

IMPORTANT NEWS

Abhilekh Patal - A Portal with over 1 Crore Pages of Digital Records of National Archives

Inside Story of the News:

- **'Abhilekh Patal'**, a portal which now hosts more than one crore pages of historical records from the National Archives, recently received a lot of acclaim from Prime Minister Narendra Modi.
- It is a search portal of the department of archives which was launched in March 2015 as a reference media of historical records.
- To make the rich archival treasure available to researchers and users, the digitisation of historical records was started.
- The department has also started the Digital on Demand (DOD) process by putting an e-payment gateway in place.
- The government made the decision to open this portal and declassify Netaji Subhas Chandra Bose-related documents that had previously been in the "classified" category.
- On January 23, 2016, the PM complied with a long-standing popular demand by making 100 digital copies of Netaji-related data available to the general public.
- These files also began to facilitate scholars to carry out further research on Subhas Chandra Bose.
- In two batches, the National Archives of India later made digital versions of 75 declassified Netaji-related files available to the public.

India jumps 6 places in World Bank's Logistics Performance Index 2023

Inside Story of the News:

- The 7th edition of the **World Bank's Logistics Performance Index 2023 placed India 38th out of 139 nations**, an improvement of 6 places.
- On four of the six LPI metrics, India has made significant progress.
- This progress, which is being driven by Government's laser focus on reforms for enhancing logistical infrastructure, is a powerful indicator of India's place in the world.
- The government attributed the recent update to the PM GatiShakti National Master Plan, which was introduced in October 2021. The statement further said that PM GatiShakti answers the new demands for changing the logistics environment brought on by causes such as quick urbanisation, shifting energy preferences, e-commerce, the requirement to create resilient supply chains, etc.
- In addition, the National Logistics Policy (NLP), which serves as a guide for States or UTs wanting to develop logistics strategy, assisted India in rising in the rankings.

- The NLP emphasises the switch to more eco-friendly fuels and energy-efficient forms of transportation in order to lessen the carbon impact.
- The government also made investments in trade-related soft and hard infrastructure that linked the economic zones in the interior to port gateways on both coasts.
- The use of radio frequency identification (RFID) tags to containers as part of the NICDC Logistics Data Bank project has significantly improved cross-border trade facilitation since its implementation in the Western region of India in 2016 and scaled up to Pan India level in 2020.
- Additionally, by providing data on performance benchmarking, congestion, dwell time, speed, and transit time analysis, the Logistics Data Bank project encourages healthy competition among ports.
- Sagarmala and Bharatmala initiatives have been instrumental in increasing India's logistics efficiency.

PM Modi launches an integrated e-GramSwaraj and GeM portal

Inside Story of the News:

- On 24th April, a number of initiatives were unveiled by Prime Minister Narendra Modi, including the reconstruction of Gwalior Railway Station and the **integrated e-GramSwaraj and GeM portal** for public procurement at the panchayat level.
- On the National Panchayati Raj Day, the Prime Minister launched the eGramSwaraj-Government eMarketplace integration in Rewa, allowing the Panchayats to use GeM to make purchases of goods and services.
- Additionally, he launched the "Joint Steps towards Development" campaign and gave beneficiaries 35 lakh SVAMITVA property cards.
- In addition, PM Modi took part in a ceremony celebrating the "Griha Pravesh" of more than 4 lakh recipients of the Pradhan Mantri Awaas Yojana-Gramin.
- The Prime Minister laid the foundation stone for several Jal Jeevan Mission projects costing about Rs. 7,000 crore and other railway projects totalling about Rs. 2,300 crore, including 100% rail electrification in Madhya Pradesh.

DRDO and Indian Navy conduct successful trial of BMD Interceptor

Inside Story of the News:

- On April 21, 2023, the Indian Navy and the Defence Research and Development Organisation (DRDO) successfully completed the first flight test of a **sea-based endo-atmospheric interceptor missile** off the coast of Odisha in the Bay of Bengal.
- The trial's goal was to combat and defeat a hostile ballistic missile threat in order to advance India into the elite club of nations with a naval BMD capability.
- Before this, the DRDO successfully demonstrated a land-based BMD system that could counter ballistic missile threats posed by enemies.

