

ECONOMY

Better utilization of fertilizer and food subsidies: Basic subsidies can be climate focused and aimed better

The article suggests India should change how it spends its agriculture and food subsidies. It recommends promoting organic fertilizers and millets over chemical fertilizers and rice or wheat, for better environmental and economic benefits. Basic subsidies can be climate focused and aimed better

What is the current situation with India's fertilizer and food subsidies?

a) India's Fertilizer Subsidies

1. India's budget shows a consistent increase in fertilizer subsidies since 2017. Despite higher subsidies, crop yields are declining.
2. Farmers are overusing nitrogen fertilizers, leading to nutrient imbalances. The NPK ratio is now 11.8:4.6:1, far from the ideal 4:2:1.

b) India's Food Subsidies

1. India's food subsidy bill accounts for about 1% of its GDP.
2. The bill has been around ₹2 trillion since 2020, largely due to the difference between MSPs (Minimum Support Prices) and CIPs (Central Issue Prices) of grains.
3. The emphasis on wheat and rice, supported by high MSPs, has led to environmentally unsustainable farming practices.

Government initiatives for better utilization of fertilizer and food subsidies

The Indian government's key initiatives for better fertilizer and food subsidy utilization include the National Plan for Organic Productions to shift towards organic farming, the classification of nano urea as a 'nano fertilizer' by the Ministry of Agriculture for sustainable fertilizer use, and promoting millets in 2023, the International Year of Millets, highlighting their nutritional and environmental advantages to redirect food subsidies effectively.

Concerns related to better utilization of fertilizer and food subsidies

Overuse of Chemical Fertilizers: India's heavy fertilizer subsidies have resulted in an excessive use of nitrogen fertilizers, disturbing soil health and causing an imbalance in nutrient use, as shown by the NPK ratio of 11.8:4.6:1 in 2022-23.

Declining Crop Yields: Increased fertilizer use has not translated into higher yields, suggesting inefficiency and potential environmental harm.

Policy and Oversight Conflicts: The divided management of fertilizer policy between separate ministries creates conflicting objectives and hinders coherent policy implementation.

wayforward

- Redirect fertilizer subsidies towards nano and organic fertilizers, aligning with net-zero emission goals.
- Consolidate fertilizer oversight under the agriculture ministry to unify policy-making and execution, addressing policy gridlocks.
- Encourage organic farming and crop diversification, as practiced in Odisha, with financial support and initiatives like rice-fallow management.
- Channel food subsidies towards millets, particularly given 2023 being the International Year of Millets, to promote nutritious and less carbon-intensive crops. This would support Tribal communities and women farmers, moving towards a circular economy.
- Maintain subsidy outlay levels while focusing on low-carbon alternatives for balanced welfare, fiscal responsibility, and climate change mitigation.
- The strategy involves redirecting subsidies towards low-carbon alternatives like organic fertilizers and millets without reducing the subsidy amount. This approach aims for a balance between welfare, fiscal responsibility, and environmental sustainability.

INTERNATIONAL RELATION

The shift in India's foreign policy language – How Delhi talks to world

India's foreign policy language is becoming more confident as the country grows stronger economically and militarily. However, this new approach isn't fully embraced by all politicians yet, and the Opposition should focus on constructive debate about India's development and global role.

How has India's foreign policy language evolved?

In India's foreign policy language has shifted from being defensive to more assertive and confident. This change reflects India's growing global stature and economic progress.

Examples of this change include India's approach in the India-US nuclear deal in mid 2000s. At that time, India was concerned that a close relationship with US will result in loss of "strategic autonomy", but now

India has much closer relationship with the US. The shift from seeing strategic autonomy as merely freedom from major powers' influence to leveraging India's own power marks a significant evolution in its foreign policy thinking.

The evolution in language also reflects in new terms like “**leading power**,” “**net security provider**,” and “**first responder**” to regional crises, indicating a proactive stance in global affairs.

