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The New Learning Mantra

A still life composition of historical artifacts. In the foreground, a brown leather flask with a metal cap stands on the left. A rolled-up scroll in reddish-brown leather lies horizontally in the middle ground. A metal key and a ring are scattered on an old, detailed map in the foreground. The background is a textured, patterned surface in shades of brown and gold. The text "HISTORY-ARTS AND CULTURE" is overlaid in the center in a bold, white, sans-serif font.

HISTORY- ARTS AND CULTURE



**INTRODUCTION TO INDIA'S NEW
CLASSICAL LANGUAGES**

**PRAKRIT AND PALI: NEWLY DESIGNATED
CLASSICAL LANGUAGES OF INDIA**

**NOBEL PEACE PRIZE 2024: HONORING
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**ORIGINS OF DURGA PUJA IN BRITISH
COLONIAL BENGAL**



INTRODUCTION TO INDIA'S NEW CLASSICAL LANGUAGES

Recent Additions to the Classical Languages List

CONTEXT: The Union Cabinet recently awarded the “classical language” tag to Marathi, Pali, Prakrit, Assamese, and Bengali. This designation joins Tamil, Sanskrit, Telugu, Kannada, Malayalam, and Odia, which had already been granted this status over the years.

Origins and Recognition of “Classical Language” Status

BACKGROUND: In response to demands from multiple states, the UPA-1 government created a special category called “classical languages” for specific Indian languages with significant historical and cultural value. The designation came with criteria to ensure only languages of high antiquity and rich literary heritage were included.

The concept of a “classical language” originated with the 2004 designation of Tamil as the first Indian language to receive this tag, recognizing its antiquity and literary significance. A Linguistic Experts Committee (LEC) was subsequently formed under the Ministry of Culture and Sahitya Akademi to examine new proposals. Sanskrit, Telugu, Kannada, Malayalam, and Odia were later recognized as classical languages based on similar criteria.

Criteria for “Classical Language” Status

As of July 2024, the criteria for achieving classical status include:

- Evidence of early texts and recorded history spanning 1500–2000 years.
- A substantial body of ancient literature considered a cultural heritage.
- Epigraphic and inscriptional records.
- Knowledge-based texts, including prose and poetry.
- A distinct or potentially discontinuous evolution from modern forms.

Following these criteria, the LEC recommended the inclusion of five additional languages, subsequently approved

by the Union Cabinet.

Highlights of the Newly Designated Classical Languages Marathi

Originating from the Maharashtri Prakrit, Marathi has ancient roots in western India and was once the official language of the Satvahanas. Early inscriptions of Maharashtri Prakrit date to the 1st century BCE, with the earliest Marathi inscriptions found in the 8th century CE.

Bengali and Assamese

Both Bengali and Assamese trace their linguistic lineage to Magadhi Prakrit, a language prevalent in East India and linked to the court of Magadha. Their evolution took place between the 6th and 12th centuries, with distinctive developments in each region.

Prakrit and Pali

Prakrit languages are a group of Indo-Aryan languages historically used by the general population, contrasting with Sanskrit's elite status. Pali, a Sanskritised form of Magadhi Prakrit, is associated with the Theravada Buddhist Canon, surviving in countries like Sri Lanka and Myanmar.

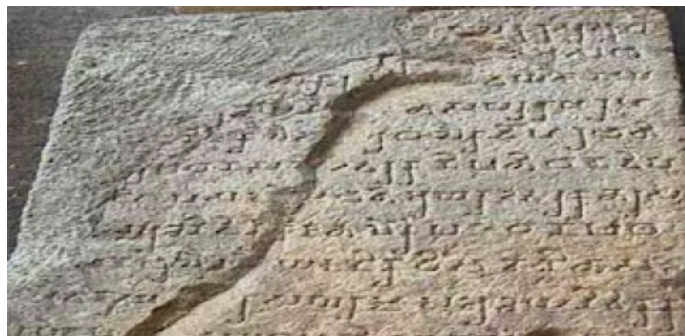
Impact of the “Classical” Tag

The classical language designation encourages the preservation and promotion of these languages. The Ministry of Education, in collaboration with the Ministry of Culture and state governments, aims to facilitate increased research, digitization, and educational inclusion. Specialized institutions and centers are also established to support the study and dissemination of these languages at both national and international levels.

This escalation underscores the long-standing conflict between the two Koreas, which has simmered for over 70 years.

PRAKRIT AND PALI: NEWLY DESIGNATED CLASSICAL LANGUAGES OF INDIA

CONTEXT: The recent recognition of Prakrit and Pali as classical languages by the Indian government honors their central role in India's spiritual, cultural, and philosophical history. Prime Minister Narendra Modi highlighted the languages' contributions to Indian thought and their influence on various religious and literary traditions.



Prakrit: The Language of the Masses

Origins and Characteristics

BACKGROUND: The term “Prakrit” is derived from “prakriti,” meaning “source” or “origin,” as these languages developed from Sanskrit, the classical language of the Vedas and early Hindu literature. Unlike Sanskrit, Prakrit languages were simpler in grammar and sound, making them accessible to the general populace and widely used in public inscriptions. Historian A.L. Basham noted that the Prakrit languages were spoken by the masses, with inscriptions and edicts, like the famous Ashokan edicts, composed in various Prakrit forms.

Diversity of Prakrit Dialects

Prakrit encompasses a group of related Indo-Aryan languages and dialects, including:

Magadhi Prakrit: The official language of the Mauryan court and used in the Ashokan edicts, which later evolved into languages like Bengali, Assamese, and Odia.



- **Ardhamagadhi:** A variant of Magadhi favored by Jain scholars and considered a definitive Prakrit by linguist A.C. Woolner.
- **Shauraseni:** Predominantly used in North and Central India, this dialect influenced later languages such as Hindustani and Punjabi and was commonly used by lower classes and women in Sanskrit plays.
- **Pali:** The Canonical Language of Buddhism

Role in Buddhist Canon

Pali, a widely studied Prakrit, served as the language for Theravada Buddhist texts, collectively known as the Tipitaka, or “Three Baskets.” The Tipitaka is divided into:

- **Vinaya Pitaka:** Rules and guidelines for monastic life.
- **Sutta Pitaka:** Discourses and teachings of the Buddha, including religious poetry.
- **Abhidhamma Pitaka:** Texts expounding on Buddhist philosophy.

Pali gained prominence in Theravada Buddhism and remained a religious language in Sri Lanka, Myanmar, Thailand, Laos, and Cambodia after Buddhism declined in India.

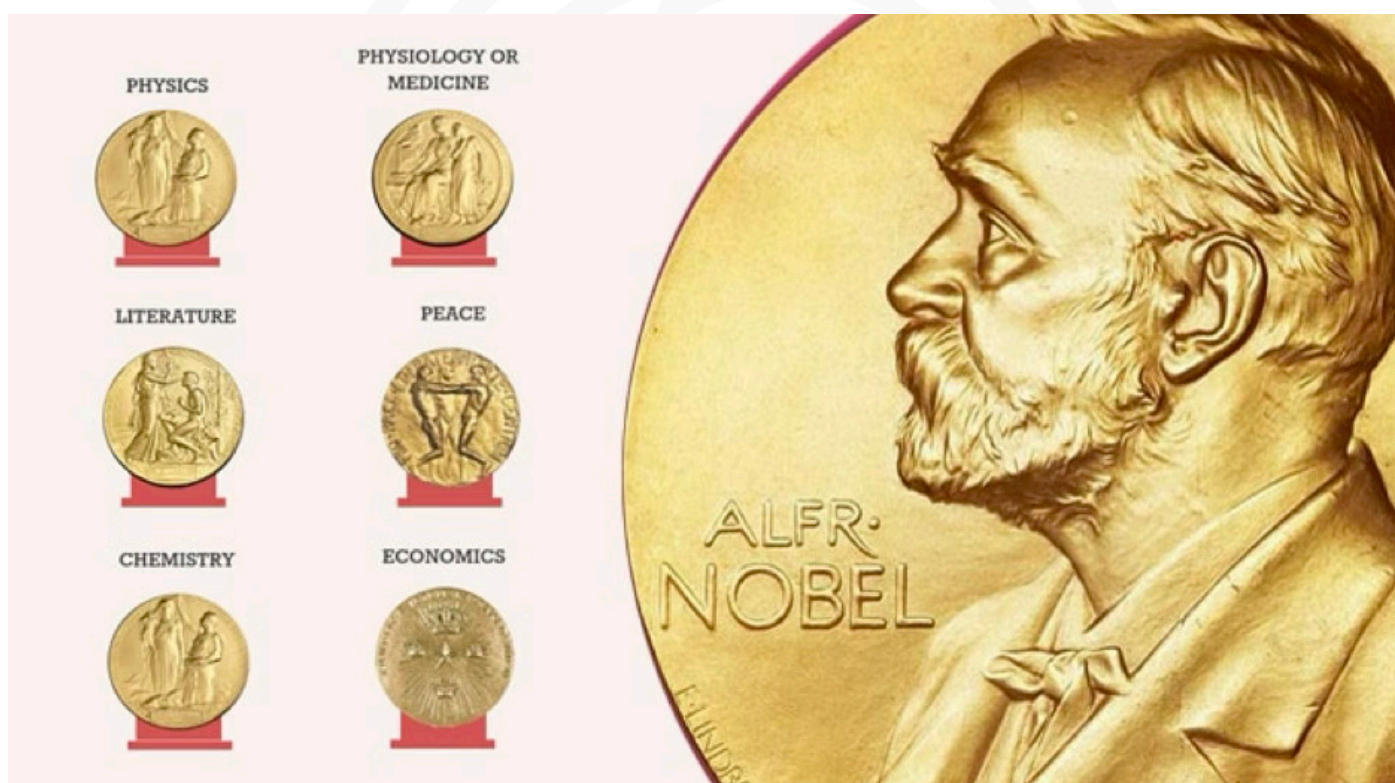
Pali’s Linguistic Roots

Though traditionally associated with Magadhi Prakrit, some scholars suggest that Pali developed as a blend of Prakrit dialects, partially Sanskritised to aid its spread across diverse regions.

Cultural Significance of the Classical Language Tag

The classification of Prakrit and Pali as classical languages aims to preserve their legacy, encouraging further academic and cultural engagement with their texts. The Ministry of Education plans to promote these languages, enhancing accessibility and scholarship in India’s rich linguistic heritage.

NOBEL PEACE PRIZE 2024: HONORING NIHON HIDANKYO FOR DISARMAMENT EFFORTS



CONTEXT: The 2024 Nobel Peace Prize has been awarded to Nihon Hidankyo, a Japanese organization representing survivors of the Hiroshima and Nagasaki atomic bombings. By awarding Nihon Hidankyo, the Nobel Committee underscores the importance of the survivors’ testimonies and the urgent need for global disarmament.



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About Nihon Hidankyo and Its Mission



BACKGROUND: Founded on August 10, 1956, Nihon Hidankyo is the only nationwide organization in Japan dedicated to survivors of the Hiroshima and Nagasaki bombings, known as Hibakusha. This group advocates for the welfare of Hibakusha, seeks to eliminate nuclear weapons, and campaigns for adequate compensation for atomic bombing victims. Through international outreach and raising awareness, they aim to expose the public to the catastrophic effects of nuclear weapons.

The Legacy of Hibakusha in the Disarmament Movement

The Hibakusha have played a crucial role in the global disarmament movement. Survivors and their descendants have tirelessly shared firsthand accounts of the bombings, reminding the world of the devastating humanitarian impact of nuclear warfare. The Nobel Committee commended these efforts, recognizing that Hibakusha's testimonies have greatly contributed to establishing a "nuclear taboo" against the use of atomic weapons, which has held since 1945.

Context and Consequences of the Hiroshima-Nagasaki Bombings

The bombings of Hiroshima (August 6, 1945) and Nagasaki (August 9, 1945) by the United States marked a turning point in history. Approximately 70,000 people died instantly in Hiroshima, with the death toll eventually surpassing 100,000. In Nagasaki, an estimated 40,000 died instantly, with many more affected in the aftermath. Following these attacks, Japanese Emperor Hirohito cited the "most cruel bomb" as a factor in Japan's surrender, warning that continued conflict

could result in "the total extinction of human civilization."

Recognizing a Legacy of Disarmament Efforts in the Nobel Prize History

The 2024 prize is part of a long Nobel Peace Prize tradition recognizing contributions toward nuclear disarmament. Since 1901, at least 10 Peace Prizes have been awarded to individuals and organizations advocating against nuclear armament. Notably, the 2017 Nobel Peace Prize went to the International Campaign to Abolish Nuclear Weapons (ICAN), which has collaborated with Nihon Hidankyo to document the long-term impacts of nuclear weapons. In 1974, Japanese Prime Minister Eisaku Sato was honored for Japan's commitment to non-nuclear policies.

Ongoing Threats and the Need for Vigilance

While the nuclear taboo has persisted, the Nobel Committee warns that it is under growing pressure as new nations develop nuclear capabilities and existing powers upgrade arsenals. For example, a BBC report suggests that the U.S. may spend over \$1 trillion by the 2040s to modernize its nuclear infrastructure, underscoring the ongoing challenge to disarmament.

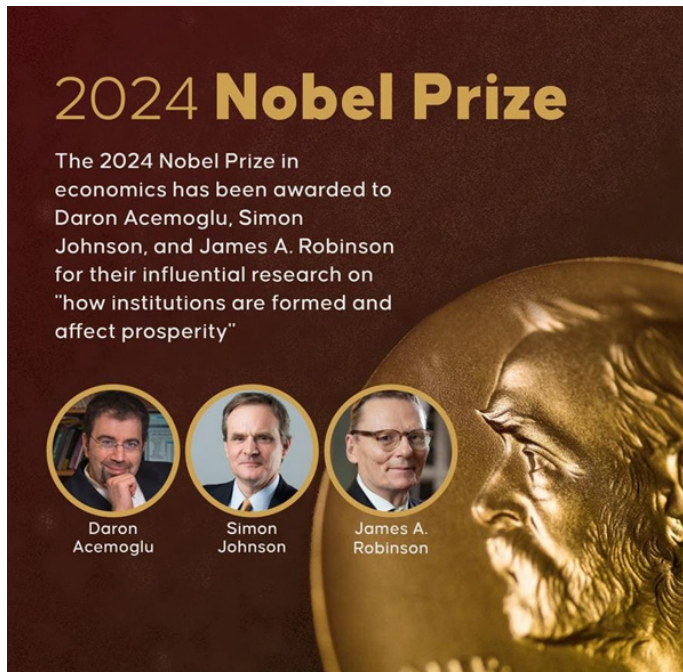
The Nobel Peace Prize's Commitment to Peace

Alfred Nobel's will defined peace as the abolition or reduction of armies and the promotion of peace congresses. By awarding Nihon Hidankyo, the Nobel Committee reaffirms its dedication to these principles, recognizing those who strive for a world free from the threat of nuclear devastation.



2024 NOBEL PRIZE IN ECONOMIC SCIENCES: FOCUS ON INSTITUTIONAL IMPACT ON NATIONAL PROSPERITY

CONTEXT: The 2024 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel was awarded to economists Daron Acemoglu, Simon Johnson, and James A. Robinson for their work on how societal institutions shape a country's prosperity. The Nobel Committee highlighted their contributions in explaining why nations succeed or fail based on institutional frameworks.



frameworks established by colonizers had lasting effects on former colonies. Colonies where settlers faced high mortality rates saw exploitative, extractive institutions put in place, while areas with lower mortality attracted settlers who established inclusive institutions with long-term benefits.

Case Study: India's Institutional Shift

Before British colonization, India was a hub of industrial production, surpassing the United States in manufacturing output in the mid-18th century. However, British rule prioritized extractive policies, leading to a significant economic reversal. Industrial and technological advancements benefited only those countries where inclusive institutions supported wider access and prosperity.

Factors Shaping Colonial Institutions

The laureates identified mortality risks faced by colonizers as a major factor in their choice of institutions. In regions with high mortality due to factors like disease or resistance from local populations, colonizers favored extractive institutions that enabled quick resource extraction. Conversely, in low-mortality areas, they established inclusive institutions, allowing for more stable and prosperous settlements.

Present-Day Implications: India, China, and Institutional Development

India's democratic framework, based on its Constitution, includes regular elections, an independent judiciary, and a robust media. Yet, as economist Arvind Subramanian pointed out, India's growth lagged despite its inclusive institutions, while China's non-inclusive framework enabled rapid growth. Subramanian suggested that China's success might be temporary, with long-term growth more sustainable in inclusive societies.

Global Trends in Institutional Strength

Acemoglu emphasized growing concerns over the weakening of institutions worldwide. Data from organizations like Freedom House and V-Dem shows declining support for democracy, suggesting that even established democracies must strive for cleaner governance and effective democratic delivery.

Key Question: Why Do Nations Succeed or Fail?

BACKGROUND: The economists addressed longstanding questions about why some nations achieve prosperity while others remain in poverty. They demonstrated that factors like geography, biology, and climate alone don't fully explain these disparities. Rather, institutions—defined as the broad rules governing behavior within societies—play a central role.

The Importance of Institutions: Inclusive vs. Extractive

The laureates differentiated between inclusive institutions—those fostering democracy, rule of law, and property rights—and extractive institutions—where power is centralized, often autocratic, and exploits the population. Inclusive institutions incentivize long-term investments and economic growth, while extractive ones discourage these behaviors and hinder prosperity.

Evidence from Colonial History

Acemoglu, Johnson, and Robinson's research examined the impact of European colonization on institutional development. In their influential study, "The Colonial Origins of Comparative Development," they argued that the institutional

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2024 NOBEL PRIZE IN CHEMISTRY: RECOGNIZING BREAKTHROUGHS IN PROTEIN SCIENCE AND ARTIFICIAL INTELLIGENCE

CONTEXT: The 2024 Nobel Prize in Chemistry was awarded to David Baker, Demis Hassabis, and John M. Jumper for their pioneering work on protein design and structure prediction. Their achievements merge the fields of biology and artificial intelligence (AI), demonstrating transformative potential for science and medicine.



Why Protein Research is Critical

BACKGROUND: Proteins are essential to nearly all biological functions – acting as the “machinery” behind life’s chemical processes. In humans, proteins like hemoglobin carry oxygen, while insulin regulates glucose absorption. Disruptions in protein function are linked to numerous health conditions, making protein research vital for understanding and treating diseases.

Breakthroughs by Jumper and Hassabis in Protein Structure Prediction

The three-dimensional structure of proteins, determined by sequences of 20 amino acids, gives each protein its unique function. In the 1960s, Christian Anfinsen showed that a protein’s amino acid sequence dictates its

shape, sparking the hope that scientists could predict a protein’s structure solely based on its sequence – a goal that long eluded researchers.

Hassabis, who co-founded DeepMind, introduced the AlphaFold AI model to the Critical Assessment of Protein Structure Prediction (CASP) competition in 2018. Although AlphaFold initially reached only 60% accuracy, its accuracy improved significantly when John Jumper joined the DeepMind team, leading to a breakthrough in 2020. AlphaFold’s predictions were so precise that it marked a decisive win in the CASP competition.

David Baker’s Contributions to Protein Design

David Baker, a scientist at the University of Washington, developed Rosetta, a software tool that predicts protein structures. After debuting Rosetta in CASP in 1998, Baker’s team developed a new application: entering desired protein shapes to reverse-engineer possible amino acid sequences. This innovation enabled the creation of novel proteins with specific functions, opening doors to custom-designed proteins for research and medical use.

Impact of Protein Structure Prediction and Design

Understanding protein structures is pivotal for breakthroughs in fields like disease research, antibiotic resistance, and even plastic degradation by microbes. Beyond understanding life processes, Baker, Hassabis, and Jumper’s work promises advancements in targeted pharmaceuticals, vaccine development, sensors, and sustainable materials. Their contributions make way for new applications that benefit humanity, with implications for health, industry, and the environment.

LITERATURE NOBEL FOR HAN KANG: ILLUMINATING TRAUMA AND PERSONAL LOSS WITH EMPATHY

CONTEXT: Han Kang, a prominent voice in contemporary Korean literature, was awarded the Nobel Prize in Literature on October 10, 2024. Known for her evocative prose and exploration of trauma, she became the first South Korean author to win this honor. Celebrated globally for her novel *The Vegetarian*, which marked her entry into the Anglophone world, Han’s work reflects profound insights into the human condition.



Breakthrough with *The Vegetarian*: Exploring Resistance and Identity

BACKGROUND: Han Kang’s *The Vegetarian* (2007) won the Man Booker International Prize in 2016, marking the first win for a Korean novel in this award’s history. The story follows Yeong-Hye, a woman who rejects meat as a quiet act of resistance, challenging societal and familial expectations. Through her vegetarianism and desire to become a plant, Han addresses intertwined themes of colonialism, patriarchy, violence, and autonomy. Yeong-Hye’s choice confronts her controlling husband and oppressive family, particularly her authoritarian father, a Vietnam War veteran, who perceives her diet as defiance against patriarchal control.

Literary Themes: Personal and Historical Trauma

Across her body of work, Han Kang consistently examines historical trauma, brutality, and personal loss. *Human Acts* (2014) portrays the 1980 Gwangju massacre, a tragic event in which student protests were violently suppressed by the military. Using second-person narration, Han immerses readers in the haunting impact of this event, with each chapter focusing on a different character affected by the death of 15-year-old Dong-ho.



In *The White Book* (2017), Han reflects on loss through the death of the narrator’s newborn sister, weaving imagery and fragmented prose to explore the lingering pain of never knowing a lost sibling. In *Greek Lessons* (2023), a woman who loses her ability to speak bonds with her teacher, who is slowly losing his vision, emphasizing loss and fragility.

We Do Not Part: Women’s Perspectives on the Jeju Massacre

Han’s forthcoming novel, *We Do Not Part* (2025), explores the Jeju massacre through the lens of three women: Kyungha, Inseon, and Inseon’s late mother, whose trauma from the event shapes her relationship with her daughter. By focusing on these intertwined lives, Han reveals the intimacy of human relationships shaped by historical traumas.

Centering Women’s Experiences and Quiet Resilience

Han’s writing often delves into the complex inner lives of women, addressing themes of motherhood, loss, and personal identity. In *The White Book*, she contemplates the life

and death surrounding pregnancy and childbirth, portraying mourning in a way that is both haunting and poetic.

Her female characters exhibit subtle defiance, challenging traditional patriarchal roles through quiet acts of negation. In *The Vegetarian*, Yeong-Hye’s choice to abstain from meat evolves into a detachment from humanity itself – a decision met with harsh backlash from male figures in her life. Similarly, in *Greek Lessons*, the unnamed protagonist distances herself from the world, questioning her place within it.

Han Kang’s Legacy: Honoring Human Fragility and Strength

The Royal Swedish Academy recognized Han for her “intense poetic prose that confronts historical traumas and exposes the fragility of human life.” Her works invite readers to ponder complex themes of survival, resistance, and the delicate balance of life in a turbulent world, establishing her as an empathetic chronicler of personal and collective grief.

NOBEL PRIZE IN PHYSICS FOR PIONEERS OF ARTIFICIAL INTELLIGENCE: ENABLING MACHINES TO LEARN

CONTEXT: The 2024 Nobel Prize in Physics was awarded to John Hopfield and Geoffrey Hinton for their pioneering contributions that laid the foundation for machine learning and artificial neural networks. Their groundbreaking work, which began in the 1980s, is now transforming artificial intelligence (AI) technology used globally in applications such as facial recognition and data analysis.



Foundations of Machine Learning: From Basic Calculations to Complex Recognition

BACKGROUND: Initially, computers were built to perform repetitive calculations faster than humans. However, scientists soon aimed to create machines that could accomplish human-like tasks such as recognizing patterns, learning, and creating. The term “Artificial Intelligence” emerged in the 1950s, denoting computers capable of tasks once considered exclusive to human intelligence. Yet, these systems remained limited to fast calculations rather than real cognitive functions.

Hopfield’s Breakthrough: Mimicking the Brain’s Learning Mechanisms

In the 1980s, physicist and neuroscientist John Hopfield revolutionized AI by developing artificial neural networks that emulated the brain’s neuronal structure. Drawing inspiration from the Canadian psychologist Donald Hebb’s 1949 discovery that learning alters the connections between nerve cells, Hopfield created a network that could ‘remember’ and ‘learn’ patterns.

Unlike traditional computers, which store and process data in isolated bits, Hopfield networks capture information as a whole, allowing them to recognize incomplete or similar data – crucial for tasks such as image recognition. This leap enabled computers to interpret entire patterns, such as identifying an incomplete image by retaining relationships among individual elements.

Advancing Neural Networks: Geoffrey Hinton and the Rise of Deep Learning

Building on Hopfield’s work, Geoffrey Hinton took artificial networks to new heights by designing systems capable of tackling more complex tasks. Hinton’s development of deep neural networks and backpropagation allowed machines to recognize and improve upon patterns with increasing accuracy by training on vast datasets. The process of continuous learning through multiple layers, or “deep learning,” became essential for technologies like speech recognition, image processing, and self-driving vehicles.

Hinton’s neural network model gained global attention in 2012 when his team’s algorithm, AlexNet, excelled in the ImageNet Visual Recognition Challenge, achieving unprecedented image recognition results. This breakthrough



demonstrated the potential of deep learning for practical AI applications, leading to widespread machine learning adoption across diverse fields.

Physics Meets Computer Science: The Impact and Legacy of Hopfield and Hinton's Work

Hopfield's neural network design drew upon earlier principles in physics, especially from a system called "spin glass," known for its unique mathematical properties. This innovative cross-disciplinary approach highlights why the

Nobel Prize in Physics recognized these advancements in computer science and AI. Hinton, who received the Turing Prize in 2018, has dedicated his career to computer science, while Hopfield's contributions span physics, neuroscience, and biology.

The Nobel Committee's decision mirrors a past recognition in 2007 when a Physics Nobel acknowledged breakthroughs in data storage, underscoring AI's transformative impact across scientific domains and society.

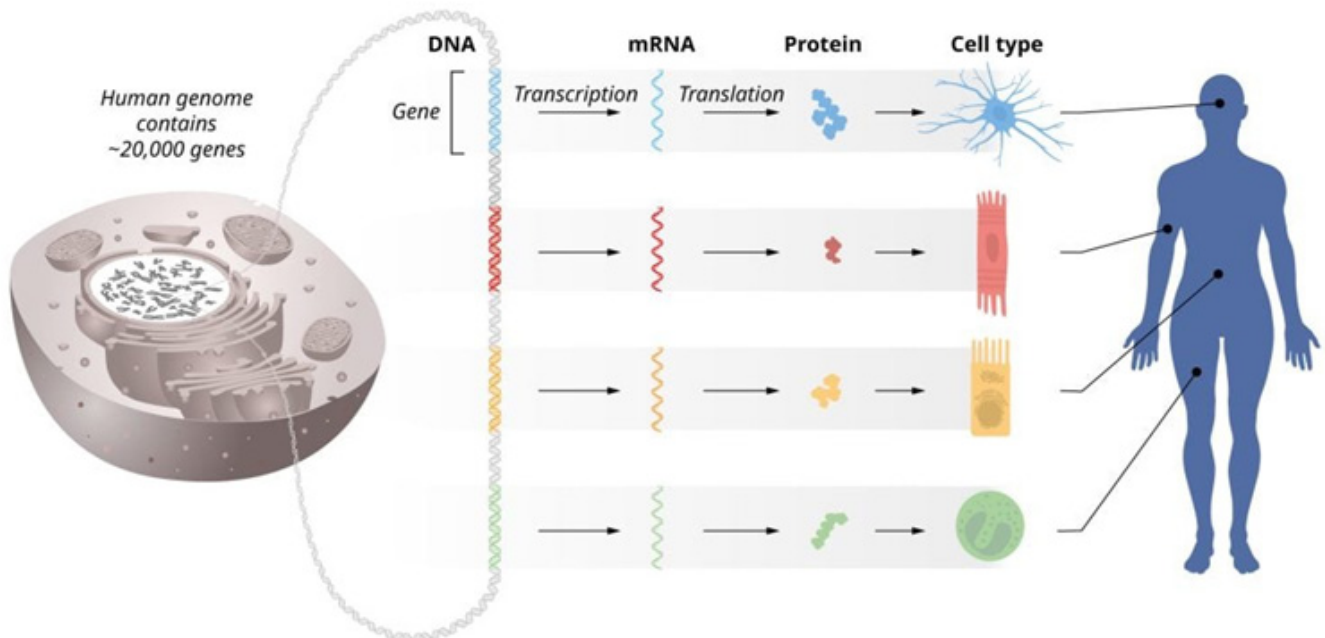
2024 NOBEL PRIZE IN MEDICINE: RECOGNIZING THE DISCOVERY OF MICRORNA IN GENE REGULATION

CONTEXT: The 2024 Nobel Prize in Physiology or Medicine was awarded to scientists Victor Ambros and Gary Ruvkun for their pioneering discovery of microRNA and its essential role in gene regulation. The Nobel committee emphasized that this mechanism has operated for hundreds of millions of years, contributing to the evolution of complex organisms.



Exploring Gene Regulation and the Discovery of MicroRNA

BACKGROUND: Gene regulation controls how cells utilize specific genes to perform their functions. Although every cell contains the same genetic material, only particular genes are activated depending on the cell type—enabling specialized functions in nerve cells, muscle cells, and more. Ambros and Ruvkun's curiosity about this regulatory mechanism led them to the discovery of microRNA, uncovering new insights into how complex organisms, including humans, function.



Significance of Gene Regulation: Understanding Cell Functions and Disease Prevention

Genetic information in DNA is copied to mRNA, which instructs cells to produce the necessary proteins for various bodily functions. Gene regulation ensures that each cell type creates specific proteins suited to its role. Errors in gene regulation can result in diseases such as cancer, diabetes, and autoimmune disorders. Thus, understanding gene regulation

is vital for advancing potential treatments.

Earlier in the 1960s, scientists identified transcription factors—proteins that act like switches, turning genes on or off in response to cellular needs. For decades, transcription factors seemed to explain gene regulation. However, in 1993, Ambros and Ruvkun's findings introduced a new, unexpected regulatory mechanism through microRNA.



Discovery Process: How Ambros and Ruvkun Identified MicroRNA

Ambros and Ruvkun, initially working under Nobel laureate Robert Horvitz, conducted research on the tiny roundworm *C. elegans*. Studying two genes, *lin-4* and *lin-14*, they observed that *lin-4* appeared to suppress *lin-14*, affecting cellular maturation timing. Ambros found that *lin-4* produced a tiny RNA molecule that inhibited *lin-14*, though not by coding for proteins. Meanwhile, Ruvkun discovered that *lin-4* prevented *lin-14* from creating its protein without halting its mRNA production.

When their findings were compared, they realized that the *lin-4* RNA was a microRNA that specifically bound to

lin-14's mRNA, blocking its protein production. This process, published in 1993, introduced the concept of gene regulation by small RNA molecules, a revelation initially thought to apply only to *C. elegans*.

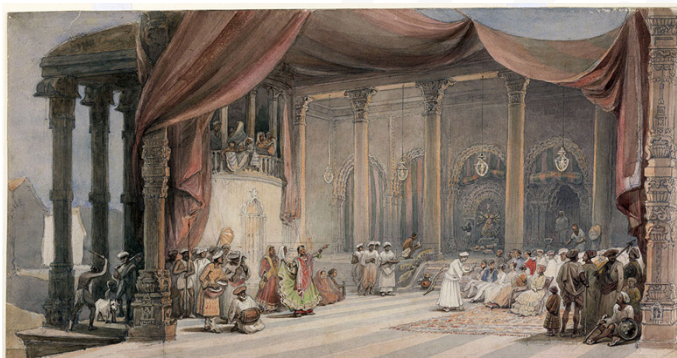
Widespread Impact of MicroRNA Discovery

In 2000, Ruvkun's team discovered another microRNA, *let-7*, present in multiple species, including humans, which spurred global research. Hundreds of microRNAs were subsequently identified, revealing that they regulate gene expression across nearly all multicellular organisms. This discovery has reshaped our understanding of genetics, making microRNA a fundamental component of gene regulation across life forms.

ORIGINS OF DURGA PUJA IN BRITISH COLONIAL BENGAL

The popular Durga Puja festival in Bengal, deeply associated with Goddess Durga's homecoming, has roots in the colonial era of British rule. This emergence connects with the Battle of Plassey in 1757, the development of a native elite class under the East India Company, and, later, the surge of nationalist sentiment among Bengalis.

noted that the festival became a space for "conspicuous consumption rather than bhakti (devotion)." Bengali elites would host elaborate Pujas with expensive decorations and nautch girls, sometimes inviting British officials to their events. Thus, Durga Puja evolved into a display of wealth, as well as a mingling ground for social elites.



Robert Clive and the Myth of the First Durga Puja

One origin story of Durga Puja connects it to Robert Clive following the British victory at the Battle of Plassey. After Clive defeated Nawab Siraj ud-Daula, consolidating British control over Bengal, Clive supposedly wanted to conduct a grand religious ceremony in Calcutta to thank God. Nabakishan Deb, Clive's Persian translator, is said to have invited him to his mansion for offerings to Goddess Durga, beginning what came to be known as the Company Puja at Sovabazar. However, this story lacks historical verification and is considered more of a metaphor for the collaboration between the Bengali elite and the East India Company.

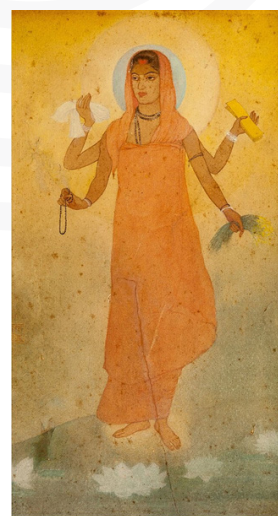
Durga Puja as a Status Symbol Among Bengal's Elite

With Company rule, a powerful class of zamindars and wealthy Bengali merchants emerged, who often showcased their newfound wealth through grand Durga Puja celebrations. The Permanent Settlement Act of 1793 strengthened the zamindars' power, making them intermediaries for the British administration. Additionally, a burgeoning class of prosperous Bengali merchants, like the Tagores and Mullicks, took advantage of economic opportunities under Company rule.

For these newly affluent classes, Durga Puja became a grand social occasion marked by opulence rather than solely a religious event. Renowned historian Tapan Raychaudhuri

Nationalism and the Transformation of Durga Puja

By the late 19th century, nationalist ideas were emerging among the Bengali intelligentsia, with Bankim Chandra Chatterjee's novel *Ananda Math* (1882) and its invocation of "Bande Mataram" furthering the concept of the nation as a mother figure. In this climate, Goddess Durga became a symbol of "Ma" Durga, embodying the nation and its call for liberation from British rule. The 1905 Partition of Bengal by Lord Curzon intensified these sentiments, sparking the Swadeshi Movement. Durga Puja gatherings became platforms for promoting indigenous goods and rejecting foreign products, with advertisements endorsing local brands.



Durga Puja also symbolized resistance, as some Puja depictions showed Durga defeating British officers, signifying the goddess's role as a protector from foreign rule.

The Rise of Public, Universal Pujas

The early 1920s saw a shift toward public, or sarbojanin (universal), Pujas that were open to all communities. The first such Puja was held in 1926 in Maniktala, Calcutta, organized by neighborhoods rather than elite

cliques. Historian Rachel McDermott explains that these Pujas became inclusive events, embracing Gandhian ideals and reaching a broader audience across caste and class divides. Temporary temples (pandals) were constructed in public spaces, fostering communal celebration and marking a transition from elite to popular festival.

A vintage world map with a compass and a magnifying glass. The map is a historical representation of the world, showing continents and oceans in Latin. The word "GEOGRAPHY" is written in large, bold, black letters across the center of the map. A magnifying glass is positioned on the right side of the map, focusing on the word "GEOGRAPHY". A compass is visible in the bottom right corner. The map includes labels for "ATLANTICUS", "MARE PACIFICUM", "MARE INDICUM", "MARE ARABICUM", "MARE MEDITERRANEUM", "MARE EURASIATICUM", "MARE AFRICANUM", "MARE ASIATICUM", "MARE AUSTRALIS", "MARE ANTARCTICUM", "MARE ARCTICUM", "MARE BALTICUM", "MARE ADRIATICUM", "MARE TYRRHENICUM", "MARE IONICUM", "MARE EGAEUM", "MARE MARMARONICUM", "MARE PROPONTICUM", "MARE HELLESPONTICUM", "MARE BOSPORICUM", "MARE CASPIUM", "MARE HYSPERIANUM", "MARE SCYTHICUM", "MARE SARMATICUM", "MARE EURALICUM", "MARE URSICUM", "MARE SIBIRICUM", "MARE TIBETICUM", "MARE HIMALAYICUM", "MARE GANGESICUM", "MARE BRABHARICUM", "MARE GANGETICUM", "MARE INDIANUM", "MARE PACIFICUM", "MARE AUSTRALIS", "MARE ANTARCTICUM", "MARE ARCTICUM", "MARE BALTICUM", "MARE ADRIATICUM", "MARE TYRRHENICUM", "MARE IONICUM", "MARE EGAEUM", "MARE MARMARONICUM", "MARE PROPONTICUM", "MARE HELLESPONTICUM", "MARE BOSPORICUM", "MARE CASPIUM", "MARE HYSPERIANUM", "MARE SCYTHICUM", "MARE SARMATICUM", "MARE EURALICUM", "MARE URSICUM", "MARE SIBIRICUM", "MARE TIBETICUM", "MARE HIMALAYICUM", "MARE GANGESICUM", "MARE BRABHARICUM", "MARE GANGETICUM", "MARE INDIANUM".

GEOGRAPHY



MOUNT EREBUS

CHAGOS ARCHIPELAGO

CHARON MOON

ANTARCTIC WARMING

AURORA BOREALIS

ROOPKUND LAKE

CYCLONE DANA



MOUNT EREBUS

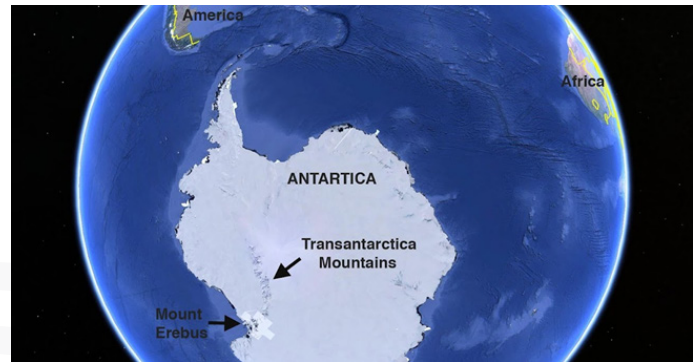
CONTEXT: Mount Erebus in Antarctica, the southernmost active volcano, stands out by not only being active in the extreme cold but also emitting micro-crystals of gold.

About Mount Erebus:

- **Location:** Ross Island, Antarctica; southernmost active volcano on Earth.
- **Volcano type:** Stratovolcano, characterized by a conical shape formed from layers of lava and ash.
- **Discovery:** Discovered in 1841 by British explorer Sir James Clark Ross, named after his ship HMS Erebus.
- **Elevation:** Stands at 3,792 meters (12,441 feet), the second-highest volcano in Antarctica.
- **Lava lake:** Known for its persistent lava lake, active since at least 1972, one of the few long-lived lava lakes globally.
- **Eruptions:** Features Strombolian eruptions, with

occasional ejection of molten lava bombs.

- **Proximity to research stations:** Monitored closely due to its proximity (40 km) to McMurdo Station (U.S.) and Scott Base (New Zealand).



CHAGOS ARCHIPELAGO

CONTEXT: The U.K. and Mauritius have reached an agreement on the return of the Chagos Archipelago to Mauritian sovereignty, resolving a long-standing dispute. This development, involving the strategic Diego Garcia base, is seen as a completion of Mauritius' decolonisation process.

About Chagos Dispute:

- **Colonial Background:** The Chagos Archipelago was claimed by Britain along with Mauritius in 1814. Before Mauritius' independence in 1968, the U.K. separated the islands in 1965 to create the British Indian Ocean Territory (BIOT).
- **Military Leasing:** In 1966, Britain leased Diego Garcia (the largest island) to the U.S. for a military base, displacing the native Chagossian population.
- **Legal Disputes:** Chagossians have fought legal battles to return to their homeland. Mauritius has continuously

claimed sovereignty over the islands since 1968.

- **International Rulings:** In 2019, the International Court of Justice (ICJ) ruled that the U.K. must return the Chagos Islands to Mauritius, calling the U.K.'s administration of the islands unlawful.

Geographical location of Chagos Archipelago:

- **Location:** Located in the central Indian Ocean, about 1,600 km south of India's southern tip.
- **Key Islands:** Includes atolls like Diego Garcia, Peros Banhos, and Danger Island.
- **Climate:** Tropical marine climate, with weather moderated by trade winds.
- **Disputed Nations:** The primary parties involved in the dispute are the U.K. (current administrator) and Mauritius (claimant), with the U.S. involved due to the military base on Diego Garcia.

CHARON MOON

CONTEXT: Scientists have recently detected carbon dioxide and hydrogen peroxide on Charon, Pluto's largest moon, using the James Webb Space Telescope (JWST).

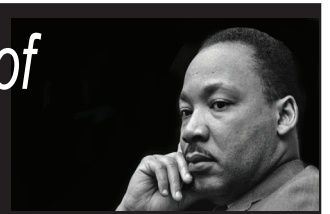
About Charon

- **Largest moon of Pluto:** Charon is the largest of Pluto's five moons, roughly half the size of Pluto itself.
- **Discovery:** It was discovered on June 22, 1978, by James W. Christy and Robert S. Harrington at the U.S. Naval Observatory in Flagstaff, Arizona.
- **Size and mass:** Charon is about 1,214 kilometers (754 miles) in diameter, and its mass is more than one-tenth of Pluto's mass.
- **Double dwarf planet system:** Due to its size and mass relative to Pluto, they are often referred to as a double

dwarf planet system.

- **Mutual tidal locking:** Charon and Pluto always show the same face to each other, a phenomenon known as mutual tidal locking.
- **Orbital period:** Charon orbits Pluto every 6.4 Earth days at a distance of about 19,640 kilometers (12,200 miles).
- **Surface composition:** Recent findings include carbon dioxide and hydrogen peroxide, in addition to previously known substances like water ice and ammonia-bearing compounds.
- **Kuiper belt object:** Charon is located in the Kuiper Belt and serves as an invaluable target for studying icy bodies beyond Neptune's orbit.

“Intelligence plus character-that is the goal of true education. — Martin Luther King Jr.





ANTARCTIC WARMING

CONTEXT: A new study indicates a dramatic increase in plant cover on the Antarctic Peninsula, attributed to rising temperatures, signalling significant ecological changes.

About Antarctic warming:

- **Warming rate:** Antarctica is warming at a rate between 0.22°C to 0.32°C per decade, double the global average of 0.14-0.18°C per decade.
- **Antarctic peninsula:** This region is warming five times faster than the global average, with temperatures now nearly 3°C higher than in 1950.
- **Extreme heatwaves:** The continent has faced record-breaking heatwaves, with temperatures in July 2024 reaching up to 28°C above normal and a peak heatwave in March 2022 showing a rise of 39°C above average.
- **Sea ice loss:** Antarctica's sea ice extent in 2024 was the second smallest on record, closely following the record low in 2023.

Recent study findings:

- **Increased vegetation:** The extent of plant cover on the Antarctic Peninsula has increased 14 times over the past 35 years, expanding from less than 1 sq km in 1986 to nearly 12 sq km by 2021.

- **Greening rate:** The rate of greening increased by over 30% between 2016 and 2021, with vegetation like mosses and lichen thriving due to warmer conditions.
- **Impact on ecosystem:** Rising temperatures and increased plant life may lead to soil formation, creating conditions conducive to invasive species, potentially threatening native flora and fauna.
- **Albedo effect:** More plant life could reduce the peninsula's albedo (reflectivity), absorbing more solar energy and further increasing temperatures, potentially accelerating global warming.

Significance:

- **Indicator of climate change:** The expansion of plant cover highlights the profound impact of climate change even in the most remote and extreme regions.
- **Global repercussions:** Increased temperatures and ice loss in Antarctica contribute to rising sea levels, affecting coastal areas worldwide.
- **Ecological shifts:** The greening of Antarctica raises concerns about altering its ecosystem balance, paving the way for non-native species and impacting native biodiversity.

AURORA BOREALIS

CONTEXT: On October 10, 2024, Leh, Ladakh experienced a rare display of aurora borealis, or northern lights, due to a severe geomagnetic storm triggered by a coronal mass ejection (CME) from the Sun.

About auroras:

Auroras are natural light displays that appear as bright, swirling curtains in the night sky, with colors ranging from green, red, and blue to yellow and purple. These lights primarily occur near the poles, known as the aurora borealis in the northern hemisphere and aurora australis in the southern hemisphere, but can sometimes extend to lower latitudes.

Why auroras occur:

- **Caused by solar activity:** Auroras occur due to the interaction of charged particles from the Sun, known as the solar wind, with Earth's magnetic field.

- **Solar wind and earth's magnetic field:** As the solar wind reaches Earth, most particles are deflected by the planet's magnetic field. However, some particles get trapped and travel toward the poles.
- **Interaction with atmospheric gases:** These charged particles collide with gases like oxygen and nitrogen in the upper atmosphere, producing light. Oxygen emits green hues, while nitrogen produces blue and purple tones.
- **Influence of solar flares and CMEs:** During strong solar activity, like solar flares or coronal mass ejections (CMEs), the solar wind intensifies, leading to geomagnetic storms. These storms can cause auroras to expand to mid-latitudes, making them visible in regions farther from the poles.

ROOPKUND LAKE

CONTEXT: Roopkund Lake, the site has drawn significant attention due to the mystery surrounding the skeletons' origins. However, environmental changes linked to climate change are shrinking the lake, raising concerns about its future.

About Roopkund lake:

- **Origin:** A glacial lake at the base of Mt Trishul in the Garhwal Himalayas, Uttarakhand, India, at an altitude of 5,029 meters (16,500 feet).
- **River feed:** Roopkund Lake is a peri-glacial lake, primarily fed by melting snow and glaciers around the area.
- **Geographical location:** Situated in the Chamoli district of Uttarakhand, part of the Nanda Devi National Park,

Roopkund lies on a popular pilgrimage route to Nanda Devi.

- **Historical mystery:** The lake contains human skeletons that date back to 850 AD, with DNA studies suggesting two distinct groups of people, likely pilgrims, who died from a hailstorm.
- **Current issue:** Climate change is shrinking the lake, reducing its depth and area due to shifting precipitation patterns and increased silting from moraine slides, impacting both the lake's ecosystem and cultural significance.



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CYCLONE DANA

CONTEXT: The India Meteorological Department (IMD) has forecasted the formation of Cyclone “Dana,” expected to intensify into a severe cyclonic storm by Wednesday, October 23, 2024. The cyclone is set to affect Odisha and West Bengal with wind speeds of up to 120 km/h.

Cyclones and their features:

- **Definition:** A cyclone is a large-scale air mass that rotates around a strong center of low atmospheric pressure.
- **Formation:** Cyclones develop over warm ocean waters (above 26.5°C) due to the rapid upward movement of warm air, which condenses to form clouds and releases energy, fueling the system.
- **Wind Speed:** Cyclonic storms are categorized based on wind speeds, with severe cyclonic storms typically reaching wind speeds between 89 and 117 kmph.
- **Impact:** Cyclones bring torrential rain, high-speed winds, and storm surges, leading to flooding, destruction of infrastructure, and displacement of communities.

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POLITY AND GOVERNANCE





SECULARISM IS A CORE PART OF THE CONSTITUTION: SUPREME COURT

ANTI-DEFECTION LAW AND THE TENTH SCHEDULE OF THE CONSTITUTION OF INDIA

PM EXPANDS THE COVERAGE OF AYUSHMAN BHARAT PRADHAN MANTRI JAN AROGYA YOJANA

DEMAND OF 6TH SCHEDULE SCHEDULE STATUS IN LADDAK

GENERAL CONSENT FOR CBI

PRIME MINISTER WARNS AGAINST 'DIGITAL ARREST' FRAUDS

TELECOM MINISTRY TO DISCONNECT 2.17 CRORE MOBILE CONNECTIONS AMID RISING CYBER SLAVERY CONCERNS



SECULARISM IS A CORE PART OF THE CONSTITUTION: SUPREME COURT

CONTEXT:

- ◇ The Supreme Court of India has recently reaffirmed that secularism is an integral and fundamental part of the Constitution's basic structure.
- ◇ This ruling came during the hearing of a case challenging the inclusion of the words "socialist" and "secular" in the Preamble.
- ◇ The Court emphasized that secularism has always been a core principle of the Indian Constitution, even before the 1976 amendment.
- ◇ This decision reinforces the commitment of India to upholding the principles of religious tolerance and equality for all citizens.

Secularism in the Indian Constitution: Origins and Evolution Introduction

The Indian Constitution is often regarded as a secular document that upholds the principles of equality, justice, and freedom for all individuals, irrespective of their religious affiliations.

While the term "secular" was explicitly added to the Preamble through the 42nd Amendment in 1976, the roots of secularism can be traced back to the Constitution's original text.

This document examines the secular foundations of the Constitution, the implications of the 42nd Amendment, and the contemporary challenges to secularism in India.

SECULAR FOUNDATIONS IN THE ORIGINAL CONSTITUTION

Key Articles Promoting Secularism

The Indian Constitution, adopted in 1950, embedded several provisions that reflect its secular character:

- **Article 15:** Prohibits discrimination on the grounds of religion, race, caste, sex, or place of birth. This establishes the principle of equality before the law.
- **Article 25:** Guarantees the freedom of religion, allowing individuals to practice and propagate their beliefs without state interference.
- **Article 26:** Empowers religious denominations to manage their own religious affairs, thus promoting autonomy among various faiths.
- **Article 27:** Prohibits the state from compelling individuals to pay taxes for the promotion or maintenance of any religion, reinforcing state neutrality in religious matters.
- **Article 28:** Ensures that no religious instruction is provided in educational institutions wholly maintained out of state funds, reflecting a secular educational framework.

Fundamental Rights and Directive Principles

The Constitution's Fundamental Rights emphasize the state's commitment to uphold individual rights regardless of religion. The Directive Principles of State Policy also guide the state toward social and economic justice, respecting the diversity of religious practices.

THE 42ND AMENDMENT: A STRATEGIC REINFORCEMENT OF SECULARISM

Context of the Amendment

The 42nd Amendment, enacted during the Emergency period (1975-1977) under Prime Minister Indira Gandhi, introduced the terms "socialist" and "secular" into the Preamble. The timing of this amendment was significant, as

the government aimed to address growing political unrest and communal tensions.

Reasons for Including "Secular" in the Preamble

1. **Clarification of Constitutional Values:** The explicit mention of "secular" was intended to reaffirm India's commitment to secularism as a foundational value and counter increasing communal tensions.
2. **Response to Political Challenges:** The government sought to legitimize its rule by aligning with democratic values during a period marked by authoritarianism.
3. **Countering Communalism:** The 1970s saw rising communal tensions. Including "secular" aimed to reinforce the state's neutrality and its commitment to treating all religions equally.
4. **Global Trends:** The global context of the 1970s, including rising secular states, influenced India's decision to formally adopt secularism as a constitutional principle.
5. **Protection of Minority Rights:** Explicitly mentioning secularism aimed to assure minorities that their rights would be safeguarded under the law.
6. **Legal and Constitutional Development:** The formal addition aimed to codify judicial interpretations of secularism as part of the Constitution's basic structure.
7. **Reinforcement of National Identity:** The inclusion promoted a composite national identity, essential for uniting India's diverse population.
8. **Legitimacy for Government Policies:** It provided a constitutional basis for various government programs aimed at promoting social justice among different religious groups.

Critique of the 42nd Amendment

Despite its intentions, the 42nd Amendment has faced criticism for being enacted during a period of political repression and for attempting to diminish judicial power while emphasizing secularism.

