POLITY AND GOVERNANCE

Context: Major Factors Responsible for Wage Inequality in India, Issues Arising Out of Design & Implementation of Policies.

In News, why?
- According to recent data released by the Reserve Bank of India, there are notable discrepancies in the wages of farm and non-agricultural workers in rural India across several states.
- The large differences in rural earnings between states highlight the necessity of fair distribution and measures that close this gap, guaranteeing a more balanced living for both agricultural and non-agricultural workers across the country.

Which are the RBI's Major Takeaways from the Data on Rural Wages?
- Rural Economic Disruptions: The Covid-19 epidemic, which affected employment and income levels, presented difficulties for the rural economy in the fiscal year 2021–2022.
- Consequently, high rates of inflation and rising interest rates caused severe disruptions to rural demand in the fiscal year 2022–2023.
- These elements had a significant impact on rural communities' access to employment and stability of income.

Rural Wage disparities:
- The livelihoods of rural households are impacted by Madhya Pradesh's rural wages, which are Rs 229.2 and Rs 246.3 per day, respectively, for agricultural and non-agricultural workers, which are substantially less than the national average.
- Kerala is the state with the highest pay overall, with rural farm laborers making Rs 764.3 a day.
- Kerala and Madhya Pradesh have wages for rural construction workers that are at opposite ends of the spectrum, at Rs 852.5 and Rs 278.7 per day, respectively.

Average Wages across the Nation:
- Workers in agriculture: Rs 345.7
- Workers outside of agriculture: Rs 348
- Workers in construction: Rs 393.3
- Stagnant Rural Income Growth: Although there were a few wage growth peaks in 2022–2023, rural income prospects stayed muted, which signified a partial rebound in the unorganized sector of the economy and stagnated real rural wage growth.
- For example, in 2022–2023, the demand for MGNREGA jobs decreased but stayed greater than pre–pandemic levels, indicating an inadequate recovery, particularly in the unorganized sector.

What Are the Principal Causes of India's Wage Inequality?

Economic Development Disparities:
- Significant salary disparities can be found in states or regions with differing degrees of economic development.
- Compared to agrarian-centric communities, advanced industrial zones typically offer higher-paying non-agricultural jobs.

Interventions in Policy:
- Wage differences are also a result of various state-level minimum wage, labor laws, and social security programs.
- States with strict labour regulations might pay more, but they might also have fewer job openings.

Market forces and demand-supply dynamics:
- The market's need for particular labour or talents is typically reflected in wage rates. Pay tends to be higher in areas where labour supply is limited and demand is higher in specific industries.

Cost of Living and Standard of Living:
- Differences in living expenses, housing costs, and other necessities have a direct bearing on salary differences. Greater pay are frequently offered to make up for better living standards or greater costs of commodities in a certain area.

Geographical Factors and Agricultural Cycles:
- The availability of jobs in rural locations is influenced by both agricultural cycles and weather conditions.
- Seasonal pay changes may result from dependency on agricultural operations and seasonal fluctuations.

Migration and Labour migration:
- Labour migration from low-wage to high-wage regions leads to wage disparities, which affect the economies of both the source and destination countries.

Which Indian government initiatives are related to this?

The National Rural Employment Guarantee Act of Mahatma Gandhi

- The Atmanirbhar Bharat Rojgar Yojana (ABRY), the National Career Service (NCS) Project, the Rural Self Employment Training Institute (RSETI),
- the Dindayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM), and PM Kaushal Vikas Yojna

