

# OCTOBER 2023 WEEKLY CURRENT AFFAIRS

# YOJNA IAS WEEKLY CURRENT AFFAIRS 9/10/2023 TO 15/10/2023

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# CURRENT AFFAIRS OCTOBER 2023

# **COMPREHENSIVE NUCLEAR TEST BAN TREATY (CTBT)**

This article covers "Daily Current Affairs" and the topic details "Comprehensive Nuclear Test Ban Treaty (CTBT)". This topic has relevance in the International Relations section of the UPSC CSE exam.

असा है ती सफट

# For Prelims:

About CTBT?

# For Mains:

GS 2: International Relations
Impact of the CTBT on Nuclear Testing?

# Why in the news?

One day after suggesting the possibility of Russia withdrawing its ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT), President Vladimir Putin has clarified that Russia's intention is not to resume nuclear testing but rather to bring itself in line with the United States for the sake of parity.

### **About CTBT:**

The Comprehensive Nuclear Test Ban Treaty (CTBT) is a significant international agreement aimed at prohibiting all nuclear explosions, whether conducted for military or peaceful purposes. The United Nations General Assembly endorsed and accepted it in the year 1996. However, despite its adoption, the treaty has not yet entered into force, primarily due to the requirement for specific countries to ratify it.

# **Ratification Status**

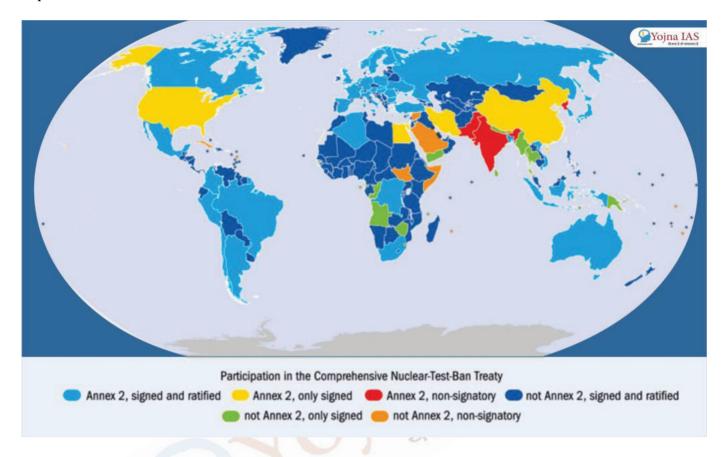
While some countries, including Russia, have ratified the CTBT, others, such as the United States and India, have not done so. Ratification is the process through which a nation formally indicates its consent to be bound by a treaty.

# **Key Countries Yet to Ratify**

The Treaty will become legally binding once all 44 States listed in Annex 2 to the Treaty have ratified it. These States possessed nuclear facilities when the Treaty was negotiated and adopted. Eight of these countries have not yet ratified the treaty. These key countries are India, China, Egypt, Iran, Israel,

North Korea, Pakistan and the United States

The CTBT's effectiveness in curbing nuclear testing worldwide hinges on the participation and ratification of these key nations. Until they formally ratify the treaty, its comprehensive ban on nuclear explosions remains unenforceable.



# The Origins and Evolution of the Comprehensive Nuclear Test Ban Treaty (CTBT)

The genesis of the Comprehensive Nuclear Test Ban Treaty (CTBT) can be traced back to the early years of the nuclear age and the subsequent global concerns regarding nuclear testing. Here's a chronological overview:

- **Emergence of Nuclear Testing (1940s):** The United States conducted the world's first successful nuclear weapons test in July 1945. Subsequently, the Soviet Union conducted its first nuclear test in 1949, sparking a prolonged arms race between the two superpowers.
- **Proliferation of Nuclear Tests (1945-1996):** Between 1945 and 1996, more than 2,000 nuclear tests were conducted worldwide. The United States conducted 1,032 tests, and the Soviet Union conducted 715. Other nuclear-armed nations, such as Britain (45 tests), France (210 tests), and China (45 tests), also contributed to this proliferation.
- **Concerns and Fallout (1950s-1960s):** The radioactive fallout from these nuclear tests raised global concerns and condemnation. In response, efforts were made to restrict nuclear testing:
  - o **Limited Nuclear Test-Ban Treaty (LTBT) 1963:** This treaty prohibited nuclear testing in the atmosphere, outer space, and underwater. However, underground tests were still permitted.
  - o **Threshold Test Ban Treaty (TTBT) Late 1960s:** The U.S. and Soviet Union signed TTBT, which established a "threshold" by banning tests that would produce a yield exceeding 150 kilotons (equivalent to 150,000 tons of TNT).
- The CTBT (1990s): Following the end of the Cold War around 1990 and the dissolution of the Soviet Union, geopolitical tensions decreased. Leveraging this change, the United Nations adopted the

- Comprehensive Nuclear Test Ban Treaty (CTBT).
- The CTBT aimed to curtail nuclear proliferation, prevent the development of new nuclear weapons, and contribute to disarmament efforts. However, its entry into force and full implementation have been contingent on the ratification by key nuclear-armed states, as mentioned earlier.

# Impact of the CTBT on Nuclear Testing

While the Comprehensive Nuclear Test Ban Treaty (CTBT) was designed to halt nuclear testing globally, its effectiveness in achieving this goal has been limited. Despite the CTBT's adoption in 1996, a number of nuclear tests have occurred since then. Here is a summary:

# **Post-CTBT Nuclear Testing**

- Since the CTBT's adoption:
- o India conducted two nuclear tests in 1998.
- Pakistan also conducted two nuclear tests in 1998.
- North Korea conducted nuclear tests in 2006, 2009, 2013, 2016 (twice), and 2017.
- In contrast, several nuclear-armed states refrained from conducting nuclear tests:
  - o The United States last conducted a nuclear test in 1992.
  - China and France last conducted nuclear tests in 1996.
  - o The Soviet Union conducted its last nuclear test in 1990, and its successor state, Russia, has not conducted a nuclear test.
- It's important to note that while these countries have refrained from conducting nuclear tests, the CTBT has not entered into force due to the non-ratification by key nuclear technology holder states, as previously mentioned. Consequently, the treaty's ability to completely eliminate nuclear testing remains unfulfilled, and the occurrence of some nuclear tests post-CTBT adoption underscores this challenge.

Source: What is the the Comprehensive Nuclear Test Ban Treaty (CTBT)? (indianexpress.com)

# Q.1 Consider the following statements regarding the Comprehensive Nuclear Test Ban Treaty (CTBT):

- 1. The CTBT was adopted by the United Nations General Assembly in 1996.
- 2. It bans all forms of nuclear testing including for peaceful purposes

# Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

ANSWER: C

# Q.2 Consider the following statements regarding the Comprehensive Nuclear Test Ban Treaty (CTBT):

- 1. The CTBT was negotiated and adopted during the Cold War era.
- 2. The CTBT has entered into force, and all nuclear-armed nations are signatories.
- 3. Key countries such as India and Pakistan have ratified the CTBT.

# How many of the above statement/s is/are correct?

- (a) Only one
- (b) Only two

(c) All three

(d) None

**ANSWER: D** 

Q.3 Analytically evaluate the role of the Comprehensive Nuclear Test Ban Treaty (CTBT) in preventing nuclear proliferation and promoting international security.

# **CANCER IN INDIA**

This article covers "Daily Current Affairs" and the topic details "Cancer in India". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

# For Prelims:

What is the status of Cancer in India?

# For Mains:

GS2: Social Issues

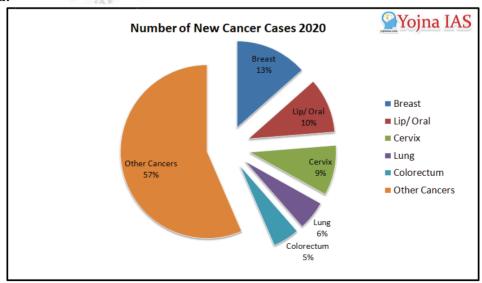
# Why in the news?

