



## Pollinator Week

[drishtiias.com/printpdf/pollinator-week](https://drishtiias.com/printpdf/pollinator-week)

### Why in News

**Pollinator Week** is celebrated from **22<sup>nd</sup> June to 28<sup>th</sup> 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

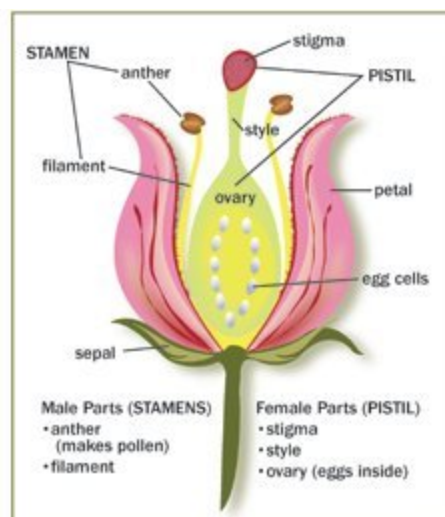
Food and Agriculture Organization of the United Nations

Working for #ZeroHunger

The infographic is set against an orange background and features five circular icons. Icon 1 shows a bee pollinating a plant. Icon 2 shows a squirrel, a snake, a mushroom, and a flower. Icon 3 shows a farmer and a woman with a basket of carrots. Icon 4 shows a magnifying glass over an apple with plus signs. Icon 5 shows a circular arrow cycle with a sun, a cloud, and a fish.

## 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

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- 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**