

GS PAPER 2 – INTERNATIONAL RELATIONS-INDIA AND ITS NEIGHBOURHOOD- RELATIONS

Signs of a potential improvement in India-Pakistan relations

The article discusses signs of a potential improvement in India-Pakistan relations following Minister S. Jaishankar's visit to Islamabad for the SCO summit. It highlights Pakistan's recent diplomatic warmth and suggests this might lead to renewed dialogue between the two nations.

What is the significance of Jaishankar's visit to Islamabad?

1. Jaishankar's visit to Islamabad for the SCO summit marks a possible thaw in India-Pakistan relations.
2. The diplomatic tone was notably warmer compared to previous engagements, such as Bilawal Bhutto Zardari's abrasive stance at the 2023 SCO meeting in Goa.
3. Pakistan's hospitality, despite internal turmoil, reflects a possible shift in its foreign policy approach.

Why is Pakistan reassessing its foreign policy?

1. Pakistan is facing severe internal challenges, including political instability, economic problems, and rising public unrest, prompting a reassessment of its foreign policy.
2. Inflation and economic instability are at the forefront, pressuring the government to focus on stabilising the country.
3. The army, led by General Asim Munir, appears to support a shift in foreign relations to ease tensions.
4. Prime Minister Shehbaz Sharif's government, mentored by Nawaz Sharif, is adopting a more pragmatic approach. It recognises that better relations with India could help address domestic issues and bring economic benefits.
5. Additionally, Pakistan is recalibrating its stance due to India's growing global influence, recognizing that cooperation with India could bring more advantages than hostility.

What is the role of different perspectives in India's policy towards Pakistan?

1. **Realists (Subedars):** Realists have dominated India's policy, especially during Modi's tenure. They focus on security and advocate a hardline stance against Pakistan, prioritizing national defense.
2. **Liberal Institutionalists (Saudagars):** This group emphasizes trade and economic ties as tools for peace. They argue that cooperation in areas like trade can benefit both nations economically.
3. **Constructivists (Sufis):** Constructivists promote dialogue, cultural exchanges, and reconciliation. They believe addressing historical grievances through diplomacy can build trust between India and Pakistan.
4. Incorporating all three perspectives could create a more balanced and cooperative approach to India-Pakistan relations.

GS PAPER 2- ISSUES RELATING TO DEVELOPMENT AND MANAGEMENT OF SOCIAL SECTOR/SERVICES RELATING TO HEALTH, EDUCATION, HUMAN RESOURCES

India's progress in human development

The article discusses India's progress in human development, highlighting its HDI ranking, gender gaps in labor participation, and rising income inequality. It emphasizes the need to address these challenges to achieve sustainable development and meet the SDGs.

How are human development and the SDGs connected?

1. The Human Development Index (HDI) measures progress in **three key dimensions: a long and healthy life, knowledge, and a decent standard of living.**
2. These dimensions are directly linked to Sustainable Development Goals (SDGs) such as SDG-3 (good health), SDG-4 (quality education), SDG-5 (gender equality), SDG-8 (decent work), and SDG-10 (reduced inequality).
3. Achieving sustainable development requires boosting human development through improvements in health, education, and income equality.

What is India's progress in human development?

1. According to the UNDP's Human Development Report (HDR) 2023-24, India is in the 'medium human development category' with an **HDI value of 0.644. India ranks 134 out of 193 countries.**
2. Neighboring countries like Bangladesh (129), Bhutan (125), and China (75) have seen faster progress.
3. Its HDI value increased from 0.434 in 1990 to 0.644 in 2022, marking a 48.4% rise.
4. However, the HDI value stagnated in 2019-20 at 0.638 and fell to 0.633 in 2021 before improving again.

What are the gender development issues in India?

1. India has a large gender gap, especially in the Labor Force Participation Rate (LFPR), with a difference of 47.8% between men (76.1%) and women (28.3%).
2. Female participation in labor is much lower compared to countries like China (53.6%) and Bangladesh (39.2%).
3. In rural areas, female participation has risen from 24.6% in 2017-18 to 41.5% in 2022-23, but in urban areas, it has only increased slightly, from 20.4% to 25.4%.

How severe is income inequality in India?

1. India has high income inequality, with the richest 1% holding 21.7% of the country's wealth.
2. This is higher than countries like Bangladesh (11.6%), China (15.7%), and Nepal (9.7%).
3. India's inequality also exceeds the global average of 17.5% and South Asia's average of 19.6%.

Way forward

India must address gender gaps in labor participation and growing income inequality. These challenges need attention to achieve the Sustainable Development Goals (SDGs) and foster human development.

