India projected to surpass China as world's most populous country during 2023: UN Report

(GS Paper 1, Population and associated Issues)

Why in news?

• Recently, the United Nations Department of Economic and Social Affairs, Population Division released World Population Prospects 2022.



Global population:

- The global population is projected to reach eight billion on November 15, 2022.
- The global population is growing at its slowest rate since 1950, having fallen under 1% in 2020.
- The latest projections by the United Nations suggest that the world's population could grow to around 8.5 billion in 2030 and 9.7 billion in 2050.
- It is projected to reach a peak of around 10.4 billion people during the 2080s and to remain at that level until 2100.

Projections about India:

- According to the report, India's population stands at 1.412 billion in 2022, compared to China's 1.426 billion.
- India, which will surpass China as the world's most populous nation by 2023, is projected to have a population of 1.668 billion in 2050, way ahead of China's 1.317 billion people by the middle of the century.

Most populated regions:

- The world's two most populous regions in 2022 were Eastern and South-Eastern Asia, with 2.3 billion people, representing 29% of the global population, and Central and Southern Asia, with 2.1 billion, representing 26% of the total world population.
- China and India accounted for the largest populations in these regions, with more than 1.4 billion each in 2022.
- More than half of the projected increase in global population up to 2050 will be concentrated in just eight
 countries of the Democratic Republic of the Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines
 and Tanzania.

Outflow of migrants:

• It is estimated that ten countries experienced a **net outflow of more than 1 million migrants** between 2010 and 2021.

- In many of these countries, these **outflows were due to temporary labour movements**, such as for Pakistan (net outflow of -16.5 million during 2010-2021), India (-3.5 million), Bangladesh (-2.9 million), Nepal (-1.6 million) and Sri Lanka (-1 million).
- In other countries, including the Syrian Arab Republic (-4.6 million), Venezuela (Bolivarian Republic of) (-4.8 million), and Myanmar (-1 million), insecurity and conflicts have driven the net outflow of migrants over the decade.

Life expectancy at birth:

- Global life expectancy at birth reached 72.8 years in 2019, an improvement of almost 9 years since 1990. Further reductions in mortality are projected to result in an average global longevity of around 77.2 years in 2050.
- Yet in 2021, life expectancy for the least developed countries lagged seven years behind the global average.

<u>India becomes 68th country to join Interpol's child sexual abuse database</u>

(GS Paper 2, International Organisation)

Why in news?

- Recently, India joined the Interpol's **International Child Sexual Exploitation (ICSE)** database.
- It will allow India to draw links between victims, abusers and crime scene using audio-visual data.



What is ICSE database?

- An intelligence and investigative tool, the database allows specialized investigators to share information on cases of child sexual abuse.
- Through the image and video comparison software, the investigators can nail down the criminals by identifying victims and places of crime.
- Detectives in all 68 countries can exchange information and notes with their colleagues across the world.
- By analysing the digital, visual and audio content of photographs and videos, victim identification experts can retrieve clues, identify any overlap in cases and combine their efforts to locate victims of child sexual abuse.

CBI:

• The CBI, which is India's nodal agency for Interpol matters, joined the database.

Sexual exploitation of Children:

- In India, National Crime Records Bureau's (NCRB) data stated that Uttar Pradesh topped the list of sexual offences against children.
- UP had reported 6.898 Protection of Children from Sexual Offences Act(POSCO) cases, followed by Maharashtra with around 5,687 cases, Madhya Pradesh with 5,648, Tamil Nadu with 3,090 and West Bengal with 2,657 cases.

IIT-K setting up air-quality sensors (GS Paper 3, Science and Tech)

Why in news?

- To bolster measurement of air pollution in rural India, the Indian Institute of Technology, Kanpur, is embarking on a \$2.5 million project to install nearly 1,400 sensors in the rural blocks of Uttar Pradesh and Bihar.
- The three-year project is expected to be a pilot that, going ahead, could pave the way for a **national network of** air quality sensors in rural India.



National Clean Air Programme (NCAP):

- In 2019, the government launched the National Clean Air Programme (NCAP) to reduce particulate matter air pollution by 20-30% by 2024. This, however, is **primarily aimed at 122 cities** that have been categorised as India's most polluted cities.
- At its launch, government had committed to increasing the network of rural air pollution monitoring sensors but little progress has been made on that front.
- Despite having several cities in the world's list of the most polluted cities in the world. India still has very few sensors relative to the size of its population due to which the magnitude of the air pollution crisis is obscured.
- Cities, because of their population density and industrial establishments, continue to be the overwhelming source of emissions. The country's current annual safe limits for PM 2.5 and PM 10 are 40 micrograms/per cubic metre (ug/m3) and 60 micrograms/per cubic metre.

Financial outlay of NCAP:

Under NCAP, Rs. 375.44 crore was provided to 114 cities from 2018-19 to 2020-21 and Rs. 290 crore was allocated to 82 cities for the financial year 2021-22.

• The programme has an allocation of Rs. 700 crore envisaged for 2021-26.

Significance:

- Air pollution in India is largely framed as an urban blight though causes of pollution, such as biomass burning and reliance on diesel generators for electricity, are worsening air quality in villages too.
- The outcomes from this network will help local communities, policy makers and researchers understand the ground situation.
- Data from this network will also be made available in real-time to enable actionable and evidence-based decision-making.

Villagers' stir against solar plants protects khejri trees

(GS Paper 3, Environment)

Why in news?

- The **proposed installation of eight solar power plants** in Jodhpur district's Phalodi tehsil has led to a major confrontation with the Bishnoi activists, who have strongly **protested against the felling of khejri trees.**
- The solar energy companies, which have acquired 25,000-bigha land on lease in the region, have cut down a large number of **khejri trees**, which is the State tree of Rajasthan.



Desert Ecosystem:

- Though the expansion of solar and wind power projects on the vast desert land in western Rajasthan is set to bring the State to the forefront of power generation, the **process of their installation has adversely affected** the desert ecosystem.
- The trees need to be felled to let the solar panels be aligned horizontally for a certain length of space.
- The two new entrants in the power sector have provided economic gains to the agriculturists whose land was taken over to install the plants with the payment of cash compensation.

Bishnoi activists:

- The Bishnoi activists, who have a sentimental attachment with **khejri or Prosopis cineraria trees**, claim that the solar panels are causing incredible loss to Thar desert's flora and fauna.
- Thousands of kheiri trees have been chopped off wherever the new solar power plants have been set up.

Significance of Khejri tree:

- Khejri tree plays an important role in maintaining the ecosystem of Thar region because of its ability to survive in dry weather.
- The tree is used in different ways, such as a source of fodder and firewood, and it helps in sustaining the soil's nutrient value and ensuring a good yield of desert crops and food plants.
- Its fruit is used to make the popular dish 'Sangri'.