Role of the political class in this change

- **Adaptation to New Diplomatic Language:** The political class, including the Opposition, is slow in embracing India's evolving assertive foreign policy language. Persistent resistance exists among politicians and intellectuals to viewing India as a major power.
- **Contribution to India's Growth:** Political parties, including the Opposition, have contributed to India's growth, being part of coalition governments since 1991. The Opposition's role is now to engage constructively in shaping India's path to development.
- **Debating India's Future Goals:** There is a need for focused political debate on ambitious goal of becoming a developed nation by 2047, as outlined by the India's government.

Responsibilities that come with India's growth

- As India's power grows, it faces more responsibilities in shaping the regional and global order.
- India's role includes contributing to regional security, managing global commons, setting rules for international commerce, and influencing international institutions.
- References to India as a “leading power”, “Vishwa Mitra”, and “net security provider” highlight its evolving responsibilities.

challenges ahead:

1. Despite India's growing economy, its low per capita income highlights developmental challenges.
2. Becoming a developed country by 2047 is a goal set by the India's current government, a challenging yet inspiring target.
3. Achieving a per capita income of \$12,000 by 2047, from the current less than \$3000, requires substantial economic growth.
4. These challenges include formulating effective economic strategies and industrial policies.
5. Addressing issues like inequality and environmental degradation is crucial for sustainable development.
6. Navigating a changing global order presents complex questions for India's international strategy.

PRELIM FACTS

1.Krishi Integrated Command and Control Centre

Agriculture Minister has recently inaugurated a Krishi Integrated Command and Control Centre (ICCC) set up at Krishi Bhavan in New Delhi. This is a big-screen dashboard of all digital innovations in the sector.

About Krishi Integrated Command and Control Centre

Description-It is a tech-based solution involving multiple IT applications and platforms which helps in making informed decisions. It is housed in the Ministry of Agriculture & Farmers' Welfare.

Objective- To monitor the farm sector by ensuring availability of geospatial information received from multiple sources at one place.

These sources include remote sensing; plot-level data received through soil survey; weather data from the India Meteorological Department (IMD); sowing data from Digital Crop Survey.

Visual output-Information on crop yields, production, drought situation, cropping patterns (geographic region-wise and year-wise) in map etc will be displayed on 8 large 55-inch LED screens installed at the ICCC.

Significance of Krishi Integrated Command and Control Centre

1) **FARMER'S ADVISORY:**It allows visualisation of GIS based soil carbon mapping and soil health card data for a particular district together at one place. This will help in ensuring a customised and authentic advisory to be sent to the farmers.

2) **DROUGHT ACTIONS:**Increase or decrease in yield from a specific region (as per GCES data) can be correlated with weather, rainfall, and other information available in Drought Portal. This would help the administration to understand the reason for increase/ decrease in yield.

3) **CROP DIVERSIFICATION:** An analysis of crop diversification maps will help decision-makers to identify regions which have a scope for crop diversification.

4) **FARM DATA REPOSITORY:** Krishi Decision Support System (K-DSS), a platform under development, will act as an agriculture data repository. This platform will help in evidence-based, efficient, and data-driven decision-making.

5) **VALIDATION OF YIELD:** Yield that is captured through Krishi Mapper can be analysed with the yield that is generated through GCES application for a plot.

6) **Individual farmer level advisories-**It can ensure individual farmer-level advisories by using apps like Kisan e-mitra.

2. ICG Ship Samudra Paheredar

The Minister of External Affairs recently visited Indian Coast Guard ship Samudra Paheredar, which is in Manila Bay in the Philippines, as part of an overseas deployment to ASEAN countries.

About Indian Coast Guard ship Samudra Paheredar

It is a specialised Pollution Control Vessel (PCV) of the Indian Coast Guard. It is the second PCV of India (the first being ICGS Samudra Prahari).

- It is built by ABG Shipyard, Surat. It is Stationed on East Coast of India in Vishakhapatnam, Andhra Pradesh
- The ship's primary role is pollution response at sea. It is equipped with the most advanced and sophisticated pollution response and control equipment for mitigating oil spills.
- It includes containment equipment like hi-sprint booms and river booms, recovery devices like skimmers and side sweeping arms. The ship is capable of unhindered oil-recovery operations.
- The special features include an integrated platform management system, a power management system and a high-powered external firefighting system.
- It is capable of operating one twin-engine ALH/ Chetak helicopter.

