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# CONSERVATION ONSERVATION OFOF PLANTS LANTS AND ANIMALS

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Chapter: - 7th



CLASS: - 8TH  
SCIENCE  
Education Source

## Chapter: 7

# CONSERVATION OF PLANTS LANTS AND ANIMALS



### Exercise:

**Q1: Fill in the blanks.**

- (a) A place where animals are protected in their natural habitat is called Sanctuary.
- (b) Species found only in a particular area is known as endemic.
- (c) Migratory birds fly to faraway places because of climactic changes.

**Q2: Differentiate between the following.**

- (a) Wildlife sanctuary and biosphere reserve  
 (b) Zoo and wildlife sanctuary  
 (c) Endangered and extinct species  
 (d) Flora and fauna

**Ans (a) Wildlife sanctuary and biosphere reserve**

Wildlife sanctuary	Biosphere reserve
(a) Protected area for specific wildlife species	Larger area for biodiversity conservation and sustainable development
(b) Conservation of specific wildlife species	Conservation of biodiversity and human activities
(c) Protect and provide safe habitat for wildlife	Promote biodiversity conservation and sustainable development
(d) Jim Corbett National Park (India)	Manas Biosphere Reserve (India)

**(b) Zoo and wildlife sanctuary**

Zoo	wildlife sanctuary
(a) Facility for public display and education	Protected area for wildlife conservation
(b) Various animal species from different regions	Specific wildlife species found in the area

(c) Usually smaller and confined spaces	Can vary in size depending on the area
(d)	<b>Ranthambore Wildlife Sanctuary (India)</b>

### (c) Endangered and extinct species

Endangered	Extinct species
(a) Species at high risk of extinction	Species that no longer exist
(b) Still present but with declining populations	Completely disappeared
(c) Require Protection, habitat restoration, captive breeding	None (since they are no longer alive)
(d) Sumatran Tiger	Dodo Bird

### (d) Flora and fauna

Flora	Fauna
(a) All plant species in a particular region	All animal species in a particular region
(b) Primary producers, oxygen production	Consumers, ecological balance
(c) Various ecosystems like forests, grasslands, deserts	Various ecosystems, including land, water, and air
(d) Example: - Trees, shrubs, grasses, flowers, vegetation	<b>Mammals, birds, reptiles, amphibians, fish, invertebrates</b>

**Q3: Discuss the effects of deforestation on the following.**

- (a) Wild animals
- (b) Environment
- (c) Villages (Rural areas)
- (d) Cities (Urban areas)
- (e) Earth
- (f) The next generation

**Ans: - Effects of deforestation on the following are: -**

(a) **Wild animals:** - Deforestation negatively affects wild animals by destroying their habitats, leading to loss of food, shelter, and breeding grounds. This can result in the displacement and extinction of many species, disrupting ecosystems and reducing biodiversity.



(b) **Environment:** Deforestation has significant environmental effects, including contributing to climate change by releasing carbon dioxide into the atmosphere and reducing the planet's capacity to absorb it. It also leads to soil erosion, decreasing agricultural productivity, and the loss of biodiversity, disrupting ecological balance and potentially causing species extinction.

(c) **Villages (Rural areas):** Deforestation impacts rural areas by disrupting livelihoods, particularly for indigenous tribes and forest-dependent farmers who rely on forest resources for sustenance. It can also lead to reduced water availability as forests play a crucial role in maintaining water cycles, affecting drinking water, irrigation, and overall agricultural productivity.



(d) **Cities (Urban areas):** Deforestation affects cities by contributing to climate change, resulting in increased temperatures and poor air quality. It also disrupts water supply as deforestation alters watersheds, leading to reduced water quantity and quality for urban water supply systems. Urban areas may experience more heatwaves, pollution, and the risk of water scarcity due to deforestation.



(e) **Earth:** Deforestation causes soil degradation by exposing the soil to erosion, diminishing fertility, and reducing its ability to retain water. It also increases the risk of flooding



as forests act as natural buffers, absorbing and storing rainwater. These impacts on soil and water can have far-reaching consequences for agriculture, food production, and the overall health of ecosystems.

**(f) The next generation:** Deforestation deprives future generations of the natural heritage provided by forests, including their biodiversity, ecological services, and recreational value. Additionally, it depletes valuable resources such as timber and medicinal plants, limiting opportunities for sustainable development and potentially impacting the economic prospects of future generations.

**Q4: What will happen if.**

**(a) we go on cutting trees.**

**(b) the habitat of an animal is disturbed.**

**(c) the top layer of soil is exposed.**

**Ans: -**

**(a) If we go on cutting trees:**

- Loss of biodiversity
- Increased greenhouse gas emissions
- Soil erosion and flooding

**(b) If the habitat of an animal is disturbed:**

- Disruption of food chain
- Population decline
- Increased vulnerability to extinction

**(c) If the top layer of soil is exposed:**

- Soil degradation
- Reduced water holding capacity
- Increased risk of desertification



**Q5: Answer in brief.**

**(a) Why should we conserve biodiversity?**

**(b) Protected forests are also not completely safe for wild animals. Why?**

**(c) Some tribals depend on the jungle. How?**

**(d) What are the causes and consequences of deforestation?**

**(e) What is Red Data Book?**

**(f) What do you understand by the term migration?**

**Ans: -**

**(a) Biodiversity conservation is important for:**

**(i) Essential ecosystem services:** Biodiversity ensures clean air, water, and soil, vital for human well-being and ecosystem functioning.