UNDERSTANDING SECULARISM

Secularism involves separating religion from political, economic, social, and cultural spheres, regarding religion as a personal matter. It has two primary meanings:

- **Separation of Religion and State:** Establishing a boundary between religious influence and state affairs.
- **Equal Respect for All Religions:** The state acknowledges and treats all religions with equal respect.

Differences Between Western and Indian Secularism

- **Western Secularism:** Advocates for a complete separation of religion from the state and prohibits state financial support for religious institutions.
- **Indian Secularism:** Encompasses a positive approach, allowing the state to engage with religions and provide limited financial support for religious educational institutions and infrastructure.

Secularism, a principle advocating for the separation of religion from the state, takes different forms around the world. Western secularism and Indian secularism share a common aim of promoting a pluralistic society where all religious groups can coexist peacefully; however, they differ significantly in approach, influenced by unique historical, social, and cultural contexts.



1. Historical Context and Evolution

- **Western Secularism:** Often referred to as the “separationist model,” Western secularism developed through centuries of conflicts between the church and the state. The Enlightenment era in Europe, emphasizing reason over religious authority, played a crucial role in shaping secularism. Over time, secularism came to mean the complete separation of religious and state institutions, as seen in countries like France and the United States. These societies tend to limit religious influence in government affairs and restrict government intervention in religious matters.
- **Indian Secularism:** Indian secularism evolved differently, shaped by India’s historical tapestry of religious diversity, colonial rule, and the struggle for independence. Indian leaders like Mahatma Gandhi and Jawaharlal Nehru emphasized the need to unify diverse religious communities in the nation-building process. Instead of strict separation, they promoted “*positive secularism*,” which encouraged the state’s engagement with all religions to ensure fairness and equality.

2. Core Principles and Approach

- **Western Secularism:**
 - **Complete Separation:** Religion and state are completely separate. Religious symbols and practices are generally discouraged in public institutions like schools and government offices.
 - **Non-Interventionist:** The state does not interfere in religious affairs and expects religious organizations to operate independently, without state funding or support.
 - **Individual Freedom:** Emphasizes individual religious freedom while ensuring that religious expressions do not infringe upon public life or policy.
- **Indian Secularism:**
 - **Equal Respect for All Religions (Sarva Dharma Sambhava):** The Indian state promotes equal respect for all religions, considering this approach more fitting for India’s diverse religious landscape.
 - **State Intervention for Social Reform:** The Indian state sometimes intervenes in religious matters to address social injustices, such as outlawing practices like untouchability and sati (widow burning), laws outlawing limiting triple Talaq etc..
 - **Limited Financial Support:** The Indian state supports religious institutions in limited ways, such as funding educational institutions run by religious organizations and providing infrastructure grants for religious purposes.
 - **Group Rights:** Unlike the Western model, which emphasizes individual rights, Indian secularism also emphasizes group rights, supporting religious communities in maintaining their distinct identities.

3. Role in Education

- **Western Secularism:**
 - Religious education is typically absent in public schooling. Public schools in Western secular states do not promote religious studies, and when offered, they focus on comparative religion rather than endorsing any specific faith.

- Private religious schools often operate independently of the state and receive minimal to no government funding, as in France and the United States.

4. Religious Symbols in Public Spaces

- **Indian Secularism:**
 - Religious education is more integrated into the educational landscape. The Indian government permits and sometimes funds/ aids educational institutions run by religious organizations, especially when they provide secular education alongside religious studies.
 - Religious symbols and prayers are allowed in government-funded religious schools, acknowledging the role of religion in Indian society.

4. Religious Symbols in Public Spaces

• Western Secularism:

- Most Western secular states strictly regulate religious symbols in public institutions, such as prohibiting the display of religious attire or symbols in government schools or offices, notably in France with its policy of *laïcité*.
- Courts often uphold laws limiting religious expressions when they conflict with secular policies, as in the case of banning headscarves in public schools in some countries.

- **Laïcité**, a French secularism principle, enforces strict religious neutrality in public institutions, banning religious symbols like hijabs or crosses. Rooted in the 1905 church-state separation law, it aims for equal treatment but stirs controversy, especially among minorities, over restricted religious expression in schools and government spaces.

• Indian Secularism:

- Indian secularism is more accommodating of religious symbols in public spaces, allowing practices such as wearing religious attire (e.g., turbans, hijabs) in government institutions and schools.
- The Indian judiciary has upheld individual rights to display religious symbols, reflecting a commitment to personal religious freedom in the public sphere.

5. Criticism and Challenges

• Western Secularism:

- Critiques of Western secularism point to instances where strict secular policies can alienate religious minorities, particularly Muslims in Europe, where some interpret prohibitions on religious symbols as discriminatory.
- The rise of secular fundamentalism in certain contexts, where religion is seen as needing to be entirely removed from public life, has sparked debates on inclusivity and cultural sensitivity.

• Indian Secularism:

- Indian secularism faces challenges in balancing state intervention and impartiality. Critics argue that the state’s involvement in religious matters sometimes leads to favouritism or selective support, which can foster inter-religious tensions.
- Some claim that the “positive secularism” approach risks blurring the lines between state and religion, potentially compromising the state’s neutrality.



HISTORICAL PERSPECTIVE ON SECULARISM IN INDIA

Ancient and Medieval Influences

- **Pre vedic Values:** Many pre vedic cultures adhered to secular principles based on liberal values of amalgamation and absorption.
- **Rig Vedic Era:** Nature worship reflected a reverence for natural elements in early Indian culture.
- **Buddha's Teachings:** Gautama Buddha's messages emphasized secular principles, such as the Four Noble Truths and the Eightfold Path.

- **Emperor Ashoka:** His Law of Piety advocated for religious tolerance and respect for all faiths.
- **Secularism in the Mughal Era**
- **Akbar's Reign:** Akbar promoted religious tolerance and established the Ibadat Khana for interfaith dialogue, stressing values of peace (Sulh-e-Kul).

Contributions of Marathas and Sikhs

The Maratha and Sikh rules emphasized a composite culture, with Ranjit Singh's secular monarchy promoting merit-based governance.

ASPECT	WESTERN SECULARISM	INDIAN SECULARISM
State-Religion Relationship	Strict separation between state and religion	Positive secularism: State engages with all religions equally
Financial Support for Religious Institutions	No direct financial aid	Limited financial support for religious institutions, especially minority institutions
Religious Symbols in Public Institutions	Generally prohibited	Permitted and accommodated, reflecting India's diverse religious landscape
Role of Religion in Education	Religion largely absent from public education	Religious education supported in limited, secular contexts, especially for minority communities
Focus	Individual rights and freedoms	Group rights and equal respect for all religions along with individual rights
Religious Reforms	State generally avoids interference in religious matters	State can intervene to reform harmful religious practices
Religious Freedom	Emphasizes individual freedom to practice religion	Emphasizes both individual and communal religious freedom

JUDICIAL INTERPRETATION AND SECULARISM

Supreme Court's Role

The Supreme Court of India has played a crucial role in interpreting and upholding secularism as part of the Constitution's basic structure. Key cases include:

- **Kesavananda Bharati vs. State of Kerala (1973):** Recognized secularism as part of the Constitution's basic structure.
- **Bommai vs. Union of India (1994):** Elaborated on secularism as the equal treatment of all religions.
- **Shirur Mutt Case (1954):** Established the Doctrine of Essentiality, allowing the judiciary to distinguish between essential and non-essential religious practices.

The **Doctrine of Essentiality**, established by India's

Supreme Court in the Shirur Mutt case (1954), states that only practices essential to a religion, as determined by the courts, are protected under Article 25 of the Indian Constitution.

This doctrine lets the judiciary distinguish between core religious practices and non-essential customs, permitting restrictions on the latter if necessary for public order, health, or morality.

For example, the court upheld the prohibition of the tandava dance by Ananda Margis in public as non-essential, while essential Islamic practices, such as Friday prayers, have been protected under this doctrine.

In Shayara Bano v. Union of India (2017), the Supreme Court ruled triple talaq (instant divorce in Islam) unconstitutional, deeming it non-essential to Islam under



the Doctrine of Essentiality. This judgment allowed state intervention in the practice, citing the need to uphold gender justice and equality over religious customs.

Recent Observations

In recent hearings, the Supreme Court affirmed secularism as an indelible component of the Constitution, emphasizing its necessity in maintaining the country's democratic ethos.

Challenges to Secularism in Contemporary India

Factors Undermining Secularism

Several challenges threaten the secular character of India:

- **Mixing Religion and Politics:** Political mobilization based on religious identities undermines state neutrality.
- **Economic Inequality:** Unaddressed disparities may lead to social unrest and exploitation of religious sentiments.
- **Communal Violence:** Recent incidents of communal riots pose significant threats to societal harmony.
- **Rise of Religious Nationalism:** Movements promoting majority and Minority nationalism can incite communal tensions.
- **Discriminatory Legislations:** Laws perceived as targeting specific religious groups exacerbate insecurity among minorities.

Measures to Strengthen Secularism

1. **Uniform Civil Code (UCC):** Implementing a UCC would ensure that all citizens are governed by common secular laws.
2. **Secular Education:** Promoting education that emphasizes tolerance and diversity is crucial for fostering an inclusive society.
3. **Judicial Consistency:** Ensuring uniform interpretation of secularism by the judiciary can strengthen its application.
4. **Interfaith Dialogue:** Facilitating dialogue between communities can foster understanding and reduce communal tensions.
5. **Anti-Discrimination Laws:** Strengthening laws against hate speech and communal violence is essential for protecting vulnerable communities.

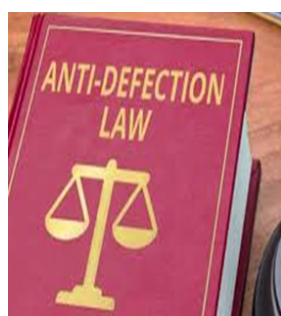
CONCLUSION

While the explicit mention of “secularism” in the Preamble reinforces India’s commitment to a secular state, the Constitution has always embodied secular principles. Strengthening secularism remains vital for maintaining unity in India’s diverse society, countering communal tensions, and ensuring equality for all citizens.

ANTI-DEFECTION LAW AND THE TENTH SCHEDULE OF THE CONSTITUTION OF INDIA

CONTEXT: The Anti-Defection Law in India, introduced to curb the destabilizing effects of political defections, ensures party discipline and government stability but faces challenges that impact its effectiveness and impartiality.

Addressing issues like decision delays, potential biases of the Speaker, and loopholes for group defections is essential to strengthen democratic integrity and enhance political accountability in India’s parliamentary system.



THE ANTI-DEFECTION LAW: SAFEGUARDING POLITICAL STABILITY IN INDIA AND ADDRESSING KEY GAPS

The Anti-Defection Law has been instrumental in promoting political stability and reducing frequent shifts in party allegiance within legislative bodies. While this law has effectively curtailed

opportunistic party-switching, several gaps need addressing to ensure it remains impartial, effective, and aligned with the principles of a stable democracy.

Understanding Political Defection

Defection Defined:

Political defection refers to the act of a member of a political party leaving their current party to join another or become an independent. This shift can disrupt the stability within parties and alter legislative power balances, often leading to the collapse of governments or forced re-elections.

The “Aaya Ram, Gaya Ram” Phenomenon:

Frequent party-switching among legislators became a widespread issue in the 1960s and 1970s. A notable example is Gaya Lal, a legislator from Haryana, who switched parties three times within a single day, leading to the popular phrase

“Aaya Ram, Gaya Ram.” This instability highlighted the urgent need for a legislative mechanism to curb such activities.

Why India Needed an Anti-Defection Law

1.Frequent Party-Switching and Government Instability:

Legislators switching allegiance mid-term often disrupted majority status in the government, destabilizing administrations and leading to costly, frequent elections.

2.Erosion of Public Trust:

Defections motivated by personal gain—such as ministerial positions or financial incentives—have eroded public trust, raised corruption concerns, and undermined electoral mandates.

3.Upholding Party Loyalty and Discipline:

The Anti-Defection Law encourages elected representatives to remain loyal to their party’s platform, promoting discipline on critical issues, including confidence motions and budget votes.

4.Ensuring Stable Governance:

Stability is essential for effective policy implementation and consistent governance, and the law aims to support this by reducing opportunistic defections.

OVERVIEW OF THE ANTI-DEFECTION LAW IN INDIA

The Anti-Defection Law, incorporated into the Constitution through the 52nd Amendment Act of 1985, is enshrined in the Tenth Schedule. It restricts Members of Parliament (MPs) and Members of Legislative Assembly (MLAs) from defecting or violating party whips after their election, which could destabilize government and negate the electoral mandate.

Key Provisions of the Anti-Defection Law:

- **Voluntarily Relinquishing Membership:** If an elected representative voluntarily resigns from their political party, they face disqualification.
- **Voting Against Party Directions:** Voting or abstaining



from voting against party directives without prior permission results in disqualification.

- **Independent Members:** Independents elected without a party affiliation face disqualification if they join any political party.
- **Nominated Members:** Nominated members can join a party within six months of being elected, but they will be disqualified if they join afterward.

Exceptions to the Rule:

- **Party Mergers:** When a party merges with another, two-thirds of its members agreeing to the merger prevents disqualification.
- **Presiding Officer's Role:** An elected presiding officer who voluntarily relinquishes party membership is not disqualified if they rejoin the party after ceasing to hold office.

Role of Judiciary in Anti-Defection Law

The Supreme Court has provided crucial clarifications through landmark cases:

1. Kihoto Hollohan v. Zachillhu (1993):

The Court upheld the law's constitutionality, allowing judicial review of Speaker decisions based on malafide intentions or perverse outcomes.

2. Ravi S. Naik v. Union of India (1994):

The Court extended the concept of "voluntarily giving up membership," ruling that even actions and conduct can imply resignation.

3. Keisham Meghachandra Singh v. Manipur Legislative Assembly (2020):

The Supreme Court mandated that Speakers must rule on disqualification cases within three months, recommending that an independent tribunal replace the Speaker as the decision-maker.

Challenges in Effective Implementation

1. Delayed Rulings:

A major flaw is the lack of a time limit for resolving defection cases, leading to delays that allow defectors to retain their seats.

2. Partisan Bias of the Presiding Officer:

Speakers or chairpersons, who are members of political parties, might delay or influence decisions based on party loyalties, which can compromise impartiality.

3. Lack of Transparency in Party Whips:

Internal party directives (whips) are often poorly communicated, leading to confusion about the party's stance and complicating defection cases.

4. Judicial Review Limitations:

Although the judiciary can review defection cases, courts generally avoid interfering in legislative autonomy, limiting oversight.

5. Two-thirds Split Provision Loophole:

The law permits two-thirds of party members to defect without penalty, leading to large-scale defections, which can encourage opportunistic political mergers.

LOOPHOLES: SPLITS AND MERGERS

- 91st Amendment
- Before this amendment a split in the party was recognized when 1/3rd of its members defected
- Post-amendment, 2/3rd defecting members constitute a merger of parties
- Exception to defection when;
- Member of such merging party becomes a member of the new political party
- Member of such merging party chooses to function as a separate group

KEY AMENDMENTS STRENGTHENING ANTI-DEFECTION LAW

1. 52nd Amendment Act (1985):

Established the Tenth Schedule, originally allowing splits when one-third of a party's members defected. This provision was later abused for mass defections.

2. 91st Amendment Act (2003):

- **Raised Threshold for Mergers:** Increased the required number of members agreeing to a merger from one-third to two-thirds.
- **Ministerial Restrictions:** Disqualified defectors from holding ministerial or political positions.
- **Limits on Council Size:** Restricted council size to 15% of the legislature's total strength, curbing the incentive to switch parties for ministerial positions.

GREY AREAS IN THE ANTI-DEFECTION LAW

- What is the status in either House or Parliament or the State Legislature of a Member who is expelled from the party which set him/her up as a candidate for election?
- Will the provisions of the Tenth Schedule apply to such Member?
- Was the view taken by the Supreme Court in G. Viswanathan's case in harmony with the provisions of Tenth Schedule?
- Since expelled members are not referred in Tenth Schedule, was the decision in Viswanathan's case a correct interpretation, viz that the Members continue to belong to such a party which had set them up as candidates in the election?
- Can it be said that when a Member of either House of Parliament is expelled joins another political party or forms his own party, that he had voluntarily given up his membership of the party?
- What is the status of unattached member in either House of Parliament?



INDIA'S LARGEST ONLINE IAS
COACHING ACADEMY

NEGATIVE IMPLICATIONS OF THE CURRENT ANTI-DEFECTION

- It affects the *independence* of MPs/ MLAs.
- Constitution drafters didn't intend to give the control of members to political parties. Interestingly, it's only in the 10th schedule, which was included in 1985 that political parties are mentioned in constitution. (Also chief whip).
- Many members speak up their mind and conviction –*more discussion* and thus better debates and solutions in parliament. Anti-defection law is against this.
- In a diverse country like India, members also *represent their constituencies*. Hence, every member needs to be given voice to give voice to all regions and sections of the population.
- No *incentive for MPs/MLAs* to research and understand on policies.

REFORM PROPOSALS TO STRENGTHEN ANTI-DEFECTION LAW

1. Time Limits for Defection Cases:

Setting a four-week time frame for resolution could curb delays. If unresolved within this period, defecting members could face automatic disqualification.

2. Clear Public Announcement of Whips:

Making party whips public through announcements or digital communication would ensure transparency in party directives.

3. Strengthen the Speaker's Role with Accountability Measures:

Rather than removing the Speaker, enhancing their accountability and impartiality could ensure timely and fair decisions.

4. Judicial Recourse for Fair Appeal:

Allowing direct appeals to higher courts in specific cases could safeguard against biased rulings and promote transparency.

COMPARATIVE ANALYSIS OF ANTI-DEFECTION MANAGEMENT IN OTHER COUNTRIES

- **United States:** Political norms and informal sanctions maintain party loyalty instead of formal anti-defection laws.
- **United Kingdom:** A robust whip system enforces party discipline, with no explicit anti-defection law.
- **South Africa:** South Africa disqualifies members switching parties, reinforcing loyalty requirements.
- **Canada:** Political parties manage loyalty through caucus discipline, often leading to expulsion for defection.

CONCLUSION: ENSURING STABILITY THROUGH REFORMED ANTI-DEFECTION MEASURES

As India considers the "One Nation, One Election" vision, revisiting the Anti-Defection Law is essential. Enhancing this law with reforms that enforce party loyalty, judicial accountability, and timely adjudication will uphold electoral integrity and fortify democratic stability in India.

PM EXPANDS THE COVERAGE OF AYUSHMAN BHARAT PRADHAN MANTRI JAN AROGYA YOJANA

CONTEXT: The Government of India has decided to extend the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana to all senior citizens aged 70 and above. This will provide approximately six crore seniors with affordable and comprehensive healthcare, regardless of their income.

World's Largest Health Insurance Scheme Becomes Bigger!

- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) to provide Health Coverage to **all Senior Citizens of 70 years & Above** Irrespective of their Income
- 4.5 Crore families** with **6 crore senior citizens** to be benefitted
- ₹ 5 Lakh** free health cover per family
- Issuance of a **new Distinct Card** under AB PM-JAY
- Additional top-up of ₹ 5 Lakh** to seniors **aged 70+** belonging to families under **AB PM-JAY**



UNION CABINET EXPANDS AYUSHMAN BHARAT COVERAGE TO ALL SENIOR CITIZENS AGED 70+

In a major step toward enhancing healthcare access for India's elderly, the Union Cabinet has approved an expansion of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) to cover all senior citizens aged 70 and above, irrespective of their income. This initiative aims to provide affordable and comprehensive health insurance to a demographic often vulnerable to high medical costs and limited insurance access.

Key Features of the Expanded AB PM-JAY Coverage

1. Broad Eligibility:

All senior citizens aged 70 and above are now eligible under the expanded AB PM-JAY coverage. This expansion is set to benefit approximately six crore elderly individuals across 4.5 crore families, providing crucial support for an aging population in need of healthcare.

2. Substantial Coverage Amount:

The expanded scheme offers an insurance amount of ₹5 lakh per family annually to cover hospitalization costs, ensuring that senior citizens have access to essential medical services without the burden of out-of-pocket expenses.

3. Enhanced Benefits for Current Beneficiaries:

For seniors from families already enrolled in AB PM-



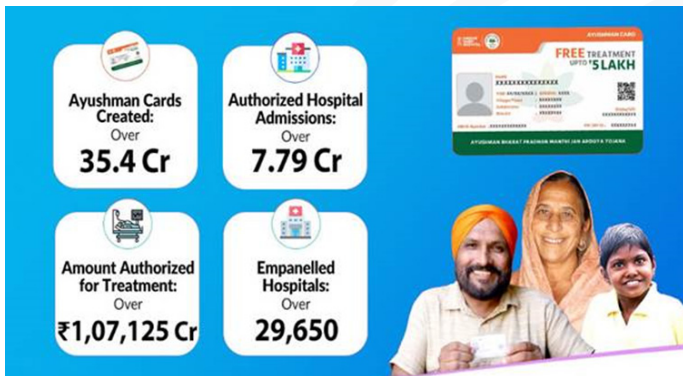
JAY, there will be an additional top-up of ₹5 lakh per year. This top-up is exclusively for the use of family members over 70 and is separate from the base coverage provided to younger family members, offering targeted support for older adults.

4. Flexibility for Other Public Health Insurance Holders:

Senior citizens currently enrolled in other public health schemes, such as the Central Government Health Scheme (CGHS), Ex-Servicemen Contributory Health Scheme (ECHS), or the Central Armed Police Forces (CAPF) Health Insurance Scheme, can choose to remain with their existing coverage or opt for AB PM-JAY benefits, providing flexibility to suit individual needs.

5. Inclusive Access for Those with Private Insurance or ESIC Coverage:

The scheme is designed to be inclusive, even for senior citizens holding private health insurance or those covered by Employees' State Insurance (ESIC), allowing them to access the benefits of AB PM-JAY without restrictions, further broadening healthcare options for the elderly.



ABOUT AYUSHMAN BHARAT PRADHAN MANTRI JAN AROGYA YOJANA (AB PM-JAY)

1. Background and Purpose:

Launched in 2018, AB PM-JAY is the world's largest publicly funded health assurance scheme, designed to support

India's vulnerable populations. The program initially targeted 55 crore individuals from 12.34 crore families, focusing on providing financial protection from high medical costs. Currently, it is implemented in 33 states and Union territories, with Delhi, Odisha, and West Bengal as exceptions.

2. Growing Impact and Successes:

Since its launch, AB PM-JAY has facilitated over 7.37 crore hospital admissions, translating to benefits worth more than ₹1 lakh crore. This widespread impact highlights the scheme's role in enhancing health security and access for millions of Indians.

3. Continuous Expansion and Inclusive Efforts:

In response to population growth, the scheme's beneficiary base was expanded to cover 12 crore families in January 2022. Additionally, workers such as Accredited Social Health Activists (ASHAs), Anganwadi Workers (AWWs), and their families were included, extending the scheme's reach to crucial community health contributors.

IMPLICATIONS OF THE EXPANDED COVERAGE

This initiative represents a shift towards universal health coverage for India's elderly population, prioritizing a demographic with heightened healthcare needs. By broadening AB PM-JAY's coverage to senior citizens regardless of income, the government aims to alleviate the financial burden of healthcare and promote equitable access to quality medical services. As India's population continues to age, this expansion underscores a commitment to affordable healthcare, positioning AB PM-JAY as a pillar in the country's health infrastructure for years to come.

CONCLUSION: The expansion of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana to all senior citizens aged 70 and above signifies a significant stride towards universal health coverage in India. By providing affordable and comprehensive healthcare to millions of elderly individuals, regardless of their income, the government reinforces its commitment to social welfare and a healthier India.

DEMAND OF 6TH SCHEDULE STATUS IN LADDAK

CONTEXT: The recent detention of climate activist Sonam Wangchuk, who was leading protests to demand the inclusion of Ladakh in the Sixth Schedule of the Indian Constitution, has reignited discussions on Ladakh's special status. Following the 2019 abrogation of Article 370 and Ladakh's designation as a Union Territory, local communities seek enhanced autonomy, environmental protection, and political representation to preserve their unique tribal identity and interests.



Background: Abrogation of Article 370 and Ladakh's New Status

With the abrogation of Article 370 in 2019, the special status previously granted to Jammu and Kashmir was revoked. Ladakh was separated from Jammu and Kashmir and reconstituted as a Union Territory, but without a legislative assembly, leaving the region with limited autonomy and political representation.

Since then, there has been a strong push among Ladakhi communities, especially in Leh, for full statehood and inclusion in the Sixth Schedule. This demand is rooted in concerns over Ladakh's fragile ecosystem, tribal identity, and a lack of local control over governance and resources.

What is Asymmetrical Federalism in India?

Definition: Asymmetrical federalism is a structure where certain states or regions enjoy different levels of autonomy and powers compared to others within the same nation. In India, asymmetrical federalism allows certain areas or communities special provisions in acknowledgment of their unique cultural, geographical, and social contexts.

Indian Context: The Indian Constitution provides asymmetrical autonomy through special provisions for certain states and



that the diverse voices of Ladakh's tribal communities are heard and considered in governance, fostering a more inclusive political environment.

4. Job Creation for Locals:

Job reservations for Ladakhis could significantly bolster the local economy. By creating employment opportunities tailored to the needs of the indigenous population, this initiative could reduce economic dependency on outside resources, curb outmigration, and promote sustainable livelihoods.

5. Balanced Regional Representation:

With an increase in Lok Sabha seats and the establishment of autonomous councils, both Leh and Kargil districts would experience improved political representation. This balance would ensure that the distinct needs of each district are addressed, promoting regional harmony and cooperation.

BROADER IMPLICATIONS OF GRANTING SIXTH SCHEDULE STATUS TO LADAKH

Impact on Other Regional Demands in India

1. Inspiration for Other Regions:

Granting Sixth Schedule status to Ladakh could set a precedent for other regions in India that are seeking greater autonomy and recognition of their unique identities, such as the Gorkhaland demand in West Bengal or the Bodoland movement in Assam. Communities may use Ladakh's case as a model to advocate for similar legislative frameworks that cater to their specific needs.

2. Strengthening Federalism:

The inclusion of Ladakh in the Sixth Schedule could strengthen the concept of asymmetrical federalism in India, leading to a more nuanced understanding of state autonomy. This might encourage other states to pursue localized governance solutions, thereby fostering a more flexible federal structure that accommodates regional diversity.

3. Potential for Conflict:

On the flip side, the decision to grant Sixth Schedule status might exacerbate tensions in regions with competing demands for autonomy or recognition. If other marginalized communities perceive unequal treatment or favoritism toward Ladakh, it could lead to unrest or increased calls for similar recognition.

EXTERNAL IMPACT ON INDIA'S KASHMIR POLICY AND BROADER INTERNATIONAL RELATIONS

1. Reinforcement of Autonomy Principles:

Granting Sixth Schedule status to Ladakh could reinforce India's commitment to recognizing and addressing

the diverse needs of its regions. This move might contribute to a more stable political landscape in the broader Jammu and Kashmir region, which has historically been marked by conflict and demands for autonomy.

2. Impact on Peace Processes:

A successful integration of Ladakh under the Sixth Schedule could be viewed positively by stakeholders involved in peace processes related to Jammu and Kashmir. It may open avenues for dialogue with other separatist groups and stakeholders, showcasing India's willingness to engage in meaningful governance reforms.

3. International Perception:

How India manages its internal diversity and regional demands is closely watched by the international community. Granting Sixth Schedule status could enhance India's image as a democratic nation that respects and promotes the rights of its indigenous populations. This perception might strengthen India's diplomatic standing in international forums and enhance its soft power.

4. Influence on Neighboring Regions:

The situation in Ladakh may also have implications for India's relations with neighboring countries, particularly China and Pakistan, which have vested interests in the Kashmir region. How India addresses Ladakh's demands could influence regional dynamics, impacting cross-border relations and geopolitical strategies.

5. Strain on Resources:

As Ladakh gains autonomy and seeks to develop its own administrative and infrastructural frameworks, there may be increased pressure on central resources and support. The Indian government would need to balance supporting Ladakh's autonomy while ensuring stability and resource distribution across other regions, which could strain administrative capacities.

CONCLUSION: Granting Sixth Schedule status to Ladakh could significantly enhance local governance, promote environmental conservation, and empower the indigenous population. This move may not only address Ladakh's unique challenges but also set a precedent for other regions seeking greater autonomy in India, potentially reshaping the country's federal landscape. Moreover, it could influence India's Kashmir policy and international relations, enhancing its image as a democratic nation that respects regional diversity. However, careful management will be essential to balance autonomy and resource distribution, ensuring stability across all regions.





GENERAL CONSENT FOR CBI

CONTEXT: Karnataka joins a growing list of non-BJP states in withdrawing general consent for CBI investigations. This decision comes amidst calls for a CBI probe into alleged irregularities in land allotments by the Mysore Urban Development Authority (MUDA) linked to the Chief Minister's wife.



POWERS AND JURISDICTION OF THE CENTRAL BUREAU OF INVESTIGATION (CBI) IN INDIA

The Central Bureau of Investigation (CBI), India's premier investigative agency, is empowered to investigate a range of criminal activities, especially cases with national and international ramifications. CBI derives its authority from the Delhi Special Police Establishment (DSPE) Act of 1946. This legislation outlines its powers and operational framework, particularly regarding its jurisdiction and the consent required from state governments.

LEGAL AUTHORITY OF CBI UNDER THE DSPE ACT, 1946

Scope of the DSPE Act: The provisions of the DSPE Act primarily apply to the Union Territories; however, the CBI can extend its investigative reach into states only with their consent. This consent is necessary due to the federal structure of governance in India, where "police" is a state subject under Entry 2 of the State List in the Seventh Schedule of the Constitution.

- **Section 6 of the DSPE Act:** This section mandates that the CBI obtain consent from the relevant state government before conducting investigations within its jurisdiction.

▪ **General consent is the approval given by a State government concerned from time to time to the CBI (the agency originated from the Special Police Establishment) and other agencies covered by the Delhi Special Police Establishment Act, 1946 (Central Act No. 25 of 1946)**

▪ **The consent is necessary as the jurisdiction of these agencies is confined to Delhi and Union Territories under this Act**



- **Role of Judiciary:** The Supreme Court and High Courts can direct the CBI to investigate crimes within any state, overriding the need for state consent. This authority enables the judiciary to ensure impartial investigations in sensitive cases across state lines.

JURISDICTIONAL CONSTRAINTS: COMPARING CBI AND NIA

The CBI's jurisdiction is distinct from that of the National Investigation Agency (NIA), which operates under the NIA Act of 2008 and has nationwide jurisdiction without requiring state consent. The CBI, however, can only extend its jurisdiction into states upon receiving consent, a constraint intended to respect state sovereignty.

- **Legal Foundation:** The CBI's jurisdictional framework rests on Entry 80 of the Union List, which allows for the extension of police powers to states, but only with their permission.

CONSENT TYPES FOR CBI INVESTIGATIONS: GENERAL VS. CASE-SPECIFIC

The DSPE Act allows states to grant consent in two forms: **General Consent** and **Case-Specific Consent**.

- **General Consent:** This form of consent allows the CBI to operate within a state without requiring separate permission for each case, facilitating seamless functioning for ongoing and future investigations.
- **Case-Specific Consent:** If a state withdraws general consent, the CBI must seek specific permission for each case it wishes to investigate. This limits the agency's capacity to operate freely within such states and significantly impacts new investigations.

CONSEQUENCES OF WITHDRAWING GENERAL CONSENT

When a state withdraws general consent, the CBI's authority within that state is constrained:

- **Restriction on Police Powers:** Without general consent, CBI officers lose the usual powers associated with police officers in that state, impacting their ability to investigate unless specific permission is granted by the state government.
- **New Investigations:** The CBI cannot initiate new investigations within states that have withdrawn general consent unless case-specific consent is obtained.
- **Ongoing Investigations:** The CBI can continue to investigate cases that were registered before the withdrawal of consent. However, this constraint complicates the agency's efforts to gather evidence and pursue fresh leads in these states.

RECENT INSTANCES OF GENERAL CONSENT WITHDRAWAL AND RESTORATION

Several states have chosen to withdraw general consent for the CBI in recent years, citing various political and administrative concerns.

- **Mizoram:** The first state post-2014 to withdraw general consent in 2015 under the Congress-led administration, accusing the central government of undue interference. This was restored in December 2023 under the current administration led by Chief Minister Lalduhoma.
- **West Bengal:** Withdrew general consent in November 2018 under Chief Minister Mamata Banerjee's leadership,



alleging misuse of the CBI by the BJP for political purposes.

- **Andhra Pradesh:** Under the Telugu Desam Party (TDP) government led by N. Chandrababu Naidu, general consent was withdrawn in 2018 as a stance against perceived political bias. This was later restored by the succeeding Y.S. Jagan Mohan Reddy administration in 2019.

ALLEGATIONS OF POLITICAL TARGETING

States have often alleged that the CBI is being used to target opposition-ruled states and leaders. The central government has faced accusations of leveraging the CBI to exert political influence, especially in cases involving opposition leaders.

JUDICIAL CONCERN OVER WITHHOLDING CONSENT

In November 2021, the Supreme Court voiced concern after the CBI reported approximately 150 pending requests for consent to investigate cases in states that had withdrawn general consent since 2018. The court highlighted the need for a balanced approach, acknowledging both the states' right to jurisdictional control and the necessity of an effective national investigative framework.

UNDERSTANDING 'GENERAL CONSENT' IN INDIA

- **Definition and Purpose:** General consent is a form of pre-approved authorization given by a state government, enabling the CBI to conduct investigations without seeking separate permissions for each case. This mechanism was created to allow CBI operations across state borders while respecting federal principles.
- **Implications of General Consent:** With general consent in place, the CBI can function akin to state police within the consenting state. However, if general consent is

withdrawn, the CBI's ability to probe new cases becomes highly restricted, limiting its role to Union Territories or states where such consent is still valid.

- **Policy Implications:** The debate over general consent touches on core issues of federalism, transparency, and the checks and balances in India's political structure. This ongoing discourse underscores the need for clear guidelines on the limits of federal agency authority in state matters and the safeguards required to ensure that investigative agencies are used judiciously.

EFFORTS TO BALANCE AUTONOMY AND CENTRAL OVERSIGHT

While the CBI's limited jurisdiction is meant to preserve state autonomy, the Supreme Court's power to mandate investigations addresses situations where impartiality and neutrality are paramount. Moving forward, the framework for CBI consent may evolve to address concerns about misuse and autonomy, supporting the agency's efficiency while maintaining respect for federal principles.

CONCLUSION:

The requirement for state consent in CBI investigations highlights the delicate balance between state autonomy and the necessity of a central investigative agency in India's federal structure. While general consent facilitates the agency's efficiency and allows it to operate seamlessly across state lines, its withdrawal restricts the CBI's reach, underscoring state concerns over political neutrality. Addressing this issue requires a cooperative approach that respects federal principles while ensuring transparent, unbiased investigations. Evolving policies on CBI's jurisdiction can enhance both accountability and the agency's ability to address crimes that span regional boundaries.

PRIME MINISTER WARNS AGAINST 'DIGITAL ARREST' FRAUDS

CONTEXT: The rising threat of "digital arrest" scams, where cybercriminals impersonate law enforcement to extort money from unsuspecting victims, has prompted the Indian government to collaborate with tech companies like Microsoft to block fraudulent accounts and raise public awareness. With financial losses mounting, government agencies such as CERT-In are actively working to curb these scams through proactive monitoring, public education, and stronger cybersecurity measures.



UNDERSTANDING DIGITAL ARREST: A GROWING CYBER THREAT

Overview:

With a significant rise in cyber fraud incidents, the Indian government, in collaboration with Microsoft, has taken active steps to combat a new cybercrime trend known as "Digital Arrest." In response to over a thousand complaints, authorities have blocked more than 1,000 Skype IDs used for

intimidation, extortion, and online blackmail.

WHAT IS DIGITAL ARREST?

Digital Arrest refers to an elaborate cybercrime tactic where scammers pose as law enforcement or government officials to intimidate victims, falsely accusing them of criminal activities. This tactic aims to manipulate individuals into paying large sums of money under the threat of digital "arrest" or supposed prosecution. Fraudsters exploit fear, demanding financial payments from victims who believe they are under police surveillance or restricted in their actions until they meet these financial demands.

MODUS OPERANDI OF DIGITAL ARREST SCAMS

1. Impersonation of Authorities:

Cybercriminals impersonate law enforcement officials from agencies like the police, Enforcement Directorate, and Central Bureau of Investigation (CBI) to establish credibility. Victims are tricked into believing they face serious charges.

2. Forced Digital Surveillance:

Victims are often kept on video calls via platforms like Skype, pressured to comply with scammer demands. The victims are told they are "digitally arrested" and must remain visible until they make the demanded payments.

3. Self-Imposed Quarantine or Restriction:

Victims, under the impression they are confined under a "digital arrest," are led to believe they cannot leave their homes until they comply. This manipulation can trap victims in



a cycle of fear, causing financial and emotional distress.

Cases Highlighting Digital Arrest Fraud

Several high-profile cases have brought attention to this scam:

- **Dr. Pooja Goel's Experience:** A prominent doctor in Noida was deceived by scammers posing as officials from the Telecom Regulatory Authority of India (TRAI). She was falsely accused of illegal phone usage and paid Rs. 60 lakh before realizing the scam.
- **Elderly Woman's Loss in South Delhi:** A 72-year-old woman in South Delhi lost Rs. 83 lakh to fraudsters who posed as police officials, pressuring her into payments to "clear her name" from fictitious charges.

STEPS EMPLOYED BY SCAMMERS IN DIGITAL ARREST FRAUDS

1. Personal Information Gathering:

Scammers often research personal details about their target through social media and public platforms, using this information to build credibility and trust.

2. Instilling Fear and Intimidation:

By referencing legal sections, displaying fake badges, or simulating government offices, they create a realistic threat of legal consequences.

3. Applying High-Pressure Tactics:

Fraudsters emphasize urgency to prevent the victim from seeking advice or assessing the legitimacy of the accusations, leading them to pay to avoid the fabricated "arrest."

GOVERNMENT MEASURES TO COMBAT DIGITAL ARREST SCAMS

- **Cybersecurity Efforts by CERT-In:**

The Indian Computer Emergency Response Team (CERT-In), established under the Information Technology Act of 2000, has become instrumental in countering cyber fraud by issuing advisories, guidelines, and maintaining real-time reporting channels. CERT-In has flagged numerous fraudulent accounts, blocking malicious video-calling IDs, SIM cards, and bank accounts linked to cybercrime.

- **National Cyber Coordination Centre (NCCC):**

This centre has been established to coordinate cybercrime response efforts across central and state government agencies, ensuring a unified approach in tracking and preventing scams.

- **Public Awareness Initiatives:**

The Prime Minister, in the 115th episode of "Mann Ki Baat," emphasized the importance of cyber hygiene and

warned citizens about the rising threat of "Digital Arrest" scams, urging schools, colleges, and community groups to spread awareness.

PREVENTIVE MEASURES FOR DIGITAL SAFETY

1. Maintaining Cyber Hygiene:

Regularly update passwords, enable two-factor authentication, and keep software and devices updated to limit unauthorized access.

2. Awareness of Phishing Attempts:

Avoid clicking on suspicious links or downloading attachments from unknown sources. Verify emails and messages before sharing personal information.

3. Securing Devices and Networks:

Install reputable antivirus software, anti-malware solutions, and regularly update operating systems and applications with the latest security patches.

4. Utilizing Virtual Private Networks (VPNs):

Encrypt internet connections with VPNs, but choose trustworthy providers to avoid data vulnerabilities.

5. Encrypted Communication:

Use encryption for sensitive communication to prevent unauthorized access. Avoid sharing passwords and confidential information on public forums.

THE THREE-STEP APPROACH TO AVOID FALLING VICTIM TO DIGITAL ARREST SCAMS

1. **Stop:** Pause and remain calm. Avoid sharing any personal information immediately.
2. **Think:** Remember that government agencies do not conduct investigations or request payments through video calls or messages.
3. **Act:** Contact the cyber helpline at 1930 or report incidents on cybercrime.gov.in. Preserve evidence, notify family members, and inform the local police if necessary.

CONCLUSION

The surge in Digital Arrest scams underscores the importance of both public vigilance and systemic security measures. Through CERT-In and other initiatives, the Indian government is intensifying efforts to prevent and combat cyber fraud, while public awareness campaigns aim to empower individuals to recognize and avoid falling prey to such scams. Cyber safety, awareness, and resilience are essential as cybercriminal tactics evolve, and vigilance remains crucial to protect individuals from digital fraud.



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TELECOM MINISTRY TO DISCONNECT 2.17 CRORE MOBILE CONNECTIONS AMID RISING CYBER SLAVERY CONCERNS

CONTEXT: The Union Ministry of Telecommunications has announced to a high-level inter-ministerial panel that it will deactivate 21.7 million mobile connections obtained through forged documents or linked to cybercrime activities. Additionally, it plans to block 226,000 mobile handsets associated with such cases.



CYBER SLAVERY: A GROWING MENACE

Background

- Cyber scams and fraud are on the rise in India, with scammers frequently using spam calls to impersonate government officials and steal sensitive information such as Aadhaar and ATM details.
- To evade detection, many of these cybercriminals now operate from overseas while using Indian mobile numbers to appear authentic to their targets.
- This shift has spurred a troubling trend known as “cyber slavery,” where individuals are lured abroad with false job promises and then coerced into participating in cybercrime.

WHAT IS CYBER SLAVERY?

Cyber slavery represents a modern form of exploitation in which individuals are deceived with promises of high-paying jobs and forced into criminal activities. Victims are often drawn by offers of lucrative data entry or tech positions in foreign countries, particularly in Southeast Asia. Once they arrive, their passports and identification documents are confiscated, entrapping them in a cycle of digital servitude.

These victims are then coerced into conducting illegal online activities, such as phishing, scamming, and cyber fraud. Their tasks may include creating fake social media profiles or manipulating others into fraudulent investment schemes, like sham cryptocurrency platforms. Those enslaved in these operations typically endure harsh working conditions, limited freedom, and face severe threats or violence if they try to escape.

THE GROWING CONCERN FOR INDIA

Cyber slavery, a disturbing offshoot of human trafficking, is escalating alongside digital crimes. This alarming intersection of human rights violations and global cybercrime networks necessitates urgent, coordinated international action to dismantle these operations and safeguard victims.

INDIANS TRAPPED IN CYBER SLAVERY

Recent reports indicate that over 5,000 Indians are believed to be forcibly held in Cambodia, where they are coerced into cyber fraud schemes. Government estimates suggest that at least ₹500 crore were defrauded from Indian citizens in the six months leading up to March this year. Data from the Indian Cyber Crime Coordination Centre (I4C) shows a rise in cybercrime incidents targeting India, with approximately 45% of these originating from Southeast Asian countries, including Cambodia, Myanmar, and Laos.

INTER-MINISTERIAL PANEL FORMED

In response, the Indian government formed an inter-ministerial panel to address this issue and identify systemic vulnerabilities. The panel highlighted significant gaps in the banking, immigration, and telecommunications sectors, pinpointing three main vulnerabilities facilitating these cyber scams from Southeast Asia:

1. **Complicit Bank Managers in Mule Accounts:** Accounts in two nationalized banks—State Bank of India and Punjab National Bank—were allegedly opened with the involvement of senior bank managers and staff to facilitate fraudulent transactions.
2. **Unreturned Passengers on Visitor Visas:** From January 2022 to May 2024, around 30,000 Indian travelers to Cambodia, Thailand, Myanmar, and Vietnam on visitor visas did not return, raising concerns about potential trafficking.
3. **Misuse of Bulk SIM Cards:** Bulk SIM card sales have been exploited to fuel cross-border cybercrime activities.

GOVERNMENT MEASURES TO COMBAT CYBER SLAVERY

The Union Ministry of Telecommunications has taken decisive steps to tackle this issue:

- **Disconnecting Fraudulent Mobile Connections:** Approximately 21.7 million mobile connections registered with forged documents or linked to cybercrimes are set to be disconnected.
- **Blocking Suspicious Handsets:** 226,000 mobile handsets involved in these activities will also be blocked.

The Department of Telecommunications (DoT) has instructed telecom providers to block all incoming international spoofed calls that appear as Indian numbers. This move has led to a 35% drop in such calls, with full implementation expected by December 31. Additionally, the DoT is working to identify roaming numbers used in Southeast Asia for scam activities. Between April and June 2023, over 600,000 Indian SIM cards were active in Southeast Asia, raising concerns about misuse. Further investigations revealed that 140,000 point-of-sale agents across India were involved in selling SIM cards used in scams in Cambodia, Myanmar, and Laos.

Telecom providers are now required to submit weekly reports on Indian mobile numbers using roaming services in high-risk countries such as Hong Kong, Cambodia, Laos, the Philippines, and Myanmar.

CONCLUSION

Cyber slavery is a grave threat, intertwining human trafficking with sophisticated cybercrime networks. As India faces a surge in these crimes originating from Southeast Asia,



the government's actions – disabling millions of fraudulent mobile connections, blocking compromised handsets, and enhancing telecom oversight – mark a critical response. Strengthening inter-sectoral vigilance and international cooperation is essential to dismantling these exploitative

networks. By addressing vulnerabilities in banking, immigration, and telecom sectors, India aims to protect its citizens from falling prey to cyber slavery and cybercrime, ensuring a safer digital landscape for the nation.



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INTERNATIONAL RELATIONS





KOREAN PENINSULA TENSION

ISRAEL'S RETALIATORY STRIKES ON IRAN

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BRICS SUMMIT 2024

INDIA AND GERMANY: A STRATEGIC PARTNERSHIP DEEPENS AMIDST GLOBAL CHALLENGES



KOREAN PENINSULA TENSION

CONTEXT: Amidst heightened tensions, North Korea announced an influx of over 1.4 million citizens applying to join the military, following its destruction of border infrastructure in response to alleged South Korean drone incursions carrying anti-North Korea leaflets.

This escalation underscores the long-standing conflict between the two Koreas, which has simmered for over 70 years.

Land cleared inside DMZ

8 November 2023



17 June 2024



A DIVIDED PENINSULA: THE HISTORY OF KOREA

The Korean Peninsula, located in East Asia, has a long and complex history marked by division, conflict, and resilience. The current geopolitical landscape of North and South Korea is a product of the Cold War and the lingering effects of colonialism.

A Century of Division and Conflict

- **Colonial Rule (1910-1945):** Korea was under Japanese rule for 35 years until Japan's defeat in World War II. This period saw significant cultural and economic changes, with the Japanese seeking to integrate Korea into their empire.
- **Post-WWII Division (1945):** After World War II, Korea was divided at the 38th parallel, with the Soviet Union administering the North and the United States overseeing the South. This division became permanent with the establishment of separate governments in 1948.
- **The Korean War (1950-1953):** In 1950, North Korea, supported by the Soviet Union and China, invaded South Korea, sparking a devastating conflict. The United States intervened on behalf of South Korea, leading to a stalemate that resulted in an armistice in 1953. However, no peace treaty was signed, leaving the two Koreas technically at war.

Two Koreas, Two Systems:

- **North Korea (DPRK):** Founded in 1948 under the leadership of Kim Il Sung, North Korea established a communist regime based on the principles of Juche (self-reliance). North Korea has been ruled by the Kim dynasty

since its founding, with Kim Jong Un currently in power. The regime has pursued a policy of isolationism, strict censorship, and severe punishments for dissent, creating a tightly controlled society.

- **South Korea:** With US support, South Korea embraced a capitalist economy and experienced rapid economic development after the Korean War. It transitioned into a full democracy in 1993, achieving a high standard of living and becoming a major player in global trade and technology.

Demilitarized Zone (DMZ)



The Korean Demilitarized Zone (DMZ):

- The DMZ is a 2.5-mile wide buffer zone between North and South Korea, established by the 1953 armistice. It remains one of the most heavily fortified borders in the world, with a constant military presence on both sides.
- The DMZ is a unique ecosystem, home to diverse flora and fauna, and has become a symbol of the ongoing division of the Korean Peninsula.

The Korean Peninsula: A Unique Geographic Landscape:

- **Mountainous Terrain:** The Korean Peninsula is approximately 70% mountainous, creating a challenging environment for agriculture and economic development.
- **Strategic Location:** The peninsula's location in East Asia makes it strategically significant, situated near major shipping routes and bordering powerful neighbors, including China, Russia, and Japan.
- **Key Regions:** The peninsula can be divided into four major regions:
 - **Western Region:** Characterized by extensive coastal plains, river basins, and foothills.
 - **Eastern Region:** Consists of high mountain ranges and a narrow coastal plain.
 - **Southeastern Basin:** Includes important agricultural areas.
 - **Southwestern Region:** Comprises mountains and valleys.

The Korean Peninsula: A Symbol of Division and Hope:

The division of the Korean Peninsula remains a significant source of tension in Northeast Asia. The ongoing conflict, the threat of nuclear weapons, and the lack of a peace treaty continue to pose challenges to regional stability. However, there is also hope for reunification and a peaceful resolution to the conflict.

The Korean people on both sides of the border share a common cultural heritage and language, and there have been various efforts towards reconciliation, including inter-Korean dialogues and cultural exchanges. The future of the Korean Peninsula remains uncertain, but the pursuit of peace and reconciliation continues to be a priority for many in the region.

CONCLUSION: The Korean Peninsula stands as a testament to the enduring legacy of division and the persistent hope for reunification. While the geopolitical landscape remains complex and fraught with challenges, the shared heritage and yearning for peace offer a glimmer of optimism for a future where the Korean people can finally stand united.

ISRAEL'S RETALIATORY STRIKES ON IRAN

CONTEXT: On October 26, 2024, Israel launched precise airstrikes against Iranian targets, marking a significant escalation in hostilities between the two nations.



ISRAEL'S RETALIATORY STRIKES ON IRAN: AN ANALYSIS Overview of Recent Events

On October 26, 2024, Israel launched precise airstrikes against Iranian targets, marking a significant escalation in hostilities between the two nations. This military action was a direct response to an earlier Iranian ballistic missile attack on Israeli territory on October 1, which followed the broader context of heightened tensions resulting from the October 7 Hamas attacks.

Background of the Israel-Iran Conflict

The animosity between Israel and Iran has deep roots, stemming from the Islamic Revolution of 1979, which transformed Iran from a U.S. ally into a vocal adversary of Israel. Following this revolution, Iran's leadership has consistently rejected Israel's legitimacy, with Supreme Leader Ayatollah Ali Khamenei famously describing Israel as a "cancerous tumor" that must be eradicated. This ideological hostility has fueled a series of proxy conflicts and military engagements, including targeted strikes on military assets and leaders from both sides.



Key Developments Leading to Escalation

- 1. Hamas Attacks:** The October 7 attacks by Hamas, supported by Iran, significantly increased tensions.
- 2. Reprisals and Assassinations:** A series of retaliatory actions, including the killing of Iranian Revolutionary Guard Corps (IRGC) commanders and Hamas leaders, have exacerbated the situation. Notably, the assassination of key figures such as Ismail Haniyeh and Hezbollah leader Hassan Nasrallah further inflamed hostilities.
- 3. Ballistic Missile Exchanges:** The exchange of missile strikes culminated in Israel's pre-emptive strikes against Iranian missile defense systems, reflecting an ongoing cycle of violence and retaliation.

Implications of Israel's Recent Airstrikes

Israel's airstrikes represent a pivotal moment in the ongoing conflict, signaling its commitment to counter perceived existential threats posed by Iran. The strikes are intended to:

- **Deter Future Attacks:** By demonstrating military capability, Israel aims to deter Iran and its proxies from further aggression.
- **Undermine Iranian Influence:** Targeting Iranian assets and leaders seeks to disrupt Iran's operational capabilities and diminish its support for proxy groups like Hezbollah and Hamas.

However, these actions could provoke further retaliatory strikes from Iran, escalating the conflict and destabilizing the region further.

Impact on India

The evolving Israel-Iran conflict has significant ramifications for India, particularly in terms of trade, security, and regional stability.

