

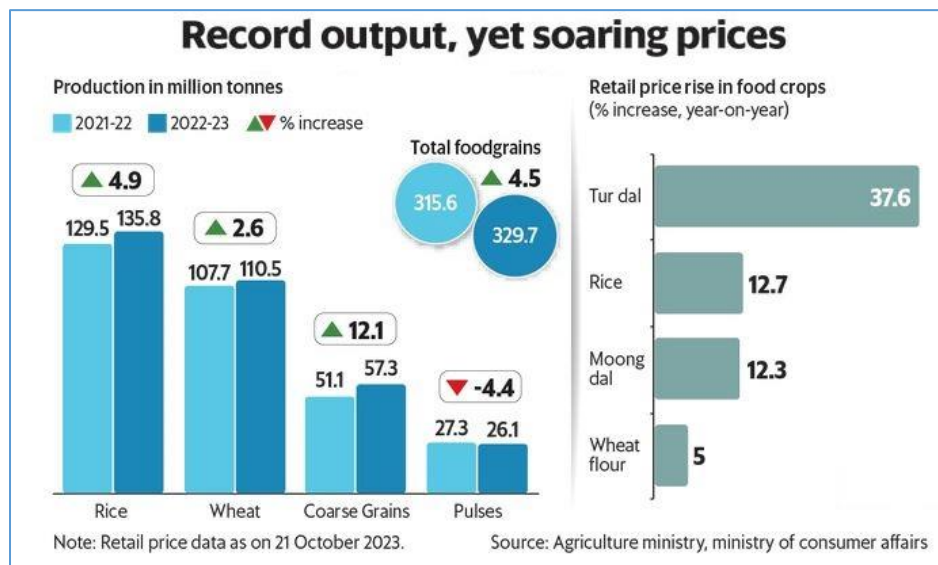
October - 23

## TNPSC BITS

- ❖ The Indian Air Force successfully test-fired an extended-range (ER) variant of the air-launched Brahmos missile.
- ❖ Fourth G20 Global Partnership for Financial Inclusion Meeting was held in Mumbai.

## NATIONAL

### India's Horticulture Production 2022-23

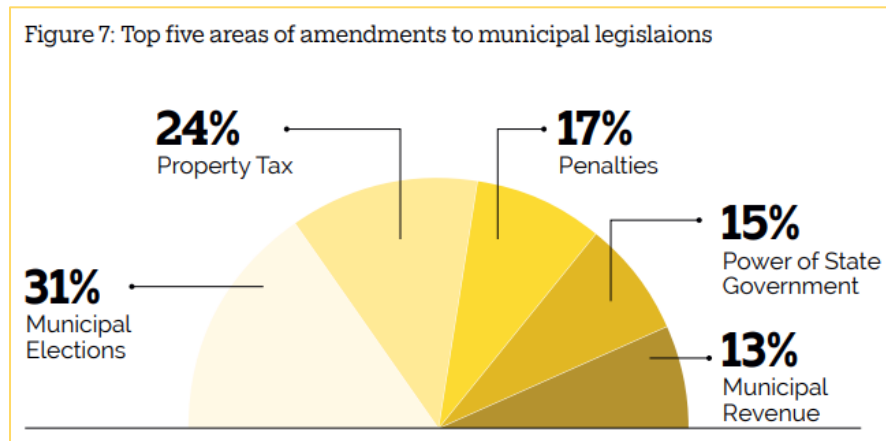


- ❖ Food grain and horticulture production hit a record high in the July 2022 to June 2023 crop year.
- ❖ The final estimates for food grain output in 2022-23 stood at a record 329.68 million tonne.
- ❖ This is 4% high or 14.1 million tonnes higher than a year ago.
- ❖ The food grain output has consistently grown over the last decade from 257.1 million tonne in 2012-13 to 315.6 million tonne in 2021-22.
- ❖ Food grain production in 2022-23 is 30.8 million tonnes higher than the previous five years' average.
- ❖ Total production of rice in 2022-23 is estimated at a record 135.75 million tonnes, up by 6.28 million tonnes from previous year's output.
- ❖ Production of wheat during 2022-23 is estimated at record 110.55 million tonnes.

