

# REGENT EDUCATION & RESEARCH FOUNDATION

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## GENERAL STUDIES - I

### Social Issues

#### Refugee Rights, the Gendered Nature of Displacement

Armed **conflicts, violence, human rights abuses, and persecution** have driven millions of people across the globe to flee their homes, **transforming them into displaced people**.

The United Nations High Commissioner for Refugees (**UNHCR**) **reported that by the end of 2023, 11.73 crore people worldwide had been forcibly displaced** due to various forms of violence and persecution.

Amid the ongoing conflicts around the world and refugee crisis, it is important to assess **India's role as a refugee receiving nation, female face to refugee demographics and steps to improve their rights and living conditions**.

##### India's role as a Refugee-Receiving Nation -

- India has **historically played a significant role as a refugee-receiving nation**, having hosted over 200,000 refugees from diverse groups since its independence.
- As of January 31, 2022, **46,000 refugees and asylum-seekers were registered with UNHCR**
- Notably, **46% of this population comprises women and girls**, who represent a particularly vulnerable and disproportionately burdened demographic.
- **These women often find themselves solely accountable for the care and sustenance of their families**, shouldering responsibilities that are exacerbated by the challenges of displacement.

##### The Gendered Nature of Displacement -

- The **UN Population Fund** has aptly described the situation by stating that the **face of displacement is female**.
- The **gendered nature of displacement** significantly impacts the **physical and mental health of refugee women**.
- They **endure a range of stressors, including the deaths of family members**, the hardships of camp life, alterations in family dynamics, and a lack of access to community networks.
- The **prolonged nature of conflicts**, coupled with socio-economic challenges and the breakdown of traditional social support systems, **increases their exposure to gender-based violence and abuse**.

##### A Closer Examination of the Mental Health Crisis Among Displaced Women -

- Trauma and Vulnerability —
  - Displaced women **often endure multiple layers of trauma**, beginning with the initial displacement itself.
  - The **act of fleeing conflict zones typically involves exposure to extreme violence**, including witnessing the death or injury of loved ones, destruction of homes, and **direct experiences of physical harm**.
  - These **traumatic events can have a profound and lasting impact on mental health**, manifesting in conditions such as post-traumatic stress disorder (PTSD), anxiety, and depression.
  - The **process of displacement strips women of their social roles, security, and support systems**, leaving them in a state of heightened vulnerability.
- Additional Stress in Refugee Camps —
  - Once **in refugee camps or temporary settlements, women face additional stressors** that exacerbate their psychological distress.
  - The **harsh living conditions, overcrowding, lack of privacy**, and limited access to basic

necessities can create an **environment of constant fear and uncertainty.**

- For many women, **the threat of sexual violence is an ever-present concern**, further contributing to their mental health struggles.
- The **breakdown of traditional family structures and the loss of male family members** often place the burden of family survival squarely on the shoulders of women, adding to their emotional and psychological load.
- Psychological Effects Due to Gender Based Violence (GBV) —
  - The **chaotic and lawless environments of conflict zones and refugee camps often lead to increased instances of sexual exploitation**, domestic violence, and other forms of abuse.
  - Women **may be forced into transactional sex as a means of survival**, or they may experience violence within their families because of the stress and desperation that accompanies displacement.
  - These experiences of GBV not only **cause immediate physical and emotional harm** but also have **long-term psychological effects**.
  - Survivors of gender-based violence are at a significantly **higher risk of developing mental health disorders such as PTSD, depression, and anxiety**.
- Social Stigma and Mental Health Access —
  - In many cultures, **mental health problems are viewed with suspicion, shame, or as a sign of weakness**.
  - This **stigma is particularly strong in patriarchal societies**, where women's mental health concerns are often trivialised or ignored.
  - As a result, **many displaced women suffering from mental health disorders do not seek help**, fearing judgment or rejection by their communities.
- The Intersection of Gender and Psychosocial Disabilities —
  - The intersection of gender and psychosocial disabilities **creates a unique and often overlooked burden for displaced women**.
  - **Women with pre-existing mental health conditions**, or those who develop such conditions due to displacement, **face compounded discrimination**.
  - They are **often viewed as less capable or less deserving of support**, both within their communities and by service providers.
  - This double marginalisation, **being both a woman and a person with a psychosocial disability**, can lead to **further exclusion and neglect**.

#### International and Domestic Legal Frameworks -

- The UN Convention on the Rights of Persons with Disabilities (**UNCRPD**) **recognises psychosocial disability as a condition** that hinders full and effective participation in society.
- The **convention guarantees a range of rights to affected persons**, particularly women and girls with disabilities, who are often subject to multiple forms of discrimination.
- **India ratified the UNCRPD and enacted the Rights of Persons with Disabilities Act 2016 (RPWDA)**, which provides corresponding guarantees to persons with disabilities, including the right to health care.
- However, **despite these legal frameworks, refugee women with psychosocial disabilities in India remain marginalised**.
- The **RPWDA's guarantees do not extend to non-nationals, including refugees, due to various factors** such as legal and administrative oversight, social stigma, discrimination, and financial constraints.
- **Although the Supreme Court of India has consistently affirmed refugees' inherent right to life under Article 21**, encompassing the right to health, access to health care services remains extremely limited for refugees, primarily restricted to government hospitals.
- **They are often excluded from public health and nutrition programs** available to citizens, and private healthcare remains prohibitively expensive for most refugee families.

**Way forward** -

- **India's exclusion from the 1951 Refugee Convention and its 1967 Protocol**, coupled with the absence of specific domestic legislation addressing the rights of refugees, including those with disabilities, **highlights a significant structural gap.**

- Given the vast refugee population in the country, **there is an urgent need to establish a uniform, codified legal framework** that adequately implements India's international commitments.
- This **need is further underscored by the 2030 Agenda for Sustainable Development**, which emphasises empowering vulnerable populations, including persons with disabilities and refugees.
- **Effective policy-making** in this regard requires the integration of refugees with disabilities into relevant policies and programs in an accessible manner.
- This also **necessitates the collection of disaggregated data on their health conditions** through systematic identification and registration processes.
- The **question that remains is not whether these steps should be taken, but rather how and when they will be implemented.**

#### Conclusion -

- **The plight of displaced women**, particularly those with psychosocial disabilities, **is a pressing humanitarian issue that demands immediate attention.**
- While international and domestic legal frameworks exist to protect the rights of these individuals, **significant gaps remain in their implementation, particularly in countries like India.**
- **Addressing these gaps requires a concerted effort to establish a comprehensive legal framework that extends protection and support to all displaced individuals**, regardless of nationality, ensuring their right to life, health, and dignity.