- 1. Disruption of Trade Routes:** A prolonged conflict could jeopardize critical shipping routes through the Red Sea, affecting India's trade valued at over \$400 billion. India relies heavily on the Suez Canal for trade with Europe, the US, and West Asia, making it vulnerable to disruptions.
- 2. Petroleum Export Challenges:** India's petroleum exports have already been impacted by rising shipping costs and disruptions in the Red Sea. A reduction in exports could strain India's economy, particularly affecting its energy security and revenue from oil.
- 3. European Market Strain:** The increased freight costs pose challenges for Indian exporters in sectors like machinery and textiles, where profit margins are already tight. This could hinder India's competitive edge in the European market.
- 4. Emerging Trade Opportunities:** Despite these challenges, India's trade with Gulf Cooperation Council (GCC) countries has seen a notable increase, suggesting potential for growth despite the geopolitical tensions.



Additionally, India's exports to Iran have also surged due to regional players maintaining neutrality.

5. **Risk to IMEC Development:** The India-Middle East-Europe Economic Corridor (IMEC) project aims to enhance trade routes between India, the Gulf, and Europe. However, the current geopolitical climate poses risks to its development, potentially delaying crucial infrastructure that would facilitate more efficient trade.

CONCLUSION

Israel's airstrikes against Iran mark a significant

escalation in a long-standing conflict that carries profound implications not only for the immediate region but also for India. As tensions rise, it is crucial for India to navigate these complexities carefully, balancing its strategic interests while seeking to enhance its economic ties with West Asia amidst the shifting geopolitical landscape. The evolving situation demands vigilant monitoring and adaptive strategies to mitigate potential risks to India's economic stability and security.

SCO MEET 2024 IN PAKISTAN

CONTEXT: The 23rd Meeting of the Council of Heads of Government of Member States of the SCO was held on October 15 and 16 in Islamabad, Pakistan.

SCO SUMMIT IN ISLAMABAD: CHALLENGES AND OPPORTUNITIES FOR INDIA

The 23rd Meeting of the Council of Heads of Government of Member States of the Shanghai Cooperation Organisation (SCO) took place in Islamabad, Pakistan, on October 15th and 16th, 2024. Chaired by Pakistani Prime Minister Shehbaz Sharif, the summit focused on enhancing regional cooperation in various fields, including economics, security, and counter-terrorism. This meeting held particular significance for India, highlighting both the opportunities and challenges presented by the SCO in the context of India's strategic priorities.



SCO SUMMIT: A FOCUS ON REGIONAL COOPERATION AND SECURITY

The summit's agenda covered a broad range of issues, including:

- **Economic Cooperation:** The summit focused on promoting sustainable economic growth, green development, and the digital economy, with an emphasis on supporting MSMEs and job creation. The members reaffirmed their support for China's Belt and Road Initiative (BRI) and its integration with the Eurasian Economic Union, though India's opposition to BRI, particularly the China-Pakistan Economic Corridor (CPEC), continues to be a point of contention.
- **Climate Action:** The SCO members expressed their commitment to tackling climate change, including the establishment of a Special Working Group on Climate Change.
- **Food Security:** Members emphasized the importance of cooperation on global food security and the promotion of climate-resilient crops like millet and wheat. This aligns

with India's focus on promoting millets as a sustainable and nutritious food source.

- **Humanitarian and Cultural Cooperation:** The summit deepened cooperation in education, culture, sports, and youth diplomacy, with plans for SCO Sports Games.
- **SCO Expansion:** The summit discussed the accession of Belarus into the SCO and strengthening the organisation's financial structures.

INDIA'S POSITION AND PRIORITIES

Key Highlights of India's Participation:

- **"Three Evils":** India highlighted the "Three Evils" – terrorism, separatism, and extremism – as major challenges that the SCO aims to combat.
- **One Earth, One Family, One Future:** India promoted its "One Earth, One Family, One Future" vision, advocating for a more inclusive and interconnected world.
- **SCO Startup Forum and Innovation:** India showcased its initiatives, including the SCO Startup Forum, the Special Working Group on Startups and Innovation, and Traditional Medicine, which were welcomed by other SCO members.
- **Digital Public Infrastructure:** India pushed for the inclusion of Digital Public Infrastructure (DPI) and digital inclusion within the SCO's cooperation framework.
- **Mission LiFE and Sustainability:** India advocated for the SCO to draw inspiration from its "Mission LiFE" initiative to achieve the United Nations Sustainable Development Goals (UNSDGs).
- **Global Food Security:** India promoted the use of climate-resilient and nutritious grains, such as millets, to enhance global food security and nutrition.
- **Fair Connectivity Projects:** India emphasized the importance of upholding fair and balanced connectivity projects in accordance with international law and the UN Charter.
- **Open Trade:** India reaffirmed its commitment to a rules-based, open, and transparent multilateral trading system, with the World Trade Organization (WTO) at its core.
- **Multilateralism and Development:** India condemned protectionist actions, unilateral sanctions, and trade restrictions that undermine the multilateral trading system and impede global sustainable development.

India's Objectives within the SCO:

- **Geopolitical Balancing:** The SCO provides India with a platform to engage with Central Asia, Russia, and China, helping to balance regional power dynamics and promote multipolarity.
- **Security Cooperation:** The SCO's focus on counter-terrorism, extremism, and separatism aligns with India's



security concerns, and initiatives like the Regional Anti-Terrorist Structure (RATS) support India's efforts.

- **Economic Connectivity:** The SCO enhances regional trade and connectivity, providing India with access to energy-rich Central Asia and promoting infrastructure projects like the International North-South Transport Corridor (INSTC).
- **Strategic Autonomy:** The SCO allows India to maintain its strategic independence in a non-Western multilateral setting, engaging diplomatically with China and Russia.
- **Soft Power Promotion:** The SCO provides a platform for India to promote its cultural and environmental initiatives, such as yoga, millets, and Mission LiFE, while advancing cooperation on sustainable development.
- **Global Governance Reform:** India advocates for UN Security Council reforms, a key priority for India's push for a more representative global order.
- **Energy Security:** India's membership in the SCO can boost energy security by providing access to mineral and energy resources of the Central Asian countries.
- **People-to-People Engagement:** The SCO can play a role in deepening people-to-people engagement through cooperation in education, medicine, tourism, and other fields.

Challenges Facing the SCO:

- **Geopolitical Tensions:** Internal differences among members (India, China, Pakistan) make consensus difficult, raising concerns about the SCO's effectiveness in the current global context.
- **Expansion Diluting Mandate:** The recent expansion risks diluting the SCO's core focus, as new members bring different priorities, making it harder to achieve collective goals.
- **Counter-Terrorism Challenges:** The SCO's limited success in combating cross-border terrorism and drug trafficking in the Golden Crescent (Afghanistan, Iran, Pakistan) remains a concern.
- **Anti-Western Posture:** The SCO's anti-Western stance complicates India's balancing act with its Western partnerships, especially as China and Russia use the platform for their geo-strategic interests.
- **China-Pakistan-Russia Influence:** India's opposition to China's Belt and Road Initiative (BRI) and the China-Pakistan Economic Corridor (CPEC) limits its ability to assert its interests within the SCO.
- **Divergent Interests of Members:** The SCO member states have a wide range of interests and objectives, which can make it difficult to establish agreements on various topics and limit the organisation's effectiveness.

India's Way Forward in the SCO:

- **Addressing Geopolitical Challenges:** India should continue emphasizing global and regional cooperation, promoting harmony and collaboration within the SCO framework.
- **Strengthening Mutual Cooperation:** SCO members should focus on cooperating in areas like terrorism, drug trafficking, people-to-people exchanges, and economic interests, setting aside bilateral disputes to achieve common objectives.
- **Managing Expansion:** As the SCO expands, it's crucial to ensure that the core mandate of the organization is not diluted. Members must commit to advancing the common goals and priorities set by the grouping.
- **Enhancing Counter-Terrorism Mechanism:** India has consistently advocated for strengthening the SCO's counter-terrorism agenda, urging member states to take firm and consistent action against countries that support terrorism. The Regional Anti-Terrorist Structure (RATS) needs to be bolstered, and the SCO must ensure that its members condemn terrorism unequivocally and take concrete steps to curb radicalism.
- **Adapting to New Challenges:** For the SCO to remain relevant, it must evolve with changing regional dynamics. This requires updating its strategies to address emerging challenges like cybersecurity, climate change, and global trade issues. The SCO should also explore ways to foster inclusive economic cooperation, focusing on energy security, infrastructure development, and sustainable development in line with member states' interests.
- **Balancing Competing Interests:** India must strike a balance between its growing ties with the West and its role in the SCO, ensuring that it uses the platform to advance its strategic interests in Eurasia without compromising its Western alliances.
- **Focus on Regional Connectivity:** India can leverage the SCO to strengthen its push for regional connectivity projects like the International North-South Transport Corridor (INSTC) to enhance trade with Central Asia and Russia.

CONCLUSION: The SCO offers India strategic opportunities for regional cooperation, connectivity, and counter-terrorism. However, it also presents challenges due to internal geopolitical differences and the dominance of China and Russia. To maximize benefits, India must balance its interests, push for an undiluted mandate, and strengthen collective efforts on security and economic issues. The organization's future success will depend on its ability to address these challenges and evolve to meet the demands of a changing global landscape.

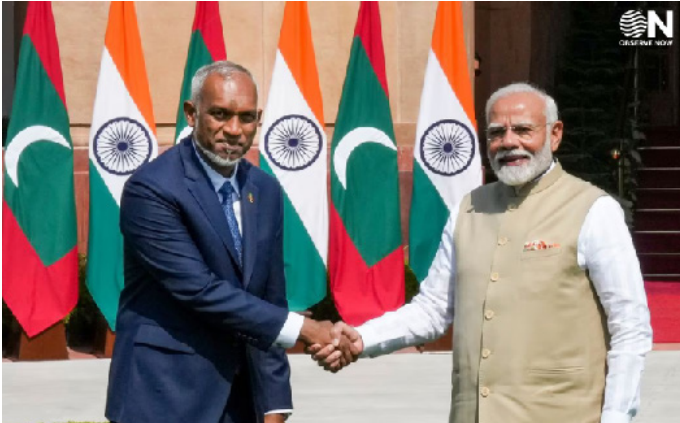
"Intelligence plus character-that is the goal of true education. — Martin Luther King Jr.





CAN INDIA RESCUE THE MALDIVES' ECONOMY? PRESIDENT MUIZZU SEEKS HELP

CONTEXT: Maldives President Mohamed Muizzu's first official bilateral visit to India, a five-day trip from October 6th to 10th, 2024, came amidst heightened political tensions between the two countries. The visit, marked by a meeting between President Muizzu and Prime Minister Narendra Modi, aims to mend ties strained by the "India Out" campaign that propelled Muizzu to power.



INDIA AND MALDIVES: A STRATEGIC PARTNERSHIP FACES ECONOMIC HEADWINDS

The recent visit of Maldivian President Mohamed Muizzu to India, his first official bilateral trip since taking office, is a significant event amidst a complex backdrop of economic challenges and shifting political dynamics. While the visit aims to strengthen the historically close ties between the two nations, it also highlights the need for renewed cooperation in the face of shared challenges.

Economic Lifeline: India Offers Support Amidst Crisis

The Maldives faces a severe economic crisis, characterized by a potential debt default, dwindling foreign exchange reserves, and downgraded credit ratings. This crisis has prompted a renewed focus on the India-Maldives relationship, with India stepping in to provide crucial financial support.

Key Highlights of the Visit:

- **Financial Assistance:** India has extended a crucial financial lifeline to the Maldives by:
 - Signing a \$400 million currency swap agreement with the Maldives Monetary Authority.
 - Providing an additional ₹3,000 crore (\$357 million) under the SAARC Currency Swap Framework, valid until 2027.
 - Rolling over a \$50 million Treasury Bill for another year.
- **Economic Partnership:** The visit marks a significant upgrade in the bilateral relationship, with both countries agreeing to transform their partnership into a "Comprehensive Economic and Maritime Security Partnership." This move signifies a deepening commitment to cooperation in areas beyond security and defense.
- **Free Trade Agreement:** India and Maldives have agreed to initiate negotiations for a Free Trade Agreement (FTA), potentially boosting trade and investment between the two nations.
- **Tourism Boost:** India's introduction of the RuPay card in

the Maldives aims to facilitate financial transactions for Indian tourists, supporting the recovery of the Maldives' vital tourism sector.

- **Infrastructure Support:** India handed over 700 houses built with its assistance and inaugurated the jointly constructed runway at Hanimadhoo Island, further solidifying the partnership and contributing to the Maldives' development.

Beyond Economics: Strengthening a Strategic Partnership

The India-Maldives relationship extends far beyond economics, encompassing a robust strategic partnership rooted in shared security interests and regional stability.

The Maldives' Strategic Importance for India:

- **Geostrategic Location:** The Maldives' location in the Indian Ocean makes it a key node in the crucial Sea Lanes of Communication (SLOCs) connecting the Gulf of Aden, Gulf of Hormuz, and the Strait of Malacca. This geographic proximity has significant implications for India's maritime security and trade interests.
- **Regional Stability:** The Maldives is considered vital for peace and stability in the Indian Ocean, and India's commitment to the Maldives' security is seen as a key element of its "Neighbourhood First" policy.
- **Shared Challenges:** Both nations face common threats, including terrorism, drug trafficking, and piracy, making cooperation on security matters crucial.

India's Role in the Maldives' Development:

- **First Responder:** India has consistently been the first responder to crises in the Maldives, providing assistance during natural disasters (2004 Tsunami, Malé water crisis in 2014), and offering immediate support during the COVID-19 pandemic.
- **Development Assistance:** India has provided substantial Lines of Credit (LOCs) for various development projects, such as the Addu Development Project, the Gulhifalhu Port project, and the Greater Malé Connectivity Project.
- **Tourism:** India is the largest source of tourists for the Maldives, with over 200,000 Indian visitors in 2023.

Challenges and the Way Forward:

- **Shifting Political Dynamics:** The Maldives has experienced shifts in political alliances, leading to fluctuations in its foreign policy priorities. This can sometimes impact the consistency of bilateral relations.
- **Perceptions of Indian Influence:** Some groups in the Maldives harbor anxieties about India's influence in local affairs. These concerns have been amplified by the "India Out" campaign, which has gained momentum in recent years.
- **Chinese Influence:** China's growing presence in the Maldives through investments and infrastructure projects poses a challenge for India's strategic interests.
- **Security Concerns:** The Maldives' susceptibility to threats such as terrorism and piracy necessitates robust security cooperation. However, differing approaches to security, particularly regarding foreign military presence, can create friction.
- **Tourism Challenges:** The tourism sector has been strained by a diplomatic dispute following derogatory comments aimed at the Indian Prime Minister during his



visit to the Lakshadweep Islands.

Strengthening the Partnership:

To navigate these challenges and further strengthen the India-Maldives relationship, both countries should focus on:

- **Economic Cooperation:** Prioritizing infrastructure projects, enhancing trade, and fostering economic development to support the Maldives' growth.
 - o This includes expediting the Greater Malé Connectivity Project, exploring a Free Trade Agreement, and promoting India's High Impact Community Development Project (HICDP) to create employment opportunities for Maldivian youth.
- **Defence Cooperation:** Strengthening joint military exercises such as "Ekuverin," "Dosti," and "Operation Shield," along with the ongoing "Ekatha" harbor project, to enhance the Maldives National Defence Force's (MNDF) operational capabilities.
- **Health Cooperation:** Facilitating the recognition of the Indian pharmacopoeia by the Maldivian government and establishing India-Maldives Jan Aushadhi Kendras to provide affordable, quality generic medicines.
- **Regional Cooperation:** Actively engaging in South Asian Association for Regional Cooperation (SAARC) and Indian

Ocean Rim Association (IORA) meetings to address shared regional challenges like piracy, illegal fishing, drug smuggling, and terrorism.

- **Colombo Security Conclave:** Strengthening the Colombo Security Conclave (CSC), a regional security grouping including India, Bangladesh, Sri Lanka, Maldives, and Mauritius, will enhance collective efforts in maritime security and foster regional cooperation.

Impact on Indo-Pacific Geopolitics:

The India-Maldives partnership is crucial for India's strategic objectives in the Indo-Pacific. A stable and prosperous Maldives, aligned with India's interests, is vital for counterbalancing China's growing influence in the region. India's active role in supporting the Maldives' economic recovery and its commitment to security cooperation are key to ensuring a more stable and secure Indo-Pacific region.

CONCLUSION: The India-Maldives partnership faces a new set of challenges, but the recent visit has highlighted the strong foundation for cooperation and a shared commitment to overcoming these challenges. As the Maldives navigates its economic difficulties, India's continued support and partnership will be essential for fostering a more stable and prosperous future for both nations.

INDIA-CANADA RELATIONS TAKE A BEATING

CONTEXT: India recently took a significant diplomatic step, ordering the expulsion of six Canadian diplomats and recalling its High Commissioner to Canada, along with other designated diplomats. This action signifies a heightened level of tension in the bilateral relationship between the two countries.



RECENT EVENTS AND DIPLOMATIC TENSIONS: THE NIJJAR KILLING

Overview of the Incident

On September 18, 2023, Canadian Prime Minister Justin Trudeau informed Parliament about "credible allegations" linking Indian government agents to the killing of Hardeep Singh Nijjar. Nijjar was a Canadian citizen and pro-Khalistan activist advocating for separatism in India. India swiftly refuted these allegations, accusing Canada of harboring individuals promoting violent separatism and undermining India's territorial integrity.

Escalation of Political Tensions

Initially limited to diplomatic discourse, the situation escalated into personal political attacks, complicating future diplomatic efforts. Trudeau's comments on the issue included discussions surrounding a meeting between Indian National Security Advisor Ajit Doval and his Canadian counterpart in

Singapore on October 12, 2024. This public discourse has further intensified the diplomatic rift.

Diplomatic Fallout

In response to the allegations, Canada requested India to lift the diplomatic immunity of six Indian diplomats, a request that India categorically denied. In retaliation, India recalled its diplomats and expelled six Canadian diplomats. Earlier, India had already urged Canada to reduce its diplomatic presence in the country.

KEY ISSUES AND DISCREPANCIES

Diplomatic Immunity and Allegations

Canada claims that the six Indian diplomats were involved in illegal intelligence operations, while India condemned this assertion as baseless and "propagandistic." India emphasized that diplomatic immunity is a well-established norm under international law, as outlined in the Vienna Convention on Diplomatic Relations (1961), which India ratified in 1972.

The Khalistan Movement

India has consistently criticized Canada's leniency towards Khalistan supporters, viewing their activities as direct threats to its sovereignty. Canadian officials, however, argue that these activities fall under lawful free speech protections.

Double Standards Among Western Democracies

The situation highlights a perceived irony among Western nations, including Canada, which often overlook fundamental freedoms when their security interests are at stake. Trudeau's previous comments regarding India's internal matters are perceived by India as violations of international diplomatic norms.

ECONOMIC IMPACTS AND STRATEGIC CONCERNS

Impact on Economic Relations

Canada has approximately \$75 billion invested in various sectors of the Indian economy, including infrastructure,



financial services, and real estate. Major investors include the Canadian Pension Plan Investment Board (CPPIB) and Caisse de dépôt et placement du Québec (CDPQ), with over 600 Canadian companies operating in India. However, negotiations for a Free Trade Agreement (FTA) between the two countries have stalled due to the current tensions.

Despite these political rifts, the private sector has largely maintained trade flows, with no major restrictions imposed by either nation thus far.

Geopolitical Implications

India's strategy to deepen economic ties with other Western countries, including the European Union and the UK, may mitigate the adverse effects of its deteriorating relations with Canada. Moreover, India is likely to seek support from key Western allies to counter the Canadian accusations and build a broader international consensus.

FUTURE PROJECTIONS

Long-Term Diplomatic Fallout

The ongoing tensions may lead to a further deterioration of diplomatic relations, impacting bilateral trade, remittances, and educational cooperation. While Canadian investments in India remain attractive, they could be redirected through third countries such as Singapore or the UAE.

Reciprocity Principle in Diplomatic Relations

The principle of reciprocity in international law emphasizes equality and mutual respect between states, suggesting that actions taken by one state should be met with equivalent responses from the other.

Historical Context of India-Canada Relations

India and Canada established diplomatic relations in 1947, with Canada being among the first nations to engage with India's nuclear program. However, relations soured following India's nuclear tests in 1974. By April 2015, bilateral ties were elevated to a strategic partnership, with both nations engaging in various dialogue mechanisms.

Trade Statistics and Dependencies

In FY 2024, bilateral trade between India and Canada reached \$8.4 billion, though it showed a declining trend from \$10.5 billion in 2022. India's exports to Canada totaled approximately \$4.1 billion, with major items including gems, jewelry, pharmaceuticals, and machinery. Conversely, India imported around \$4.05 billion from Canada, including pulses, wood pulp, and industrial chemicals. Canada ranks as the 18th-largest foreign investor in India, accounting for about 0.5% of total foreign direct investment (FDI) inflows.

STRATEGIC COOPERATION AND INVESTMENTS

Science and Technology Collaboration

The IC-IMPACTS initiative fosters research collaborations between Canada and India, while partnerships in space exploration have been strengthened through MOUs between ISRO and the Canadian Space Agency.

The Indian Diaspora

Canada hosts one of the largest Indian diasporas, comprising approximately 1.6 million individuals, including a significant Sikh population. This diaspora contributes substantially to remittance flows and plays a crucial role in maintaining bilateral ties.

Educational Exchanges

India is the largest source of international students in Canada, with nearly 230,000 Indian students studying there,

significantly contributing to the Canadian economy.

POSSIBLE MEASURES BY INDIA

In response to the current diplomatic tensions, India may consider several measures, including:

- **Impact on the Education Sector:** Restricting Indian students from studying in Canada could severely impact Canada's educational system, given that Indian students make up a substantial portion of foreign students.
- **OCI Card Cancellations:** India may cancel the Overseas Citizen of India (OCI) cards of pro-Khalistan activists, compelling them to reassess their involvement in separatist movements.
- **Property and Visa Restrictions:** India could suspend property rights for Khalistani supporters and increase scrutiny on visa applications for Canadian citizens of Indian descent involved in separatist activities.
- **Trade Sanctions:** Although Canada is among India's top trading partners, India could impose trade restrictions or freeze Canadian financial institutions' investments in the Indian economy.

PATH FORWARD FOR INDIA-CANADA RELATIONS

Diplomatic Engagement and Dialogue

Both nations should prioritize back-channel talks to de-escalate tensions. Continued engagement through multilateral forums, such as the G20 and the UN, can provide avenues for constructive dialogue.

Addressing Mutual Security Concerns

Canada must take actionable steps against anti-India elements, including pro-Khalistan activists, operating on its soil. Simultaneously, India should engage with Canadian authorities to address the evidence presented regarding the allegations.

Strengthening People-to-People Ties

Despite existing tensions, the Indian diaspora in Canada is pivotal for maintaining strong bilateral relations. It is essential for both countries to ensure that students, skilled workers, and businesses are not adversely affected by political conflicts.

Reaffirming Trade and Investment Relations

Resuming discussions on the Free Trade Agreement (FTA) and exploring new economic cooperation avenues can stabilize relations and ensure mutual economic benefits, protecting investments from political conflicts.

Collaborating on Global Issues

India and Canada can align on shared concerns, such as climate change and sustainable development, leveraging common ground in multilateral settings to maintain cooperation.

Maintaining a Balanced Approach

India should engage with its Western allies to clarify its position and avoid diplomatic isolation. Conversely, Canada must consider the long-term geopolitical implications of allowing domestic politics to dictate foreign policy, especially with a rising global power like India.

CONCLUSION: The recent diplomatic tensions between India and Canada underscore the complexities of international relations, particularly when national security and domestic politics intersect. Both nations must prioritize dialogue and mutual respect to navigate these challenges effectively. Strengthening economic ties, reaffirming commitments to



trade, and addressing security concerns will be crucial for stabilizing the relationship. The role of the Indian diaspora and educational exchanges remains vital for fostering goodwill. By focusing on collaboration on shared global issues, India

and Canada can work towards rebuilding trust and ensuring that their bilateral ties contribute positively to regional and international stability.

INDIA-US SIGN PACT ON CRITICAL MINERALS

CONTEXT: During the 6th US-India Commercial Dialogue in Washington, India's Trade Minister and the US Commerce Secretary signed a Memorandum of Understanding (MOU) aimed at strengthening cooperation in the critical minerals supply chain.

INDIA-US CRITICAL MINERALS PACT

Overview

The India-US Critical Minerals Pact focuses on essential minerals like lithium and cobalt, which are crucial for the development of electric vehicles (EVs) and clean energy technologies. This collaboration aims to enhance the resilience of supply chains for critical minerals between both nations.



Key Objectives

- **Strengthening Supply Chains:** The pact seeks to bolster the supply chains for critical minerals, ensuring a steady and reliable flow of resources.
- **Building Sector Resilience:** Through cooperation, the agreement aims to enhance the resilience of the critical minerals sector in both India and the United States.

Focus Areas

The Memorandum of Understanding (MOU) highlights several areas for collaboration:

- **Exploration and Extraction:** Identifying best practices for mineral exploration and extraction.
- **Processing and Refining:** Enhancing methods for the processing and refining of critical minerals.
- **Recycling and Recovery:** Developing effective strategies for recycling and recovering minerals to minimize waste and promote sustainability.

UNDERSTANDING CRITICAL MINERALS

Definition

Critical minerals are essential for economic development and national security but are often scarce and geographically limited, leading to vulnerabilities in supply chains.

Major Critical Minerals

A report by the Committee on Identification of Critical Minerals, constituted by the Ministry of Mines, has identified 30 critical minerals, including:

- Antimony
- Beryllium
- Bismuth
- Cobalt
- Copper
- Gallium
- Germanium
- Graphite
- Hafnium
- Indium
- Lithium
- Molybdenum
- Niobium
- Nickel
- Platinum Group Elements (PGE)
- Phosphorous
- Potash
- Rare Earth Elements (REE)
- Rhenium
- Silicon
- Strontium
- Tantalum
- Tellurium
- Tin
- Titanium
- Tungsten
- Vanadium
- Zirconium
- Selenium
- Cadmium

Top Producers

According to the International Energy Agency (IEA), the leading producers of critical minerals include:

- China
- Democratic Republic of the Congo
- Chile
- Indonesia
- South Africa

To push clean energy transition, India joins US-led Minerals Security Finance Network

Securing critical minerals in focus amid an overwhelming dependence on China for rare earths

ANIL SASI
NEW DELHI, SEPTEMBER 25

INDIA is now formally a part of the Minerals Security Finance Network, a US-led initiative aiming to strengthen cooperation among members to secure supply chains for critical minerals. The announcement, made by the US State Department on the margins of the United Nations General Assembly on September 23, involved a pact entered by 14 countries and the European Union. The

EXPLAINED

Catalysing investments

IN JUNE 2023, India had been inducted into the Minerals Security Partnership, a US-led collaboration of these 14 countries that aimed to catalyse public and private investment in critical mineral supply chains globally.

conversion of a large part of public and private transport to electric vehicles. This, alongside a concerted electronics manufacturing and semiconductor push, underlines the need to secure the supply of critical minerals.

The proposal to onboard India in the MSP initiative last year came after a strong diplomatic push mounted by New Delhi, given that there was considerable disquiet within sections of the Union government over the country not finding a place in the strategic partnership that was aimed at



• Australia

China holds a dominant position in the global processing of these minerals.

APPLICATIONS OF CRITICAL MINERALS

Critical minerals are vital across various sectors:

- **Advanced Electronics:** They are fundamental in the production of semiconductors and high-end electronics.
- **Clean Energy Technology:** Essential components in renewable technologies, including solar panels, wind turbines, and electric vehicles.
- **Transport and Communications:** Used in manufacturing aircraft, drones, and military equipment.
- **Diverse Sectors:** Critical for producing mobile phones, tablets, batteries, fibre optic cables, and medical devices.
- **Battery and Storage Technology:** Key to advancements in battery technology, particularly lithium-ion batteries.

SIGNIFICANCE OF CRITICAL MINERALS

- **Economic Development:** Essential for industries such as electronics, telecommunications, and green technologies, contributing to job creation and innovation.
- **National Security:** Important for defence, aerospace, and space applications, ensuring access to reliable and high-quality materials.
- **Environmental Sustainability:** Crucial for transitioning to clean energy and reducing dependence on fossil fuels, supporting India's goal of achieving 450 GW of renewable

INDIA, CHINA: EASING LAC TENSIONS

CONTEXT: Government of India recently announced that India and China have reached an agreement on patrolling arrangements and the resolution of the military stand-off at the Line of Actual Control (LAC).

OVERVIEW:

India and China have recently reached an agreement regarding “patrolling arrangements” to resolve the military stand-off at the Line of Actual Control (LAC). This development is significant, considering the tensions that have persisted since the border clashes in 2020. Here’s an overview of the agreement’s outcomes, the strategic importance of key regions, and the broader implications for India-China relations.

OUTCOMES OF THE AGREEMENT

1. **Resolution of 2020 Issues:** The agreement aims to address the problems that arose during the 2020 stand-off and to reduce military presence along the LAC.
2. **Restoration of Peace and Tranquility:** It seeks to restore the pre-2020 peace and stability in the region.
3. **Monthly Meetings:** Military commanders from both sides will hold monthly meetings and meet on a case-by-case basis to manage tensions and maintain communication.
4. **Troop Reduction:** The plan includes a gradual reduction of troop presence along the LAC in alignment with India's winter strategy for Ladakh while resuming patrolling.
5. **Patrolling in Previously Blocked Areas:** Both sides will resume patrolling as it was conducted prior to the 2020 stand-off, particularly in the Depsang Plains and Demchok regions.
6. **Patrolling Frequency and Coordination:** Patrols will occur twice a month with a minimum of 14-15 troops per patrol, with exchanged schedules to prevent overlap and

energy by 2030.

CHALLENGES FOR INDIA

India faces several challenges in the critical minerals sector:

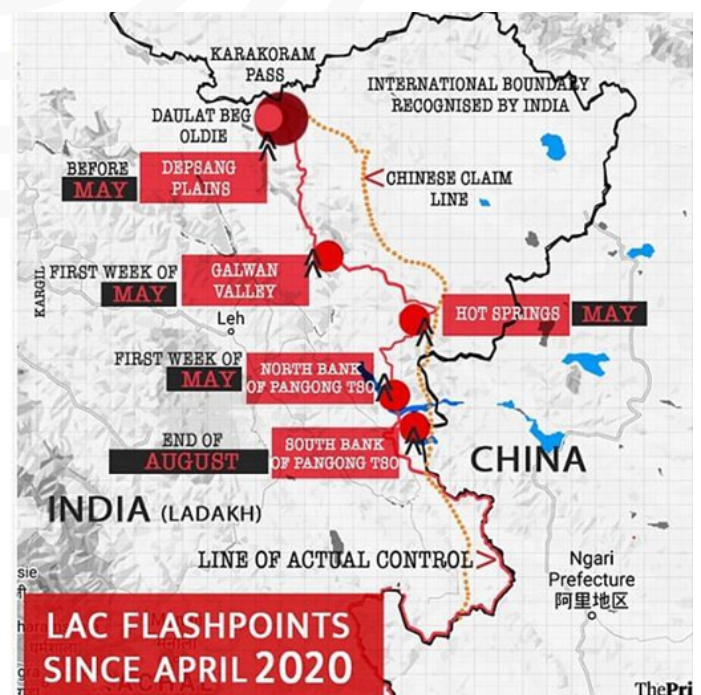
- **Dependency on China:** Heavy reliance on China for critical minerals creates vulnerabilities to supply chain disruptions and price volatility.
- **Limited Domestic Resources:** A shortage of domestic resources hampers India's ability to achieve self-sufficiency in critical minerals.
- **Technological Limitations:** Insufficient technology and infrastructure for efficient extraction, processing, and refining pose significant hurdles.
- **Investment Barriers:** Regulatory challenges and infrastructure constraints make it difficult to attract foreign investment in the critical minerals sector.
- **Increasing Demand:** The rising demand for minerals driven by the growth of renewable energy and electric vehicles adds pressure on supply chains.

CONCLUSION: The India-US Critical Minerals Pact marks a significant step towards securing a resilient and reliable supply chain for critical minerals, essential for both nations' economic development and clean energy goals. By collaborating on exploration, processing, recycling, and technology, India and the US aim to mitigate their dependence on China and foster a more sustainable and secure future for critical minerals.

minimize the risk of clashes.

STRATEGIC IMPORTANCE OF KEY AREAS

- **Depsang Plains:** Located near the strategic military post of Daulat Beg Oldie, this flat terrain is vital for potential military operations.
- Indian troops will regain patrolling rights up to specific patrolling points blocked by Chinese forces.



- **Demchok (Charding Nullah):** The resumption of patrolling in this disputed area enhances India's border security and restores access that had been compromised.



- **Y-junction:** A critical point in the Depsang Plains that allows for access to other locations along the LAC, enhancing India's operational capabilities.
- **Pangong Lake:** Divided between Indian and Chinese control, the lake has been a flashpoint for military standoffs due to differing perceptions of the LAC.

Significance of the Agreement

- **De-escalation:** The agreement represents a move towards reducing military presence along the LAC, restoring pre-2020 norms, and lowering the risk of confrontations.
- **Stabilization:** It stabilizes situations at friction points like the Depsang Plains and Demchok, fostering an

environment conducive to broader negotiations on boundary issues.

- **Confidence-Building Measures:** By restoring patrolling to previous levels, the agreement signals a mutual willingness to return to a recognized status quo, opening pathways for further dialogue and trust-building.
- **Political Implications:** The agreement could facilitate higher-level diplomatic engagements and improve bilateral relations, allowing India to manage border infrastructure better and offering China a chance to stabilize its borders amid global tensions.

Disengagement along LAC

Patrolling arrangement
Foreign secretary Vikram Misri said India and China have arrived at an agreement on "patrolling arrangements" along the LAC, "leading to disengagement and a resolution of the issues that had arisen in these areas in 2020."

Resolving pending fissures
The breakthrough in negotiations will pave the way to solve the dragging impasse in Depsang Plains and Demchok, thus far the two remaining friction points in eastern Ladakh

How the impasse began
Standoff on the LAC began with a skirmish between Indian and Chinese troops on the banks of Pangong Lake in May 2020. A brutal clash at Galwan Valley in June 2020 killed 20 Indian soldiers and an unspecified number of Chinese troops

"We reached an agreement on patrolling. With that...we have gone back to where the situation was in 2020, and...the disengagement process with China, you can say, has been completed."
- S Jaishankar, external affairs minister

Background of the Disputes and Stand-off

The India-China border dispute is complex and longstanding, involving a poorly defined, 3,488 km-long border.

It has its roots in the legacy of British colonialism and significant events like the 1962 Sino-Indian War. Key historical flashpoints include:

- **Doklam Standoff (2017):** A notable confrontation that highlighted border tensions.
- **2020 Stand-off:** Triggered by Chinese incursions, this resulted in fatal clashes, particularly in the Galwan Valley.

Reasons for the India-China Border Dispute

- **Ambiguity of LAC:** Differing perceptions of the LAC have led to frequent confrontations.
- **Historical Legacy:** Unresolved issues from the 1962 war continue to be a source of tension.
- **Infrastructure Development:** India's border infrastructure development has provoked Chinese apprehension and aggressive responses.
- **Strategic Rivalry:** Broader geopolitical tensions, particularly India's ties with the U.S. and involvement in

alliances like the Quad, exacerbate border tensions.

Challenges and Indian Efforts to Counter Chinese Influence

- **Salami-Slicing Strategy:** China's incremental territorial advancements create complications for India.
- **Debt Trap Diplomacy:** China's strategic loans to neighboring countries increase its influence, undermining India's position in South Asia.
- **Strategic Alliances:** India has engaged in strategic partnerships like the QUAD and I2U2 to counterbalance China's influence in the Indian Ocean Region.

CONCLUSION

The recent agreement between India and China marks a significant step towards stabilizing the border situation and potentially improving bilateral relations. While it resolves certain immediate issues, challenges remain regarding troop withdrawals and the overarching geopolitical rivalry. Ongoing dialogue and confidence-building measures will be crucial for maintaining peace along the LAC and fostering long-term stability in the region.



BRICS SUMMIT 2024

CONTEXT: At the invitation of President Vladimir Putin, Prime Minister Narendra Modi travelled to Kazan, the capital of Tatarstan, for the 16th BRICS Summit, held on October 22-23. The 2024 BRICS Summit in Kazan, Russia, offered a platform for observing a potential thaw in India-China relations



Prime Minister Modi's Visit to Russia for the 16th BRICS Summit

Overview of the Visit

Prime Minister Narendra Modi visited Russia from October 22 to 23, 2024, at the invitation of President Vladimir Putin, to participate in the 16th BRICS Summit held in Kazan, the capital of Tatarstan. This summit aimed to reinforce ties within the bloc and address pressing global issues.

BRICS Summit 2024: Strengthening Multilateralism

Theme and Objectives

The central theme of the 2024 BRICS Summit was "Strengthening Multilateralism for Just Global Development and Security." This theme emphasizes the need for collaborative efforts among nations to foster a fair and equitable global order. During the summit, PM Modi engaged in bilateral discussions with leaders from other BRICS nations and invited dignitaries, focusing on enhancing the Special and Privileged Strategic Partnership between India and Russia.

Welcoming New Members

The inclusion of new member states within BRICS was a significant topic, with India expressing support for this expansion. This development not only promotes inclusivity but also enhances the bloc's global influence.

KEY HIGHLIGHTS FROM THE BRICS SUMMIT 2024 IN KAZAN

1) Reaffirming BRICS Solidarity

The summit reaffirmed the commitment to strategic cooperation rooted in mutual respect, inclusivity, and consensus among member nations.

2) Advocacy for Global Governance Reform

The leaders collectively endorsed the vision of a multipolar world order, advocating for reforms within the United Nations to increase the representation and inclusion of developing nations in global decision-making processes.

3) Commitment to Sustainable Development

BRICS members reiterated their support for the 2030 Agenda, emphasizing climate resilience, biodiversity conservation, and the protection of human rights.

4) Engagement with the Global South

The summit also underscored the importance of outreach efforts aimed at the Global South to foster

international cooperation and inclusivity.

CONCERNS OVER UNILATERAL COERCIVE MEASURES

The Kazan Declaration

In a strong stance, the Kazan Declaration condemned unilateral coercive measures, including illegal sanctions that disrupt the global economy and impede progress on Sustainable Development Goals (SDGs). These actions are viewed as violations of the UN Charter and detrimental to multilateral trade systems and international environmental agreements.



ADVOCACY FOR PEACEFUL CONFLICT RESOLUTION

Addressing Global Violence

The declaration expressed serious concern over the increasing violence and ongoing armed conflicts worldwide, emphasizing the necessity of diplomacy and inclusive dialogue for peaceful dispute resolution. The focus was also placed on preventing conflicts by addressing their root causes.

SPECIFIC CONCERNS: PALESTINIAN AND LEBANESE CRISES

Violence in Gaza and Lebanon

The BRICS leaders voiced "grave concern" regarding the escalating violence in Gaza, the West Bank, and southern Lebanon. The declaration condemned Israeli military actions that led to civilian casualties and destruction of infrastructure, calling for an immediate and permanent ceasefire, the release of hostages, and unimpeded humanitarian aid to Gaza.

STRONG STANCE AGAINST TERRORISM

Unified Approach to Combat Terrorism

The BRICS declaration categorically condemned all forms of terrorism, identifying it as a global threat that requires a comprehensive and balanced response. It stressed the importance of decisively addressing cross-border terrorism, financing, and support, without resorting to double standards.

Areas of Cooperation Outlined in the Kazan Declaration

1. Cybersecurity and Data Governance

- Emphasized the importance of financial sector cyber resilience through the BRICS Rapid Information Security Channel and advocated for equitable global frameworks on data governance.

2. Trade and Economic Cooperation

- Stressed the need for secure supply chains, fair agricultural trade, and support for MSMEs, particularly in high-tech sectors.

3. Energy and Climate

- Highlighted collaboration on just energy transitions and sustainable agriculture while rejecting unilateral protectionist measures.



4. Health and Science

- Supported initiatives to combat antimicrobial resistance (AMR), tuberculosis (TB), and advancements in nuclear medicine, alongside public health collaboration.

5. Competition and Tax Cooperation

- Promoted the establishment of BRICS competition law and mutual customs recognition, enhancing tax cooperation frameworks among member nations.

UNDERSTANDING BRICS

What is BRICS?

BRICS is an acronym representing five leading emerging economies: Brazil, Russia, India, China, and South Africa. The term "BRIC" was first introduced by British economist Jim O'Neill in 2001, and the grouping was formalized in 2006. In 2010, South Africa joined, expanding the acronym to BRICS.

Expansion of BRICS

Recent Additions

The Johannesburg Declaration in 2023 invited Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, and the UAE to join as full members starting January 2024.

However, Argentina withdrew in December 2023 after a change in leadership.

Currently, BRICS comprises nine members: Brazil, Russia, India, China, South Africa, Iran, Egypt, Ethiopia, and the UAE.

Economic Impact of BRICS Expansion

With the expanded group, BRICS will represent approximately 45% of the world's population and economies valued at \$28.5 trillion, which constitutes about 28% of global GDP. If Saudi Arabia formally joins, BRICS would account for 44% of the world's crude oil production.

MAJOR INITIATIVES OF BRICS

1. Contingent Reserve Arrangement (CRA)

- Established in 2015, this framework provides financial support to member countries facing short-term liquidity crises.

2. New Development Bank (NDB)

- A multilateral development bank aimed at mobilizing resources for infrastructure and sustainable projects in emerging markets and developing countries. It is headquartered in Shanghai, with regional offices in South Africa and Brazil.

3. Medical Cooperation Initiatives

- The Ufa Declaration promotes collaboration among member states to prevent the spread of infectious diseases.

4. BRICS Payments Task Force

- An initiative focused on enhancing cooperation among central banks and financial institutions to improve national payment systems.

INDIA CHINA Thaw on sidelines of BRICS Summit

The 2024 BRICS Summit in Kazan, Russia, offered a platform for observing a potential thaw in India-China relations. While the summit itself wasn't solely focused on bilateral issues, certain developments and statements from both leaders suggested a desire for de-escalation and improved communication.

Signs of a Thaw:

- Informal Meeting:** Prime Minister Modi and President Xi Jinping held an informal meeting on the sidelines of the summit, their first interaction since the Galwan Valley clash in 2020. This meeting, though brief, symbolized a willingness to engage on a diplomatic level.
- Focus on Economic Cooperation:** Both leaders emphasized the importance of economic cooperation within BRICS, suggesting a desire to move away from the lingering border tensions and focus on shared interests.
- Positive Statements:** While there were no concrete breakthroughs, both leaders used positive language, expressing a commitment to maintaining peace and stability along the border.

Challenges Remain:

- Border Disputes:** The underlying border disputes remain unresolved, with both countries holding firm positions. These disputes are the core of the tension, and a quick resolution is unlikely.
- Strategic Trust Deficit:** Years of mistrust and strategic competition have created a deep-seated distrust between the two nations. Rebuilding trust takes time and requires concrete actions beyond rhetoric.
- Geopolitical Context:** The broader geopolitical context, with China's rising assertiveness and India's growing strategic partnership with the US, further complicates the relationship.

CONCLUSION: The 16th BRICS Summit in Kazan, while reaffirming the bloc's commitment to multilateralism and addressing global challenges, also showcased the complex dynamics of India-China relations. While the informal meeting between PM Modi and President Xi Jinping offered a glimmer of hope for de-escalation, deep-rooted border disputes and strategic mistrust remain significant obstacles. The summit underscored the need for continued diplomatic efforts and a pragmatic approach to navigate these challenges, ultimately aiming for a more stable and cooperative relationship between the two Asian giants.



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INDIA AND GERMANY: A STRATEGIC PARTNERSHIP DEEPENS AMIDST GLOBAL CHALLENGES

CONTEXT: Prime Minister Narendra Modi and German Chancellor Olaf Scholz co-chaired the 7th India-Germany Inter-Governmental Consultations (IGC) in New Delhi, focusing on key global challenges.



BACKGROUND:

About India-Germany Relations

India and Germany have enjoyed a “Strategic Partnership” since 2000, which has deepened in various fields, including artificial intelligence, cybersecurity, circular economy, smart farming, and sustainable development. This partnership underscores the growing importance of India-Germany relations in the current global landscape.

Bilateral Trade Relations

Germany stands as India’s primary trading partner within the European Union, with bilateral trade reaching USD 26 billion in 2022-23. Indian exports to Germany amounted to USD 10.1 billion, while imports from Germany reached USD 14.9 billion. Although there is currently no direct free trade agreement (FTA) in place, Germany supports ongoing negotiations for a Comprehensive FTA between the EU and India to further enhance economic ties.

7th India-Germany Inter-Governmental Consultations (IGC)

India and Germany convened the 7th Inter-Governmental Consultations (IGC) in New Delhi, co-chaired by Prime Minister Narendra Modi and German Chancellor Olaf Scholz. This high-level meeting focused on addressing pressing global issues while strengthening bilateral relations.

Key Highlights on Global Issues

1) Russia-Ukraine Conflict:

Prime Minister Modi reaffirmed India’s commitment to a peaceful resolution of the Russia-Ukraine conflict. Chancellor Scholz praised India’s stabilizing role in South Asia and urged India to advocate for a political solution to the crisis.

2) Intergovernmental Consultations (IGC):

Initiated in 2011 at the Head of Government level, the IGC facilitates a comprehensive review of bilateral relations and identifies new areas for cooperation. India is one of the few countries with which Germany maintains such a structured dialogue.

3) West Asia:

Both leaders emphasized the need to prevent further escalation in West Asia, advocating for a ceasefire and a two-state solution to resolve the Israeli-Palestinian conflict.

4) India-Germany Track 1.5 Dialogue:

This dialogue involves exchanges between think tanks and diplomats, envisioned in 2019 as a cornerstone of bilateral relations.

5) Indo-Pacific Security:

The leaders highlighted the importance of a rules-based order and maritime freedom in the Indo-Pacific region. They committed to joint efforts for regional security, including the announcement of a joint Memorandum of Arrangement for mutual logistics support. Additionally, Germany will deploy a permanent Liaison Officer at the Information Fusion Centre – Indian Ocean Region (IFC-IOR) in Gurugram to enhance marine traffic monitoring.

6) Condemnation of Terrorism and Violent Extremism:

Both leaders took a strong stance against terrorism and violent extremism, calling for unified action against all terrorist organizations, including those sanctioned by the United Nations Security Council (UNSC).

7) Reform of Global Institutions:

Prime Minister Modi and Chancellor Scholz advocated for reforms in multilateral organizations like the UN Security Council to effectively address contemporary global challenges.

8) Expanded Vision for Partnership:

The leaders emphasized a shift towards a “whole of nation” approach, aiming for broader and deeper collaboration.

Key Announcements and Agreements

1) Increased Visa Quota for Skilled Indian Workers:

Germany will expand its annual visa quota for skilled Indian workers from 20,000 to 90,000, recognizing the talent of Indian professionals as an asset to German economic growth.

2) bGermany’s “Focus on India” Strategy:

Germany’s strategic approach underscores the importance of India’s skilled workforce and aims to strengthen partnerships, reflecting a deeper level of trust.

3) Reducing Dependency on China:

Both leaders stressed the need to avoid “one-sided dependencies,” particularly in critical raw materials, positioning India as a vital partner in diversifying supply chains.

4) India as a Global Manufacturing Hub:

PM Modi promoted India as a trade and manufacturing hub, encouraging German businesses to “Make in India, Make for the World.”

5) Enhanced Defence and Security Cooperation:

Agreements were signed, including one on classified information exchange, which reflects mutual trust in defense matters. The Mutual Legal Assistance Treaty (MLAT) in criminal matters will further strengthen legal collaboration to jointly address security challenges.

Clean Energy and Sustainable Development:

- **Green Hydrogen Roadmap:** This roadmap marks a significant advancement in renewable energy collaboration, aligning with the climate goals of both nations.
- **Joint Research and Development (R&D):** A declaration of intent to cooperate in R&D on advanced materials was



made, highlighting a shared commitment to technological innovation.

- **Triangular Development Cooperation (TDC):** This initiative aims to leverage mutual strengths and experiences to implement sustainable, viable, and inclusive projects in third countries, supporting the achievement of Sustainable Development Goals (SDGs) and climate targets in Africa, Asia, and beyond.

CONCLUSION:

The 7th India-Germany IGC marked a significant step forward in the already strong bilateral relationship. Beyond addressing global challenges, the meeting showcased a shared vision for a collaborative future built on economic growth, sustainable development, and a strengthened security partnership. The increased emphasis on “whole-of-nation” cooperation, coupled with concrete agreements like

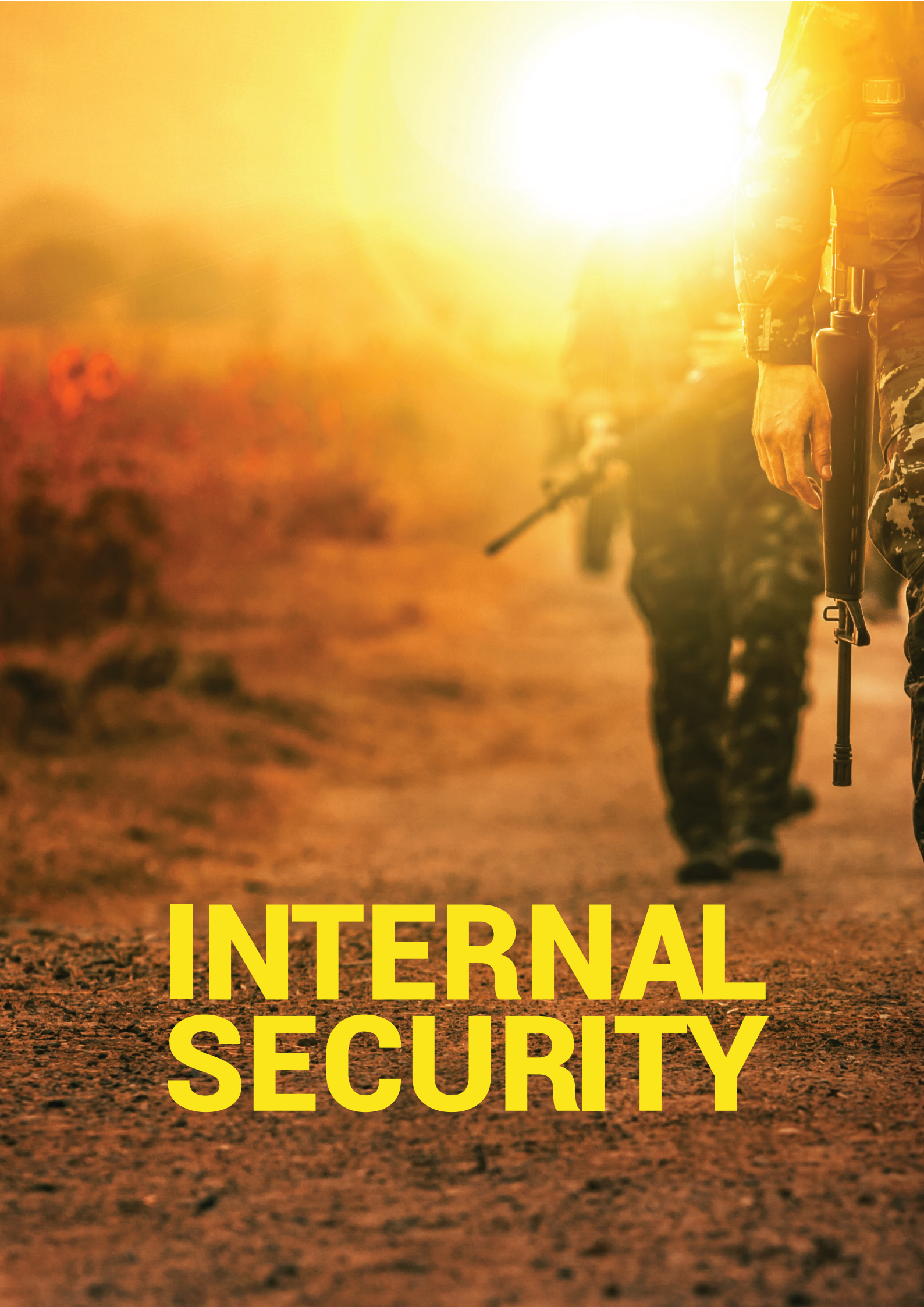
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INTERNAL SECURITY

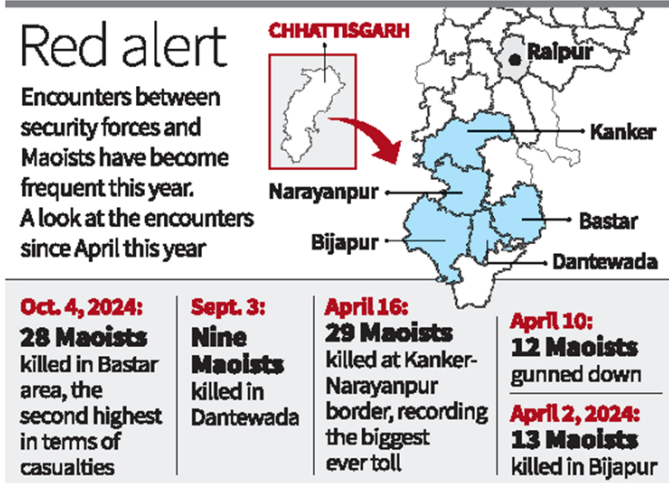


-  **NAXALISM**
-  **LADAKH SECURITY**
-  **VERY SHORT-RANGE AIR DEFENCE SYSTEM**
-  **MQ-9B HALE**
-  **T-90 BHISHMA TANK**
-  **DIGITAL ARREST**
-  **BATTLE OF WALONG**
-  **S4* SSBN**
-  **INDIA-CHINA PATROLLING ARRANGEMENT**



NAXALISM

CONTEXT: Recently security forces in Chhattisgarh's Bastar region engaged in a significant gunfight with Naxalites, resulting in the death of 28 insurgents. This marks one of the highest casualty tolls in recent anti-Naxal operations.



