

Date - 11 July 2023

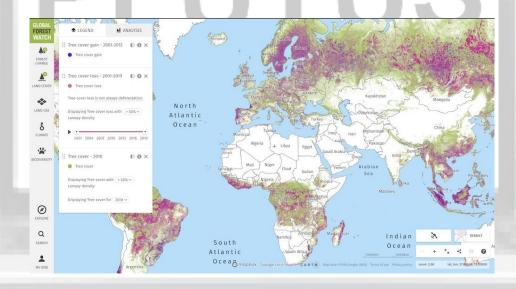
GLOBAL FOREST WATCH REPORT

This article covers "Daily Current Affairs" and the topic details "Global Forest Watch Report". The topic "Global Forest Watch Report" has relevance in the "Ecology and Environment" section of the UPSC CSE exam.

For Prelims:

What is the Global Forest Watch? Who publishes it? What is primary forest? For Mains:

GS3: Ecological Conservation



Why in the news?

In its new research, Global Forest Watch has stated that in 2022 tropical areas will lose 4.1 million hectares of forest cover – equivalent to losing an area of 11 football fields per minute.

Global Forest Watch

Global Forest Watch (GFW) is an open-source web application that monitors global forests in near real-time.

- It provides data and tools to track deforestation, forest degradation, and forest cover change.
- GFW is used by governments, businesses, and civil society organisations to inform decisionmaking and take action to protect forests.
- GFW is a project of the World Resources Institute (WRI), in partnership with Google, USAID, the University of Maryland, and many other academic, non-profit, public, and private organisations.

2022 Report Findings:

- The 2022 Global Forest Watch report found that **tropical primary forest loss worsened in 2022**, despite international commitments to end deforestation.
- The report found that tropical primary forest loss totaled 4.1 million hectares in 2022, an increase of 10% from 2021. This loss is equivalent to an area the size of 11 football fields disappearing every minute.
- Brazil and the Democratic Republic of the Congo had the highest rates of primary forest loss in 2022, while Indonesia and Malaysia continued to reduce their loss.
- Ghana and Bolivia experienced record-high levels of primary forest loss in 2022, driven by agriculture, mining and fires.
- Global tree cover loss declined by 10% in 2022, mainly due to a decrease in fire-related losses, especially in Russia.
- Global Forest Watch reports that India experienced a loss of 43.9 thousand hectares of humid primary forest between 2021 and 2022, representing approximately 17% of the country's total reduction in tree cover during that period. The overall tree cover loss in India between 2021 and 2022 amounted to 255 thousand hectares.

Primary Forest:

Primary forests are mature, natural forests that have not been significantly altered by human activity. They are important carbon sinks and biodiversity hotspots.

• Primary forest loss is often irreversible, as secondary forests that grow in their place do not have the same biodiversity or carbon storage capacity.

Implications

WRI evaluates progress towards two objectives which encompass various international forest commitments.

- Ending deforestation by 2030
- Restoring 350 million hectares (Mha) of depleted and degraded forests by 2030 According to the report, the majority of global forest-related commitments are not being met.
- In order to attain the 2030 target, it is necessary to annually reduce global deforestation by at least 10%. Although the global deforestation rate in 2022 was 3.1% lower compared to the baseline period of 2018-2020, it still exceeded the required level by over one million hectares. Consequently, the world is deviating from the path to achieve the 2030 goal.
- To accomplish the objective of restoring 350 Mha of forests globally by 2030, it is imperative to increase tree cover by 22 Mha per year between 2021 and 2030. Despite some progress, the overall change in tree cover over the past two decades has resulted in a net loss of 100 Mha.
- This indicates that forests are still being lost, and restoration efforts are not occurring at the necessary pace.

Other Reports by World Resources Institute:

- World Resources Report
- State of Climate Action Report
- Global Forest Review

Sources:

World's tropical forest cover continued to decrease in 2022, new research says – The Hindu

Q1. Global Forest Watch has recently published its report, consider the following statements in this context:

- 1. Primary forests have a higher biodiversity and carbon storage capacity than secondary forests that grow at the same place.
- 2. Brazil had one of the highest rates of primary forest loss in 2022.
- 3. India experienced an increase of humid primary forest between 2021 and 2022.

Which of the statements given above is/are correct?

(a) 1 and 2 only

- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (a)

Q2. Consider the following pairs:

Report/ Index – Organisation

- 1. Global Forest Review World Resources Institute (WRI)
- 2. State of the Food and Agriculture Organization (FAO) World's Forests
- 3. State of Global World Meteorological Organization (WMO) Water Resources
- 4. Global Forest Watch Germanwatch

How many of the above mentioned pairs are correctly matched ?

(a) Only one

- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (c)

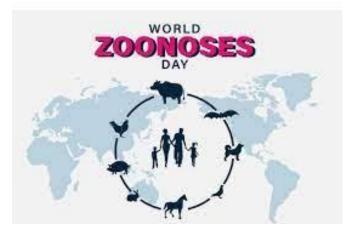
Q3. Forests are critical ecosystems for fighting climate change, supporting livelihoods and protecting biodiversity. In light of the statement, highlight the diverse efforts undertaken by both governmental and non-governmental entities to protect and preserve forests.

