

THE WORLD IS GETTING OLDER. CAN INDIA COPE?

Context

- **Demographics are a critical aspect of understanding the trajectory of human civilisation.** Therefore, the future of humanity has been a topic of particular concern and speculation.
- **The United Nations Population Fund (UNFPA) report from 2019 and the India Aging Report of 2023** provide valuable insights into the global and Indian demographic landscapes and how it will lead to geopolitical reorganisation of nations.

An Analysis of Global Demographic Trends

- **Findings of UNFPA**
 - In 2019, the UNFPA reported that **India would soon surpass China as the most populous country in the world.**
 - The report forecasted that **between 2027 and 2050, India,** along with several other nations including Nigeria, Pakistan, Ethiopia, United States, etc., **would witness the highest population growth.**
- **A Report by IMF (International Monetary Fund)**
 - **In contrast to the 1970s, where there were more adolescents and young adults (15 to 24-year-olds) than older individuals, by 2050, these age groups are expected to be on par globally.**
 - **Japan is an example, with over 28% of its population aged 65 and above.**

Demographic Landscape in India

- **UNFPA India Ageing Report 2023**
 - The report declares that globally, there are 1.1 billion persons aged 60 years and above in 2022, comprising 13.9 per cent of the total population of 7.9 billion.
 - Over the next three decades, the number of older persons worldwide is expected to double to 2.1 billion by 2050, with the share rising to 22 per cent of the total population.

- **By 2050, the share of older persons will double to 20.8 per cent, with the absolute number at 347 million.**
- **The report points out that the unprecedented rise in the ageing population will have significant implications for health, economy, and society in India.**
- **The National Family Health Survey 2022**
- **It showed that except for Uttar Pradesh and Bihar (amongst the larger states) fertility levels elsewhere have dropped below the replacement level of 2.1.**
- **In urban India, the fertility rate is at 1.6, which is comparable to that of the developed world.**
- **This is below replacement level, and combined with increased longevity, will ensure that the elderly constitute a significant segment of our population.**

Population and Geopolitics

- **Rise and Decline of China Due to Population**
- **According to a study on the population decline, published in Lancet in 2020, China is expected to replace the United States by 2035 in terms of the largest total gross domestic product (GDP).**
- **However, the rapid decline in China's population means that the United States will reclaim the top position soon since its population will grow consistently if sustained by liberal immigration policies.**
- **The World will be Multipolar**
- **According to the Lancet report, by the end of this century the world will be multipolar, with India, Nigeria, China, and the US as the dominant powers, supported in great part by their working age populations.**
- **The immigration and strong reproductive and sexual rights for women will be key as the world will undergo radical shifts in geopolitical power.**
- **The Influence of Europe and Asia will Decline**
- **By 2100, most of the fastest shrinking populations will be in Asia and Europe which will decline the influence of Asia and Europe in geopolitics.**

- For instance, China will decline from 1.4 billion in 2017 to 732 million people in 2100, Thailand from 71 million to 35 million, Italy from 61 million to 31 million and Japan from 128 million to 60 million.

ENCORE SOFTWARE

The Election Commission of India has designed in-house software, ENCORE, for complete Candidate and election management.



About ENCORE software:

ENCORE • This ENCORE software stands for **Enabling Communications On Real-Time Environment**.

- This provides a seamless facility for **Returning Officers** to process **candidate nominations, affidavits, Voter turnout, counting, results**, and data management.
- The **ENCORE counting application** is an end-to-end application for returning officers to digitize the **votes polled, tabulate the round-wise data** and then take out various statutory reports of counting.
- Another application called the **ENCORE Scrutiny Application** allows Returning Officers to do scrutiny of the nominations filed by the candidates online.
- After verification of the nomination the status is marked as Accepted, Rejected or Withdrawn helping the Returning Officer to prepare the final list of contesting candidates and assign the symbols.

Key Facts about the Election Commission of India

- It is a permanent **constitutional body** responsible for organising **free and fair elections in India**.
- The Constitution grants the ECI the power of direction, superintendence, and control of elections to Parliament, state legislatures, the office of president of India, and the office of vice-president of India.
- **Functions**
- **Determining the Electoral Constituencies'** territorial areas throughout the country.