Due to the limited success in several Indian districts in effectively implementing cancer screening as per Health Ministry guidelines, the Indian Council of Medical Research (ICMR) is preparing to introduce corrective actions.

# **Understanding Cancer:**

- Cancer is a condition characterised by the uncontrolled growth and spreading of specific cells within the body. It can begin anywhere in the body, consisting of trillions of cells.
- Usually, cells grow, divide, and replace old ones in a structured manner. However, sometimes, this process goes awry, causing abnormal cells to multiply and form tumours, which can be cancerous.

### Cancer in India:



- Cancer is a significant public health concern in India, ranking third globally in incidence after China and the United States.
- It's projected that India will see a significant 57.5% increase in cancer cases between 2020 and 2040, according to the Global Cancer Observatory.

# **Advancements in Cancer Treatment:**

- **Targeted Therapies:** Modern targeted cancer therapies have made significant strides. For instance, a 35-year-old man with anaplastic lymphoma kinase (ALK)-positive, an advanced non-small cell lung cancer (NSCLC) type, turned asymptomatic after three months on a targeted drug Lorlatinib.
- **Surgical Management:** Robot-assisted surgery and minimally invasive techniques like "keyhole" surgery have emerged as noteworthy innovations in cancer treatment. In the past couple of years, there has been a notable rise in the adoption of onco-robotics or robotic onco-surgery in India. This advancement has significantly enhanced surgical precision and led to a substantial reduction in recovery time.
- **Medical Management:** In the last 5-7 years, there have been major advances in radiation, immunotherapy, and targeted therapy. Advanced radiotherapy techniques, such as intensity-modulated radiotherapy (IMRT) and image-guided radiotherapy (IGRT), have greatly improved cancer treatment in India.
- **Immunotherapy:** This type of cancer treatment helps your immune system fight cancer. It is a significant area of cancer research. Immunotherapy, in some instances, is referred to as biologic therapy or biotherapy.
- **Chemotherapy:** It is a cancer treatment that employs medications to eliminate cancer cells.
- **Radiation Therapy:** This type of cancer treatment uses high doses of radiation to kill cancer cells and shrink tumours.

# Reducing Cancer Mortality in India:

- **Preventing Tobacco-Related Cancers:** Tobacco is the leading identified cause of cancer, responsible for around 40 to 50% of cancers in men and about 20% in women. Preventing tobacco consumption could significantly decrease cancer incidence.
- **Early Detection:** Most cancer-related deaths occur in individuals younger than 70 years. Early detection is crucial for effective cancer management.
- **Improving Access to Healthcare Resources:** Rural areas, in particular, face a shortage of healthcare resources. Enhancing access to healthcare could help lower cancer mortality.
- Raising Awareness and Providing Education: There is a lack of awareness and a social stigma associated with cancer. Increasing awareness and educating the public about cancer could facilitate early detection and treatment.
- **Making Treatment Affordable:** Cancer treatment can be costly. Ensuring more affordable treatment options could alleviate the financial burden of cancer.
- **Promoting a Healthy Lifestyle:** Dietary habits, inadequate physical activity, and alcohol consumption are risk factors for various types of cancer. Promoting a healthy lifestyle could help prevent these cancers.
- Advancing Research: The significant variation in cancer rates in India suggests the existence of
  other risk factors or causative agents that are yet to be discovered. Further research could help
  identify these factors and develop strategies to address them.

Sources:

ICMR project to accelerate cancer screening at district level - The Hindu

# Q1. With reference to cancer, consider the following statements:

- 1. Cancer is an ailment in which certain cells within the body undergo uncontrolled growth and spread to other areas.
- 2. India is the world's second-highest country for cancer cases after China.
- 3. Oral cancer has the highest incidence in India, followed by Cervical Cancer.