Source - [The Hindu](#)

**QUESTION - Armed conflicts and violence have resulted in a significant global refugee crisis, with the UNHCR reporting over 11.73 crore forcibly displaced individuals by the end of 2023. In this context, evaluate India's role as a refugee-receiving nation, with a specific focus on the challenges faced by displaced women, particularly those with psychosocial disabilities.**

## GENERAL STUDIES - II

### Polity

#### India's Constitutional Journey

The Indian Constitution, a voluminous document with over 395 articles and 10 schedules, has become a cornerstone of Indian democracy. However, its journey from a mere draft to a living document was marked by intense public engagement and struggle.

#### The Early Years and Public Critique -

- **Initial Length and Criticism** — The draft Constitution faced criticism for its length and complexity. P Kodanda Rao, a prominent social activist and journalist, suggested that it be shortened to the point of being inscribed on the National Flag.
- **Public Involvement** — Despite the initial skepticism, the Constitution quickly became a rallying point for the Indian public. Thousands of diverse groups, associations, and individuals from across the country actively participated in the Constitution-making process, voicing their demands and aspirations.

#### The Constitution as a Site of Struggle -

- **Diverse Voices** — The public's engagement led to a rich tapestry of demands and perspectives. Adivasi Gond students, for example, convened a conference in Nagpur

to

advocate for their rights, including free education, scholarships, and representation in governance.

- **Innovative Rights Claims** — Informed by their daily life experiences, the Indian public thought beyond conventional constitutional ideas, addressing issues such as disability, sexual violence, child rights, and the right to food.
- **Public Pressure** — The overwhelming response from the public forced the Constituent Assembly to open its doors and incorporate public feedback into the drafting process. The draft Constitution, once circulated for public comments, became a best seller, even selling out at railway stations.

### A Constitution of the People -

- **Public Ownership** — The Indian public played a pivotal role in shaping the Constitution, translating it into various languages and critiquing its limitations. The Deaf and Dumb Society of India, among others, actively advocated for their rights and demanded constitutional guarantees.
- **Active Participation** — Despite high levels of illiteracy, poverty, and the uncertainties wrought by the Partition, the Indian public was not passive recipients of the Constitution. They actively participated in its making, envisioning a transformative vision for their lives.
- **Collective Struggles** — Through collective public struggles, Indians made themselves the real protagonists in the theatre of constitutionalism. They understood what they were getting and persistently mobilised in pursuit of their transformative vision.

### Conclusion -

The Indian Constitution's journey is a testament to the power of public engagement and the importance of citizen participation in shaping a nation's future. The Constitution, born from the collective struggles and aspirations of the Indian people, has become a living document that continues to inspire and guide the nation. It is a reminder that true democracy is not merely a set of rules, but a constant process of negotiation, compromise, and collective action.

Source - [The Indian Express](#)

**QUESTION - Critically examine the role of public participation in the drafting and adoption of the Indian Constitution. Discuss the challenges and opportunities that arose during this process. How has the Constitution evolved as a result of public engagement, and what are the implications for contemporary Indian democracy?**

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## Governance

### The seductive trap of civil services

The recent tragedies of young aspirants preparing for the Union Public Service Commission (UPSC) exam highlight the intense competition and challenges faced by those seeking a career in the civil services. These incidents raise questions about the factors driving this obsession and the need for reforms to address the underlying issues.

### The Historical Context -

- **A National Pastime** — The civil services have long been considered a prestigious and secure career option in India. The prestige and security associated with government jobs, coupled with limited employment opportunities in the past, made the civil services a highly desirable career choice.
- **Economic Liberalisation and Downsizing** — The allure of the civil services intensified following economic liberalisation and government downsizing. As the private sector expanded and job opportunities increased, the civil services emerged as a stable and



sought-after option.

- **Sixth Pay Commission and Salary Revisions** — The revision in government salaries further enhanced the attractiveness of government jobs. The implementation of the Sixth Pay

Commission's recommendations in 2008 led to significant salary increases, making government positions even more desirable.

### The Underbelly of the Allure -

- **Faked Identities and Document Fraud** — The case of a trainee officer in Maharashtra exposed the lengths some individuals go to to secure a place in the civil services. The revelation that the officer had faked her identity and documents underscores the intense pressure and desperation felt by some aspirants.
- **Tragic Deaths** — The avoidable deaths of three aspirants in Delhi highlighted the risks and pressures associated with the pursuit of civil service careers. The incident, which involved the drowning of three aspirants in a flooded basement, raised concerns about the safety and well-being of those preparing for the exam.
- **Coaching Industry** — The coaching industry thrives on the intense competition, capitalising on the aspirations of millions of aspirants. These coaching centres offer intensive training and guidance, but they also contribute to the pressure and anxiety felt by many candidates.

### The Allure of the Indian Administrative Service -

- **Multiple Attempts** — Many aspirants repeatedly attempt the UPSC exam, driven by the allure of the Indian Administrative Service (IAS). The IAS is considered the pinnacle of the civil services, offering prestige, power, and opportunities for significant impact.
- **Unrealistic Expectations** — The arduous journey to qualify for the IAS can lead to unrealistic expectations and a sense of entitlement. The intense competition and the perception of the IAS as a highly coveted position can create unrealistic expectations among aspirants.

### Way forward -

- **Reducing Age Limits and Attempts** — Lowering the upper age limit and restricting the number of attempts can alleviate some of the pressures faced by aspirants. This would reduce the number of years spent preparing for the exam and potentially reduce the overall stress and anxiety experienced by candidates.
- **Diversifying Aspirations** — Promoting alternative career paths and emphasising the importance of various professions in nation-building can help reduce the overwhelming focus on the civil services. It is essential to highlight the diverse opportunities available in different sectors and the contributions that individuals can make to society through various careers.
- **Reforming the Coaching Industry** — Implementing stricter regulations and quality standards for coaching institutions can help prevent unethical practices and ensure better guidance for aspirants. This would help protect candidates from exploitation and ensure that coaching centres provide quality education and support.

### Conclusion -

The allure of the civil services, while historically understandable, has reached unhealthy proportions. It is imperative to address the underlying issues and promote a more balanced and sustainable approach to career aspirations. By diversifying options, reducing pressures, and reforming the system, India can ensure that the pursuit of a civil service career is driven by genuine passion and a desire to serve the nation, rather than mere obsession.

Source - [The Hindu](#)

**QUESTION - Critically analyse the factors contributing to the intense competition for civil service positions in India. Discuss the challenges faced by aspirants and the impact of the pursuit on individuals and society. Suggest measures to reform the civil service recruitment process and promote a more balanced approach to career aspirations.**

**Need for judicial clarity in PMLA**

**Two recent observations** from different Benches of the Supreme Court of India **in the bail petitions of Delhi CM and former Delhi Deputy CM highlight critical issues** that warrant in-depth analysis.