GS PAPER 2- GOVERNANCE-MECHANISMS, LAWS, INSTITUTIONS AND BODIES CONSTITUTED FOR THE PROTECTION AND BETTERMENT OF THESE VULNERABLE SECTIONS

The case regarding the marital rape exception (MRE)

The article discusses a Supreme Court case challenging the legal exception that protects husbands from being prosecuted for marital rape. It explains the origins of this exception, judicial precedents, and ongoing legal debates about its constitutionality and societal impact.

What is the case regarding the marital rape exception (MRE)?

1. The Supreme Court is hearing petitions challenging the marital rape exception (MRE) in Indian law.
2. This exception, found in Section 375 of the Indian Penal Code (IPC), protects husbands from being charged with rape if their wife is over 18 years old.
3. The challenge also extends to a similar provision in the new Bharatiya Nyaya Sanhita (BNS), 2023.

Where did MRE Law originate?

1. The Marital Rape Exception (MRE) law originated from English common law, specifically the “**doctrine of coverture.**” This doctrine treated the husband and wife as a single entity after marriage, denying women legal autonomy.
2. **British jurist Matthew Hale codified the MRE in a 1736 treatise**, stating that a husband could not rape his wife due to marital consent.
3. The doctrine was adopted by British colonies, including India.
4. **England abolished the MRE in 1991 in R vs R**, recognizing that it no longer reflected the modern view of marriage and women’s rights.

What are the major issues with MRE?

1. **Violation of Equality (Article 14):** The MRE creates unequal treatment by denying married women legal protection against non-consensual sex, unlike unmarried women.
2. **Impact on Women’s Rights:** Violates women’s right to privacy and bodily autonomy (Article 21), as seen in *K.S. Puttaswamy* and *Joseph Shine* cases.
3. **High Incidence of Domestic Violence:** Nearly one-third of married women (18-49 years) in India experience physical or sexual violence by their husbands (NFHS-5).
4. **Colonial Legacy:** The MRE stems from outdated colonial laws rooted in patriarchal views of marriage.

What are the Judicial views on MRE?

1. **Karnataka High Court (2022):** Ruled that a husband can be prosecuted for raping his wife, emphasizing no legal exception should license crimes, citing the 2013 Justice J.S. Verma Committee report.
2. **Delhi High Court (2022):** Issued a split verdict. Justice Shakhder found the MRE unconstitutional, citing bodily autonomy. Justice Shankar upheld it, seeing marital sex as a “legitimate expectation.”
3. **Supreme Court (2022):** Recognized marital rape in cases involving intimate partner violence, acknowledging that sexual assault by a husband could constitute rape.

What is the Government’s Stance?

1. The government opposes removing the marital rape exception (MRE) and has stated this position in a Supreme Court affidavit.
2. It argues that marriage creates an expectation of “reasonable sexual access” not found in other relationships.
3. The government acknowledges that violating a wife’s consent is wrong but considers labeling it as “rape” to be too harsh and disproportionate.
4. It warns that criminalizing marital rape could harm the sanctity of marriage and lead to false accusations.
5. The government’s stance echoes Justice C. Hari Shankar’s 2022 Delhi High Court opinion supporting the MRE’s legality.

What would happen if the Law changed?

1. If the Supreme Court strikes down the MRE, it will not create a new offense but would remove the husband’s immunity from prosecution for rape within marriage.
2. This change would align legal treatment of marital rape with that of other forms of sexual assault.

GS PAPER 3 – INDIAN ECONOMY AND ISSUES RELATING TO PLANNING, MOBILIZATION OF RESOURCES, GROWTH, DEVELOPMENT AND EMPLOYMENT

Benefits and Criticisms of Universal Transfers

The article discusses whether India should adopt a Universal Basic Income (UBI) to address unemployment and poverty. It explores the feasibility of a modified UBI as a social safety net and suggests combining it with existing welfare programs for better coverage.

Why is UBI Being Discussed Again?

1. UBI is being discussed again due to rising concerns about unemployment and inequality, as highlighted by the International Labour Organization.
2. Automation and Artificial Intelligence have slowed global job growth, contributing to rising youth unemployment in India.
3. India faces a problem of jobless growth, where productivity increases without matching job creation, worsening inequality.
4. The 2016-17 Economic Survey of India recommended considering UBI as a solution to help those affected by unemployment and poverty.
5. UBI has become more feasible with India’s JAM (Jan-Dhan, Aadhaar, Mobile) infrastructure, enabling direct benefit transfers.
6. The COVID-19 pandemic demonstrated the importance of income transfers in times of crisis, adding urgency to discussions around UBI.