- ❖ It is 2.8 million tonnes more than previous year's wheat production.
- ❖ Total pulses production during 2022-23 is estimated at 26 million tonnes.
- ❖ It is higher by 1.4 million tonnes compared to the last five years' average.

### Urban Local Bodies: ASICS 2023 report

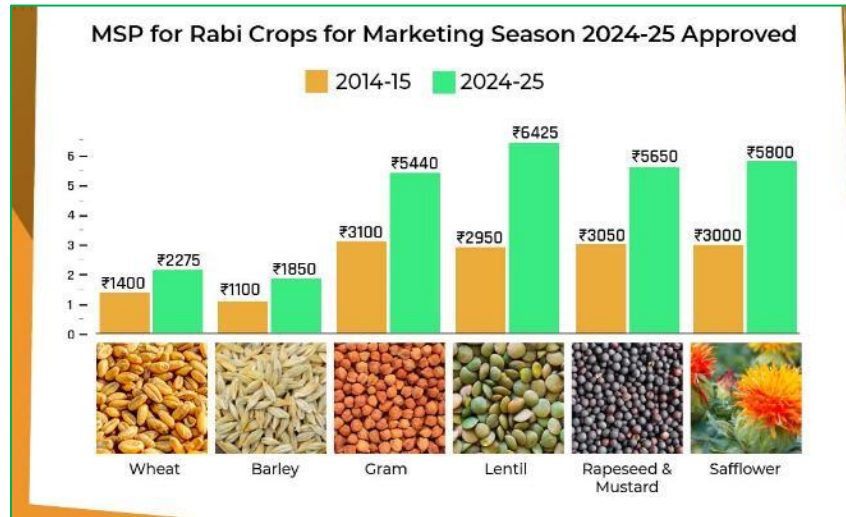
- ❖ The Annual Survey of India's City-Systems (ASICS) is a comprehensive evaluation of the quality of governance in Indian cities.
- ❖ It was published after a gap of five years (the last was in 2017).
- ❖ This time it focused on the state as a unit instead of ranking cities as they did in the past.
- ❖ Only About 20% of municipal expenditure is covered by property tax, suggesting the need for revenue optimization and efficiency measures.
- ❖ 51% of states/union territories lack accessible urban legislation in the public domain.
- ❖ 39% of India's capital cities do not have an active master plan.
- ❖ Eastern states have better urban legislation, followed by Southern states.



### Minimum Support Price for Rabi 2024/25

- ❖ The union government announced an increase in the minimum support price (MSP) of wheat by ₹150 to ₹2,275 per quintal for the 2024-25 marketing season.
- ❖ This is the highest increase since 2014.
- ❖ Currently, the MSP on wheat stands at ₹2,125 per quintal for the 2023-24 marketing season (April-March).
- ❖ A decision in this regard was taken in the meeting of the Cabinet Committee on Economic Affairs (CCEA).

- ❖ Wheat is the main rabi (winter) crop, sowing of which begins in October, while harvesting in April.
- ❖ MSP is the minimum rate ensured to protect the interest of farmers.
- ❖ And below this rate the grain is not purchased by the government procurement agencies.



