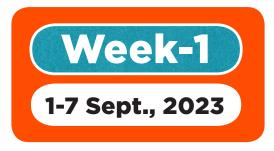




SEPTEMBER, 2023



** Useful for **

CSE, ESE, PSUs, State Services Exams, SSC and Banking Exams

1st SEPTEMBER, 2023

Mahendragiri : India's latest warship

• **Context:** India's latest warship, Mahendragiri will be launched at the Mazagon Dock Shipbuilders in Mumbai.

Key Highlights:

- Mahendragiri is the seventh and last stealth frigate of Project 17A.
- Mahendragiri is named after a mountain peak in Eastern Ghats located in the state of Orissa.
- Developed by Mazagon Dock Shipbuilders Limited
- It has been incorporated with improved stealth features, advanced weapons and sensors and platform management systems.

About Project 17A

- Project 17A is a follow-on of the Project 17 Shivalikclass frigate for the Indian Navy.
- A total of **seven ships** were built under Project 17-A. These are:
 - 1. INS Nilgiri
 - 2. INS Himgiri
 - 3. INS Udaygiri
 - 4. INS Dunagiri
 - 5. INS Taragiri
 - 6. INS Vindhyagiri
 - 7. INS Mahendragiri.
- The warships have been designed in-house by Indian
 Navy's Warship Design Bureau
- The four warships were built at Mazagon Dock Shipbuilders Limited. The remaining three were developed at Garden Reach Shipbuilders & Engineers (GRSE).
- Around 75% of warship equipment has been ordered from indigenous firms, including Micro, Small, and Medium Enterprises (MSMEs) adhering to Prime Minister's 'Make in India' call.

State of Food Security and Nutrition in the World (SOFI) Report

• **Context:** The 'State of Food Security and Nutrition in the World' (SOFI) 2023 report has been released with the theme "Urbanization, agrifood systems transformation, and healthy diets across the ruralurban continuum".

- SOFI is an annual flagship report jointly prepared byFood and Agriculture Organisation of the United Nations (FAO), International Fund for Agricultural Development (IFAD), United Nations Children's Fund (UNICEF), World Food Programme (WFP) and World Health Organisation (WHO).
- To inform on progress towards ending hunger, achieving food security and improving nutrition and to provide an in-depth analysis of key challenges for achieving this goal in the context of the SDG.
- India has the lowest cost of a healthy diet among BRICS nations and neighboring countries. However, a significant portion of the population can't afford it due to stagnant or decreasing incomes.
- For instance, meal costs in Mumbai increased by 65% in five years, while salaries/wages only grew by 28%-37%.
- In India, a healthy diet costs 3.066 PPP dollars per person per day, the lowest among the countries considered.
- PPP stands for 'Purchasing Power Parity'. In simple terms, 1 PPP dollar in the United States should buy the same amount of goods and services as 1 PPP dollar in, say, India or Brazil.
- In India, 74% were not able to afford a healthy diet, the fourth highest share among the nations considered.
- Between 2019 (before the COVID-19 pandemic) and 2021, the expense of maintaining a healthy diet increased by almost 9% in Asia — the highest across regions.
- Between 2019 and 2021, Asia and Africa saw the highest growth in the number of people who could not afford a healthy diet.

 In Asia, South Asia had the highest number of people (1.4 billion) and the highest share (72%) who could not afford a healthy diet.

Aatmanirbhar Bharat RozgarYojana (ABRY)

 Context: Aatmanirbhar Bharat RozgarYojana(ABRY) has exceeded its initial employment generation goals showcasing its success in fostering job creation and recovery during the COVID-19 pandemic.

Key Highlights:

- It was launched on 1st October, 2020.
- To incentivize employers for creation of new employment and restoration of loss of employment during Covid-19 pandemic.
- Under the scheme, the government of India for a period of two years, is crediting both the employee' share (12% of wages) and employer's share (12% of wages) of contribution for establishments with up to 1000 employees.
- For establishments with over 1000 employees, only the employee's EPF contributions (12% of wages) were covered in respect of new employees.
- An employee drawing a monthly wage of less than Rs. 15000/- who was not working in any establishment registered with the Employees' Provident Fund Organization (EPFO) before 1st October, 2020.
- The employees who lost their job during Covid-19 pandemic and did not join any EPF covered establishment upto 30.09.2020.
- The scheme commenced from 1st October 2020 and registration was open for eligible employers and new employeesupto 31st March, 2022.
- The scheme had set a target to benefit approximately 7.18 million employees across India.
- As of July 31, 2023, the ABRY has already achieved an enrolment of over 7.58 million new employees, surpassing its initial employment generation target.

