

1.UNFPA State of World Population Report 2023

Topic: Report and Indices



In News: UNFPA has released State of World Population Report 2023.

More on the Topic

- While the global population touched 8 billion last November, it is growing at its slowest rate since 1950, having fallen under 1 per cent in 2020.
- **Last year, China remained the most populous country** with an estimated 144.8 crore people while India's population was estimated at 140.6 crore.
- The estimated global population is 8,045 million, of which 65 per cent is between 15-64 years, 24 per cent between 10-24 years, and 10 per cent above 65 years.
- **Central and Southern Asia is expected to become the most populous region in world by 2037.**
- More than half of projected increase in global population up to 2050 will be concentrated in eight countries — **Democratic Republic of Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, Philippines and United Republic of Tanzania.**

India Specific Findings:

- With its population estimated to touch 142.86 crore by the middle of this year, marginally ahead of China at 142.57 crore, India is on track to be the world's most populous country.
- **68 per cent of India's total population is between the ages of 15 and 64 years**, which is considered the working population of a country. About 25 per cent is between 0-14 years; 18 per cent between 10 and 19 years, 26 percent between 10 and 24 years, and 7 per cent above 65 years.

- India's population is expected to grow for the next three decades after which it will begin declining.
- India's total fertility rate (births per woman in the reproductive age) is estimated at 2.0.
- In India, **life expectancy at birth is estimated at 71 years for men and 74 years for women** in India.

Source: Indian Express

2.Sathi portal and mobile app

Topic: Government Scheme



In News: The Union ministry of agriculture and farmers welfare has launched the Sathi (Seed Traceability, Authentication and Holistic Inventory) portal and mobile app.

More on the Topic:

- It is a centralized online system designed **to address seed production challenges, seed quality identification, and certification.**
- Developed by the **NIC in collaboration with the Union Ministry of Agriculture and Farmers Welfare**, the portal aims to curb the sale of spurious seeds and ensure quality seeds reach farmers.
- The portal, consisting of **integrated seed chain verticals**, will offer **quality assurance, seed source identification, and direct subsidies to registered farmers' bank accounts.**

About Seed Certification:

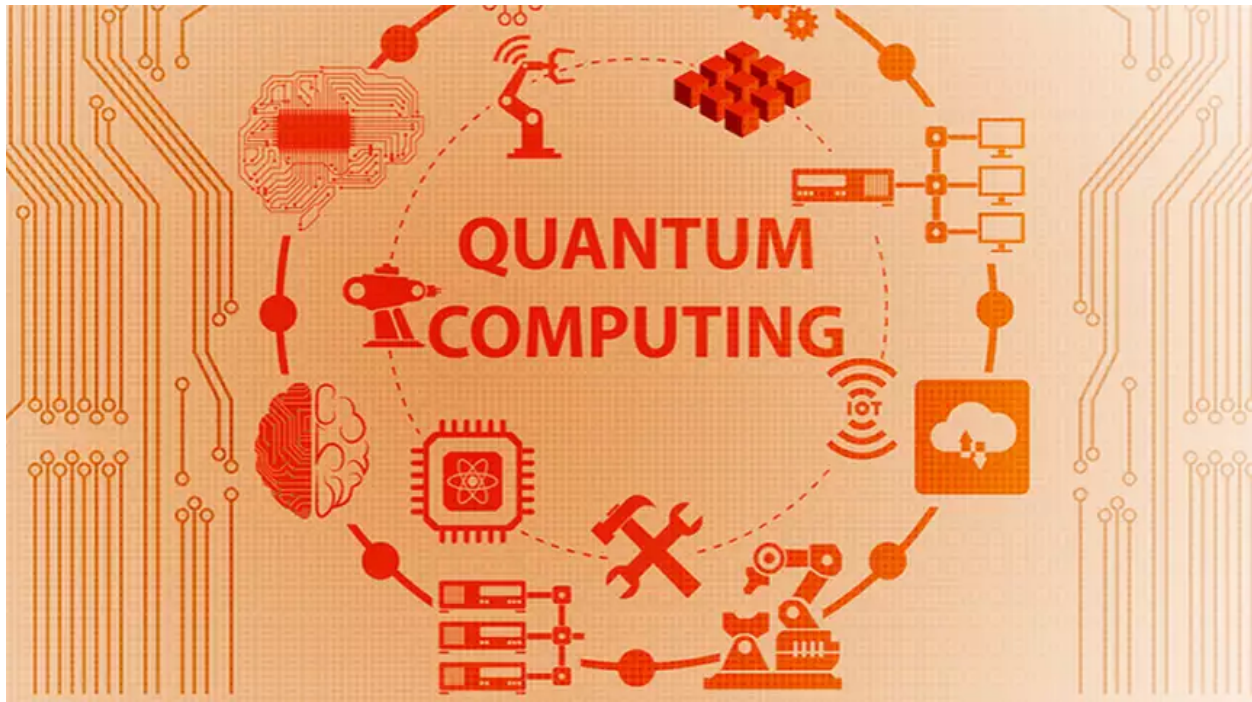
- Seed certification is **a process designed to maintain and make available to the general public continuous supply of high quality seeds.**
- Seeds with valid certification can **only be sold by valid licensed dealers to centrally registered farmers** who will receive subsidy through DBT directly into their pre-validated bank accounts.
- In India, legal status to seed certification was given by Enactment of Seeds Act, 1966. Seed certification is voluntary but labelling is compulsory in India.