These observations pertain to the involvement of political parties in criminal cases under the Prevention of Money Laundering Act (PMLA) and the distinction between policy-making and criminality.

Therefore, it is necessary to explore these observations, analysing their legal implications and the potential consequences for India's political and judicial landscape.

### A Legal Analysis of Implication of Political Parties Under PMLA -

- Can a Political Party be Implicated Under PMLA?
  - The **observation by the SC Bench has sparked a broader debate** on the legal and constitutional implications of treating political parties as entities liable under criminal law, particularly in the context of the PMLA.
- Understanding Section 70 of the PMLA —
  - **To analyse this issue, it is essential to first understand the legal framework of the PMLA**, particularly Section 70, which the Enforcement Directorate (ED) invoked to include the Aam Aadmi Party (AAP) as an accused in the case.
  - **Section 70 of the PMLA deals with offences by companies**, stating that if a contravention of the Act is committed by a company, then every person in charge of and responsible for the company at the time of the offence is deemed guilty.
  - **The section also includes an explanation that defines a company as any body corporate and includes a firm** or other association of individuals.
  - At first glance, **this provision appears to apply broadly to various types of entities**, including firms and associations of individuals.
  - However, **the question arises whether this definition extends to political parties**.
  - **The explanation within Section 70 is primarily aimed at business entities engaged in economic activities**, which are often involved in generating and handling funds that could potentially be laundered.
- Political Parties: Distinct from Business Entities —
  - **Political parties, by their very nature, are distinct from the types of entities typically covered under Section 70 of the PMLA.**
  - Unlike companies or firms, which are transactional and profit-driven, **political parties are ideological organisations.**
  - Their primary function is to mobilise citizens, contest elections, and form governments to implement policies reflecting their platforms.
  - **They do not engage in business activities in the traditional sense**, nor do they generate revenue through commercial transactions.
- ED's Argument to Implicate AAP Under PMLA —
  - **The ED's argument is based on the definition of political parties from the Representation of the People Act (RPA) 1951**, posits that a political party can be considered an association of individuals under Section 70 of the PMLA.
  - **Section 29A of the RPA defines a political party as any association or body** of individual citizens of India calling itself a political party.
  - **While this definition aligns with the broad language of association of individuals in Section 70 of the PMLA**, it does not necessarily mean that political parties should be treated the same as business entities under criminal law.
  - **The distinction becomes clearer when considering the purpose and context of the PMLA.**
  - **The Act is designed to prevent the laundering of money** obtained from illegal activities, primarily targeting economic offences where illicit funds are concealed or integrated into the formal economy.
  - **Political parties, however, do not operate within the same framework** as companies or firms.
  - They receive donations from individuals and corporations, which are regulated by election laws, not by laws governing economic transactions.

**The Debate on Policy-Making vs. Criminality and the SC's Role -**

- Policy Making vs Criminality —

- **The second observation, made by a Bench** raised the critical question of **where to draw the line between policy-making and criminality**.
- This question is particularly relevant in cases arising from policies framed by a cabinet, which, under the Indian Constitution, holds exclusive and final authority in policy matters.
- Under the British system of parliamentary democracy adopted by India, **the cabinet, led by the PM at the Centre and CMs in the States, directs national policy**.
- **While a policy may be subject to public or legislative disapproval, the judiciary traditionally does not assess the correctness or motivation behind cabinet decisions**.
- Consequently, **criminal charges against an individual Minister for decisions made collectively by the cabinet are legally unsustainable** and have no precedent in the history of cabinet governments.
- The Supreme Court's Role —
  - **The SC has consistently upheld the principle that policy decisions are beyond judicial scrutiny** unless they violate fundamental rights or are otherwise unconstitutional.
  - This **position underscores the need to protect the decision-making autonomy** of the executive branch.
  - **Charging Ministers with criminality for policies approved by the cabinet would undermine this autonomy** and could lead to a paralysis of governance.
  - **The judiciary, therefore, has a crucial role in ensuring that the line between policy and criminality is clearly defined and respected**.

#### Way forward -

- The recent SC observations concerning the application of the PMLA to political parties and the distinction between policy-making and criminality highlight critical legal and constitutional issues.
- **Bringing political parties within the purview of the PMLA could have far-reaching and potentially destabilising consequences** for India's political system.
- Similarly, **blurring the line between policy-making and criminality could jeopardise the functioning of the cabinet** and the broader executive branch.
- In this context, **it is imperative for the judiciary to clarify the law regarding these matters**.
- **Such clarification would ensure that political parties are not unfairly targeted** under the PMLA and that Ministers are not wrongfully accused of criminality for collective cabinet decisions.
- **Upholding these principles is essential to maintaining the integrity of India's democratic processes** and ensuring the effective functioning of its government.

#### Conclusion -

- **The SC's observation** in the case involving Arvind Kejriwal and the subsequent inclusion of the Aam Aadmi Party as an accused under the PMLA **represents a significant legal development with potentially wide-ranging implications**.
- **The application of Section 70 of the PMLA to political parties raises complex legal and constitutional questions** about the nature of political parties, their role in a democracy, and the limits of criminal liability under the PMLA.
- **It is imperative for the judiciary to clarify whether political parties can be equated with business entities for the purposes of the PMLA** and, if so, under what circumstances.

Source - [The Hindu](#)

**QUESTION** - Recent Supreme Court observations on the Prevention of Money Laundering Act (PMLA) have sparked a debate on whether political parties can be implicated under this law and the demarcation between policy-making and criminal liability. Analyse the legal implications of these observations.

## Expanding contraceptive choices in India

A recent study has highlighted the need for diverse contraceptive options, particularly focusing on the potential of Levonorgestrel 1.5mg for pericoital use. The increasing demand for emergency contraceptive pills (ECPs) in India underscores the importance of addressing women's reproductive health needs.

#### **The Rise of Emergency Contraception -**

- **ECP Usage** — The sale of ECPs in India has surged, indicating a growing preference for managing fertility.
- **ECP Effectiveness** — While effective when used promptly, ECPs are not a long-term contraceptive solution.
- **Accessibility** — The WHO emphasises the safe and effective use of ECPs for all women, regardless of medical conditions.

#### **Contraceptive Landscape in India -**

- **Public vs. Private Sector** — The public sector dominates in sterilisation and long-acting reversible contraceptives, while the private sector leads in oral contraceptives, ECPs, and condoms.
- **Women's Agency** — Reversible contraceptives empower women to make informed decisions about their reproductive health.