- DRDO, Indian Navy, and industry members who participated in the successful demonstration of ship-based **ballistic missile defence** capabilities were commended by Raksha Mantri, Shri Rajnath Singh.
- The teams involved in the missile's design and development were praised by the Secretary of DDR&D and the Chairman of the DRDO, Dr. Samir V. Kamat. He said that the nation had developed extremely sophisticated network-centric anti-ballistic missile systems to achieve self-reliance.

IIT Madras researchers develop ARTSENS

Inside Story of the News:

- An innovative, non-invasive device called **ARTSENS** has been created by researchers at the Indian Institute of Technology Madras (IIT-M) to evaluate the condition and age of blood vessels and enable early screening for cardiovascular diseases.
- It has been developed so that even non-experts can use it to evaluate and forecast vascular health during routine medical examinations.
- It has been developed by the Healthcare Technology Innovation Centre at IIT-M and is powered by a proprietary non-imaging probe and an intelligent computing platform.
- Clinical trials for ARTSENS have been given the go-ahead in the US, Europe, and India.
- More than 5,000 people have been used in the device's evaluations.
- The IIT-M team plans to use this to do more than a million vascular screenings annually.
- After comprehensive testing, the product is prepared for technology transfer and commercialisation.
- The invention has already been granted five utility patents in the US, the EU, and India, ten design patents, and 28 other patents are pending in additional jurisdictions.
- Researchers at AIIMS New Delhi are using it to study and comprehend the physiological underpinnings of arterial ageing in various disease conditions, and researchers at Radboud University Medical Centre in the Netherlands are using it to look into the relationship between arterial age, physical (in)activity, and cardiovascular events.

Ministry of Civil Aviation launches UDAN 5.0

Inside Story of the News:

- The Ministry of Civil Aviation has begun the fifth round of the Regional Connectivity Scheme (RCS) - **Ude Desh Ka Aam Nagrik (UDAN)** to further improve connection to rural and regional areas of the nation and attain last mile connectivity after the first four rounds of bidding were successful.
- UDAN has shown to be the lifeblood of numerous regions, many of which are now well connected to other areas of the country.

- This improved and more powerful version of the plan will increase momentum, connect new routes, and get us one step closer to the goal of operationalizing 1,000 routes and 50 more airports, heliports, and water aerodromes soon.
- A wide range of stakeholders have benefited from the UDAN Scheme. Air connectivity has benefited passengers, airlines have benefited from incentives for operating regional flights, and unserved regions have benefited both directly and indirectly from it in terms of their ability to grow their economies.
- It is a step closer to the prime minister's goal of enabling low-cost, subsidised air travel for the common man.

Key features:

- This round of UDAN focuses on Category-2 (20-80 seats) and Category-3 (>80 seats).
- The earlier stage length cap of 600 km is waived off and there is no restriction on the distance between the origin and destination of the flight.
- Viability gap funding (VGF) to be provided will be capped at 600 km stage length for both Priority and Non-Priority areas which was earlier capped at 500 km.
- No predetermined routes would be offered. Only Network and Individual Route Proposal proposed by airlines will be considered.
- The airlines would be required to submit an action/business plan after 2 months from the issuance of LoA wherein they submit their aircraft acquisition plan/availability of aircraft, crew, slots, etc. at the time of the Technical Proposal.
- The same route will not be awarded to a single airline more than once, whether in different networks or in the same network.
- Exclusivity will be withdrawn if the average quarterly PLF is higher than 75% for four continuous quarters, to prevent exploitation of the monopoly on a route.
- 25% of the Performance Guarantee to be encashed for each month of delay up to 4 months, to further incentivize quick operationalization.
- Airlines would be required to commence operations within 4 months of the award of the route. Earlier this deadline was 6 months.
- A list of airports that are ready for operation or would soon be ready for operations has been included in the scheme to facilitate quicker operationalization of routes under the Scheme.
- Novation process for routes from one operator to another is simplified and incentivized.