- India established Protection of Plant Varieties and Farmers Rights (PPV&FR) Authority, under PPV&FR Act, 2001 to ensure availability of quality seeds and planting materials to farmers.

Source: Hindu

3. National Quantum Mission

Topic: Science and Technology



In News: The Union Cabinet approved the National Quantum Mission (NQM) in a bid to aid scientific and industrial research and development in quantum technology.

More on the Topic:

- The mission will be implemented from 2023-24 to 2030-31, and aims to put India among the top six leading nations involved in the research and development in quantum technologies.
- NQM will mainly **work towards strengthening India's research and development in the quantum arena** alongside indigenously building quantum-based (physical qubit) computers which are far more powerful and are able to perform the most complex problems in a highly secure manner.



Objectives of the Mission:

- It will **target developing intermediate scale quantum computers with 50-1000 physical qubits** in eight years in various platforms like superconducting and photonic technology.
- **Satellite based secure quantum communications** between ground stations over a range of 2000 kilometres within India
- **Long distance secure quantum communications** with other countries
- **Inter-city quantum key distribution** over 2000 km
- **Multi-node Quantum network** with quantum memories
- Develop **magnetometers with high sensitivity in atomic systems and Atomic Clocks** for precision timing, communications and navigation.
- **Support design and synthesis of quantum materials** such as superconductors, novel semiconductor structures and topological materials for fabrication of quantum devices.
- **Single photon sources/detectors, entangled photon sources** will also be developed for quantum communications, sensing and metrological applications.

Implementation Plan:

- **Four 'Thematic Hubs' (T-Hubs)** will be set up in top academic and national R&D institutes in the domains of quantum computing, quantum communication, quantum sensing and metrology, and quantum materials and devices.
- The hubs will focus on generation of new knowledge through basic and applied research as well as promote R&D.
- **DST will lead this national mission, supported by other departments.** Presently, R&D works in quantum technologies are underway in the US, Canada, France, Finland, China and Austria.

About Quantum Technology:

- Quantum Technology (QT) is a field of physics that applies the principles of Quantum Mechanics.
- QM describes the behaviour of matter and energy at an atomic/subatomic scale, where classical laws of physics do not apply.

Source: Hindu

4. Millets And Other Ancient Grains International ReSearch Initiative (MAHARISHI)

Topic: Government Schemes



In News: India has tabled MAHARISHI at the G20 Meeting of Agriculture Chief Scientists on “Sustainable Agriculture and Food System for Healthy People and Planet.”