**(ii) Food security and resources:** Diverse plant and animal species provide agricultural, medicinal, and genetic resources, supporting food production and innovation.

**(iii) Intrinsic value and preservation:**

Conserving biodiversity recognizes the inherent worth of species and ecosystems, safeguarding their right to exist and thrive.



**(b) Protected forests may not ensure complete safety for wild animals due to illegal activities like poaching and wildlife trade, even within these areas. Human activities causing habitat fragmentation outside protected zones can restrict animals' access to food, mates, and suitable habitats.**

**(c) Tribals depend on the jungle in several ways:**

**(i) They depend on the forest for subsistence, gathering fruits, nuts, and medicinal plants, and hunting for food.**

**(ii) Forests provide natural resources for their livelihoods, such as timber, firewood, and fibres for crafts.**



**(d) Causes of deforestation:**

- (i) Clearing of forests for agriculture, logging, mining, and urbanization.
- (ii) Expansion of commercial plantations, such as for palm oil or soybeans.
- (iii) Infrastructure development, including road construction and dam projects.
- (iv) Forest fires, often exacerbated by human activities.

**Consequences of deforestation:**

- (i) Loss of biodiversity and habitats for numerous plant and animal species.
- (ii) Soil erosion and degradation, leading to reduced agricultural productivity.
- (iii) Disruption of water cycles, affecting water availability and regional climates.
- (iv) Increased greenhouse gas emissions and contribution to climate change.

**(e)** The Red Data Book is a comprehensive record or list that documents and categorizes endangered and threatened species. It provides information on the conservation status of different species, including plants, animals, and fungi, as well as their habitats. The Red Data Book aims to raise awareness about the conservation needs of these species and guide conservation efforts to protect them from extinction.



**(f)** Migration refers to the seasonal movement of animals from one region or habitat to another. It is typically driven by factors such as the availability of food, breeding opportunities, and favourable climatic conditions. Migration can involve long distances and may occur across land, water, or air.

**Q6: In order to meet the ever-increasing demand in factories and for shelter, trees are being continually cut. Is it justified to cut trees for such projects? Discuss and prepare a brief report.**

**Ans:** Cutting down trees for industrial and shelter projects has pros and cons. On one hand, it can lead to economic growth, job opportunities, and meeting the needs of a growing population. Technological advancements and environmental measures can also support these projects. However, cutting trees has negative effects, like harming ecosystems, biodiversity loss, and climate change. It's important to find a balance by having strict rules, using sustainable practices, and planting new trees to protect our environment while still allowing development.

**Q7: How can you contribute to the maintenance of green wealth of your locality? Make a list of actions to be taken by you.**

**Ans:** - To contribute to the maintenance of the green wealth of your locality, you can take the following actions:

- (i) Plant trees in your locality.
- (ii) Practice responsible waste management.
- (iii) Conserve water through efficient usage.
- (iv) Promote sustainable transportation methods.
- (v) Educate and raise awareness about environmental issues.
- (vi) Support local green initiatives and organizations.
- (vii) Preserve natural habitats and wildlife.
- (viii) Reduce energy consumption in your daily life.
- (ix) Encourage the implementation of green infrastructure.