ABOUT NAXALISM:

- **ORIGINS IN NAXALBARI:** The Naxalite movement began in 1967 in Naxalbari village, West Bengal, when peasants led an uprising against local landlords over land disputes.
- **MAOIST IDEOLOGY:** The movement was inspired by Maoist political ideology, advocating armed rebellion to overthrow the state and redistribute land and resources to oppressed communities.
- **SPREAD TO TRIBAL REGIONS:** Naxalism gradually spread to underdeveloped and tribal areas, particularly in states like Chhattisgarh, Odisha, Jharkhand, and parts of Andhra Pradesh.
- **OBJECTIVE:** The Naxalites aimed to challenge the Indian state through armed insurgency, focusing on the redistribution of land, wealth, and resources to marginalized and tribal communities.

RED CORRIDOR ZONES

The Red Corridor refers to areas significantly affected by Naxalite-Maoist insurgency. It includes regions in Chhattisgarh, Odisha, Andhra Pradesh, Maharashtra, West Bengal, Jharkhand, Bihar, and Telangana.

REASONS FOR NAXALISM'S GROWTH:

- **TRIBAL DISPLACEMENT:** Massive displacement due to development projects and mining activities has fuelled discontent among tribal populations, making them vulnerable to Maoist influence.
- **SOCIO-ECONOMIC GAPS:** Poverty, lack of education, and absence of government welfare programs in tribal and rural areas have deepened grievances.
- **STATE NEGLIGENCE:** Lack of infrastructural development, poor connectivity, and weak governance in the Red Corridor have created vacuums that Maoists exploit.
- **FOREST RIGHTS:** The Forest (Conservation) Act, 1980 restricts access to forest produce, further alienating

forest-dependent communities.

- **GOVERNMENT FOCUS ON SECURITY:** The government's emphasis on security measures rather than addressing underlying socio-economic issues has left many grievances unresolved.

STEPS TAKEN BY THE GOVERNMENT:

◇ LEGAL MEASURES:

- **UNLAWFUL ACTIVITIES (PREVENTION) ACT (UAPA):** Declares Naxalite groups as terrorist organizations and enables swift action against them.
- **RELIEF AND REHABILITATION POLICY:** Encourages Naxalites to surrender and join the mainstream by offering rehabilitation packages.
- **FOREST RIGHTS ACT, 2006:** Aims to restore land rights to tribal communities, addressing one of the root causes of insurgency.

◇ MILITARY MEASURES:

- **OPERATION GREEN HUNT:** Launched in 2010, this large-scale counter-insurgency operation has significantly reduced Naxal activities.
- **GREYHOUNDS FORCE:** Special forces unit in Andhra Pradesh trained for guerrilla warfare against Naxalites.
- **COORDINATION WITH STATE FORCES:** Increased cooperation between central paramilitary forces and state police, improving intelligence and response.

◇ DEVELOPMENTAL MEASURES:

- **ASPIRATIONAL DISTRICTS PROGRAMME:** Targets underdeveloped regions, including those affected by Naxalism, to enhance healthcare, education, and infrastructure.
- **SKILL DEVELOPMENT PROGRAMS:** Initiatives to train the tribal youth in vocational skills and reduce their dependency on Naxalite ideologies.
- **INFRASTRUCTURE DEVELOPMENT:** Road and telecom connectivity projects have been launched in remote areas, enhancing access to basic services and governance.

◇ WAY AHEAD

- **ADDRESSING SOCIO-ECONOMIC GRIEVANCES:** Focus on addressing root causes such as land disputes, tribal rights, and poverty through inclusive policies.
- **ENHANCED INTELLIGENCE:** Improve real-time intelligence gathering and collaboration between state and central forces.
- **SUSTAINED DEVELOPMENT:** Ensure the long-term implementation of development schemes and socio-economic programs.

CONCLUSION:

To comprehensively address Naxalism, India must balance military actions with efforts to improve tribal livelihoods and ensure access to "Jal, Jangal, Zameen", the fundamental demands of tribal populations.

LADAKH SECURITY

CONTEXT: The Ukraine war highlights the renewed importance of battle tanks alongside long-range firepower. Since the May 2020 stand-off in Eastern Ladakh, India and China have deployed tanks at altitudes of 13,000-15,000 feet, sometimes with barrels just 100 meters apart.



TANKS ARMOURING LADAKH SECTOR:

REVIVAL OF TANKS IN MODERN WARFARE:

- **GLOBAL RELEVANCE:** Tanks have regained importance in modern conflicts, proving essential alongside long-range firepower, as seen in the Ukraine war.
- **LADAKH DEPLOYMENT:** India and China have stationed tanks at altitudes of 13,000-15,000 feet on the Line of Actual Control (LAC).
- **CLOSE PROXIMITY:** Tanks from both nations were positioned as close as 100 meters apart during peak tensions on the Pangong Tso in 2020.
- **ENHANCED CAPABILITIES:** Armoured units now feature advanced equipment, making them adaptable to evolving battlefield dynamics.

CURRENT SITUATION IN LADAKH:

- **T-90 BHISHMA TANKS:** India has deployed T-90 tanks and BMP-2 carriers to demonstrate capabilities like deep-fording and manoeuvrability at high altitudes.
- **OPERATIONAL CHALLENGES:** Tanks require frequent engine revving in cold conditions to maintain functionality due to low oxygen levels.
- **INFRASTRUCTURE UPGRADES:** Maintenance facilities

and winterisation kits have been set up at Nyoma and other strategic locations.

- **INCREASED PRESENCE:** Tank regiments, including T-72s and artillery units, have been steadily added to fortify the region since the 2020 stand-off.

CHALLENGES OF HIGH-ALTITUDE OPERATIONS:

- **EXTREME WEATHER:** Harsh conditions with temperatures dropping to -40°C impact the performance and durability of tanks.
- **OXYGEN LEVELS:** Low oxygen at high altitudes affects both the crew and the engine's efficiency, necessitating special adaptations.
- **WEAR AND TEAR:** Rapid degradation and high wear and tear of equipment require faster turnaround of spares and technical support.
- **LOGISTICS:** Transporting and maintaining heavy armoured units in such terrain is a logistical challenge, demanding specialized facilities.

THREATS FROM CHINA:

- **PLA MODERNIZATION:** China has deployed advanced ZTQ 15 light tanks and Type 96A tanks along the LAC, enhancing its military presence.
- **MECHANIZED UNITS:** Chinese mechanized brigades have inducted new wheeled APCs and CSK assault vehicles for rapid mobility.
- **STRATEGIC POSITIONING:** China has improved its infrastructure and troop strength along the LAC, posing a persistent threat to Indian positions.
- **COMPARATIVE ADVANTAGE:** Chinese light tanks are more agile and manoeuvrable in high-altitude conditions compared to traditional heavy tanks.

INDIAN ARMY'S FUTURE PLANS:

- **TANK UPGRADES:** Plans to upgrade T-72 tanks and BMP-2 carriers with advanced engines and new-generation Anti-Tank Guided Missiles (ATGMs).
- **LIGHT TANK DEVELOPMENT:** Indigenous light tank 'Zorawar' is in development with expected trials by August 2025 for deployment in Ladakh.
- **MODERN COMBAT VEHICLES:** Focus on acquiring Future Ready Combat Vehicles (FRCV) and Future Infantry Combat Vehicles (FICV) for advanced warfare.
- **COUNTERMEASURES:** Implementing technology to counter drones and loitering munitions, including air burst ammunition to protect armoured units.





VERY SHORT-RANGE AIR DEFENCE SYSTEM

CONTEXT: The Defence Research and Development Organisation (DRDO) successfully conducted three flight tests of the fourth-generation miniaturized Very Short-Range Air Defence System (VSHORADS) at the Pokhran Field Firing Ranges in Rajasthan



VSHORADS – SALIENT FEATURES AND DETAILS:

- **TYPE:** Fourth-generation Man Portable Air Defence System (MANPAD).
- **DESIGN AND DEVELOPMENT:** Indigenously developed by DRDO's Research Centre Imarat (RCI), Hyderabad, in collaboration with other DRDO laboratories and industry partners.

- **PURPOSE:** Designed to counter low-altitude aerial threats like helicopters and low-flying aircraft.
- **RANGE:** Capable of engaging targets at a range of up to 6 km.
- **TECHNOLOGIES INCORPORATED:**
 - **DUAL-BAND IIR SEEKER:** Ensures precise tracking and targeting of aerial threats.
 - **MINIATURISED REACTION CONTROL SYSTEM:** Enhances missile manoeuvrability.
 - **INTEGRATED AVIONICS:** Provides advanced targeting and control.
 - **DUAL-THRUST SOLID MOTOR:** Powers the missile for fast response and interception.
- **PORTABILITY:** Lightweight and portable design for quick deployment over difficult terrains.
- **OPERATIONAL CAPABILITY:** Demonstrated hit-to-kill capability against high-speed targets in various engagement modes (approaching, receding, and crossing scenarios).
- **DEVELOPMENT STATUS:** Trials completed with production agencies engaged, paving the way for early user trials and mass production.

MQ-9B HALE

CONTEXT: The Cabinet Committee on Security (CCS) has approved two major defense deals: the purchase of 31 MQ-9B High Altitude Long Endurance (HALE) Unmanned Aerial Vehicles (UAVs) from General Atomics and the indigenous construction of two nuclear attack submarines (SSNs).

MQ-9B UAV DEAL:

- **QUANTITY AND TYPE:** Includes 15 Sea Guardians for the Indian Navy and 16 Sky Guardians for the Indian Army and Air Force.
- **COST:** The deal is valued at approximately \$3.99 billion.
- **MRO FACILITY:** General Atomics will set up a Global Maintenance, Repair, and Overhaul (MRO) facility in India.
- **INDIGENOUS CONTENT:** Amendments to include indigenous content were approved by the Defence Acquisition Council (DAC).

FEATURES OF MQ-9B PREDATOR UAV:

- **HIGH-ALTITUDE CAPABILITY:** Operates at over 40,000 feet with a top speed of 442 km/h.
- **ENDURANCE:** Up to 40 hours of continuous flight for prolonged surveillance.
- **PAYLOAD AND ARMAMENT:** Can carry up to 5,670 kg, equipped with four Hellfire missiles and bombs.
- **VARIANTS:** Two variants include Sky Guardian and Sea Guardian, the latter in use by the Indian Navy since 2020.
- **ROLES:** Engages in surveillance, anti-submarine and anti-surface warfare, and electronic warfare.
- **OPERATIONAL FLEXIBILITY:** Capable of automatic take-offs and landings, integrates into civil airspace for real-time situational awareness.

T-90 BHISHMA TANK

CONTEXT: In a significant stride towards self-reliance, the Indian Army has successfully overhauled its first T-90 Bhisma tank, marking a critical step in enhancing its operational readiness.

ABOUT T-90 BHISHMA TANK:

- **ORIGIN:** The T-90 Bhisma is a main battle tank of the Indian Army, procured from Russia in 2001, with deliveries starting in 2004.
- **SPECIFICATIONS:**
 - Weighs approximately 47 tonnes.
 - Measures 9.6 meters in length and 2.8 meters in width.
 - Can reach speeds up to 60 km/h, making it highly manoeuvrable in various terrains like forests and marshes.
- **FIREPOWER:**
 - Equipped with a 125 mm smoothbore gun, capable of firing different types of shells.

- Features an anti-aircraft gun that can target within a range of 2 kilometers and fire up to 800 shells per minute.
- **ADVANCED FEATURES:**
 - Sports a new turret weapon station with an upgraded 125 mm gun.
 - Integrated with a highly automated digital fire control system (FCS) to effectively target enemy tanks, self-propelled guns, and other armoured targets.
 - Includes a guided missile system capable of destroying armoured targets, even those with explosive reactive armour (ERA), with a range of up to 5 kilometers.
- **CREW:** Operated by a crew of three: commander, gunner, and driver.
- **PROTECTION:** Equipped with a Nuclear-Biological-Chemical (NBC) protection system to safeguard the crew in hazardous environments.



DIGITAL ARREST

CONTEXT: The rise of cybercrimes has given birth to new scams, such as “digital arrest,” where cybercriminals impersonate government officials to extort money. These scams have impacted many well-educated and affluent individuals, prompting the Ministry of Home Affairs (MHA) to issue warnings and take preventive actions.

DIGITAL ARREST - DEFINITION: Digital arrest is a form of cybercrime where scammers impersonate officials from law enforcement agencies (CBI, ED, police, etc.) and claim the victim is involved in serious crimes like money laundering or narcotics trafficking. They create a fear psychosis and “arrest” the victim digitally by forcing them to stay on video calls while extorting money under the pretence of avoiding physical arrest.

STATUS IN INDIA:

- **RECENT CASES:** According to Indian Cyber Crime Coordination Centre (I4C) data, multiple such scams have been reported in various states, with significant financial losses.
 - **BUSINESSMAN S.P. OSWAL:** Duped of ₹ 7 crore after being misled into believing he was involved in a money laundering case.
 - **SCIENTIST IN INDORE:** Lost ₹ 71 lakh after he and his wife were placed under digital arrest for six days.
 - **BENGALURU LAWYER:** Extorted ₹ 14 lakh and subjected to a fake narcotics test during a digital arrest.
- **CONSEQUENCES OF DIGITAL ARREST:**
 - **FINANCIAL LOSSES:** Victims lose substantial sums, sometimes their entire savings, to these scams.
 - **MENTAL TRAUMA:** Victims face immense psychological stress, often leading to depression and suicidal tendencies.
 - **TRUST EROSION:** The prevalence of these scams erodes public trust in online platforms and even government systems.
- **GOVERNMENT INITIATIVES:**
 - **I4C:** The MHA-established Indian Cyber Crime Coordination Centre has been blocking fraudulent accounts, including over 1,000 Skype accounts linked to digital arrest scams.

- **CYBER AWARENESS CAMPAIGNS:** I4C’s “Cyberdost” platform is issuing alerts and spreading awareness about such scams.
- **NATIONAL CYBER-CRIME REPORTING PORTAL:** Victims are encouraged to report incidents at the portal or call the helpline (1930).
- **CHALLENGES:**
 - **LACK OF AWARENESS:** Many victims are unaware of the existence of digital arrest scams and easily fall prey to them.
 - **CROSS-BORDER OPERATIONS:** These scams often have international elements, making it difficult for law enforcement to track and prosecute the criminals.
 - **USE OF DEEPFAKE TECHNOLOGY:** Scammers use sophisticated technology to impersonate officials, making it harder for victims to detect fraud.
 - **INADEQUATE CYBERCRIME LAWS:** India’s cyber laws are still evolving, and enforcement is not always efficient in addressing new forms of cybercrime.
- **WAY AHEAD:**
 - **STRENGTHEN CYBERCRIME laws:** Amendments to cyber laws are necessary to keep pace with rapidly evolving technologies.
 - **PUBLIC AWARENESS CAMPAIGNS:** The government must intensify awareness campaigns to educate people about digital arrest scams.
 - **ENHANCE TECHNOLOGY AND LAW ENFORCEMENT:** Invest in anti-deep-fake technology and increase cooperation with international bodies to combat cross-border cybercrimes.
 - **COLLABORATION WITH FINANCIAL INSTITUTIONS:** Work with banks to monitor suspicious transactions linked to these scams.

CONCLUSION:

Digital arrest scams pose a significant threat to individuals’ financial and mental well-being in India. While government initiatives like I4C and public awareness campaigns are steps in the right direction, a multi-pronged approach involving stronger laws, better technology, and public education is essential to curb this menace.

BATTLE OF WALONG

CONTEXT: To mark the 62nd anniversary of the iconic Battle of Walong during the 1962 war with China, the Army is planning a month-long series of commemorative events.



ABOUT BATTLE OF WALONG:

- **LOCATION:** Walong, Arunachal Pradesh, near the McMahon Line, was a key battleground in the 1962 Sino-Indian War.
- **INDIAN FORCES:** The 11th Infantry Brigade, comprising the 4th Sikh, 6th Kumaon, and 3rd Battalion of 3 Gorkha Rifles, defended Walong with about 800 men.
- **CHINESE OFFENSIVE:** On October 21, 1962, over 4,000 Chinese troops attacked. Despite limited resources, Indian forces resisted for 27 days.
- **TACTICS:** Indian troops used the terrain to set up ambushes and defensive positions, slowing the Chinese advance.
- **OUTCOME:** Indian forces withdrew on November 16, 1962, after inflicting heavy casualties and delaying the Chinese



significantly.

- **SIGNIFICANCE:** The Indian defense forced China to

divert additional troops from Tawang, demonstrating India's bravery and resilience in its only counterattack of the war.

S4* SSBN

CONTEXT: India's fourth nuclear-powered ballistic missile submarine (SSBN), referred to as S4*, was launched into water at the Ship Building Centre in Visakhapatnam.

FEATURES - NUCLEAR-POWERED BALLISTIC MISSILE SUBMARINE (SSBN):

- **NUCLEAR PROPULSION:** SSBNs are powered by nuclear reactors, enabling them to stay submerged for long durations without surfacing, limited only by food supplies and maintenance.
- **BALLISTIC MISSILE CAPABILITY:** They are equipped with submarine-launched ballistic missiles (SLBMs), allowing them to serve as a platform for nuclear deterrence with a second-strike capability.
- **STEALTH:** The submarines are designed for stealth, reducing their detection by enemy forces, making them a key asset for strategic deterrence.

INDIAN SSBN PROGRAMME:

- **OPERATIONAL SSBNS:** India currently operates two

SSBNs, INS Arihant (commissioned in 2016) and INS Arighaat (commissioned in 2024).

- **UPCOMING SSBNS:** The S4 submarine, Aridhman, is undergoing sea trials, and the newly launched S4* is more advanced in terms of size and missile range capabilities.

FEATURES OF INDIAN SSBNS:

- **MISSILE RANGE:** INS Arihant is equipped with K-15 SLBMs with a 750 km range. The S4* will carry the advanced K-4 missile, capable of striking targets up to 3,500 km away.
- **NUCLEAR DETERRENCE:** These submarines provide India with a second-strike capability, a critical element of its nuclear deterrence strategy, ensuring survivability in case of a first-strike attack.
- **STRATEGIC IMPORTANCE:** SSBNs allow India to maintain credible deterrence by remaining hidden in the vastness of the oceans, ensuring the capability to respond to any nuclear attack.

INDIA-CHINA PATROLLING ARRANGEMENT

CONTEXT: India and China recently announced an agreement on "patrolling arrangements" along the Line of Actual Control (LAC), aimed at resolving lingering border disputes.

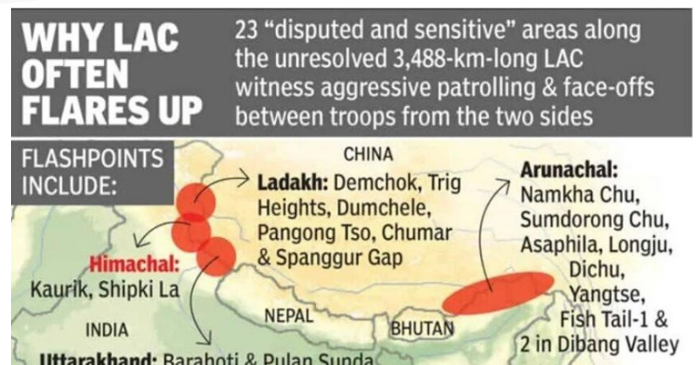
INDIA-CHINA PATROLLING AGREEMENT - SALIENT FEATURES:

- **RESTORATION OF PATROLLING RIGHTS:** Indian and Chinese troops will regain patrolling rights in areas of longstanding contention, such as the Depsang Plains and Demchok, restoring pre-2020 conditions.
- **THREE-PHASE PROCESS:** The agreement outlines a phased approach – Disengagement, De-escalation, and De-induction of troops – aimed at reducing troop presence along the Line of Actual Control (LAC) over time.
- **RESUMPTION OF GRAZING RIGHTS:** Traditional grazing activities will resume in certain areas, reflecting an effort to return to a status quo that predates recent border tensions.
- **MONITORING AND VERIFICATION:** Both countries agree on close monitoring to prevent the reoccurrence of confrontations, such as the Galwan Valley clash in 2020.
- **LIMITED AREAS OF ENGAGEMENT:** Current disengagement covers the Depsang and Demchok regions, with previous stand-off points, including Pangong Tso and Galwan, remaining unchanged.



CHALLENGES IN THE DE-ESCALATION PROCESS:

- **TRUST DEFICIT:** India remains cautious due to past incidents where China did not uphold previous border agreements fully, emphasizing the need for a "trust, but verify" approach.
- **DIVERGING INTERPRETATIONS:** Differences in Indian and Chinese statements indicate varying perspectives, with China emphasizing general progress, while India highlights specific de-escalation steps.
- **SEQUENCE OF DE-ESCALATION:** India's focus is on disengagement first, while China's position on the sequence is less clear, possibly complicating the pace and sequence of military withdrawal.
- **POLITICAL SENSITIVITIES:** India's stance links border peace with broader bilateral relations, whereas China views the border issue as separate from overall ties, adding diplomatic tension.



WAY AHEAD:

- **CLOSE MONITORING:** Maintain stringent checks on patrolling activities to ensure compliance and avoid provocations.
- **STRATEGIC ENGAGEMENT:** Continue dialogues at various diplomatic levels to address boundary issues



transparently.

- **STRENGTHENED SURVEILLANCE:** Enhance infrastructure and surveillance along the LAC to swiftly detect and address potential violations.
- **PROMOTE CONFIDENCE-BUILDING MEASURES:** Initiate regular communication channels and confidence-building measures to rebuild trust.

CONCLUSION:

The recent agreement represents a cautious yet hopeful step in India-China relations. Sustained efforts toward disengagement and de-escalation, guided by mutual respect and trust, are essential for restoring long-term stability along the LAC. As India emphasizes, maintaining peaceful borders is key to resuming “business as usual” with China.

VEDHIK IAS ACADEMY
The New Learning Mantra

ഇന്ത്യയിലും
പിന്ദേശത്തും
നടക്കുന്നത് എന്തെങ്കിലും
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ECONOMICS





DIAMOND INDUSTRY

SEBI RULES TO CURB F&O

FARM TO FORK

**NATIONAL MISSION ON EDIBLE OILS –
OILSEEDS**

PRIME MINISTER'S INTERNSHIP SCHEME

MF LITE FRAMEWORK

INDIA TEXTILE SECTOR

**SECOND ALL INDIA RURAL FINANCIAL
INCLUSION SURVEY**

INDIA'S DIRECT TAX COLLECTIONS

GROWTH OF CORE SECTOR INDUSTRIES

**ALL INDIA RURAL FINANCIAL INCLUSION
SURVEY (2021-22)**

INDIAN RAILWAYS ACCIDENTS

**INDIA'S RISE: ANNUAL INDIA LEADERSHIP
SUMMIT**

21ST LIVESTOCK CENSUS OPERATION

**NATIONAL PHARMACEUTICAL PRICING
AUTHORITY**

**CENTRE INCREASES MSP FOR WHEAT,
FIVE OTHER RABI CROPS**

**IMF RETAINS INDIA'S GROWTH
PROJECTION**



DIAMOND INDUSTRY

CONTEXT: The Indian diamond industry, particularly in Surat, is facing a significant downturn due to global geopolitical tensions, especially the Russia-Ukraine war and the Gaza conflict. This has severely affected raw diamond supply and global demand, leading to widespread job losses and economic challenges in India's diamond sector.

ABOUT INDIAN DIAMOND INDUSTRY:

- **GLOBAL LEADER:** India processes over 90% of the world's diamonds.
- **EMPLOYMENT:** Provides jobs to around 5 million people.
- **EXPORTS:** In 2022, diamond exports were valued at \$23 billion, dropping to \$16 billion in 2023, with further decline expected.
- **GLOBAL SHARE:** India contributes 19% of total global diamond exports.

ISSUES FACED BY THE DIAMOND INDUSTRY:

- **SUPPLY CHAIN DISRUPTIONS:** Sanctions on Russia, a major diamond supplier, have limited raw material availability.
- **GLOBAL DEMAND SLUMP:** Key markets like the U.S., Europe, and China have reduced demand.
- **SUICIDES AND JOB LOSSES:** Over 50,000 job losses in Surat, with more than 70 suicides in a year due to economic hardship.
- **OVERSUPPLY AND PRICE DROP:** Despite limited demand, production continued, causing a 5-27% decline in polished diamond prices.
- **RISE OF LAB-GROWN DIAMONDS:** Cheaper alternatives are gaining market share, impacting the natural diamond industry.

SEBI RULES TO CURB F&O

CONTEXT: The Securities and Exchange Board of India (SEBI) recently introduced significant reforms in the equity index derivatives (futures and options, F&O) framework to curb speculative trading, protect retail investors, and improve market stability.

RECENT SEBI REFORMS AND THEIR IMPLICATIONS:

RECALIBRATION OF CONTRACT SIZE FOR INDEX DERIVATIVES:

- **REFORM:** The minimum contract size for index derivatives has been increased to ₹15 lakh (from the earlier ₹5-10 lakh), effective November 20, 2024.
- **IMPLICATION:** This raises the entry barrier, ensuring that participants have sufficient risk tolerance, reducing speculative trading by small retail investors.
- **IMPACT:** It will discourage small traders from taking excessive risks, encouraging more responsible trading.

UPFRONT COLLECTION OF OPTIONS PREMIUM:

- **REFORM:** From February 1, 2025, trading members must collect the options premium upfront from buyers.
- **IMPLICATION:** It reduces the misuse of leverage in options trading, enforcing financial discipline and reducing the risk of defaults.
- **IMPACT:** This measure protects investors from over-leveraged positions, preventing potential market volatility.

RATIONALIZATION OF WEEKLY EXPIRING DERIVATIVES PRODUCTS:

- **REFORM:** Only one benchmark index per exchange will

WAY AHEAD

- **DIVERSIFY EXPORT MARKETS:** Focus on emerging markets to reduce dependency on traditional buyers.
- **SUPPORT FOR WORKERS:** Implement government relief measures for displaced workers, including financial aid and retraining programs.
- **BOOST LAB-GROWN DIAMOND INDUSTRY:** Leverage India's expertise in diamond cutting to expand in the growing lab-grown sector.
- **GLOBAL COOPERATION:** Collaborate with international players to find alternate sources of rough diamonds.
- **TECHNOLOGICAL UPGRADATION:** Invest in innovation and technology to improve productivity and maintain global competitiveness.

LAB GROWN DIAMOND:

- **CHEMICAL PROPERTIES:** Lab-grown diamonds have the same chemical, physical, and optical properties as natural diamonds.
- **ORIGIN:** Created using technology that replicates natural geological processes.

PRODUCTION METHODS:

- **HPHT METHOD:** Mimics natural diamond formation using extreme pressure and temperatures.
- **CVD METHOD:** Uses carbon gas to form diamonds under controlled temperature and pressure.

APPLICATIONS: Widely used in industries for cutting tools, electronics, and lasers due to their hardness and thermal conductivity.

offer weekly expiring derivatives, starting November 20, 2024.

- **IMPLICATION:** Limits frequent speculative trades that create short-term volatility, especially on expiry days.
- **IMPACT:** Reduces speculative pressure, promoting market stability.

INTRA-DAY MONITORING OF POSITION LIMITS:

- **REFORM:** From April 1, 2025, SEBI will monitor position limits intra-day, not just end-of-day.
- **IMPLICATION:** Prevents excessive speculative positions from being built up during the day.
- **IMPACT:** Real-time compliance ensures smoother and more stable market functioning.

REMOVAL OF 'CALENDAR SPREAD' TREATMENT ON EXPIRY DAY:

- **REFORM:** Effective February 1, 2025, calendar spread benefits will not be available on the day of contract expiry.
- **IMPLICATION:** Forces traders to execute rollovers earlier, reducing speculation on the day of expiry.
- **IMPACT:** Eases volatility and stabilizes derivative prices during expiration.

INCREASE IN 'TAIL RISK' COVERAGE ON EXPIRY DAY:

- **REFORM:** An additional 'Extreme Loss Margin' of 2% will be levied on short options contracts on expiry day.
- **IMPLICATION:** Provides greater protection against extreme market movements.
- **IMPACT:** Reduces the risk of significant losses due to



rare market events, improving market resilience.

HOW THESE REFORMS IMPACT INDIA:

- **CURBING SPECULATION:** Larger contract sizes and upfront premium collection reduce excessive speculation, particularly by small traders.
- **MARKET STABILITY:** Limiting speculative positions and lowering intra-day volatility enhances market stability, attracting long-term investors.

- **PROTECTING RETAIL INVESTORS:** The reforms safeguard retail investors from significant losses due to aggressive short-term trading.
- **PROMOTING CAPITAL GROWTH:** A focus on disciplined investment strategies supports capital formation and sustainable economic growth.

FARM TO FORK

CONTEXT: A series of working papers from the Reserve Bank of India (RBI) reveals that farmers receive a significantly lower share of the consumer rupee in the fruits and vegetables market, with middlemen and retailers profiting substantially.

- **AGRICULTURAL PRICING & MARKETING:** Highlights inefficiencies in the value chain and role of middlemen in lowering farmers' earnings.
- **FOOD INFLATION:** Case studies for understanding food price dynamics.
- **AGRICULTURAL REFORMS:** Discusses reforms to enhance farmers' income and reduce dependency on middlemen.

Farmers' Share of Consumer Price

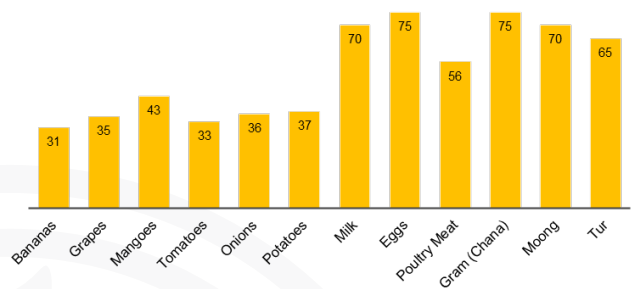


FIGURE: Column chart representation of farmer's share of consumer's price. Source: RBI Working Papers on Fruits, Vegetables, Livestock, Poultry, and Pulses.

NATIONAL MISSION ON EDIBLE OILS – OILSEEDS

CONTEXT: The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, has approved the National Mission on Edible Oils – Oilseeds (NMEO-Oilseeds), a landmark initiative aimed at boosting domestic oilseed production and achieving self-reliance in edible oils.

ABOUT NATIONAL MISSION ON EDIBLE OILS – OILSEEDS (NMEO-OILSEEDS)

ORIGIN: Announced in 2024 as part of India's broader self-reliance (Atmanirbhar Bharat) agenda.

To promote self-reliance, the National Mission on Edible Oils – Oil Palm (NMEO-OP) was launched in 2021 with an outlay of ₹ 11,040 Cr.

MINISTRY: Ministry of Agriculture and Farmers' Welfare.

FUNDS: Total outlay of ₹ 10,103 Cr. (Central Share: ₹ 7,150 Cr.; State Share: ₹ 2,953 Cr.).

AIMS:

- Increase domestic oilseed production from 39 million tonnes (2022-23) to 69.7 million tonnes by 2030-31.
- Reduce dependence on edible oil imports, targeting 25.45 million tonnes of domestic production by 2030-31.
- Boost production of key oilseeds like rapeseed, groundnut, soybean, sunflower, and sesame.
- Promote cultivation of oilseeds on fallow lands and enhance intercropping practices.
- Utilize modern technologies like genome editing to boost

seed quality and production.

KEY FEATURES:

- Introduction of Aadhaar-authenticated e-vouchers for EV buyers to ease the demand incentive process.
- Allocation of ₹ 500 Cr. for promoting e-ambulances.
- Creation of 65 seed hubs and 50 storage units to improve seed infrastructure.
- Formation of over 600 Value Chain Clusters across 347 districts, covering over 10 lakh hectares annually.
- Expansion of oilseed cultivation in rice and potato fallow lands by 40 lakh hectares.
- Enhancement of post-harvest infrastructure to extract more oil from sources like cottonseed and rice bran.
- Mission will introduce SATHI Portal enabling States to coordinate with stakeholders for timely availability of quality seeds

CURRENT STATUS:

- India relies on imports for 57 % of its edible oil demand.
- Minimum Support Price (MSP) for oilseeds has been significantly increased to ensure better prices for farmers.
- The Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA) supports farmers through price support and deficiency payment schemes.
- A 20% import duty on edible oils has been imposed to protect domestic producers and promote local cultivation.

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PRIME MINISTER'S INTERNSHIP SCHEME

CONTEXT: The government launched the pilot phase of the ambitious Prime Minister's Internship Scheme, which aims to provide 1.25 lakh internship opportunities during the fiscal year 2024-25.

ABOUT PM INTERNSHIP SCHEME:

ORIGIN:

- Announced in Budget 2024-25 as part of the Prime Minister's Package for Employment and Skilling.

AIM:

- To provide 1 Cr. youth with hands-on work experience in top 500 companies over five years, enhancing employability and skill development.

BUDGET:

- 2 lakh Cr. overall, with 2,000 Cr. allocated for the fiscal year 2024-25.

CRITERIA:

- Youth aged 21-24 who are not in full-time employment or education.
- Must hold qualifications like high school diplomas, ITI

- certificates, or graduate degrees (e.g., B.A., B.Sc., B.Com).
- Excludes candidates from IITs, IIMs, and those holding advanced degrees (e.g., MBA, CA).

FEATURES:

- 12-month internships with a stipend of ₹5,000 (₹4,500 from the government, ₹500 from companies).
- Interns are insured under government schemes like PM Jeevan Jyoti Bima Yojana.
- A one-time ₹6,000 grant for incidentals.
- Multilingual helpline and grievance redressal system.

SIGNIFICANCE:

- Enhances practical experience for youth, improving employability.
- Focuses on skill development in real-world job environments across sectors like pharma, auto, and agriculture.
- Supports the government's vision of self-reliance (Atmanirbhar Bharat) by developing skilled manpower.

MF LITE FRAMEWORK

CONTEXT: The Securities and Exchange Board of India (SEBI) introduced the Mutual Funds Lite (MF Lite) framework on September 30 to promote passively managed mutual fund schemes. This initiative aims to attract new players to the mutual fund industry, offer diversified and less risky investment opportunities for retail investors, and enhance market liquidity.

FEATURES OF MF Lite FRAMEWORK:

- RELAXED REGULATIONS:** Lower eligibility criteria for sponsors, including requirements related to net worth, track record, and profitability, to ease entry for new AMCs.
- MINIMUM NET WORTH:** Mandates a minimum net worth of ₹35 Cr. for AMCs operating passive funds, ensuring adequate liquidity.
- SIMPLIFIED GOVERNANCE:** Reduced oversight role for trustees in passive funds, with a focus on preventing conflicts of interest and market misconduct.
- BOARD-LEVEL OPERATIONS:** Daily operational control shifted to the AMC's board to maintain transparency in fees, expenses, and tracking errors.

NEED FOR A SEPARATE FRAMEWORK

- LOWER RISK PROFILE:** Passive funds mimic index performance, making the stringent requirements of active funds unnecessary.
- PREDICTABLE STRATEGY:** Tracking established indices means minimal discretion in asset allocation, lowering the need for tight regulations.
- REGULATORY SIMPLIFICATION:** Current regulations focus on active funds; a separate framework tailors to the unique nature of passive funds.
- ENHANCED MARKET PARTICIPATION:** Encourages new and smaller players to enter the mutual fund ecosystem, increasing diversity and competition.

IMPACT OF THE MF Lite FRAMEWORK:

- NEW MARKET ENTRANTS:** Lower financial barriers and governance changes are expected to attract more AMCs, increasing competition.
- INCREASED LIQUIDITY:** More players in the market will improve overall liquidity, enhancing market stability.
- COST-EFFICIENT OPTIONS:** Investors benefit from cost-effective passive funds, focusing on minimizing expenses and maximizing returns.
- OPERATIONAL EFFICIENCY:** Shifting oversight to the AMC's board streamlines processes and boosts transparency.

RISKS ASSOCIATED WITH MF Lite FRAMEWORK

- TRACKING ERROR:** Deviation from the benchmark can lead to lower-than-expected returns, impacting investor profits.
- EXPENSE MANAGEMENT:** Even with a low TER, unmanaged costs can reduce the returns of passive funds.
- MARKET VOLATILITY:** Passive funds mirror market movements, making them vulnerable to downturns without active intervention.
- LIMITED FLEXIBILITY:** Lack of active management limits response to market shifts, potentially affecting performance during market instability.

CONCLUSION:

The MF Lite framework represents a significant step towards creating a robust, inclusive, and diversified mutual fund ecosystem in India. Adopting global best practices, focusing on investor education, and using technology for transparency will ensure sustainable growth and responsible investment opportunities in the passive mutual fund space.



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INDIA TEXTILE SECTOR

CONTEXT: The Indian textile industry, which was estimated at \$153 billion in 2021, has recently faced challenges, impacting its growth and export potential. Although aiming for a \$350 billion target by 2030, the industry has experienced a slump due to various economic and geopolitical factors.

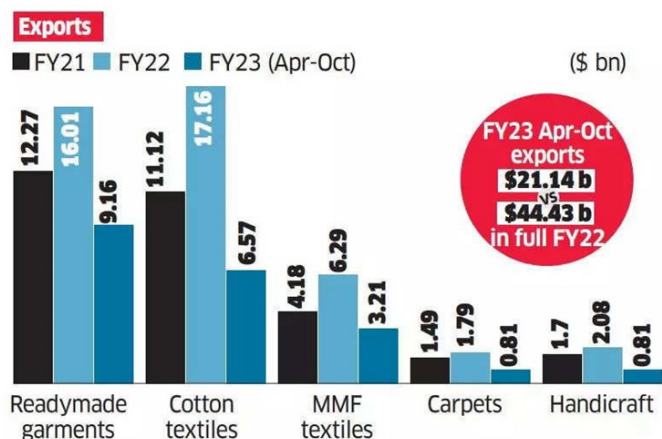


FIGURE: Column chart representation of export value of textiles

CURRENT STATUS OF THE TEXTILE SECTOR:

- **MARKET SIZE:** The Indian textile and apparel industry was valued at \$153 billion in 2021, with \$110 billion coming from the domestic market.
- **GLOBAL POSITION:** India is the third-largest textile exporter in the world, holding a 5.4% share of the global market.
- **EMPLOYMENT:** The sector employs about 105 million people directly and indirectly, making it one of the largest employment generators in the country.
- **ECONOMIC CONTRIBUTION:** The textile industry contributes around 2.3% to India's GDP and accounts for 10.6% of the total manufacturing Gross Value Added (GVA) as of FY23.
- **PRODUCTION CLUSTERS:** Major textile hubs like Tamil Nadu, Gujarat, and Maharashtra are crucial for spinning and garment manufacturing, with Tiruppur being a key knitwear production center.
- **RECENT PERFORMANCE:** FY22 saw growth with exports reaching \$43.4 billion; however, there has been a notable decline in both domestic demand and exports in FY23 and FY24.

REASONS BEHIND THE SLUMP IN THE TEXTILE SECTOR:

- **GLOBAL ECONOMIC SLOWDOWN:** Geopolitical issues and reduced demand from international markets have severely impacted India's textile exports.
- **HIGH RAW MATERIAL COSTS:** Increased prices of cotton and Man Made Fibres (MMF) have led to higher production costs, making Indian products less competitive.
- **IMPORT DUTIES:** The 10% import duty on cotton has made domestic cotton more expensive than global prices, further hampering the industry's competitiveness.
- **SUPPLY CHAIN DISRUPTIONS:** Quality control orders on MMF and supply chain bottlenecks have affected raw material availability and price stability.

OTHER CHALLENGES IN THE TEXTILE SECTOR

- **E-COMMERCE AND RETAIL SHIFT:** Direct retailing through e-commerce has disrupted traditional business systems, impacting small-scale manufacturers.
- **CHANGING CONSUMER PREFERENCES:** Increased demand for comfort wear and sustainable fashion has led to a decline in demand for conventional textile products.
- **SUSTAINABILITY AND ESG COMPLIANCE:** Foreign brands are increasingly adopting ESG (Environmental, Social, and Governance) sustainability, pressuring Indian manufacturers to meet strict compliance standards.
- **LABOUR COSTS:** Rising labour costs in the textile sector are affecting overall production expenses, prompting the need for technological interventions to enhance productivity.

GOVERNMENT SCHEMES IN THE TEXTILE SECTOR:

- **AMENDED TECHNOLOGY UPGRADATION FUND SCHEME (ATUFS):**
 - o Supports technology upgradation in textiles with financial incentives.
 - o Aims to improve production capabilities and boost employment.
- **SCHEME FOR INTEGRATED TEXTILE PARKS (SITP):**
 - o Provides world-class infrastructure for textile units in clusters.
 - o Enhances competitiveness and efficiency of the textile industry.
- **SAMARTH SCHEME (SCHEME FOR CAPACITY BUILDING IN TEXTILES SECTOR):**
 - o Focuses on skill development, targeting 10 lakh people in textile-related jobs.
 - o Aims to bridge the skill gap in the organized and traditional sectors.
- **POWER-TEX INDIA:**
 - o Aims to strengthen the power loom sector through technology upgrades.
 - o Provides subsidies for modernization and market expansion.
- **SILK SAMAGRA SCHEME:**
 - o Integrated program to promote silk production and quality improvement.
 - o Supports R&D, seed production, and market promotion in the silk industry.
- **PM-MITRA (MEGA INTEGRATED TEXTILE REGION AND APPAREL PARKS):**
 - o Aims to create world-class industrial infrastructure for the textile industry.
 - o Establishes integrated textile parks to attract investments and boost exports.
- **WAY AHEAD FOR THE TEXTILE SECTOR**
 - o **POLICY INTERVENTIONS:** Remove or reduce the import duty on cotton during off-season months to stabilize raw material prices.
 - o **INVESTMENT IN TECHNOLOGY:** Invest in modern technologies and innovations to improve production efficiency and reduce wastages.



- o **SKILLING AND WORKFORCE DEVELOPMENT:** Upskill the workforce to align with the changing demands of the global market.
- o **SUSTAINABILITY INITIATIVES:** Promote the adoption of sustainable practices in manufacturing and supply chains to meet international standards.
- o **MARKET DIVERSIFICATION:** Explore new markets and diversify exports to reduce dependency on traditional markets.

SECOND ALL INDIA RURAL FINANCIAL INCLUSION SURVEY

CONTEXT: The National Bank for Agriculture and Rural Development (NABARD) released its second All India Rural Financial Inclusion Survey (NAFIS) for 2021-22, covering one lakh rural households across India. The survey provides insights into economic and financial indicators, assessing the impact of government policies on rural development post-COVID.

DATA CATEGORY	2016-17	2021-22	KEY OBSERVATIONS
Income Growth	₹8,059 per month	₹12,698 per month	57.6% increase in average monthly income. Agricultural households earn slightly more.
Expenditure Increase	₹6,646 per month	₹11,262 per month	Significant rise in monthly expenditure, higher for agricultural households.
Financial Savings	50.6% of households saved	66% of households saved	Higher savings rate, with agricultural households showing more savings.
Kisan Credit Card (KCC)	Not specified	44% of agricultural households	Greater uptake among households with larger landholdings.
Insurance Coverage)	25.5% with insurance	80.3% with insurance	Marked increase in households with at least one insured member.
Pension Coverage	18.9% receiving pension	23.5% receiving pension	Slight improvement in households with at least one member receiving pension.
Financial Literacy	33.9% demonstrated good literacy	51.3% demonstrated good literacy	Significant rise in financial literacy and sound financial behaviour.

SIGNIFICANCE:

- **ECONOMIC GROWTH:** Improved income and expenditure levels indicate better economic conditions for rural households, contributing to poverty reduction.
- **ENHANCED FINANCIAL SECURITY:** Increased savings, insurance, and pension coverage suggest improved financial resilience and security among rural populations.
- **INCLUSIVE GROWTH:** The rise in financial literacy and KCC adoption reflects greater access to financial services, empowering rural communities.
- **POLICY IMPACT:** Government initiatives like MGNREGS, PMAY-G, and DAY NRLM have played a vital role in boosting rural financial inclusion and socio-economic development.

LIMITATIONS:

- **INCOME DISPARITIES:** Despite the rise in average income, there remain significant disparities between

- agricultural and non-agricultural households.
- **UNEVEN FINANCIAL ACCESS:** States like Goa, Kerala, and Gujarat show lower savings rates, indicating uneven access to financial services.
- **INSURANCE GAPS:** Life and health insurance penetration remains limited compared to vehicle insurance, highlighting areas for improvement.
- **PENSION SHORTFALLS:** Despite improvements, a significant portion of elderly rural populations still lacks pension coverage.

CONCLUSION:

The NAFIS 2021-22 survey highlights substantial progress in rural financial inclusion, with improved income, savings, and financial literacy. Continued government support and investment are crucial to sustain this momentum and ensure a prosperous future for India's rural population.



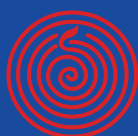
INDIA'S DIRECT TAX COLLECTIONS

CONTEXT: In FY2023-24, India's direct tax collections reached a significant milestone, constituting 56.72 % of total tax revenue, the highest in 14 years.

Key data released by the Central Board of Direct Taxes (CBDT) report:

Parameter	FY2023-24	Comparison/Trend
Direct Tax to Total Tax Revenue	56.72 %	Highest since FY2010 (60.78%)
Indirect Tax to Total Tax Revenue	43.28 %	Decreased from FY2022-23
Direct Tax to GDP Ratio	6.64 %	Highest in over 20 years
Personal Income Tax Collection	₹10.45 lakh Cr.	Higher than corporate tax collection
Corporate Tax Collection	₹9.11 lakh Cr.	Lower due to 2019 corporate tax rate cuts
Tax Buoyancy	2.12	Improved from 1.18 in FY2022-23
Income Tax Filers	8.09 Cr	Up from 7.4 Cr in FY2022-23
Total Taxpayers	10.41 Cr	Up from 9.37 Cr in FY2022-23
Cost of Tax Collection	0.44 %	Lowest since 2000-01
Assessment Year	2023-24	Increased number of taxpayers

- **ECONOMY (GROWTH AND DEVELOPMENT):** The data reflects tax buoyancy and its relation to economic growth, relevant for topics like Taxation Policies, Fiscal Responsibility, and Public Finance.
- **PUBLIC ADMINISTRATION AND GOVERNANCE:** Insights into tax reforms, the impact of the corporate tax cut, and the changing dynamics of direct vs indirect taxation are crucial for understanding fiscal governance and public sector efficiency.
- **SOCIAL ISSUES AND POLICY:** Understanding how direct taxation (linked to income) affects wealth redistribution and impacts various socioeconomic groups aligns with equity and justice in economic policies.



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GROWTH OF CORE SECTOR INDUSTRIES

CONTEXT: Output levels in India's core sectors slipped to a nine-month low in August, even as year-on-year growth slipped 1.8%, marking the first contraction in three and a half years.

TRENDS IN INDIA'S CORE SECTOR OUTPUT (AUGUST 2024):

- **OVERALL CONTRACTION:** Core sector output declined by 1.8% in August 2024, compared to the 6.1% growth recorded in July.

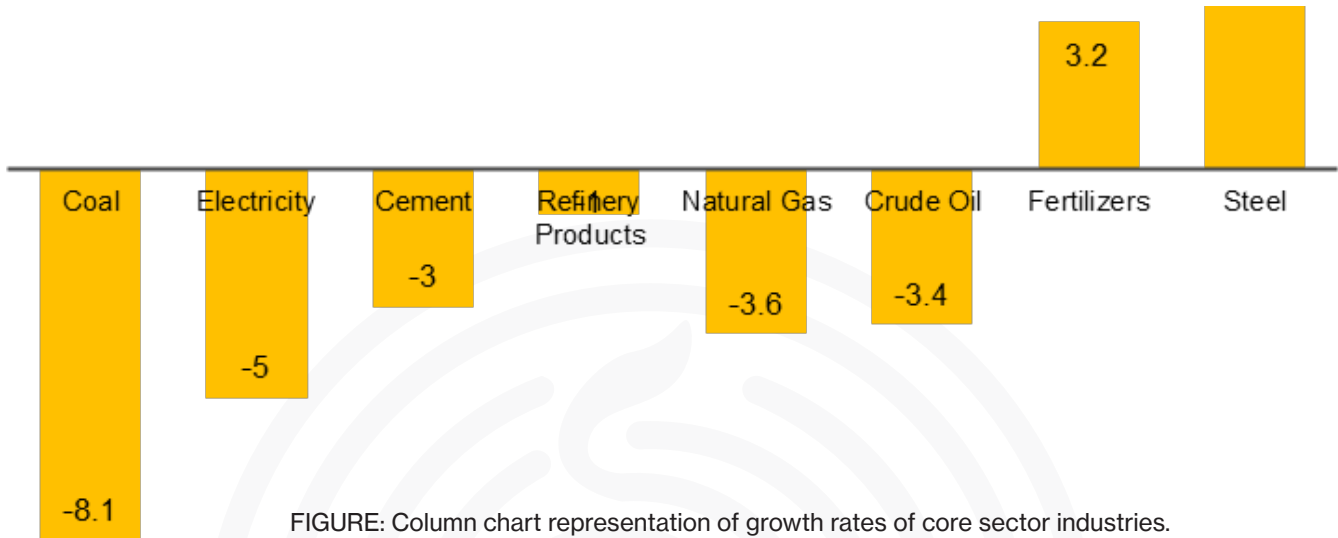


FIGURE: Column chart representation of growth rates of core sector industries.