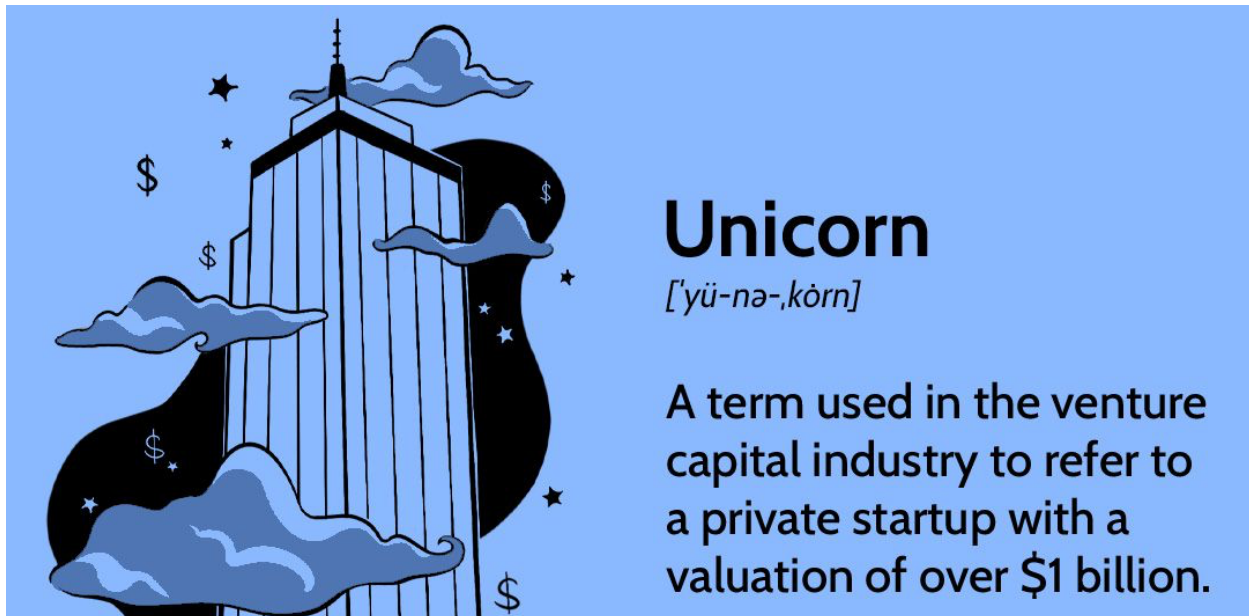
More on the Topic:

- MAHARISHI International Initiative will focus on Research and Awareness with agro-biodiversity, food security, and nutrition aligning with the International Year of Millets 2023.
- In these areas, options will be explored of G20 countries coming together to help sharing science-based technological and innovative solutions.
- Millets are known as **nutri-cereals or superfoods**, mainly grown on marginal land in dry areas of temperate, sub-tropical and tropical regions.

Source: Hindu

5.Global Unicorn Index

Topic: Economy



In News: The Hurun Research Institute's Global Unicorn Index 2023 was launched recently.

More on the Topic:

- India is the third-largest hub for startup unicorns, with a total of 68 companies in the billion-dollar valuation club.
- As per the index, India (68 unicorns) added 14 new unicorns since pandemic began and stands behind USA (666) and China (316).
- In business, a unicorn is a **privately held startup company valued at over US\$1 billion**. The term was first published in 2013, coined by venture capitalist Aileen Lee, choosing the mythical animal to represent the statistical rarity of such successful ventures.

Source: Business Standard

6. Kamakhya Temple Corridor

Topic: Art and Culture



In News: Assam is planning to construct a corridor at the Kamakhya Temple in Guwahati on the lines of the Kashi-Vishwanath Temple Corridor in Varanasi.

More on the Topic:

- Located by the banks of Brahmaputra in **Nilachal Hill in Guwahati**, Kamakhya Temple is considered one of the oldest and sacred places of worship.
- Temple is one of the **51 Shakti Peethas in country and dedicated to Goddess Kamakhya**.
- The temple has **four chambers including Garbha griha** (sanctum sanctorum), which is a cave under the ground level that houses a rock fissure instead of an idol. Three mandapas known as calanta, pancharatna and natamandira.
- Millions of pilgrims and tourists visit the temple every year, especially during the Ambubachi Mela held in June every year.

Source: Indian Express

7. Pahadi Korvas

Topic: Social Justice



In News: An event of mass suicide has been reported among the Pahadi Koreas tribe.

More on the Topic:

- The tribe is one of the 75 Particularly Vulnerable Tribal Groups (PVTGs) in country.
- They live mostly in mountainous regions and live in houses made of wood and bamboo. They are Hunter gatherers and practice subsistence farming.

About Particularly Vulnerable Tribal Groups (PVTGs):

- PVTGs are more vulnerable among the tribal groups.
- Due to this factor, more developed and assertive tribal groups take a major chunk of the tribal development funds, because of which PVTGs need more funds directed for their development.
- There are total 75 PVTGs out of 705 Scheduled Tribes, spread over 17 states and one Union Territory (UT), in the country (2011 census).

Government of India follows the following criteria for identification of PVTGs.

- Pre-agricultural level of technology
- Low level of literacy
- Economic backwardness
- A declining or stagnant population.

Source: Business Standard