## INTERNATIONAL

### Amazon Wildfires in 2023

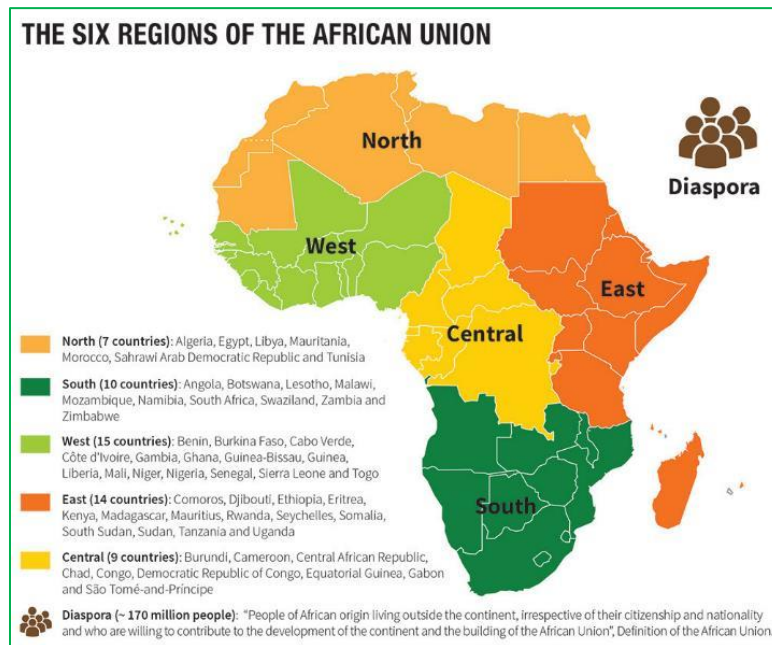


- ❖ The number of wildfires in the Amazon forests in the first half of 2023 was 10 per cent higher than in 2022.
- ❖ In June 2023, the number of active fires in the Amazon reached the highest peak since 2007.

- ❖ Indeed, only 19 per cent of the fires were related to recent deforestation during January-June 2023, down from 39 per cent in 2022.
- ❖ Hot and dry conditions wrought by El Nino this year also fuelled this occurrence.
- ❖ Deforestation rates have been falling in 2023, with alerts 42 per cent lower between January and July than in the same period of 2022.

### **African credit ratings agency**

- ❖ The African Union plans to launch a new African credit rating agency next year.
- ❖ This is due to its concerns about what it views as unfair ratings given to African countries.
- ❖ It aims to provide additional context for investors when making decisions about purchasing African bonds or extending private loans to countries.
- ❖ The agency will generate its own evaluation of lending risks associated with African countries.