What are the current income transfer schemes in India?

1. **PM-KISAN:** Provides ₹6,000 annually to all farmers. By 2020-21, it aimed to cover 10 crore households, with a cost of ₹75,000 crore (0.4% of GDP).
2. **Rythu Bandhu Scheme (Telangana):** Offers unconditional payments of ₹4,000 per acre to farmers.
3. **KALIA (Odisha):** Provides cash transfers to farmers to support their livelihoods.

What are the Benefits and Criticisms of Universal Transfers?

1. **Benefits of Universal Transfers:**
2. **Reduced Administrative Costs:** Universal schemes reduce costs by eliminating the need for beneficiary targeting, as seen in broader applications like PM-KISAN.
3. **Minimized Exclusion Errors:** By covering everyone, universal transfers reduce the risk of missing eligible recipients.
4. **Fewer Intermediaries Involved:** This directly lowers the chances of funds leaking before reaching the intended recipients.
5. **Avoids Work Disincentives:** Universal transfers provide a basic income without discouraging work, unlike some targeted programs that may reduce incentives to seek employment.
6. **Criticisms of Universal Transfers:**
7. **High Financial Cost:** Implementing a UBI could require up to 11% of GDP, posing substantial budgetary challenges.
8. **Benefits to the Wealthy:** The inclusion of wealthier individuals in UBI schemes raises concerns, although tax adjustments could offset the net benefit to high earners.
9. **Implementation Challenges:** Issues like Aadhaar verification failures and bank rejections have been problematic, as highlighted by the PM-KISAN experience.

Is UBI Financially Feasible?

1. Large-scale UBI proposals, amounting to 3.5%-11% of GDP, are financially challenging for India. Implementing such a scheme would require cutting other anti-poverty programs or raising taxes substantially.
2. A more feasible option is a limited UBI scheme pegged at 1% of GDP. This scheme would provide ₹144 per month to every citizen, similar to PM-KISAN, which currently supports farmers.
3. The PM-KISAN scheme, covering 10 crore households, costs ₹75,000 crore, about 0.4% of GDP. Expanding this scheme universally would cost approximately double.
4. The fiscal burden is manageable if it's combined with existing schemes like MGNREGS.
5. Thus, a modified UBI scheme, rather than a full-scale one, could be financially feasible.

AGRICULTURE PAPER-III

Centre Says Fortified Rice Safe To Consume

The Union Food Ministry said scientific evidence suggested that iron-fortified rice was safe for consumption for everyone and people suffering from blood disorders such as Thalassemia and Sickle Cell anemia are not at risk of excessive iron absorption.

- There were concerns of safety raised over the consumption of fortified rice and the complaint that the approval for its universal supply was to please certain multinational companies.
- Centre clarified that fortified rice was an ambitious initiative to combat micronutrient deficiencies.

What is Fortification?

- Fortification is the process of adding nutrients to food products that are not naturally present or are present in insufficient amounts.
- **Rice Fortification: Fortified Rice Kernels (FRK)**, containing **FSSAI prescribed micronutrients** (Iron, Folic Acid, Vitamin B12) are **added to normal Rice** in the ratio of **1:100** (Mixing 1 Kg of FRK with 100 Kg custom milled rice).
- **Standard for Fortified rice:** According to **FSSAI** norms 1 kg fortified rice shall contain Iron (28 mg-42.5 mg), folic acid (75-125 microgram) and Vitamin B-12 (0.75-1.25 microgram).
 - Fortified rice is nearly identical to traditional rice in aroma, taste, and texture.
 - Process is done in the rice mills at the **time of milling of rice.**

Need of Rice Fortification

- India has very high levels of malnutrition among women and children.
- Iron deficiency affects more than **two billion people globally causing anaemia**, weakness, impaired learning and increased risk of infections and maternal mortality.
- Rice is a staple diet for **one-third of the Global Population** and the **majority of the population** in India rely on rice.
- Distribution of Fortified Rice through Public Distribution System can help India fight against the problem of Malnutrition and Anaemia.

PRELIM FACTS

1. Battle of Walong

The Indian Army is organizing a series of month-long events to commemorate the 62nd anniversary of the Battle of Walong, which occurred during the 1962 war with China.

