

**19– 02 – 2022**

**News:** Human Immunodeficiency Virus (HIV)

- Recently, third person in the world got cured from HIV.

## **Human Immunodeficiency Virus (HIV) / Acquired Immuno Deficiency Syndrome (AIDS)**

- Human Immunodeficiency Virus (HIV) attacks CD4, a type of White Blood Cell (T cells) in the body's immune system.
- T cells are those cells that move around the body detecting anomalies and infections in cells.
- After entering the body, HIV multiplies itself and destroys CD4 cells, thus severely damaging the human immune system.
- Once this virus enters the body, it can never be removed.
- The CD4 count of a person infected with HIV reduces significantly. In a healthy body, CD4 count is between 500- 1600, but in an infected body, it can go as low as 200.

## Prevalence of HIV/AIDS in India

- As per the India HIV Estimation 2019 report, the **estimated adult (15 to 49 years) HIV prevalence trend has been declining in India** since the epidemic's peak in the year 2000 and has been stabilizing in recent years.
- In 2019, HIV prevalence among **adult males was estimated at 0.24%** and among **adult females at 0.20% of the population.**
- There were **23.48 lakh Indians living with HIV in 2019.** Maharashtra had the maximum numbers followed by Andhra Pradesh and Karnataka.

## News: Reserved Forest

- Recently, the **Delhi government** has notified forest land in two villages in South **Delhi** as 'reserved forest', which will give them legal status.
- It was notified under **Section 20** (declaration of reserved forest) of Indian Forest Act, 1927.

## Different Types of Forests

### Based on the level of Protection

#### Reserved Forests

- Reserve forests are **the most restricted forests and are constituted by the State Government** on any forest land or wasteland which is the **property of the Government**.
- In reserved forests, **local people are prohibited, unless specifically allowed by a Forest Officer in the course of the settlement.**

#### Protected Forests

- The **State Government** is empowered to constitute any land other than reserved forests as protected forests over which the Government has proprietary rights and the power to issue rules regarding the use of such forests.

- This power has been used to **establish State control over trees, whose timber, fruit or other non-wood products have revenue-raising potential.**

### **Village forest**

- Village forests are the one in which the **State Government may assign to 'any village community the rights of Government to or over any land** which has been constituted a reserved forest'.

### **Based on the amount of rainfall received**

#### **Tropical Evergreen and Semi Evergreen Forests**

- Tropical Evergreen and Semi Evergreen Forests are **found in the western slope of the Western Ghats, hills of the northeastern region and the Andaman and Nicobar Islands.**
- They are found in warm and humid areas with an **annual precipitation of over 200 cm and mean annual temperature above 22°C.**
- Tropical evergreen forests are well stratified, with layers closer to the ground and are covered with shrubs and creepers, with short structured trees followed by a tall variety of trees.

- In these forests, trees reach **great heights up to 60 m or above**. There is **no definite time for trees to shed their leaves**, flowering and fruition. As such these **forests appear green all the year round**.
- The semi **evergreen forests are found in the less rainy parts of these regions**. Such forests have a mixture of evergreen and moist deciduous trees. The undergrowing climbers provide an evergreen character to these forests.

### **Tropical Deciduous Forests**

- Tropical Deciduous Forests are the **most widespread forests in India**. They are also called the **monsoon forests**. They spread over regions which receive **rainfall between 70-200 cm**. On the basis of the availability of water, these forests are further divided into moist and dry deciduous.

### **Montane Forests**

- In mountainous areas, the **decrease in temperature with increasing altitude leads to a corresponding change in natural vegetation**.
- Mountain forests can be classified into two types, the **northern mountain forests and the southern mountain forests**.

## **Tropical Thorn forests**

- Tropical thorn forests occur in the areas which receive **rainfall less than 50 cm**. These consist of a **variety of grasses and shrubs**. It includes semi-arid areas of **south west Punjab, Haryana, Rajasthan, Gujarat, Madhya Pradesh and Uttar Pradesh**.
- In these forests, **plants remain leafless for most part of the year** and give an expression of scrub vegetation.

## **Swamp Forests**

- Swamp Forests are found along the **Andaman and Nicobar Islands and the delta area of the Ganga and the Brahmaputra**.
- Other areas of significance are the Mahanadi, the Godavari and the Krishna deltas.
- Some of these forests are **dense and impenetrable**. Only a **limited number of plants are found in these evergreen forests**.
- They have **roots that consist of soft tissue so that the plant can breathe in the water**.
- It consists mainly of whistling pines, mangrove dates, palms, and bulletwood.

## News: Guduchi

- Recently, the Ministry of Ayush reiterated that Guduchi is safe and as per available data, and does not produce any toxic effect.

## Guduchi

- Guduchi is a climbing shrub that grows on other trees, from the botanical family Menispermaceae.
- The plant is native to India but also found in China and tropical areas of Australia and Africa.
- People have long used it to treat a wide range of issues, including fever, infections, diarrhoea, and diabetes.

## Medicinal Applications of Guduchi

- A special focus has been made on its health benefits in treating various metabolic disorders and its potential as an immune booster.
- It's use as antioxidant, anti –hyperglycemic, anti –hyperlipidemic, hepatoprotective, cardiovascular protective, neuroprotective, osteoprotective, radioprotective, anti-anxiety, adaptogenic, analgesic, anti-inflammatory,

antipyretic, anti-diarrheal, anti-ulcer, anti-microbial, and anti-cancer have been well established.

- It is used as a major component of therapeutics for ameliorating metabolic, endocrinal, and several other ailments, aiding in the betterment of human life expectancy.
- It is a popularly known herb for its immense therapeutic applications in traditional systems of medicine and has been used in the management of Covid-19.