

**19– 09 – 2024**

**News:** De-hyphenating the production of rice and wheat

- Recently, the **policymakers called for de-hyphenating the production of rice and wheat due to changes in their production and consumption.**
- **In rice, there is a surplus production while wheat is suffering from a deficit in production and increased consumption.**

**Need in De-hyphenating the production of rice and wheat**

**Contrasting Surplus Situations**

- **Rice Surplus:** India exported 21.21 million tonnes (mt) of cereal grain (basmati plus non-basmati) in 2021-22, 22.35 mt in 2022-23, and 16.36 mt in 2023-24.
- Despite the **record shipments**, rice stocks in government godowns were at an **all-time high at 45.48 mt in August 2024.**
- **Wheat Deficit:** Wheat exports plunged from a peak of 7.24 mt in 2021-22 to 4.69 mt in 2022-23 and 0.19 mt in 2023-24.
- The **government banned wheat exports in May 2022**, yet wheat stocks were at a **low of 26.81 mt in August 2024**, one of the lowest in recent years.

## Differences in Production Areas

- **Rice:** Rice is grown both during the kharif (southwest monsoon) and rabi (winter-spring) seasons. In West Bengal, farmers grow three crops of rice called aus (summer), aman (rainy season) and boro (winter).
- Moreover, it is cultivated across a wide geography with 16 states contributing over 2 mt each. E.g., North (Punjab, UP) to South (Tamil Nadu, Telangana), Central (MP, Chhattisgarh), East (West Bengal, Assam), and West (Maharashtra, Gujarat).
- **Wheat:** Wheat has a single rabi cropping season and only eight states producing 2 mt-plus each mainly in the northern, central, and western regions.
- The top four states (UP, MP, Punjab, Haryana) account for 76% of output.
- **Production Volatility:** Wheat is more volatile due to its seasonal and geographical constraints, making it more susceptible to production fluctuations.

## Limiting Factor

- **Rice:** Water availability is the main limiting factor which can be easily managed. E.g. States like Telangana have increased rice output significantly due to improved irrigation and minimum support price (MSP) assurances.
- **Wheat:** Wheat has become vulnerable to winters getting shorter, warmer and less predictable due to climate change adapting to which is long and difficult.

- Temperature increase in March (grain formation), and higher temperatures in November-December (sowing period) have reduced yields in recent years, leading to lower government stocks.

### **Diverging Consumption Trends**

- **Wheat:** Official household expenditure survey data 2022-23 shows per capita monthly wheat consumption at 3.9 kg in rural and 3.6 kg in urban India, translating to roughly 65 mt for a population of 1,425 million.
- A significant portion of wheat is consumed in processed forms (maida, sooji/rava) for bakery items, convenience foods, and sweets, which is expected to rise with urbanisation and higher incomes.
- Today, most South Indians consume wheat daily in at least one meal, while rice has not become as popular in the North as wheat has in the South.
- **Rice:** No similar upward trend in rice consumption. Innovations in rice-based convenience foods are limited, suggesting stable consumption patterns.

## **Wheat**

- Wheat is a **Rabi crop** requires a temperature 10 to 15° C in sowing time and 21 to 26° C in harvesting time.
- **Well drained fertile loamy and clayey soil** is favourable to cultivate wheat.

- 75-100 cm of rainfall is good.
- Area under Wheat cultivation is the second highest after Rice.
- As of 2024, Uttar Pradesh stands first in the cultivation of wheat followed by Madhya Pradesh, Punjab, Haryana and Rajasthan.
- India is the second largest producer of wheat (around 13.5% of world share) in the world after China.
- Russia is the world's largest exporter of wheat, accounting for more than 18% of international exports.
- In 2019, Russia and Ukraine together exported more than a quarter (25.4 %) of the world's wheat.
- The top five countries that exported the highest dollar-value worth of wheat include Russia > United States > Canada > France > Ukraine.
- India accounts for even less than 1% in world wheat export. However, its share has increased from 0.14% in 2016 to 0.54% in 2020.
- Egypt is the world's biggest importer of wheat.
- Turkey is also a big spender on Russian and Ukrainian wheat with 74% of its imports coming from those two countries in 2019.
- Wheat is the second most important cereal crop after rice and the main food crop in North and North West India.

- Temperate grasslands of the mid-latitudes produce the greatest quantity of wheat per capita amongst the world's wheat-growing nations.
- The temperate grasslands are ideal for extensive wheat cultivation.
- They are, naturally the greatest wheat exporters.
- Three-quarters of the world's wheat is winter wheat, i.e. wheat sown in winter or late autumn, and is then harvested in the summer.

## Rice

- Rice is a Kharif crop that requires a temperature of 22 to 32° C with high humidity.
- Deep clayey and loamy soil is the most favourable soil type to grow rice.
- Rice requires an adequate rainfall of 150-300cm annually.
- As of 2024, West Bengal tops the production of rice followed by Uttar Pradesh, Punjab, Telangana and Odisha.
- Rice is the staple food crop of majority of Indian people.
- Area under Rice cultivation is the highest followed by Wheat.
- India is the second largest producer of rice in the world after China. But, India is the largest exporter of rice in the world.

- In states like Assam, West Bengal and Odisha, three crops of paddy are grown in a year. These are Aus, Aman and Boro.
- **Sheath Blight**, a fungal disease (caused by *Rhizoctonia solani*) affects the crop in rainy season reducing the crop up to 60%. Sheath blight occurs in areas with high temperature (28–32°C), high levels of nitrogen fertilizer, and relative humidity of crop canopy from 85–100%.
- Infected leaves senesce or dry out and die more rapidly. As a result, the leaf area of the canopy can significantly be reduced by the disease.
- Between 2017 and 2022, India exported \$40.4 billion worth of rice, over 90% of it going to African and Asian countries.
- India is having a market share of at least 10% of total rice imports of at least 9 European countries.