About Battle of Walong

1. The Battle of Walong, fought between 14 and 16 November 1962, was the only counterattack launched by India during the India-China war of 1962.
2. The battle took place in Arunachal Pradesh's Walong, the easternmost town near the Tibet region.
3. The Indian Army's 6 Kumaon Battalion launched the counterattack with limited resources, ammunition, and manpower. Despite being heavily outnumbered, Indian troops managed to hold back the Chinese forces for over 20 days.
4. Initially, China had reserved a full division for attacks on Tawang and Sela sectors and assigned just one regiment for Walong. However, due to stiff Indian resistance, the Chinese had to divert their division meant for Tawang to Walong.
4. **Notable Incidents:** On 23 October, a company led by Lt Bikram Singh removed planks from a wooden bridge, causing the first Chinese soldier crossing the bridge to fall into a river, alerting Indian troops and allowing them to repel the Chinese assault, inflicting heavy casualties.

6. Counterattack at Tri Junction: On 12 November, Indian troops planned to disrupt Chinese operations by attacking from a feature called Tri Junction. The counterattack launched by two companies under Captain B.N. Singh on 14 November was met with fierce Chinese resistance.

7. Final Day of Battle: On 16 November, Chinese troops launched a massive attack on Walong. Despite valiant resistance from the few remaining Indian troops, they were surrounded and ordered to withdraw due to lack of reinforcements and mounting casualties.

8. Post-War Scenario: After the war, the Chinese vacated most of the territory they had captured, including Walong, but India learned hard lessons regarding preparedness, infrastructure, and the importance of proper military equipment.

9. Legacy and Recognition: The bravery and determination of Indian soldiers were recognized, with Time magazine in January 1963 stating, "At Walong, Indian troops lacked everything. The only thing they did not lack was guts."

2. Twilight Zone in the ocean

Recent evidence suggests that there are more animals in Twilight Zone of the ocean by weight than in all of the world's fisheries combined.

About Twilight Zone in the ocean

Source:nature

1. The Twilight Zone in the ocean is a fascinating layer of the marine environment that lies between the Epipelagic Zone (sunlit surface waters) and the Bathypelagic Zone (deeper, darker waters). It is also known as **Mesopelagic Zone**.

2. It extends from approximately 200 meters to 1,000 meters below the ocean's surface. In this zone, sunlight is minimal and insufficient for photosynthesis, creating a dimly lit, shadowy realm, hence the name "twilight."

Characteristics of the Twilight Zone

1. Light Penetration: Very little sunlight reaches the Twilight Zone, which gradually diminishes as depth increases. While it is not completely dark, the low light levels make it impossible for photosynthetic organisms to survive.

2. Temperature and Pressure: Temperatures in the Twilight Zone are significantly cooler than at the surface, often ranging from 4°C to 20°C. Pressure increases drastically with depth, which plays a role in the adaptation of organisms living here.

3. Oxygen Levels: The oxygen concentration in this zone is relatively low, especially at deeper levels, creating a challenge for marine life that must adapt to low-oxygen environments.

4. Marine Life: Despite the low light and harsh conditions, the Twilight Zone is home to a wide array of organisms.

Many species, including lanternfish, bristle mouths, squids, jellyfish, and zooplankton have evolved to survive in this environment.

Some animals are bioluminescent, producing light through chemical reactions in their bodies. This ability is crucial for communication, predation, and camouflage in the dim light of the Twilight Zone.

5. Diel Vertical Migration: One of the most remarkable phenomena in the Twilight Zone is the diel vertical migration, where vast numbers of creatures travel from the depths to the surface at night to feed, returning to the Twilight Zone by day to avoid predators.

6. Role in the Carbon Cycle: The Twilight Zone plays a crucial role in the global carbon cycle. Marine organisms, particularly zooplankton and small fish, feed on phytoplankton from the surface waters and transport carbon to deeper layers of the ocean when they excrete waste or die and sink.

Importance and Research:

1. The Twilight Zone is increasingly recognized for its importance in marine ecosystems and climate regulation.

2. Scientists are keen to understand how it functions as a carbon sink, helping mitigate the effects of climate change.

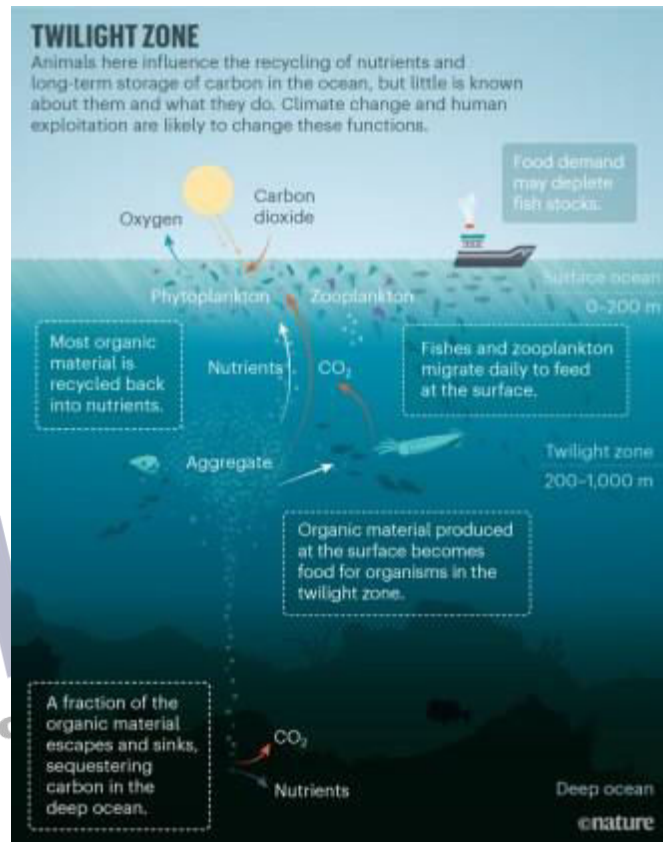
However, it is also under pressure from deep-sea fishing and climate change, making its preservation a growing concern for marine biologists.

3. Assam's Hollongapar Gibbon Sanctuary

The National Board for Wildlife (NBWL) has deferred approval for a Vedanta subsidiary's proposal for oil exploration in Assam's Hollongapar Gibbon Sanctuary.

About Hollongapar Gibbon Sanctuary

- **Location:** Situated in Assam, India.
- **Former Names:** Previously known as the Gibbon Wildlife Sanctuary or Hollongapar Reserved Forest.
- **Establishment:** Officially constituted and renamed in 1997.
- **Initial Designation:** Initially set aside in 1881.



Flora and Fauna

- **Hoolock Gibbons:** Home to India's only ape and gibbon species.
 - It is found in Nagaland, Manipur, Assam, Meghalaya, Arunachal Pradesh, Mizoram, and Tripura, south of the Brahmaputra in India.
 - **Conservation status: IUCN Red Lists**
 - Hoolock Gibbon (Eastern)- **vulnerable**
 - Hoolock Gibbon (Western) – **Endangered**
- These both the species are on Schedule I of the Wildlife (Protection) Act of India, 1972.
- **Bengal Slow Loris:** Also houses Northeastern India's only **nocturnal primate**.
- **Vegetation:**
 - **Upper Canopy:** Dominated by hollong trees (*Dipterocarpus retusus*).
 - **Middle Canopy:** Dominated by nahar trees (*Mesua ferrea*).
 - **Lower Canopy:** Comprises evergreen shrubs and herbs.

Threats to the Habitat

- **Illegal Logging:** Unauthorized cutting of trees.
- **Human Encroachment:** Expansion of human settlements into the forest area.
- **Habitat Fragmentation:** The breaking up of the forest into smaller, isolated patches.

4. Understanding The Differences Between Antelope and Deer

Context: Recently, Blackbuck and Chinkara are at the centre of the news cycle given the tragic murder of Nationalist Congress Party leader Baba Siddique in Mumbai.

Key Differences between Antelope and Deer

- **Taxonomy**
 - **Both deer and antelope** belong to the kingdom *Animalia* and the order *Artiodactyla* (**even-toed ungulates**).
 - **Deer** belong to the family *Cervidae*, while **antelope** are part of the family *Bovidae* (which also includes cattle, buffalo, goats, etc.)
- **Physical Characteristics**
 - **Deer** have **antlers:** Branching, keratinous growths present **only in males** and **shed annually**.
 - **Antelope** have **horns:** Permanent, unbranched, strong, and composed of a chitinous shell with a bony core, **present in both males and females**.
- **Body Structure**
 - **Antelopes:** Generally have **longer legs and more slender bodies**, adapted for speed and agility in open habitats.
 - **Deer:** Tend to have **stockier builds with shorter legs** compared to many antelope species.
- **Behaviour**
 - **Antelopes:** Antelopes have adapted a wide range of habitats, typically **woodland, forest, savannah, grassland plain, desert (hot and cold), swamp, marshes**, etc. and several species are living in the **mountain and rocky outcrops**.
 - They **often live in large herds and rely on speed and agility to evade predators**.
 - **Deer:** May form smaller groups and are often found in forested areas.
 - They **rely more on camouflage and stealth, along with speed, to avoid predators**.

Geographical Distribution of Antelope

- **Distribution:** There are 91 species of antelopes worldwide, primarily in Africa and Asia with Africa being the 'antelope haven.'
- **Antelopes in India:** India has **six antelope species:** Tibetan Antelope, Tibetan Gazelle, Nilgai, **Blackbuck, Chinkara, and Chausingha**.
- **Threats to Antelope Populations:** Hunting, habitat destruction, competition with livestock and wars and conflict.