Core sector industries

Coal	-8.1%	Steepest decline
Electricity	-5.0%	First contraction in 13 months
Cement	-3.0%	Worst performance in 9 months
Refinery Products	-1.0%	Second fall in 3 months
Natural Gas	-3.6%	Second successive month of contraction
Crude Oil	-3.4%	Third straight month of negative growth
Fertilizers	+3.2%	Modest growth
Steel	+4.5%	Slowest growth in 26 months

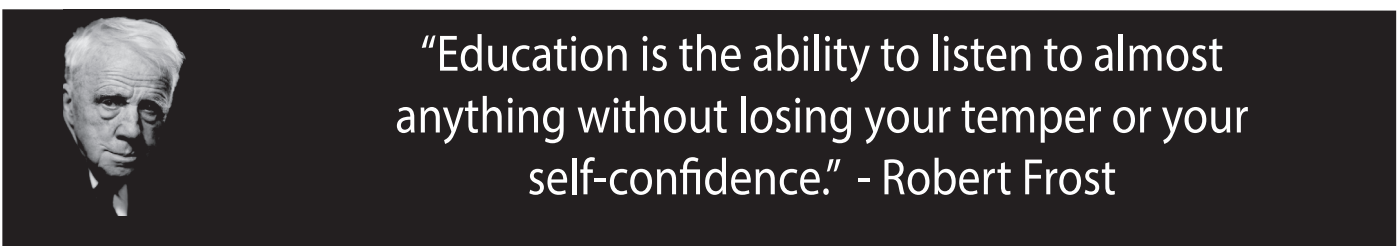
- **MONSOON IMPACT:** The late withdrawal of the monsoon has disrupted coal production and electricity generation, affecting overall industrial activities.
- **GLOBAL ECONOMIC UNCERTAINTY:** Ongoing global economic challenges have impacted demand, particularly for energy-intensive industries like electricity and coal.
- **SUPPLY CHAIN DISRUPTIONS:** Factors such as logistical bottlenecks and fluctuations in international markets for crude oil and natural gas have affected the output of refinery products and crude oil.
- **SEASONAL FACTORS:** Reduced construction activity during the monsoon months likely contributed to lower output in the cement and steel sectors.

BACKGROUND:

- **INDEX RELEASED BY:** The Index of Eight Core Industries (ICI) is released by the Office of the Economic Adviser under the Department for Promotion of Industry and Internal Trade (DPIIT) in the Ministry of Commerce & Industry.
- **BASE YEAR:** The base year for the ICI is 2011-12.
- **FREQUENCY:** The ICI is published every month.
- **SIGNIFICANCE:** It serves as a critical barometer of India's industrial performance, covering 40 % of the weight in the Index of Industrial Production (IIP).

REASONS FOR THE DECLINE:

- **BASE EFFECT:** The sharp contraction in August can be partly attributed to the high base of 13.4% growth from the previous year, making the current year's figures appear lower by comparison.





ALL INDIA RURAL FINANCIAL INCLUSION SURVEY (2021-22)

CONTEXT: The latest All India Rural Financial Inclusion Survey (2021-22) indicates a reversal of the declining trend in rural households' dependence on agriculture.

ABOUT ALL INDIA RURAL FINANCIAL INCLUSION SURVEY (2021-22):

- **INCREASE IN AGRICULTURAL HOUSEHOLDS:** 57 % of rural households were identified as "agricultural" in 2021-22, up from 48 % in 2016-17. This includes semi-urban centers with less than 50,000 population. (NABARD's All India Rural Financial Inclusion Survey)
- **RISE IN AGRICULTURAL INCOME:** The average monthly income of agricultural households was ₹ 13,661 in 2021-22, compared to ₹ 8,931 in 2016-17. Agricultural households earned more than their non-agricultural counterparts.

(NABARD Survey)

- **INCREASED INCOME FROM CULTIVATION AND ANIMAL HUSBANDRY:** Income from farming activities rose from 43.1 % to over 45 % in 2021-22. (NABARD Survey)
- **IMPACT OF COVID-19:** The pandemic-induced economic slowdown caused a shift back to agriculture, which was less affected by lockdowns due to exemptions. (NABARD Survey and PLFS).
- **RIISING DEPENDENCE ON AGRICULTURE FOR EMPLOYMENT:** PLFS data shows agriculture engaged 46.5 % of India's workforce in 2020-21, rising from 42.5% in 2018-19. (PLFS)

% SHARE OF AGRICULTURAL TO RURAL HOUSEHOLDS

	2016-17	2021-22		2016-17	2021-22
J & K	*77	**73	Uttarakhand	41	57
Jharkhand	51	69	Karnataka	59	55
Assam	47	67	Telangana	47	55
Uttar Pradesh	63	66	Gujarat	58	54
Chhattisgarh	55	66	Andhra Pradesh	34	53
Rajasthan	63	66	West Bengal	35	49
Madhya Pradesh	58	64	Bihar	47	45
Himachal	70	63	Tripura	39	40
Odisha	58	60	Punjab	42	36
Maharashtra	36	59	Kerala	13	18
Haryana	34	58	Goa	3	18
Tamil Nadu	13	57	All- India	48	57

*Includes only Jammu; **Excludes Ladakh.

Source: NABARD All India Rural Financial Inclusion Surveys, Data (In%)

AGRICULTURE SECTOR'S SHARE OF WORKFORCE (%)



Source: NSSO Employment & Unemployment Surveys (till 2011-12) and Periodic Labour Force Surveys (from 2017-18).



POSITIVES:

- **INCREASED AGRICULTURAL PARTICIPATION:** More rural households are relying on agriculture for income, potentially revitalizing the sector. Almost, 57 % rural households involved in agriculture (NABARD).
- **HIGHER AGRICULTURAL INCOME:** Agricultural households reported an increase in income, contributing to rural economic stability. The monthly agricultural income increased to ₹ 13,661 from ₹ 8,931 (NABARD).
- **RESILIENCE DURING COVID-19:** Agriculture remained resilient during the pandemic, ensuring a livelihood for many when non-farm jobs were scarce. Agriculture was exempt from lockdowns (NABARD, PLFS).
- **IMPROVED FARM PRODUCTIVITY:** A rise in income from animal husbandry and cultivation reflects increased farm productivity. The income from farming activities rose to 45% (NABARD).

NEGATIVES:

- **LACK OF NON-FARM JOBS:** The increased dependence on agriculture reflects a shortage of alternative employment in manufacturing and services. Approximately, 11.4 % of the workforce is employed in manufacturing (PLFS).
- **LOW MARGINAL PRODUCTIVITY:** Agricultural jobs tend to offer low productivity and subsistence-level wages, hindering overall economic growth. Employment characteristics in agriculture remain similar to low-wage, informal sectors.
- **INCOME DIVERSIFICATION DECLINE:** Agricultural households are now earning less from non-farm sources,

which could make them more vulnerable to farming risks. The reduction in income from non-farm sources across land-size categories (NABARD).

- **ECONOMIC DISPARITIES ACROSS STATES:** States like Bihar, Uttar Pradesh, and Chhattisgarh still have a very high dependency on agriculture, which points to regional economic disparities. Chhattisgarh, Madhya Pradesh, and Bihar have over 50% of their labour force in agriculture (PLFS).

WAY AHEAD:

- **DIVERSIFY RURAL EMPLOYMENT:** Promote rural industries and service-sector jobs to reduce over-reliance on agriculture.
- **BOOST AGRICULTURAL PRODUCTIVITY:** Invest in modern technologies and practices to enhance farm productivity and increase income.
- **STRENGTHEN RURAL INFRASTRUCTURE:** Improve transportation, irrigation, and storage facilities to support the agricultural sector and rural industries.
- **PROMOTE SKILL DEVELOPMENT:** Implement programs for skill development in rural areas to provide youth with non-farm employment opportunities.

CONCLUSION:

The survey data highlights a paradox where rural India is increasingly reliant on agriculture despite overall economic growth. While agricultural income has risen, the need for diversification and productivity improvements is essential for long-term rural prosperity.

INDIAN RAILWAYS ACCIDENTS

CONTEXT: On October 17, eight coaches of the Agartala-Lokmanya Tilak Express derailed in Assam with no casualties. On October 11, a passenger train rear-ended a stationary goods train near Chennai, also with no casualties. Indian trains have been involved in multiple accidents of late.

KEY STRESS FACTORS:

- **ACCIDENTS AND SAFETY CONCERNS:** Accidents have reduced from 1,390 per year in the 1960s to 40 in 2023-24, but recent high-profile incidents like the Balasore crash raise serious safety issues. Almost, 55.8 % of accidents are due to human error, with equipment failure accounting for 6.2 %.
- **SLOW IMPLEMENTATION OF 'KAVACH' TECHNOLOGY:** 'Kavach' covers only 2% of the railway network despite being a crucial safety feature designed to prevent collisions. Its high cost and slow implementation hinder wider adoption.
- **FINANCIAL CHALLENGES AND OPERATING RATIO:** The operating ratio for 2024-25 is projected at 98.2%, meaning the Railways spends nearly as much as it earns, leaving little for upgrades. Dependence on Extra-Budgetary Resources has grown, increasing fiscal pressure.
- **FREIGHT SERVICES AND REVENUE IMBALANCE:** Freight accounts for 65 % of revenue, but inefficiencies and slow freight movement (26 km/hr in 2016) dampen growth. Coal, which contributes 45 % of freight volume, faces decline due to a shift towards renewable energy.
- **UNDERINVESTMENT IN INFRASTRUCTURE:** Capital

outlay for track renewal is inadequate, and the depreciation reserves have shrunk by 96%, weakening the ability to maintain assets.

- **PASSENGER SERVICES LOSSES:** In 2021-22, passenger services incurred a loss of ₹68,269 crore. Efforts like Vande Bharat trains increase revenue, but rationalising fares is crucial.

ABOUT KAVACH SYSTEM:

- **INDIGENOUS DEVELOPMENT:** Kavach is an Automatic Train Protection (ATP) system developed by the Research Design and Standards Organisation (RDSO) under Indian Railways, in collaboration with Medha Servo Drives Pvt Ltd, HBL Power Systems Ltd, and Kernex Microsystems.
- **FUNCTIONALITY:** It uses electronic devices and Radio Frequency Identification (RFID) installed in locomotives, signalling systems, and tracks to communicate using ultra-high radio frequencies. These systems control train brakes and alert drivers based on pre-programmed logic.
- **FIELD TESTING:** Field tests for Kavach on passenger trains began in 2016, showing promising results in preventing collisions and enhancing safety.
- **APPLICATIONS:**
 - Prevents Signal Passing At Danger (SPAD) and overspeeding by alerting the loco pilot.
 - Automatically applies brakes when it detects another train within a predefined distance.
 - Provides signals to the loco pilot ahead of time, useful in low-visibility conditions.
 - Automatically controls train speed if the pilot fails to



respond.

- o Assists in driving during harsh weather conditions like dense fog.

POTENTIAL SOLUTIONS:

- **IMPROVING SAFETY WITH 'KAVACH' AND SIGNALLING UPGRADE:** Prioritising the completion of Kavach across high-density routes and upgrading signalling systems could prevent future accidents and improve operational safety.
- **STRENGTHENING FINANCIAL HEALTH:** A better balance between passenger fares and freight rates, fare rationalisation, can address financial gaps. Expanding premium services and curbing losses from subsidised services is also essential.
- **INFRASTRUCTURE UPGRADATION:** Increasing

investment in track renewal and wagon replacements will enhance efficiency and reduce accidents. Funds should also be allocated for capacity expansion and completing the DFC projects.

- **LEVERAGING TECHNOLOGY AND DATA:** Introducing AI-based systems for real-time monitoring of tracks, improving training, and better staff management could improve both safety and efficiency.

CONCLUSION:

Addressing these stress factors requires a comprehensive approach that includes investments in technology, safety improvements, financial reforms, and sustainable growth strategies. A well-balanced strategy between affordability and profitability is crucial for securing the future of India's key public transportation system.

INDIA'S RISE: ANNUAL INDIA LEADERSHIP SUMMIT

CONTEXT: At the Annual India Leadership Summit in New Delhi, discussions centered on India's rising economic influence in comparison to China's historical dominance. With a projected 7% GDP growth and over 151,000 startups, India's reforms and digital innovations are driving its rapid ascent.

REPORT:

- **GDP GROWTH PROJECTIONS:** India's GDP is projected to grow at 7% in FY 2024-25, maintaining its status as the fastest-growing major economy (World Bank, 2023).
- **MARKET PERFORMANCE:** Indian stock markets delivered a 15% compound annual growth rate (CAGR) over the last five years, while Chinese markets underperformed, with near-zero or negative growth (Ananth Narayan, SEBI, 2024).
- **DIGITAL GROWTH:** UPI transactions surged from 92 crore in FY 2017-18 to 13,116 crore in FY 2023-24, illustrating rapid digital adoption (Digital India, 2024).
- **STARTUP ECOSYSTEM:** India is the third-largest startup ecosystem, with 151,000 recognized startups and a 15x increase in investments from 2015-2022 (Startup India, 2023).
- **INCLUSIVE FINANCIAL GROWTH:** The PMJDY has facilitated over 53 crore bank accounts, bringing millions

into the formal financial system (Government of India, 2024).

FACTORS PUSHING INDIA TOWARDS A NEW ECONOMIC ERA:

- **DIGITAL REVOLUTION:** Initiatives like Digital India and UPI have driven India's shift towards a digital economy, making financial transactions seamless and inclusive (Digital India Initiative, 2015).
- **STRONG MARKET PERFORMANCE:** Consistent stock market growth and economic reforms have attracted domestic and international investments (SEBI, 2024).
- **STARTUP BOOM:** Government initiatives like Startup India have fostered innovation and entrepreneurship, driving job creation and economic diversification (Startup India, 2023).
- **AI AND TECHNOLOGY INTEGRATION:** Programs like AI for India 2.0 are positioning India as a future leader in AI, creating a skilled workforce for the future (Global India AI Summit, 2024).
- **INCLUSIVE GROWTH POLICIES:** Schemes like PMJDY and PMAY-U have promoted financial inclusion and affordable housing, benefitted millions and supported broader economic growth (PMJDY, 2024).

Case Study: India vs. China comparison:

Aspect	India	China
GDP Growth (2024-25)	Projected at 7% (World Bank, 2023)	Projected at 4.8% (World Bank, 2023)
Market Performance (5-Year CAGR)	15% growth in stock markets (SEBI, 2024)	Stagnant/Negative growth (SEBI, 2024)
Digital Finance	13,116 crore UPI transactions (FY 2023-24)	Advanced, but slower transaction growth compared to India
Startup Ecosystem	151,000 startups; 3rd largest globally (Startup India, 2023)	Slower growth due to regulatory crackdowns
Demographics	Younger population with favourable dependency ratio (UN, 2024)	Aging population, posing economic challenges (UN, 2024)



LIMITATIONS FACED BY INDIA:

- **INFRASTRUCTURE DEFICIENCY:** Despite rapid growth, India still faces significant infrastructure gaps, especially in rural areas, affecting overall productivity (World Bank, 2023).
- **HIGH UNEMPLOYMENT:** A growing working-age population means India must address unemployment and underemployment issues, particularly in the formal sector (ILO, 2023).
- **INCOME INEQUALITY:** While growth has been robust, wealth distribution remains uneven, with large sections of the population still excluded from economic benefits (Oxfam, 2023).
- **EDUCATIONAL GAPS:** Despite progress, India's education system continues to struggle with quality and access, particularly in rural and underprivileged areas (UNICEF, 2024).
- **ENVIRONMENTAL CONCERNS:** Rapid industrialization and urbanization have led to environmental degradation,

which poses risks to sustainable long-term growth (UNEP, 2024).

WAY AHEAD:

- **SKILLING PROGRAMS:** Expand programs aimed at upskilling the workforce, particularly in AI and emerging technologies, to address unemployment and underemployment (AI for India, 2024).
- **REDUCING INCOME INEQUALITY:** Implement policies that promote inclusive growth and equitable wealth distribution, ensuring that economic benefits reach all sections of society (Oxfam, 2023).
- **EDUCATIONAL REFORM:** Strengthen the education system by focusing on quality, accessibility, and alignment with market demands, especially in tech-related fields (UNICEF, 2024).
- **CLIMATE-RESILIENT POLICIES:** Prioritize policies that promote sustainable industrialization and urban development to mitigate environmental risks (UNEP, 2024).

21ST LIVESTOCK CENSUS OPERATION

CONTEXT: The 21st Livestock Census Operation, a landmark initiative led by the Ministry of Fisheries, Animal Husbandry, and Dairying, is set to be launched by Union Minister today.

ABOUT LIVESTOCK CENSUS XXI:

- **LAUNCH DATE:** October 25, 2024.
- **MINISTRY INVOLVED:** Ministry of Fisheries, Animal Husbandry, and Dairying.
- **FREQUENCY:** Conducted every five years since 1919; the last census was in 2019.
- **CENSUS PERIOD:** Scheduled from October 2024 to February 2025.
- **SCOPE:**
 - o Covers 15 livestock species, including cattle, buffalo, yak, sheep, goats, and more.
 - o Includes poultry species like fowl, ducks, turkeys,

quail, and others.

- o Data on 219 indigenous breeds of 16 species.
- **NEW FEATURES:**
 - o First census to capture independent data on livestock holdings by pastoralists.
 - o Will provide information on the gender of individuals primarily involved in livestock rearing.
- **TECHNOLOGY:** Utilizes mobile technology for accurate and efficient data collection and transmission.
- **FIELD OFFICIALS:** Around 1 lakh veterinarians and para-veterinarians will conduct the door-to-door survey.
- **IMPORTANCE:** Provides critical data for policy-making and supports the livestock sector's growth and development.

NATIONAL PHARMACEUTICAL PRICING AUTHORITY

CONTEXT: The National Pharmaceutical Pricing Authority (NPPA) has approved an increase in the ceiling prices of 11 scheduled formulations of eight drugs by 50% of their current ceiling prices.

Most of these drugs are low-cost and generally used as first-line treatment crucial to the public health programmes of the country. These drugs are used for treatment of asthma, glaucoma, thalassemia, tuberculosis, mental health disorders, and so on.

NEED FOR THE REVISION

Elaborating on the need to bring in the increase in price, the authority said that this was done to ensure availability of essential drugs at affordable prices without jeopardising access to such medicines. The essential drugs must remain available to address the public health needs of the country, and their price regulation should not lead to a situation where these drugs become unavailable in the market.

The NPPA explained that it has been receiving applications from the manufacturers for a revision of prices citing reasons such as increased cost of active pharmaceutical ingredients and cost of production, and change in exchange rate, resulting in unviability in sustainable production and

marketing of drugs. Companies have also applied for discontinuation of some of the formulations on account of their unviability.

Formulations for which ceiling prices have been revised include Atropine injection 0.6 mg/ml; Streptomycin powder for injection 750 mg and 1000 mg; Salbutamol tablet 2 mg and 4 mg and respirator solution 5 mg/ml; Pilocarpine 2% drops; Cefadroxil tablet 500 mg; Desferrioxamine 500 mg for injection; and Lithium tablets 300 mg.

RULES AND LAWS FOR PRICE REVISION:

- **PARA 19 OF DPCO 2013:** Allows the government to revise drug prices during extraordinary circumstances.
- **ESSENTIAL COMMODITIES ACT:** Empowers price regulation to ensure availability and affordability.
- **ANNUAL PRICE REVISION:** Ceiling prices are typically revised based on the previous year's Wholesale Price Index (WPI).
- **EXTRAORDINARY CIRCUMSTANCES:** Invoked when market conditions make price regulation necessary to maintain drug availability.

ABOUT NATIONAL PHARMACEUTICAL PRICING AUTHORITY:

- **ORIGIN:** NPPA was established on August 29, 1997, to



regulate the prices of pharmaceutical drugs and medical devices, implementing the provisions of the Drugs (Prices Control) Order (DPCO).

- **MINISTRY:** It operates under the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers.
- **GOVERNING LAW:** NPPA's authority comes from the DPCO, 2013 and the Essential Commodities Act, ensuring availability and fair pricing of essential drugs.
- **FUNCTIONS:**
 - **PRICE REGULATION:** Control and regulate the prices of essential drugs and medical devices to ensure they remain affordable.
 - **ENFORCEMENT:** Implement and enforce the

provisions of the DPCO regarding the pricing of pharmaceutical products.

- **MONITORING AVAILABILITY:** Ensure that essential medicines are available and address shortages when necessary.
- **DATA COLLECTION:** Gather information on drug production, imports, exports, and market shares of pharmaceutical companies.
- **ADVISORY ROLE:** Provide the government with recommendations on drug price revisions and policy changes related to pharmaceuticals.
- **LEGAL MATTERS:** Handle legal cases and disputes arising from pricing and availability issues.

CENTRE INCREASES MSP FOR WHEAT, FIVE OTHER RABI CROPS

CONTEXT: The Cabinet Committee on Economic Affairs on Wednesday increased the minimum support price (MSP) for rabi crops for the next marketing season of 2025-26 with the MSP for wheat going up by ₹150 a quintal. The new MSP for a quintal of wheat is ₹2,425 in comparison to ₹2,275 per quintal, which was in place for the 2024-25 season.

The Centre said the MSP for six rabi crops are higher by 50% to 105% than the production cost. Union Agriculture Minister Shivraj Singh Chouhan said the steady increase in the MSP of wheat, barley, gram, lentil, rapeseed and mustard, and safflower shows the commitment of the Narendra Modi government towards farmers' welfare. This comes in line with the Union Budget 2018-19 announcement of fixing the MSP at a level of at least 1.5 times of the all-India weighted average cost of production.



The Cabinet increased the minimum support prices for rabi crops

Crop	MSP for rabi 2025-26*	MSP for rabi 2024-25*	Increase in MSP
Wheat	₹2,425	₹2,275	₹150
Barley	₹1,980	₹1,850	₹130
Gram	₹5,650	₹5,440	₹210
Lentil (masoor)	₹6,700	₹6,425	₹275
Rapeseed & mustard	₹5,950	₹5,650	₹300
Safflower	₹5,940	₹5,800	₹140

IMF RETAINS INDIA'S GROWTH PROJECTION

CONTEXT: The International Monetary Fund (IMF) in its latest World Economic Outlook (WEO) maintained its June growth rate projections for India at 7% in the current fiscal year ending March 31, 2025 and 6.5% in the next fiscal year (FY2025-26).

The moderation in domestic growth rate from 8.2% in 2023 with exhaustion of pent-up demand accumulated during the pandemic, as the economy reconnects with its potential. The U.S. is projected to grow at 2.8% this year and 2.2% next year, an upward revision from the July WEO update.

The global output was expected to grow at 3.2% in 2024 as well as 2025. Globally, inflation has been on the way down which had touched 9.4% in the third quarter of 2022, expected to be 3.5% by the end of 2025. The global battle

against inflation has largely been won, even though price pressures persist in some countries. A global recession has been avoided through the disinflationary process, despite a synchronised tightening of monetary conditions. However, downside risks now dominate the outlook.

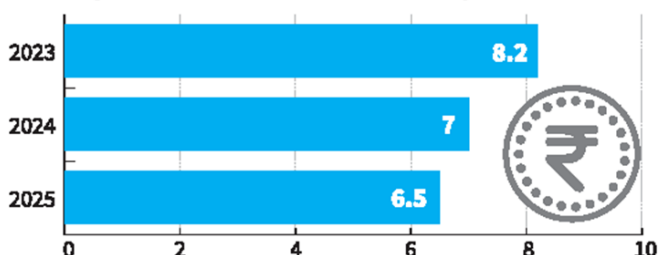
The IMF Chief Economist identified worsening of geopolitical risks with the potential for escalation of regional conflicts, and its adverse impacts upon the commodity markets since the previous WEO releases in April and June this year. The Russia-Ukraine war continues and the conflict in West Asia has intensified, including in Lebanon, in recent weeks.

The IMF Chief Economist also identified growing protectionist policies as one of the risks. Also, monetary policy remaining too tight in some countries for too long and this impacting labour markets was a risk. Sovereign debt stress and activity in China being weak were some of the other risks that he listed.

The IMF recommended a 'triple policy pivot' to respond to the "relatively mediocre" growth rate, of 3.2% over the medium term. The first is moving to a neutral monetary policy stance, a process under way in many countries. The second is the need to build fiscal buffers after years of a loose fiscal policy. The third is structural reforms to increase growth and productivity, coping with ageing populations and younger people looking for opportunities in some parts of the world, tackling the climate transition and increasing resilience.

Growth decelerates

The chart shows India's growth rate in 2023 and its projected growth rates in 2024 and 2025, as per the International Monetary Fund's World Economic Outlook report



ECOLOGY





WORLD CASSOWARY DAY 2024

**NMCG APPROVES PROJECTS
WORTH ₹1,062 CRORE**

**NATIONAL BIODIVERSITY
STRATEGY AND ACTION PLANS
TRACKER**

WORLD GREEN ECONOMY FORUM

PYGMY HOGS

**NATIONAL MISSION ON EDIBLE
OILS**

**WORLD'S WATER CYCLE GETTING
UNPREDICTABLE - UN STUDY**

**WILDLIFE POPULATIONS PLUNGE
73% SINCE 1970**

ENVISTATS INDIA 2024

**6TH ASSEMBLY OF
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**MESOPHOTIC CORAL
ECOSYSTEMS**

**4TH GLOBAL CORAL BLEACHING
EVENT**

ASIATIC GOLDEN CAT



WORLD CASSOWARY DAY 2024

CONTEXT: World Cassowary Day 2024 highlights the endangered status of the “world’s most dangerous bird,” with threats from hunting, logging, and invasive species jeopardizing its survival.

BACKGROUND: World Cassowary Day is observed annually on September 26 to raise global awareness about the ecological significance of cassowaries and the need for their protection. These flightless birds play a critical role in rainforest ecosystems.

Cassowaries, native to northeast Queensland, New Guinea, and nearby regions, play a crucial role in rainforest ecosystems. There are three species – southern, northern, and dwarf cassowaries – inhabiting various habitats from lowland rainforests to mountainous terrain. Beyond their striking appearance, cassowaries are vital seed dispersers, helping maintain native plant diversity in fragmented rainforests, as per a 2023 study. Their persistence highlights their ecological importance in these vulnerable landscapes.



Southern cassowary - Previously listed as Vulnerable from 1994–2016, the IUCN changed its status to **Least Concern** in 2018. While the population is believed to be declining, estimates suggest it’s larger than previously thought.



Northern cassowary - Previously listed as Vulnerable from 1998–2016, the IUCN changed its status to **Least Concern** in 2017. While the species is threatened by habitat loss and hunting, population estimates suggest it’s larger than previously thought.



Dwarf cassowary - Previously listed as Near Threatened from 2004–2013, the IUCN changed its status to **Least Concern** in 2015. The species’ population appears to be stable, and hunting pressure is less than it was in the past.

NMCG APPROVES PROJECTS WORTH ₹1,062 CRORE

CONTEXT: The 57th Executive Committee meeting of the National Mission for Clean Ganga, chaired by DG Rajeev Kumar Mital, approved projects worth ₹1,062 crore for river conservation efforts.

BACKGROUND: The EC approved a ₹350 crore project in Katihar, Bihar, to enhance drainage and sewage management. It includes constructing 35 MLD and 20.5 MLD STPs in Rojampur and Sharifganj, respectively, and follows the DBOT model with 15 years of maintenance.

In Aligarh, Uttar Pradesh, a ₹488 crore project was approved for two sewage treatment plants (STPs) and other facilities. In Supaul, Bihar, a ₹76.69 crore project will manage six drains through STPs and diversion structures. Uttarakhand secured ₹2.5 crore for septage co-treatment at existing STPs in Haridwar, Rishikesh, Srinagar, and Devprayag, aiming to enhance sanitation and water management.

- **IEC Project for Mahakumbh 2025:** A ₹30 crore initiative includes mural art, ‘Paint My City,’ and a 45-day exhibition on Namami Gange.
- **Ganga Seva Doots Deployment:** 1,500 Ganga Seva Doots will raise awareness on cleanliness and Ganga conservation across the fairgrounds.
- **PIAS Manpower Restructuring:** 90 posts will focus on enhancing environmental data collection and pollution control in the Ganga basin.
- **STP Monitoring Project:** An OCEMS system will monitor 51 STPs in Uttar Pradesh and West Bengal with a ₹33 crore investment.
- **Gharial Conservation Program:** A ₹2 crore breeding programme at Kukrail Center aims to restore turtle and gharial populations in the Ganga.



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NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS TRACKER

CONTEXT: A recent NBSAP tracker report reveals that only 10% of countries have met their biodiversity commitments ahead of the COP16 conference, highlighting global challenges in conservation efforts.

BACKGROUND: Ahead of COP16 on biodiversity, only 10% of nations have met their biodiversity pledges, raising concerns. The conference (October 21 - November 1, 2024) will be the first since the 2022 adoption of the Kunming-Montreal GBF. WWF's NBSAP Tracker is monitoring global progress. Importance of the NBSAP Tracker for Biodiversity Goals at COP16

- **NBSAP Tracker Objectives:** The NBSAP Tracker promotes transparency in biodiversity policies, ensuring accessibility for all stakeholders during COP16 preparations.
- **Critical Moment at COP16:** COP16 is vital for nations to reaffirm commitments to the Global Biodiversity Framework (GBF), focusing on 30% protection by 2030.

- **Need for Action Plans:** Countries must develop clear action plans to protect land and water while restoring degraded ecosystems.
- **Accountability Concerns:** While the NBSAP Tracker ensures accountability, doubts remain about nations' ability to implement strong actions for biodiversity.
- **Call for Strong Leadership:** Achieving GBF goals requires robust leadership, adequate resources, and international cooperation to ensure a sustainable future.

Despite the 196-country pledge to halt and reverse biodiversity loss by 2030 under the Global Biodiversity Framework (GBF), only 20 nations have revised their National Biodiversity Strategies and Action Plans (NBSAPs), with just nine and the EU submitting them by mid-2024. Concerns have been raised about inadequate progress, weak plans lacking measurable goals, and insufficient funding. Increased civil society and indigenous participation is a positive development, but many countries, including India, lag behind.

National Biodiversity Strategy and Action Plans Tracker

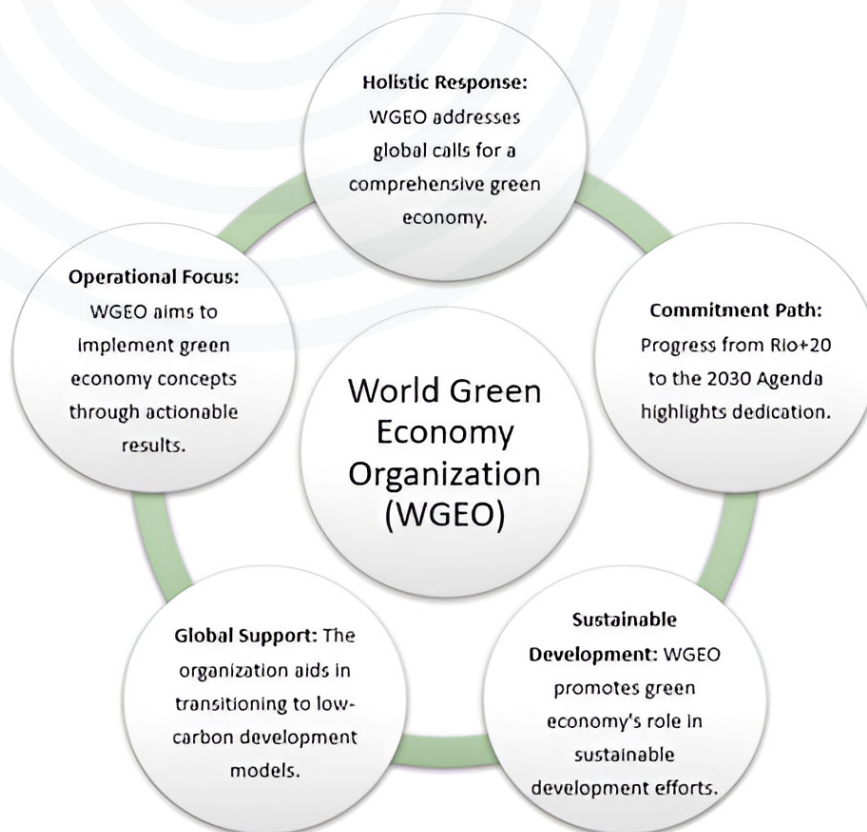
- **Tool Development:** WWF developed a tracker for monitoring NBSAP progress.
- **Global Alignment:** NBSAPs align with Kunming-Montreal Global Biodiversity Framework goals.
- **Accessibility Aim:** The tracker ensures biodiversity policies are accessible to stakeholders.
- **Transparency Focus:** It promotes transparency and accountability ahead of COP16.
- **Strategic Importance:** NBSAPs are essential for addressing biodiversity loss globally.

WORLD GREEN ECONOMY FORUM

CONTEXT: The World Green Economy Forum was launched in Dubai, uniting global leaders and experts to tackle urgent environmental challenges facing the world today.

BACKGROUND: Under the patronage of Sheikh Mohammed bin Rashid Al Maktoum, a forum themed "Empowering Global Action" convened to address climate change and sustainability. The agenda included critical sessions on international cooperation, emphasizing integrated approaches to sustainable development goals.

The World Green Economy Forum featured sessions on decarbonizing energy-intensive industries, enhancing public-private-philanthropic partnerships, and utilizing AI for sustainability. A notable panel discussed scaling Sustainable Aviation Fuel (SAF) production from 200,000 to 300 million tonnes by 2050, highlighting the UAE's target of 1% SAF use by 2031. The forum also underscored the vital role of youth in fostering sustainability, fostering optimism for collaborative climate action and innovative solutions moving forward.





PYGMY HOGS

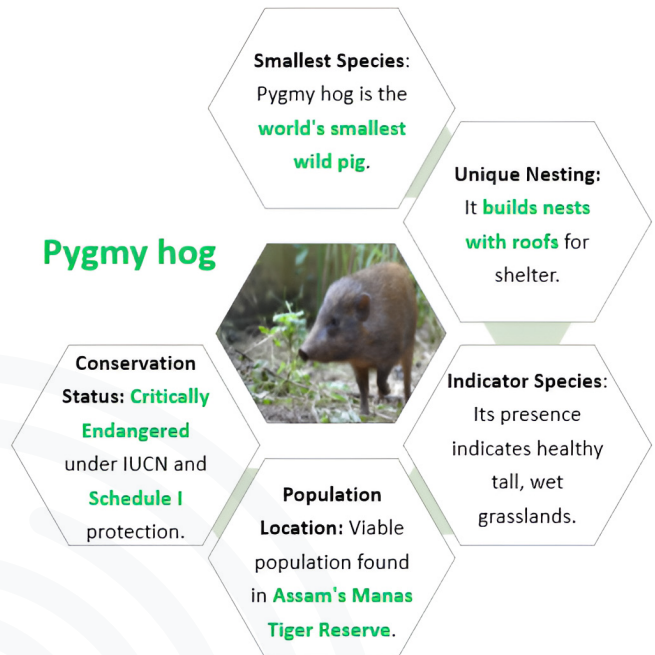
CONTEXT: Nine captive-bred pygmy hogs have been successfully released into a national park in Assam, marking a significant step in conservation efforts for this endangered species.

BACKGROUND: Nine captive-bred pygmy hogs were released in Manas National Park, Assam, marking the fifth release by the Pygmy Hog Conservation Programme since 2020. The pygmy hog is the world's smallest and rarest wild pig, critically threatened by extinction.

Successful Reintroduction of Pygmy Hogs in Manas National Park

- **Pygmy Hogs Release:** 27 pygmy hogs were released in Manas National Park to stabilize their endangered population.
- **Commendable Conservation Effort:** R.P. Singh praised the reintroduction effort, highlighting its importance for the species' survival.
- **Camera Trap Success:** A 2023 camera trap study revealed the hogs are exploring and breeding in their new habitat.
- **Significant Discovery:** A pregnant female hog was captured on camera for the first time, indicating successful breeding.
- **Collaborative Stakeholders:** Various organizations,

including Durrell Wildlife Conservation Trust and Aaranyak, are involved in the Pygmy Hog Conservation Program.



NATIONAL MISSION ON EDIBLE OILS

CONTEXT: The Union Cabinet has approved the National Mission on Edible Oils – Oilseeds, aiming to enhance domestic oilseed production and promote self-reliance in edible oils under the Atmanirbhar Bharat initiative.

BACKGROUND: The newly approved NMEO-Oilseeds mission will run from 2024-25 to 2030-31, with a budget of ₹10,103 crore. It aims to boost production of primary oilseed crops and improve efficiency in collection and extraction from secondary sources.



Enhancing Oilseed Production Through NMEO-Oilseeds Initiative

- **Focus on Oilseed Crops:** The NMEO-Oilseeds aims to enhance production of key oilseed crops like Rapeseed-Mustard, Groundnut, and Soybean.
- **Production Targets:** The mission seeks to boost primary oilseed production from 39 million tonnes in 2022-23 to 69.7 million tonnes by 2030-31.
- **Domestic Oil Production Goal:** Together with NMEO-OP, the initiative targets increasing domestic edible oil production to 25.45 million tonnes by 2030-31.
- **High-Yielding Seed Varieties:** The Mission promotes adoption of high-yielding, high oil content seed varieties

- and encourages intercropping practices.
- **Seed Availability Improvement:** An Online 5-year rolling seed plan through the SATHI Portal will enhance quality seed accessibility and infrastructure.
India imports 57% of its edible oil demand, prompting the government to initiate measures for self-sufficiency. The National Mission on Edible Oils – Oil Palm (NMEO-OP) was launched in 2021 with an allocation of ₹11,040 crore to enhance oil palm cultivation. The Minimum Support Price (MSP) for edible oilseeds has been raised, and a 20% import duty on edible oils has been imposed to protect local farmers and promote domestic production.



WORLD'S WATER CYCLE GETTING UNPREDICTABLE - UN STUDY

CONTEXT: The United Nations warns that increasingly severe floods and droughts are a “distress signal” of the unpredictable water cycle effects caused by climate change, indicating future challenges.

BACKGROUND: The UN warns that intensified floods and droughts signal worsening climate change impacts on the water cycle. A report reveals rivers at their driest in 30 years and significant glacier loss, highlighting water as a critical indicator of climate change.

Global Water Crisis: Challenges and Impacts of Climate Change

- **Global Water Access:** About two billion people lack access to safe drinking water, highlighting a critical global crisis.
- **Severe Water Scarcity:** Roughly half of the world's population faces severe water scarcity for parts of the year, worsened by climate change.
- **Limited Freshwater Supply:** Only 0.5% of Earth's water is usable, and climate change is threatening this already limited freshwater supply.
- **Declining Terrestrial Water Storage:** Over twenty years, terrestrial water storage has decreased by 1 cm per year, impacting water security.
- **Glacier Water Decline:** Water supplies from glaciers and snow are expected to decline, reducing availability during warm periods for over a billion people.
- **Salinization from Sea-Level Rise:** Sea-level rise will increase groundwater salinization, diminishing freshwater resources for coastal ecosystems and communities.
- **Impact on Agriculture:** Climate change and water

scarcity will pressure food supply, with agriculture using approximately 70% of global freshwater resources.

The Role of Aquatic Ecosystems in Climate Adaptation and Resilience

- **Emission Reduction:** Healthy aquatic ecosystems can lower greenhouse gas emissions significantly.
- **Carbon Sinks:** Wetlands like mangroves and swamps absorb and store CO2 efficiently.
- **Extreme Weather Protection:** Wetlands buffer against storm surges and extreme weather events.
- **Water Management:** They provide natural water storage and purification through microorganisms.
- **High Returns:** Early warning systems yield over tenfold returns on investments.
- **Disaster Risk Reduction:** A 24-hour storm warning can cut damage by 30%.
- **Infant Lives Saved:** Resilient water systems could save over 360,000 infants annually.

Climate change is leading to more severe and frequent extreme weather events, including floods and droughts. Rising global temperatures enhance atmospheric moisture, resulting in heavier rainfall and intensified dry spells. According to the IPCC, risks associated with droughts and floods are projected to increase with each degree of warming. Water-related disasters account for 70% of natural disaster-related deaths, with flood disasters rising by 134% since 2000, predominantly affecting Asia, while drought-related fatalities are most common in Africa.

WILDLIFE POPULATIONS PLUNGE 73% SINCE 1970

CONTEXT: The World-Wide Fund for Nature's 2024 Living Planet Report reveals a 73% decline in the average size of monitored wildlife populations from 1970 to 2020, highlighting significant biodiversity loss.

BACKGROUND: The 2024 Living Planet Report by WWF highlights a 73% decline in monitored wildlife populations from 1970 to 2020, indicating a worsening crisis. The report calls for significant collective action over the next five years to address climate and nature challenges.

Report Highlights

- **Living Planet Index Overview:** The Living Planet Index (LPI) tracks 35,000 population trends of 5,495 species from 1970 to 2020.
- **Freshwater Ecosystem Decline:** Freshwater ecosystems have seen the sharpest decline at 85%, indicating critical threats to aquatic life.
- **Terrestrial and Marine Ecosystems:** Terrestrial ecosystems declined by 69%, while marine ecosystems faced a 56% decline, highlighting widespread biodiversity loss.
- **Main Threats to Wildlife:** The primary threat is habitat loss and degradation, followed by over-exploitation, invasive species, and diseases.

- **Pollution Impact in Asia-Pacific:** In the Asia-Pacific region, pollution has contributed to an average wildlife decline of 60%.
- **Vulture Population Declines in India:** Three vulture species in India—white-rumped, Indian, and slender-billed vultures—are experiencing significant population declines.
- **Vulture Survey Findings:** The 2022 vulture survey revealed a 67% decline in white-rumped vultures, 48% in Indian vultures, and 89% in slender-billed vultures since 2002.
- **Urgent Conservation Measures Needed:** The decline of vultures underscores the urgent need for conservation measures to protect these vital scavengers and maintain ecological balance.

Despite declines in many wildlife populations in India, proactive government initiatives have led to recovery in some species, notably wild tigers, with a 2022 estimation of 3,682 individuals, up from 2,967 in 2018. While global goals exist to halt nature loss and cap temperature rise, national commitments remain inadequate to meet 2030 targets and avoid critical tipping points, highlighting the need for enhanced action in biodiversity conservation and climate change mitigation.



ENVISTATS INDIA 2024

CONTEXT: The Ministry of Statistics released “EnviStats India 2024: Environment Accounts,” the seventh issue based on the System of Environmental-Economic Accounting framework, on September 30, 2024.

BACKGROUND: The latest report introduces Ocean Accounts, offering a framework for compiling ocean-related data, including extent and condition parameters. Technical assistance was provided by an Expert Group comprising members from various ministries and the Geological Survey of India.

Key Findings from the Recent Environmental Report

- Physical Asset Accounts: The report provides Physical Asset Accounts and Supply and Use Tables for Energy

based on various government agencies.

- Soil Nutrient Index Update: Updated values of the Soil Nutrient Index for 2023-24 are included, utilizing data from Soil Health Cards.
- Taxonomic Diversity: The report presents taxonomic faunal and floral diversity in India, highlighting important species like Leopard and Snow leopard.
- Genetic Conservation Data: Information on Genetic Conservation is compiled using data from relevant stakeholder ministries and agencies.
- IUCN Species Richness: The report compiles Species Richness from the IUCN Red List, categorized by taxonomic groups using spatial datasets.

System of Environmental-Economic Accounting (SEEA)

- International Standard:** SEEA is an international statistical standard for environmental-economic analysis.
- Interaction Focus:** It examines the relationship between economy and environment.
- Two Components:** Includes SEEA-Central Framework and SEEA-Ecosystem Accounting.
- Framework Goals:** SEEA-Central Framework addresses environmental impacts on economic activities.
- Integrated Data:** Together, they provide data for sustainable development and economic accounts.



INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



6TH ASSEMBLY OF INTERNATIONAL SOLAR ALLIANCE

CONTEXT: The 6th Assembly of the International Solar Alliance will take place in New Delhi from October 30 to November 2, 2023, with 96 countries participating, chaired by Minister R. K. Singh.

BACKGROUND: During the ISA Assembly, Minister R.K. Singh emphasized that energy access is crucial for a successful energy transition. He highlighted ISA's role in advising countries on solar electrification, ensuring investments focus on Southern nations, and its growth beyond other energy organizations.

India's Commitment to Renewable Energy and the Role of ISA

- Solar Energy Transition: The Minister emphasizes that solar energy is crucial for rapid renewable energy capacity

addition worldwide.

- Hydropower's Role: Hydro energy is vital for balancing the grid, with many countries sourcing over 50% of energy from hydro.
- ISA Framework Growth: The number of countries signing the ISA Framework Agreement has doubled from 47 to 94 since 2018.
- ISA's Objectives: The ISA aims for global energy transition, national energy security, and local energy access to ensure sustainable energy for all.
- Support for Solar Initiatives: ISA provides financial assistance for demonstration projects, trains personnel through the STAR-C initiative, and launched the Virtual Green Hydrogen Innovation Centre.



Advancements in Solar PV: The **World Solar Technology Report 2023** emphasizes the growth of solar photovoltaics (PV), predicting a 56.4% share of renewable energy by 2050, with crystalline silicon technology dominating.



Market Evolution and Growth: The **World Solar Market Report 2023** analyses the solar market's journey from Europe to the Asia-Pacific region, which has seen a remarkable 37% compound annual growth rate in 2022.



Surge in Solar Investments: The **World Solar Investment Report 2023** reveals global solar investments surpassed \$300 billion in 2022, advocating for enhanced grid infrastructure, diversified supply chains, and focus on emerging markets for sustainable energy transition.

MESOPHOTIC CORAL ECOSYSTEMS

CONTEXT: Researchers from the Max Planck Institute for Chemistry report that mesophotic coral ecosystems in the Eastern Tropical Pacific are threatened by bleaching from warm water and cold-water exposure.

BACKGROUND: Rising sea surface temperatures are leading to increased coral bleaching events, posing a significant threat to coral reefs. Initial studies suggest that Mesophotic Coral Ecosystems (MCEs) may serve as thermal refuges for shallow-water coral species amid projected warming.

Mesophotic Coral Ecosystems: Importance and Advances in Research

- Depth Range and Habitat: Mesophotic coral ecosystems thrive in tropical and subtropical regions at depths between 100 and 490 feet, dominated by corals, sponges, and algae.
- Role in Coral Replenishment: Mesophotic corals are hypothesized to help reseeding degraded shallow-water reefs, acting as extensions of these ecosystems and sharing common species.
- Essential Fish Habitat: These ecosystems provide critical habitats for economically and ecologically significant fish, supporting activities like spawning, breeding, and growth to maturity.
- Potential for Natural Products: Mesophotic coral ecosystems contain organisms with specialized defences that produce compounds potentially beneficial for human health and developing natural products.

Mesophotic coral ecosystems (MCEs) in India remain largely unexplored but have been identified along the





Andaman and Nicobar Islands, Lakshadweep Islands, and the mainland coast. These deep-sea reefs host a diverse range of coral species, including hard and soft corals, as well as various

marine life such as fish and invertebrates. However, MCEs face significant threats from pollution, overfishing, and climate change, highlighting the need for conservation efforts.

4TH GLOBAL CORAL BLEACHING EVENT

CONTEXT: NOAA scientists report that the world is facing a global coral bleaching event, the fourth recorded and the second in the past decade, highlighting ongoing environmental challenges.

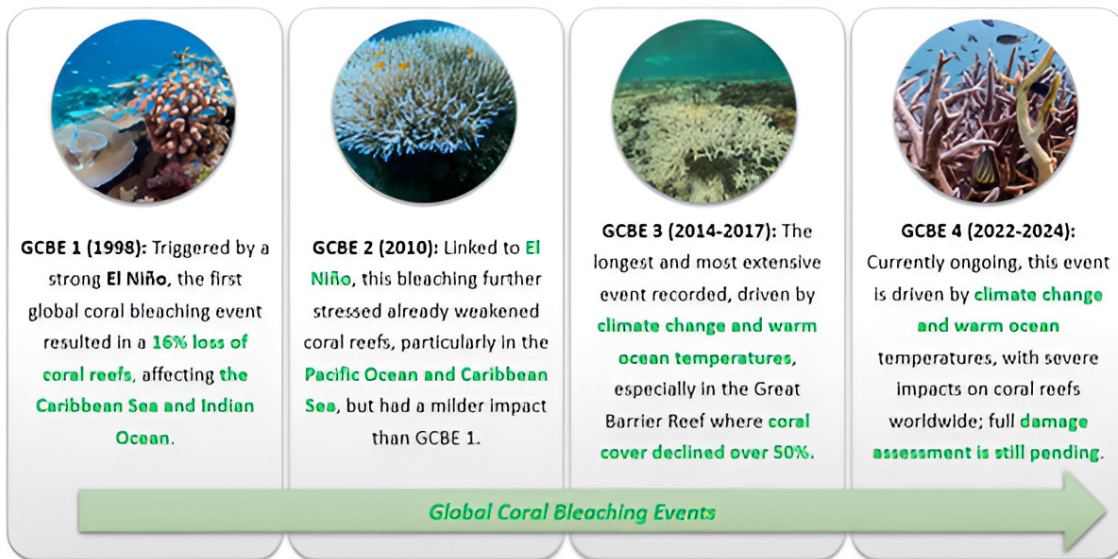
BACKGROUND: The fourth global coral bleaching event (GCBE4), which began in January 2023, is the most extensive to date, exceeding the bleaching levels of 2014-2017 by over 11%. This severe event occurred in nearly half the time of previous occurrences.

Since early 2023, widespread mass bleaching of coral reefs has been reported in tropical regions worldwide, including Florida, the Caribbean, Brazil, Australia's Great Barrier Reef, and parts of the South Pacific. The Indian Ocean basin is also affected, with significant bleaching confirmed in Tanzania, Kenya, Mauritius, and off the western coast of Indonesia. These alarming trends underscore the urgent need for action to protect and preserve coral ecosystems globally.

- **Unprecedented Heatwave:** The 2023 heatwave in

Florida was unique, starting earlier and lasting longer than previous events, causing significant coral bleaching.

- **NOAA's Interventions:** Through the Mission: Iconic Reefs program, NOAA implemented measures like relocating coral nurseries to deeper waters and deploying sunshades to mitigate coral damage.
- **Global Collaboration:** The International Coral Reef Initiative (ICRI), co-chaired by NOAA, facilitates sharing of resilience-based management actions and lessons learned from the 2023 marine heatwaves.
- **Advancing Restoration Efforts:** ICRI and its members support coral interventions and restoration by funding scientific research on best management practices and implementing its Plan of Action.
- **Multidisciplinary Approach:** NOAA's Coral Reef Conservation Program integrates expertise from various NOAA offices, promoting a comprehensive strategy for understanding and conserving coral reef ecosystems.



ASIATIC GOLDEN CAT

CONTEXT: Wildlife experts have confirmed the presence of the rare Asiatic golden cat in Assam's Manas National Park, a UNESCO World Heritage site, highlighting its ecological significance.

BACKGROUND: Despite intensive camera trapping efforts over eight years yielding no

records, two photographic captures in December 2019 and January 2021 confirmed the presence of the species in the region, as reported by lead scientist M. Firoz Ahmed.

Asiatic Golden Cat





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EMERGENCY USE LISTING (EUL) PROCEDURE

MAJOR ATMOSPHERIC CHERENKOV EXPERIMENT OBSERVATORY

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INDIA'S FIRST DEMONSTRATION FACILITY FOR BIOPOLYMERS

'MADE IN INDIA' BULLET TRAINS

SOLAR ASSISTED REEFER TRANSPORTATION WITH HYBRID CONTROLS AND INTELLIGENCE SYSTEM

e-SHRAM – ONE STOP SOLUTION

EUROPA CLIPPER MISSION



ANNA DARPAN

CONTEXT: The **Food Corporation of India (FCI)** has revamped its supply chain management system through the Anna Darpan initiative, aiming to enhance efficiency and transparency in food distribution.

BACKGROUND: As part of the 100 Days Achievements, the Food Corporation of India (FCI) has initiated a digital transformation of its supply chain management through the 'Depot Online System,' aiming to modernize and improve efficiency in food distribution.

