

#### 4. Impact of Climate Change on India's Banana Crop

**Prelims:** Environment- Climate Change & its Impact

**Mains:** GS-III- Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

#### Why in News?

- ▶▶ A new study has found that climate change has benefited bananas over the last several decades but predicted that the trend will reverse, with climate change eventually causing a Negative Impact.

#### Highlights of the Study:

- ▶▶ The study, led by researchers from the University of Exeter has been published in **Nature Climate Change**.
- ▶▶ The study includes both the recent and future impact of climate change on the world's leading banana producers and exporters.
- ▶▶ They found that 27 countries – accounting for 86 per cent of the world's dessert banana production – have on average seen increased crop yield since 1961 – by 1.37 tonnes/hectare every year – due to the changing climate resulting in more favourable growing conditions.
- ▶▶ In India, data from the National Horticulture Board show broadly consistent yields in six years leading up to 2016-17, when the provisional yield was 34 tonnes/hectare.
- ▶▶ The study says the gains in these 27 countries could be significantly reduced by 2050 – to 1.19-0.59 tonnes/hectare – or disappear completely, if climate change continues at its expected rate. The study predicts that 10 countries – including India and the fourth largest producer, Brazil – could see a significant decline in crop yields.

#### Concerns:

- ▶▶ Bananas has the impact on millions of people in both rural and urban areas across the globe.
- ▶▶ In Britain, for example, more than five billion bananas are purchased each year, and the United Kingdom accounts for seven per cent of the global export market.

- ▶▶ Such international trade can play a pivotal role to local and national economies in producing countries. For example, bananas and their derived products constitute the second largest agricultural export commodity of Ecuador and Costa Rica.

### About Banana Crop:

- ▶▶ Bananas **Thrive in warmer climates, and India is the world's largest producer and Consumer** of the fruit crop.
- ▶▶ Bananas are recognised as the most important fruit crop, providing food, nutrition, and income for millions in both rural and urban areas across the globe.

### Way Forward:

- ▶▶ Banana growers are very concerned about the impact of diseases like **Fusarium Wilt on bananas**, but the impacts of climate change have been largely ignored.
- ▶▶ In coming years, the study may stimulate vulnerable countries to prepare through investment in technologies like irrigation.
- ▶▶ An **open exchange of ideas** is going to be critical going forward. It is believed that **practical solutions already exist, but these are scattered** across banana producing countries. This knowledge exchange needs to start now to counteract predicted yield losses due to climate change.