# Which of the statements given above is/are NOT correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (a)

# Q2. Which of the following is the primary purpose of immunotherapy in cancer treatment?

- (a) Reducing recovery time of the patient
- (b) Enhancing surgical precision in cancer surgeries
- (c) Helping the immune system fight cancer
- (d) Using high doses of radiation

Answer: (c)

Q3. Discuss the key factors contributing to the rising incidence of cancer in India and the strategies that can be employed to address this pressing issue.

# NOBEL IN ECONOMIC SCIENCES

This article covers "Daily Current Affairs" and the topic details "Nobel in Economic Sciences". This topic has relevance in the "Economy" section of the UPSC CSE exam.

# For Prelims:

Nobel in Economic Sciences 2023?

# For Mains:

GS2: Economy

# Why in the news?

Harvard University professor **Claudia Goldin** has been honoured with the 2023 Nobel Prize in Economics for her research that has deepened our comprehension of the **gender disparity in the job market.** 

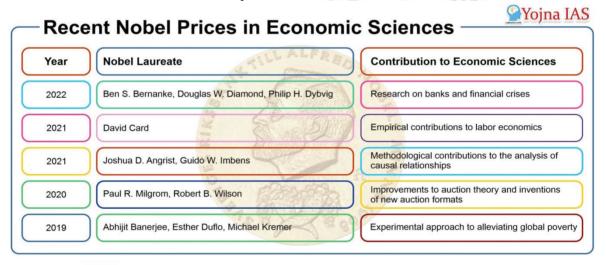
### About the news:

- Claudia Goldin's **extensive research spanning 200 years reveals that, despite women achieving higher education levels than men, the gender pay gap persists** and has not consistently narrowed.
- This trend raises concerns about women's labour force participation rates, which had declined since the 1990s when the U.S. led the world.

- Claudia Goldin has explored the historical shifts in women's roles in the workforce and the enduring gender pay gap. Her research underscores the influence of societal norms and individual perceptions on women's career choices and income disparities.
- She has explained **how changes in birth control and expectations have affected the gender pay gap**, which began to close in the 1980s but has since plateaued.
- **Her research overcame data challenges** stemming from historical gaps in labour market records, particularly concerning women. Goldin had to search archives and employ creative methods to fill these gaps.

# Nobel Memorial Prize in Economic Sciences,

- The Nobel Memorial Prize in Economic Sciences, officially named The Sveriges Riksbank Prize
  in Economic Sciences in Memory of Alfred Nobel, is an annual award sponsored by Sweden's
  central bank, Sveriges Riksbank.
- It is granted by the Royal Swedish Academy of Sciences to outstanding researchers in the realm of economic sciences.
- **Established in 1969,** the prize follows the same principles as the original Nobel Prizes, which have been awarded since 1901.
- This esteemed award acknowledges individuals who have made significant contributions to the field of economics, whether in theory or through empirical research.
- Their work spans various areas within economics, including macroeconomics, microeconomics, econometrics, and economic development.



Sources: 2023 Nobel Prize in Economic Sciences awarded to U.S. economist Claudia Goldin – The Hindu

# Q1. With reference to the Nobel Prize in Economics, consider the following statements:

- 1. Claudia Goldin has been honoured with the 2023 Nobel Prize in Economics for her research on gender disparity in the job market.
- 2. According to her research, despite women achieving higher education levels than men, the gender pay gap persists.
- 3. In the last 200 years, the gender pay gap has been consistently narrowed.

# Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 3 only

(d) None

Answer: (a)

# Q2. Consider the following:

1	Ben S. Bernanke	Research on banks and financial crises
2	Joshua D. Angrist	Experimental approach to alleviating global poverty
3	Abhijit Banerjee	Methodological contributions to the analysis of causal relationships

# How many of the pairs are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answer: (a)

Q3. Discuss the global gender pay gap and its socio-economic implications. Analyse the factors contributing to this disparity and evaluate the effectiveness of policies and initiatives in addressing this issue.

# DIGITAL INDIA ACT (DIA)

This article covers "Daily Current Affairs" and the topic details "Digital India Act". This topic has relevance in the Governance section of the UPSC CSE exam.

