

POLITY- ELECTION [GS-II]**Current status of NOTA**

The article discusses the NOTA “None of the Above” option in Indian elections, introduced in 2013 to ensure voter secrecy. It highlights a recent election in Indore where NOTA received a record 2,18,674 votes, the highest ever, while the winner, Shankar Lalwani of the BJP, got 12,26,751 votes. The piece also mentions a petition that seeks to enforce legal consequences when NOTA receives the most votes.

Why was the NOTA option introduced?

Purpose of NOTA: The NOTA (None of the Above) option was introduced to allow voters to reject all candidates, enhancing voter freedom and secrecy.

Legal Push: Initiated by the Supreme Court of India in September 2013, following a petition from the People’s Union for Civil Liberties (PUCL) in 2004, which argued that the existing voting rules violated the secrecy of voters.

Supreme Court Ruling: The court ruled that voter secrecy must be maintained whether a voter decides to vote or not, countering the government’s position that only active voters deserve secrecy.

EVM Concerns: The introduction of Electronic Voting Machines (EVMs) made it apparent if a voter chose not to vote, compromising voter secrecy. NOTA was seen as a solution to maintain this secrecy.

Integrity in Elections: By implementing NOTA, the Supreme Court aimed to encourage political parties to nominate candidates of higher integrity, given that voters could now formally express disapproval.

What is the current status of NOTA?

Current Impact of NOTA: If NOTA receives the highest number of votes, it generally has no legal consequence on the election outcome at the national level, meaning the candidate with the next highest votes wins.

Local Rules by State Election Commissions: In states like Maharashtra, Haryana, Puducherry, Delhi, and Chandigarh, the State Election Commission has passed orders treating NOTA as a “Fictional Electoral Candidate” in local body elections. If NOTA receives more votes than any candidate, these elections are declared null, necessitating a re-election.

Petition for Legal Consequences: A petition filed in April 2024, asking for elections to be declared null and void if NOTA gets the majority. He argues that NOTA should pressure political parties to field better candidates. He also suggests that candidates polling fewer votes than NOTA should be banned from contesting elections for five years.

INDIAN POLITY [GS-II]**Impacts of inaccurate exit polls**

The article discusses how exit polls, which predict election results, were wrong in predicting a big win for the BJP-led NDA in India. These incorrect predictions affected the stock market and raised concerns about the accuracy and credibility of pollsters and media.

What happened with the exit polls?

1. Exit polls inaccurately predicted a significant majority for the BJP-led NDA in the recent elections, estimating around 400 seats.
2. This overestimation influenced the financial markets, with the BSE Sensex initially surging by 2,507 points, or 3.39%, due to optimistic investor sentiment.
3. Reality clashed with predictions when actual election results were announced, showing a stark difference from the polls, causing the stock market to plunge by 5.74%.
4. Similar inaccuracies in exit polls have occurred in the past, such as in the Lok Sabha elections in 2004, and the Bihar and Chhattisgarh assembly elections in 2015 and 2023, respectively.

What issues do these inaccuracies highlight?

1. The inaccuracies in exit polls highlight concerns about the sampling methods used, which might not accurately represent the entire voting population.
2. Issues of potential underrepresentation of certain groups in the polls suggest that significant voter segments might be overlooked, affecting the accuracy of results.
3. The impact of flawed exit polls extends to financial markets, as evidenced by a stock market surge and subsequent crash based on the initial predictions and actual outcomes.

4. These repeated discrepancies suggest a need for greater transparency and scrutiny in how pollsters conduct and report their findings.

What should be done?

1. Pollsters should reevaluate their sampling methods to ensure they more accurately reflect the diverse voter population.
2. There is a need for stricter disclosure norms concerning the funding of poll organizations to prevent potential conflicts of interest and ensure unbiased results.
3. The repeated inaccuracies call for a thorough internal review and possibly external oversight to regain public and market trust.