3. Afanasy Nikitin Seamount (AN Seamount)

Recently, India applied for rights to explore two vast tracts in the Indian Ocean seabed. The application to explore the Afanasy Nikitin Seamount (AN Seamount) is advantageous for India.

About Afanasy Nikitin Seamount (AN Seamount)

1. It is a major seamount in the central Indian Ocean Basin. It is located about 3,000 km away from India's coast.
2. It reaches up to about 1,200 meters, rising from an oceanic depth of around 4,800 meters.
3. It is rich in deposits of cobalt, nickel, manganese and copper.
4. **Laws related to extraction:**
 - a) For doing extraction in this region, countries must apply first for an exploration licence to the ISBA. These rights to extraction are applied to areas that are part of the open ocean.
 - b) Open ocean means ocean (including air, surface and seabed) where no countries can claim sovereignty.
 - c) Around 60% of the world's seas are open ocean and believed to be rich in a variety of mineral. However, the costs and challenges of extraction are prohibitive.
 - d) Currently, no country has commercially extracted resources from open oceans.
 - e) **Exclusive rights:** Countries have exclusive rights up to 200 nautical miles, and its underlying seabed from their borders.

Note: The Commission on the Limits of the Continental Shelf is a UNCLOS-linked body. It decides on the limits of a country's continental shelf.

About ISA

The International Seabed Authority (ISA) is an autonomous international organization. It was established under the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea (1994 Agreement).

2. **Headquarter:** ISA headquarters is in Kingston, Jamaica.

3. **Members:** All States Parties to UNCLOS are members of ISA. As of 18 May 2023, ISA has 169 Members, including 168 Member States and the European Union.

4. **Mandate:** It has the mandate to ensure the effective protection of the marine environment from harmful effects that may arise from deep-seabed-related activities.

5. **Function:** ISA is the organization through which States Parties to UNCLOS organize and control all mineral-resources-related activities in the Area for the benefit of humankind as a whole.

4. India Employment Report 2024

The International Labour Organisation (ILO) and the Institute of Human Development (IHD) have jointly published a report titled "India Employment Report 2024".

1. Prepared by – the Institute for Human Development in collaboration with the International Labour Organization (ILO).

2. It highlights the challenges of youth employment within India's evolving economic, labor market, educational, and skills landscapes.
3. This report has used the data analysis from the National Sample Surveys and the Periodic Labour Force Surveys between 2000 and 2022.

Key Findings of the report:

- a) There has been an increase in female labor market participation rates since 2019, especially in rural areas.
- b) There has been also a gradual shift in the workforce from agricultural to non-farm sectors.
- c) There has been predominance of self-employment and casual employment, with nearly 82% of workers in the informal sector.
- d) A modest rise in the wages of casual laborers between 2012 and 2022 has been observed while real wages for regular workers have stagnated or declined.
- e) India is expected to have a migration rate of around 40 per cent in 2030 and will have an urban population of around 607 million.

Challenges highlighted by the report:

1. Almost 90% of workers remain engaged in informal work.
2. There has been a rise in contractualisation. There is only a small percentage of regular workers covered by long-term contracts. The share of regular work increased steadily after 2000 which declined after 2018.
3. There are widespread livelihood insecurities with only a small percentage being covered with social protection measures, precisely in the non-agriculture, organized sector.
4. India's large young workforce is a demographic dividend, but they don't appear to have the skills to deliver with 75% of youth unable to send emails with attachments, 60% unable to copy and paste files, and 90% unable to put a mathematical formula into a spreadsheet.

Measures to address these challenges:

1. Promoting job creation.
2. Enhancing employment quality.
3. Tackling labor market inequalities.
4. Strengthening skills and active labor market policies.
5. Bridging knowledge gaps regarding labor market trends and youth employment.

5. Nimmu-Padam-Darcha road

Recently, Border Roads Organisation (BRO) connected the strategic Nimmu-Padam-Darcha road in Ladakh.