The Way Ahead

- Agricultural diversification is the process of fostering related industries including fisheries, agro-processing, and animal husbandry in order to diversify rural economies.
- This could provide other revenue streams, lowering reliance on agriculture alone and raising total income.
- Adoption and Innovation of Technology: Using new technologies to improve agricultural methods and increase output. Incomes in rural areas can be increased by having access to modern farming equipment, techniques, and markets.
- Infrastructure development is the process of making investments in rural areas' improved roads, irrigation systems, and connections.
- Better infrastructure can bring industries to remote areas, improve economic activity, generate job opportunities, and raise wages.
- Put the welfare of migrant workers first by putting laws protecting their rights and means of subsistence into place. Ensuring equitable compensation, sufficient living standards, and social security benefits for this working population might encourage a balanced labour force distribution among states.
- Encouragement of Agri-business: Give prospective agripreneurs market access, mentorship, and incentives in order to promote and support their rural business.
- This might have a knock-on effect, increasing wages in rural areas and producing jobs.

SECURITY

Context: The Civil Aviation Security and the NIA The involvement of external state and non-state entities in posing obstacles to domestic security.

In News, why?

- In relation to the Air India threat, the National Investigation Agency (NIA) has filed a charge against a founder of Sikhs for Justice (SFJ) and a Khalistani Terrorist.
- India outlawed the SFJ in 2019 on the grounds that it was a "unlawful association" and that it had engaged in "anti-national and subversive" actions.
- The Unlawful Activities (Prevention) Act and the Indian Penal Code (IPC) were used by the NIA to prosecute SFJ.

The National Investigation Agency (NIA): What is it?

About:

- The National Investigation body (NIA) is a federal body under the jurisdiction of the Indian government that looks into and prosecutes offenses pertaining to national security, terrorism, and insurgencies.
- Generally speaking, federal authorities in a nation have authority over issues that impact not just one or more states or provinces but the entire nation.
- It was founded in 2009 in the wake of the 2008 terrorist attacks in Mumbai and is run by the Ministry of Home Affairs under the National Investigation Agency (NIA) Act, 2008.
- In July 2019, the NIA Act, 2008 was amended by the National Investigation Agency (Amendment) Act, 2019.

Function:

- State police forces and other agencies' investigations into instances involving terrorism may be taken over by the NIA. It also has the power to look into issues across state lines without first getting approval from state authorities.
- It collaborates on counterterrorism and national security issues with various law enforcement authorities in India and abroad.

Examine:

- Under Section 6 of the NIA Act 2008, the State government may refer instances pertaining to scheduled offenses to the Central government for an NIA inquiry.
- On its own initiative, the Central government may also order the NIA to look into a scheduled offense that occurs inside or outside of India.
- The NIA requests permission from the Central government to prosecute the accused under the UAPA and for a few other listed offenses.
- Left Wing Extremism (LWE) crimes pertaining to the funding of terrorism are handled by a dedicated cell. The NIA has the authority to look into any related offences while looking into a scheduled offence. Ultimately, the cases are brought before the NIA Special Court following an investigation.

2

How is aviation security regulated in India, and what does it mean?

About:
- Civil aviation security is the term used to describe the procedures and policies put in place to protect civil aviation against unauthorized intervention, including threats, hijackings, terrorist acts, and sabotage.
- The goal of these security protocols is to protect travelers, flight attendants, aircraft, and airport infrastructure.

Controlling Bodies:
- In India, the national authority overseeing civil aviation security is the Bureau of Civil Aviation Security (BCAS).
- In January 1978, the BCAS was first established as a Cell within the DGCA, following the Pande Committee's recommendation. In 1987, the BCAS was restructured into a separate department under the purview of the Ministry of Civil Aviation.
- Air transport services to, from, and within India are governed by the Directorate General of Civil Aviation (DGCA). It also upholds airworthiness requirements, air safety laws, and civil aviation rules.

Guidelines:
To improve civil aviation security in accordance with international agreements, the Ministry of Civil Aviation has introduced the Aircraft (Security) Rules, 2023.

International Civil Aviation Convention:
- Established in 1944 under the supervision of the International Civil Aviation Organization (ICAO), a specialized body of the United Nations, it is widely known as the Chicago Convention.
- The fundamental agreement for international civil aviation is the Chicago Convention. It contains rules pertaining to aviation security as well as guidelines and criteria for the safe and orderly growth of international civil aviation.