Gaurav Nikumbh

WORLD ZOONOSIS DAY

This article covers "Daily Current Affairs" and the topic details "World Zoonosis Day". The topic "World Zoonosis Day" has relevance in the Environment section of the UPSC CSE exam. **For Prelims:**

About World Zoonosis Day? About Zoonotic Diseases? **For Mains:** GS 3: Environment Causes of Zoonotic Diseases? Prevention Strategies? India's Initiatives Related to Zoonotic Diseases? One Health Concept?



Why in the news?

The Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying recently conducted an awareness program on zoonotic diseases as part of the Aazadi Ka Amrit Mahostav initiative on World Zoonosis Day

About World Zoonosis Day?

World Zoonosis Day commemorates the first vaccination against a zoonotic disease. Louis Pasteur administered the first vaccine for a zoonotic disease on July 6, 1885.

Significance:

- World Zoonosis Day aims to raise awareness about the risks and impacts of zoonotic diseases on human and animal health.
- According to the World Health Organization (WHO), 60% of known infectious diseases and 75% of emerging infectious diseases are zoonotic.

About Zoonotic Diseases:

Zoonotic diseases are infections that can be transmitted between animals and humans. These diseases can be caused by various pathogens such as bacteria, viruses, parasites, or fungi.

Classification:

Based on Pathogens:

- Bacterial Zoonoses: Diseases caused by bacterial infections, such as anthrax and brucellosis.
- Viral Zoonoses: Diseases caused by viruses, including rabies, Ebola, and Covid-19.
- Parasitic Zoonoses: Diseases caused by parasites, like toxoplasmosis and leishmaniasis.
- Fungal Zoonoses: Diseases caused by fungi, such as ringworm.

Based on Animal Species:

- Wildlife Zoonoses: Diseases involving interactions between humans and wildlife, like hantavirus infections and avian influenza.
- Domestic Animal Zoonoses: Diseases transmitted by domestic animals, such as brucellosis and toxoplasmosis.

Based on Mode of Transmission:

- Direct Contact Zoonoses: Infections occurring through direct contact with infected animals or their fluids.
- Vector-Borne Zoonoses: Diseases transmitted by vectors like mosquitoes and ticks.
- Waterborne Zoonoses: Diseases transmitted through contaminated water sources.

Causes of Zoonotic Diseases:

- Environmental changes, wildlife interactions, livestock farming practices, and human behavior contribute to the emergence and spread of zoonotic diseases.
- Several factors contribute to the transmission of zoonotic diseases, including encroachment into natural habitats, wildlife trade, and inadequate food safety and sanitation measures. These factors create opportunities for interactions between humans, animals, and pathogens, increasing the risk of disease transmission. Encroachment into natural habitats disrupts ecosystems, bringing humans into closer contact with wildlife and their associated pathogens.

Prevention Strategies:

- Multisectoral collaboration, using the "One Health" approach, is crucial in preventing and controlling zoonotic diseases.
- Early detection and surveillance systems, hygiene practices, vaccination programs for animals, and public awareness are key prevention strategies.

India's Initiatives Related to Zoonotic Diseases:

- National Animal Disease Control Programme (NADCP) for controlling Foot & Mouth Disease (FMD) and Brucellosis.
- Mobile Veterinary Units (MVUs) for providing veterinary services and raising awareness.
- Animal Birth Control (Dogs) Rules, 2023, focusing on anti-rabies vaccination and neutering of stray dogs.
- National One Health Programme for Prevention & Control of Zoonoses, promoting intersectoral coordination.
- Vaccination efforts for FMD and brucellosis.

One Health Concept:

- The One Health concept emphasizes the collaboration between human health, animal health, and environmental sectors to address zoonotic diseases and other health threats at their interface.
- It recognizes the interconnectedness of human, animal, and ecosystem health and the need for a holistic approach to prevent and control diseases.

SOURCES:

https://www.hindustantimes.com/lifestyle/health/world-zoonoses-day-2023-datehistory-significance-of-the-day-101688526905375.html

Q.1 Which of the following statements about zoonosis is correct?

- (A) Zoonosis refers to diseases that are only transmitted from humans to animals.
- (B) Zoonosis is caused exclusively by bacterial infections transmitted from animals to humans.
- (C) Zoonotic diseases can be caused by bacteria, viruses, parasites, or fungi.

(D) Zoonotic diseases are limited to interactions between humans and domestic animals.

ANSWER: (C)

Q.2 Which of the following factors plays a significant role in the transmission of zoonotic diseases?

- (A) Genetic factors in humans
- (B) Air pollution levels
- (C) Encroachment into natural habitats
- (D) Global economic policies

ANSWER: (C)

Q.3 Critically evaluate the effectiveness of the "One Health" approach in addressing zoonotic diseases. Highlight the need for inter-sectoral collaboration and its implications for disease prevention and control.

Rishabh