#### For Prelims:

About the Digital India?

### For Mains:

Rationale for the Legislation?

# Why in the news?

The recent unveiling of the Digital India Act 2023 (DIA) signifies a noteworthy stride in setting up a modern legal framework for India's expanding digital landscape. The initiative, led by the Ministry of Electronics and Information Technology (MEITY), demonstrates a proactive stance in governing and molding the nation's digital destiny.

# **Digital India Bill**

The Digital India Act Bill (DIA) is a comprehensive legislative framework comprising four essential

- Digital Personal Data Protection Bill 1.
- 2. **DIA Rules**
- 3. National Data Governance Policy
- 4. Amendments to the Indian Penal Code

# **Rationale for the Legislation**

- India, boasting 850 million internet users, stands as the world's largest digitally connected democracy. However, the existing Information Technology Act, designed for a pre-digital era, lacks provisions to safeguard user rights, establish trust, ensure cybersecurity, and counter contemporary cyber threats.
- The surge in cybercrimes, the spread of disinformation, and concerns regarding privacy underscore the imperative need for updated legislation.

# Goals of the Digital India Bill

The Digital India Bill seeks to accomplish the following objectives:

- **Evolvable Digital Law:** Establishing a flexible legal framework that can adapt to evolving technological trends.
- **Adjudicatory Mechanism:** Providing an accessible mechanism for resolving online civil and criminal offenses.
- **Principles and Rules-based Approach:** Developing a legislative structure based on overarching governing principles.

# **Key Components of the DIA**

The Digital India Bill comprises several critical components:

- **Open Internet:** Promoting choice, competition, diversity, fair market access, and facilitating ease of doing business while preventing the concentration of power.
- **Online Safety and Trust:** Safeguarding users against cyber threats, addressing issues such as revenge porn, defamation, cyberbullying, and moderating fake news. The bill advocates for digital rights and protects minors.
- **KYC Requirements:** Mandating Know Your Customer (KYC) for privacy-invading devices like spy camera glasses.
- **Monetization Rules:** Revamping rules related to platform and user-generated content to align them with the provisions of the Digital India Bill.

# **Key Feature:**

- **Revisiting the Concept of Safe Harbour:** In the realm of cyberspace, a significant aspect currently under reconsideration by the government pertains to the 'safe harbour' principle.
- **Understanding Safe Harbour:** The 'safe harbour' principle is rooted in the idea that internet 'intermediaries' should not be held accountable for content posted on their platforms by third parties. This principle, in essence, grants social media platforms immunity from legal liability regarding user-generated content.
- **Evolution of Safe Harbour:** In recent years, the 'safe harbour' concept has faced restrictions and modifications due to regulations such as the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021. These rules mandate that platforms must remove content when instructed by the government or when compelled to do so by law.

# Q.1 Consider the following statements regarding the Digital India Bill (DIA) and the concept of 'Safe Harbour':

- 1. The 'Safe Harbour' principle holds internet intermediaries responsible for content posted by third parties on their platforms.
- 2. One key component of the Digital India Bill is mandating KYC for privacy-invading devices.

# Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

**ANSWER: D** 

Q.3 Examine the significance of the Digital India Act (DIA) 2023 in the context of India's digital transformation. Analyze the potential impact of this legislation on various stakeholders

# **GANGETIC RIVER DOLPHIN**

This article covers "Daily Current Affairs" and the topic details "Gangetic River Dolphin". This topic has relevance in the "Environment and Ecology" section of the UPSC CSE exam.

### For Prelims:

What are the characteristics of Gangetic River Dolphin?

# For Mains:

GS3: Environment and Ecology

# Why in the news?

A recent report from scientists and researchers discloses that 19 Gangetic river dolphins were successfully saved from the irrigation canals within the Ganga-Ghagra basin in Uttar Pradesh from 2013 to 2020.

# **About Gangetic River Dolphin**

• The Ganges River Dolphin (*Platanista gangetica*), is a toothed whale belonging to the Platanistidae family. These dolphins represent one of the Earth's ancient species, sharing this distinction with certain types of turtles, crocodiles, and sharks.