PRELIM FACTS

1.Mythimna separata

Context: Continuous warm temperatures for prolonged periods may have led to the serious Mythimna separata pest infestation in Assam that damaged paddy crops in at least 15 districts.

About Mythimna Separata:
- It is a typical long-distance migratory insect that is a major, polyphagous pest of grain crops in China and other Asian countries.
- The pest was first reported as a sporadic pest in Tamil Nadu in 1937 and Kerala and Odisha in 1957.
- The pest is known as the ear-head-cutting caterpillar, rice ear-cutting caterpillar, or armyworm.
- It feeds on leaves and can cut off panicles from the base of a crop plant.
- It frequently leaves the field looking like it has been grazed by cattle.
- During an outbreak, the pest multiplies in large numbers and moves in swarms from field to field, like an army, to feed and attack the crops.
- Favourable condition: An increase in temperatures with dryness creates a favourable condition for the pest population to increase.

What is a polyphagous pest?
Polyphagous insect pests are primarily agricultural pests that feed on economically important agricultural and horticultural crops of wide taxonomic diversity across the globe.

2.Investor Risk Reduction Access platform

Context: Recently, the chairperson of the Securities and Exchange Board of India (SEBI) launched the Investor Risk Reduction Access platform.

About the Investor Risk Reduction Access Platform:
- It has been developed to reduce risks faced by investors in the eventuality of technical glitches at the trading member's end at both the primary site and disaster recovery site.
- Its purpose is to provide investors with an opportunity to square off/close their open positions and cancel pending orders using the IRRA platform in case of technical glitches or unforeseen outages that render the trading member's site inaccessible.
- It has been designed to reduce risks for investors participating in the market.
- It is not meant for taking fresh positions or orders, but only to cancel the pending orders.
- This platform will be available to trading members supporting internet-based trading (IBT) and Security Trading through Wireless Technology (STWT) for their investors. However, it will not be accessible for algo trading and institutional clients.
- It has been jointly developed by all the stock exchanges – BSE, NSE, NCDEX, MCX and Metropolitan Stock Exchange of India (MSE).

3

How will this platform work?
- Stock exchanges can also monitor parameters like connectivity, order flow, and social media posts, and Suo moto initiate the enablement of the IRRA service if needed, irrespective of any such request by the trading member.
- This service shall be enabled by the exchanges, Suo moto, only in case of disruption of trading services of trading member across all the exchanges, where the trading member is a member
- On invocation, after basic checks, the platform downloads trades of the trading member from all the trading venues and sends SMS/email to investors using internet trading or wireless technology, along with a link to access IRRA.
- Once the trading member is migrated to the IRRA platform, the investors of the affected trading member will be enabled to access the IRRA platform through a secure login system using their Unique Client Code (UCC) or investor's PAN number.

3.Large Ozone holes reappear over Antarctica: Study
As per recent study, from 2020- 22, ozone hole has grown larger and thinner over Antarctica. Since 2004, researchers saw a total reduction of 26% at the core of ozone hole.
- Ozone hole is a region of exceptionally depleted ozone in the stratosphere over Antarctic.
- Ozone is a highly reactive molecule formed of three oxygen atoms found primarily in two regions of atmosphere.
  ➢ **Potential drivers of ozone hole over Antarctica**
- Changes in Antarctic polar vortex (Stratospheric wind pattern with a vast swirl of low pressure and very cold air, high above South Pole).
- Aerosols from wildfires and volcanic eruptions.
- Changes in solar cycle.
- Climate change and increased atmospheric abundance of Chlorofluorocarbons (CFCs).
➢ **Ozone layer** is a thin shield of gas in Earth's atmosphere that protects the Earth, absorbing the sun's ultraviolet rays
➢ Human-made greenhouse gases known as **Ozone-Depleting Substances** (ODSs) have been destroying the ozone layer.
- Major ODSs includes chlorine, bromine, CFCs, carbon tetrachloride, halons etc.
- Montreal Protocol on Substances that Deplete Ozone Layer, 1987 aims to phase out production and consumption of ODSs.
- According to United Nations Environment Programme, ozone layer is on track to recover within four decades.

