



Pollinator Week

drishtiias.com/printpdf/pollinator-week

Why in News

Pollinator Week is celebrated from **22nd June to 28th June** every year.

It was initiated by the **non-profit Pollinator Partnership** and the **USA' Senate in 2007**.

Benefits of
pollinators

1
Help 75% of crops producing fruits and seeds to pollinate

2
Increase biodiversity

3
Increase food production

4
Provide micronutrient-rich foods

5
Maintain ecosystems

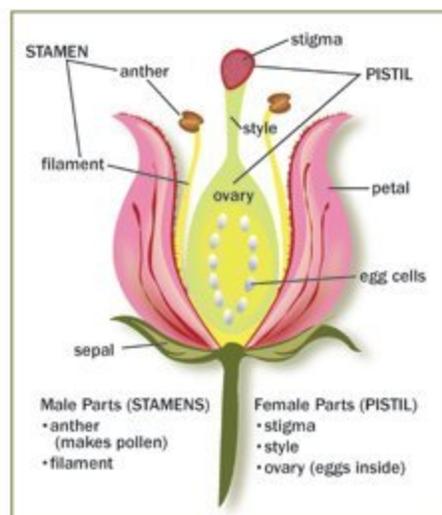
Food and Agriculture Organization of the United Nations

Working for #ZeroHunger

The infographic is set against an orange background and features five circular icons. Each icon contains illustrations related to the benefit: 1. A bee flying over a plant with a dashed line indicating its path. 2. A squirrel, a snake, a mushroom, and a flower. 3. A farmer with a pitchfork and a woman standing next to a basket of carrots. 4. A magnifying glass over an apple with plus signs. 5. A circular arrow cycle with a sun, a cloud, and a fish in the water.

Key Points

- According to the **Food and Agriculture Organization (FAO)**, **bees being the dominant pollinators**, have around 25,000-30,000 species.
- **More than 180,000 plant species**, including 1,200 crop varieties, across the world, **depend on pollinators** to reproduce.
- **Declining Numbers:**
 - Around **40% of invertebrate pollinator species**, particularly bees and butterflies, **face extinction** across the world.
 - In **India**, wild honeybees of the genus **Apis**, including the **Asian bee** and the **little bee**, have declined steadily for the past 30 years.
 - Around **16.5% of vertebrate pollinators are threatened** with extinction. Of these, 45 species of bats, 36 species of non-flying mammals, 26 species of hummingbirds, seven species of sunbirds and 70 species of passerine birds face extinction.
- **Reasons for the Decline:** Most of them are the **result of an increase in human activities:**
 - Land-use change and fragmentation.
 - Changes in agricultural practices including the use of chemical **pesticides**, fungicides and insecticides.
 - Change in the **cropping pattern** and crops like the cultivation of **Genetically Modified Organisms (GMOs)** and mono-cropping.
 - High environmental **pollution from nitrogen** and heavy metals.
 - Growth of **invasive alien species**.
 - Higher temperatures associated with **climate change**.



Pollination

- When a **pollen grain** moves from the **anther** (male part) of a flower to the **stigma** (female part), pollination happens and it is the **first step in a process that produces seeds**, fruits, and the next generation of plants.
- This can happen through **self-pollination**, **wind and water pollination** or **through pollinators**.

Pollinators

- **Vectors that move pollen within the flower and from flower to flower** are called pollinators.
- They visit flowers to drink nectar or feed off of pollen and transport pollen grains as they move from spot to spot.
- There are **two categories** of pollinators:
 - **Invertebrate pollinators:** Include bees, moths, flies, wasps, beetles and butterflies.
 - **Vertebrate pollinators:** Include monkeys, rodents, lemurs, tree squirrels and birds.

Way Forward

- Pollination contributes to one-third of the world's agricultural crop production and pollinators can increase crop yield by 24% in small diverse farms and its reduction can pose an immediate threat to mankind's food and nutrition.
- People should leave some areas under natural habitation, promote hedgerows, flower trees and shrub plant diversity, intercropping and try to be less dependent on toxic chemicals and pesticides.
- Governments should take proactive steps for bee conservation, recognise apiculture (bee-keeping) as a subject for advanced research and promote it among farmer communities as an additional source of livelihood, which will be a win-win situation for both the bees and humans.

Source: DTE