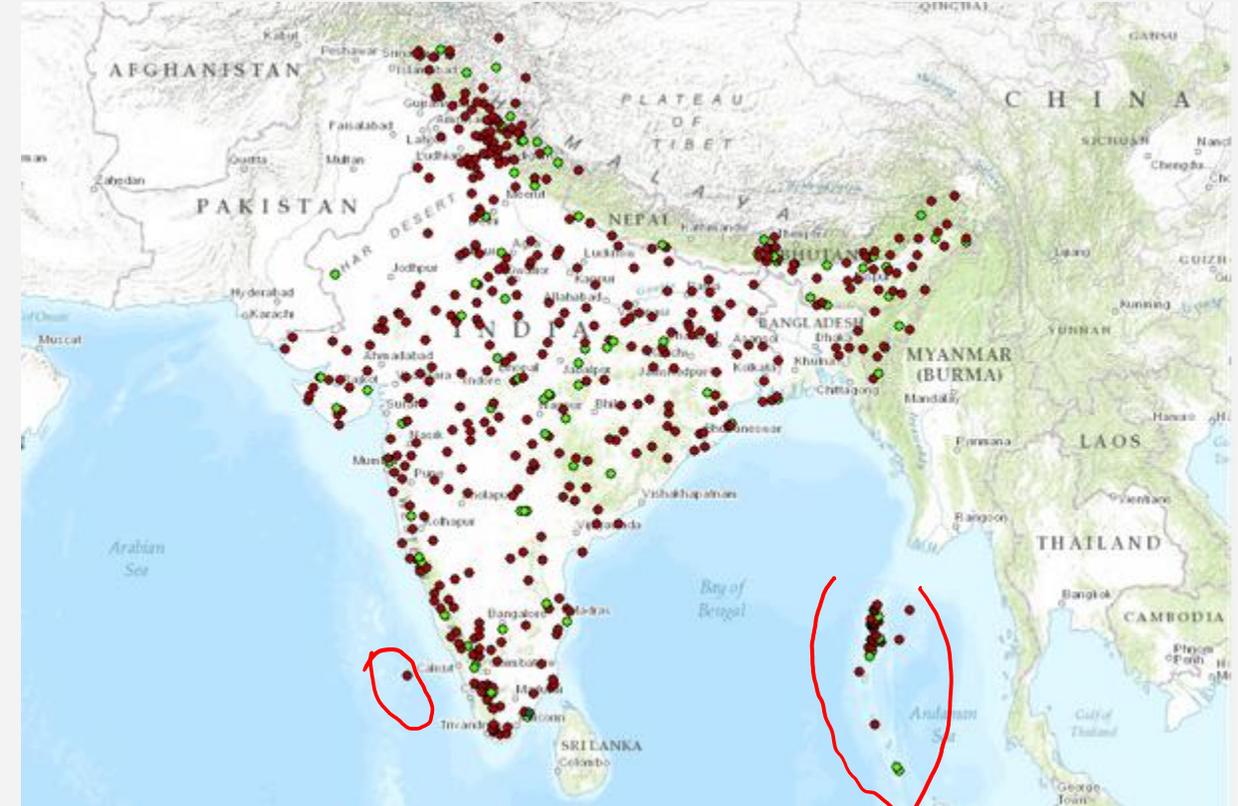
The ethical argument for conserving biodiversity relates to what we owe to millions of plant, animal and microbe species with whom we share this planet

Bio-diversity Conservation



PROTECTED AREAS

- ❖ They are ecological/biogeographical areas where biological diversity along with natural and cultural resources are protected.
- ❖ Eg. Cold desert(Ladakh & Spiti), hot desert(Thar), Wetland(Assam and N.E States), Saline swampy areas(Sundarbans, Rann of Kutch), mangroves, coral reefs
- ❖ World Conservation Monitoring Centre has recognized 37,000 protected areas Worldwide
- ❖ India has about 651 protected areas of national parks(100), and wildlife sanctuaries(551), 18 Biosphere reserves.
- ❖ It covers 4.7% land surface.