#### **A Significant Policy Shift -**

- **NLEM Inclusion** — The government's inclusion of Levonorgestrel 1.5mg in the National List of Essential Medicines is a crucial step towards affordable access to preferred ECPs.
- **Price Disparity** — The previous price difference between the single and two-dose ECP regimens created a market imbalance.
- **India's Fertility Transition** — The country has achieved replacement-level fertility, reflecting the impact of expanded contraceptive choices and improved access to healthcare.

#### **Challenges and Opportunities -**

- **Uneven Demand** — Contraceptive needs vary across regions, emphasising the importance of targeted interventions.
- **Unmet Need** — Despite progress, a significant portion of women still lack access to desired contraceptive methods.
- **Future Directions** — Research and technological advancements will continue to shape contraceptive options. Policymakers must respond to evolving needs and preferences.

#### **Conclusion -**

The inclusion of Levonorgestrel 1.5mg in the NLEM marks a positive step towards improving contraceptive access and empowering women in India. Continued efforts to expand contraceptive choices, enhance counselling services, and address regional disparities are essential for meeting the diverse reproductive health needs of the population.

**Source - [The Hindu](#)**

**QUESTION - Critically examine the role of the government in expanding contraceptive choices in India. Discuss the challenges and opportunities in achieving universal access to family planning services. Suggest measures to address the unmet need for contraception in the country.**

## **Bill to curb online content creators in India**

The Ministry of Information and Broadcasting (MIB) recently circulated the draft version of **the Broadcasting Services (Regulation) Bill 2024** among a handful of stakeholders from the industry.

The MIB is learnt to have proposed **expanded regulations for independent creators of news**



**content** on platforms such as YouTube, Instagram and X, which has raised concerns over the freedom of speech and expression.

### Objective and Intent Behind the Draft Broadcasting Services (Regulation) Bill 2024 -

- **Significance of the digital media** —
  - As seen in the recent elections, digital media can serve as a vital alternative forum for creators and commentators to **scrutinise government policies and demand accountability**.
  - **It can enable dissenting voices** that are ignored by mainstream media and aid in the formation of **counter-narratives** on key issues.
- **Objectives of the bill** —
  - This Bill aims to extend the regulations currently applied to traditional television and radio to the internet, and is designed to consolidate existing guidelines and increase accountability among broadcasters.
  - **It covers** all large influencers, content creators and political commentators, and tries to regulate speech.
- **Intent of the bill** — Hence, the Bill could significantly **undermine creative independence and stymie online freedom of expression** in India, both of which are vital for a well-functioning and vibrant democracy.

### Key Provisions of the Draft Bill that Undermine Creative Independence in India -

- **Reimagines the term “broadcaster”** —
  - To include **digital news broadcasters**, defining them as anyone who “systematically” broadcasts news and current affairs online, including on social media platforms via text, video or audio.
  - This means that **commentators** on YouTube, Twitter, blogging portals or podcasts discussing current affairs and socio-political issues will all get covered under the Bill.
- **Provisions for the digital news broadcasters** —
  - These broadcasters with a certain threshold of subscribers/viewers **must notify the government, conform to a Programme Code, set up a grievance redressal mechanism**, and adhere to a three-tier regulatory structure.
  - **For content other than current affairs** (for example, a programme providing a historical overview), broadcasters are also required to get **pre-certification by a Content Evaluation Committee**.
- **Penalties for the digital news broadcasters** — The Bill empowers the users to raise complaints against Programme Code violations, and gives the central government the power to —
  - Impose penalties,
  - Direct broadcasters to go off-air, and
  - Even prohibit transmission in the interest of sovereignty, security, public order, decency, morality, or foreign relations.
- **Extra-territorial application** — The current draft potentially brings global content creators, news publishers, and commentators of current affairs within the scope of the Bill.
- **Threatening safe harbour** — The Bill imposes new obligations on social media intermediaries, including compliance with government demands for information about broadcasters on their platforms.

### Issues with the Provisions of the Draft Broadcasting Services (Regulation) Bill 2024 -

- **Ignores fundamental differences between TV and the internet** —
  - Unlike TV where linear programming is disseminated one to many, content on the internet is **demand-based and one-to-one**.
  - Applying the same regulations as TV, **may significantly increase costs** (while reducing speed to market) for smaller-scale content creators and independent journalists.
  - This may lead to **serious censorship** and can create a chilling effect on free speech.
- **Implementation challenges** — The extra-territorial application of the provisions are difficult to implement given the global, decentralised nature of the web.

- **Add to the regulatory difficulties by introducing parallel legislation** — This is because the IT Act 2000 and the accompanying IT Rules already require social media intermediaries to —
  - Establish grievance redressal mechanisms,
  - Comply with government orders, and
  - Operate a notice-and-takedown regime for flagged content.

### Way forward for Internet Regulation in India -

- The constitutional challenges to the IT Rules 2021, which attempted to create government oversight over media, have led to these Rules being stayed by the Courts.
- Therefore, **other measures (such as the IT Act 2000) need to be leveraged** if the government is worried about fake news or harmful/misleading content.
- The draft Bill **requires thorough deliberation and discussion** with a broad and diverse range of stakeholders before it is made into law.

Source - [Business Standard](#)

**QUESTION - The draft Broadcasting Services (Regulation) Bill 2024 proposes to extend regulations to digital news broadcasters and content creators on platforms such as YouTube, Instagram, and X. Critically analyse the potential impact of this Bill on freedom of speech and expression in India. Discuss the challenges associated with implementing such regulations in the context of the digital media landscape.**

## Reducing the health burden on poor

**A key aspect of household vulnerability is the ability to cope with adverse shocks** (such as unexpected medical expenses), which can drastically affect a household's well-being.

**The analysis of unit-level data from the Household Consumption Expenditure Survey (HCES 2022-23) reveals a remarkable reduction in poverty since 2011-12.**

However, while the decrease in poverty is significant, **it is essential to delve deeper into the underlying vulnerabilities that persist among Indian households**, particularly in the bottom 50% of the population.

