India, the world's largest rice producer

Prelims: *Current events of national and international importance | Agriculture*

Why in News?

India has overtaken China to become the world's largest rice producer, as announced by the Minister of Agriculture & Farmers welfare.

- Paddy (rice) is a ***staple crop*** for much of the world's population.
- The cycle of growing rice is about 190 days, and the harvest seasons last for at least 30 days.
- **Cropping seasons –** Rice is majorly a ***kharif crop,*** it also grown in different seasons in different parts based on rainfall, temperature, water availability, soil types, and other climatic conditions.
    - **Kharif (Monsoon/Wet Season: July–December) –** Rice is the primary Kharif crop in India and is grown mainly under rainfed conditions.
    - **Rabi (Dry Season: January–June) –** Rice is grown in many states during the rabi season, where assured irrigation is available.
    - **Zaid Season (Summer: March–June)** -Paddy is also cultivated along with other summer crops on assured irrigated land, before the monsoon begins.
- **Growing Conditions–** Paddy crop is best suited to regions which have ***high humidity, prolonged sunshine*** and an assured supply of water.
    - **Temperature –** 20–35°C, and the maximum temperature that the crop can tolerate is 40-42° C.
    - **Rainfall –** 100–200 cm annually (or assured irrigation)
    - **Soil –** Sandy to clay, pH from 3 to 10, organic matter
    - content from 1 to 50% and salt content from 0 to 1 % with high water-retention capacity.
    - **Humidity –** High humidity favours healthy crop growth.
- **Global Production –**
    - **Highest Producer –** India beats China with a total output of 150.18

million tonnes.
    - **Highest Exporter –** India.
    - **Highest Importer –** Philippines, followed by Vietnam as the 2nd-largest importer.

The top 3 rice-producing countries in the world are India (~150 MT), China (~145 MT), and Bangladesh.

The largest rice-producing states of India
• Uttar Pradesh (13.82%), • Telangana (11.62%), • West Bengal (10.67%), • Followed by others such as Punjab (9.56%), Chhattisgarh (6.9%), Odisha (6.34%), Madhya Pradesh (6.07%), Bihar (5.53%), Andhra Pradesh (5.43%), and Tamil Nadu (4.72%).

- **Role of High-yield variety seeds -** High-Yielding Variety Seeds (HYV seeds) are seeds of better quality than normal quality seeds.
- Boost crop production with *higher output per hectare* compared to traditional varieties.
- Enhanced climate resilience in some varieties.
- Has more potential against insects and diseases, and intends to enhance farmers' income.

References

1. The Indian Express | India, the world's largest rice producer
2. The Economic Times | India, the world's largest rice producer

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