→ 106

NATIONAL PARKS

- Areas maintained by government and reserved for betterment of wildlife
- A few of them have been declared as world heritage site like kaziranga, Keoladeo and Manas.
- The first National park of India was Jim Corbett National Park(1936)
- The first National park of World was Yellowstone National park.

List of National Parks in India (Updated)

- 1. City Forest (Salim Ali)
- 2. Dachigam
- 3. Kazinag
- 4. Kishtwar High Altitude

- 1. Great Himalayan
- 2. Inderkilla
- 3. Khirganga
- 4. Pin Valley
- 5. Col. Sherjung Simbalbara

1. Hemis

- 1. Corbett
- 2. Gangotri
- 3. Govind
- 4. Nanda Devi
- 5. Rajaji
- 6. Valley of Flowers

1. Khangchendzonga

- 1. Dibru-Saikhowa
- 2. Kaziranga
- 3. Manas
- 4. Nameri
- 5. Rajiv Gandhi (Orang)
- 6. Raimona
- 7. Dihang Patkai

- 1. Mouling
- 2. Namdapha

◆ **Latest National Park**

- Raimona NP - 105
- Dihang Patkai NP - 106

- 1. Kalesar
- 2. Sultanpur

1. Dudhwa

1. Valmiki

- 1. Intanki
- 1. Balphakram
- 2. Nokrek Ridge

- 1. Keibul- Lamjao
- 2. Shiroi

- 1. Murlen
- 2. Phawngpui (Blue Mountain)

- 1. Buxa
- 2. Gorumara
- 3. Jaldapara
- 4. Neora Valley
- 5. Singalila
- 6. Sunderban

- 1. Desert
- 2. Keoladeo Ghana
- 3. Mukundra Hills
- 4. Ranthambhore
- 5. Sariska

Total 106 NP

1. Betla

- 1. Clouded Leopard
- 2. Bison (Rajbari)

- 1. Blackbuck (Velavadar)
- 2. Gir
- 3. Marine (Gulf of Kachchh)
- 4. Vansda

- 1. Bhitarkanika
- 2. Simlipal

- 1. Guru Ghasidas (Sanjay)
- 2. Indravati (Kutru)
- 3. Kanger Ghati

- 1. Bandhavgarh
- 2. Dinosaur Fossils
- 3. Fossil
- 4. Pench
- 5. Kanha
- 6. Kuno
- 7. Madhav
- 8. Panna
- 9. Sanjay
- 10. Satpura
- 11. Van Vihar

1. Mollem

- 1. Kasu Brahmananda Reddy
- 2. Mahaveer Harina Vanasthali
- 3. Mrugavani

- 1. Campbell Bay
- 2. Galathea Bay
- 3. Mahatama Gandhi Marine (Wandoor)
- 4. Mount Harriett
- 5. Rani Jhansi Marine
- 6. Saddle Peak

- 1. Chandoli
- 2. Gugamal
- 3. Nawegaon
- 4. Pench
- 5. Sanjay Gandhi
- 6. Tadoba

- 1. Anshi
- 2. Bandipur
- 3. Bannerghatta
- 4. Kudremukh
- 5. Nagarhole (Rajiv Gandhi)

- 1. Anamudi Shola
- 2. Eravikulam
- 3. Mathikettan Shola
- 4. Pambadum Shola
- 5. Periyar
- 6. Silent Valley