The discovery of the Ganges river dolphin dates back to the year 1801. It is India's National

Aquatic Animal.



### Habitat:

- Ganges River Dolphins predominantly inhabit the freshwaters of Ganges, Brahmaputra, and Meghna rivers, spanning across the regions of India, Bangladesh, and Nepal.
- They have adapted well to these river systems' murky and swiftly flowing waters.

# **Distinctive Appearance:**

- Gangetic River Dolphins are renowned for their unique physical traits. They possess a lengthy, slender beak and a hump on their back, setting them apart from other river dolphins.
- Their colouring typically leans towards greyish-brown, lacking the conventional dorsal fin observed in marine dolphins.

# **Echolocation:**

- Gangetic River Dolphins employ echolocation to navigate and locate prey in the turbid waters like their dolphin counterparts.
- They emit sound waves that bounce off objects, returning to them and assisting in creating a mental map of their surroundings.

# Diet:

- Their diet mainly consists of various fish species found in freshwater rivers.
- Gangetic River Dolphins are skilled hunters and use their sharp teeth to capture and consume their prey.

# Reproduction:

• These dolphins have a slow reproductive rate, with females giving birth to a single calf every 2-3 years. The gestation period lasts for around 9-10 months.

# **Conservation Status:**

- According to the International Union for Conservation of Nature (**IUCN**), the Gangetic River Dolphin holds an **endangered** status.
- It is legally protected under **Schedule 1** of the **Wildlife (Protection) Act 1972.**
- It is listed in **Appendix 1** of both the Convention on International Trade in Endangered Species **(CITES)** and the Convention on Migratory Species **(CMS)**.

# **Challenges:**

- The construction of over 50 dams and various irrigation projects has fragmented Ganges river dolphin populations, isolating them into distinct groups.
- This isolation increases the risk of inbreeding and heightens their vulnerability to additional threats as they cannot migrate to new areas.
- Their population has declined due to various threats, including habitat degradation, pollution, and accidental entanglement in fishing nets.

# **Initiatives for conservation:**

- o Project Dolphin:
- Initiated in 2020 by the Prime Minister, Project Dolphin focuses on preserving Ganges river dolphins and the riverine ecosystem.
- The Ministry of Environment, Forests, and Climate Change, India, financially supports the project.
- It systematically monitors the species' status and potential threats to develop and implement a conservation action plan.

# **o** Wildlife Institute of India:

- Since 2016, the Wildlife Institute of India has been actively involved in developing a Conservation Action Plan for the Gangetic River Dolphins through their Species Conservation Programs, funded by CAMPA.
- The plan from 2022 to 2047 has been formulated to ensure the well-being of the river dolphin and aquatic habitats.
- Protected Areas:
- Important habitats of the Gangetic river dolphin along the Ganges river have been designated Protected Areas, such as the Vikramshila Dolphin Sanctuary in Bihar.

# Sources:

https://www.thehindu.com/sci-tech/energy-and-environment/19-dolphins-rescued-alive-from-canals-of-ganga-ghagra-basin-says-study/article67392753.ece

महित्रम

# Q1. With reference to the Gangetic River Dolphin, consider the following statements:

- 1. They are only found in freshwater river systems.
- 2. Unlike the Dolphins, these Gangetic River dolphins cannot navigate and locate prey in turbid waters.
- 3. Being vegetarian, their diet mainly consists of various plant species found in freshwater rivers.

# Which of the statements given above is/are NOT correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (b)

# **Q2.** Consider the following with reference to Gangetic River Dolphins:

- 1. Dolphins are one of the oldest creatures in the world.
- 2. Vikramshila Dolphin Sanctuary in Uttar Pradesh has been designated a protected area for these dolphins.

# Which of the abovementioned statements is correct?

- (a) 1 Only
- (b) 2 Only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (a)

Q3. Discuss the challenges facing the conservation of the Gangetic River Dolphin and the initiatives aimed at addressing these challenges, highlighting their importance and effectiveness in ensuring the survival of this endangered species.

