

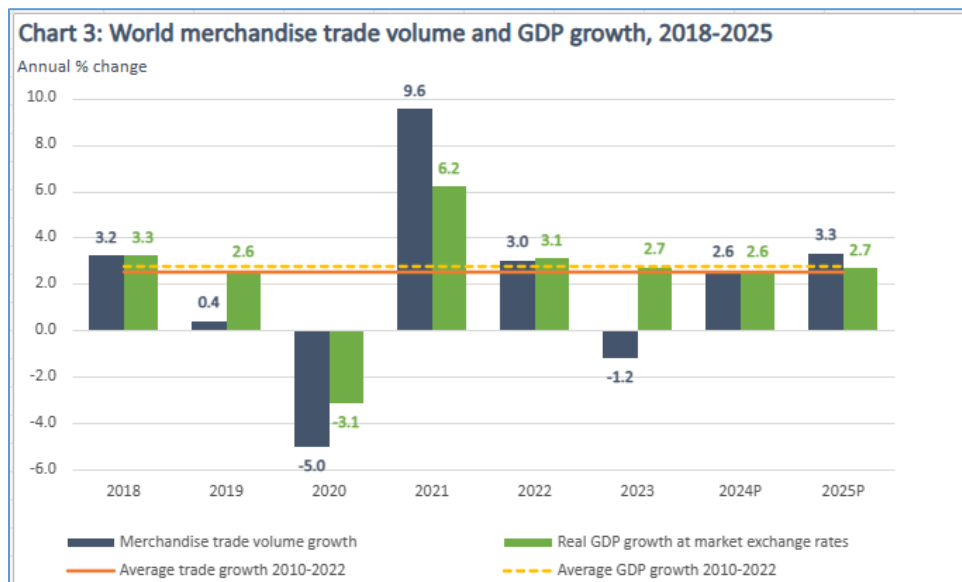
April - 17

## TNPSC BITS

- ❖ Jain Acharya Lokesh Muni has become the first Indian monk to be honoured with the American President's Gold Volunteer Service Award.
- ❖ Adani Green Energy Limited is building the world's largest renewable energy park over 538 square kilometers in Khavda in Kutch district of Gujarat.
- ❖ The fifth edition of India-Uzbekistan Joint Military Exercise Dustlik commenced in Uzbekistan.
- ❖ The United Kingdom appointed Lindy Cameron as the first woman British High Commissioner to India.

## INTERNATIONAL

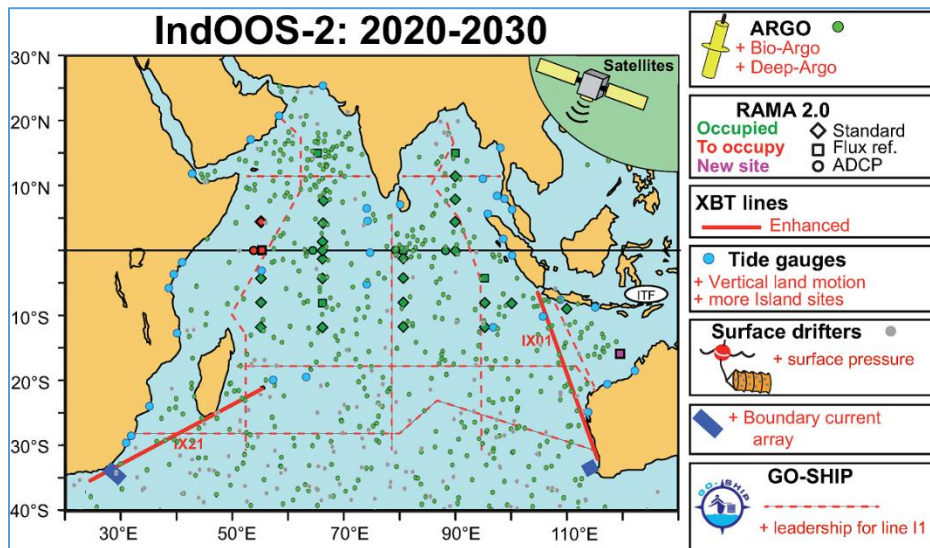
### Global Trade Outlook and Statistics 2024



- ❖ The latest “Global Trade Outlook and Statistics” report was released by the World Trade Organization (WTO).
- ❖ The volume of world merchandise trade is expected to increase by 2.6% in 2024 and 3.3% in 2025 after falling 1.2 per cent in 2023.
- ❖ The High energy prices and inflation continued to weigh heavily on demand for manufactured goods.
- ❖ It is resulting in a 1.2% decline in world merchandise trade volume for 2023.