### Understanding the Burden of Medical Expenditure, Nature of Medical Shocks, Economic Implications and Policy Response -

- A Significant Financial Challenge —
  - **Medical expenditure represents a significant financial challenge** for many households, particularly those in the lower-income brackets.
  - In India, where out-of-pocket medical expenses account for a large portion of healthcare costs, **the burden of medical expenditure can have far-reaching consequences** on household financial stability and overall well-being.
  - This **burden becomes especially acute in cases of hospitalisation**, where the costs are not only higher but often sudden and unexpected.
- The Nature of Medical Shocks —
  - **Medical shocks**, particularly those requiring hospitalisation, **are distinct from regular healthcare expenses**.
  - While routine medical expenses, such as consultations, medications, and minor treatments, are relatively predictable and can be managed within a household's monthly budget, **hospitalisation often involves a large lump-sum payment**.
  - For **households in the bottom 50% of the income distribution**, such a sudden financial demand can be overwhelming.
  - These families typically have limited savings and little to no access to credit or insurance, making it difficult to absorb the shock of hospitalisation without compromising other essential expenditures.
- Economic Implications of Medical Expenditure —
  - The **economic implications of high medical expenditure extend beyond the immediate financial strain**.
  - When a household is forced to allocate a significant portion of its income to medical costs, **it often has to make difficult trade-offs**.
  - **These trade-offs might involve reducing spending on nutritious food, delaying, or**

forgoing education expenses, or neglecting the maintenance of the home.

- In some cases, **households may even resort to selling assets**, taking on high-interest loans, or withdrawing children from school to cope with the financial burden.

- The Policy Response —

- Recognising the severe burden that medical expenditure imposes on households, particularly the poor, **the Indian government has implemented policies aimed at reducing this financial strain.**
- **Programs such as the Ayushman Bharat Yojana are designed to provide financial protection against high medical costs,** particularly for those in the lower-income brackets.
- By covering a significant portion of hospitalisation expenses, **these programs help to alleviate the immediate financial burden on households and reduce their vulnerability to falling into poverty due to health-related shocks.**

### An Analysis of Rising Healthcare Accessibility, Affordability, Vulnerability and Consumption Status -

- Rising Healthcare Accessibility and Affordability —

- The findings indicate that the **incidence of hospitalisation among the bottom 50% of the Indian population increased from 17% in 2011-12 to 22% in 2022-23.**
- This **increase reflects improved access to healthcare,** particularly for rural households, where the **rate rose from 18% to 23%, compared to an increase from 16% to 20% in urban households.**
- These **figures suggest a significant improvement in healthcare accessibility** for the poorest half of the population across India.

- Ratio of Healthcare Expenditure to Overall Household Expenditure —

- The **analysis further explores the ratio of health expenditure to overall household expenditure,** both with and without hospitalisation.
- For households that did not experience hospitalisation, **health expenditure as a percentage of monthly household spending increased marginally over the decade.**
- However, for households that did experience hospitalisation, there was a notable decline in this ratio.
- Specifically, for the bottom 50% of households, the ratio of health expenditure decreased from 10.8% to 9.4% over ten years.
- **This trend is particularly pronounced in rural areas,** where the ratio of health expenditure for **households experiencing hospitalisation decreased from 11.15% to 9.14% and** in urban areas, the decline was less significant, from 10.3% to 9.9%.
- **These findings suggest that healthcare involving significant hospitalisation costs has become more affordable** for the poorest half of the population, especially in rural areas.

- Vulnerability and Consumption Status —

- The vulnerability of households, particularly those incurring hospitalisation costs, is evident in the change in consumption status.
- **In 2011-12, 40% of the poorest half of the population who experienced hospitalisation saw a decline** in their consumption status.
- **By 2022-23, this proportion had decreased to 33%, indicating a 23% reduction in the odds of households facing a decline in consumption status** due to hospitalisation.
- This **reduction in vulnerability is even more pronounced in rural areas,** where the odds of a decline in consumption status for the bottom 50% of households experiencing hospitalisation decreased by 29%.
- **In urban areas, the odds fell by 14% over the same period.** These trends suggest that the financial burden of hospitalisation is becoming less severe, reducing the vulnerability of households to a decline in their overall consumption status.

- A Significant Decline in Loss of Consumption Due to Medical Expenditure —

- Over the past decade, healthcare has become more accessible and affordable for the bottom 50% of the Indian population.
- The analysis reveals a significant decline in the odds of households facing a loss in consumption status due to the financial burden associated with hospitalisation.
- This reduction in vulnerability is particularly evident in rural areas and among households with young children and elderly members.

- **These trends are closely linked to public health policies in India**, such as the Ayushman Bharat Yojana, which aims to alleviate the financial burden of hospitalisation for the poor.

**Conclusion -**

- While the decline in poverty is an important achievement, addressing the vulnerability of households to medical shocks is equally crucial for ensuring sustainable well-being and economic stability.
- The improved accessibility and affordability of healthcare, as well as the reduction in financial vulnerability due to hospitalisation, are positive steps toward enhancing the overall welfare of the bottom half of India's population.

Source - [The Indian Express](#)

**QUESTION** - Despite the reduction in poverty levels, a significant portion of Indian households, remains vulnerable to medical shocks. Analyse the economic implications of medical expenditure on these households and evaluate the effectiveness of government policies such as Ayushman Bharat Yojana in mitigating this vulnerability. How do these trends impact the overall well-being and consumption status of the poor in India?

## GENERAL STUDIES - III

### Economy

#### RBI Employment Data

In recent debates surrounding job creation in India, the **KLEMS database has become a frequently cited source.**

**Developed as part of an international project,** this database has been curated by scholars from the Delhi School of Economics and the Indian Council for Research on International Economic Relations (ICRIER) since 2009, and is **now housed at the Reserve Bank of India (RBI) since 2022.**

**Given its prominent use in economic discussions,** particularly in countering claims of poor job creation, it is **imperative to examine the methodology behind this data collection, its sources, and its sectoral breakdowns.**

#### **The KLEMS Database: Composition and Sources -**

- The KLEMS database **encompasses data on capital (K), labour (L), energy (E), material (M), and services (S)** for the period **from 1980 to 2024.**
- It is **designed as a measurement tool to monitor and evaluate productivity growth** both at the industry level and across the broader economy.
- The **data sources include the employment-unemployment surveys (EUS),** periodic labour force surveys (PLFS), National Account Statistics, and the Annual Survey of Industries.
- In the **absence of annual data from the National Statistical Office,** these data points serve **as benchmarks,** with interpolations used for years where direct data is unavailable.

#### **Methodological Limitations Employed in Employment Figures -**

- **Population Estimation and Worker-Population Ratios (WPR) —**
  - The **first step in the KLEMS methodology involves estimating the population for different demographic groups—rural male, rural female, urban male, and urban female.**
  - The **employment estimates are derived by multiplying the Worker-Population Ratios (WPR) for these groups by the total population.**
  - The **WPR, which indicates the proportion of the population that is employed, is drawn from employment-unemployment surveys (EUS) and periodic labour force surveys (PLFS).**
  - However, **the surveys themselves do not provide the absolute number of workers:**



instead, they offer ratios that are then applied to population estimates.