Global Distribution of Deer

- There are **43 species of deer** found across various regions, from the **Americas to Eurasia**.
 - **Moose:** The largest deer species, found in North America (called Elk in Eurasia).
 - **Pudu:** The smallest deer species, native to South America.
- **Deer in India:** India is home to 12 species of deer.
 - **Indian Mouse Deer (smallest)**
 - **Sambar (largest)**

5. Jiangmen Underground Neutrino Observatory (JUNO)

Context: After years of construction, the \$300 million **Jiangmen Underground Neutrino Observatory (JUNO)** in China's **southern Guangdong province** will soon start gathering data on **neutrinos**, a product of nuclear reactions, to help solve one of the **biggest mysteries in particle physics**.

About Jiangmen Underground Neutrino Observatory (JUNO)

- **Location:** Southern Guangdong Province, China.
- **Cost:** \$300 million.
- **Purpose:** To study **neutrinos**, subatomic particles from nuclear reactions, for understanding particle physics and the universe.

- **Construction:** A **giant sphere** with light-detecting tubes, housed in a 12-storey pool of water, 700 metres underground.
- **Operational:** Expected to start in **2025**.
- **Scientific Objectives:**
 - **Neutrino Mass Hierarchy:** JUNO aims to determine which neutrino types are **lightest** and **heaviest**—a crucial question in particle physics.
 - **Study of Solar Processes:** Real-time observation of **neutrinos from the Sun** for insights into solar energy generation.
 - **Earth Studies:** Investigate **neutrinos from radioactive decay** in Earth's mantle to understand **tectonic plate movement**.
 - **Nuclear Power Plants:** JUNO will analyse neutrinos from two nearby nuclear plants for up to six years.

About Neutrinos

- Type of **subatomic particle**.
- **Mass and Charge:** Don't have an electric charge, have a small mass, and are left-handed (a physics term meaning the direction of its spin is opposite to the direction of its motion).
- **Abundance of Neutrinos:** **Second-most abundant particles after photons** (particles of light) and the most abundant among particles that make up matter.
- **Types/Flavours:** **Three types** or "flavours" – **electron neutrino, tau neutrino and muon neutrino**.
- **Neutrino Oscillation:** They can **change from one flavour to another** as they travel. This is an **unusual quantum phenomenon**.
- **Example:** Neutrinos from the **Sun** are initially **electron-neutrinos**, but on **Earth**, many of them are detected as **muon-neutrinos**.
- **Observation:** Neutrinos' **weak charge** and almost **nonexistent mass** have made them notoriously difficult for scientists to observe.
- They can only be "**seen**" when they **interact with other particles**

India's Neutrino Project

- **India-based Neutrino Observatory (INO):** Planned for **Tamil Nadu, India**.
- **Location:** The INO collaboration has decided on a site in the Bodi West Hills (BWH) region in the **Theni district of Tamil Nadu**.
- **Funding and Support:** Funded by the **Department of Atomic Energy**.
- **Current Status:** Faces an uncertain future due to procedural issues and **lack of political support**.

6.SARTHI, or Solar Assisted Reefer Transportation with Hybrid controls and Intelligence

Recently, the National Institute of Food Technology Entrepreneurship and Management, Kundli (NIFTEM-K) has introduced Solar Assisted Reefer Transportation with Hybrid Controls and Intelligence (SARTHI) system.

About SARTHI

- SARTHI, or **Solar Assisted Reefer Transportation with Hybrid controls and Intelligence**, is a system that uses **IoT (Internet of Things)**, sensors, and **solar power** to reduce **post-harvest losses** in the **transportation of perishable food**.
- **Features of SARTHI:**
 - **Dual Compartments:** Stores fruits and vegetables at different temperatures
 - **Real-time Monitoring:** Sensors measure temperature, humidity, ethylene, and CO2 levels
 - **Mobile App:** Provides real-time information about the quality of the produce
 - **Solar-Powered Air Handling Unit:** Maintains temperature control when the vehicle stops
- **Significance:**
 - SARTHI can help **extend the shelf life of produce** and **reduce losses** due to **moisture loss or chilling injury**.
 - It can also **help transporters** make **informed decisions**, such as rerouting produce to closer markets if spoilage is detected.
 - This can help **reduce carbon footprints and energy waste**.

ANSWER WRITING

Q. "High economic growth does not necessarily translate into improved social indicators." In light of India's 2024 Global Hunger Index ranking, critically examine the relationship between economic growth and social development.