- ❖ The decline was larger in value terms, with merchandise exports down 5% to USD 24.01 trillion.
- ❖ Services trade were more upbeat, with commercial services exports up 9% to USD 7.54 trillion.
- ❖ Global GDP growth will remain mostly stable over the next two years at 2.6% in 2024 and 2.7% in 2025, after slowing to 2.7% in 2023 from 3.1 per cent in 2022.

## Indian Ocean Observing System



- ❖ India and the US have decided to reactivate the Indian Ocean Observing System (IndOOS).
- ❖ It is a network of 36 moored buoys in the high seas to collect high-resolution ocean and atmospheric data for weather forecasts.
- ❖ The moored buoys are part of the Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction (RAMA) programme.
- ❖ Its Observations are essential for operational services such as cyclone warnings, storm surge alerts, initial conditions for monsoon predictions and climate forecasts, tsunami warnings and harmful algal bloom detection.

## Land Rights in Afghanistan

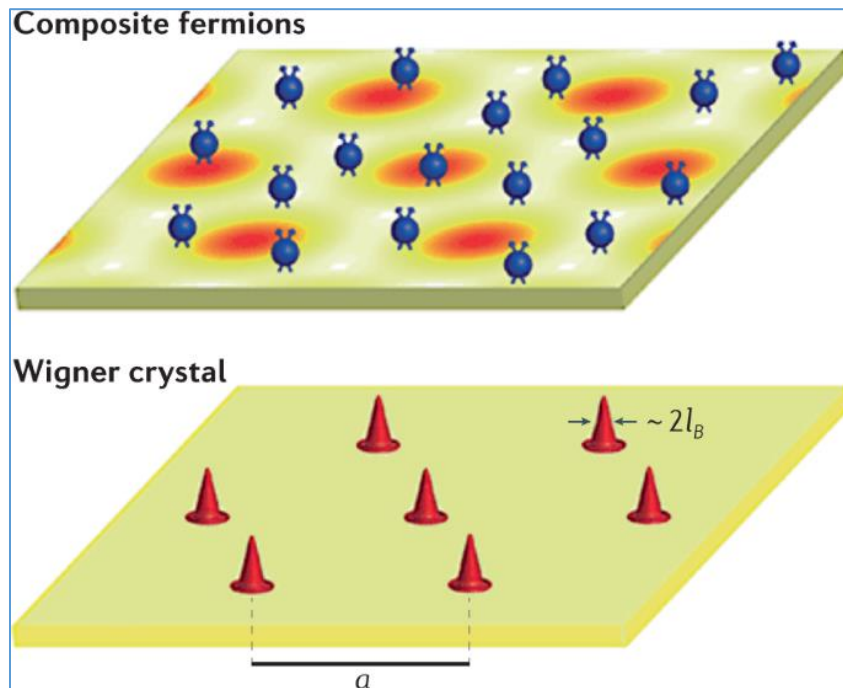
- ❖ The Taliban regime decided to restore property rights to their citizens belonging to Afghan Hindu and Sikh community.
- ❖ They have reportedly set up a commission to ensure return to owners the rights of private land which were seized by warlords during the tenure of the previous dispensation in Kabul.

- ❖ They were lost property in the decades beginning with the Soviet occupation and the warlord culture that developed subsequently in the early 1990s.



## SCIENCE AND TECHNOLOGY

### Wigner Crystal



- ❖ It is hard to coax electrons to form a crystal, and even harder to measure this structure.



- ❖ But physicists have now managed to directly image a “Wigner crystal” – and their images are the clearest ones yet.
- ❖ The researchers employed a scanning tunnelling microscope (STM) and pristine graphene samples to observe the formation of the Wigner Crystal directly.
- ❖ The Wigner crystal is one of the most fascinating quantum phases of matter that has been predicted and the subject of numerous studies claiming to have found.
- ❖ At very low temperatures, however, repulsive electric forces win out, and the electrons end up arranging themselves into a uniform grid, or a crystal.
- ❖ Physicist Eugene Wigner predicted this phenomenon in 1934.
- ❖ But researchers only recently started to understand how to create Wigner crystals in the lab.

## ENVIRONMENT

### Volcanic Vortex Rings



- ❖ Mount Etna, the largest volcano in Europe, has been sending up almost perfect rings of smoke into the air.
- ❖ The rings are a rare phenomenon that scientists refer to as volcanic vortex rings.
- ❖ Vortex rings are generated when gas, predominantly water vapour, is released rapidly through a vent in the crater.
- ❖ The vent that has opened up in Etna’s crater is almost perfectly circular.
- ❖ The phenomenon was first observed at Etna and Vesuvius in Italy in 1724, and has been documented in an engraved plate from 1755.