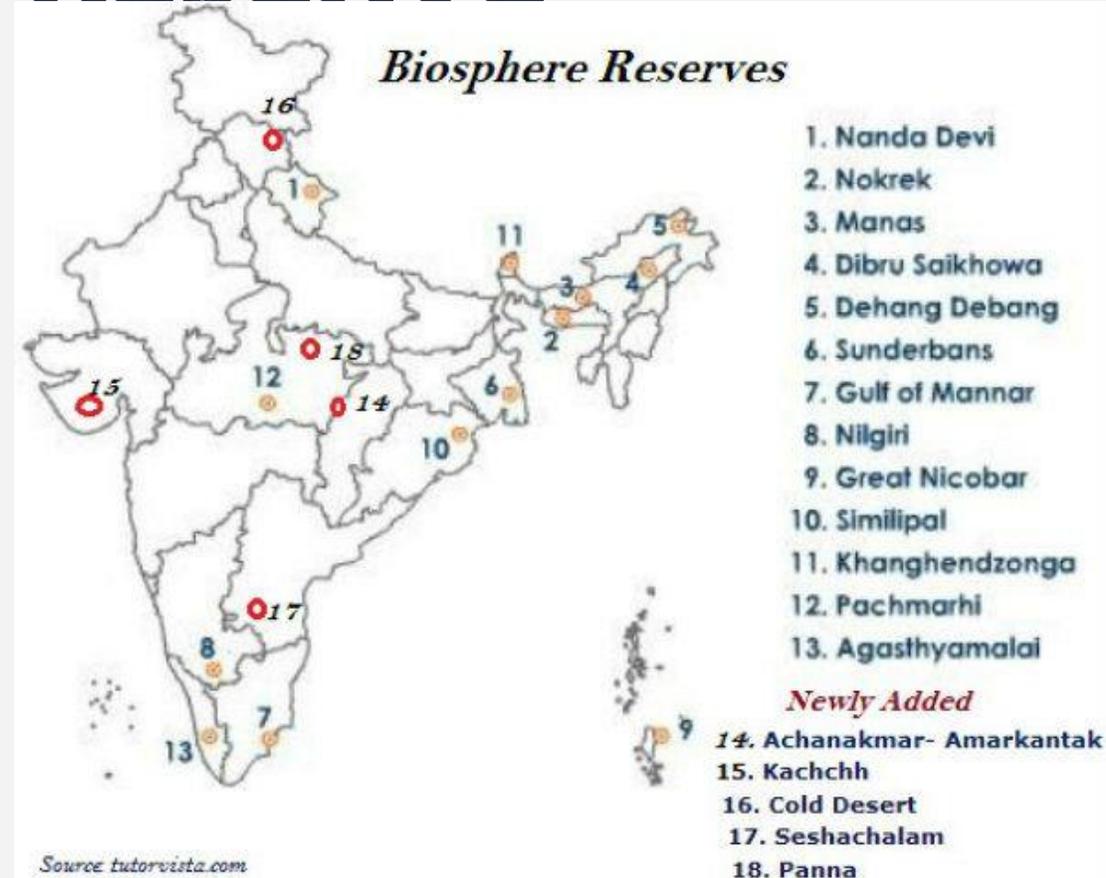
- 1. Guindy
- 2. Gulf of Mannar Marine (Annamalai)
- 3. Indira Gandhi
- 4. Mudumalai
- 5. Mukurthi

- 1. Papikonda
- 2. Rajiv Gandhi (Rameswaram)
- 3. Sri Venkateswara

BIOSPHERE RESERVE

- Multipurpose protected areas which are meant for preserving genetic diversity in representative ecosystem.
- Till May 2002, 408 biosphere reserves had been established in 94 countries.
- In India, 18 biosphere reserves have been set up.
- Four of them recognized as World Heritage site-

1. Nanda Devi
2. Sunderbans
3. Nilgiri
4. Gulf of Manner



~~*~~ RAMSAR SITES (Wetlands)

- Wetlands are called Ramsar sites because the first international convention on their conservation was held in Ramsar in Iran in 1971.
- These are low lying marshy areas which get filled up during rains due to runoff and overflow from other waterbodies.