About Nimmu-Padam-Darcha road

1. It is 298-km road that will connect Manali to Leh through Darcha and Nimmu on Kargil – Leh Highway.
2. It is the 3rd road which connects Ladakh to the hinterland. Other 2 roads are Manali-Leh and Srinagar-Leh which connects Ladakh to the hinterland.
3. The road starts at Nimo, which lies on the Leh-Srinagar highway, 35 km before Leh. It meets Manali-Leh highway in Darcha, a village in Lahaul and Spiti district.
4. The road is aligned along the course of Zaskar river till Padum, after which it follows the Lungnak river till Purne village and the Kurgiakh river till Shinkun La pass, which is located on the border of Himachal and Ladakh.
5. Strategic significance:
 - a) The Nimmu-Padam-Darcha road holds strategic significance due to its shorter length compared to the other two axes.
 - b) It crosses only one pass that is Shinkun La (16,558 feet) on which tunnel work is about to commence by the BRO.
 - c) This will result in the road having all weather connectivity to the Ladakh region.
 - d) The tunnel will be designed to withstand long-range artillery shelling or missile firings from neighbouring countries like China and Pakistan, bolstering defence preparedness in the region.
 - e) This enhanced connectivity will lead to economic development in the Zaskar valley, as highlighted by the ministry.

ANSWER WRITING**Q. Explain the role of geographical factors towards the development of Ancient India.**

A. In the study of historical developments, "geographical factors" refer to the physical features, climate, and natural resources of a region that influence the lifestyle, culture, and economic development of its

inhabitants. In the context of ancient India, a vast and diverse land, these geographical attributes played a pivotal role in shaping the development civilization

Understanding the Geographical Landscape of Ancient India

Physical Features:

- **Mountains:** The Himalayan Mountain range not only served as a formidable natural barrier safeguarding the inhabitants of the Indian subcontinent from invasions but also played a crucial role in defining the climate of the region.
- **Rivers:** The perennial rivers such as the Ganges, Indus, and Brahmaputra, carved vast river valleys that harboured ancient Indian civilizations. These rivers not only provided fertile soils ideal for agriculture but also facilitated trade and transportation.
- **Plains:** The Indo-Gangetic plains formed by river deposits, fostered agrarian societies which grew to form the backbone of ancient Indian civilization. This land was rich in alluvial soil which was also ideal for cultivating a wide variety of crops including cereals, fruits, and vegetables.
- **Deserts:** The Thar desert, also known as the Great Indian Desert, molded the way of life for the communities that resided there. The desert region dictated the establishment of specific trade routes and encouraged caravan trades.

Climate:

- **Monsoons:** The Indian monsoon, a phenomenon of seasonal reversing winds, brought abundant rains which were central to agriculture. The anticipation of monsoons led to a deep-rooted agricultural calendar and practices, dictating the sowing and harvesting periods.
- **Temperature Variations:** Ancient India experienced a wide range of temperature variations, from the cold regions of the Himalayas to the hot Thar desert and the coastal areas with moderate climates. It influenced the diverse agricultural practices and dietary habits of different regions.

Role of Geographical Factors in Development of Ancient India

Economic Development:

- **Agriculture:** The Indus and Ganges rivers provided fertile lands, which supported cultivation of a variety of crops including cereals, pulses, and vegetables, paving the way for a surplus production that not only sufficed for local consumption but also became a substantial source of trade. Ex. Different ancient civilizations settled near River Basins like Neolithic sites in Jammu and Kashmir.
- **Trade and Commerce:** The coastal regions enabled maritime trade, fostering relations with ancient civilizations like Mesopotamia, Egypt, giving rise to rich ports such as Lothal and Dwarka in Ancient India. Eg: mountainous passes served as conduits for the Silk Road.