ANNA DARPAN to Revolutionize Supply Chain Management

The Food Corporation of India (FCI) has initiated the ANNA DARPAN project, an integrated microservices-based supply chain management system, to optimize operations from Mandis to headquarters. The project, led by M/s Coforge Limited, involves cloud hosting, service mesh architecture, and API integration, ensuring seamless coordination. Additionally, a centralized analytics platform will support data-driven decisions, making the supply chain more efficient and responsive.



Efficiency Enhancement:
Streamlines processes to improve **supply chain performance**.



User-Friendly Interface:
Offers an intuitive and **interactive UI** for users.



Data-Driven Decisions:
Utilizes data analytics for **strategic and operational** decisions.



System Integration:
Ensures seamless integration with **internal and external systems**.



Mobile Accessibility:
Emphasizes mobile-first **design for anytime, anywhere** access.

INTERNATIONAL MEDICAL DEVICE REGULATORS FORUM

CONTEXT: The Ministry of Health and Family Welfare has introduced new regulations for medical devices, aligning with global standards to foster growth, innovation, and a robust regulatory ecosystem in India.

BACKGROUND: The Central Drugs Standard Control Organization (CDSCO), under the Ministry of Health & Family Welfare, has become an Affiliate Member of the International Medical Device Regulators Forum, strengthening global collaboration in medical device regulation.



India's Affiliate Membership in IMDRF and Its Impact on Medical Device Regulation

- **Global Alignment:** India's CDSCO applied for Affiliate Membership in the International Medical Device

Regulators Forum (IMDRF) to enhance global alignment in medical device regulations.

- **Membership Approval:** After review during the 26th Session of IMDRF in September 2024, CDSCO received approval as an Affiliate Member, enabling participation in regulatory discussions.
- **Regulatory Collaboration:** As an Affiliate Member, India will participate in IMDRF Open Sessions, exchanging technical information and learning the latest medical device regulatory trends from other regulators.
- **Adoption of IMDRF Documents:** CDSCO will use IMDRF documents to enhance India's medical device regulatory framework, improving public health safety and aligning with international standards.
- **Strengthening Competitiveness:** Affiliate Membership helps Indian manufacturers meet IMDRF regulatory requirements, boosting the competitiveness of the domestic medical device industry.

International Medical Device Regulators Forum (IMDRF)

- **Established in 2011:** IMDRF is a collaborative group of medical device regulators.
- **Global Membership:** Members include authorities from 13 countries and WHO.
- **Regulatory Harmonization:** Aims to accelerate harmonization of medical device regulations globally.
- **Complexity Reduction:** Harmonization reduces complexity for manufacturers and safeguards public health.
- **Support for Innovation:** Promotes timely access to innovative medical devices through collaboration.



NATIONAL HEALTH ACCOUNT (NHA) ESTIMATES

CONTEXT: The Union Ministry of Health and Family Welfare released the 2020-21 and 2021-22 National Health Account estimates, offering a comprehensive overview of India's healthcare expenditure in the eighth and ninth editions.

BACKGROUND: The Union Ministry of Health and Family Welfare released the National Health Account (NHA) estimates for 2020-21 and 2021-22. These reports highlight increased government healthcare spending, reduced out-of-pocket expenses, and rising social security expenditure, reflecting India's progress toward Universal Health Coverage.

The National Health Account estimates for 2020-21 and 2021-22 reveal a significant increase in India's government healthcare spending, a decrease in out-of-pocket payments, and a rise in social security expenditures. These trends indicate a commitment to enhancing public health, reducing financial barriers, and improving healthcare infrastructure. As reforms continue, India moves closer to achieving Universal Health Coverage, fostering a more resilient and equitable healthcare system for all citizens.



Rising Expenditure: Government Health Expenditure (GHE) rose from **1.13% of GDP in 2014-15** to **1.84% in 2021-22**, and from 3.94% to 6.12% of General Government Expenditure, indicating commitment to public healthcare.



Reduction in OOPE: Out-of-Pocket Expenditure (OOPE) in Total Health Expenditure decreased from **62.6% in 2014-15** to **39.4% in 2021-22**, reflecting improved public health spending and access.



Government's Increased Share: The government's share in Total Health Expenditure rose from **29% in 2014-15** to **48% in 2021-22**, highlighting enhanced public health reliance and infrastructure investment.



Total Health Expenditure: In 2020-21, India's Total Health Expenditure was estimated at Rs. 7,39,327 crores (3.73% GDP), with Government Health Expenditure comprising Rs. 3,16,554 crores (**42.82% THE**).



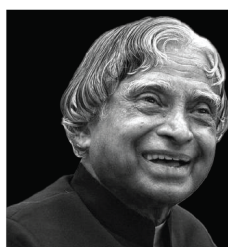
Total Health Expenditure: In 2021-22, India's Total Health Expenditure reached Rs. 9,04,461 crores (3.83% GDP), with Government Health Expenditure rising to Rs. 4,34,163 crores (**48% THE**).

Health Accounts in India

- **Health Accounts:** Health Accounts detail health expenditures and fund flows for a financial year, answering key policy questions regarding healthcare financing and service utilization.
- **SHA 2011 Framework:** The System of Health Accounts 2011 (SHA 2011) provides a global standard for estimating health expenditures, facilitating inter-country comparisons.
- **Current Health Expenditures (CHE):** The focus is on

CHE, detailing revenues from financing schemes, entities managing funds, healthcare providers, and functions of healthcare services.

- **National Health Account (NHA):** NHA estimates adhere to SHA 2011, illustrating financial flows within India's health system and enabling standard reporting of healthcare expenditures.
- **Dynamic Updates:** NHA guidelines are regularly updated to reflect changes in India's healthcare landscape, ensuring data availability, improved estimation methodologies, and



You have to dream before your dreams can come true..

- A. P. J. ABDUL KALAM



EMERGENCY USE LISTING (EUL) PROCEDURE

CONTEXT: The World Health Organization has granted Emergency Use Listing for the first mpox in vitro diagnostic test, enhancing global access to mpox testing and response efforts.

BACKGROUND: The emergency use approval of Abbott Molecular Inc.'s Alinity m MPXV assay will enhance diagnostic capacity in countries experiencing mpox outbreaks. Rapid and accurate testing is crucial for early diagnosis, timely treatment, and effective virus control.

WHO Emergency Use Listing Procedure (EUL)

- WHO Emergency Use Listing: The EUL is a risk-based procedure aimed at assessing unlicensed vaccines, therapeutics, and diagnostics during public health emergencies.
- Purpose of EUL: The EUL facilitates product availability

for affected populations and helps UN procurement agencies assess product acceptability based on quality and safety data.

- Eligibility Criteria: Eligible vaccines must target serious diseases with potential for outbreaks, especially when no licensed products are available or existing ones are ineffective.
- Manufacturing Compliance: Candidate products must be manufactured according to Good Manufacturing Practices (GMP) for medicines and vaccines, and under a functional Quality Management System (QMS) for diagnostics.
- Development Commitment: Applicants must commit to completing product development and apply for WHO prequalification once the product is licensed, ensuring ongoing validation and verification.

The evaluation process assesses vaccine quality, safety, and effectiveness against WHO standards to ensure benefits outweigh risks during a Public Health Emergency of International Concern (PHEIC). Manufacturers must submit comprehensive data, including manufacturing quality, clinical findings, monitoring plans, and labelling details in ICH CTD format.



MAJOR ATMOSPHERIC CHERENKOV EXPERIMENT OBSERVATORY

CONTEXT: India has inaugurated the Major Atmospheric Cherenkov Experiment (MACE) Observatory in Hanle, Ladakh, marking a significant advancement in astrophysics research and observational capabilities in the country.

BACKGROUND: An Imaging Cherenkov Observatory is a specialized facility that detects Cherenkov radiation generated by high-energy cosmic particles, like gamma rays and cosmic rays, during their interactions with the Earth's atmosphere, facilitating advanced astronomical observations and research.

MACE Imaging Cherenkov Telescope

- Largest Telescope: MACE is **Asia's largest** imaging

Cherenkov telescope.

- Highest Altitude: Located at ~4,300 m, it's the **highest telescope globally**.
- Indigenous Development: Built by **BARC with support from ECIL** and industry partners.
- Gamma-Ray Observation: Observes **high-energy gamma rays** from cosmic phenomena.
- Strengthening Astronomy: Complements global observatories, enhancing India's role in **multimessenger astronomy**.

BHARATGEN PROJECT

CONTEXT: The launch of BharatGen marks India's first government-supported multimodal large language model initiative, aiming to enhance AI capabilities and promote innovation in various sectors.

BACKGROUND: BharatGen, an innovative generative AI initiative aimed at transforming public service delivery and enhancing citizen engagement, was inaugurated in New Delhi. It focuses on developing foundational models in language, speech, and computer vision.

BharatGen: Empowering India's AI Ecosystem

- Atmanirbhar Bharat Vision: BharatGen supports India's self-reliance by creating foundational AI models tailored for local needs, reducing dependence on foreign technologies.
- Strengthening Domestic Ecosystem: By developing AI technologies in India, BharatGen enhances the local AI ecosystem for startups, industries, and government agencies.

- Democratizing AI Access: The initiative provides foundational models and technical recipes, enabling innovators and startups to create AI applications rapidly and affordably.
- Data-Efficient Learning: BharatGen focuses on developing models that require minimal data, addressing the needs of Indian languages with limited digital representation.
- Fostering AI Community: The initiative promotes a vibrant AI research community through training programs, hackathons, and collaborations with global experts to drive innovation.

Led by IIT Bombay under the National Mission on Interdisciplinary Cyber-Physical Systems, BharatGen aims to develop generative AI systems in multiple Indian languages. The project emphasizes cultural preservation, social equity, and data sovereignty, ensuring AI accessibility and relevance to India's diverse population.



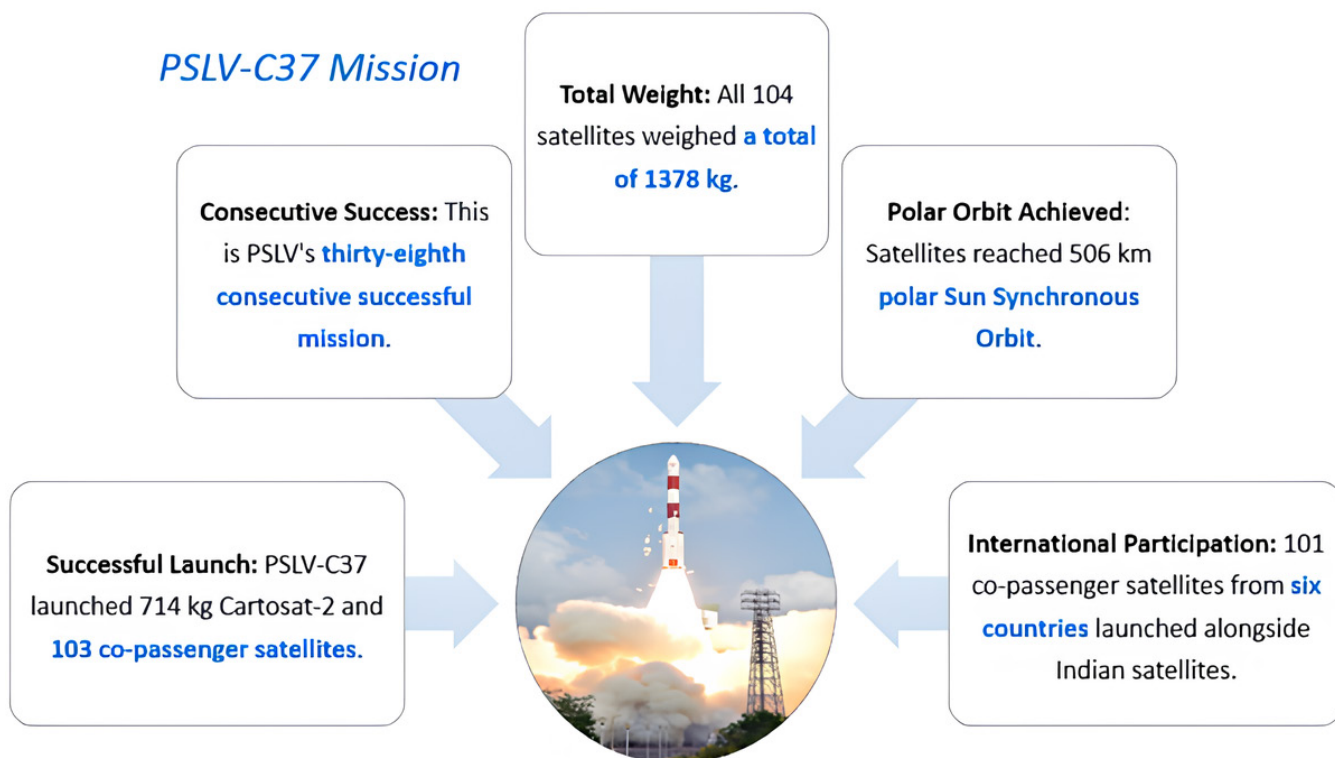
PSLV-37 MISSION RE-ENTERS EARTH'S ATMOSPHERE

CONTEXT: ISRO reports that the upper stage of the historic PSLV-37 mission re-entered Earth's atmosphere eight years after its launch, marking a significant milestone in space mission management.

BACKGROUND: The PSLV-C37 mission, launched on February 15, 2017, carried the Cartosat-2D satellite as its main payload alongside 103 co-passenger satellites. This historic mission marked the first instance of launching 104 satellites

with a single vehicle.

ISRO ensures compliance with international debris mitigation guidelines by actively reducing the orbital lifetime of rocket bodies to under 8 years. Initiatives include controlled re-entry and engine restarts for PSLV upper stages, aiming for a debris-free space by 2030 through the Debris Free Space Mission.



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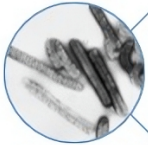


MARBURG VIRUS DISEASE

CONTEXT: Rwanda has confirmed multiple cases of Marburg virus disease in hospitals nationwide, including several fatalities, raising concerns about public health and disease management efforts.

BACKGROUND: Rwanda's Ministry of Health reported Marburg Virus Disease (MVD) cases, including patients in healthcare facilities, with 62 illnesses and 15 deaths across several provinces. The CDC is collaborating with international partners to update case counts and monitor the situation.

Marburg virus disease (MVD) is a severe illness with an average fatality rate of 50%, ranging from 24% to 88% in past outbreaks. Currently, no approved vaccines or antiviral treatments exist, but several are under development. The virus, hosted by fruit bats, spreads to humans through direct contact and human-to-human transmission. Early supportive care is crucial for improving survival rates, and community engagement plays a vital role in controlling outbreaks.



Marburg Virus Disease (MVD): Caused by **Marburg and Ravn viruses**, MVD has a **fatality rate up to 88%** and emerged from outbreaks since 1967 linked to African green monkeys.



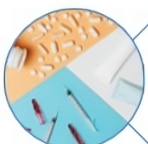
Transmission of Marburg Virus Disease: MVD spreads from **Rousettus bats to humans** and through direct contact with infected **bodily fluids, surfaces, and during burial ceremonies**.



Symptoms of Marburg Virus Disease: MVD symptoms include **high fever, severe headache, diarrhoea, haemorrhagic manifestations**, and potential central nervous system involvement, often leading to **death within 8-9 days**.



Diagnosis of Marburg Virus Disease: MVD is confirmed through **ELISA, antigen detection, RT-PCR, and virus isolation**; samples pose biohazard risks and require maximum containment during testing.



Treatment: MVD, with a **50% average fatality rate**, has no approved vaccines or treatments; early supportive care enhances survival, while community engagement is crucial for outbreak control.

TDP1: CANCER TREATMENT

CONTEXT: Scientists have discovered a promising cancer treatment target by activating the DNA repair enzyme TDP1, indicating a potential combination therapy for patients resistant to existing cancer treatments.

BACKGROUND: Researchers at the Indian Association for the Cultivation of Science in Kolkata have identified a new target in human breast cancer cells that regulates DNA repair during cell division, potentially paving the way for innovative cancer therapies.

CDK1 and TDP1: Targeting DNA Repair Mechanisms in Cancer Therapy

- **TDP1 Role:** TDP1 repairs **drug-induced trapped Top1** during DNA replication's S phase; its function in the mitotic phase was previously unknown.
- **CDK1 Regulation:** CDK1, a key mitotic kinase, phosphorylates TDP1, **enhancing its ability to resolve Top1-DNA** adducts and facilitating efficient DNA repair.
- **Phosphorylation Importance:** The phosphorylation

of TDP1 by CDK1 is crucial for DNA repair during cell division, **allowing cancer cells to survive Top1-targeted chemotherapy**.

- **Combination Therapy:** Using CDK1 inhibitors, like avotaciclub and alvocidib, alongside **Top1 inhibitors disrupts DNA repair**, making it harder for cancer cells to survive.
- **Therapeutic Targets:** Identifying **CDK1 and TDP1 as key players** in DNA repair suggests they are potential targets for new cancer therapies that inhibit repair mechanisms.

Researchers at the Indian Association for the Cultivation of Science have unveiled mechanisms behind cancer cell resistance to Topoisomerase 1-targeting drugs like Camptothecin. Their study, published in The EMBO Journal, identifies key proteins Cyclin-dependent kinase 1 (CDK1) and Tyrosyl-DNA phosphodiesterase 1 (TDP1) as crucial players in DNA repair. TDP1 helps cancer cells survive chemotherapy by repairing drug-induced DNA damage, suggesting new



TELE MANAS

CONTEXT: The National Tele Mental Health Programme, launched by the Government of India on October 10, 2022, celebrates two years of enhancing the nation's mental healthcare system and accessibility.

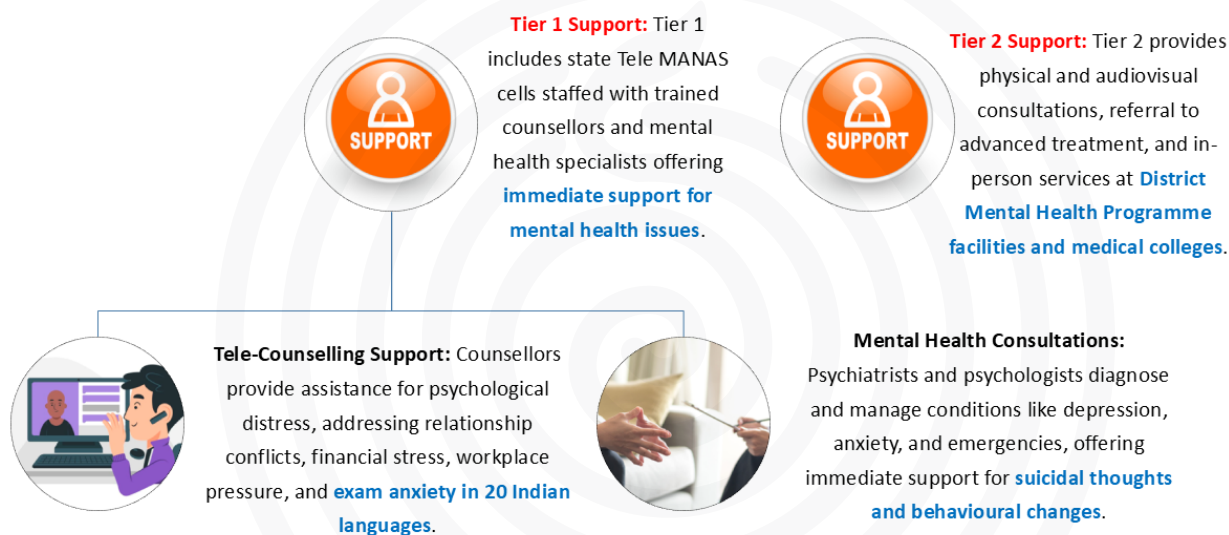
BACKGROUND: Tele MANAS, a nationwide toll-free helpline (14416), has been launched to provide comprehensive mental health services. This digital platform offers telephone-based counseling, psychotherapy, psychiatric consultations, and urgent care referrals, eliminating barriers of distance and cost for individuals in need.

Addressing India's Mental Health Crisis: The Role of Tele MANAS

- **Mental Health Crisis:** India, housing **18% of the global population, faces a significant mental health crisis**, with disorders being the second leading cause of disability.

- **Suicide Statistics:** **Suicide ranks as the third leading cause of death** in many states, highlighting the urgent need for mental health intervention.
- **Treatment Gap:** Despite 15% of adults requiring mental health intervention, **the treatment gap ranges from 70-92%**, leaving millions without care.
- **Tele MANAS Initiative:** Tele MANAS was established to **provide accessible mental healthcare** through counselling, psychotherapy, and referrals via telephone, bridging the treatment gap.
- **Fundamental Right:** Access to mental healthcare is a **fundamental human right**, and Tele MANAS plays a crucial role in ensuring individuals receive necessary support without discrimination.

Structure and Support in Tele MANAS



INDIA'S FIRST DEMONSTRATION FACILITY FOR BIOPOLYMERS

CONTEXT: India's first Demonstration Facility for Biopolymers was inaugurated in Pune, advancing the nation's goal of becoming a global economic leader and promoting a greener, cleaner planet.

BACKGROUND: Praj Industries, a leader in industrial biotechnology, is advancing a circular economy through bio-based solutions. With its Bio-Mobility portfolio in biofuels, the company is strategically expanding into Renewable Chemicals and Materials (RCM) through the Bio-Prism initiative.

now operational at its new demonstration facility. PLA bioplastics offer biodegradable and environmentally friendly alternatives, showing proven functionality in sectors like food packaging, personal care, agriculture, and pharmaceuticals. This innovation represents a significant step towards safer materials for both humans and the environment.

- **Organic Polymers:** Biopolymers are organic polymers **composed of biomolecules** – proteins, carbohydrates, and fats – bonded covalently, either repetitive (polysaccharides, lipids) or nonrepetitive (proteins, polynucleic acids).
- **Biodegradable Nature:** Biopolymers are biodegradable, **breaking down into simple molecules like water, methane, and carbon dioxide**, and have complex structures crucial for specific functions.
- **Diverse Sources:** Biopolymers are sourced from **plants** (rice, wheat), **animals** (pig, cattle), **microbes** (algae, fungi), and **marine life** (corals, fish, shrimp)
- **Versatile Uses:** Biopolymers are applied in **biomedicine** (collagen films, chitosan), **food packaging, edible films, and water purification**, showcasing their multifunctionality.



Praj's Matrix R&D Centre has successfully developed an integrated PLA technology for bioplastics,



'MADE IN INDIA' BULLET TRAINS

CONTEXT: BEML has secured an ₹866.87 crore contract to manufacture 'Made in India' bullet trains, marking a significant step in domestic railway development and manufacturing capabilities.

BACKGROUND: State-owned BEML has secured contract from the Integral Coach Factory in Chennai to design, manufacture, and commission two high-speed train sets, marking the first indigenous effort in this area of railway engineering.

India's Mumbai-Ahmedabad Bullet Train Project: A Leap in Connectivity

India's Mumbai-Ahmedabad High-Speed Rail (MAHSR) project is set to transform intercity travel with its 508-kilometer corridor connecting key cities. Starting from Mumbai's Bandra Kurla Complex, trains will operate at speeds of 320 km/h, enhancing economic integration among Mumbai, Surat, Anand, Vadodara, and Ahmedabad. Strategic stops will maximize accessibility, bringing unprecedented growth and convenience to commuters and businesses along the route.

National High-Speed Rail Corporation Limited (NHSRCL)



Incorporation: NHSRCL was established on February 2016 under the **Companies Act, 2013** for High-Speed Rail Corridor

management.

- **Joint Sector Model:** The company operates as a **Special Purpose Vehicle** with equity participation from the **Central Government and two states**.
- **Technological Marvel:** The High-Speed Rail project represents significant technological advancements in **India's transportation infrastructure**.
- **Quantifiable Benefits:** Expected benefits include **reduced travel time, lower vehicle costs, decreased pollution, and enhanced safety**.
- **Economic Growth:** The project aims to boost **infrastructure development, create jobs**, and contribute positively to India's economy.

SOLAR ASSISTED REEFER TRANSPORTATION WITH HYBRID CONTROLS AND INTELLIGENCE SYSTEM

CONTEXT: NIFTEM-K, under the Ministry of Food Processing Industries, has launched an innovative solution to minimize post-harvest losses in the transportation of perishable food items.

BACKGROUND: The Solar Assisted Reefer Transportation with Hybrid Controls and Intelligence (SARTH I), developed by NIFTEM-K under the Ministry of Food Processing Industries, combines IoT, sensors, and solar power to enhance the transportation of fruits and vegetables, reducing post-harvest losses.

Innovative Features of SARTH I for Perishable Goods Transport

- **Dual Compartments:** SARTH I features two compartments, storing fruits at 0-5°C and vegetables at 7-12°C, optimizing

storage conditions.

- **Temperature Control:** A dedicated compartment can maintain temperatures as low as -10°C for specific produce, extending shelf life.
- **IoT Integration:** Real-time monitoring through sensors measures temperature, humidity, ethylene, and CO2 levels, enabling data-driven quality assessment.
- **Sustainable Features:** The solar-powered air handling unit ensures temperature control during transport halts, enhancing sustainability.
- **Post-Harvest Loss Reduction:** SARTH I aims to revolutionize India's food supply chain by significantly reducing post-harvest losses during transport.



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E-SHRAM – ONE STOP SOLUTION

CONTEXT: Union Minister launched “eShram – One Stop Solution,” a platform aimed at providing comprehensive support and services to India’s labour force.

BACKGROUND: eShram – One Stop Solution offers unorganised workers seamless access to various Social Security Schemes, ensuring streamlined support for those registered on the eShram platform, enhancing welfare and protection for this vulnerable workforce segment.

- **Comprehensive Database:** e-Shram is a National Database of Unorganised Workers (NDUW), launched by the Ministry of Labour & Employment.
- **Welfare Benefits:** The platform facilitates the delivery of welfare benefits and social security measures to unorganised sector workers.
- **Identity Cards:** It provides registered unorganised workers with identity cards, enabling access to government schemes and services.
- **No Income Criteria:** Any unorganised worker, not an income tax payee, can register on the e-Shram platform.
- **Eligibility:** Workers aged 16-59 years are eligible to register on e-Shram, subject to certain conditions.
- **Required Documents:** Registration requires an Aadhaar Number and an Aadhaar-linked mobile number.

Introduction
e-Shram portal was launched on 26th August 2021 for creation of a National Database of Unorganised Workers (NDUW)
A pioneering endeavour by Government of India to support workers in unorganised sector

Who can register on e-Shram?
Unorganised Workers aged between 16-59 years, are eligible to register on the e-Shram portal

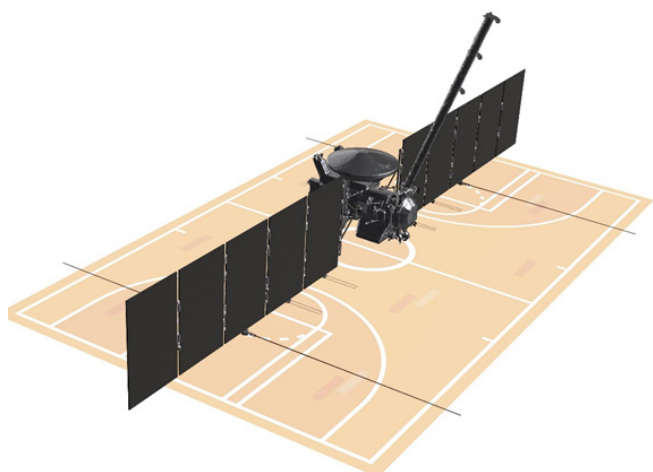
Integration of e-Shram
National Career Service (NCS) for *Employment opportunities*
<https://www.ncs.gov.in>
PM-SYM for *Pension schemes*
<https://maandhan.in>
myScheme for *Guidance on government schemes*
<https://www.myscheme.gov.in>
Skill India Digital Hub (SIDH) for *Skilling & apprenticeship*
<https://www.skillindiadigital.gov.in>
Integration with other schemes underway

e-Shram
Shramev Jayate
NATIONAL DATABASE OF UNORGANISED WORKERS

EUROPA CLIPPER MISSION

CONTEXT: NASA’s largest mission spacecraft, the Europa Clipper, is en route to Jupiter, relying on gravitational assists from Mars and Earth to complete its journey.

BACKGROUND: NASA’s spacecraft, Clipper, launched from Kennedy Space Centre two weeks ago, is en route to Europa, Jupiter’s moon. With a sub-surface ocean, Europa is considered a potential candidate for supporting life, making this mission scientifically significant.



NASA’s Largest Planetary Mission Spacecraft

NASA’s Europa Clipper, the largest spacecraft for a planetary mission, features massive solar arrays and radar antennas. Designed to operate in Jupiter’s distant system, it spans over 100 feet with its solar arrays and stands 16 feet tall. Weighing 7,145 pounds without propellant, its large arrays ensure sufficient power as it explores Europa, one of Jupiter’s moons.

Europa Clipper Mission: Exploring Jupiter’s Moon for Signs of Life

- **Main Goal:** Europa Clipper aims to explore whether Jupiter’s moon, Europa, has subsurface environments capable of supporting life.
- **Science Objectives:** The mission focuses on studying Europa’s ice shell, the ocean beneath, its composition, and geology.
- **Flyby Exploration:** The spacecraft will perform nearly 50 close flybys, gathering detailed data from as close as 16 miles above Europa’s surface.
- **Global Scan:** Each flyby targets different areas, allowing the mission to scan nearly the entire moon.
- **Astro biological Potential:** Detailed exploration will help scientists assess Europa’s potential as a habitable world beyond Earth.

A close-up photograph of a person's hands clasped together, wearing a dark blue suit jacket. The background is a solid, lighter blue color. The text 'CSAT' is overlaid in the center in a large, white, bold, sans-serif font.

CSAT



CSAT: ENGLISH COMPREHENSION



CSAT PREPARATION ENGLISH COMPREHENSION: PREVIOUS YEARS PAPER ANALYSIS & KEY TAKEAWAYS

Since the CSAT was introduced in the year 2011, the number of questions based on comprehension in Paper II has been steadily high and no candidate can escape attempting at least few of the passages

The range and complexity of the passages has also undergone a visible change and so has the variety of questions. Instead of writing a didactic 'How to attempt comprehension passages' blog we have taken up the passages that appeared in CSP-2017, Paper II and show you first-hand how you can attempt the passages with accuracy. The 2017 CSP Paper II was a quintessential paper encompassing passages from a multitude of topics

But before that have a look at some of the numbers:

Now we are all set to take up the passages and try our hands at some reverse engineering:

[Passage 1] What climate change will undeniably do is cause of amplify events that hasten the reduction of resources. Competition over these diminishing resources would ensue in the form of political or even violent conflict. Resource based conflicts have rarely been overt and are thus difficult to isolate. Instead they take on veneers that appear more politically palatable. Conflicts over resources like water are often cloaked in the guise of identity or ideology.

What does the above passage imply?

- Resource-based conflicts are always politically motivated.
- There are no political solutions to resolve environmental and resource-based conflicts.
- Environmental issues contribute to resource stresses and political conflicts
- Political conflicts based on identity or ideology cannot be resolved.

Solution:

If we sum up the passage in our language it basically says that climate change will lead to resource crunch, this crunch would lead to conflicts and that many identity or ideology based conflicts are in fact conflicts engenders by resource scarcity. Now let us evaluate each option:

- Resource-based conflicts are always politically motivated – The passage, in fact, contends just the opposite i.e. many politically palatable conflicts are, in truth, resource-based...OUT
- There are no political solutions to resolve environmental and resource-based conflicts...The passage is talking about the problem and not the solution and as such is not asserting whether there can be any political situation to the looming crisis...OUT
- Environmental issues contribute to resource stresses and political conflicts...**This is exactly how we summed-up the passage and is indeed the needed implication...**ANSWER**
- Political conflicts based on identity or ideology cannot be resolved.....The passage is not about whether and how political conflicts can be resolved...OUT

[Passage 2] The man who is perpetually hesitating which of the two things he will do first, will do neither. The man who resolves, but suffers his resolution to be changed by the first counter-suggestion of a friend – who fluctuates from opinion

to opinion and veers from plan to plan-can never accomplish anything. He will at best be stationary and probably retrograde in all. It is only the man who first consults wisely, then resolves firmly and then executes his purpose with inflexible perseverance, undismayed by those petty difficulties which daunt a weaker spirit – that can advance to eminence in any line.

The keynote that seems to be emerging from the passage is that

- we should first consult wisely and then resolve firmly
- we should reject suggestions of friends and remain unchanged
- we should always remain broad-minded
- we should be resolute and achievement-oriented

Solution:

Again summing-up the passage – we should take wise counsel, then take a resolution and stand our ground. If we keep vacillating we will never reach anywhere.

Now let us evaluate the options:

- we should first consult wisely and then resolve firmly...** YES, it is a contender for answer choice but let us go on with other options first.
- we should reject suggestions of friends and remain unchanged....The passage is about our ability to stay focused and not about rejecting the suggestions of friends. In fact rejecting a suggestion just for the sake of it might be counter-productive as it may be a wise suggestion.
- we should always remain broad-minded.....It is not really clear what the option means by being 'broad-minded' so this option can be avoided at this stage.
- we should be resolute and achievement-oriented....YES, this is another contender for the answer choice and but compared with option (a), we see that what option (a) says is stated very clearly in the passage and thus it should be preferred over option (d).

Hence option (a) should be marked as answer choice as the most appropriate among the options given.

[Passage 3] During the summer in the Arctic Ocean, sea ice has been melting earlier and faster, and the winter freeze has been coming later. In the last three decades, the extent of summer ice has declined by about 30 per cent. The lengthening period of summer melt threatens to undermine the whole Arctic food web, atop which stand polar bears.

Which among the following is the most crucial message conveyed by the above passage?

- Climate change has caused Arctic summer to be short but temperature to be high
- Polar bears can be shifted to the South Pole to ensure their survival
- Without the presence of polar bears, the food chains in Arctic region will disappear
- Climate change poses a threat to the survival of polar bears

Solution:

The passage asks for the most crucial message. As we can see that the passage goes on to lament the conditions



in the Arctic and closes the passage with the assertion that these conditions threaten the food chain atop which sits the polar bear. Basically the passage was a built-up to drive home the point that polar bears are at risk due to conditions that Arctic now faces. Now let us evaluate the options:

- Climate change has caused Arctic summer to be short but temperature to be high...The passage does talks about the havoc that climate change is wreaking in the Arctic region but that is not the most crucial message. The whole revelation about increasing melt and delayed winter freeze is to drive home the point of its effect on the food chain in Arctic and thus this, in itself, is not the most crucial message of the passage.....OUT
- Polar bears can be shifted to the South Pole to ensure their survival.....This is one-of-a-kind solution for the survival of the Polar bears but this is not what the passage proffers. The passage is not even discussing any solution, plausible or adventurous.....OUT
- Without the presence of polar bears, the food chains in Arctic region will disappear....Again the passage is not discussing the effect of presence or absence of Polar bear on the Arctic food chain.....OUT
- Climate change poses a threat to the survival of polar bears....**This is the most plausible among the options given that qualifies as the most crucial message of the passage as it syncs with what the passage eventually leads to.....ANSWER

[Passage 4] Why do people prefer open defecation and not want toilets or, if they have them, only use them sometimes? Recent research has shown two critical elements: ideas of purity and pollution, and not wanting pits or septic tanks to fill because they have to be emptied. These are the issues that nobody wants to talk about, but if we want to eradicate the practice of open defecation, they have to be confronted and dealt properly.

Which among the following is the most crucial message conveyed by the above passage?

- The ideas of purity and pollutions are so deep-rooted that they cannot be removed from the minds of the people
- People have to perceive toilet use and pit-emptying as clean and not polluting
- People cannot change their old habits
- People have neither civic sense nor sense of privacy

Solution:

Let us evaluate the options:

- The ideas of purity and pollution are so deep-rooted that they cannot be removed from the minds of the people.... If the passage were to suggest that ideas of purity and pollution, arguably the reason behind people's preference for open defecation, are so entrenched that they cannot be altered then it shall not suggest remedy to bring out behavioral changes in people.....OUT
- People have to perceive toilet use and pit-emptying as clean and not polluting**This is indeed the message of the passage that we have being about a change in the perception of the people and make them see toilet use and pit-emptying as clean.....ANSWER
- People cannot change their old habits.....If the passage meant that people cannot change their old habits it

would not go on to suggest that we should counter the people's perceived notions to bring about a change in their preference for open defecation...OUT

- People have neither civic sense nor sense of privacy.....
The passage is not a commentary on the civic sense of the people and is rather in the nature of trying to figure out the reason behind the preference for open defecation.....
OUT

[Passage 5] In the last two decades, the world's gross domestic product (GDP) has increased 50 percent, whereas inclusive wealth has increased by a mere 6 percent. In recent decades, GDP-driven economic performance, has only harmed inclusive wealth like human capital; and natural capital like forests, land and water. While the world's human capital which stands at 57 percent of total inclusive wealth grew by only 8 percent, the natural which is 23 percent of total inclusive wealth declined by 30 per cent worldwide in the last two decades.

Which of the following is the most crucial inference from the above passage?

- More emphasis should be laid on the development of natural capital
- The growth driven by GDP only is neither desirable nor sustainable
- The economic performance of the countries of the world is not satisfactory
- The world needs more human capital under the present circumstances

Solution:

Let us evaluate the options for the crucial inference of the passage. But before that, let us sum-up the passage: GDP driven growth – inequity – harming inclusive wealth. Now let us get back at the options:

- More emphasis should be laid on the development of natural capital.....Where is the passage making any such suggestion?....OUT
- The growth driven by GDP only is neither desirable nor sustainable.....**This can be inferred from the passage as the passage mentions that GDP driven growth is harming inclusive wealth like human and natural capital. And thus we can infer that only GDP driven growth is undesirable....
ANSWER
- The economic performance of the countries of the world is not satisfactory....The passage says GDP grew by 50 percent. If that is not satisfactory then what is?....OUT
- The world needs more human capital under the present circumstances...Human capital already stands at 57 percent and there is no suggestion in the passage that we need any more of it.....OUT

[Passage 6] By 2020, when the global economy is expected to run short of 56 million young people, India, with its youth surplus of 47 million, could fill the gap. It is in this context that labour reforms are often cited as the way to unlock double-digit growth in India. In 2014, India's labour force was estimated to be about 40 per cent of the population, but 93 per cent of this force was in unorganized sector. Over the last decade, the compound annual growth rate (CAGR) of employment has slowed to 0.5 per cent, with about 14 million jobs created during last year when the labour force increased by about 15



million.

Which of the following is the most rational inference from the above passage?

- India must control its population growth so as to reduce its unemployment rate
- Labour reforms are required in India to make optimum use of its vast labour force productively
- India is poised to achieve the double-digit growth very soon
- India is capable of supplying skilled young people to oil countries

Solutions:

The passage, in our words, can be re-written as – a shortage of labour force is imminent and if India wants to tap into this opportunity with its young labour force, labour reforms are a necessity. Everything else is customary paraphernalia to underscore this suggestion.

Now let us evaluate the options and check which one comes closest to our understanding of the passage:

- India must control its population growth so as to reduce its unemployment rate...Passage is about labour reforms and not population control.....OUT
- Labour reforms are required in India to make optimum use of its vast labour force productively...**This is what gels well with our understanding of the passage...
ANSWER
- India is poised to achieve the double-digit growth very soon.....Passage suggests that India can achieve double-digit growth if we take care of labour reforms and not that such growth is automatic and imminent.....OUT
- India is capable of supplying skilled young people to oil countries.....Supplying young people to other countries? And oil countries in specific??.....OUT

[Passage 7] The very first lesson that should be taught to us when are old enough to understand it, is that complete freedom from the obligation to work is unnatural, and ought to be illegal, as we can escape our share of the burden of work only by throwing it on someone else's shoulders. Nature ordains that the human race shall perish of famine if it stops working. We cannot escape from this tyranny. The question we have to settle is how much leisure we can afford to allow ourselves.

The main idea of the passage is that

- it is essential for human beings to work
- there should be a balance between work and leisure
- working is a tyranny which we to face
- human's understanding of the nature of work is essential

Solution:

As we understand it, the passage suggests that we should not succumb to ergophobia (aka abnormal fear or aversion to work). We have to ensure that we maintain a healthy balance between work and leisure. And that work-leisure balance is the main idea of the passage is corroborated by the last statement which ends the passage by throwing a challenge to identify how much leisure can be allowed. Now let us evaluate the options:

- it is essential for human beings to work...YES, this is an answer-contender
- there should be a balance between work and leisure.....**

YES, again an answer-contender. Rather a more potent answer contender as the passage ends with a call to limit leisure to healthy proportion.

- working is a tyranny which we to face....The passage has used nature's tyranny as a simile to drive home the point that we must work and this is not the main idea of the passage.. OUT
- human's understanding of the nature of work is essential... The passage is not about the understanding of nature of work but about its necessity...OUT

Thus between option (a) and option (b), option (b) seems to be more appropriate as it combines both leisure and work, the two themes touched upon in the passage.

[Passage 8] There is no harm in cultivating habits so long as they are not injurious. Indeed, most of us are little more than bundle of habits. Take away our habits and the residuum would hardly be worth bothering about. We could not get on without them. They simplify the mechanism of life. They enable us to do a multitude of things automatically, which, if we had to give fresh and original thought to them each time, would make existence an impossible confusion.

The author suggests that habits

- tend to make our lives difficult
- add precision to our lives
- make it easier for us to live
- tend to mechanize our lives

Solution:

Let us evaluate the options:

- tend to make our lives difficult...The passage suggests just the opposite...OUT
- add precision to our lives.....The passage talks about making our lives easy and not precise...OUT
- make it easier for us to live...**This is definitely suggested in the passage in the statement, They simplify the mechanism of life.....YES...but before locking it as answer we will also look at option d
- tend to mechanize our lives...The passage does mentions that habits enable us to handle several chorus automatically but it does not suggest that habits make our life mechanical which is sort of a pessimistic view of the author's view and the passage does not seem to be a pessimistic take on habits....OUT

[Passage 9] We have hard work ahead. There is no resting for any of us till we redeem our pledge in full, till we make all the people of India what destiny intends them to be. We are citizens of a great country, on the verge of bold advance, and we have to live up to that high standard. All of us, to whatever religion we may belong, are equally the children of India with, equal rights, privileges and obligations. We cannot encourage communalism or narrow-mindedness, for no nation can be great whose people are narrow in thought or action.

The challenge the author of the above passage throws to the public is to achieve

- a high standard of living, progress and privileges
- equal privileges, fulfilment of destiny and political tolerance
- spirit of adventure and economic parity
- hard work, brotherhood and national unity



Solution:

In first glance, the passage seems to be some kind of exhortation by the author to work for the achievement of the high ideals. Now let us evaluate the options:

- a. a high standard of living, progress and privileges...The tone and tenor of the exhortation suggests that is not about standard of living but is about greater things...OUT
- b. equal privileges, fulfilment of destiny and political tolerance.....privilege and political tolerance is not what the challenge is about. The author does use the word destiny but the usage appears to be more figurative in the sense that people should achieve what they are capable of...OUT
- c. spirit of adventure and economic parity....spirit of adventure? The passage does not exhort people to become adventurous...OUT
- d. **hard work, brotherhood and national unity**....This gels most with the tone of the passage...ANSWER

[Passage 10] “The individual, according to Rousseau, puts his person and all his power in common under the supreme direction of the General Will and in our corporate capacity we receive each member as an indivisible part of the whole.”

In the light of the above passage, the nature of General Will is best described as

- a. the sum total of the private wills of the individuals
- b. what is articulated by the elected representatives of the individuals
- c. the collective good as distinct from private wills of the individuals
- d. the material interests of the community

Solution:

In common parlance, the passage means, individuals are part of a whole which is guided by the 'General Will' or, in more general terms, by the collective good that overrides the individual good. Hence the answer option is option (c).

(c) the collective good as distinct from private wills of the individuals

[Passage 11] In a democratic State, where a high degree of Political maturity of the people obtains, the conflict between the will of the sovereign law-making body and the organized will of the people seldom occurs.

What does the above passage imply?

- a. In a democracy, force is the main phenomenon in the actual exercise of sovereignty
- b. In a mature democracy, force to a great extent is the main phenomenon in the actual exercise of sovereignty
- c. In a mature democracy, use of force is irrelevant in the actual exercise of sovereignty
- d. In a mature democracy, force is narrowed down to a marginal phenomenon in the actual exercise of sovereignty

Solution:

A tangential look at the option leads to the consternation about what is the relevance of words like 'force' and 'sovereignty' which find no mention at all in the passage. But if we read the passage again and try to connect it with the options, we realize that the passage is really about the fact that conflict seldom occurs in mature democracy and the use of 'force' is minimal and yet again the force is not obliterated

completely. Now under the aegis of our such mature understanding of the passage let us evaluate the options:

- a. In a democracy, force is the main phenomenon in the actual exercise of sovereignty...force as main phenomenon? OUT
- b. In a mature democracy, force to a great extent is the main phenomenon in the actual exercise of sovereignty force to great extent? OUT
- c. In a mature democracy, use of force is irrelevant in the actual exercise of sovereignty force is irrelevant?.OUT
- d. **In a mature democracy, force is narrowed down to a marginal phenomenon in the actual exercise of sovereignty** force is there but is minimal ANSWER

[Passage 12] A successful democracy depends upon widespread interest and participation in politics, in which voting is an essential part. To deliberately refrain from taking such an interest, and from voting, is a kind of implied anarchy, it is to refuse one's political responsibility while enjoying the benefits of a free political society.

This passage relates to

- a. duty to vote
- b. right to vote
- c. freedom to vote
- d. right to participate in politics

Solution:

The passage is in the form of a commentary on the people who take democracy for granted and shy away from their responsibility and duty to vote to ensure a healthy vibrant democracy. Here there is no need to evaluate each option separately and the answer is clearly option (a).

(a) duty to vote ANSWER

[Passage 13] In a free country, the man who reaches the position of leader is usually one of outstanding, character and ability. Moreover, it is usually possible to foresee that he will reach such a position, since early in life one can see his qualities of character. But this is not always true in the case of a dictator; often he reaches his position of power through chance, very often through the unhappy state of his country.

The passage seems to suggest that

- a. a leader foresees his future position
- b. a leader is chosen only by a free country
- c. a leader must see that his country is free from despair
- d. despair in a country sometimes leads to dictatorship

Solution:

Our understanding of the passage: leader show signs from childhood while dictators may be incidental. Now lets us evaluate the options:

- a. a leader foresees his future position The passage does not talk about the clairvoyant skills of a leader OUT
- b. a leader is chosen only by a free country The passage is not discussing who chooses a leader and who chooses a dictator OUT
- c. a leader must see that his country is free from despair .The passage is not about what a leader should or should not do OUT
- d. **despair in a country sometimes leads to dictatorship** .This gels really well with the passage which suggests that dictatorship is often result of despairing conditions of a



country ANSWER

[Passage 14] The greatest blessing that technological progress has in store for mankind is not, of course, an accumulation of material possessions. The amount of these that can be effectively enjoyed by one individual in one lifetime is not great. But there is not the same narrow limit to the possibilities of the enjoyment of leisure. The gift of leisure may be abused by people who have had no experience of making use of it. Yet the creative use of leisure by a minority in societies has been the mainspring of all human progress beyond the primitive level.

With reference to the above passage, the following assumptions have been made:

1. People always see the leisure time as a gift and use it for acquiring more material possessions.
2. Use of leisure by some people to produce new and original things has been the chief source of human progress.

Which of these assumptions is/are valid?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Solution:

Our reading of the passage is : material possessions is not everything as no one can have every material possession and still enjoy it. But the possibility to enjoy leisure is unbounded. And during this leisure time, a minuscule population gets sucked up in creative and original pursuits that engender human advancement.

Now if we evaluate the two assumptions we can see that the word 'always' makes the assumption one a sweeping generalisation and is thus out.

Assumption 2 is almost verbatim from the passage and is thus valid. So the answer option is (b):

(b) 2 only

[Passage 15] There is more than a modicum of truth in the assertion that "a working knowledge of ancient history is necessary to the intelligent interpretation of current events". But the sage who uttered these words of wisdom might well have added something on the benefits of studying particularly the famous battles of history for the lessons they contain for those of us who lead or aspire to leadership. Such a study will reveal certain qualities and attributes which enabled the winners to win – and certain deficiencies which caused the losers to lose and the student will see that the same pattern recurs consistently, again and again, throughout the centuries. With reference to the above passage, the following assumptions have been made:

1. A study of the famous battles in history would help us understand the modern warfare.
2. Studying the history is essential for anyone who aspires to be a leader.

Which of these assumptions is/are valid?

1. 1 only
2. 2 only
3. Both 1 and 2
4. Neither 1 nor 2

Solution:

Here we are evaluating the validity of the assumptions made. Now, see that eventually assumptions may or may not come out to be true but we need to only check whether we can make these assumptions from the passage or not without bothering about their eventual outcome. For example, if we consider the second assumption, we cannot discard it by countering it by claiming that it is not true that every leader must study history but we can certainly say from the passage that for an aspiring leader a study of history is essential! Did that make sense? I hope it did.

As for the first assumption, the passage does not make out a case suggesting that studying past battle shall help us understand modern warfare.

Hence answer is

(b) 2 only

[Passage 16] Disruption of traditional institutions, identifications and loyalties is likely to lead to ambivalent situations. It is possible that some people may renew their identification with traditional groups whereas others align themselves with new groups and symbols emergent from processes of political development. In addition, political development tends to foster group awareness of a variety of class, tribe, region, clan, language, religion, occupation and others.

Which one of the following is the best explanation of the above passage?

- a. Political development is not a unilinear process for it involves both growth and decay
- b. Traditional societies succeed in resisting positive aspects of political development
- c. It is impossible for traditional societies to break away from lingering loyalties
- d. Sustenance of traditional loyalties is conducive to political development

Solutions:

Alignment along traditional and new groups may lead to ambivalent situations. Political development creates new identities along which people may align themselves severing ties with traditional institutions. Now let us evaluate the options:

- a. **Political development is not a unilinear process for it involves both growth and decay** That is not a unilinear process can be made out from the fact that it creates multitude of group awareness. This option is still in race and now let's checkout other options.
- b. Traditional societies succeed in resisting positive aspects of political development No, infact people align themselves along new groups and symbols..OUT
- c. It is impossible for traditional societies to break away from lingering loyalties 'Impossible' is too strong a word especially when passage sage people do align with new symbols and groups engendered by political development .OUT
- d. Sustenance of traditional loyalties is conducive to political development The passage does not make any case for continuation of traditional loyalties OUT

Since option (b), (c) and (d) have been ruled out, we can mark option (a) as the answer.



[Passage 17] There has been a significant trend worldwide towards regionalism in government, resulting in a widespread transfer of powers downwards towards regions and communities since 1990s. This process, which involves the creation of new political entities and bodies at a sub-national level and an increase in their content and powers, is known as devolution. Devolution has been characterized as being made up of three factors—political legitimacy, decentralization of authority and decentralization of resources. Political legitimacy here means a mass demand from below for the decentralization process, which is able to create a political force for it to take place. In many cases, decentralization is initiated by the upper tier of government without sufficient political mobilization for it at the grassroots level, and in such cases the decentralization process often does not fulfil its objectives.

Which among the following is the most logical, rational and critical inference that can be made from the above passage?