India launches Operation Kaveri

Inside Story of the News:

- As the current turmoil in Sudan worsens, India has launched "**Operation Kaveri**," a significant mission to rescue thousands of citizens trapped in the violence-hit country.
- The Indian government and its embassy are working together as part of Operation Kaveri to secure the safe repatriation of Indian people who are stranded in parts of Sudan that are affected by the crisis.

- On April 24, 2023, this evacuation operation was started in response to the continued violence in the afflicted area.
- It bears the name "Kaveri," after one of India's largest rivers.
- The Indian government has assigned a group of officials, including representatives from the Ministry of External Affairs, the Indian Air Force, and the Indian embassy in Sudan, to oversee the correct evacuation procedure.
- During the evacuation, Indians are moved from Sudan to Khartoum, the country's capital, and then flown back to India.
- In order to ensure the seamless operation of the transit facility that India has established in Jeddah, Minister of State for External Affairs V. Muraleedharan is in charge of planning the evacuation of the city.

What is the crisis in Sudan?

- When widespread protests broke out in Sudan in April 2019 and military generals took over, President Omar al-Bashir was deposed. Following this, Sudan held elections in 2023 under the direction of a body that shared power, the Sovereignty Council.
- Two military and paramilitary generals got involved in a war that interfered with the plan for a transition to elections after the military overthrew the Abdalla Hamdok-led transitional government in October 2021.
- In December 2021, a tentative agreement for the transition to democracy was reached. However, as the news of the Rapid Support Forces' (RSF) integration with the Sudanese Armed Forces (SAF) was made public, the agreement ran into trouble. Tensions over resource management and RSF integration escalated into conflicts as a result of divergent views on the timing and security sector changes.
- The RSF and the Sudanese Army got into a fight over how to integrate the 10,000 RSF personnel and who should be in charge of the process. The army stated that it is most likely to happen in the next two years, despite RSF general Dagalo delaying the procedure for ten years. Tensions in Sudan have been caused by several disagreements.

Why is the rescue mission named "Operation Kaveri"?

- The name Kaveri was chosen for the rescue effort to convey a metaphorical meaning.
- One of India's biggest rivers, the Kaveri, passes through the southern states of Karnataka and Tamil Nadu. People in the area revere this river as the Goddess Kaveriamma and see it as sacred.
- To emphasise the significance that rivers achieve their goal despite the obstacles they encounter, this operation is dubbed Operation Kaveri. In this instance, River Kaveri is portrayed as a mother who will make sure to safely deliver her kids home.

Multinational Air Exercise INIOCHOS-23

Inside Story of the News:

- **Multinational Air Exercise INIOCHOS-23** is being conducted at Greece's Andravida Air Base from April 24 to May 4, 2023.

- The Indian Air Force (IAF) is participating in the exercise hosted by the Hellenic Air Force, the air force of Greece.
- The IAF is participating with four Su-30 MKI and two C-17 aircraft.
- The exercise's objective is to improve the participating Air Forces' international cooperation, synergy, and interoperability.
- Multiple types of air and surface assets are being used in a realistic combat scenario during the exercise.
- Additionally, it will allow the participating contingents to interact professionally, allowing them to learn from one another's best practises.

New injectable cell therapy may treat osteoarthritis

Inside Story of the News:

- Scientists have developed **a new injectable cell therapy for osteoarthritis** that, according to their research, both lowers inflammation and regenerates cartilage.
- The study, published in the journal Science Advances, set out to investigate what is taking place in the osteoarthritic joint environment that keeps the healing process from happening.
- Based on research and what is understood about functional tissue repair, a cell therapy that can reduce inflammation and restore cartilage has been developed.
- Progenitor cells and immune cells that have been triggered by cartilage to fight inflammation contribute to tissue healing.
- The combination of cells leads to simultaneous treatment of several of the aspects involved in osteoarthritis: synovial inflammation, cartilage degradation, subchondral bone sclerosis and innervation of pain sensory neurons.
- The treatment was examined in a pre-clinical model, and it was discovered that it might repair cartilage damage in the synovial membrane and reduce inflammation.
- A compassionate use trial including nine patients with osteoarthritis that had been confirmed and who had each received one or two injections was carried out to gauge clinical efficacy.
- Effectiveness was assessed using pain and functional living scores, pre- and post-treatment MRI scans, and a biopsy taken from one patient.
- The patients' quality of life, capacity to engage in leisure activities, and pain level all improved after treatment, according to the researchers.