- **Preparing and periodically revising electoral rolls** and registering all eligible voters.
- Notifying the schedules and dates of elections and scrutinising nomination papers.
- **Granting recognition to the various political parties** and allocating them election symbols.
- The Commission also **has advisory jurisdiction** in the matter of post-election disqualification of sitting members of Parliament and State Legislatures.
- **Composition:** The commission consists of a **Chief Election Commissioner (CEC)** and two **Election Commissioners (ECs)**.
- Under **Article 324 (2)**, the President appoints the CEC and other ECs.
- The President makes the appointment on the advice of the Union Council of Ministers, headed by the Prime Minister.
- The Constitution does not prescribe any qualifications, academic or otherwise, for appointment to these offices.
- The tenure of office and the conditions of service of all the commissioners is determined by the President.
- The tenure of commissioners is **6 years or up to the age of 65**, whichever is earlier.
- The CEC and the two other ECs have the same powers and emoluments, including salaries, which are the same as those of a Supreme Court judge.

MULTI-BILLION DOLLAR FTX FRAUD

Why in news?

- FTX founder Sam Bankman-Fried was found guilty of stealing from customers of his now-bankrupt cryptocurrency exchange in one of the biggest financial frauds on record.
- The prosecutors made the case that he looted \$8 billion from the exchange's users out of sheer greed.

Cryptocurrency

- Cryptocurrencies are digital or virtual currencies in which encryption techniques are used to regulate the generation of their units and verify the transfer of funds.
- These currencies operate independently of a central bank.

Challenges posed by crypto assets

- The rapid growth and increasing adoption of crypto assets also pose financial stability challenges as these are extremely volatile.
 - These are much more volatile than equities or commodities or even exchange rates. This volatility is introducing instability in the ecosystem.
- Challenges posed by the crypto ecosystem include
 - operational and financial integrity risks from crypto asset providers,
 - investor protection risks for crypto-assets,
 - inadequate reserves and disclosure for some stable coins.

Use of cryptocurrencies in India: Statistics

- The number of blockchain start-ups surpassed 300 in 2021, with the daily crypto trading volume peaking between \$300 - \$500 million.
- As per Global Consumer Survey in 2020, India ranks higher than China, United States, Germany and Japan in crypto adoption.

Crypto regulation in India

- **India's stand in initial years of crypto**
 - India's stance on cryptocurrency has evolved.
 - In 2013, the RBI cautioned users, holders, and traders of virtual currencies, including cryptocurrencies, about the potential risks associated with their use.
 - In 2017, the RBI prohibited banks and other regulated entities from providing services to individuals or businesses dealing in cryptocurrencies.
 - The circular effectively made it illegal for Indian residents to buy or sell cryptocurrencies.
 - However, in March 2020, the Supreme Court of India overturned the RBI's ban on cryptocurrencies.
 - Since then, the Indian government has considered a regulatory framework for cryptocurrencies.
- **Focus shifted from banning to regulating**
 - In 2022, the Ministry of Finance released a report proposing the creation of a digital rupee, a state-backed digital currency, as well as a framework for regulating private cryptocurrencies.

FTX scandal

- Recently, the cryptocurrency exchange FTX filed for bankruptcy and its chief executive, Sam Bankman-Fried, resigned.
- As a result, the savings of hundreds of thousands of customers who deposited their holdings on the FTX platform are in jeopardy.

About FTX

- FTX is a cryptocurrency exchange based in the Bahamas.
 - The company built its business on risky trading options that are not legal in the United States.
- It was founded by Sam Bankman-Fried in 2019 and lets users buy, sell, hold, and trade cryptocurrency.
 - It enabled customers to trade digital currencies for other digital currencies or traditional money; it also had a native cryptocurrency known as FTT.

Impact on cryptocurrency market

- The cryptocurrency industry has long struggled to convince regulators, investors and ordinary customers that it is trustworthy.
- The fall of FTX, which seemed more stable than other companies, and the pull-out by Binance have jolted the market.
 - Binance is also a cryptocurrency exchange.

TAURID METEOR SHOWERS



A celestial light show will grace the night sky as the Taurid meteor shower reaches its peak.

About the Taurid meteor shower:

- The Taurid meteors are debris from the **periodic Comet 2P/Encke**, which has the shortest known orbital period for a comet (it takes only 3.3 years to make one complete trip around the sun).
- These showers are named after the **constellation Taurus**.