- Emergence of powerful mass leaders is essential to create sub-national political entities and thus ensure successful devolution and decentralization
- The upper tier of government should impose devolution and decentralization on the regional communities by law or otherwise
- Devolution, to be successful, requires a democracy in which there is free expression of the will of the people at lower level and their active participation at the grassroots level
- For devolution to take place, a strong feeling of regionalism in the masses is essential

Solution:

Our understanding of passage: decentralization due to grass-root demand seems good but that which is initiated in the upper levels may miss its target. Now let us evaluate the options:

- Emergence of powerful mass leaders is essential to create sub-national political entities and thus ensure successful devolution and decentralization .The passage is not talking about the emergence of strong leaders to create sub-national entities thus ensuring devolution OUT
- The upper tier of government should impose devolution and decentralization on the regional communities by law or otherwise .The last statement of the passage counters this option by stating that the devolution initiated by upper tier may miss its objective..OUT
- Devolution, to be successful, requires a democracy in which there is free expression of the will of the people at lower level and their active participation at the grassroots level** The passage suggests that devolution engendered by mass demand from below has political legitimacy and for it can be inferred that it can happen when people at lower level should be able to freely express themselves and participate actively in the process .ANSWER
- For devolution to take place, a strong feeling of regionalism in the masses is essential The passage suggests that devolution can happen if initiated by upper tiers as well, even though it may not work as intended, and thus strong regional feeling is not a prerequisite for devolution OUT

[Passage 18] We live in digital times. The digital is not just something we use strategically and specifically to do a few tasks. Our very perception of who we are, how we connect to the world around us, and the ways in which we define our domains of life, labour and language are hugely structured by the digital technologies. The digital is everywhere and; like air, invisible. We live within digital systems, we live with intimate gadgets, we interact through digital media, and the very presence and imagination of the digital has dramatically restructured our lives. The digital, far from being a tool, is a condition and context that defines the shapes and boundaries of our understanding of the self, the society, and the structure of governance.

Which among the following is the most logical and essential message conveyed by the above passage?

- All problems of governance can be solved by using digital technologies
- Speaking of digital technologies is speaking of our life and living
- Our creativity and imagination cannot be expressed without digital media
- Use of digital systems is imperative for the existence of mankind in future

Solution:

The passage is about the omnipresence of digital world. That it has come to shape the context that defines our understanding i.e. it may appear invisible but has become an integral part of our existence. Now let us evaluate the options:

- All problems of governance can be solved by using digital technologies .'All' ? Sweeping statement. Nevertheless, the passage is about the permanency of the digital world and not about how digital tech can solve governance problems .OUT
- Speaking of digital technologies is speaking of our life and living** YES..when we talk of life and living we unconsciously also talk of digital techs which have so smoothly entered our lives that we do not even notice their existence..but let us evaluate remaining options first.
- Our creativity and imagination cannot be expressed without digital media..Again sweeping statement! We may have to live with digital tech all around us but that does not mean our creativity cannot be expressed without digital means. What about our creativity on the walls of the archaeological sites that we so lovingly adorn (aka desecrate) with our drawings? .OUT
- Use of digital systems is imperative for the existence of mankind in future .That digital tech has become part of our daily living does not mean we cannot survive without it i.e. it is not imperative! OUT

In the light of above, the answer choice is option (b)

[Passage 19] The IMF has pointed out that the fast growing economies of Asia face the risk of falling into 'middle-income trap'. It means that average incomes in these countries, which till now have been growing rapidly, will stop growing beyond a point—a point that is well short of incomes in the developed West. The IMF identifies a number of causes of middle-income trap—none of which is surprising—from infrastructure to weak institutions, to less than favourable macroeconomic conditions. But the broad, overall cause, says IMF, is a collapse



in the growth of productivity.

Which among the following is the most logical, rational and critical inference that can be made from the above passage?

- Once a country reaches middle-income stage, it runs the risk of falling productivity which leads to stagnant incomes
- Falling into middle-income trap is a general characteristic of fast growing economies
- There is no hope at all for emerging Asian economies to sustain the growth momentum
- As regards growth of productivity, the performance of Asian economies is not satisfactory

Solution:

Our understanding : Asian economies – risk of income being plateau out – due to collapse of productivity growth. Now let us evaluate the options:

- 1. Once a country reaches middle-income stage, it runs the risk of falling productivity which leads to stagnant incomes** Yes, the passage is about the middle-income trap phenomenon which befalls the growing economies if corrective action is not taken. So this is an answer-candidate. But before marking it as the final answer let us evaluate other options.
- Falling into middle-income trap is a general characteristic of fast growing economies .No, the passage says that economies of Asia face this risk and not that it is a general characteristic of fast growing economies...OUT
- There is no hope at all for emerging Asian economies to sustain the growth momentum....'no hope' ? Again very strong uncorroborated statement. Of course there is light at the end of the tunnel by boosting productivity growth... OUT
- As regards growth of productivity, the performance of Asian economies is not satisfactory The passage is making an assertion based on past experience that fast growing economies are facing a risk of falling into middle-income trap. The passage is nowhere commenting that these economies are not performing well. In fact, it says that they are fast emerging economies .OUT

Thus based on above elimination of options (b), (c) and (d), we get option (a) as the answer.

[Passage 20] An innovative India will be inclusive as well as technologically advanced, improving the lives of all Indians. Innovation and R&D can mitigate increases in social inequality and relieve the pressures created by rapid urbanization. The growing divergence in productivity between agriculture and knowledge-intensive manufacturing and services threatens to increase income inequality. By encouraging India's R&D labs and universities to focus on the needs of poor people and by improving the ability of informal firms to absorb knowledge, an innovation and research agenda can counter this effect. Inclusive innovation can lower the cost of goods and services and create income – earning opportunities for the poor people.

Which among the following is the most logical and rational assumption that can be made from the above passage?

- Innovation and R&D is the only way to reduce rural to urban migration
- Every rapidly growing country needs to minimize the divergence between productivity in agriculture and other sectors

- Inclusive innovation and R&D can help create an egalitarian society
- Rapid urbanization takes place only when a country's economic growth is rapid

Solution:

Our understanding of the passage: Invest in R&D as it can stem inequality. Now let us evaluate the options:

- Innovation and R&D is the only way to reduce rural to urban migration....R&D is essential as made out by the passage but that it is the 'only way' has not been mentioned anywhere in the passage...OUT
- Every rapidly growing country needs to minimize the divergence between productivity in agriculture and other sectors...The passage is concerned about R&D and inequality and not about agriculture and other sectors, so it cannot be most logical assumption...OUT
- Inclusive innovation and R&D can help create an egalitarian society...**Yes, this is the case that the passage intends to make. It claims that inclusive innovation and R&D can reduce inequality and create a just society...now let's check out last option before finalizing this as answer choice.
- Rapid urbanization takes place only when a country's economic growth is rapid...Urbanization is not even what the passage is about. Only reference to is while claiming that R&D can tackle the issues arising out of rapid urbanization...OUT

Thus our final answer is option (c).

[Passage 21] Climate change is likely to expose a large number of people to increasing environmental risks forcing them to migrate. The international community is yet to recognize this new category of migrants. There is no consensus on the definition and status of climate refugees owing to the distinct meaning the term refugees carry under international laws. There are still gaps in understanding how climate change will work as the root cause of migration. Even if there is recognition of climate refugees, who is going to provide protection? More emphasis has been given to international migration due to climate change. But there is a need to recognize the migration of such people within the countries also so that their problems can be addressed properly.

Which of the following is the most rational inference from the above passage?

- The world will not be able to cope with large scale migration of climate refugees
- We must find the ways and means to stop further climate change
- Climate change will be the most important reason for the migration of people in the future
- Relation between climate change and migration is not yet properly understood

Solution:

Our understanding of the passage: The passage is essentially about the environmental refugees. The passage suggests that such categorization of migrants is still not commonplace as it lacks a consensus definition and the intra-country migration is to be recognised as well. And even when such migration is recognised who will provide for the refugees? Now let us evaluate the options:



Now let us evaluate the options:

- The world will not be able to cope with large scale migration of climate refugees...The passage does not mention if the world would be able to cope or not..OUT
- We must find the ways and means to stop further climate change...Well indeed we must find ways but this passage is about environmental refugees and how to provide for them and not about finding ways to contain climate change...OUT
- Climate change will be the most important reason for the migration of people in the future....That climate change will lead to migration is true as per passage but passage does not vouch for the fact it shall be the 'most important' factor for migration of people...OUT
- Relation between climate change and migration is not yet properly understood** ...Yes, it is indeed the case as this is the reason why the world has been unable to recognize and define this category of migrants properly.
ANSWER

[Passage 22] Many farmers use synthetic pesticides to kill infesting insects. The consumption of pesticides in some of the developed countries is touching 3000 grams/hectare. Unfortunately, there are reports that these compounds possess inherent toxicities that endanger the health of the farm operators, consumers and the environment. Synthetic pesticides are generally persistent in environment. Entering in food chain they destroy the microbial diversity and cause ecological imbalance. Their indiscriminate use has resulted in development of resistance among insects to insecticides, upsetting of balance in nature and resurgence of treated populations. Natural pest control using the botanical pesticides is safer to the user and the environment because they break down into harmless compounds within hours or days in the presence of sunlight. Plants with pesticidal properties have been in nature for millions of years without any ill or adverse effects on the ecosystem. They are easily decomposed by many microbes common in most soil. They help in the maintenance of biological diversity, of predators and the reduction of environmental contamination and human health hazards. Botanical pesticides formulated from plants are biodegradable and their use in crop protection is a practical sustainable alternative.

On the basis of the above passage, the following assumptions have been made:

- Synthetic pesticides should never be used in modern agriculture.
- One of the aims of sustainable agriculture is to ensure minimal ecological imbalance.
- Botanical pesticides are more effective as compared to synthetic pesticides.

Which of the assumptions given above is/are correct?

- 1 and 2 only
- 2 only
- 1 and 3 only
- 1, 2 and 3

Solution:

Our summary of the passage: The passage is about synthetic Vs botanical. And we underline the properties, this is what we get –

Synthetic: toxic, enter food chain, persistent, destroy diversity, cause imbalance, insects develop resistance

Botanical: in use for millions of years, break down into harmless compounds in presence of sunlight, no ill/adverse effects on ecosystems, maintain biodiversity, easily broken down by microbes, reduced contamination and health hazard, practical sustainable alternative.

- Synthetic pesticides should never be used in modern agriculture....Nowhere mentioned
- One of the aims of sustainable agriculture is to ensure minimal ecological imbalance...True
- Botanical pesticides are more effective as compared to synthetic pesticides...No comparison of respective efficacies.

Since only the second statement is correct the answer is option (b).

(b) 2 only

Which of the following statements is/are correct regarding bio-pesticides?

- They are not hazardous to human health.
- They are persistent in environment.
- They are essential to maintain the biodiversity of any ecosystem.

Select the correct answer using the code given below.

- 1 only
- 1 and 2 only
- 1 and 3 only
- 1, 2 and 3

Let us look at the given statements:

- They are not hazardous to human health...Yes, as per the passage
- They are persistent in environment....No, they breakdown fast
- They are essential to maintain the biodiversity of any ecosystem...They maintain biodiversity as mentioned in the passage but passage nowhere claims that they are 'essential' for maintaining the biodiversity.

Since only statement 1 is correct answer is option (a):

(a) 1 only

[Passage 23] An air quality index (AQI) is a way to combine measurements of multiple air pollutants into a single number or rating. This index is ideally kept constantly updated and available in different places. The AQI is most useful when lots of pollution data are being gathered and when pollution levels are normally, but not always, low. In such cases, if pollution levels spike for a few days, the public can quickly take preventive action (like staying indoors) in response to an air quality warning. Unfortunately, that is not urban India. Pollution levels in many large Indian cities are so high that they remain well above any health or regulatory standard for large part of the year. If our index stays in the Red/Dangerous' region day after day, there is not much any one can do, other than getting used to ignoring it.

Which among the following is the most logical and rational inference that can be made from the above passage?

- Our governments are not responsible enough to keep our cities pollution free
- There is absolutely no need for air quality indices in our country



- c. Air quality index is not helpful to the residents of many of our large cities
- d. In every city, public awareness about pollution problems should increase

Solution:

Our take on the passage – AQI works well when levels are low because in that case spikes are easily identifiable. However it is not much useful in Indian cities as levels are perpetually high making the indicator redundant. Now let us evaluate the options in fresh air:

- a. Our governments are not responsible enough to keep our cities pollution free...The passage is taking about the pollutions levels and the utility of AQI and not a commentary on the lackadaisical attitude of governments....OUT
- b. There is absolutely no need for air quality indices in our country.....Absolutely no need is tantamount to stretching the argument too far. That it is not working optimally is no reason to cast it aside altogether...OUT
- c. **Air quality index is not helpful to the residents of many of our large cities...**Exactly. This is what the passage says that AQI's utility is under cloud....ANSWER
- d. In every city, public awareness about pollution problems should increase...This is what should happen but this is not what the passage seeks to perpetuate....OUT

[Passage 24] Productive jobs are vital for growth and a good job is the best form of inclusion. More than half of our population depends on agriculture, but the experience of other countries suggests that the number of people dependent on agriculture will have to shrink if per capita incomes in agriculture are to go up substantially. While industry is creating jobs, too many such jobs are low-productivity non-contractual jobs in the unorganized sector, offering low incomes, little protection, and no benefits. Service jobs are relatively of high productivity, but employment growth in services has been slow in recent years.

Which among the following is the most logical and rational inference that can be made from the above passage?

- a. We must create conditions for the faster growth of highly productive service jobs to ensure employment growth and inclusion
- b. We must shift the farm workers to the highly productive manufacturing and service sectors to ensure the economic growth and inclusion
- c. We must create conditions for the faster growth of productive jobs outside of agriculture even while improving the productivity of agriculture
- d. We must emphasize the cultivation of high-yielding hybrid varieties and genetically modified crops to increase the per capita income in agriculture

Solution:

Our take on the passage: people engaged in agriculture should come down in order for agricultural per capita incomes to go up. Jobs created by the industry are mostly low income jobs in unorganized sector. Growth in high productivity service sector is slow.

Let us evaluate the options now and evaluate our productivity to identify the right option:

- a. We must create conditions for the faster growth of highly productive service jobs to ensure employment growth and inclusion.....YES that is a plausible inference from

the passage but before marking it as the answer let us evaluate other options as well.

- b. We must shift the farm workers to the highly productive manufacturing and service sectors to ensure the economic growth and inclusion.....The passage says that manufacturing/ industry sector is not really highly productive and shifting the farm workers (assuming options meant all of the) is not viable method to occasion high growth as where would agriculture go then?...OUT
- c. We must create conditions for the faster growth of productive jobs outside of agriculture even while improving the productivity of agriculture...Another contender for answer choice as everything seems to be right with the option. Comparing it with option (a), this option (a) seems more germane as it talks of jobs and inclusion, something with which the passage opens and hence option (a) is more appropriate inference. Moreover the passage nowhere mentions what should be done with agriculture sector as is mentioned in option (c).
- d. We must emphasize the cultivation of high-yielding hybrid varieties and genetically modified crops to increase the per capita income in agriculture....The passage is not talking about hybrid varieties and modified crops...OUT

[Passage 25] A Landscape-scale approach to land use can encourage greater biodiversity outside protected areas. During hurricane 'Mitch' in 1998, farms using eco agricultural practices suffered 58 percent, 70 percent and 99 percent less damage in Honduras, Nicaragua and Guatemala, respectively, than farms using conventional techniques. In Costa, vegetative windbreaks and fencerows boosted farmers' income from pasture and coffee while also increasing bird diversity. Bee pollination is more effective when agricultural fields are closer to natural or semi natural habitat, a finding that matters because 87 percent of the world's 107 leading crops depend on animal pollinators. In Costa Rica, Nicaragua and Colombia silvo-pastoral systems which integrate trees with pastureland are improving the sustainability of cattle production, and diversifying and increasing farmers' income.

Which among the following is the most logical and rational inference that can be made from the above passage?

- a. Agricultural practices that enhance biodiversity can often increase farm output and reduce the vulnerability to disasters
- b. All the countries of the world should be encouraged to replace ecoagriculture with conventional agriculture
- c. Ecoagriculture should be permitted in protected areas without destroying the biodiversity there
- d. The yield of food crops will be very high if ecoagricultural practices are adopted to cultivate them

Solution:

Our understanding: Eco-agricultural activities are better than conventional activities. Enough examples and figures given to ingrain the idea into our head. Now let us evaluate the options:

- a. **Agricultural practices that enhance biodiversity can often increase farm output and reduce the vulnerability to disasters...**Yes certainly an answer-contender. Now move on to other options.
- b. All the countries of the world should be encouraged to



replace ecoagriculture with conventional agriculture.....No. Just the opposite in fact...OUT

- c. Ecoagriculture should be permitted in protected areas without destroying the biodiversity there....Passage is not making out a case for allowing ecoagricultural activities inside the protected areas...OUT
- d. The yield of food crops will be very high if ecoagricultural practices are adopted to cultivate them....The passage is silent about the yield...OUT

Ruling out the other three options, we are left with option (a) as the most plausible inference from the passage and that is thus the answer option.

[Passage 26] The medium term challenge for Indian manufacturing is to move from lower to higher tech sectors, from lower to higher value-added sectors, and from lower to higher productivity sectors. Medium tech industries are primarily capital intensive and resource processing; and high tech industries are mainly capital and technology intensive. In order to push the share of manufacturing in overall GDP to the projected 25 per cent, Indian manufacturing needs to capture the global market in sectors showing a rising trend in demand. These sectors are largely high technology and capital intensive.

Which among the following is the most logical and rational inference that can be made from the above passage?

1. India's GDP displays high value-added and high productivity levels in medium tech and resource processing industries
2. Promotion of capital and technology intensive manufacturing is not possible in India
3. India should push up the public investments and encourage the private investments in research and development, technology upgradation and skill development
4. India has already gained a great share in global markets in sectors showing a rising trend in demand

Solution:

In our words passage means: manufacturing should move from lower to higher end and that we should make inroads into booming global sectors. Let us evaluate the options now:

- a. India's GDP displays high value-added and high productivity levels in medium tech and resource processing industries...If this were true why would we need to shift from medium to high end?...OUT
- b. Promotion of capital and technology intensive manufacturing is not possible in India...Passage is in the form of what we should do and is not talking about if it is possible to do or not...OUT
- c. **India should push up the public investments and encourage the private investments in research and development, technology upgradation and skill development....**This is what can be inferred from the passage doing this would lead to what the passage seems to suggest...ANSWER
- d. India has already gained a great share in global markets in sectors showing a rising trend in demand...No we have not gained a firm ground in global markets and hence passage suggests that we should make foray into such sectors...OUT

[Passage 27] Over the last decade, Indian agriculture has become more robust with record production of food grains and oilseeds. Increased procurement, consequently, has added huge of food grains in the granaries. India is one of the world's top producers of rice, wheat, milk, fruits and vegetables. India is still home to a quarter of all undernourished people in the world. On an average, almost half of the total expenditure of nearly half of the households is on food.

Which among the following is the most logical corollary to the above passage?

- a. Increasing the efficiency of farm-to-fork value chain is necessary to reduce the poverty and malnutrition
- b. Increasing the agricultural productivity will automatically eliminate the poverty and malnutrition in India
- c. India's agricultural productivity is already great and it is not necessary to increase it further
- d. Allocation of more funds for social welfare and poverty alleviation programmes will ultimately eliminate the poverty and malnutrition in India

Solution:

Before we start evaluating the options let us understand what is meant by 'corollary'. For our purpose it simply means what follows from what is given i.e. which of the given options can follow from the arguments presented in the passage.

Now our take on passage: It presents an irony. Water, water everywhere not a drop to drink. Enough production, enough storage still high levels of hunger.

- a. **Increasing the efficiency of farm-to-fork value chain is necessary to reduce the poverty and malnutrition...YES** this should indeed happen if the arguments of the passage are true. So this is a contender for answer choice. But let us evaluate other options.
- b. Increasing the agricultural productivity will automatically eliminate the poverty and malnutrition in India...The passage is arguing just the opposite. That there is enough productions still malnutrition and hunger and it is not getting eliminated automatically...OUT
- c. India's agricultural productivity is already great and it is not necessary to increase it further...Passage is presenting a case for handling malnutrition and not agricultural production and adjectives likes 'great' are too good to be trusted...OUT
- d. Allocation of more funds for social welfare and poverty alleviation programmes will ultimately eliminate the poverty and malnutrition in India....The passage is trying to relate production and storage with hunger and malnutrition and not discussing welfare programmes...OUT

Thus the only option that fits the bill is option (a) and is the answer.

i

ETHIC





**ETHICS, INTEGRITY &
APTITUDE: CASE STUDIES**



1. **Rajesh Kumar is a senior public servant, with a reputation of honesty and forthrightness, currently posted in the Finance Ministry as Head of the Budget Division. His department is presently busy organising the budgetary support to the states, four of which are due to go to the polls within the financial year.**

This year's annual budget had allotted 78300 crores for the National Housing Scheme (NHS), a centrally sponsored social housing scheme for the weaker sections of society. 775 crores have been drawn for NHS till June. The Ministry of Commerce had long been pursuing a case for setting up a Special Economic Zone (SEZ) in a southern state to boost exports. After two years of detailed discussions between the centre and state, the Union Cabinet approved the project in August. The process was initiated to acquire the necessary land. Eighteen months ago, a leading Public Sector Unit (PSU) had projected the need for setting up a large natural gas processing plant in a northern state for the regional gas grid. The required land is already in possession of the PSU. The gas grid is an essential component of the national energy security strategy. After three rounds of global bidding, the project was allotted to an MNC, M/s XYZ Hydrocarbons. The first tranche of payment to the MNC is scheduled to be made in December. Finance Ministry was asked for a timely allocation of an additional 6000 crores for these two developmental projects. It was decided to recommend re-appropriation of this entire amount from the NHS allocation. The file was forwarded to the Budget Department for their comments and further processing. On studying the case file, Rajesh Kumar realized that this re-appropriation may cause an inordinate delay in the execution of NHS, a project much publicized in the rallies of senior politicians. Correspondingly, the non-availability of finances would cause a financial loss in the SEZ and national embarrassment due to delayed payment in an international project. Rajesh Kumar discussed the matter with his seniors. He was conveyed that this politically sensitive situation needs to be processed immediately. Rajesh Kumar realized that diversion of funds from NHS could raise difficult questions for the government in the Parliament.

Discuss the following with reference to this case:

Ethical issues involved in re-appropriation of funds from a welfare project to the developmental projects.

Given the need for proper utilization of public funds, discuss the options available to Rajesh Kumar. Is resigning a worthy option?

SOLUTION:

Ethical issues involved in re-appropriation of funds from a welfare project to the developmental projects

In this case, several ethical issues are associated with the decision to re-appropriate funds from the National Housing Scheme (NHS), a welfare project, to support two developmental projects—a Special Economic Zone (SEZ) and a gas processing plant. Here are the key ethical issues involved:

1. Conflict between Welfare and Developmental Objectives

The NHS is intended to provide housing for weaker sections of society, addressing basic needs and ensuring

social welfare. Diverting funds from this scheme to support developmental projects prioritizes economic gains over welfare, potentially affecting the lives of many who rely on the scheme for affordable housing.

This creates a conflict in policy objectives: while developmental projects contribute to economic growth, they may not directly benefit those in immediate need of welfare support. The question arises: should immediate welfare needs be compromised for long-term development goals?

2. Equity and Social Justice

The NHS serves a vulnerable population by providing housing, an essential component of social security. Re-appropriating funds away from this project could lead to delays or reduced coverage, thereby disadvantaging these weaker sections. This goes against the principle of equity and social justice, which mandates that government resources should be distributed in a way that benefits those who are most in need. This also raises concerns about whether the government is upholding its commitments to the weaker sections or prioritizing economic projects that might not directly address social disparities.

3. Transparency and Accountability

The decision to divert funds could lead to a lack of transparency regarding the prioritization of budget allocations. The government has made promises to the public regarding the NHS, and diverting funds may be seen as renegeing on these promises.

Accountability is crucial, especially as the NHS has been publicized in political rallies. If the re-appropriation decision is later scrutinized or challenged, the Finance Ministry and the government could face questions in Parliament, which might strain public trust in governmental commitments.

4. Public Perception and Trust

The NHS has garnered public attention and is a political promise. Diverting funds from this scheme could lead to public dissatisfaction, as it may appear that the government is compromising on its commitment to social welfare.

This decision could also affect the credibility of politicians who championed the NHS in rallies, potentially leading to reputational damage and a loss of trust among the public.

5. Moral Responsibility of the Decision-Makers

As a senior public servant with a reputation for honesty and integrity, Rajesh Kumar faces a moral dilemma. Supporting the re-appropriation aligns with fulfilling the financial needs of the SEZ and the gas processing plant, which are important for national development. However, it may come at the expense of a welfare scheme designed for the underprivileged.

The ethical question here is whether Rajesh should prioritize the immediate welfare needs of the NHS beneficiaries or support projects that will contribute to economic growth and national security, potentially benefiting society in the long term.

6. Political Sensitivity and Pressure

Rajesh has been informed by his seniors of the politically sensitive nature of this case. However, allowing political factors to influence financial decisions at the expense of welfare projects may not be ethically sound. The pressure to process this file immediately might overlook the due diligence



required to evaluate the impact on NHS beneficiaries.

7. Long-term vs. Short-term Gains

The SEZ and gas processing projects are investments in the nation's economic infrastructure with long-term benefits. The NHS, however, provides immediate relief and support for weaker sections. Re-appropriating funds emphasizes long-term gains over short-term needs, raising ethical concerns about whose needs are prioritized.

In summary, this case presents a complex ethical dilemma involving the balancing of welfare commitments to marginalized populations against national economic development objectives. Ensuring transparency, accountability, and a commitment to social justice are essential for maintaining public trust and upholding the integrity of government policy decisions.

Options available to Rajesh Kumar for proper utilization of public funds.

Rajesh Kumar has several potential options to address this ethical dilemma regarding the re-appropriation of funds from the National Housing Scheme (NHS) to developmental projects. Here's an analysis of his options, including whether resignation is a viable and worthy choice.

1. Recommend Partial Re-appropriation of Funds

- Option: Rajesh could suggest reallocating only a part of the NHS funds to support the immediate needs of the SEZ and gas processing plant projects, thereby maintaining some funding for NHS and reducing the delay in its execution.
- Benefits: This approach could allow both projects to move forward, though at a slower pace. It would help Rajesh fulfill the budgetary needs of both welfare and developmental projects without entirely depriving NHS of its funding.
- Limitations: Partial reallocation might still delay NHS, risking criticism from the public and politicians.

2. Propose Alternative Funding Sources

- Option: Rajesh could explore alternative funding sources within the Finance Ministry, such as surpluses or underutilized funds from other departments, rather than re-appropriating NHS funds.
- Benefits: If viable, this approach would preserve NHS funding and fulfill the requirements for the SEZ and gas processing projects without causing delays to the housing scheme. It would also demonstrate Rajesh's commitment to responsible fiscal management.
- Limitations: Identifying alternate funding sources may be time-consuming and may not yield the full 6000 crores required.

3. Recommend Phased Funding for Developmental Projects

- Option: Rajesh could propose phased funding for the SEZ and gas processing plant projects, where funds could be allocated as they're required rather than all at once.
- Benefits: This approach could reduce the amount needed for immediate re-appropriation, leaving some NHS funding intact. This would minimize delays in NHS and allow the developmental projects to commence.
- Limitations: Phased funding might still lead to cash flow challenges in the SEZ and gas processing projects and

could compromise their efficiency.

4. Escalate the Issue and Advocate for Direct Parliamentary Approval

- Option: Rajesh could escalate the issue to the highest levels within the ministry and recommend that the re-appropriation decision be debated in Parliament, as the NHS is a public welfare project with political significance.
- Benefits: This would ensure transparency and allow elected representatives to weigh the trade-offs, potentially strengthening the democratic process. Rajesh's stance would reflect his integrity and commitment to ethical governance.
- Limitations: This approach could lead to delays in the developmental projects and might invite criticism from his superiors or colleagues, given the politically sensitive nature of the decision.

5. Document the Concerns and Execute the Orders

- Option: Rajesh could formally document his reservations about the re-appropriation's potential impact on NHS but ultimately proceed with the reallocation as directed by his seniors.
- Benefits: By documenting his concerns, Rajesh would protect himself against potential repercussions if questions arise later. Executing the orders shows loyalty to the hierarchy while still fulfilling his duty.
- Limitations: This approach may be seen as compromising his ethical values if the NHS faces severe setbacks. It also reflects limited agency in his decision-making role, which could affect morale and public perception.

6. Resignation as a Form of Protest

- Option: Rajesh could consider resignation if he believes that reallocating NHS funds is against his moral principles or if he feels strongly about not contributing to a policy decision that may harm public welfare.
- Benefits: Resigning would demonstrate Rajesh's commitment to his ethical principles and protect his integrity. It would be a strong statement about his dedication to public welfare over political expedience.
- Limitations: Resignation could deprive the Ministry of a competent, honest leader and might limit his ability to influence future budgetary decisions in favor of public welfare. Moreover, resignation is often seen as a last resort; Rajesh's experience and reputation might be better used to advocate for responsible fund utilization from within the system.

Is Resignation a Worthy Option?

While resignation is an option, it may not be the most effective one in this case. Rajesh's resignation would likely draw public attention to the issue, but it may not result in any real change or stop the re-appropriation of NHS funds. Given Rajesh's reputation and position, staying within the Finance Ministry could allow him to influence not just this decision but future policy decisions as well. Resigning could, however, be justified if he feels his ethical principles are being seriously compromised, or if the government repeatedly ignores ethical considerations in its policies.

Recommended Approach

A balanced approach would be to recommend phased or partial reallocation, supplemented with efforts to



find alternative funding sources. Escalating the issue with a well-documented rationale may also create the transparency needed to address public concerns. Rajesh should aim to protect NHS funding as much as possible while meeting the government's development goals, ensuring he remains committed to his ethical principles and duty to serve the public interest.

2. The Chairman of Bharat Missiles Ltd (BML) was watching a program on TV wherein the Prime Minister was addressing the nation on the necessity of developing a self-reliant India. He subconsciously nodded in agreement and smiled to himself as he mentally reviewed BML's journey in the past two decades. BML had admirably progressed from producing first-generation anti-tank guided missiles (ATGMS) to designing and producing state of the art ATGM weapon systems that would be the envy of any army. He sighed in reconciliation with his assumptions that the government would probably not alter the status quo of a ban on the export of military weaponry. To his surprise, the very next day he got a telephone call from the Director-General, Ministry of Defence, asking him to discuss the modalities of increasing BML production of ATGMS as there is a possibility of exporting the same to a friendly foreign country. The Director-General wanted the Chairman to discuss the details with his staff at Delhi next week. Two days later, at a press conference, the Defence Minister stated that he aims to double the current weapons export levels within five years. This would give an impetus to financing the development and manufacture of indigenous weapons in the country. He also stated that all indigenous arms manufacturing nations have a very good record of the international arms trade. As Chairman of BML, what are your views on the following points?

As an arms exporter of a responsible nation like India, what are the ethical issues involved in the arms trade?

List five ethical factors that would influence the decision to sell arms to foreign governments.

SOLUTION:

Ethical issues as an arms exporter of a responsible nation like India involved in the arms trade

As the Chairman of Bharat Missiles Ltd (BML), it is essential to address the ethical issues surrounding the arms trade, especially given India's commitment to responsible arms export practices and the broader goal of promoting a self-reliant defense industry. The ethical considerations involved in the arms trade for a responsible nation like India are nuanced and involve weighing national interests, international responsibilities, and humanitarian concerns.

1. Promoting Peace and Security vs. Contributing to Global Militarization

- Issue: The primary ethical question in arms exports is the balance between enhancing a nation's security and economic growth versus the risk of contributing to regional or global militarization. Arms trade can inadvertently escalate conflicts if weapons are misused or fall into the wrong hands.
- View: India, as a responsible nation, must ensure that its arms exports do not fuel conflicts or disrupt peace. Export

agreements should only be with nations that demonstrate stable governance, respect for international laws, and a commitment to peace.

2. Human Rights Concerns

- Issue: The sale of arms to countries with poor human rights records poses a moral dilemma. Weapons exported by BML could potentially be used in ways that infringe upon the rights of civilians or minority groups in the importing country.
- View: To address this concern, India must implement stringent checks on the end-use of exported arms. Selling weapons only to countries with a commitment to human rights and peace aligns with India's values and its stance on responsible arms trading.

3. Economic Growth vs. Ethical Constraints

- Issue: The arms trade can bring significant economic benefits, such as funding indigenous defense development, creating jobs, and promoting technological advancements. However, focusing purely on economic gains could lead to compromising on ethical standards, such as selling to any willing buyer regardless of their intentions or background.
- View: Economic growth is crucial, but it should not come at the cost of ethical integrity. Arms export decisions must prioritize India's commitment to responsible exports, promoting economic benefits without compromising ethical values.

4. Regional Stability and Geopolitical Balance

- Issue: Arms sales can shift regional power dynamics, affecting the stability of neighboring or allied nations. For instance, providing advanced weaponry to one country in a tense region could provoke arms races or aggravate existing tensions.
- View: India should consider the broader geopolitical implications of its arms exports. Export policies should ensure that weapons sales do not disrupt regional stability or escalate conflicts, especially in sensitive regions near India's borders.

5. Non-Proliferation and Control of Advanced Military Technology

- Issue: The spread of advanced military technology, particularly to regions with unstable governments or extremist influences, poses the risk of weapons falling into the hands of non-state actors or terrorist groups.
- View: It is crucial to maintain strict control over advanced technology exports to prevent proliferation risks. Ensuring robust end-use monitoring and a selective approach to arms export licensing can help prevent misuse.

6. Transparency and Accountability in Arms Exports

- Issue: Transparency in arms sales is important to avoid corruption, ensure accountability, and build public trust. Without transparency, there's a risk of backdoor deals or illicit sales that undermine national interests.
- View: India should establish transparent export policies and oversight mechanisms to ensure accountability in its arms trade practices. This transparency aligns with democratic principles and reinforces India's image as a responsible arms exporter.

7. Commitment to Sustainable Defense

- Issue: The arms industry can have substantial



environmental impacts, from the production process to the disposal of expired or unusable weaponry.

- View: As part of India's broader sustainability goals, BML and other arms manufacturers should adopt sustainable practices in manufacturing and disposal, setting an example of environmental responsibility even within the defense sector.

CONCLUSION

India's entry into the arms export market comes with substantial ethical responsibilities. As the Chairman of BML, it is critical to support policies and practices that prioritize human rights, regional stability, and non-proliferation. India's approach to arms exports should reflect its values of peace, transparency, and responsible growth, balancing national economic and security interests with a firm commitment to ethical principles.

Five key ethical factors that would influence the decision to sell arms to foreign governments include:

1. Human Rights Record of the Purchasing Government

Assessing the purchasing government's record on human rights is essential. Arms should ideally not be sold to governments with a history of human rights abuses, as they could use the weapons to oppress their population or target minority groups, leading to ethical and reputational risks.

2. Intended Use and End-User Assurance

It is important to evaluate the intended use of the arms and seek end-user guarantees to ensure they will not be misused, transferred, or resold to unauthorized parties. This helps prevent arms from ending up in the hands of insurgent groups, terrorists, or other destabilizing actors.

3. Impact on Regional Stability and Geopolitical Balance

Selling arms can alter regional power dynamics and potentially escalate tensions, especially in conflict-prone areas. Considering the potential impact on regional stability helps prevent exacerbating conflicts or provoking arms races among neighboring states.

4. Alignment with International Laws and Non-Proliferation Treaties

Ensuring that arms sales comply with international arms trade regulations, treaties, and non-proliferation agreements is crucial. Violating these agreements undermines international security and could have legal or diplomatic repercussions.

5. Transparency and Accountability in the Transaction

Transparent sales processes help maintain accountability and public trust, reducing the risk of corruption or illicit arms trafficking. Clear documentation, oversight, and adherence to ethical export policies ensure the transaction aligns with the ethical standards of the exporting nation.

3. Rampura, a remote district inhabited by a tribal population, is marked by extreme backwardness and abject poverty. Agriculture is the mainstay of the local population, though it is primarily subsistence due to the very small landholdings. There is an insignificant industrial or mining activity. Even the targeted welfare programs have inadequately benefited the tribal population. In this restrictive scenario, the youth has begun to migrate to other states to supplement the family income. The plight

of minor girls is that their parents are persuaded by labour contractors to send them to work in the Bt Cotton farms of a nearby state. The soft fingers of the minor girls are well suited for plucking the cotton. The inadequate living and working conditions in these farms have caused serious health issues for the minor girls. NGOs in the districts of domicile and the cotton farms appear to be compromised and have not effectively espoused the twin issues of child labour and development of the area. You are appointed as the District Collector of Rampura.

Identify the ethical issues involved.

Which specific steps will you initiate to ameliorate the conditions of minor girls of your district and to improve the overall economic scenario in the district?

SOLUTION:

Ethical issues involved

As the District Collector of Rampura, several ethical issues arise in addressing the socio-economic conditions, exploitation, and well-being of the tribal population, particularly the plight of minor girls involved in child labour. Here are the key ethical issues involved:

1. Child Labour and Exploitation

- Issue: The recruitment of minor girls by labour contractors to work in Bt cotton farms is a form of child labour that exploits the girls for their "soft fingers," placing them in harmful working conditions. This violates their rights to childhood, education, and health, exposing them to long-term physical and psychological harm.
- Ethical Concern: The exploitation of minors for profit, while denying them a safe, healthy childhood and education, is ethically unacceptable and requires immediate intervention.

2. Health and Safety Violations

- Issue: The working and living conditions on the cotton farms are reportedly inadequate, posing serious health risks to the minor girls. Prolonged exposure to pesticides, physical strain, and unsanitary conditions contribute to their deteriorating health.
- Ethical Concern: Subjecting minors to hazardous conditions for economic gain shows a disregard for human dignity and well-being. Ensuring the health and safety of all individuals, particularly vulnerable minors, is a moral responsibility that must be prioritized.

3. Economic Exploitation and Poverty Trap

- Issue: The underlying poverty in Rampura drives families to send their children to work, perpetuating a cycle of economic exploitation. Inadequate local development and ineffective welfare programs have failed to provide viable livelihoods, leaving the tribal population vulnerable to exploitation.
- Ethical Concern: Poverty and the lack of local economic opportunities are systemic issues that push families toward exploitative labour. Addressing these root causes ethically requires a focus on equitable development and sustainable livelihood options for the community.

4. Failure of Welfare Programs and Institutional Neglect

- Issue: Government welfare programs meant to uplift the tribal population have failed to reach and benefit them effectively. Moreover, NGOs that are supposed to protect



vulnerable groups appear compromised and inactive in addressing child labour and local development.

- **Ethical Concern:** This reflects a failure of accountability and responsibility on the part of government and civil society institutions. Institutions must function transparently and effectively to ensure that resources intended for marginalized populations reach them and make a positive impact.

5. Right to Education and Development

- **Issue:** By engaging in child labour, these minor girls are deprived of their right to education and opportunities for personal development, perpetuating a cycle of poverty and social stagnation within the community.
- **Ethical Concern:** Denying education and growth opportunities to children is a violation of their basic rights. Ethically, it is important to safeguard these rights and provide children with the means to break free from generational poverty.

6. Responsibility to Address Migration Pressures

- **Issue:** Due to limited economic opportunities, youth in Rampura are compelled to migrate to other states, disrupting family and social structures and potentially exposing them to exploitation in unfamiliar environments.
- **Ethical Concern:** Forced migration due to poverty is a sign of socio-economic distress that affects community cohesion and stability. Ethically, the district administration has a responsibility to create employment opportunities and support systems locally, reducing the need for distress migration.

7. Ethical Obligation to Empower the Tribal Community

- **Issue:** The tribal population in Rampura faces systemic socio-economic disadvantages and inadequate access to development resources. The lack of targeted initiatives that respect their cultural context and empower them to sustain their livelihoods is a core issue.
- **Ethical Concern:** The tribal community deserves equitable access to development resources that are tailored to their needs and culture. An ethical approach would emphasize respectful, inclusive development and community empowerment rather than exploitation or neglect.

CONCLUSION

Addressing these ethical issues as the District Collector involves safeguarding the rights of the tribal population, particularly children, against exploitation. Ethical governance demands targeted welfare initiatives, effective local employment opportunities, access to education, and improved health and safety standards. Intervening to stop child labour and improving institutional accountability will be critical to fostering sustainable, fair, and humane development in Rampura.

Specific steps initiated to ameliorate the conditions of minor girls of your district and to improve the overall economic scenario in the district

As the District Collector of Rampura, taking a multi-pronged approach is essential to address both the immediate welfare of minor girls and the broader economic challenges facing the district. Here are specific steps to achieve these goals:

1. Immediate Rescue and Rehabilitation of Minor Girls

- **Collaboration with Law Enforcement:** Initiate rescue operations in collaboration with law enforcement agencies to identify and repatriate minor girls working in Bt cotton farms. Ensure strict action against labour contractors involved in trafficking and child labour.
- **Temporary Shelters and Counselling:** Set up or coordinate with existing NGOs to establish temporary shelters offering safe accommodation, health check-ups, and counselling for rescued girls, helping them recover from exploitation.
- **Education and Vocational Training Programs:** Create bridge education programs to reintegrate rescued girls into schools. For those nearing working age, offer vocational training aligned with safe local employment options.

2. Strengthen Child Protection Mechanisms

- **Community Child Vigilance Committees:** Establish vigilance committees at the village level, involving community members and local leaders to monitor and report child labour cases.
- **Child Rights Awareness Campaigns:** Launch campaigns with NGOs and schools to educate families about the importance of education, the harms of child labour, and the legal consequences for those involved in trafficking and exploitation.

3. Improve Access to Quality Education and Skills Development

- **Increase School Enrolment and Retention:** Partner with the Education Department to improve school infrastructure, provide mid-day meals, and ensure free school supplies to increase attendance. Set up scholarship programs for girl students and create incentives for parents to keep their children in school.
- **Skills Training Centers:** Establish skill development centers tailored for older youth in fields such as handicrafts, carpentry, and computer literacy. This will equip young people with employable skills, reducing migration pressures and empowering them to contribute to the local economy.

4. Enhance Livelihood Opportunities to Reduce Migration

- **Promote Sustainable Agriculture and Allied Activities:** Provide training and subsidies to introduce modern, high-yield farming techniques and crop diversification. Encourage allied activities like poultry, beekeeping, and dairy farming to create additional income sources.
- **Self-Help Groups (SHGs) and Micro-Financing:** Support the formation of SHGs, particularly for women, to offer micro-loans and training on small-scale enterprises. SHGs could engage in activities like handicrafts, textiles, or small-scale food processing, creating income without necessitating migration.
- **MNREGA Utilization:** Maximize the implementation of the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) to create local employment and improve rural infrastructure, ensuring that all eligible families benefit.

5. Encourage Local Entrepreneurship and Small Businesses

- **Set Up Small Business Training and Support Centers:**



Partner with state development agencies to provide training and resources for setting up small businesses, such as handicrafts or small-scale manufacturing.

- Youth Entrepreneurial Grants: Launch a program to offer grants or loans to young entrepreneurs interested in starting local businesses, fostering innovation and self-reliance within the community.

6. Strengthen Healthcare Access and Preventive Health Programs

- Mobile Health Clinics and Regular Check-Ups: Deploy mobile health units to provide regular health check-ups in villages, particularly focusing on women's and children's health.
- Nutritional Programs for Vulnerable Children: Implement nutritional support programs in schools and anganwadis (childcare centers) to improve the health of children, making them less vulnerable to exploitation and illness.
- Health Awareness Campaigns: Conduct health awareness drives to educate communities about sanitation, nutrition, and preventive care to reduce long-term healthcare issues among the population.

7. Improve Transparency and Accountability in Welfare Programs

- Audit Welfare Schemes: Conduct a thorough audit of existing welfare schemes to identify gaps in implementation and reasons for their ineffectiveness in

reaching the tribal population.

- Community-Based Monitoring: Involve local leaders and communities in the monitoring of welfare programs to ensure transparency and accountability, making sure resources reach those most in need.

8. Collaborate with Ethical NGOs and Advocacy Groups

- Strengthen NGO Partnerships: Partner with reputable NGOs that focus on child rights, education, and rural development. Regular monitoring and assessment will ensure these organizations fulfill their obligations without compromising ethics.
- Establish a Local Advisory Council: Form a council comprising community representatives, social workers, and officials to advise on key issues and development strategies, ensuring community participation and trust.

Long-Term Vision for Economic and Social Upliftment

Implementing these immediate steps will lay the foundation for sustainable economic development in Rampura. The focus will be on creating local employment opportunities, ensuring children's rights to education, and gradually eliminating poverty-driven migration. By building a self-sustained community with access to quality education, healthcare, and employment, Rampura can overcome its socio-economic challenges and offer its youth a brighter, healthier future.

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TOPICS OF THE MONTH





THE DOUBTER IS A TRUE MAN OF SCIENCE

- DR. Alexander Jacob IPS

**EDUCATION IS WHAT REMAINS AFTER ONE
HAS FORGOTTEN WHAT ONE HAS LEARNED
IN SCHOOL**

-DR. Babu Sebastian

**VISIONARY DECISION-MAKING HAPPENS AT
THE INTERSECTION OF INTUITION AND LOGIC**

-DR. G. Prasanna Kumar IAS

**FROM CULTURE TO CIVILIZATION: THE
EVOLUTION OF HUMAN SOCIETIES**

-Santhosh Taneja

**THE TIME TO REPAIR A ROOF IS WHEN THE
SUN IS SHINING**

-Adul Sankar



THE DOUBTER IS A TRUE MAN OF SCIENCE

In 2019, India witnessed a remarkable scientific breakthrough when researchers at the Indian Institute of Science (IISc) developed a novel technique to detect tuberculosis (TB) using a simple urine test. This innovation was born out of persistent questioning and rigorous experimentation, showcasing the essence of doubt in the scientific process. Dr. Shyam Sundar, leading the project, encountered numerous challenges while validating the test's effectiveness. Rather than accepting initial findings, he and his team continually refined their approach, questioning every variable and result. Their dedication to scepticism not only led to a more accurate diagnostic tool but also emphasized the broader impact of scientific inquiry on public health in India, where TB remains a significant concern. This incident underscores that a true man of science embraces doubt, for it is through questioning, testing, and revising assumptions that transformative discoveries emerge. In a country striving for innovation, the spirit of inquiry rooted in doubt is essential for scientific advancement and societal progress.

Understanding Doubt in the Scientific Context

Doubt is an intrinsic part of the scientific process, serving as the catalyst for inquiry and discovery. In science, doubt compels researchers to question existing knowledge, leading to more rigorous experimentation and validation of theories. This critical approach is exemplified in India's rich scientific history. For instance, when Indian physicist C.V. Raman discovered the Raman Effect in 1928, he initially faced scepticism from the scientific community. His relentless pursuit of answers, despite doubts from peers, ultimately led to his Nobel Prize in Physics in 1930. Similarly, the ongoing research in agriculture, where scientists are continuously questioning and testing traditional farming practices, showcases how doubt drives innovation. In a contemporary context, India's fight against diseases like COVID-19 has illustrated the importance of questioning initial assumptions about the virus, leading to adaptive strategies in public health. By understanding doubt as a vital component of scientific exploration, we appreciate its role in fostering creativity and advancement. This leads us to consider the historical perspectives on scientific doubt and its evolution over time.

Historical Perspectives on Scientific Doubt

Throughout history, scientific progress has often emerged from the fertile ground of doubt. The journey of Indian science exemplifies this. For instance, the ancient Indian astronomer Aryabhata challenged the prevailing geocentric model, proposing instead that the Earth rotates on its axis. His willingness to question established beliefs laid the groundwork for future astronomical discoveries. Fast forward to the 20th century, and we see Indian physicist Homi Bhabha, who doubted the limitations of existing nuclear research. His critical thinking and perseverance led to the establishment of India's nuclear program, which has had profound implications for the nation's energy security and technological advancement.

These historical examples illustrate that doubt is not merely a sign of scepticism but a necessary precursor to inquiry and innovation. Scientists like Aryabhata and Bhabha exemplify how questioning the norm fosters deeper understanding and advancement in science. This interplay between doubt and exploration inevitably leads us to explore

the profound relationship between doubt and curiosity, highlighting how they are interconnected in the quest for knowledge.

The Relationship Between Doubt and Curiosity

The relationship between doubt and curiosity is foundational to scientific inquiry, driving researchers to seek deeper understanding and challenge established norms. Curiosity ignites questions, while doubt pushes scientists to investigate and validate their assumptions. In the Indian context, the work of Vikram Sarabhai, often regarded as the father of the Indian space program, exemplifies this dynamic. Sarabhai's curiosity about India's potential in space exploration was fuelled by his doubts regarding the limitations of contemporary technology. His visionary approach led to the establishment of ISRO, which has since achieved remarkable milestones, such as the Mars Orbiter Mission, demonstrating that questioning existing capabilities can yield extraordinary results.

Similarly, the field of traditional medicine, particularly Ayurveda, has undergone rigorous scrutiny and exploration due to modern scientists' curiosity and scepticism about its efficacy. This interplay ensures that scientific advancement remains dynamic and responsive to new ideas. Thus, understanding the symbiotic relationship between doubt and curiosity is crucial in fostering a culture of inquiry. This leads us to explore the vital role of scepticism in the scientific method, further enhancing our understanding of scientific exploration.

The Role of Scepticism in the Scientific Method

Scepticism is a cornerstone of the scientific method, acting as a crucial filter that ensures the integrity and validity of scientific findings. It encourages researchers to question assumptions, rigorously test hypotheses, and seek evidence before accepting claims as truth. In India, the legacy of scepticism is evident in the work of scientists like Jagadish Chandra Bose, who doubted the prevailing views on plant responses. Through meticulous experimentation, he demonstrated that plants can respond to stimuli, thus laying the groundwork for plant physiology.

Moreover, scepticism is vital in public health research, where scientists continuously evaluate the efficacy of interventions. For instance, during the COVID-19 pandemic, Indian researchers scrutinized various treatments and vaccine efficacy, leading to adaptive strategies that prioritized safety and effectiveness. This critical lens not only refines knowledge but also fosters a culture of accountability within the scientific community.

As we explore the role of scepticism, we recognize how it serves as a catalyst for innovation, driving scientists to push boundaries and explore new frontiers in their respective fields.

Doubt as a Catalyst for Innovation

Doubt is a powerful catalyst for innovation, propelling scientists to challenge existing paradigms and seek novel solutions to complex problems. In the Indian context, this is exemplified by the work of Dr. A.P.J. Abdul Kalam, whose questioning of traditional defence technology led to the development of India's Integrated Guided Missile Development Program. Driven by his doubts about the country's reliance on foreign technology, Kalam and his team innovated indigenous



missile systems, enhancing India's defence capabilities.

Similarly, in the agricultural sector, Indian scientists are constantly exploring sustainable practices to combat food insecurity. By doubting conventional farming methods and experimenting with organic practices, researchers have developed techniques that not only increase yield but also improve soil health, such as the System of Rice Intensification (SRI).

These examples highlight that doubt does not merely reflect uncertainty; it encourages a proactive pursuit of knowledge and innovation. As we consider the role of doubt in driving progress, it is essential to examine the impact of peer review on scientific integrity, ensuring that innovations are both credible and robust.

The Impact of Peer Review on Scientific Integrity

Peer review is a critical process in maintaining scientific integrity, serving as a safeguard against flawed research and unsubstantiated claims. By subjecting scientific work to the scrutiny of experts in the field, peer review fosters accountability and transparency, ensuring that published findings are reliable and credible. In the Indian context, the role of peer review was notably significant during the development of the Indian vaccine against COVID-19, Covaxin. The rigorous evaluation of the vaccine trials by independent experts not only reinforced public trust but also ensured adherence to safety and efficacy standards.

Additionally, research published in Indian journals, such as the Indian Journal of Medical Research, emphasizes the importance of peer review in addressing public health challenges and validating new methodologies. This process allows for constructive criticism and feedback, which ultimately enhances the quality of research and fosters scientific progress.

Understanding the impact of peer review leads us to appreciate the importance of open-mindedness in science, as researchers must remain receptive to feedback and new ideas to foster an inclusive and dynamic scientific community.

The Importance of Open-Mindedness in Science

Open-mindedness is fundamental to scientific progress, allowing researchers to embrace new ideas and adapt to evolving evidence. It fosters an environment where innovative concepts can thrive, particularly in a diverse and rapidly changing landscape like India's scientific community. For example, the field of renewable energy has witnessed significant advancements due to open-minded approaches. Indian scientists, like those at the Indian Institute of Technology (IIT), have embraced unconventional methods to develop solar energy technologies. Their willingness to consider alternative materials and designs has led to breakthroughs in cost-effective solar panels.