About Osteoarthritis:

- Over 520 million people worldwide suffer from osteoarthritis, which causes pain and swelling. The usual cause is mechanical or traumatic stress on the joint, which results in damaged cartilage that cannot heal on its own.
- It is a disease of the joint system.
- The inside surface of the joint is lined with a connective tissue called the synovial membrane. The membrane serves to safeguard the joint and secretes a lubricant fluid including cell components necessary to preserve a wholesome environment and ensure friction-free mobility.

- When an injury develops in a healthy joint, the body summons a horde of inflammatory cells and sends them there to help remove the harmed tissues. However, a traumatic injury causes damage to the cartilage and synovial membrane in an osteoarthritic joint.
- Chronic inflammation in the surrounding tissues develops as the inflammation worsens over time, causing the cartilage that lines the joint bones to deteriorate. This hampers daily activities for patients and causes excruciating pain and swelling.

GSK launches Shingrix in India

Inside Story of the News:

- GlaxoSmithKline Pharmaceuticals Ltd. (GSK India) announced the much-awaited launch of its globally top-selling shingles vaccine **Shingrix (Zoster Vaccine Recombinant, Adjuvanted) in India, for the prevention of shingles (herpes zoster) and post-herpetic neuralgia** in adults aged 50 years and above.
- In 2017, the U.S. Food and Drug Administration (FDA) approved Shingrix for the treatment of persons 50 years of age or over who are at risk of developing shingles.
- In 2018, the European Commission approved Shingrix for use in people 50 years of age or older to prevent shingles.

About Shingles:

- The **varicella zoster virus (VZV)**, which also causes chickenpox, reactivates and causes shingles.
- By the age of 40, more than 90% of Indian subjects in a seroprevalence study had this virus in their bodies and were at risk for developing shingles.
- A rash with painful blisters spread across the chest, abdomen, or face is how shingles commonly manifests.
- Aching, burning, stabbing, or shock-like are common adjectives used to describe the discomfort.
- In every case, the rash goes away, but the agony frequently lasts for months or years.
- A person may also develop post-herpetic neuralgia (PHN) discomfort after the rash, which can continue anywhere between three months and many years.
- Due to decreased immunity, those over the age of 50 and those with chronic illnesses including diabetes, heart disease, and kidney disease are more likely to acquire shingles.
- Adults over the age of 50 have a 30% higher risk of developing post-herpetic neuralgia, and the pain is more debilitating in this group of people.
- Even psychological disorders and a greater reliance on caregivers may result from this suffering.
- In elderly folks, shingles can also result in consequences like hearing loss and vision loss.
- Depending on the patient's age, PHN affects 5-25% of all shingles cases, making it the most frequent consequence.

About Shingrix:

- Shingrix is the **world's first non-live, recombinant subunit vaccine** to be given intramuscularly in two doses.

- Shingrix combines the antigen glycoprotein E with the adjuvant system AS01B to produce a potent and long-lasting immunological response that can help counteract the immune system's deterioration with age.
- It can be given to people over 50 who are immunosuppressed or compromised and may be at an increased risk of developing Shingles.