- It is unique in that it comprises **two distinct streams** (i.e., Southern and Northern Taurids), both of which have spread over time due to the gravitational influence of Jupiter.
- It can be seen with the naked eye and is best viewed at around midnight.
- These are modest, offering fewer than 10 shooting stars per hour on peak nights.
- However, **November is one of the better months** for shooting stars because there are many sporadic meteors

What are Meteoroid, Meteor and Meteorite?

- A meteoroid is an object in space that ranges in size from dust grains to **small asteroids**.
- When meteoroids enter Earth's atmosphere (or that of another planet, like Mars) at high speed and burn up, the fireballs, or "**shooting stars**" are called **meteors**.
- When a **meteoroid survives** a trip through the atmosphere and hits the ground, it's called a

What is the significance of Meteors?

- It helps in understanding early conditions and **processes in the solar system's history**.
- These include the age and composition of different planetary building blocks, the temperatures achieved at the surfaces and interiors of asteroids, and the degree to which materials were shocked by impacts in the past.

[DIRECT LISTING ON FOREIGN EXCHANGES: WHAT DOES IT MEAN FOR INDIAN COMPANIES?](#)

Why in the News?

- The Union government recently permitted certain Indian companies to directly list on select foreign stock exchanges.

Background:

- In July 2023, the Union Finance Minister had announced that the government had decided to enable listed and unlisted domestic companies to directly list their equity shares on the International Financial Services Centre (IFSC), Ahmedabad.

- In a notification issued earlier this week, the Ministry of Corporate Affairs (MCA) said the provision, which was announced in the Companies (Amendment) Bill, 2020, came into effect on October 30.
- The amendment empowered the central government to allow certain classes of public companies to list prescribed classes of securities in foreign jurisdictions.
- This essentially means **certain classes of domestic public companies can be listed on prescribed foreign stock exchanges**, including GIFT IFSC, Ahmedabad.

How will Companies Benefit by Direct Foreign Listing?

- With direct listing, domestic companies can tap foreign markets to raise funds.
- A direct listing abroad would help Indian companies attract a large and diverse pool of capital.
- It will also help improve corporate governance as well as the benefits of dollar-denominated trades which enables investors to save hedging and currency conversion costs.

Challenges Involved in Direct Foreign Listing:

- The two biggest challenges would be:
 - Will global investors provide the same valuations as that in India?
 - What would be the commercial benefits of these listings?
- Experts said that more clarity is needed on the following issues:
 - Which classes of public companies can use this route,
 - What are the classes of securities (such as equity, preference, etc.) which can be listed,
 - Which are the foreign jurisdictions and permitted stock exchanges where such companies can list,
 - What are the exemptions offered to such companies in terms of procedural compliances.

WHAT IS PROJECT KUSHA?



In a significant move towards enhancing its air defence capabilities, India is embarking on an ambitious project called 'Project Kusha.'

About Project Kusha:

- 'Project Kusha' is set to **provide the Indian Air Force (IAF) with a long-range air defence system, with deployment targeted for 2028-29.**
- The ambitious indigenous project will be **developed by the Defence Research and Development Organisation (DRDO)** at an estimated **budget of Rs 21,700 crore.**
- **Drawing parallels with Israel's renowned Iron Dome system, 'Project Kusha' is expected to not only match but potentially surpass the capabilities of its Israeli counterpart.**
- It aims to **detect and destroy various hostile targets**, including cruise missiles, stealth fighter jets, and drones **at extended ranges.**
- **Key Features:**
- The long-range surface-to-air defence system (LR-SAM) **incorporates advanced long-range surveillance and fire control radars**, which empower the IAF to effectively monitor airspace and fend off enemy threats.
- **Interceptor missiles, with ranges of 150 km, 200 km, and 350 km, provide the ability to detect and strike hostile targets at different distances.**
- It will also be effective in **providing strategic and tactical cover.**
- The system reportedly has a **single-shot kill chance of at least 80% and over 90% when two missiles are fired** after each other.
- The **firing units of 'Project Kusha' can seamlessly integrate with the IAF's air command and control system, facilitating coordination with a wide range of military radars.**