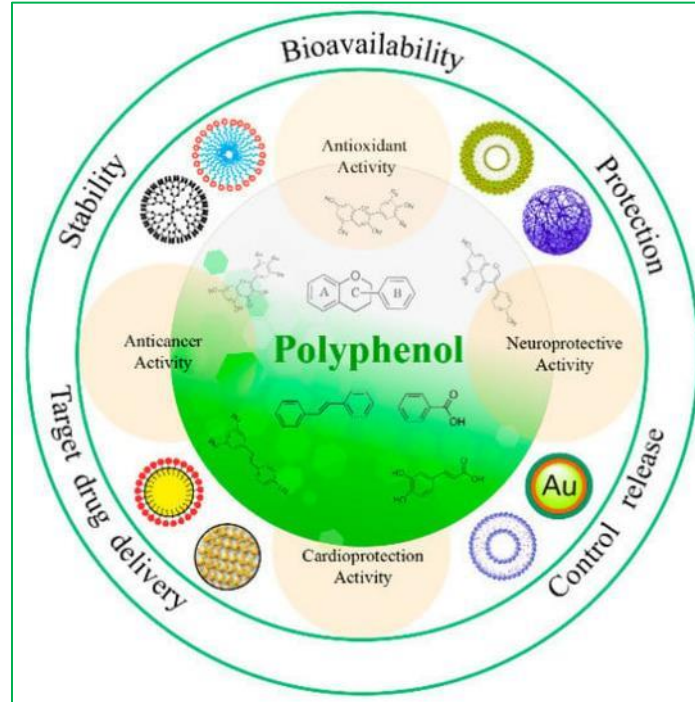


## **SCIENCE AND TECHNOLOGY**

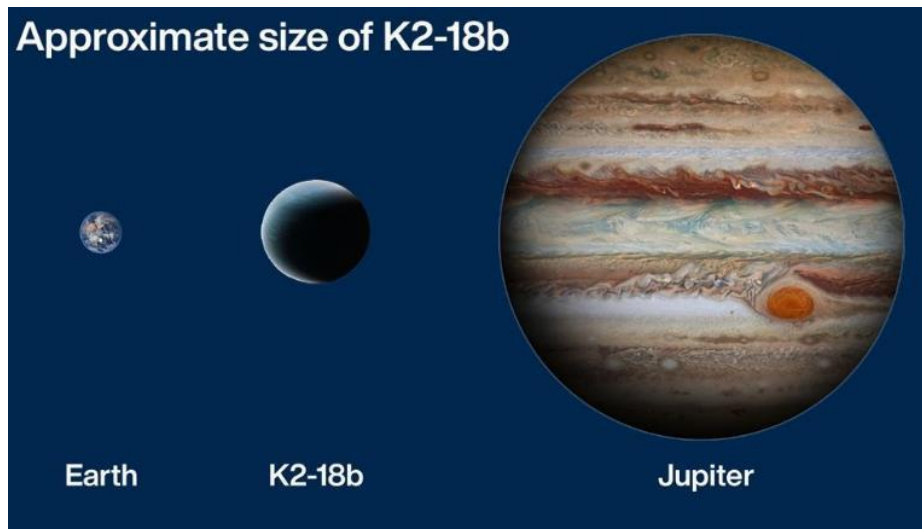
### **Plant-Based Polyphenols**

- ❖ Scientists have found that highly abundant naturally occurring plant-based polyphenols (PPs) like Tannic acid found in twigs of trees like Chestnut and Oak can modulate the ferroptosis-AD axis.

- ❖ This is a safe, cost-effective strategy for combating Alzheimer's disease (AD) and reduce the societal burden of this debilitating neurodegenerative disorder.
- ❖ AD is a widely prevalent progressive neurodegenerative disorder marked by memory and cognitive decline.



### Methane and Co<sub>2</sub> in K2-18 b



- ❖ James Webb Space Telescope data revealed that the presence of carbon-bearing molecules like methane and carbon dioxide in planet K2-18 b.
- ❖ The planet is 8.6 times as massive and has a radius 2.6 times that of Earth.

- ❖ Its surface could be covered with water oceans and that it has a hydrogen-rich atmosphere.
- ❖ The planet K2-18 b orbits the cool dwarf star K2-18 in the goldilocks zone.
- ❖ The planet is about 120 light-years away from us in the constellation Leo.

## REPORTS AND INDICES

### Global Pension Index 2023

System	Overall Grade	Total	Adequacy	Sustainability	Integrity
Netherlands	A	85.0	85.6	82.4	87.7
Iceland	A	83.5	85.5	83.8	80.0
Denmark	A	81.3	82.5	82.5	77.8
Israel	A	80.8	77.0	82.7	84.4
Australia	B+	77.3	70.7	78.4	86.1
Finland	B+	76.6	77.4	65.6	90.9
Singapore	B+	76.3	79.8	71.6	77.0
Norway	B	74.4	79.4	59.1	87.8
Sweden	B	74.0	72.1	75.6	75.0
UK	B	73.0	77.3	62.7	80.6
Switzerland	B	72.0	69.6	70.6	77.9
Canada	B	70.2	71.1	64.5	76.7

- ❖ Netherlands' retirement income system has once again secured the first position.
- ❖ Iceland and Denmark have claimed the second and third positions in the ranking, respectively.
- ❖ Argentina had the lowest index value.
- ❖ India had an overall index value of 45.9 from 44.5 in 2022, ranking 45 out of the 47.
- ❖ The index is derived from the weighted averages of the sub-indices of adequacy, sustainability, and integrity.

## IMPORTANT DAYS

### World Statistics Day 2023 - October 20

- ❖ The day is dedicated to create awareness about the significant role of advanced, reliable, and good quality statistics in the development of global nations.
- ❖ The United Nations General Assembly established this day on 20<sup>th</sup> October 2015.

- ❖ This day highlights the huge achievements of national statistical systems, and to foster the importance of statistics in various aspects of society.
- ❖ The theme for 2023 is "Connecting the world with data we can trust."



### **World Osteoporosis Day 2023 - October 20**



- ❖ This day aims to promote awareness regarding the prevention, diagnosis, and treatment of osteoporosis.
- ❖ Osteoporosis is a bone disorder characterized by abrupt structural alterations in the bones.
- ❖ Thus, it is resulting in a reduction in bone mass and bone mineral density.
- ❖ "Step Up for Bone Health-Build Better Bones" is the theme of 2023.

## **Police Martyrs' Day 2023 - October 21**

- ❖ The day marks the sacrifice of 10 CRPF men who lost their lives to a Chinese attack in 1959.
- ❖ The attack happened near Ladakh's Hot Springs area.
- ❖ Hot Spring in Aksai Chin in Ladakh is situated between 15,000 and 16,000 ft above the sea level on the Indo-Tibet border.
- ❖ The day honouring the spirits of police people and their family members.
- ❖ It is celebrated to pay respect to all those who sacrificed their lives.