UP completes distribution of 55,14,921 'gharaunis' under Svamitva scheme

Inside Story of the News:

- The state government recently completed the distribution of 55,14,921 '**gharaunis**' (**rural house records**) by the revenue department of Uttar Pradesh under the Svamitva scheme.
- The achievement was marked by the Prime Minister digitally presenting about 20,98,926 "gharaunis" to beneficiaries in Uttar Pradesh on National Panchayati Raj Day.
- The **Pradhan Mantri Svamitva Yojana** has so far given 55,14,921 "gharaunis" in 37,833 villages throughout the state, with the goal of establishing clear ownership of property in rural regions.
- This has been described as a step towards realising the concept of "**Rashetrodaya from Gramodaya**".
- On April 24, 2020, Prime Minister Narendra Modi launched the PM Svamitva Yojana.
- The objective of this scheme is to strengthen the ownership rights of the citizens on their land.
- The Gramin Svamitva Yojana has been linked to the e-Gram Swaraj portal as part of the scheme so that all applicants can view the specifics of their land online. This portal offers access to all land-related information online.

6,448 schools selected for upgrade under PM-SHRI scheme

Inside Story of the News:

- Under the **Pradhan Mantri Schools for Rising India (PM-SHRI) scheme**, 6,448 schools from 28 states and union territories have been chosen for upgrading.
- The majority of these schools are located in Uttar Pradesh, Andhra Pradesh, Telangana, and Maharashtra.
- The Union Cabinet approved the ₹27,360-crore scheme in September of last year to upgrade 14,500 schools nationwide over the following five years.
- The scheme is expected to benefit 1.8 million students, ensure that schools act as role models for educational institutions, and capture the spirit of the National Education Policy (NEP), 2020.
- Through an online portal that the Union education ministry launched in November, more than 200,000 eligible schools from across the nation submitted applications for the first round of upgrades under the scheme.
- To be chosen as PM-SHRI schools, urban schools had to receive a minimum score of 70%, while rural schools had to receive a minimum score of 60%.
- Three stages made up the selection procedure:

- States and UTs had to sign memoranda of understanding (MoU) pledging to fully implement the NEP in the first stage, with the Centre committing to support these schools in obtaining a stipulated level of quality assurance as PM-SHRI schools.
- The ministry's Unified District Information System for Education Plus (UDISE+) data from the relevant states were used in the second step to identify schools eligible to be selected under the plan based on a set minimum benchmark.
- The final stage required the chosen schools to compete for the status of PM-SHRI.
- The selection process was based on six broad parameters:
 - curriculum, pedagogy, and assessment
 - access and infrastructure
 - human resources leadership
 - inclusive practices and gender equity
 - management, monitoring, and governance
 - beneficiary satisfaction
- Gujarat (274), Assam (266), Punjab (241), Jammu and Kashmir (233), Karnataka (129), and Haryana (124) are some of the other states and UTs from which schools have been chosen for PM-SHRI upgradation.
- Additionally, 317 Navodaya Vidyalayas and 735 Kendriya Vidyalayas run by the central government have been chosen for the programme.
- All states and UTs have signed MoUs with the Union Education Ministry to implement the programme, with the exception of seven states- Delhi, West Bengal, Bihar, Odisha, Tamil Nadu, Kerala, and Jharkhand.

About PM-SHRI Schools:

- The **PM-SHRI schools** will have a modern, transformational and holistic method of imparting education.
- These schools will have cutting-edge facilities like labs, smart classrooms, libraries, sporting goods, art studios, etc.
- They will also be developed as "green schools" with water conservation, waste recycling, energy-efficient infrastructure, and the incorporation of an organic lifestyle into the curriculum.

Exercise Ajeya Warrior 2023

Inside Story of the News:

- The 7th edition of **joint military exercise "AJEYA WARRIOR-23"** between India and the United Kingdom is being conducted at Salisbury Plains, United Kingdom from 27 April to 11 May 2023.
- The latest edition of this exercise, which is a biennial training event with the United Kingdom and is hosted alternately in the United Kingdom and India, took place at Chaubatia, Uttarakhand, in October 2021.
- Soldiers of the 2 Royal Gorkha Rifles from the United Kingdom and Indian Army soldiers from the BIHAR Regiment are participating in the exercise.