2nd SEPTEMBER, 2023

World's first-ever prototype of the BS-VI Stage-II Electrified Flex Fuel Vehicle

• **Context:** The Union Road Transport Minister has launched the world's first-ever prototype of the BS-VI Stage-II Electrified Flex Fuel Vehicle in New Delhi.

Key Highlights:

- It is developed by Toyota Kirloskar Motor.
- The vehicle uses a mixture of fuel to drive the car. It includes ethanol, a biofuel produced from energy crops like sugarcane, maize and rice and an electric power.
- Electrified Flex Fuel Vehicle has both a Flexi Fuel engine and an electric power train. This gives it the ability to provide dual benefit of higher ethanol use and much higher fuel efficiency as is in case of a Strong Hybrid Electric Vehicle (SHEV), which can provide 30-50% higher Fuel Efficiency as it can run 40-60% in EV mode with engine shut off.
- It uses minimal advanced chemistry batteries. So, it also guards against possible Geo-political risks of battery raw material supplies.

Minor Irrigation (MI) Schemes

• **Context:** The Ministry of Jal Shakti has released the 6th Census Report on Minor Irrigation (MI) Schemes.

- Minor irrigation (MI) schemes are defined as those structures either in ground water or in surface water category having Culturable Command Area (CCA) up to 2,000 ha.
- Minor irrigation schemes are categorized into six types: Dug wells/dug-cum-bore wells, Shallow Tube wells, Medium Tube wells and Deep tube wells comes under the category of Ground water schemes whereas Surface flow schemes and Surface lift schemes comes under the category of Surface water schemes.

- There are 23.14 million minor irrigation schemes in
- India spread over 695 districts. Of these 21.93 million (94.8%) are groundwater and 1.21 million (5.2%) are surface water schemes.
- Dug wells have the highest share in MI schemes followed by shallow tube wells, medium tube wells and deep tube wells.
- Uttar Pradesh possesses the largest number of MI schemes in the country (17.2%) followed by Maharashtra (15.4%), Madhya Pradesh (9.9%) and Tamil Nadu (9.1%).
- There has been an increase of about 1.42 million in MI schemes with their number standing at 23.14 million during 6th MI Census as compared to 21.7 million in 5th Census.
- 96.6% of minor irrigation schemes are under private ownership whereas 3.4% are under public ownership. Therefore, most minor irrigation schemes are owned by individuals or groups of farmers.
- The most notable finding was that 18.1% of minor irrigation schemes are owned by women.

Index of Eight Core Industries

• **Context:** The combined Index of Eight Core Industries (ICI) has increased by 8.0% (provisional) in July 2023 as compared to the Index of July 2022.

Key Highlights:

- The production of Coal, Steel, Natural Gas, Cement, Electricity, Refinery Products, Fertilizers and Crude Oil increased in July 2023 over the corresponding month of last year.
- Index of Eight Core Industries(ICI) measures combined and individual performance of production of eight core industries viz. Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity.
- These Eight Core Industries comprise 40.27% of the weight of items included in the Index of Industrial Production (IIP).

About Index of Industrial Production (IIP):

- Index of Industrial Production is an index that measures growth of industrial production in India.
- This index classifies industries into the mining, manufacturing and electricity sector.
- IIP index is currently calculated using 2011-2012 as the base year.
- IIP data is compiled and released every month by the Central Statistical Organization (CSO).

3rd SEPTEMBER, 2023

Elephant Corridors of India 2023 report

• **Context:** Elephant Corridors of India 2023 report has been released.

- The report has been prepared by Project Elephant with technical support from the Wildlife Institute of India.
- Elephant corridors are linear, narrow, natural habitat linkages that allow elephants to move between secure habitats without being disturbed by humans.
- 150 elephant corridors have been identified in 15 elephant-ranging states.
- 40% of elephant corridors of India have reported an increase in use by the elephants.
- Around 29 corridors constituting 19% of the total have recorded a decline in use by the elephants over the years.
- These corridors are primarily affected by encroachment, mining activities, development of linear infrastructure such as roads and railway tracks and other human interventions.
- Further, around 10% of the elephant corridors have become impaired over the years.
- West Bengal has the highest number (26) of identified elephant corridors in India.
- There are six transnational corridors between India and Nepal.