- The **population figures used for these calculations can be interpolated using Census data or taken from the projections provided by the National Population Commission** under the Ministry of Health and Family Welfare (MoHFW).
- The **choice of data source and the method of interpolation can significantly impact the final employment figures.**
- Use of Projections and Potential Overestimation —
  - **One of the critical issues** with the KLEMS methodology is the **reliance on population projections, particularly those provided by the MoHFW.**
  - These **projections have been criticised for being on the higher side**, primarily due to an overestimation of population growth following a significant decline in fertility rates between 2010 and 2020.
  - This **overestimation has far-reaching consequences** and when these inflated population figures are multiplied by the WPR, the resulting estimates for the labour force and total workforce tend to be exaggerated.
  - Moreover, **the methodology assumes uniform growth rates for rural and urban populations.**
  - This **assumption is problematic because, in reality, rural areas typically experience slower population growth** than urban areas.
- Sectoral Employment Distribution —
  - **Another aspect of the KLEMS methodology** involves the **distribution of the total estimated number of workers across various industry sectors.**
  - This **distribution is based on the shares of employment** in these sectors as reported in the PLFS.
  - However, **this approach does not account for changes in industry dynamics**, such as shifts in the economic landscape or the emergence of new sectors, which could alter the distribution of employment over time.
  - **For instance, if a sector experiences a decline in employment opportunities** but the methodology assumes a constant or increasing share based on outdated PLFS data, **the employment figures for that sector may be misleading.**
- Temporal Comparability and WPR Variability —
  - A **significant methodological challenge in the KLEMS database is ensuring temporal comparability of data**, particularly when transitioning from EUS to PLFS.
  - The **WPR derived from EUS data for the period 2011-12 is not directly comparable with the WPR** from PLFS data for 2017-18, yet the KLEMS methodology assumes continuity without addressing potential discrepancies.
  - This **shift could introduce biases in the employment estimates**, especially if the methodologies or survey designs of EUS and PLFS differ significantly.
- Inclusion of Subsidiary Employment and its Impact on Employment Figures —
  - The **KLEMS database includes individuals engaged in subsidiary employment**—those who have secondary or marginal work engagements—in its employment figures.
  - This **inclusion can be misleading**, as it encompasses individuals with tenuous connections to the labour market, such as unpaid family workers.
  - **These workers, though counted as employed, may not have secure or full-time jobs**, thus distorting the perception of employment quality and stability.
- Implications for Policy and Economic Analysis —
  - If employment figures are overestimated due to inflated population projections, **incorrect growth rate assumptions, or the inclusion of subsidiary employment, policymakers might develop a misguided understanding** of the labour market.
  - This **could lead to inappropriate policy responses**, such as underestimating the need for job creation initiatives or overlooking the challenges of underemployment and poor job quality.
  - Moreover, **using the KLEMS data to claim rapid employment growth, especially in the absence of a critical examination of the methodology, could result in complacency**

among policymakers and stakeholders, who might believe that the employment situation is better than it actually is.

**An Analysis of Emerging Employment Trends -**

- Employment Trends According to KLEMS —
  - The **data trends within the KLEMS database suggest a significant rise in employment across sectors post-2018.**
  - For instance, **agricultural employment reportedly increased from 20 crore to 25 crore between 2018-19 and 2022-23.**
  - Similarly, **service sector employment rose from 17.2 crore to 20.2 crore, while manufacturing employment grew from 5.5 crore to 6.3 crore.**
- Contrasting Data between ASUSE and KLEMS —
  - A study by economists at the State Bank of India (SBI) **highlights discrepancies between employment figures from different sources.**
  - The **Annual Survey of Unincorporated Sector Enterprises (ASUSE) estimated employment in unorganised enterprises to be 10.96 crore.**
  - Yet, **this figure has been inflated to claim that total employment in 2022-23 reached 56.8 crore, aligning closely with KLEMS data.**
  - This **discrepancy suggests that the KLEMS data may not fully account for the nuances of employment, particularly within unorganised sectors.**
  - The **employment figures from enterprise surveys, which indicate positions in enterprises, do not easily correlate with individual-level data collected through household surveys, which are generally considered more reliable.**

#### Conclusion -

- **The methodological limitations of the KLEMS database raise significant concerns about its use in evaluating job creation in India.**
- While the database is valuable for tracking productivity and employment trends, **its reliance on interpolated data, assumptions about population growth, and the inclusion of tenuous employment connections could lead to inflated or misleading employment figures.**
- It is **crucial to critically evaluate the data and consider the broader context before drawing conclusions** about the state of employment in the country.

Source - [The Indian Express](#)

**QUESTION** - Examine the role of comprehensive databases like KLEMS in shaping the discourse on employment and productivity in emerging economies. Critically assess the methodological challenges these databases face and discuss the broader implications for policymaking and economic strategy. Suggest how emerging economies can effectively leverage such databases while addressing potential inaccuracies and biases.

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## Environment

### How Clean Plant Programme plants to boost fruit production?

The Union Cabinet approved the **Clean Plant Programme (CPP)**, aimed at increasing the yield and productivity of horticulture crops in India.

#### About Clean Plant Programme -

- The Clean Plant Programme (CPP) is an initiative by the Indian Government aimed at **boosting the availability of disease-free and high-quality planting material for horticultural crops, such as fruits, vegetables, and flowers.**
- It was first announced in Union Finance Minister Nirmala Sitharaman's interim Budget speech in February 2023.
- The program's primary focus is to **enhance the productivity and quality of horticultural produce** by ensuring that farmers have access to certified, disease-free planting material, which can significantly reduce crop losses and improve yields.

- The Ministry of Agriculture has sought an **allocation of Rs 1,765 crore for the programme.**

- One half of this will be sourced from the budget of the **Mission for Integrated Development of Horticulture** (MIDH), while the other half will be in the form of a loan from the **Asian Development Bank** (ADB).

#### **Implementation of CPP -**

- The programme consists of three key components designed to help farmers access virus-free, high-quality planting material for vegetative propagation, aimed at boosting crop yields and enhancing income opportunities —
  - **Establishment of Nine Clean Plant Centres (CPCs)** — These centres will offer disease diagnostics and treatments, develop mother plants for nurseries, and quarantine all domestic and imported planting materials intended for commercial propagation and distribution.
  - **Infrastructure Development** — This includes setting up large-scale nurseries to efficiently multiply clean planting material. The mother plants produced by the CPCs will be propagated in these nurseries and then distributed to farmers.
  - **Regulatory and Certification Framework** — A robust regulatory and certification process will be created to ensure complete accountability and traceability in the production and distribution of planting material.