4. Digital Twins
Context: Genesys International (3D mapping company), and Survey of India (SoI) announced a partnership to create digital twins of major cities and towns.
About:
- It will provide previously unavailable data layers, including high-precision 3D data, digital terrain models, digital surface models etc.
- Digital twin is a digital representation of a physical object, person, or process, contextualized in a digital version of its environment.
- It can help an organization simulate real situations and their outcomes, ultimately allowing it to make better decisions.
- SoI is National Mapping Agency of country under Department of Science & Technology.

5.Prime Minister of India announces launch of Global Digital Public Infrastructure Repository (GDPIR) and Social Impact Fund (SIF)
Both GDPIR and SIF are India led initiative, announced during Virtual G20 Leaders' Summit.
- Earlier, consensus was achieved at G20 Digital Economy Working Group on creation of a GDPIR for exchange of information and best practices.
➢ GDPIR, developed by Ministry of Electronics and Information Technology, is a comprehensive resource hub, pooling essential lessons and expertise from G20 members and guest nations.
- Its aim is to bridge knowledge gap required for design, construction, deployment, and governance of DPIs.
- GDPIR showcases information in a standardized format from countries that have developed DPIs at scale, incorporating governance frameworks etc.
- Currently, GDPIR features 54 DPIs from 16 countries.
➢ SIF is envisioned as a government led multi-stakeholder initiative to fast-track DPI implementation in global south.
- India has pledged an initial commitment of 25 million USD to SIF.
- It will offer financial support to provide technical and nontechnical assistance to countries in developing DPI systems.
- It offers a platform for all relevant stakeholders, to contribute to this fund and help accelerate achievement of Sustainable Development Goals in Low- and Middle-Income Countries through DPIs.

4

ANSWER WRITING

Examine the moral dilemmas surrounding digital privacy and data security in the public sector given the growing use of technology and data in governance.

Introduction,

With the growing use of technology and data in governance, two significant ethical challenges are raised: digital privacy and data security. The public sector gathers, uses, and distributes different kinds of data from people, companies, and other organizations for a range of functions, including national security, law enforcement, policymaking, and service delivery. The rights and interests of data subjects as well as the general public are seriously jeopardized by these data activities.

Among the moral dilemmas involving data security and digital privacy are the following:

Invasion of Digital Privacy:
- Data Collection and Surveillance: For a variety of reasons, including public services, law enforcement, and health management, governments frequently gather enormous volumes of personal data from their residents.
- Concerns regarding privacy violations are raised by the indiscriminate gathering and monitoring of personal data.

Social Profiling:
- Social profiling is the process of classifying people according to their online activity and personal data
- It is facilitated by the application of sophisticated data analytics and algorithms Decisions
  - **Data Protection:**
  - **Cyber security Vulnerabilities:** Because of the sensitive information it contains, the public sector is a prime target for hackers. To protect citizen data, strong cybersecurity measures are necessary. When governments don't sufficiently preserve this data, ethical issues come up.
  - **Data breaches:** Incidents of data breaches, where sensitive information is exposed, can have severe consequences for individuals. Ethical dilemmas arise when governments are found responsible for such breaches, leading to a breach of trust.
  - **Openness and Responsibility:**
- **Lack of Transparency:** Suspicions of data abuse or misuse may arise from government entities' opacity regarding the gathering, storing, and use of data. Establishing transparency in these procedures is essential to fostering confidence.
- **Accountability Deficits**: Because government structures are complicated, it can be difficult to hold people or agencies accountable when data misuse happens in the public sector. When people who violate privacy or cause data breaches escape punishment, ethical questions are raised.
  - **Innovative Technologies and Biometrics:**
  - **Biometric Information:** Using biometrics to identify someone can improve security, but it also presents ethical questions about how such personal information might be misused.
  - **Artificial Intelligence (AI):** The deployment of AI in public sector operations can lead to ethical dilemmas related to bias in algorithms and decision-making processes. Ensuring fairness and equity is a significant challenge.