Moreover, open-mindedness in the study of traditional medicine has prompted researchers to explore the scientific basis of Ayurvedic practices, integrating them with modern health care systems. This has not only expanded treatment options but also validated indigenous knowledge, promoting holistic health solutions.

By fostering a culture of open-mindedness, the scientific community encourages collaboration and interdisciplinary research, driving innovation. As we appreciate

this importance, we can further explore how doubt plays a pivotal role in the evolution of scientific knowledge, pushing the boundaries of what is known.

Doubt and the Evolution of Scientific Knowledge

Doubt is a crucial driving force behind the evolution of scientific knowledge, challenging established theories and prompting reevaluation of accepted norms. This iterative process of questioning and reassessment has led to significant advancements in various fields. In India, the work of physicist Satyendra Nath Bose illustrates this dynamic beautifully. His scepticism about classical statistics and willingness to explore alternative theories resulted in the development of Bose-Einstein statistics, fundamentally altering our understanding of quantum mechanics.

Moreover, in the realm of environmental science, researchers have begun to doubt conventional wisdom surrounding climate change and biodiversity. The Indian government's initiatives, like the National Mission for a Green India, emerged from doubts about the efficacy of traditional conservation methods, leading to innovative strategies for sustainable development.

As scientists embrace doubt, they contribute to a more nuanced understanding of complex issues. This ongoing evolution of knowledge is critical in shaping informed policies and practices. As we delve deeper into the role of doubt in science, we must also consider the ethical dimensions associated with scientific inquiry and the responsibilities of researchers in their pursuit of knowledge.

The Ethical Dimensions of Scientific Doubt

The ethical dimensions of scientific doubt are profound, influencing how researchers conduct their work and interpret their findings. Doubt fosters a culture of responsibility, ensuring that scientists remain vigilant against biases and ethical pitfalls. In India, the controversy surrounding the efficacy of certain traditional medicines highlights the ethical obligation of scientists to question and rigorously test claims. For example, the scepticism surrounding the use of cow urine as a cure for various ailments prompted extensive research, emphasizing the need for evidence-based practices in healthcare.

Furthermore, ethical scientific inquiry requires transparency and honesty. When researchers harbour doubts about their findings or methodologies, they must communicate these uncertainties to avoid misleading the public or policymakers. The Indian Council of Medical Research (ICMR) has consistently advocated for ethical research practices, particularly in clinical trials, emphasizing informed consent and participant welfare.

By grappling with the ethical implications of doubt, scientists can enhance the credibility of their work and contribute positively to society. As we explore these dimensions, it becomes essential to focus on promoting a culture of doubt in education, equipping future generations to embrace inquiry and critical thinking.

Promoting a Culture of Doubt in Education

Promoting a culture of doubt in education is vital for nurturing critical thinking and fostering innovation among students. Encouraging learners to question assumptions and challenge established knowledge forms the foundation of scientific inquiry. In the Indian educational context, initiatives



like the National Council of Educational Research and Training (NCERT) have integrated inquiry-based learning into curricula, urging students to explore and doubt conventional wisdom.

For instance, the implementation of the “Experiential Learning” approach in science education allows students to conduct experiments, analyse results, and question their interpretations. This method not only cultivates curiosity but also instils a sense of scepticism towards unverified claims. Projects like the “Innovation in Science Pursuit for Inspired Research” (INSPIRE) further promote hands-on research experiences, pushing students to investigate and innovate.

By fostering an environment where doubt is seen as a tool for learning rather than a hindrance, educators can empower students to become future scientists who rigorously question and explore. As we recognize the importance of nurturing such a culture, it’s crucial to address the challenges of overcoming dogma in science, which can inhibit this vital process.

Challenges of Overcoming Dogma in Science

Overcoming dogma in science presents significant challenges, often rooted in long-standing beliefs and institutional inertia. In India, one notable example is the

resistance encountered by researchers investigating alternative agricultural practices. Despite mounting evidence supporting organic farming’s benefits, traditional methods continue to dominate, fuelled by established practices and vested interests. Scientists advocating for innovative techniques often face scepticism from both the agricultural community and policymakers, highlighting the difficulty in shifting entrenched mindsets.

Furthermore, the adherence to dogmatic views can stifle creativity and discourage young researchers from questioning established paradigms. The debate over climate change illustrates this, as some sceptics persist despite overwhelming scientific consensus, hindering effective policy action.

To navigate these challenges, it is crucial to promote an environment that encourages questioning and critical analysis, creating pathways for new ideas to flourish. Recognizing and addressing dogma is essential for the advancement of scientific knowledge. As we delve into these challenges, we can appreciate the broader implications of doubt, leading us to the conclusion: the virtue of doubt in science and society, emphasizing its role in fostering innovation and progress.

EDUCATION IS WHAT REMAINS AFTER ONE HAS FORGOTTEN WHAT ONE HAS LEARNED IN SCHOOL

The quote, “Education is what remains after one has forgotten what one has learned in school,” often attributed to Albert Einstein, captures the essence of true learning beyond mere rote memorization. It suggests that the core of education lies not in the facts and figures we memorize for exams, but in the deeper understanding and critical thinking skills we develop throughout our lives.

In traditional educational settings, students frequently focus on accumulating information to pass tests, often leading to the quick forgetting of that material once the assessments are over. However, genuine education is about cultivating a mindset that values inquiry, creativity, and the ability to apply knowledge in various contexts. This kind of education fosters resilience, adaptability, and a lifelong love for learning – qualities essential in our rapidly changing world.

Moreover, education extends beyond the classroom. Experiences gained from interactions with diverse people, engagement with complex issues, and real-world challenges contribute significantly to our growth as individuals. It shapes our values, influences our decisions, and enhances our capacity for empathy and critical thought.

Ultimately, education is a continuous journey. It involves synthesizing knowledge from various sources, reflecting on our experiences, and integrating lessons learned into our lives. This enduring aspect of education equips us with the tools necessary to navigate complexities, make informed choices, and contribute meaningfully to society. In this light, the quote underscores the importance of focusing on the skills and insights we carry with us long after formal schooling has ended, emphasizing that true education is about becoming a thoughtful and engaged member of the world.

Rot learning education system in India

The quote “Education is what remains after one has forgotten what one has learned in school” highlights a critical

perspective on the current rote learning education system. In many educational institutions today, the emphasis on memorization over comprehension often leads to a superficial understanding of subjects. Students are trained to recall facts and figures primarily for exams, rather than to engage with the material in a meaningful way.

Rote learning prioritizes short-term retention over long-term understanding. As a result, students may excel in tests yet struggle to apply their knowledge in real-life situations. This approach stifles critical thinking, creativity, and the ability to solve complex problems – skills essential for success in today’s rapidly evolving world.

Moreover, the focus on standardized testing can create a high-pressure environment that discourages curiosity and exploration. When grades become the primary measure of success, the joy of learning can diminish, leading students to see education as a chore rather than an opportunity for growth. This system often neglects individual learning styles and the diverse needs of students, resulting in disengagement and frustration.

To address these shortcomings, educators and policymakers are increasingly advocating for a shift towards more holistic, student-centered approaches. Methods that emphasize inquiry-based learning, collaborative projects, and real-world applications can foster deeper understanding and retention. By prioritizing skills such as critical thinking, problem-solving, and adaptability, we can create a more effective and meaningful educational experience.

In conclusion, while rote learning may provide a foundation of knowledge, it is not enough to prepare students for the complexities of life beyond the classroom. True education should inspire curiosity, encourage exploration, and equip individuals with the tools they need to thrive in an ever-changing world.



Practice oriented learning education system in India

The quote “Education is what remains after one has forgotten what one has learned in school” resonates deeply with the need for a shift towards a practice-oriented learning education system. This approach emphasizes the application of knowledge and skills in real-world contexts, fostering a deeper and more meaningful understanding of the material.

In a practice-oriented system, students engage in hands-on experiences, problem-solving activities, and collaborative projects. This not only enhances retention but also cultivates critical thinking and creativity. By working on real-life challenges, students learn to connect theoretical concepts with practical applications, preparing them for future careers and responsibilities.

One of the key benefits of this approach is that it encourages active learning. Instead of passively receiving information, students become active participants in their education. They develop essential skills such as communication, teamwork, and adaptability, which are crucial in today's job market. Furthermore, this method can cater to diverse learning styles, making education more inclusive and engaging for all students.

Integrating technology into practice-oriented learning can further enhance the experience. Tools like simulations, virtual labs, and interactive platforms allow students to experiment and innovate in safe environments. This blend of traditional learning with modern technology equips students with both foundational knowledge and practical skills.

Additionally, partnerships with businesses, organizations, and communities can enrich the educational experience. Internships, mentorships, and service-learning projects provide students with invaluable insights and connections, bridging the gap between school and the professional world.

In conclusion, moving towards a practice-oriented learning system can transform education into a more dynamic and relevant experience. By focusing on the application of knowledge and skills, we can foster lifelong learners who are not only knowledgeable but also capable of navigating the complexities of modern life. This shift aligns with the essence of education—preparing individuals to think critically, act responsibly, and contribute meaningfully to society.

Role of teachers in learning systems

The quote “Education is what remains after one has forgotten what one has learned in school” underscores the profound role teachers play in shaping meaningful learning experiences. Beyond delivering content, teachers are vital in fostering critical thinking, curiosity, and a love for learning that endures long after formal education ends.

Firstly, teachers act as facilitators of knowledge. They encourage students to explore concepts deeply, promoting inquiry and discussion rather than mere memorization. By creating an engaging classroom environment, teachers inspire students to ask questions, think critically, and connect ideas across disciplines. This deeper understanding cultivates skills that extend beyond academic settings.

Additionally, teachers serve as mentors and role models. They guide students in developing not just intellectual skills, but also emotional intelligence and resilience. By building strong relationships with their students, teachers

create a supportive atmosphere where learners feel valued and encouraged to take risks. This emotional support can significantly impact students' motivation and self-confidence. Moreover, effective teachers adapt their methods to meet the diverse needs of their students. They recognize that each learner has unique strengths, challenges, and learning styles. By employing various instructional strategies—such as collaborative projects, hands-on activities, and technology integration—teachers can engage all students and make learning more accessible and relevant.

Teachers also play a crucial role in fostering a growth mindset. They help students understand that learning is a continuous process, where mistakes are opportunities for growth rather than failures. This perspective encourages perseverance and a lifelong love for learning, aligning perfectly with the essence of education.

In summary, teachers are instrumental in shaping not only academic knowledge but also the attitudes and skills that remain with students long after they leave the classroom. Their ability to inspire, mentor, and adapt to the needs of their students is essential in cultivating a meaningful educational experience that prepares learners for the complexities of life beyond school.

Spurring innovation in economy

The idea that “Education is what remains after one has forgotten what one has learned in school” highlights the importance of fostering deep understanding and critical thinking over rote memorization. This perspective is crucial for spurring innovation in the economy for several reasons.

Cultivating Critical Thinkers

When education focuses on developing critical thinking and problem-solving skills, it equips individuals to tackle complex challenges in innovative ways. Workers who can analyze situations, think creatively, and approach problems from various angles are more likely to generate novel ideas and solutions, driving innovation in their fields.

Encouraging Lifelong Learning

A system that emphasizes enduring knowledge and skills fosters a culture of lifelong learning. As industries evolve and new technologies emerge, individuals committed to ongoing education can adapt more readily. This adaptability not only helps businesses remain competitive but also fuels economic growth as workers continually update their skills.

Promoting Collaboration and Communication

Education that prioritizes collaboration encourages individuals to work together across disciplines. This collaborative spirit is vital for innovation, as diverse teams often generate more creative solutions than individuals working in isolation. Effective communication skills, cultivated through practice-oriented learning, further enhance collaboration and idea exchange.

Emphasizing Real-World Applications

When education focuses on practical applications of knowledge, students learn to connect theory with real-world challenges. This approach helps them identify gaps in the market and develop solutions that meet actual needs. Entrepreneurs and innovators are more likely to emerge from an educational background that encourages this type of thinking.



Fostering Entrepreneurial Mindsets

An educational framework that promotes creativity, risk-taking, and resilience cultivates entrepreneurial mind sets. Individuals who are encouraged to explore their ideas and learn from failure are more likely to start new ventures, which can lead to job creation and economic dynamism.

Integrating Technology and Innovation

Education systems that incorporate technology and emphasize digital literacy prepare students for the future workforce. Understanding technological tools and their applications can lead to the development of innovative products and services, further driving economic growth.

In essence, when education transcends rote memorization and focuses on nurturing critical thinking, creativity, and real-world application, it lays the groundwork for a more innovative economy. Individuals equipped with these skills contribute to a dynamic workforce capable of addressing contemporary challenges and creating new opportunities, ultimately enhancing economic resilience and growth.

In conclusion, the quote “Education is what remains after one has forgotten what one has learned in school”

VISIONARY DECISION-MAKING HAPPENS AT THE INTERSECTION OF INTUITION AND LOGIC

Visionary decision-making is a unique skill that combines intuition with logical reasoning, setting it apart as a powerful tool for leaders, innovators, and strategists. While intuition draws on subconscious insights and experiences, often allowing individuals to “see” beyond data or trends, logic grounds these insights in systematic, evidence-based thinking. This dual approach creates a balanced framework that not only anticipates future challenges but also devises solutions that are both creative and practical. The synergy between intuition and logic enables leaders to navigate uncertainty, make bold decisions, and transform abstract ideas into actionable strategies.

In a rapidly evolving world, where variables shift unpredictably and data can sometimes fall short, relying on pure logic or intuition alone is often insufficient. Visionary decision-makers use intuition to sense opportunities and risks that might not yet be visible on a spreadsheet, while logic helps them evaluate these perceptions with a critical eye, ensuring decisions are robust and grounded. By fostering a dialogue between intuition and logic, visionary thinkers cultivate a unique decision-making approach that empowers them to lead with foresight, resilience, and adaptability. This essay explores how the interplay of these two facets enhances decision-making and provides a foundation for effective, future-focused leadership.

How visionary decision making transform and empower people

At the individual level, visionary decision-making that balances intuition and logic can be transformative, empowering people to pursue ambitious goals, navigate complex life choices, and foster personal growth. This approach combines the gut feelings and instinctive insights that individuals have about their life path with a structured analysis of available options, resources, and risks.

Intuition plays a crucial role by allowing individuals to sense opportunities that might not yet be clear through

encapsulates the true essence of meaningful learning. It emphasizes that real education goes beyond memorizing facts; it is about developing critical thinking, creativity, and the ability to apply knowledge in diverse contexts. As we navigate an ever-changing world, the skills and insights that endure – shaped by engaging experiences and thoughtful guidance – become invaluable.

Teachers play a pivotal role in fostering this deeper understanding, inspiring students to become lifelong learners and adaptable problem-solvers. By moving away from rote memorization and towards practice-oriented and inquiry-based approaches, we can cultivate a generation equipped to innovate, collaborate, and tackle the challenges of the future. Ultimately, true education enriches lives, empowers individuals, and drives societal progress. It is the lasting impact of learning that shapes not just personal growth, but also the ability to contribute meaningfully to the economy and community. As we redefine educational priorities, we can ensure that what remains with students long after they leave school is the foundation for a brighter, more innovative future.

external data alone. For instance, when considering a career change, people often have an intuitive sense of alignment with a particular field, even if the path may appear risky or unconventional. This “gut feeling” can open doors to new possibilities and inspire bold steps toward meaningful pursuits. Logic, however, provides a reality check by allowing individuals to analyze the feasibility of these decisions – evaluating factors like financial impact, skill gaps, and long-term goals. It grounds visionary decisions in practical steps, making ambitions achievable and sustainable.

By integrating intuition and logic, individuals can make decisions that are both personally fulfilling and realistically viable. This balanced approach not only helps them pursue meaningful aspirations but also equips them to adapt to changes, manage risks, and stay resilient in the face of challenges, ultimately leading to a life that is both purpose-driven and grounded in thoughtful planning.

Visionary decision exemplified in history

Throughout history, some of the most celebrated rulers have exemplified visionary decision-making by skilfully balancing intuition with logic. One prime example is Alexander the Great, whose conquests shaped much of the ancient world. While Alexander relied on rigorous training, military strategy, and the logical counsel of advisors, he also demonstrated an uncanny intuition for timing, morale, and cultural understanding that enabled him to make daring and often unconventional decisions. His capacity to blend careful planning with intuitive insight allowed him to adapt his strategies to unfamiliar territories, recognize opportune moments for advancement, and inspire loyalty among a diverse array of soldiers and allies. Another notable example is Queen Elizabeth I of England, whose reign was marked by political and religious turbulence. Elizabeth's decisions, from her handling of the Spanish Armada to her approach to religious reform, often combined rational planning with a profound intuitive sense of her people's



sentiments and the complex European political climate. By trusting her instincts alongside calculated moves, she secured her nation's position as a powerful player on the world stage. These rulers exemplify how visionary leaders throughout history have drawn from both intuition and logic, transcending the limitations of each to make decisions that changed the course of nations.

Norway's Visionary decision making

Norway's social security system is a prime example of visionary decision-making, where the intersection of intuition and logic has created one of the world's most comprehensive welfare programs. Rooted in the foresight of early leaders who intuitively understood the need for a safety net in a rapidly industrializing society, Norway's approach to social security also leverages rigorous analysis and strategic planning. This dual approach has made the system resilient, equitable, and sustainable, ultimately revolutionizing the quality of life for its citizens.

The foundation of Norway's social security program, established in the post-World War II era, was an intuitive response to the social inequalities and vulnerabilities that many citizens faced. Norway's leaders envisioned a welfare state that would protect citizens from "cradle to grave," addressing potential life risks such as illness, unemployment, and retirement. However, implementing such a bold idea required careful logic; leaders systematically analyzed resources, economic impact, and demographic trends to build a program that was both sustainable and effective. This led to the establishment of a robust framework, including universal healthcare, income support, and public pensions funded by taxes and, later, oil revenues.

Today, Norway's social security program stands as a model of visionary decision-making, balancing an intuitive commitment to citizen welfare with a logical approach to policy execution and financial stewardship. By anticipating citizens' needs and backing this vision with pragmatic planning, Norway has created a sustainable system that continues to adapt and respond to the evolving demands of society, setting an example for welfare programs worldwide.

Ratan Tata's visionary decision making

The acquisition of Jaguar Land Rover (JLR) by Ratan Tata, then chairman of the Tata Group, is a prime example of visionary decision-making where intuition and logic converged to shape a historic turnaround. In 2008, Tata Motors acquired JLR from Ford in a move that many saw as risky – JLR was struggling financially, and the global economy was in the throes of a recession. However, Ratan Tata's decision was guided by both a strong sense of intuition about the long-term potential of the iconic British brands and a rigorous logical assessment of Tata Group's resources, market reach, and manufacturing capabilities.

Tata's intuition saw a future where the Indian market would embrace premium vehicles, and JLR's reputation for luxury and engineering excellence aligned with this vision. Additionally, his appreciation for the brand's legacy and its loyal customer base added confidence to this bold acquisition. Logic played a crucial role in his decision as well; he analyzed the operational inefficiencies at JLR and saw opportunities for restructuring, cost management, and product innovation under Tata's ownership.

Through a calculated blend of intuition and logical strategy, Ratan Tata not only revived JLR but turned it into a profitable global brand, underscoring how visionary decision-making can drive success against challenging odds.

Steve Jobs' approach at Apple

Visionary decision-making in technology relies on a delicate balance between intuition and logic, enabling leaders to anticipate trends, push boundaries, and shape the future. Many technological breakthroughs, from the invention of the personal computer to the rise of artificial intelligence, have stemmed from a synthesis of these two forces. Logic provides a structured framework, offering data-driven insights, rigorous research, and a detailed understanding of systems and processes. Intuition, however, allows innovators to envision possibilities beyond the constraints of current knowledge or accepted norms, sparking transformative ideas that can leap ahead of the market.

A quintessential example is Steve Jobs' approach at Apple. Jobs used logical assessments of technological capabilities and market demands, but his intuition allowed him to predict consumer needs before they were fully articulated. The development of products like the iPhone and iPad was not just a logical progression in technology; it stemmed from a visionary sense that people would desire devices that seamlessly integrated with their lives. His intuition about design aesthetics, simplicity, and user experience reshaped the industry.

By marrying logic with intuition, visionary decision-makers in technology can navigate uncharted territory, innovating in ways that seem improbable but, with time, prove essential. This dynamic balance drives the evolution of technology and, ultimately, redefines our lives.

NEOM, Saudi Arabia's ambitious smart-city project

Visionary decision-making is essential in the creation of NEOM, Saudi Arabia's ambitious smart-city project, which aims to redefine urban living on a massive scale. NEOM exemplifies how projects of this magnitude require a blend of intuition and logic to envision a city that pushes the boundaries of technology, sustainability, and human-centered design. At its core, NEOM is an attempt to build a futuristic ecosystem – one that integrates renewable energy, AI, and robotics, promising to set new standards for urban development.

Intuition guides NEOM's leaders to foresee global shifts toward sustainability, urbanization, and digital lifestyles. This forward-thinking perspective has inspired NEOM's zero-emission infrastructure and its focus on creating car-free, pedestrian-oriented spaces. The ambitious layout, which includes "The Line" – a 170-kilometer urban strip – reflects an intuitive leap beyond traditional city models, aiming to optimize living space and reduce environmental impact. However, such a bold vision is grounded by logical analysis, such as evaluating engineering feasibility, financial implications, and environmental impacts. Detailed logistical planning and partnerships with experts ensure that the city's high-tech goals are realistic and adaptable to future advancements.

By merging intuition and logic, NEOM's visionary leaders aim not only to create a sustainable and smart city but also to redefine what cities of the future can achieve. This balanced approach allows NEOM to remain resilient, dynamic, and potentially transformative, addressing current urban



challenges while paving the way for future innovation.

Visionary decisions gone awry

Visionary decision-making does not always guarantee success, and there are notable examples where balancing intuition with logic did not yield the anticipated results. Some high-profile failures reveal how over-reliance on one element – intuition or logic – at the expense of the other can lead to flawed decision-making, especially when it comes to ambitious projects or investments.

One prominent example is Google Glass. Google's intuitive leap into wearable technology anticipated a future where augmented reality (AR) could be seamlessly integrated into daily life. While the vision was forward-thinking, Google may have underestimated the logical aspects, such as privacy concerns, social acceptance, and practical functionality. This lack of a grounded analysis contributed to the product's market failure, as it struggled to resonate with users and faced backlash over privacy fears. The project ultimately stumbled, underscoring the risks of relying too heavily on intuition without a comprehensive logical assessment of user needs and societal concerns.

Another example is the Segway, which was initially hyped as a revolutionary transportation device that would transform urban mobility. The creators, confident in their vision, overlooked logical aspects like infrastructure compatibility, pricing, and the practical limitations for everyday use. The

Segway failed to gain the mass appeal anticipated, becoming more of a novelty item than a transformative vehicle.

These examples highlight the importance of blending vision with careful, grounded analysis. When one dominates over the other, even the most exciting innovations can fall short of their visionary potential.

In conclusion, visionary decision-making thrives at the delicate intersection of intuition and logic, blending bold foresight with grounded analysis to create transformative outcomes. Intuition enables leaders to perceive potential beyond conventional boundaries, sensing possibilities that may not yet be supported by data alone. Logic, on the other hand, provides a structured, evidence-based framework that ensures these intuitive insights are feasible, sustainable, and adaptable to real-world conditions.

Historical examples and ambitious projects, both successful and failed, reveal how this balance is crucial: without intuition, decisions may lack the innovation needed to break new ground; without logic, even the most inspiring visions can crumble under practical challenges. Visionary decision-makers who excel are those who cultivate both qualities, using intuition to set ambitious goals and logic to bring them to life. In a rapidly evolving world, this balanced approach empowers leaders to navigate uncertainty, manage risks, and ultimately drive impactful, future-focused progress.

FROM CULTURE TO CIVILIZATION: THE EVOLUTION OF HUMAN SOCIETIES

Culture and civilization are two fundamental concepts that define human existence and societal development. While often used interchangeably, these terms represent distinct aspects of human life. Culture is rooted in the beliefs, rituals, and customs of a community, serving as a reflection of identity and values. In contrast, civilization embodies the more complex structures that arise from these cultural foundations, characterized by hierarchies, organized institutions, and the remnants of monumental architecture. Understanding the nuances between culture and civilization can provide deeper insights into the evolution of human societies and their interconnections.

Defining Culture and Civilization

At its core, culture is an integral part of what it means to be human. It encompasses the man-made elements of life, such as language, art, food, clothing, and social practices. Unlike plants and animals, which exist without a cultural framework, humans have always created cultures. This journey began when early humans transitioned from their primal ancestors, adopting tools, expressing themselves through cave paintings, and developing diverse cultural expressions. Therefore, every individual belongs to a culture, shaping their identity and worldview.

Conversely, civilization represents the material and structural aspects of society. It is defined by its complexity, including social hierarchies, organized institutions, and public buildings constructed from surplus resources. Historically, the term "civilization" was often employed by Europeans to distinguish themselves from other cultures, asserting their societal advancements as markers of superiority. This viewpoint implied that only those who colonized and structured

societies into class divisions could claim the title of civilization, thus dismissing other cultures as "uncivilized."

However, this perspective is increasingly viewed as flawed and insulting. It oversimplifies the relationship between culture and civilization and raises the question: How can societies that have rich cultural practices be labeled as lacking civilization? As such, there is a pressing need to rethink these definitions.

A Need for Reassessment

To better understand the relationship between culture and civilization, a new definition is warranted. Every human possesses culture, which primarily serves the needs of its community. On the other hand, civilization involves interactions with other cultures, often facilitated through trade. For example, the transformation from Stone Age cultures to Bronze Age civilizations marked a shift toward increased trade and exchange of resources, such as metals and agricultural goods.

A notable historical example is the Harappan civilization, which thrived in the northwestern region of India around 4,500 years ago. This civilization engaged in extensive trade with areas that now constitute modern Iraq and Iran. Harappans exported a variety of goods—including cotton textiles, sesame oil, ivory, and semi-precious stones—via maritime routes. In exchange, they received essential items such as bitumen, incense, silver, and woolen textiles. This vibrant trade network illustrates how cultural exchanges can elevate societies to the status of civilization.

Culture vs. Civilization: A Comparative Perspective

To illustrate the distinction between culture and civilization, consider the Jarawa tribe in the Andaman Islands.



This group, while undoubtedly human and possessing cultural practices, remains isolated and does not engage in trade. Thus, they embody culture but do not meet the criteria for civilization due to the absence of inter-cultural exchange.

In essence, civilization is a broader construct that addresses not only the needs of the in-group but also the out-group. It is through trade that ideas and innovations flow between cultures, leading to transformation and enrichment. This highlights the interplay between the material wealth of civilization and the intrinsic values of culture.

The Diversity of Indian Culture

When discussing culture in the context of India, it is essential to recognize its rich diversity that extends well beyond the northern regions. The Harappan civilization, for instance, thrived around 2500 BC, renowned for its unique red and black pottery. By around 1500 BC, the Vedic culture in the Gangetic Plain emerged, distinguished by its painted grey ware. Meanwhile, other regions of India were also developing their cultural identities.

In the Deccan, communities were constructing megaliths and ashmounds, accumulating copper artifacts that reflect their cultural practices. While these groups are undoubtedly part of the human cultural landscape, without clear evidence of trade or inter-cultural interactions, they cannot be classified as civilizations. This distinction emphasizes the importance of trade and exchange in elevating cultures to the status of civilization.

Moreover, the discovery of 10,000-year-old rock art along the Ratnagiri coast of Maharashtra showcases the cultural expressions of ancient peoples. However, the absence of knowledge regarding their trading patterns limits the ability to classify them as a civilization. This illustrates that culture can thrive in isolation, yet it requires the dynamics of trade and interaction to evolve into a civilization.

The Interdependence of Culture and Civilisation

The relationship between culture and civilization

is not merely a matter of definition; it is an ongoing dynamic that shapes human experience. Culture serves as the foundation upon which civilizations are built, providing the values, beliefs, and practices that define societal identities. Meanwhile, civilization reflects the material achievements and organizational structures that result from the interaction of diverse cultures.

As societies evolve, the exchange of goods and ideas becomes pivotal. Cultures that engage in trade not only enhance their material wealth but also enrich their cultural practices through exposure to new ideas and influences. This exchange mindset transforms cultures into civilizations, allowing for the development of complex social structures and institutions.

In this light, it becomes evident that while all civilizations are cultures, not all cultures can be classified as civilizations. The former encompasses the broader scope of human interaction, incorporating trade, governance, and social organization, whereas the latter is rooted in the unique identity and practices of a specific community.

CONCLUSION

In conclusion, the exploration of culture and civilization reveals significant insights into the fabric of human society. Recognizing the distinctions between these concepts allows for a more nuanced understanding of how societies develop, interact, and evolve. By redefining our perceptions of culture and civilization, we can appreciate the richness of human diversity and the myriad ways in which communities express their identities.

Ultimately, this understanding fosters a greater appreciation for the complexity of human experiences, encouraging dialogue and exchange among cultures. As societies continue to navigate the challenges of globalization and cultural interaction, acknowledging the interplay between culture and civilization remains vital to fostering mutual respect and understanding in an increasingly interconnected world.

THE TIME TO REPAIR A ROOF IS WHEN THE SUN IS SHINING

The saying “The time to repair a roof is when the sun is shining” serves as a poignant metaphor for proactive decision-making in various aspects of life. It emphasizes the importance of addressing issues before they escalate, making it applicable to personal, professional, and societal contexts. This essay explores the meaning behind this saying, its relevance in different spheres, and the implications of waiting until problems become urgent.

UNDERSTANDING THE METAPHOR

At its core, the metaphor suggests that one should take action when conditions are favorable rather than waiting until circumstances become dire. Just as a roof can be repaired more effectively in pleasant weather, various life challenges can be addressed more easily when one is prepared and able. This proactive approach fosters resilience, reduces stress, and ultimately leads to better outcomes.

THE IMPORTANCE OF PROACTIVITY

Proactivity is a crucial trait in both personal and professional contexts. By taking initiative to address potential issues before they become major problems, individuals can create a more stable and secure environment.

Personal Life: In personal matters, being proactive

means anticipating future needs and addressing them accordingly. For instance, maintaining good health through regular exercise and a balanced diet can prevent serious health issues down the line. Similarly, financial planning, such as saving for emergencies or retirement, can mitigate the stress of unexpected expenses.

Professional Life: In the workplace, proactivity is often linked to career success. Employees who anticipate challenges and take steps to resolve them – whether through upskilling, networking, or seeking feedback – are more likely to thrive. For example, a project manager who identifies potential risks and develops contingency plans can ensure smoother project execution.

THE CONSEQUENCES OF IN ACTION

Failing to act when conditions are favorable can lead to a myriad of negative consequences. Delaying necessary actions often results in increased pressure and more complex problems.

Personal Consequences: In personal life, ignoring small health issues can lead to more significant health crises. For instance, neglecting to address minor car issues can result in major repairs or accidents. The longer one waits to deal with



a problem, the more time and resources it may take to rectify it later.

- **Professional Consequences:** In a professional context, procrastination can hinder career growth. Employees who avoid taking on new responsibilities or developing skills may find themselves left behind as industries evolve. Additionally, organizations that fail to adapt to market changes risk falling behind competitors.
- **Societal Consequences:** On a larger scale, societies that delay addressing pressing issues—such as climate change, public health crises, or social inequalities—often face dire repercussions. Proactive policies and community initiatives can foster resilience and adaptability, whereas inaction can lead to crises that require extensive resources to resolve.

HISTORICAL EXAMPLES OF PROACTIVITY

History is replete with examples of proactive decision-making that led to significant benefits. These instances serve as reminders of the value of taking action while conditions are favorable.

- **Public Health Initiatives:** The establishment of vaccination programs in various countries is a testament to the importance of proactive health measures. By addressing potential health crises before they escalate, nations can significantly reduce the impact of infectious diseases. For instance, widespread vaccination campaigns for polio and measles have saved millions of lives and prevented outbreaks.
- **Environmental Policies:** Countries that have adopted proactive environmental policies have often reaped economic and social benefits. For example, investing in renewable energy technologies not only helps mitigate climate change but also creates jobs and stimulates economic growth. The transition to sustainable practices in agriculture can lead to long-term food security and environmental health.
- **Disaster Preparedness:** Communities that invest in disaster preparedness—such as building resilient infrastructure, developing early warning systems, and conducting regular emergency drills—are often better equipped to handle natural disasters. For instance, Japan's proactive approach to earthquake preparedness has significantly reduced the loss of life and property during seismic events.

THE ROLE OF MINDSET

A proactive mindset is essential for recognizing opportunities to take action. This mindset is characterized by optimism, resilience, and a willingness to embrace change.

Cultivating a Proactive Mindset: Individuals can develop a proactive mindset through self-reflection and goal setting. By regularly assessing their lives and identifying areas for improvement, people can take intentional steps toward positive change.

- **Embracing Change:** Embracing change is a crucial aspect of a proactive mindset. Individuals who view change as an opportunity for growth rather than a threat are more likely to take the necessary steps to prepare for future challenges.
- **Overcoming Fear of Failure:** Fear of failure can often hinder proactive behavior. By reframing failure as a learning opportunity, individuals can reduce the anxiety associated

with taking risks and become more willing to act.

IMPLEMENTING PROACTIVE STRATEGIES

To embody the saying “the time to repair a roof is when the sun is shining,” individuals and organizations can implement various proactive strategies.

- **Regular Maintenance:** Just as one would regularly inspect a roof for potential issues, individuals should consistently evaluate their personal and professional lives. This can include regular health check-ups, financial assessments, and career evaluations.
- **Setting Goals:** Establishing clear, achievable goals can provide direction and motivation. By breaking larger goals into smaller, actionable steps, individuals can create a roadmap for success and remain proactive in their pursuits.
- **Seeking Feedback:** Feedback from peers, mentors, and supervisors can provide valuable insights into areas for improvement. Actively seeking feedback and acting on it demonstrates a commitment to growth and development.
- **Continuous Learning:** Embracing lifelong learning can enhance one's ability to adapt to change and take proactive measures. Whether through formal education, online courses, or self-directed learning, investing in knowledge equips individuals with the tools to navigate challenges.

THE ROLE OF COMMUNITY

Proactivity is not solely an individual endeavor; it can also be fostered within communities. When individuals work together to address common challenges, the collective impact can be significant.

- **Community Initiatives:** Local organizations and community groups often implement proactive initiatives to address issues such as food insecurity, education, and public health. By pooling resources and knowledge, communities can create solutions that benefit all members.
- **Advocacy and Awareness:** Raising awareness about pressing social issues is a proactive step that can lead to meaningful change. Community advocacy efforts can mobilize resources, influence policy, and promote dialogue around important topics.
- **Building Resilience:** Communities that prioritize resilience through preparedness programs, resource sharing, and mutual support are better equipped to handle crises. Collaborative efforts can lead to stronger social bonds and a greater sense of belonging.

CONCLUSION

The saying “the time to repair a roof is when the sun is shining” encapsulates the essence of proactive living. By recognizing the importance of addressing issues before they escalate, individuals and communities can foster resilience, reduce stress, and achieve greater success. Proactivity, whether in personal health, professional development, or societal challenges, is a mindset that empowers individuals to take charge of their lives and create positive change.

In a world that often prioritizes immediate gratification and reactive measures, embracing a proactive approach can be transformative. As we navigate the complexities of life, let us remember that the best time to act is now—while conditions are favorable. By taking responsibility and making intentional choices, we can ensure a brighter future for ourselves and those around us.



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MODEL QUESTION PAPER-MCQ





Q1. Consider the following statements regarding 'NBSAP Tracker' often seen in news.

1. It promotes transparency in biodiversity policies, ensuring accessibility for all stakeholders during COP16 preparations.
2. It ensures accountability, doubts remain about nations' ability to implement strong actions for biodiversity.

Identify the correct statement/s.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Q2. In which city was the World Green Economy Forum launched to promote sustainable development and green practices globally?

- A. Abu Dhabi
- B. Riyadh
- C. Dubai
- D. Doha

Q3. With reference to 'Pygmy hogs' often seen in news, consider the following statements.

1. The species is the smallest and rarest wild pig.
2. It uniquely constructs its own nests with roofs.
3. They listed in Schedule II under Wildlife Protection Act.

How many of the above statement/s is/ are correct?

- A. Only One
- B. Only Two
- C. All the Three
- D. None of the above

Q4. Consider the following oilseeds.

1. Mustard
2. Groundnut
3. Soybean

Which of the above seed/s included under National Mission on Edible Oils?

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Q5. Which of the following statements about the water cycle is correct?

- A. Transpiration in the water cycle is the process where water vapor is directly absorbed from the atmosphere by plants.
- B. Evapotranspiration combines water loss from soil and plants, influencing local climate and water availability in ecosystems.
- C. Sublimation is the transformation of liquid water to vapor directly under extreme atmospheric conditions in the water cycle.
- D. Precipitation only occurs in regions with significant vegetation cover, as it requires active transpiration from plants.

Q6. The "Living Planet Report," which provides insights on biodiversity and ecosystem health, is published by which of the following organizations?

- A. United Nations Environment Programme (UNEP)
- B. International Union for Conservation of Nature (IUCN)
- C. World-Wide Fund for Nature (WWF)
- D. Intergovernmental Panel on Climate Change (IPCC)

Q7. The report EnviStats India 2024: Environment Accounts, often seen in the news, is released by which of the following?

- A. Ministry of Environment, Forest and Climate Change
- B. Ministry of Statistics and Programme Implementation
- C. NITI Aayog
- D. Ministry of Earth Sciences

Q8. Consider the following statements regarding 'Anna Darpan initiative' often seen in news.

1. The initiative was launched by National Agricultural Cooperative Marketing Federation of India.
2. The initiative aims to improve food distribution across India effectively.

Identify the correct statement/s.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Q9. Which of the following is primarily focused on enhancing global regulatory cooperation in the field of medical devices?

- A. World Health Organization
- B. International Medical Device Regulators Forum
- C. Global Medical Device Alliance
- D. International Council for Harmonisation

Q10. Which of the following statements is correct regarding India's National Health Account (NHA) estimates for 2020-21 and 2021-22?

- A. Out-of-pocket expenses increased as the government healthcare expenditure decreased significantly during this period.
- B. Government healthcare spending rose, with a simultaneous increase in private sector investment in rural health infrastructure.
- C. There was a substantial increase in government healthcare spending, leading to a reduction in out-of-pocket healthcare costs.
- D. Out-of-pocket expenditure saw a slight increase due to limited government intervention in urban healthcare services.

Q11. The Emergency Use Listing (EUL) Procedure, often mentioned in the context of public health emergencies, is associated with which of the following organizations?

- A. United Nations Children's Fund (UNICEF)
- B. World Health Organization (WHO)
- C. International Red Cross and Red Crescent Movement
- D. Global Vaccine Alliance (GAVI)

Q12. The Major Atmospheric Cherenkov Experiment (MACE) Observatory, recently inaugurated in India, is located in which of the following places?



- A. Mt. Abu, Rajasthan
- B. Gulmarg, Jammu and Kashmir
- C. Hanle, Ladakh
- D. Nainital, Uttarakhand

Q13. Consider the following statements regarding 'PSLV-C37' mission sometimes seen in news.

- 1. ISRO's PSLV-C37 launched 104 satellites, including the 714 kg Cartosat-2 series.
- 2. The mission lifted 1378 kg of payload, reaching Sun Synchronous Orbit.

Identify the correct statement/s.

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Q14. Which of the following statements regarding the Tele MANAS Initiative is correct?

- A. It primarily focuses on managing physical health concerns through digital consultations and home-based primary care services.
- B. It is an initiative to provide real-time telemedicine support for mental health, especially in rural and underserved areas.
- C. It requires mandatory referral from a local health professional before individuals can access its services.
- D. It primarily aims at training healthcare providers in the physical infrastructure development of mental health facilities.

Q15. Which of the following initiatives provides unorganised workers with seamless access to various social security schemes, ensuring enhanced welfare and protection for this vulnerable workforce segment?

- A. Pradhan Mantri Awas Yojana
- B. eShram – One Stop Solution
- C. National Rural Employment Guarantee Act
- D. Skill India Mission

Q16. Consider the following statements regarding Negative-yield bonds.

- 1. Negative-yield bonds are debt instruments that offer to pay the investor a maturity amount lower than the purchase price of the bond.
- 2. Negative-yield bonds are generally issued by central banks or governments.
- 3. Negative-yield bonds attract investments during times of stress and uncertainty as investors

Which of the above statements is/are correct?

- a. 1 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q17. During a phase of deflation, which among the following is practiced by RBI?

- 1. Engage in Bond selling programme.
- 2. Decrease in the policy rates.
- 3. Increase the Loan To value ratio.

Select the correct code:

- 1. 1 only
- 2. 1 and 3 only
- 3. 2 and 3 only
- 4. 1, 2 and 3

Q18. Consider the following statements:

- 1. The Ministry classifies the Micro Small Medium Enterprises (MSMEs) based upon their capital investments.
- 2. The PM Mudra Yojana focus upon providing subsidised micro-lending services to micro, small and medium enterprises.

Which among the above statement(s) is are true?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Q19. Consider the following statements:

- 1. The secondary sector contributes the largest share to the GDP of India.
- 2. In India, the share of population employed in the secondary sector is disproportionately large compared to its contribution to the GDP of India.
- 3. The Government focus upon shifting the population employed in the secondary sector towards the primary sector.

Which among the above statement(s) is / are NOT true?

- a. 1 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q20. Which of the following countries share a boundary with the Mediterranean Sea?

- 1. Lebanon
- 2. Syria
- 3. Jordan
- 4. Iraq
- 5. Turkey

Select the correct answer using the codes given below:

- a. 1, 2 and 4 only
- b. 1, 2 and 5 only
- c. 3, 4 and 5 only
- d. 1, 2, 3 and 5 only

Q21. Consider the following statements:

- 1. Panda Bonds: Chinese renminbi denominated bonds issued by a non-Chinese entity, sold in the People's Republic of China
- 2. Masala Bonds: Rupee-denominated financial instruments issued by Indian corporates to raise funds from overseas capital markets
- 3. Uridashi Bonds: Rupee-denominated financial instruments issued by International Finance Corporation (IFC) to finance GHG mitigation and related initiatives from Tokyo Stock Exchange

Which among the above is / are correctly matched?

- a. 1 and 2 only
- b. 1 and 3 only



- c. 2 and 3 only
- d. 1, 2 and 3

Q22. Identify the correctly matched from the following pairs.

- 1. Kurds: Syria
- 2. Rohingya: China.
- 3. Yazidis: Myanmar

Select the correctly matched pairs from the code given below.

- a. 1 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q23. With reference to the retail inflation, consider the following:

- 1. The Reserve Bank of India Monetary Policy Committee (MPC) is bound to maintain CPI (All India) within the window of 3% – 8% under the 'Flexible Inflation Targeting' regime.
- 2. The Reserve Bank of India Monetary Policy Committee (MPC) follows a Dear Money Policy to check the rise in inflation.

Which among the above statement(s) is / are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Q24. Consider the following statements:

- 1. The Financial Sector Regulatory Appointments Search Committee (FSRASC), headed by the Cabinet Secretary with RBI Governor and Economic Affairs Secretary and 3 experts in the field of economics or banking or finance or monetary policy recommends the nominees to be appointed by the Centre.
- 2. The nominees appointed by the Centre enjoy a tenure of 4 years.
- 3. The nominees appointed by the Centre are eligible for reappointment.

Which among the above statement(s) is /are true?

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q24. Consider the following:

- 1. SC/ST and/or women entrepreneurs above 18 years of age.
- 2. Loans under the scheme are available for Greenfield projects only.
- 3. Majority stake of non-individual enterprises with controlling stake held by either an SC/ST or woman entrepreneur

Who among the above is / are eligible for securing loan under the Stand Up India Scheme?

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q25. With reference to the Indian economy, consider the following statements:

- 1. If the inflation is too high, Reserve Bank of India (RBI) is likely to buy government securities.
- 2. If the rupee is rapidly depreciating, RBI is likely to sell dollars in the market.
- 3. If interest rates in the USA or European Union were to fall, that is likely to induce RBI to buy dollars.

Which of the statements given above are correct? UPSC Civil Services (Pre.), 2022

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Q26. Consider the following:

- 1. Union Government
- 2. State Government
- 3. Banking Financial Institution
- 4. Non-Banking Financial Institution

Which among the above is / are clients of the Reserve Bank of India under the Repo rate?

- a. 1, 2 and 4 only
- b. 1, 3 and 4 only
- c. 2, 3, and 4 only
- d. All of the above

Q27. Consider the following regarding the Payments Bank:

- 1. Banking services, either independently or through Business Correspondents (BCs) or through networks provided by others.
- 2. Provide lending services
- 3. Accept Time Deposits

Which among the above services can be offered by a Payments Bank?

- a. 1 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

Q28. Consider the following statements:

- 1. The Governors of Central Banks established Basel Committee on Banking Supervision in 1974 in response to the disruptions in financial markets under the aegis of the International Monetary Fund (IMF).
- 2. India is a founding member of the Basel Accords.
- 3. The secretariat of the Basel Committee on Banking Supervision (BCBS) is located in Basel, Switzerland at the Bank for International Settlements (BIS).

Which among the above statement(s) is / are NOT true?

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q29. Consider the following:

- 1. Union Government
- 2. State Government.
- 3. Municipal Corporations.
- 4. Govt. bodies.



5. Banking Financial Institutions.
6. Non-Banking Financial Institutions.
7. Public Sector Units

Which among the above can issue financial instruments?

1. 1, 2, 3 and 4 only
2. 1, 3, 4, 5 and 6 only
3. 2, 3, 4, 5 and 6 only
4. All of the above

Q30. Consider the following statements:

1. Between Census 1951 and Census 2001, the density of the population of India has increased more than three times.
2. Between Census 1951 and Census 2001, the annual growth rate (exponential) of the population of India has doubled.

Which of the statements given above is/are correct? (UPSC-2009)

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Q31. Which one of the following foreign travellers elaborately discussed about diamonds and diamond mines of India? (UPSC-2018)

- a. Francois Bernier
- b. Jean-Baptiste Tavernier
- c. Jean de Thevenot
- d. Abbe Barthelemy Carre

Q32. Disguised unemployment generally means (UPSC – 2013)

- a. large number of people remain unemployed
- b. alternative employment is not available
- c. marginal productivity of labour is zero
- d. productivity of workers is low

Q33. Which of the following gives 'Global Gender Gap Index' ranking to the countries of the world? (UPSC-2017)

- a. World Economic Forum
- b. UN Human Rights Council
- c. UN Women
- d. World Health Organization

Q34. The FAO accords the status of 'Globally Important Agricultural Heritage System (GIAHS)' to traditional agricultural systems. What is the overall goal of this initiative? (UPSC-2016)

1. To provide modern technology, training in modern farming methods and financial support to local communities of identified GIAHS so as to greatly enhance their agricultural productivity.
2. To identify and safeguard eco-friendly traditional farm practices and their associated landscapes, agricultural biodiversity and knowledge systems of the local communities.
3. To provide Geographical Indication status to all the varieties of agricultural produce in such identified GIAHS.

Select the correct answer using the code given below:

- a. 1 and 3 only
- b. 2 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q35. The QUAD grouping is a strategic alliance comprising which of the following countries?

1. India
2. Australia
3. United Kingdom
4. United States

Select the correct answer using the codes given below:

- a. 1, 2, and 3 only
- b. 2, 3, and 4 only
- c. 1, 3, and 4 only
- d. 1, 2, and 4 only

Q36. The "3+1" dialogue format, intended for enhancing cooperation among South Asian nations, includes which of the following countries in partnership with the United States?

1. Bangladesh
2. India
3. Maldives
4. Sri Lanka

Select the correct answer using the codes given below:

- a. 1, 2, and 3 only
- b. 2, 3, and 4 only
- c. 1, 3, and 4 only
- d. 1, 2, and 4 only

Q37. The DiGi (Digital Cooperation for Indo-Pacific Growth) Framework aims to enhance cooperation with India's private sector to support digital infrastructure. Which of the following countries are involved in this partnership?

1. Japan
2. United States
3. Republic of Korea
4. Australia

Select the correct answer using the codes given below:

- a. 1, 2, and 3 only
- b. 1 and 2 only
- c. 1, 2, and 4 only
- d. 2, 3, and 4 only

Q38. The term "digital arrest," often seen in the news, refers to which of the following?

- a. A fraud where impostors impersonating law enforcement officers deceive victims into believing that their bank account has been used unlawfully.
- b. A security feature on smartphones to prevent unauthorized access.
- c. A government measure to prevent the spread of fake news through digital platforms.
- d. None of the above



Q39. The term “digital arrest,” recently mentioned in the news, pertains to which of the following?

- A new cyber security measure introduced by the government to prevent unauthorized access to digital financial services.
- An online fraud in which criminals impersonate law enforcement officials to deceive victims regarding unlawful use of their bank accounts.
- A feature that disables devices remotely to prevent data theft during cyberattacks.
- An initiative by digital platforms to prevent the circulation of unverified information.

Q40. According to the Supreme Court’s 2018 judgment, which of the following rights is related to the legal framework for withdrawing life support for terminally ill patients?

- Right to freedom of speech
- Right to religious freedom
- Right to privacy
- Right to die with dignity

Q41. The Justice K.S. Puttaswamy v. Union of India case, a landmark judgement by the Supreme Court of India, is primarily associated with which of the following rights?

- Right against Exploitation
- Right to Privacy
- Right to employment
- Right to die with dignity

Q42. With reference to heritable human genome editing (HHGE), consider the following statements:

- Heritable genome editing involves modifications to somatic cells, which affect only the individual and are not passed onto future generations.
- The CRISPR-Cas9 technology is commonly used for heritable human genome editing.
- The Oviedo Convention, adopted by South Africa, explicitly allows the use of genome editing to create genetically modified children

Which of the statements given above is/are correct?

- 1 and 2 only
- 2 and 3 only only
- 2 only
- 1, 2, and 3

Q43. With reference to the “Z-Morh Tunnel”, consider the following statements:

- It is part of the Zojila tunnel project.
- It has been constructed by the Border Roads Organisation (BRO).
- It is named for the Z-shaped stretch of road between Sonamarg and Gagangir.

Which of the statements given above is/are correct?

- 1 and 2
- 2 and 3
- 1 and 3
- 1, 2 and 3

Q45. With reference to a grouping of countries known as BRICS, consider the following statements:

- The first BRIC Summit was held in Russia in 2009.
- The 16th BRICS Summit will be hosted by India.
- The New Development Bank, which was also known as the BRICS Development Bank was established in 2015.

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

- 1 and 2
- 2 and 3
- 1 and 3
- 1, 2 and 3

Q46. With reference to the “Solar Assisted Reefer Transportation with Hybrid Controls and Intelligence (SARTHI) system”, consider the following statements:

- It was recently introduced by the Ministry of Agriculture & Farmers Welfare.
- It is an innovative solution that promises to reduce post-harvest losses in India’s food supply chain.
- The system includes a solar-powered air handling unit that ensures temperature control during halts.

How many of the statements given above are correct?

- Only one
- Only two
- All three
- None

Q47. With reference to the ‘Prohibition of Benami Property Transactions Act, 1988 (PBPT Act)’, consider the following statements:

- A property transaction is not treated as a benami transaction if the owner of the property is not aware of the transaction.
- Properties held benami are liable for confiscation by the Government.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Q48. Consider the following statements with respect to Unlawful Activities Prevention Act (UAPA):

- Individuals are exempted from the provision of UAPA if they have been members before the organisation was declared a terrorist organisation.
- Even if the person is not convicted for being associated with a terrorist organisation, “proceeds of terrorism” can be forfeited to the Central Government or the State Government.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2



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SPACE FOR ROUGH WORK





**SAMKALP
VEDHIK
CURRENT AFFAIRS
OCTOBER 2024**