- On April 26, 2023, a C-17 aircraft from the Indian Air Force carrying soldiers from the Indian Army arrived at Brize Norton.
- In addition to developing interoperability, bonhomie, camaraderie, and friendship between the two armies, the exercise aims to foster good military relations, absorb each other's best practises, and foster the ability to operate together while conducting company-level sub-conventional operations in urban and semi-urban environments under UN mandate.
- This exercise's scope includes a company-level Field Training Exercise (FTX) and a Command Post Exercise (CPX) at the battalion level.
- Participants in the exercise will take part in a range of missions designed to test their operational knowledge in a number of simulated scenarios, as well as to demonstrate and improve their tactical exercises and learn from one another's operational expertise.
- "Exercise AJEYA WARRIOR" is yet another notable accomplishment in the British Army and Indian Army's defence cooperation, further strengthening their bilateral ties.

Mysterious 900-foot-deep blue hole discovered in Mexico

Inside Story of the News:

- A **massive sinkhole** has been found by scientists off the Yucatan Peninsula's coast in Mexico.
- The **enormous blue hole**, which is about 900 feet deep, has been ranked as the **second-deepest** blue hole ever discovered.
- Blue holes are unique ecosystems that can be found on coastal karst platforms all over the world, including the Caribbean Sea and the Yucatán Peninsula.
- The **giant underwater cavern**, which covers an area of 13,660 square metres and is named **Taam Ja' (which in Mayan means "deep water")**, is situated near Chetumal Bay.
- Nearly circular on the surface, the submerged blue hole has steep sides that form a large conical structure that is covered in biofilms, sediments, limestone, and gypsum ledges.
- In *Frontiers in Marine Science*, researchers from the Department of Observation and Study of the Land, the Atmosphere, and the Ocean in Chetumal, Mexico, have published their findings on the blue hole.
- According to the study, the first record of this geomorphologic feature came about as a result of underwater exploration using scuba diving, thermohaline profiles, chemical analysis of water samples, and echo-sounding.
- The blue hole, which was initially found in 2021, might provide a window into how marine life has changed throughout the centuries.
- In the past, researchers have discovered bacteria in the Caribbean's blue hole at such depths where no other lifeforms have been discovered, demonstrating the evolution of life there.
- The blue hole was discovered in the middle of Chetumal Bay, where reports of submerged coastal karstic sinkholes known as "pozas" have been made.
- In September 2021, scientists used scuba diving to retrieve chemical water samples from the blue hole.

- Before developing steep, nearly vertical slopes, a succession of irregular terraces were seen near the eastern and northern sides of the blue hole at water depths.
- The blue hole's structure can be characterised as a conic, north-skewed shape with a volume of roughly one million m³.
- The blue hole's greatest water depth is over 270 mbsl, with the deeper sections being largely dispersed on the northern side.
- Inside the blue hole, the team noticed significant variations in salinity and temperature.
- Salinity readings at deep layers inside the blue hole revealed that saltwater is the primary water supply, although surface salinity values were indicative of the brackish conditions of the Chetumal Bay estuary.
- The **deepest blue hole** found on the planet is in the South China Sea and is 987 feet deep.

Manamadurai pottery receives a GI tag

Inside Story of the News:

- **Manamadurai in Tamil Nadu** gained notice on a global scale with the recent GI (Geographical Indication) tag for its **distinctive pottery**.
- The label protects the imitation of the pottery and guarantees authenticity.
- The pottery is made by the locals of Manamadurai in the Sivagangai district and is well-known for its special process, characteristics, and excellent quality.

What is special about Manamadurai pottery?

- The pot's strength comes from the proper ratio of mud, clay, and heating; it is mostly made from mud and water.
- The Vaigai River, which flows through the town of Manamadurai, enriches the clay used to make pottery.
- These pots need skill to make because the bottom must be perfectly spherical. The neck and circumference of the pot should also be balanced.
- These pots are a combination of the five elements of nature: earth, water, fire, sun, and air. The potters credit the uniqueness of this combination.
- Clay, which represents earth is combined with water. Then, this is baked in fire. The space is symbolised by the hollow the pot is encircled by, and the air is that which travels through the pores in the clay pot.