Conclusion:

The public sector faces serious ethical difficulties with digital privacy and data security as a result of the growing use of technology and data in governance. To ensure that the advantages of digital governance are realized while protecting individuals' rights and privacy, addressing these ethical issues calls for extensive legislation, open policies, cyber security investments, and constant oversight. An important step in this direction is the Digital Personal Data Protection Act of 2023, which creates a framework for the handling of personal data in India.

MCQs

1. Recently, 'Mythimna Separata' was in the news. It is species of
   a) Earthworm
   b) Green-blue Algae
   c) Polyphagous pest
   d) Weed

2. Consider the following statements regarding 'Investor Risk Reduction Access Platform'

   1. It has been developed to reduce risks faced by investors in the eventuality of technical glitches at the trading member's end at both the primary site and disaster recovery site.

   2. This platform will be available to all trading members including the algo trading and institutional clients.

   3. It is developed by SEBI with the help of National Stock Exchange (NSE).

   How many of the above-mentioned statements are correct?

   a) Only one
   b) Only two
   c) All three
   d) None

5

3. With reference to Aadhar and its Authentication, consider the following statements :

1. Aadhaar is a 12-digit individual identification number issued by the Unique Identification Authority of India on behalf of the Government of India which serves as proof of identity and address, anywhere in India.

2. The Aadhaar number is unique for each individual and will remain valid for life time.

3. Aadhaar Authentication is a process by which the Aadhaar number along with biometric information of an individual is submitted to Central Identities Data Repository for its verification.

How many of the statements given above are not correct ?

a) Only one
b) Only two
c) All three
d) None

4. Which of the following Legislative Frameworks in India provide for income opportunities for rural people ?

1. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
2. Atmanirbhar Bharat Rojgar Yojana (ABRY)
3. National Career Service (NCS) Project
4. Deendayal Antyodaya Yojana- National Rural Livelihood Mission (DAY-NRLM)

How many of the statements given above are correct?

a) Only one
b) Only two
c) Only three
d) All Four

5. Consider the following statements about Green Leaf Volatiles (GLVs)

1. They are group of compounds present in plants that causes pleasant smell when released into air.
2. GLVs activate internal plant-defence responses and could help mitigate pest damage to crops.

Choose the correct statements:

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor

6. Overheating of an economy can occur when

1. there is high consumption and low savings
2. its productive capacity is unable to keep pace with growing aggregate demand

Select the correct answer code:

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

7. Consider the following islands:

1. Car Nicobar
2. Little Andaman
3. Great Nicobar
4. Lower Andaman

Which of the following is the correct north to south arrangement of the above islands?

a) 4-2-3-1
b) 2-4-3-1
c) 2-4-1-3
d) 4-2-1-3

8. Consider the following statements regarding hydrogen electrolysis:

1. Electrolysis is the process of using electricity to split water into hydrogen and oxygen.
2. A hydrogen electrolyzer is an electrochemical device that can produce hydrogen using an electrolysis process.

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

9. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board (CPCB)?

1. The NGT has been established by an Act whereas the CPCB has been created by an executive order of the Government.
2. The NGT provides environmental justice and helps reduce the burden of litigation in the higher courts whereas the CPCB promotes cleanliness of streams and wells, and aims to improve the quality of air in the country.

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2

10. What is common to the places known as Aliyar, Isapur and Kangsabati?

a) Recently discovered uranium deposits
b) Tropical rain forests
c) Underground cave systems
d) Water reservoirs

6