GOVERNMENT POLICIES AND INTERVENTIONS FOR DEVELOPMENT IN VARIOUS SECTORS AND ISSUES ARISING OUT OF THEIR DESIGN AND IMPLEMENTATION [GS-II]**Governance Model under Coalitions**

The article discusses the governance model that should be adopted by the new regime at the Centre, given the electoral results indicating a possible return of the coalition era. It questions whether a coalition government can deliver better governance results than the previous government, which held a single-party majority.

What economic reforms have been undertaken by the previous government?

- 1) Inflation targeting monetary policy regime with RBI
- 2) Insolvency and Bankruptcy Code
- 3) Goods and Services Tax (GST)
- 4) Real estate regulatory system
- 5) Improving digital public infrastructure\

What reforms are still pending?

- 1) Progress on key economic reforms like rationalizing GST rates, privatizing non-strategic PSUs, and reforming land, labour, and farm laws was limited.
- 2) Despite the passage of four labor codes, the Center did not garner support from all states.

What are the prospects of economic reforms under coalition?

- 1) There are lesser chances of implementing long-pending economic reforms because the ruling party in its election manifesto has been mostly silent on land and farm sector reforms.
- 2) Given the government's significant reliance on its coalition partners for its survival, it may not go ahead with reform initiatives.
- 3) There is a lack of clarity on renewing efforts to bring trade unions and states on board for implementing labour law reforms.
- 4) Throughout history, coalition administrations have traditionally advocated for reforms mainly in times of economic crisis. However, that's not the situation now

What should be the way forward?**1) Governance Reforms –**

A) Reviving institutions like the Industrial Management Pool (IMP) could help break the dominance of the Indian Administrative Service (IAS) and encourage the appointment of domain experts and technocrats in key ministries.

B) The new government should form a committee with representatives from all states to develop a plan. Involving states in both shaping the new governance model and maintaining investment momentum would be beneficial.

2) Cooperative Federalism– A coalition structure should encourage adoption of a positive approach towards cooperative federalism and try to minimize the strain in Centre-state relations witnessed during the previous decade.

3) Consensus Building– There is a need to build consensus among coalition partners for initiating crucial governance reforms.

A performance-oriented team of ministers with political resolve and economic intent could pursue these reforms.

ECONOMY [GS-III]**Strategies for India's new government to boost economic growth**

Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment

The article discusses various strategies for India's new government to boost economic growth. It also suggests keeping in mind the rapidly changing global backdrop while taking these steps.

What is the current status of the global economy?

1. **Shift in Economic Policies:** Moving from globalization to protectionism.
2. **Economic Stimuli:** Reduced fiscal stimulation and persistently high interest rates.
3. **Environmental and Technological Impacts:** Adverse effects on businesses due to stricter environmental considerations and technological disruptions.

What steps should be taken by the new government to boost economic growth?

1. **Address Disguised Employment in Agriculture:** Shift workforce to industries or services to reduce underemployment in agriculture.
2. **Reduce Manufacturing Costs:** Use increased PSU market cap for strategic divestments to absorb subsidies in power and logistics, enhancing manufacturing competitiveness.
3. **Boost Consumption:** Implement a gold monetization scheme to bring hidden gold into the mainstream economy, thus boosting liquidity and consumer spending.
4. **Develop Agriculture:** Expand successful cooperative models like Amul to other commodities and increase exports, as seen with the Netherlands' success in agri-products.
5. **Promote Free Labor Movement:** Include labor movement clauses in Free Trade Agreements to enhance remittances and support Indian workers abroad.
6. **Enhance Skills:** Establish institutions like the plumbing institute in Odisha to supply skilled labor both domestically and internationally.
7. **Expand Manufacturing through PLI Schemes:** Focus on sectors like garments, automobiles, and jewelry to create jobs and increase exports.
8. **Support Services Sectors:** Develop tourism, education, and healthcare through integrated approaches and engage the diaspora as brand ambassadors.
9. **Unlock Investment in Infrastructure:** Improve judicial infrastructure and streamline land acquisition and labor laws to attract more investment.
10. **Enhance Judicial Infrastructure:** Reduce case backlogs and improve the rule of law to attract more investment.
11. **Simplify Doing Business:** Implement reforms in land acquisition and labor laws and create special economic zones.
12. **Foster Technology Investment:** Quickly operationalize funds for future technologies like artificial intelligence and pharmaceutical research.
13. **Advocate for Environmental Compensation:** Pursue international compensation for India's low per capita carbon emissions compared to historical contributions.
14. **Implement Responsible Mining Policies:** Balance local interests and industrial needs, especially in states like Odisha.
15. **Improve Education and Healthcare:** Utilize technology and public-private partnerships to enhance service quality and accessibility.
16. **Educate Investors:** Increase financial literacy to prevent poor investment choices like cryptos and Ponzi schemes.
17. **Promote Sustainable Practices:** Leverage green energy and push for global cooperation on environmental issues.