Sociopolitical Development

- **Formation of Kingdoms and Empires:** Certain regions marked by rich natural resources and proximity to rivers. Availability of Iron and metals near southern border provided advancement of States like the Maurya and Gupta empires.
- **Urbanization:** Cities situated strategically near river banks, facilitated economic activities such as trade and agriculture. Ex. Lothal, Mohenjo-Daro etc

Cultural Development

- **Religion and Philosophy:** The serene surroundings of the Indian subcontinent fostered deep philosophical introspection, giving birth to religions such as Hinduism and Buddhism.
- **Art and Architecture:** The abundant natural resources influenced the art and architecture of ancient India, with stone, marble, and metals being used extensively in the creation of timeless sculptures and magnificent structures, with styles influenced by the varying geographical features.

Religious Development

- **Worship:** River basins make them feel that nature worship Like Ganga, Indus etc.

Overall, it catalysed a rich tapestry of cultural developments, from profound philosophies to majestic art and architecture, carving a civilization rich in diversity and depth. Thus, it is evident that the geographical landscape of ancient India played a pivotal role in the intrinsic development of one of the world's oldest civilizations

MCQs

1. With reference to the International Organization for Migration (IOM), consider the following statements:
 1. IOM was established in 1951 to help resettle people displaced by World War II.
 2. India is not an IOM member state.
 3. The International Migration Outlook is an annual publication by the IOM.

How many of the statements given above is/are incorrect?

- a) Only one **b) Only two**
c) All three d) None
2. Consider the following statements:
1. The Sundarbans Biosphere Reserve includes Sunderban Tiger Reserve, Halliday Island and Lothian Island Wildlife Sanctuaries.
2. Major rivers flowing through the Sundarbans Biosphere Reserve are Saptamukhi, Matla and Goasaba.
Select the correct answer using the codes given below:
a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2
3. With reference to the black carbon, consider the following statements:
1. The industrial sector contributes India's highest total black carbon emissions.
2. It is a long-lived pollutant which contributes to global warming.
Select the correct answer using the codes given below:
a) 1 only b) 2 only
c) Both 1 and 2 **d) Neither 1 nor 2**
4. Consider the following statements:
1. The International Labour Organization (ILO) is a United Nations agency whose mandate is to advance social and economic justice by setting international labour standards.
2. As per the India Employment Report 2024, released recently by the ILO, the share of regular jobs in India has significantly increased since 2018.
Which of the statement(s) given above is/are correct?
a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2
5. Consider the following statements:
1. Countries have exclusive rights to exploit resources up to 200 nautical miles from their coastlines, including the underlying seabed.
2. One of the functions of the International Seabed Authority (ISBA) is to enforce national regulations on seabed mining within individual country's jurisdictions.
3. Currently, no country has commercially extracted resources from open oceans.
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
6. Which one of the following is the primary objective of the ISRO's Space Science and Technology Awareness Training (START) program?
a) To train students for specific technical roles in the space industry
b) To raise awareness about the benefits of space exploration for the public
c) To provide in-depth knowledge of complex space science concepts
d) To generate interest and potential careers in space science among students
7. In the context of Strategic Litigation against Public Participation (SLAPP), seen in the news recently, which one of the following statements is correct?
a) It aims to facilitate constructive engagement and dialogue within the public sphere.
b) These are legal tactics used to intimidate or silence critics, activists, or individuals engaged in public discourse.
c) It primarily targets criminal activities and aim to prosecute wrongdoers.
d) These are initiated by defendants to protect their interests and rights in public debates and discussions.
8. Consider the following statements:
1. In the Code of Criminal Procedure, the term 'bail' is defined as the temporary prison release of a person awaiting trial or an appeal.
2. In 'Khilari vs. State of UP' (2009), the Supreme Court ruled that the appellate court must record its reasons while granting bail.
Select the correct answer using the codes given below:
a) 1 only **b) 2 only**
c) Both 1 and 2 d) Neither 1 nor 2
9. If a country successfully reduces its current account deficit, it is likely to experience:
a) Increased reliance on foreign borrowing
b) Decreased domestic investment
c) Improved stability of its currency
d) Higher rates of inflation
10. Zaskar valley, which was in news recently, is located in
(a) Himachal Pradesh
(b) Jammu
(c) Ladakh
(d) Sikkim