- ❖ The Etna volcano's eruptive history can be traced back 500,000 years. At least 2,700 years of this activity has been documented.

## REPORTS AND INDICES

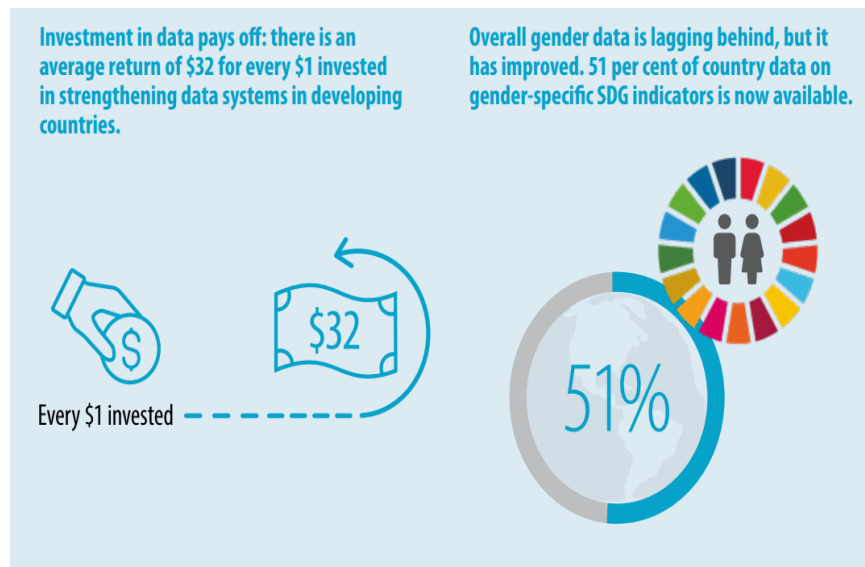
### Plastic Overshoot Day Report



- ❖ The Plastic Overshoot Day report was released by Swiss non-profit EA Earth Action.
- ❖ Global plastic waste generation has risen by 7.11 per cent since 2021.
- ❖ The world is estimated to have generated 220 million tons of plastic waste this year, 70 million tons of which will end up polluting the environment.
- ❖ India is among the 12 countries responsible for 60 percent of the planet's mismanaged plastic waste.
- ❖ But its per capita plastic waste production is among the lowest in the world (8 kg per capita per year).
- ❖ India's mismanaged plastic waste will be less than one-fifth of China and one-third of the US.
- ❖ People living in Belgium are the top generators of plastic waste, with a yearly waste production of 147.7 kg per person.
- ❖ This is 16 times higher than in India.

- ❖ Oman tops the list of countries in terms of mismanaged plastic waste, with a projected 111 kg of mismanaged plastic per person in 2024.
- ❖ This is 30 times higher than Norway.
- ❖ India is in the bottom 12 countries.
- ❖ Each country has its own "Plastic Overshoot Day".
- ❖ It is determined by the amount of plastic waste generated and the country's capacity to manage it.
- ❖ India will reach its Plastic Overshoot Day on April 23.

## Financing for Sustainable Development Report 2024



- ❖ Trillions of dollars are needed if the 17 Sustainable Development Goals (SDGs), agreed upon by all UN members back in 2015, are to be achieved by 2030.
- ❖ Some \$4.2 trillion are needed in investments to close the development financing gap.
- ❖ This number was \$2.5 trillion before the COVID-19 pandemic began.
- ❖ The Debt service will be \$40 billion annually between 2023 and 2025 in the least developed countries (LDC).
- ❖ This will be more than 50 per cent from \$26 billion in 2022.
- ❖ Official Development Assistance (ODA) has increased to an all-time high in 2022, reaching \$211 billion, from \$185.9 billion in 2021.
- ❖ If current trends continue, the UN estimates that almost 600 million people will continue to live in extreme poverty in 2030 and beyond, more than half of them women.

- ❖ The international financial system, which was set up at the 1944 Bretton Woods Conference, is no longer fit for purpose.
- ❖ The Bretton Woods Conference, held in the United States, led to the birth of institutions like the World bank and the International Monetary Fund.

## **PERSONALITIES, AWARDS, AND EVENTS**

### **Blue Origin's NS-25 mission**

- ❖ Gopi Thotakura is set to become the first Indian to venture into space as a tourist on Amazon founder Jeff Bezos's Blue Origin's NS-25 mission.
- ❖ Thotakura was selected as one of the six crew members for the mission.
- ❖ This is making him the first Indian space tourist and the second Indian to venture into space after the Indian Army's Wing Commander Rakesh Sharma in 1984.