How are the pots made?

- To enhance the quality of the pottery, sand is added to the clay mixture.
- The mixture also contains additional ingredients like lead, graphite, calcium lime, sodium silicate, iron, etc.
- The elements are derived from the waters of Sundaranadappu, Seikalathur, Nathapurakki, and Nedunkulam.
- After two days of drying, this is sieved.

- The slurry is combined with the sand after being sieved.

Other GI-tagged products from Tamil Nadu:

- The Geographical Indications Registry recently identified 10 other products in addition to the Manamadurai pots.
- These include the Marthandam honey, Manapparai murukku, Salem sago, Authoor betel leaf, Negamam cotton sari, Myladi stone carvings, Thaikkal Rattan craft, Cumbum Panner Grapes, and Ooty Varkey.
- As a result, Tamil Nadu will have 56 items in all with GI tags.

Sanchi to become India's first solar city

Inside Story of the News:

- The Raisen district of **Madhya Pradesh's Sanchi, a world heritage site** of Buddhist Stupas, is slated to become **India's first solar city**.
- In MP, the use of solar energy is consistently advocated, and there are numerous solar power projects operating all around the state.
- The nation has taken notice of Madhya Pradesh's accomplishments in the field of renewable energy. Sanchi, a solar city, would offer MP a new identity in this industry.
- Further, new Anganwadi centres would be opened to complete the work of applications by eligible women under Mukhyamantri Ladli Bahna Yojana.
- Upgradation of government hospitals, conduct of regular meetings of health committees, and continuous review to reduce the maternal and new-born mortality rate will also take place.
- Review activities related to the operation of Gram Sabhas and supply of essential materials to tendupatta collectors under PESA rule in tribal-dominated areas in the state will take place too.

World Development Report 2023: Migrants, Refugees, and Societies

Inside Story of the News:

- The world population has reached eight billion people and is anticipated to continue to expand for decades, although many nations are currently experiencing a steep decline in the number of working-age adults.
- Global workforce and skill shortages will worsen, and many nations will need immigration to reach their full potential for long-term prosperity.
- The World Bank recently released a report named "**World Development Report 2023: Migrants, Refugees, and Societies**" that makes policy recommendations for improved migration management in countries of origin, transit, and destination. This report emphasises the necessity of these policies.

Match-Motive Framework:

- The "**Match-Motive Framework**," a labour economics-based strategy that emphasises how well migrants' skills and characteristics match the requirements of the destination nations, is introduced in the report.
- The framework also evaluates the factors that lead people to migrate in quest of opportunity and assesses the benefits that migration brings to migrants, origin countries, and destination countries.
- The approach combines "match" and "motive" to identify the top policy concerns for the global community as well as countries of origin, transit, and destination.

Policies for Origin and Destination Countries:

- According to the World Bank report, origin nations should explicitly include labour migration in their development strategy.
- Simultaneously, it is advised that the countries of destination encourage migration in fields where migrant workers are in high demand, work to integrate them into society, and address any social repercussions that might worry their citizens.
- The report also urges multilateral initiatives and international cooperation to improve how well the talents of migrants are matched with the demands of their new societies.

Population Shifts:

- There will likely be a population boom in many low-income countries, which will put pressure on them to create more employment possibilities for young people.
- While developed countries have already passed this point due to depopulation, developing and impoverished countries like India are seeing an increase in the number of young people.
- With a population of 47 million, Spain is expected to have a population decline of more than one-third by the year 2100, with the population's share of those 65 and older rising from 20% to 39%.
- Countries like Mexico, Thailand, Tunisia, and Turkey may soon need more foreign workers as their populations are no longer growing.