 The report has recommended following measures to safeguard corridors. These measures are: Habitat enrichment, accurate demarcation, measures to check human interventions, and legal protection under appropriate laws at the state level.

One Nation, One Election

 Context: The Government of India has constituted a committee headed by former president of India Ram NathKovind to explore the possibility of "One nation, One election".

Key Highlights:

- The concept of "one nation, one election" refers to holding simultaneous elections across the country.
- It implies that elections for the Lok Sabha and state assemblies across India will be held simultaneously with voting presumably taking place around the same time.
- Simultaneous elections for the Lok Sabha and state assemblies were a norm in India till 1967. The Lok Sabha and state legislatures went to elections together in 1952 and 1957.
- In 1959, this cycle was first broken in Kerala when the government of Jawaharlal Nehru used Article 356 of the Constitution to dismiss the government of Chief Minister E M S Namboodiripad.
- In the 1967 elections, the Congress party suffered defeat in many states. But the governments were unstable, and many of these Assemblies were dissolved before their terms were over, resulting in the separation of the election cycles of many states from that of the Lok Sabha.
- In 2015, the Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice, headed by E M SudarsanaNatchiappan, compiled a report on 'Feasibility of Holding Simultaneous Elections to House of People (Lok Sabha) and State Legislative Assemblies'.

4th SEPTEMBER, 2023

Aarogya Maitri Cube

• **Context:** India has built the world's first disaster hospital that can be airlifted, packed in 72 cubes.It has been named as 'Aarogya Maitri Cube'.

Key Highlights:

- Aarogya Maitri Cube is the world's first disaster hospital that can be airlifted.
- It has been developed indigenously under the Project BHISHM (Bharat Health Initiative for Sahyog Hita and Maitri).
- It has been developed as part of India's 'Aarogya Maitri' initiative to provide essential medical supplies to friendly countries.
- Aarogya Maitri Cube is packed in 72 cubes. These cubes contain essential equipment and supplies, such as an operation theater, a mini-ICU, ventilators, blood test equipment, an X-ray machine, a cooking station, food, water, shelter, a power generator, and more.
- The special cage can hold 36 mini-cubes filled with supplies needed for 100 people to survive for two days.
- There are two of these cages, called master cubes, which can be joined to support 200 survivors.One of the major features of these cubes is their ability to handle various severe injuries, including bullet injuries, major bleeds etc.

Digital Public Infrastructure (DPI)

• **Context:** Digital public infrastructure (DPI) has been a key part of the government's overall narrative about India throughout its G20 presidency.

Key Highlights:

 Digital public infrastructure (DPI) refers to blocks or platforms such as digital identification, payment infrastructure and data exchange solutions that help countries deliver essential services to their people, empowering citizens and improving lives by enabling digital inclusion.

Current Affairs Week-1 01st September - 07th September

- India's Digital public infrastructure (DPI) is known as India Stack. It is the name used to describe a collection of disparate technology products and frameworks. The components of this collection are owned and maintained by different agencies.
- The overall architecture of India Stack has three key layers identity, payments, and data management.
- It is centered around Aadhaar, India's national identity program. It can be used to remotely authenticate via two-factor or biometric authentication, receive digitally signed records such as driver's licenses, educational diplomas, and insurance policies, and sign documents or messages using a governmentbacked digital signature service.
- UPI forms the second layer as it is designed to enable interoperability between money custodians, payment rails and front-end payment applications. The technology, which is in the custody of the National Payments Corporation of India (NPCI), has been licenced to several third-party private entities such as PhonePe, Google Pay and Paytm.
- It focuses on creating a new model for data governance. It operates as per a policy called the Data Empowerment and Protection Architecture (DEPA), which at its core has the institution of a consent management system — which will allow the sharing of the information — with a view to provide better financial, health and telecom-related products and services to individuals and firms.
- India has launched the Digital Public Infrastructure (DPI) partnership to enable countries, especially low and middle-income brackets, to learn from its experiences in harnessing technology to improve governance, and for social, economic, digital and sustainable development.
- India also introduced the idea to form an alliance of countries called One Future Alliance which would allow like-minded nations to use technology to improve people's lives.
- India signed MoUs with Armenia, Sierra Leone, and Suriname to share its successful digital solutions implemented at scale through the India Stack.