#### **What is the need for CPP?**

- India, the world's second-largest producer of fruits and vegetables after China, has seen significant growth in horticulture over the past decade.
- From 2013-14 to 2023-24, the **area under horticulture crops expanded from 24 million hectares to 28.63 million hectares**, with production rising from 277.4 million metric tonnes to 352 million metric tonnes.
- India is also a significant player in the global fruit market, both as an importer and exporter.
- In the financial year 2023-24, India exported fresh fruits worth \$1.15 billion and imported fruits valued at \$2.73 billion.
- With increasing domestic consumption, there has been a growing demand for planting materials of foreign apples and exotic fruits like avocados and blueberries.
- Between 2018-20, the import of planting materials saw a substantial rise, with apple plant imports increasing from 21.44 lakh in 2018 to 49.57 lakh in 2020.
- Avocado plant imports surged from 1,000 to 26,500, and blueberry plant imports grew from 1.55 lakh to 4.35 lakh during the same period.
- Currently, the import process for plants is lengthy, requiring a two-year quarantine period.
- The introduction of Clean Plant Centres (CPCs) aims to reduce this quarantine period to six months, making it easier for farmers to access disease-free and authentic planting material.
- The CPCs are modelled after successful projects in countries like the US, Israel, and the Netherlands.

Source - [The Indian Express](#)

**QUESTION - Analyse the potential impact of the Clean Plant Programme (CPP) on India's position as a global player in the fruit market, and discuss the role of the regulatory and certification framework in ensuring the success of this programme.**

## **Movement of ballast water in India**

The Tamil Nadu Water Resources Department (WRD) has informed the National Green Tribunal that it has requested ₹160 crore from Kamarajar Port in Ennore, Tamil Nadu, to address the removal of invasive **charru mussels (Mytella strigata)** along the coast. These mussels are harming marine ecosystems and obstructing fisher boat movements, impacting livelihoods.

The WRD accuses Kamarajar Port of contributing to the spread of the invasive species by failing to regulate ballast water from ships.

**Invasive Species and Their Threat to Ecosystems -**

- **About —**

- Invasive species are non-native organisms that are introduced, either accidentally or intentionally, into a new environment where they do not naturally occur.
- These species often spread rapidly and can cause significant harm to the local ecosystems, economies, and human health.
- Invasive species can outcompete native species for resources, alter habitats, disrupt food webs, and even lead to the extinction of native species.
- One of the primary ways invasive species are introduced is through human activities, such as global trade and transportation.
- For example, ballast water from ships, which is used to stabilise vessels, often contains various marine organisms. When this water is discharged in a new location, it can introduce invasive species to the area.
- **Case Study: Charru Mussels (*Mytella strigata*) —**
  - **About —**
    - It is an example of an invasive species that has become a significant ecological threat.
    - Native to South America, the charru mussel has spread to other regions, including the coast near Kamarajar Port in Ennore, Tamil Nadu.
    - The spread of this species is largely attributed to ballast water discharge from ships, which is not adequately regulated.
  - **Threats posed to marine ecosystems —**
    - It reproduces quickly and forms dense colonies, which can outcompete native species for space and resources.
    - The mussels attach to various surfaces, including rocks, other marine organisms, and even man-made structures like boats and docks.
    - This can lead to the displacement of native species, changes in habitat structure, and a reduction in biodiversity.
    - In the Ennore region, the proliferation of charru mussels has also had economic and social impacts.
    - The dense colonies of mussels hinder the movement of fishing boats, affecting the livelihoods of local fishermen.

### **Ballast water -**

- Ships require a certain level of immersion in the sea for stability. To maintain this, when cargo is offloaded and the ship rises, then sea water (known as ballast water) is taken into tanks onboard.
- Conversely, when cargo is loaded and the ship sinks lower in the water, the ballast water is pumped out.

### **Laws regulating movement of ballast water -**

- **Background —**
  - Traditionally, there were no restrictions on the intake and discharge of ballast water at various locations, including ports and along coasts.
  - However, since ballast water can carry invasive species that harm ecosystems in other countries, the global shipping industry has moved to regulate ballast water discharge.
    - In India, scientists have recorded nearly 30 invasive species coming from ship ballast water.
    - Among the most harmful in recent times is the charru mussel
    - In the Pulicat lake in Tamil Nadu, as in Ashtamudi lake in Kerala, this mussel has replaced almost all other species.
    - Its survival rate and egg production is very high. Though of marine origin, it can survive even in fresh water.
- **Global regulations —**
  - The **Ballast Water Management (BWM) Convention**, enforced by the International Maritime Organisation (IMO) since 2017, aims to prevent the spread of harmful aquatic organisms and pathogens through ships' ballast water.
  - Ships must now manage their ballast water to remove or neutralise these organisms before discharge in new locations.



- Newly built ships with ballast water management systems treat the water with chemicals to eliminate biological organisms.

- Older ships without such systems are required to exchange ballast water taken in at ports with neutral ocean water during their journey.
- Countries like Australia and New Zealand are particularly strict in enforcing these regulations to protect their marine ecosystems.
- Australia, which frequently handles ballast water due to its role as a major raw material supplier, conducts rigorous checks on ships, especially near sensitive areas like the Great Barrier Reef, to prevent ecological damage.
- **Situation in India —**
  - As of July 2024, 97 countries have signed the BWM Convention of IMO, **but India is not among them**.
  - Consequently, ships docking at Indian ports are not obligated to follow the BWM Convention.
  - While Indian ports enforce other rules, such as those related to oil discharge, ballast water remains unchecked.
- **Way forward for India —**
  - Maritime law experts note that ports are facilitators and cannot be held liable unless a law is in place.
  - If there is any evidence that a vessel has pumped out the ballast water that led to the invasive species, then the vessel owner can be held liable if a law is in force.
  - Hence, India must join the BWM Convention to address this gap.

Source - [The Hindu](#)

**QUESTION - Discuss the ecological and economic impacts of invasive species in coastal regions, using the case study of charru mussels (*Mytella strigata*) in Tamil Nadu. Evaluate the effectiveness of international and national regulations, such as the Ballast Water Management (BWM) Convention, in managing ballast water discharge and preventing the spread of invasive species. Propose a strategic framework for India to address the challenges posed by invasive species in its maritime ecosystems.**

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## Security

### Disinformation, AI and Cyber Chakravayuh

The year **2024** has emerged as a period marked by an escalating sense of threats, concerning global security.

**With the rapid advancement of Artificial Intelligence (AI) and its many manifestations, including Generative AI and Artificial General Intelligence (AGI), security specialists worldwide have been bracing for an unprecedented wave of attacks.**

The **spectrum of these threats extends beyond traditional cyber threats** to include the expanding horizons of disinformation, all of which contribute to a distinctly grim outlook for the future.