**Q8: Explain how deforestation leads to reduced rainfall.**

**Ans:** Deforestation leads to reduced rainfall due to:

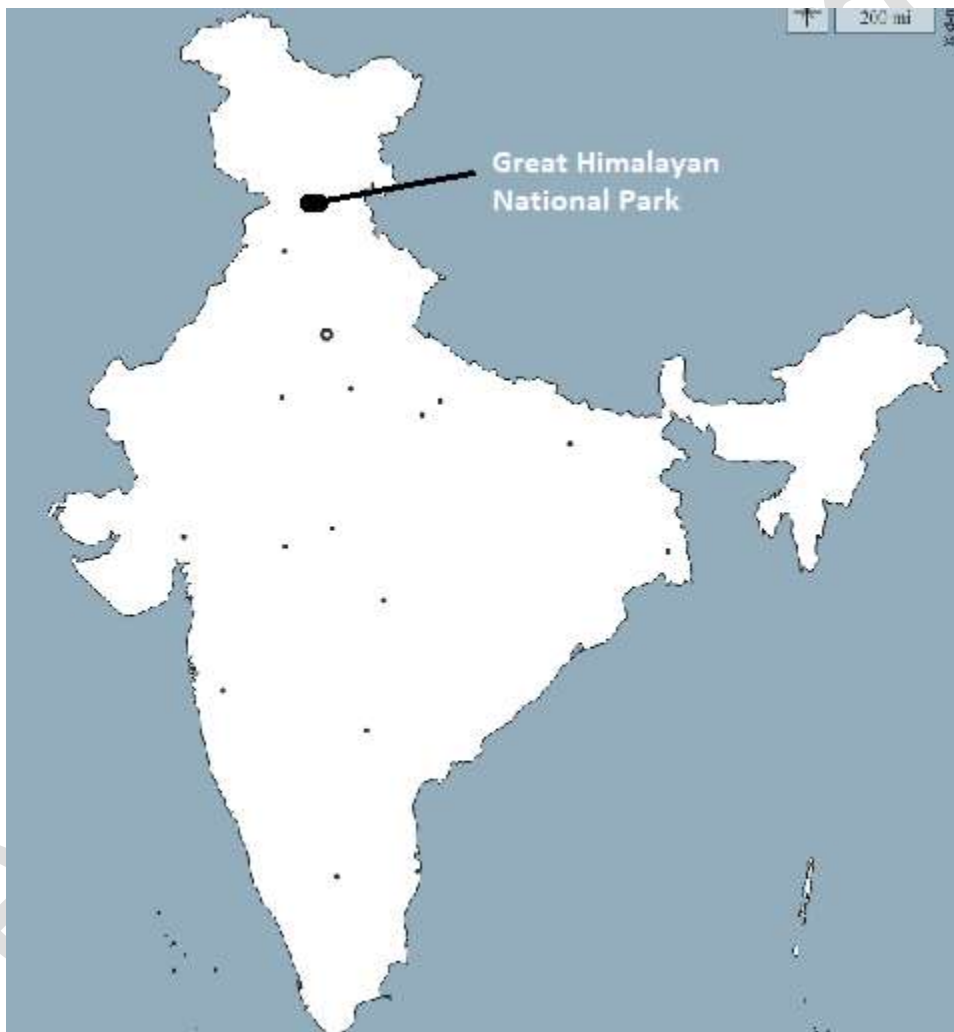
- (a) **Decreased evapotranspiration:** Trees release moisture through evapotranspiration, but deforestation removes this process, reducing water vapor in the atmosphere needed for rainfall formation.

**(b) Disruption of local and regional climate patterns:** Forests regulate temperature and humidity, promoting cloud formation. Deforestation disrupts these patterns, hindering cloud formation and decreasing rainfall.

**(c) Soil degradation and water runoff:** Deforestation exposes soil to erosion, reducing water infiltration and increasing surface runoff. This disrupts the water cycle and diminishes water availability for rainfall.

**Q9: Find out about national parks in your state. Identify and show their location on the outline map of India.**

**Ans:**



**Q10: Why should paper be saved? Prepare a list of ways by which you can save paper.**

**Ans: Reasons to save paper:**

- (i) Conservation of Natural Resources.
- (ii) Reduction of Deforestation.
- (iii) Energy and Water Conservation.
- (iv) Minimization of Waste and Landfill Space.
- (v) Prevention of Pollution.



• **Ways to save paper:**

- a. Print only when necessary.
- b. Utilize digital alternatives.
- c. Use both sides of the paper.
- d. opt for electronic communication.
- e. Reduce paper towel usage.
- f. Recycle paper waste.

### Key Worlds

**a. BIODIVERSITY:** The variety of life on Earth, including all living organisms, ecosystems, and genetic diversity.

**b. BIOSPHERE RESERVE:** A protected area consisting of terrestrial, coastal, and marine ecosystems, aiming to conserve biodiversity and promote sustainable development.

**c. DEFORESTATION:** The clearing or removal of forests on a large scale, often due to human activities such as logging, agriculture, or urbanization.



**d. DESERTIFICATION:** The process of land degradation in arid, semi-arid, and dry sub-humid areas, resulting in the transformation of once fertile land into desert-like conditions, often caused by human activities and climate change.



**e. ECOSYSTEM:** A community of living organisms interacting with each other and their physical environment, functioning as a self-regulating system.

**f. ENDANGERED:** Refers to a species that is at risk of extinction or is vulnerable to threats, such as habitat loss, overexploitation, or climate change.



**g. SPECIES:** A group of organisms that can interbreed and produce fertile offspring, sharing common characteristics.

**h. ENDEMIC SPECIES:** Species that are native and exclusive to a particular geographic region and are not found naturally anywhere else in the world.

**i. EXTINCT:** Refers to a species that no longer exists, with no living individuals remaining. (e.g., dinosaurs)

**j. FAUNA:** The collective term for all animal life in a particular region or time period.

**k. FLORA:** The collective term for all plant life in a particular region or time period.

**l. MIGRATORY BIRDS:** Birds that travel long distances seasonally between their breeding grounds and wintering grounds in search of favourable conditions and resources.



**m. NATIONAL PARK:** A protected area managed for conservation purposes, preserving natural landscapes, ecosystems, and wildlife, often providing recreational and educational opportunities.



**n. RED DATA BOOK:** A comprehensive record or list of endangered, threatened, and extinct species, providing valuable information for conservation efforts.

**o. REFORESTATION:** The process of planting or regenerating trees in an area where forests have been cut down or destroyed, aiming to restore forest cover and ecosystem functions.



**p. SANCTUARY:** A protected area designated for the conservation and protection of wildlife, providing a safe habitat and refuge for species from threats and human disturbances.

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