High economic growth in India does not necessarily lead to improved social indicators such as health, education, and nutrition. Despite a growing GDP, the country still grapples with issues like hunger, malnutrition, and unequal access to services. The 2024 Global Hunger Index (GHI) ranks India 105th out of 127 countries, highlighting a gap between economic success and social progress.

High Economic Growth and Poor Social Indicators

- **Income Inequality:** Despite economic growth, wealth is unevenly distributed, leading to inadequate improvements in health and education for marginalised groups.
For example: According to the **National Sample Survey**, the top **10%** of India's population holds over **77%** of the total national wealth, exacerbating inequality.
- **Undernutrition and Hunger:** High GDP growth has not eradicated hunger, as evidenced by India's poor ranking in the GHI.
For example: **13.7%** of India's population remains **undernourished**, highlighting the disconnect between economic growth and nutritional improvements.

- **Poor Health Outcomes:** Investments in healthcare remain insufficient compared to GDP growth, resulting in poor health indicators.
For example: India's health expenditure is only **2.1% of GDP**, leading to inadequate health services for the poor.
- **Education Disparities:** Economic growth has not translated into equitable education opportunities, particularly in rural areas.
For example: The **Annual Status of Education Report (ASER)** shows that only **73%** of children in rural areas can read at the level expected for their age.
- **Access to Clean Water and Sanitation:** Despite growth, access to clean water and sanitation remains limited, affecting public health.
For example: According to **NITI Aayog**, around **600 million** people face high to extreme water stress, despite economic progress.
- **Unemployment and Jobless Growth:** Economic growth in India has not resulted in job creation, leaving many without employment opportunities.
For example: The **Periodic Labour Force Survey (PLFS)** reported an unemployment rate of **3.2%** in **2024**
- **Gender Inequality:** Women's participation in the workforce remains low, even with economic growth.
For example: World Bank reports that the **female labour force participation** rate in India was **32.7%** in 2023

Positives of Economic Growth and Social Development

- **Reduction in Poverty:** Economic growth has led to a reduction in overall poverty levels in India, improving living standards for many.
For example: The **World Bank** reported that the poverty rate in India dropped to **9.4%** in **2023**, from **22.5%** in **2011-12**.
- **Improvement in Infrastructure:** Economic growth has facilitated investments in infrastructure, leading to better connectivity and social services.
For example: The **Pradhan Mantri Gram Sadak Yojana (PMGSY)** has improved rural road connectivity, enhancing access to education and healthcare.
- **Increased Social Spending:** Higher revenues from economic growth have enabled increased public spending on welfare programs.
For example: The government increased its budget for the **Mahatma Gandhi National Rural Employment Guarantee Act** to enhance rural livelihood opportunities.
- **Technological Advancements:** Growth has encouraged digital adoption, improving access to education and health services.
For instance: The **Digital India** initiative has expanded **e-health** and **e-education** services, benefiting rural populations.
- **Financial Inclusion:** Growth has enabled greater financial inclusion, leading to better access to financial services.
For example: Over **460 million Jan Dhan accounts** have been opened, providing banking access to the unbanked population.

Negatives of Economic Growth and Social Development

- **Persistent Hunger and Malnutrition:** Despite growth, hunger and malnutrition remain prevalent, as highlighted by the **GHI**.
For example: India's **child wasting** rate is the highest globally at **18.7%**, reflecting poor nutritional outcomes.
- **Widening Inequality:** Economic growth has exacerbated income and regional inequalities, limiting social progress.
For instance: States like Bihar and Uttar Pradesh continue to lag behind in health and education indicators compared to wealthier states.
- **Inadequate Health Infrastructure:** Growth has not adequately improved healthcare infrastructure, especially in rural areas.
For example: The **doctor-to-patient ratio** in rural India remains well **below WHO standards**, impacting healthcare delivery.
- **Environmental Degradation:** Rapid economic growth has led to environmental damage, affecting health and livelihoods.
For instance: **Air pollution** in cities like **Delhi** has reached hazardous levels, contributing to respiratory diseases.
- **Neglect of Agriculture:** Economic policies favouring industrial growth have led to the neglect of agriculture, affecting food security.

Way Ahead

- **Focus on Inclusive Growth:** Policies should aim at inclusive growth that benefits all sections of society, especially the marginalised.
For example: Expanding schemes like **PM-KISAN** to cover more farmers can ensure that economic growth reaches rural households.
- **Increased Public Health Investment:** Higher investment in public health infrastructure is essential to improve social indicators.
For instance: Increasing healthcare spending to **3%** of **GDP** can help achieve universal health coverage.
- **Strengthening Social Safety Nets:** Expanding social safety nets like **PDS** and **MGNREGA** will ensure food and income security.
For instance: Enhancing **PDS** coverage can help combat malnutrition and food insecurity effectively.