#### **The Danger Posed by AI in 2024 -**

- **The Threats Surrounding the 2024 Summer Olympic Games —**
  - **One of the major concerns in 2024 was the 33rd Summer Olympic Games in France, held during July and August.**
  - **These Games were seen as an attractive target for various digital criminals, including cyber attackers.**
  - **The anticipation of digital assaults of a kind never encountered before was profound among experts.**
  - **Despite the Paris Games concluding peacefully without any significant incident, the absence of a major attack has not alleviated the ongoing fears.**
  - **Security agencies remain on high alert, fully aware that vigilance is the price they must**

pay to ensure safety in this new digital age.

- Disinformation and AI-Generated Deep Fakes during Taiwanese Elections —
  - The year began with a surge in disinformation, particularly in the context of the Taiwanese elections in January.
  - The atmosphere was rife with fake posts and videos, leading to widespread confusion and chaos.
  - While many attributed these actions to China, the reality is that AI has made it significantly easier to spread disinformation disguised as truth.

### The Evolution of Cyberattacks and their National Security Threat -

- Transformation of Isolated Incidents of Digital Mischief into Significant Threats —
  - The evolution of cyberattacks has transformed them from isolated incidents of digital mischief into significant threats with the potential to undermine national security.
  - In the context of 2024, this threat has been exacerbated by the integration of AI technologies, which have enhanced the sophistication, scale, and impact of these attacks.
  - The convergence of AI and cyber capabilities has created a new battlefield, where the traditional boundaries of warfare are blurred, and the distinction between state and non-state actors becomes increasingly difficult to discern.
- Vulnerability of Critical Infrastructure —
  - At the heart of the national security threat posed by cyberattacks is the vulnerability of critical infrastructure.
  - In modern societies, essential services such as electricity, water supply, telecommunications, and transportation rely heavily on interconnected digital systems.
  - These systems, while enhancing efficiency and connectivity, also present a significant point of vulnerability.
  - Cyberattacks targeting these infrastructures can lead to widespread disruption, economic loss, and even physical harm.
  - The conflict in Ukraine is a prime example of how cyber warfare can be used as a tool of statecraft to destabilise a nation, disrupt critical services, and sow confusion and fear among the populace.
- Economic Destabilisation and Broader Implications —
  - In addition to the direct threat posed by cyberattacks on critical infrastructure, there is also the risk of economic destabilisation.
  - Financial markets, supply chains, and other key components of the global economy are all highly vulnerable to cyberattacks.
  - A successful attack on these systems could trigger a cascading effect, leading to significant economic downturns and undermining the stability of entire regions.
  - This, in turn, could create fertile ground for further conflict, as nations struggle to cope with the economic and social fallout of such disruptions.
- Undermining Public Trust in Government Institutions —
  - Moreover, cyberattacks have the potential to undermine public trust in government institutions.
  - In democracies, where the legitimacy of the government relies on the trust and confidence of the electorate, a successful cyberattack that disrupts elections, manipulates public opinion, or exposes sensitive information could have far-reaching consequences.
  - The erosion of public trust could lead to political instability, social unrest, and a weakening of the nation's ability to respond to other security challenges.

### The Role of AI in Cyberattacks -

- The Role of AI in Cyberattacks —
  - AI has further complicated the cyber threat landscape by enabling more sophisticated and automated attacks.

- **AI algorithms can be used to scan networks for vulnerabilities**, launch attacks, and even adapt in real-time to countermeasures deployed by defenders.
- **This level of automation and adaptability makes AI-powered cyberattacks particularly dangerous**, as they can scale rapidly and cause extensive damage before being contained.

- Furthermore, **AI can be used to create highly convincing disinformation campaigns, which can be deployed in tandem with cyberattacks to amplify their impact** and create confusion and mistrust within a targeted population.
- Ethical and Legal Considerations of AI-Enabled Cyber Threats —
  - As AI technologies become more integrated into national defence strategies, **there is a growing debate over the appropriate use of such technologies in warfare.**
  - **Issues such as the potential for collateral damage, the accountability of autonomous systems,** and the implications of AI-driven decision-making in life-and-death situations are **all areas of concern.**
  - **These ethical considerations further complicate the challenge of defending against cyber threats,** as nations must balance the need for effective defence with the responsibility to uphold international norms and human rights.

#### Microsoft Outage: A Preview of Potential Cyber Disasters -

- **In June 2024, the world received a preview of the potential devastation** that could be caused by a massive cyberattack, whether AI-enabled or otherwise.
- **A 'glitch' in a software update concerning Microsoft Windows resulted in a massive outage** that initially affected parts of the United States before spreading globally, including to India.
- **This incident, while not a cyberattack, provided a sobering glimpse of the kind of disruption** that could occur in the event of a genuine cyber onslaught.
- **The scale of the disruption, affecting flight operations, air traffic, and stock exchanges, underscored the vulnerability** of global systems to such threats.

#### Way Forward -

- The Need for a Comprehensive Cyber defence Strategy —
  - In response to these challenges, **nations must adopt a comprehensive and multi-layered approach to cyber defence.**
  - **This includes not only the development of advanced technological solutions but also the strengthening of international cooperation** to share intelligence, coordinate responses, and establish norms of behaviour in cyberspace.
  - **Public-private partnerships are also essential,** as most of the critical infrastructure is owned and operated by private entities.
  - **Governments must work closely with these stakeholders to ensure that they have the necessary resources** and expertise to defend against cyber threats.
- Training, Education and Awareness —
  - **As cyber threats evolve, so too must the skills and knowledge** of those responsible for defending against them.
  - **This requires ongoing investment in cybersecurity training and the development of a workforce capable of navigating the complexities of the modern threat landscape.**
  - **It also means educating the public about the risks** and encouraging responsible behaviour online to reduce the likelihood of successful attacks.

#### Conclusion -

- **The struggle against digital threats is not a battle that can be fought in isolation; it requires coordinated action** and a collective realisation that nations, particularly democracies, are under attack from a new and different source.
- **There is an urgent need to counter digital surveillance, disinformation, bullying, and manipulation** to ensure our survival in this increasingly digital world.
- **The year 2024 has shown us the extent of the threats we face, and it is imperative that we remain vigilant** and prepared for the challenges that lie ahead.

**QUESTION** - The year 2024 has seen a marked increase in the sophistication and scale of cyber threats, heavily influenced by the rapid advancement of Artificial Intelligence (AI) technologies. Using the examples of the 2024 Summer Olympic Games and the Taiwanese

**elections, analyse the evolving nature of cyber threats, their implications for national security, and the ethical considerations in deploying AI for cyber defence.**