Ex-situ biodiversity conservation methods

Zoological gardens

→ Alipore Zoo

Botanical gardens

→ Howrah

Gene banks

- Ovum / egg
- Sperm / Pollen
- Zygote / Seed
- TISSUE

Aquarium



WILD LIFE PROTECTION ACT

- In **1952** an advisory body of Central Board of Wild life, later renamed as **Indian Board of Wild life (IBWL)** was set up.
- In **1972 Wild Life Protection Act** was enacted.
- In **1982**, 1st October, 12 point strategy for an Action plan for the conservation of wild life in India was taken into account by Indira Gandhi. This included the establishment of protected areas, national parks, sanctuaries and biosphere reserves.
- **Project Tiger** was first launched in **1973** by government of India during Indira Gandhi period. Under this different kinds of habitats in nine states were included for protection of tiger, an endangered species.
- **Gir Lion Project** was first implemented in **1972** as a five year plan for the conservation and protection of only surviving habitat of Asian lion, *Panthera leo persica*. It started with less than 50 and present number is about 400.

• **Crocodile Breeding project was initiated in 1975** to conserve and protect *Crocodilus porosus* (saltwater), *Palustris* (freshwater and swamp), and *Gavialis agangeticus* (Gharial) →

• **Rhino conservation was introduced in 1987** for continued effective and intensive management of rhinos.

• **Project elephant was launched in 1992** for elephant conservation

• Biosphere Reserve Programme was launched by UNESCO in 1971 under its Man and the Biosphere Programme (BRP). It emphasized on i) conservation, ii) research, iii) education, and iv) local involvement

• **National Parks** were formed to safeguard the biodiversity. First National Park in India was established in **1936 as Hailey National Park now known as Jim Corbette National Park** in Uttarakhand.

1. WHICH ONE OF THE FOLLOWING WAS RECENTLY CONSIDERED TO BE A SUITABLE SITE FOR INTRODUCING AFRICAN CHEETAH IN INDIA?
- [A] BANDHABGARH NATIONAL PARK
 - [B] DUDHWA NATIONAL PARK
 - [C] KUNO NATIONAL PARK
 - [D] MANAS NATIONAL PARK



WHICH OF THE FOLLOWING IS/ARE CAUSED DUE TO UNCONTROLLED DEFORESTATION?

- [A] The destruction of habitats ✓
- [B] landslides ✓
- [C] Floods ✓
- [D] All of these ← Ans





WBCS BATCH 2022



SUMANA MAHENDRAS
(GS)



ANURAG MAHENDRAS
(GA/GS)



BORNON MAHENDRAS
(GA/GS)



SHIRSITA MAHENDRAS
(GA/GS)



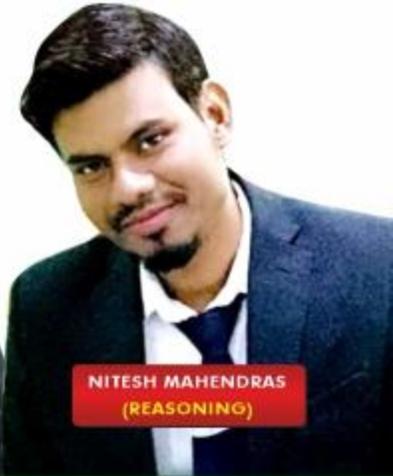
VISHAL MAHENDRAS
(MATHS)



AYAN MAHENDRAS
(GS)



SRAYA MAHENDRAS
(ENGLISH)



NITESH MAHENDRAS
(REASONING)



MONDAY TO FRIDAY - 11:30 AM TO 1:30 PM

W.B.C.S - YouTube schedule for 5-days

TIMING	DAYS				
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:30	ECO	CA	ECO	POL	BEN
12:00	REAS	SCI	POL	SCI	REAS
12:30	ENG	MATHS	ENG	MATHS	ENG
13:00	GEO	HIS	GEO	HIS	CA

WBCS BATCH 2022



WBCS OFFLINE BATCH STARTS FORM

26TH FEBRUARY

TIMING - 1:30-5:30PM

BOOK YOUR SEAT NOW

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