AWARENESS IN THE FIELDS OF IT, SPACE, COMPUTERS [GS-III]**AI and Digital Public Infrastructure (DPI)**

The article highlights the potential of AI to enhance India's digital public infrastructure by addressing various challenges. An event was held in Bangalore that attracted companies from the AI sector to showcase their developments and to understand ongoing work in the field.

What major insight did the event offer?

- 1) Computer resources need not be centralized in large data centers but could be distributed across multiple micro data centers accessible through an interoperable protocol.
- 2) Companies don't have to wait for a new AI law to be enforced. Instead, every Indian AI company can commit to following a code of conduct that directs their innovation in this area.
- 3) The most impactful idea was the potential for AI to significantly enhance the reach of digital public infrastructure (DPI).

What are the issues with the current digital public infrastructure (DPI)?

DPI solutions are built using standardized protocols to ensure consistent and reliable services at a population scale. However, standardized solutions are not able to handle diversity well, so while they work for a lot of people, they don't adapt easily to different situations.

What is the essential feature of the DPI playbook?

The essential feature of the DPI playbook is the unbundling of traditional processes to rebuild them as DPI solutions. This transformation is necessary to scale existing services effectively to reach a broad population.

How can AI contribute to enhancing existing DPI solutions?

- 1) AI can dynamically adapt to individual preferences and contexts. It can make public service delivery more responsive and user-centric by adjusting to users' engagement modes.
- 2) It can accommodate linguistic and cultural diversity. It can also improve DPI solutions by providing personalized and user-friendly interfaces.

For ex- Setu, a finance company, showed an AI-powered personal finance app at the event. This app, made in a WhatsApp bot, uses the Account Aggregator system to study how users handle money and give them helpful advice. Its chat interface makes it easy to use, even for people who have limited knowledge about finances.

- 3) With the increasing integration of AI into DPI solutions by various companies, India's digital public infrastructure has the potential to cater to diverse needs and preferences of every citizen.

PRELIM FACT

1. World Environment Day 2024

- World Environment Day is celebrated on June 5th, serving as a platform to promote awareness and conservation of the environment.
- The theme for World Environment Day 2024 is "Land Restoration, Desertification, and Drought Resilience."

About World Environment Day

- **Origin:** In 1972, the United Nations General Assembly (UNGA) designated June 5th as World Environment Day during the Stockholm Conference on the Human Environment. The inaugural celebration took place in 1973 with the theme "Only One Earth."
- **Objective:** To increase global awareness and inspire actions that protect the environment and promote sustainable practices.
- **Theme:** Each year, World Environment Day centers on a specific theme addressing a particular environmental issue.
- **Host Nation:** Each year, a particular country or region takes a leading role in hosting major events and raising awareness for the chosen theme.
- The host country for World Environment Day 2024 is the Kingdom of Saudi Arabia.

2. Stromatolites- Geological Structures

Recently, scientists discovered living stromatolites which are ancient geological structures formed by algae on Sheybarah Island, located on the northeastern shelf of the Red Sea in Saudi Arabia.