# **GLOBAL GENDER GAP INDEX**

This article covers "Daily Current Affairs" and the topic details "Global Gender Gap Index". This topic has relevance in the Social Justice section of the UPSC CSE exam.

# For Prelims:

About the Global Gender Gap Index?

# For Mains:

GS 2: Social Justice

Key Findings from the Global Gender Gap Index 2023 Report? Status of South Asia and India in the Global Gender Gap Index (2023)?

# Why in the news?

The Global Gender Gap Index is an annual report introduced by the World Economic Forum in 2006. It serves as a critical tool to assess and track the state and evolution of gender parity worldwide, highlighting areas where gender gaps persist.

# Key Findings from the Global Gender Gap Index 2023 Report: Progress Towards Full Gender Parity:

• The report states that no country has yet achieved complete gender parity, emphasizing that there is still work to be done.

# **Top-Performing Country:**

• Iceland has consistently secured the top position for the 14th year in a row, with a score of 91.2%. It is the sole country to successfully bridge more than 90% of its gender gap.

# **Gender Gap Progress Across Dimensions:**

- The report measures gender gaps in four main dimensions: Health and Survival, Educational Attainment, Economic Participation and Opportunity, and Political Empowerment.
- The health and Survival gender gap has closed by 96%, the Educational Attainment gap by 95.2%, the Economic Participation and Opportunity gap by 60.1%, and the Political Empowerment gap by 22.1%.

# **Projections for Closing Gender Gaps:**

• The analysis suggests that the time required to close gender gaps varies across dimensions. The Political Empowerment gender gap is projected to take 162 years to close, while the Economic Participation and Opportunity gender gap is estimated to require 169 years. In contrast, the Educational Attainment gender gap is expected to be resolved within 16 years.

# **Challenges in Achieving Gender Parity in the Labor Market:**

- Achieving gender parity in the labor market remains a significant challenge. Women's participation in the global labor market has seen a decline in recent years, and substantial disparities persist in various aspects of economic opportunity.
- Despite women returning to the workforce at higher rates than men, gender gaps still exist, especially in leadership roles.

# Status of South Asia and India in the Global Gender Gap Index (2023) India's Rank and Progress:

• In the Gender Gap Report of 2023 by the World Economic Forum (WEF), India was ranked 127 among 146 countries, showing an improvement of eight places from the previous year's ranking.

• India's rank in 2022 was 135, indicating that it has made progress by 1.4 percentage points, moving towards its 2020 gender parity levels.

# Gender Gap in India:

- The report indicates that India has closed 64.3% of the overall gender gap, with notable achievements in educational parity.
- India has reached parity in enrollment across all levels of education, which is a significant advancement.

# **Economic Participation and Opportunity:**

• However, in economic participation and opportunity, India has achieved only 36.7% parity. This dimension remains a substantial challenge for gender equality.

# **Wages and Income Parity:**

 While there has been some improvement in wage and income parity, the representation of women in senior positions and technical roles has slightly decreased since the previous report.

# **Political Empowerment:**

• India has a 25.3% parity in political empowerment, and women make up 15.1% of Members of Parliament (MPs).

# **Local Governance Representation:**

• Among 117 countries with data available since 2017, India is among 18 nations where women's representation in local governance exceeds 40%, standing at 44.4%.

# **Sex Ratio Improvement:**

- India has seen a 1.9 percentage point improvement in the sex ratio at birth, contributing to increased gender parity after more than a decade.
- India's sex ratio at birth, while improving, is slightly lower than top-scoring countries, standing at 92.7% compared to the leading countries with 94.4% gender parity at birth.

The Global Gender Gap Index reveals that India has made notable progress in certain areas of gender parity but continues to face challenges, especially in economic participation and opportunity. The report underscores the importance of ongoing efforts to close gender gaps, empower women politically, and ensure greater representation in decision-making roles.