 Draft Public Key Infrastructure (PKI) Mutual Recognition Framework has also been released by the Ministry of Electronics & IT, Government of India with an aim to take the lead on the subject of implementation and adoption of India's DPI beyond the country's borders

5th SEPTEMBER, 2023

Amrit Kalash Yatra

• **Context:** Union Home Minister launched the Amrit Kalash Yatra under the 'Meri Mati-Mera Desh' campaign in New Delhi

Key Highlights:

- Under this, 7500 pots with soil or grains collected from every household, ward and village will reach New Delhi between 28th and 30th of October.
- Prime Minister Shri Narendra Modi will put soil from these Amrit Kalash in the Amrit Vatika created at Delhi in honour of great veers, which will keep on reminding every citizen that we must make India great during the period of Amritkal.

About Meri Maati Mera Desh:

- "Meri Maati Mera Desh", with the tagline `Mitti ko naman, veeron ka vandan`, is a nationwide and people led "Jan bhagidari" initiative to commemorate 75 years of India's independence.
- It is the finale of Azaadi ka Amrit Mahotsav program.
- It is a tribute to the Veers and Veeranganas who have made the supreme sacrifice for the country.
- This campaign comprises many activities and ceremonies conducted across the country at Panchayat/Village, Block, Urban Local Body, State and National levels

G20 THINQ

 Context: The Indian Navy had scaled up the Inter School Quiz competitions, held at various stations to a National Level School Quiz Competition – The Indian Navy Quiz (THINQ).

Key Highlights:

- The event is being conducted by the Navy under the aegis of the G20 Secretariat and in partnership with NWWA (Navy Welfare and Wellness Association).
- It will have two levels: National and International. The National Round of the G20 THINQ will see the participation of school children studying in Classes IX to XII.
- On completion of the national round, the two best quizzers among all finalists will be chosen to represent Team India in the international round.
- The International Round of G20 THINQ will see a representation from across the world. This round will see the participation of teams from G20+9 nations, each team comprising two students.

Air Quality Life Index

• **Context:** The Air Quality Life Index 2021 has been released.

Key Highlights:

- It was released by Energy Policy Institute at the University of Chicago (EPIC)
- It is a pollution index that quantifies the relationship between long-term exposure to particulate pollution and life expectancy.
- Pollution remains the foremost external threat to human health around the world.
- Its impact on life expectancy rivals that of smoking, surpassing alcohol use, unsafe water, and even exceeding car crash injuries.
- If the world were to permanently reduce fine particulate pollution (PM2.5) to meet the World Health Organization's (WHO) guideline, the average person would add 2.3 years onto their life expectancy.
- South Asia is home to the four most polluted countries in the world and nearly a quarter of the global population. Between 2013 to 2021, particulate pollution in South Asia surged by 9.7%, which is estimated to reduce life expectancy in the region by an additional six months.

- Bangladesh, India, Nepal, and Pakistan where 22.9% of the global population lives are the four most polluted countries in the world. In Bangladesh, people potentially lost an average of 6.8 years of life due to air pollution not meeting WHO guidelines.In contrast, the average person from the U.S. lost just 3.6 months.
- China stands out due to its success in reducing pollution by a staggering 42.3% from 2013 to 2021 and extending the average life expectancy of its population by 2.2 years. This reduction can be attributed to the country's policy initiatives to combat pollution in 2014.
- India is the second-most polluted country in the world in 2021.
- The average Indian resident is set to lose 5.3 years of life expectancy if WHO guidelines remain unmet. In contrast, cardiovascular diseases reduce the average Indian's life expectancy by about 4.5 years, while child and maternal malnutrition reduces it by 1.8 years.
- Delhi is the world's most polluted city. If the PM2.5 level in Delhi is reduced to meet the WHO guideline, a resident in Delhi could gain 11.9 years in life expectancy.
- Northern plains, which is home to over half a billion people and 38.9% of India's population, is the most polluted region.
- The northern plains include the States and Union Territories of Bihar, Chandigarh, Delhi, Haryana, Punjab, Uttar Pradesh, and West Bengal.
- In the northern plains, the average resident is set to lose about 8 years of life expectancy if pollution levels persist and policies do not succeed in reducing pollution to levels as prescribed by the WHO.