1. **About Stromatolites:** These are layered structures formed by the activity of microorganisms, primarily cyanobacteria (blue-green algae). They are also known as stromatoliths.
2. **Formation Process:** These organisms trap and bind sedimentary grains in shallow waters, creating layers upon layers until they form mound-like structures.
3. **Appearance:** Stromatolites typically display thin, alternating light and dark layers. Their shapes can vary, being flat, rounded (hummocky), or dome-shaped.
4. **Historical Significance**

- i) They are ancient structures, most common during the Precambrian era, over 542 million years ago.
- ii) While primarily marine, some ancient stromatolites from more than 2.5 billion years ago are found in environments ranging from intertidal zones to freshwater lakes.
- iii) Current Locations: Today, living stromatolites are rare which are found in a few salty lagoons or bays, notably in Western Australia. Shark Bay is a key location for these living marine stromatolites.

5. Importance of Stromatolites

- i) Fossil Records: It provide critical evidence of early life on Earth, with fossils dating back over 3.5 billion years.
- ii) Oxygen Production: The cyanobacteria in stromatolites are photosynthetic. They produce oxygen as a byproduct of their metabolism.
- iii) Role in Understanding the Great Oxygenation Event and evolution of complex life forms: About 2.5 billion years ago, as stromatolites became more prevalent, they significantly increased the oxygen levels in the atmosphere. This transformation was crucial as it changed the atmosphere from being rich in carbon dioxide to one rich in oxygen. The rise in atmospheric oxygen set the stage for the evolution of more complex life forms, including the development of eukaryotic cells, which are cells with a nucleus.

3. Direct Seeded Rice (DSR) cropping system

The Indian Council of Agricultural Research (ICAR) has commercialized herbicide-tolerant (Ht) basmati rice varieties, which they claim can control weeds in rice crops and support the water-saving technique of direct seeded rice (DSR).

- 1. About: DSR is a modern rice cultivation method where seeds are directly sown into the field, bypassing the traditional transplanting of seedlings from a nursery.
- 2. This method is recognized for its efficiency and sustainability, benefiting farmers, the environment, and the economy.

3. Previous Context and Innovations in DSR

- i) Historically, the Northwestern Plains, including Punjab and Haryana have used DSR for growing Basmati rice.
- ii) The Green Revolution favored water-intensive transplanted rice leading to ecological challenges.
- iii) Innovations from 2014 to 2017 at IARI Karnal, such as TAR-VATTAR technology utilized climatic factors and effective herbicides like Pendimethalin to cut costs and conserve water.

4. Development of Herbicide-Tolerant Basmati Rice

- i) The Indian Council of Agricultural Research (ICAR) has commercialized non-genetically modified herbicide-tolerant (Ht) basmati rice varieties.
- ii) These varieties are engineered with a mutated ALS gene that allows for the direct application of the herbicide Imazethapyr.

5. Scientific Research and Debates

- i) Studies suggest that manual weeding at intervals (20 and 40 days after sowing) in DSR fields leads to better yields than using Imazethapyr.
- ii) ICAR supports eco-friendly practices like hand weeding over repeated herbicide use to control weeds and improve seed yield.

6. Challenges with Herbicide Use

- i) Imazethapyr specifically targets broadleaf weeds but does not affect all weed types.
- ii) The evolution of herbicide-resistant weeds poses a potential threat to rice production and food security.

4. Phenome India Project

Recently, CSIR completed the first phase of its longitudinal health monitoring project, Phenome India, and hosted a special event called Phenome India Unboxing 1.0.

About Phenome India Project

Aspects	Description
About Phenome India- CSIR Health Cohort Knowledgebase	1) Phenome India-CSIR Health Cohort Knowledgebase (PI-CheCK) is a project launched by the Council of Scientific and Industrial Research (CSIR) on December 7, 2023.