Exercise AGNI DAMAN-23

Inside Story of the News:

- The risk of fire has significantly increased with the arrival of summer and the exceptionally high temperatures that are common in Pune and the surrounding areas.
- A **mutual firefighting exercise** known as **AGNI DAMAN-23** was held at 29 Field Ammunition Depot, Dehu Road under the auspices of Headquarter Southern Command on April 28, 2023, to highlight the importance of raising men's awareness of and training in firefighting as well as to test the capabilities of combined forces of all agencies, including military and civil.
- A total of 56 firefighting columns including 32 from civil agencies like National Disaster Relief Force (NDRF), State Disaster Relief Force (SDRF), MC Alandi, Fire Department Pimpri Chinchwad,

PMRDA Akurdi, MIDC Ambi Talegaon, MC Talegaon Dhabade, Nagar Parishad Chakan, Main Fire Department Bhawani Peth, Tata Motors Ltd, Mahindra Vehicle Ltd and Bajaj Auto participated actively in the exercise.

- A coordinated effort was made to practise drills and procedures, including a quick reaction strategy for all sorts of fire.
- The drill was a ground-breaking effort to coordinate all of Pune's firefighting resources from the military and civilian establishment.
- Ex Agni Daman-22 gave the combatant personnel, including central and state authorities, the motivation and chance to coordinate firefighting and offer the most assistance to the afflicted areas in the shortest amount of time in order to save irreplaceable lives and valuable assets.

WHO launches PRET initiative

Inside Story of the News:

- The World Health Organization (WHO) has launched a new initiative to be better prepared for future outbreaks of a similar scale and devastation as the COVID-19 pandemic.
- The **Preparedness and Resilience for Emerging Threats (PRET)** initiative's mission is to offer guidance on integrated planning for responding to any respiratory pathogen, such as influenza or coronaviruses.
- While the SARS-CoV-2 outbreak and potential threat of an avian influenza outbreak will serve as the backdrop for PRET's current focus on respiratory viruses, work is already under way to determine which pathogens should be the next group to be mitigated as part of this initiative.
- The initiative was announced at the Global Meeting for Future Respiratory Pathogen Pandemics, which took place in Geneva, Switzerland, from April 24 to 26, 2023.
- The PRET monitoring framework, which is slated to be unveiled soon, includes a long list of tasks that nations are expected to complete by December 2025.
- The three-pronged strategy entails updating preparedness plans that state priority actions, increasing connectivity among stakeholders in pandemic preparedness planning through systematic coordination and cooperation, and committing sustained investments, financing, and monitoring of pandemic preparedness with a focus on bridging the gaps highlighted during the COVID-19 pandemic.
- The PRET Initiative ushers in a new era of pandemic preparedness and is a development of WHO's core activities to assist all member states in enhancing their capacities and capacities for health emergency preparedness, prevention, and response.
- The initiative can also be used to operationalize the Pandemic Accord's objectives and provisions, which is being negotiated by WHO Member States currently.
- The Working Group has concluded its third meeting, and discussions are also being held to modify the International Health Regulations.
- In the closed-door meetings, amendments pertaining to compliance, implementation, and public health responses were discussed.

IIT Madras researchers develop machine learning tool to detect tumour in brain, spinal cord

Inside Story of the News:

- A **machine learning-based computational tool** has been developed by IIT Madras researchers to improve the **diagnosis of cancerous tumours in the brain and spinal cord**.
- Named '**GBMDriver**' (**GlioBlastoma Mutiforme Drivers**), this tool is publicly available online.
- In the brain and spinal cord, Glioblastoma is a tumour that is rapidly and aggressively growing. Although research has been undertaken to understand this tumour, the therapeutic options are still limited, and the expected survival time after diagnosis is less than two years.
- To improve patient therapy options, it is critical to assess the functional effects of protein variations related to Glioblastoma. However, it would take a lot of effort to carry out functional validations to isolate driver mutations (disease-causing mutations) from all the observed variants.
- The GBMDriver has been developed specifically to identify driver mutations and passenger mutations in Glioblastoma.
- The important amino acid features for identifying cancer-causing mutations have been identified and the highest accuracy for distinguishing between driver and neutral mutations has been achieved.
- By aiding in the identification of possible therapeutic targets and helping to prioritise driver mutations in Glioblastoma, this tool could help in the development of drug design methods.