6th SEPTEMBER, 2023

Kerala 'Pulikkali'

 Context: The traditional folk dance of Kerala 'Pulikkali' was performed on the occasion of Onam. Current Affairs Week-1 01st September - 07th September

Key Highlights:

- Pulikkali (Tiger Dance) is one of the folk art forms of Kerala.
- The artists wear a tiger mask, paint their bodies like tigers and dance to the rhythm of traditional percussion instruments such as thakil, udukku and chenda.
- It is performed on the fourth day of Onam festival.
- It is believed to have originated two centuries ago as a street dance form and became part of Onam celebrations later.
- It is said to have been introduced by the erstwhile ruler of Cochin, Maharaja Rama Varma Sakthan Thampuran.
- The main theme of this folk art is tiger hunting with participants playing the role of tiger and hunter.
- Usually, men and children perform this art form. For the first time, 3 women among a 51-member team participated in the Pulikali at Thrissur in 2016.

Aditya L-1 Mission

• Context: Recently, ISRO launched Aditya L-1, its first space-based mission to study the Sun, from the Satish Dhawan Space Centre in Sriharikota.

Key Highlights:

- The solar probe was carried into space by the Polar Satellite Launch Vehicle (PSLV) in 'XL' configuration.
- The PSLV will initially place the Aditya L-1 in a lower Earth orbit. Subsequently, the orbit as well as the velocity of the spacecraft around the Earth will be increased using onboard propulsion till it is slingshot towards the Sun.
- The spacecraft will finally be stationed in a halo orbit around the Lagrange point 1 (L1) of the Sun-Earth system, which is about 1.5 million km from the Earth.
- Named after the rising Sun, the Aditya L-1 will cover its journey to the L1 point in about four months.

Study the Sun from Space:

 The Sun emits radiation along with various energetic particles and magnetic fields. But, the atmosphere of the Earth as well as its magnetic field acts as a protective shield and blocks a number of harmful radiations.

• This means studying the Sun from Earth can't provide a complete picture and it becomes crucial to observations from outside the planet's atmosphere i.e., from space.

7th SEPTEMBER, 2023

Project TAMARA

• **Context:** The Technology Development Board (TDB) has introduced a project called "Development and Commercialization of Intelligent Water Body Management System (IWMS)-TAMARA.

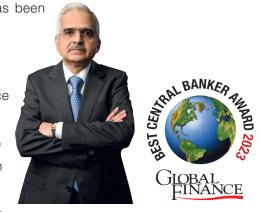
- This project is in line with AMRUT 2.0 mission which has the specific goal of preserving water bodies and promoting a circular water economy, aligning with the principles of Blue Economy.
- It is a smart aeration system with sensors and IoTbased technology to manage water quality.
- It not only improves wastewater but also ensures that water bodies and aquaculture ponds stay clean and healthy.
- This system comprises of several key elements:
 - 1. Smart Sediment Aeration System: It helps to bring more oxygen to the bottom of water bodies.
 - 2. Smart Climate-Driven Water Quality Monitoring System: It helps to control the level of nutrients in the water and how much oxygen is in it.
 - 3. Smart Weed Harvester System (PLASHBOT): This system removes unwanted plants from water bodies.
 - 4. Communication System and Data Protection: This system uses a special kind of technology to send and receive data between devices.

Central Banker Report Cards 2023

• **Context:** Reserve Bank of India (RBI) Governor Shaktikanta Das has been rated 'A+' in the Central Banker Report Cards 2023.

Key Highlights:

- The Central Banker Report Cards, published annually by Global Finance since 1994, grade the central bank governors of 101 key countries.
- Global Finance's annual Central Banker Report Cards celebrate those bank governors whose strategies outperformed their peers through originality, creativity and tenacity.



 The Bank Governors who earned an 'A+' grade in the Global Finance Central Banker Report Cards 2023 are Shaktikanta Das from India, Thomas J. Jordan (Switzerland) and Nguyen Thi Hong (Vietnam).