- **Education Reforms:** Investing in quality education, especially in rural areas, will enhance human capital development.
For instance: Improving teacher training programs under **Samagra Shiksha** can lead to better educational outcomes.
- **Addressing Gender Inequality:** Promoting women's participation in the workforce through targeted interventions is crucial.
For instance: Expanding the scope of **Skill India** to include more women can boost female labour force participation.

The 2024 Global Hunger Index underscores that economic growth alone is insufficient to improve social indicators in India. To achieve true development, it is essential to bridge the gap between economic success and social well-being through inclusive policies, better social infrastructure, and targeted interventions that address the needs of the marginalised.

MCQ

- Consider the following statements regarding Kaziranga National Park:
 - It is a UNESCO World Heritage Site known for its population of one-horned rhinoceroses.
 - It has been recognized as the second-largest butterfly diversity hub in India.
 - The park is located in both Arunachal Pradesh and Assam.
 Which of the above statements is/are correct?
 - 1 and 2**
 - 1 only
 - 2 and 3
 - 1, 2 and 3
- Consider the following statements about the Drugs Technical Advisory Board (DTAB):
 - It is the highest statutory body for advising on drug-related matters in India.
 - It operates under the Ministry of Chemicals and Fertilizers.
 - The board was established under the Drugs and Cosmetics Act, 1940.
 - It is part of the Central Drugs Standard Control Organization (CDSCO).
 Which of the above statements are correct?
 - 1 and 3
 - 1, 3, and 4**
 - 2 and 4
 - 1, 2, 3, and 4
- Consider the following statements about the Battle of Walong:
 - It was part of the 1962 Indo-Pak war.
 - Indian forces held off a much larger Chinese army.
 - The battle demonstrated India's only counteroffensive during the Sino-Indian War.
 - Walong is located in Arunachal Pradesh, near the McMahon Line.
 Which of the above statements are correct?
 - 1 and 3
 - 1, 3, and 4
 - 2 and 4**
 - 1, 2, 3, and 4
- Consider the following statements about neutrinos:
 - Neutrinos are produced in high-energy processes like nuclear reactions in stars.
 - Neutrinos interact frequently with matter, making them easy to detect.
 - The Jiangmen Underground Neutrino Observatory (JUNO) is being built in the United States to study neutrinos.
 - Neutrinos carry an electric charge.
 Which of the above statements is correct?
 - 1 Only**
 - 2 Only
 - 3 Only
 - 4 Only
- Consider the following statements:
 - Abhidhamma refers to the historical accounts of the Buddha's life.
 - Pali was the language used to preserve the teachings of the Buddha.
 Which of the statement(s) given above is/are correct?
 - 1 only
 - 2 only**
 - Both 1 and 2
 - Neither 1 nor 2
- With reference to IndiaAI Mission, consider the following statements:
 - It is a comprehensive initiative launched by the Indian government to position India as a global leader in artificial intelligence (AI) research, development, and application.
 - IndiaAI Compute Capacity, a component of the Mission, is responsible for regulating AI applications in the private sector.
 Which of the statement(s) given above is/are correct?
 - 1 only**
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
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 Which of the statement(s) given above is/are correct?
 - 1 only**
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
- In the context of the Buddha's teachings, which one of the following is the significance of living according to Dhamma?
 - It guarantees wealth and prosperity in this life
 - It leads to liberation by aligning with the truth of existence**
 - It ensures rebirth in a higher form in the next life
 - It promotes social status and authority in religious circles
- Consider the following statements:
 - Namdapha National Park has the highest butterfly's species in India.
 - Kaziranga National Park is the only habitat for one-horned rhinoceros in India.
 Which of the statement(s) given above is/are correct?
 - 1 only**
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
- Consider the following statements:
 - Green methanol can reduce carbon dioxide emissions by up to 95%.
 - Green methanol production eliminates the need for green hydrogen.
 - Green methanol can store excess renewable energy and be used to generate electricity or as a fuel.
 How many of the statements given above are correct?
 - Only one
 - Only two**
 - All three
 - None
- With reference to IndiaAI Mission, consider the following statements:
 - It is a comprehensive initiative launched by the Indian government to position India as a global leader in artificial intelligence (AI) research, development, and application.
 - IndiaAI Compute Capacity, a component of the Mission, is responsible for regulating AI applications in the private sector.
 Which of the statement(s) given above is/are correct?
 - 1 only**
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2