	<p>2) This is the first pan-India longitudinal health monitoring study that focuses on cardio-metabolic diseases.</p> <p>3) Participants: Nearly 10,000 individuals including CSIR employees, pensioners, and their spouses from 17 states and 24 cities are involved.</p> <p>4) Data Collection: The study collects a wide range of data, including clinical questionnaires, lifestyle and dietary habits, anthropometric measurements, imaging/scanning data, and extensive biochemical and molecular data.</p>
Purpose	The initiative aims to create India-specific risk prediction models for cardio-metabolic diseases, including diabetes, liver diseases, and cardiac diseases.
Significance	<p>1) The study is critical for understanding the risk and prevalence of cardio-metabolic disorders in the Indian population, which may vary from Western populations due to ethnic diversity and different lifestyle patterns.</p> <p>2) CSIR is leveraging this project to promote Predictive, Personalized, Participatory, and Preventive (P4) healthcare, which is customized for the unique phenotypic and genetic profiles of the Indian population.</p>

ANSWER WRITING

Q. Examine prevalent issues associated with the management of buffer stocks. Mention some innovative ways to optimise storage, prevent wastage, and ensure efficient distribution

Stocking of Food Grains being implemented by the Food Corporation of India (FCI) was first introduced in India in 1969 during the 4th Five-year plan period. Recently buffer stock was in news in relation to onion, tomato, wheat, & rice; so as to stabilize the prices of staple food at times of fluctuating supply and case of shortages through government-maintained reserves.

Prevalent Issues associated with the management of buffer stocks

- **Damaged Stock:** According to the CAG report, **1.06 lakh metric tonnes of foodgrains worth Rs 121.93 crore were damaged** due to FCI's failure to adhere to the first-in-first-out principle from 2006-07 to 2011-12.
- **Unwanted Expenditure:** FCI incurred an **additional Rs 376 crore in unwanted expenditure over the same period**, indicating a lack of fiscal discipline and operational oversight.
- **Rising Operational Costs:** Mandi fees, MSP hikes, bonuses, and administrative expenses swell the Food Corporation of India's (FCI) economic cost of food grain management. **The costs are about 40% higher than procurement prices**, affecting overall efficiency.
- **Pest Infestation and Spoilage:** Due to poor storage conditions, significant quantities of grains are lost to pest infestations. **In 2019, FCI reported a loss of around 62,000 metric tonnes of wheat due to pests.**
- **Quality Degradation:** Reports from the Commission for Agricultural Costs and Prices have pointed out the **nutritional quality degradation of grains** in prolonged storage, impacting market value and consumer health.
- **Corruption and Diversion:** Instances like the **2012 Bihar food grain scam** reveal the vulnerability of buffer stocks to diversion and corruption.
- **Natural Calamities and Climate Change:** Climate change impacts, like unexpected flooding, have affected buffer stock quality, **as seen in the 2018 Kerala floods**, which damaged stored grains.

Ways to optimise storage, prevent wastage, and ensure efficient distribution

Strategies to Optimise Storage

- **Decentralised Procurement:** The **Shanta Kumar Committee's** suggestion to decentralised procurement operations **aligns with the successful models in states like Odisha and Chhattisgarh**. It would mean states with a surplus can directly contribute to the central pool, reducing transit time and storage pressure on FCI.
- **Involving Private Sector:** By **incorporating the Private Entrepreneur Guarantee (PEG) scheme and private entities in stocking operations**, alongside Central Warehousing Corporation (CWC) and State Warehousing Corporations (SWC), storage can be optimised through better infrastructure and reduced overhead costs.

- **Negotiable Warehouse Receipt (NWR) System:** Encouraging the NWR system would allow farmers to store their produce in certified warehouses, making storage more systematic and reducing the pressure on FCI godowns, thus optimising storage capacity.
- **Leveraging Technology:** Implementation of technologies like **blockchain for inventory management can streamline stock levels**, improve transparency, and optimise the use of available storage space, preventing overstocking and underutilization.

Strategies to Prevent Wastage

- **Transparent Liquidation Policy:** An automated policy, as recommended by Shanta Kumar committee, to liquidate surplus stocks would prevent the rotting of grains in godowns. The excess stock can be offloaded in the open market or used for exports, preventing wastage.
- **Quality Control Mechanisms:** Regular quality checks and a dynamic approach towards stock maintenance would help in early detection of spoilage risks, allowing timely interventions and reducing wastage.
- **Improved Infrastructure:** Upgrading storage facilities with better ventilation, moisture control, and rodent-proofing will significantly bring down the loss percentage that currently exists due to poor storage conditions.
- **Robust Monitoring Systems:** The use of sensors and IoT devices for real-time monitoring can help in maintaining the quality of the stored grains by providing alerts on environmental changes that could lead to wastage.

Strategies to Ensure Efficient Distribution

- **Outsourcing Last-Mile Distribution:** Engaging the network of self-help groups and Farmer Producer Organizations (FPOs) in the distribution network would ensure that food aid reaches the most remote areas efficiently.
- **Direct Benefit Transfer (DBT):** Implementing the DBT system as suggested would streamline subsidies, reduce pilferage, and ensure that the benefits reach the intended beneficiaries directly and timely.
- **Restructuring FCI's Role:** FCI's redefined role would concentrate on need-based procurement, especially from states with insufficient procurement infrastructure such as eastern and north-eastern states, thus ensuring that grains are distributed efficiently from surplus to deficit regions.

Conclusion

By implementing targeted reforms and embracing technological innovations, India can transform its buffer stock management into a more efficient and responsive system, ensuring food security, reducing wastage, and supporting the agricultural sector's growth and sustainability.

MCQS

- Which of the statements about none of the above option (NOTA) in elections is/are correct?
 - It is a form of negative vote without having any electoral impact
 - If NOTA receives the highest votes among all listed candidates, then the election will be declared null or void
 - Supreme court has allowed nota as an option in election for rajya sabha members
 Which of the above statements are correct ?
 - 1 only
 - 1 and 2
 - 2 and 3
 - 3 only
- Which of the following is the theme for World Environment Day 2024 ?
 - Land Restoration, Desertification, and Drought Resilience.
 - Beat Plastic Pollution
 - Only One Earth
 - Ecosystem Restoration
- With reference to the elections in India, consider the following statements:
 - The NOTA option was first implemented in the 2014 Parliamentary election in India.
 - The NOTA option was introduced in elections to protect the 'right to secrecy' of voters.
 - If NOTA receives the highest number of votes in the constituency, the election of the constituency will be "null and void".
 How many of the statements given above is/are correct?

- a) **Only one**
b) Only two
c) All three
d) None
4. Gold reserves are part of India's foreign exchange reserves. What is the primary purpose of maintaining these gold reserves?
a) To fund government expenditures
b) To support the value of the Indian rupee
c) To provide loans to other countries
d) To create gold jewelry for export
5. Consider the following statements:
1. Stromatolites are layered sedimentary formations created by the growth of microbial mats.
2. Stromatolites are exclusively found in marine environments.
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
6. Which one of the following is the primary functions of a 'Clearing Corporation' in the financial markets?
a) Regulating the stock exchanges
b) Facilitating the settlement of trades
c) Issuing new securities
d) Providing investment advice
7. Consider the following statements with reference to the World Environment Day:
1. United Nations Environment Programme (UNEP) leads the global celebrations of World Environment Day.
2. The theme for World Environment Day 2024 is 'Ecosystem Restoration'.
3. Saudi Arabia is hosting the global celebrations for World Environment Day 2024.
Which of the statements given above are correct?
a) 1 and 2 only
b) 2 and 3 only
c) 1 and 3 only
d) 1, 2 and 3
8. With reference to Doctrine of Merger and the Rule of stare decisis, consider the following statements:
1. The Doctrine of Merger applies when a higher court confirms the decision of a lower court, causing the lower court's decision to lose its separate identity and merge into the higher court's judgment.
2. The Rule of Stare Decisis obligates courts to follow the precedents set by higher courts within the same jurisdiction to ensure consistency and predictability in the law.
3. Under the Doctrine of Merger, if a lower court's decision is overturned by a higher court, the original decision remains valid and enforceable.
How many of the above statements is/are correct?
b) Only two
c) All three
d) None
9. Who has implemented the world's largest grain storage plan?
a) World Food Programme
b) United Nations
c) Government of India
d) Food and Agriculture Organization
10. What is the primary objective of the 'Phenome India' project?
a) To map the genetic diversity of India's population.
b) To create a repository of traditional Indian medicinal plants and their uses.
c) To develop advanced agricultural techniques tailored to Indian climates.
d) None of the above