Source:

https://www.thehindu.com/news/national/india-climbseight-places-to-127-in-global-gender-index-says-wef-report/ article66994156.ece

- **Q.1** Which organization is responsible for providing the rankings in the 'Global Gender Gap Index' for countries worldwide?
- (a) World Economic Forum
- (b) UN Human Rights Council
- (c) UN Women
- (d) UNDP

### ANSWER: A

Q.2 Gender equality is not just a goal in itself but a catalyst for achieving sustainable development." Elaborate.

# **MERA YUVA BHARAT**

This article covers "Daily Current Affairs" and the topic details "Mera Yuva Bharat". This topic has relevance in the Government Policies section of the UPSC CSE exam.

# For prelims:

Mera Yuva Bharat

### For mains:

- General Studies-02
- Government Policies and Plans

# Why in the news?

• Recently, the Union Cabinet chaired by the Prime Minister approved the setting up of an autonomous body named ;Mera Yuva Bharat (MY India).

# Key points:

# Purpose-

• It seeks to serve as an all-encompassing technology-driven mechanism for youth development and youth-led development, as well as to realize youth aspirations by granting them equal access and creating a developed India across all facets of government.

# Age group targeted:

• Young people between the ages of 15 and 29 will benefit from it, according to the National Youth Policy's definition of; The target audience for program elements created especially for teenagers will be people between the age group of 10-19 years.

# Approach:

- It will involve youth, and the principles of a whole of government approach; (activities supported by all branches of government) will serve as a guide for their empowerment.
- The primary objective of Mera Yuva Bharat (MY Bharat) is to make it a whole of Government platform for youth development. Under the new arrangement, with access to resources & amp; connection to opportunities, youth would become community change agents and nation builders allowing them to act as the Yuva Setu between the Government and the citizens. It seeks to harness the immense youth energy for nation-building. Mera Yuva Bharat Need:
- In order to engage youth and empower them in a rapidly changing world characterised by highvelocity communications, social media, new digital opportunities, and emerging technologies, the government has decided to establish an overarching enabling mechanism in the form of a new Autonomous Body, namely Mera Yuva Bharat (MY Bharat) Expected impact
- Under the new system, youth will become community change agents and nation builders thanks to access to resources and opportunities, allowing them to act as young people's liaisons between the public and the government.
- Improve the leadership skills through experiential learning by shifting from isolated physical interaction to programmatic skills
- Communities will have leaders and social innovators if they invest more in youth as active forces for development. Young people will be able to participate in development as ;active drivers; as opposed to just passive recipients; if there is a focus on youth-led development.

- It aims to better synchronize community needs and aspirations for young people
- In addition, it will bring in increased efficiency through a combination of current programs and serve as a one-stop shop for youth and ministries.

Source: PIB

# **Preliminary Exam Questions-**

# Q.1 Consider the following statements regarding Mera Yuva Bharat:

- 1. Recently, approved the setting up of an autonomous body named Mera Yuva Bharat(MY INDIA) under the chairmanship of the Defence Minister
- 2. In line with the definition of youth: given in the National Youth Policy, youth in the age group of 15-29 years will benefit from it.

# Which of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer - B

# Q-2. With reference to Mera Yuva Bharat, consider the following statements:

- 1. It aims to act as a comprehensive enabling mechanism driven by technology for youth development and youth-led development
- 2. It will engage the youth and their empowerment will be guided by the principles of whole government approach (activities supported from all sections of government).
- 3. The main goal of My India is to make it a holistic government platform for youth development.

# Which of the above statements is/are correct?

- a) Only 1 and 2
- b) Only 2 and 3
- c) Only 3
- d) All of the above.

Answer: (D)

# **Main Exam Question-**

Q.03- Examine the significance of, Mera Yuva Bharat youth will be able to be community change agents and nation builders due to access to resources and opportunities

# **INTENSIFIED MISSION INDRADHANUSH 5.0**

This article covers "Daily Current Affairs" and the topic details "Intensified Mission Indradhanush 5.0". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

# For Prelims:

What is Intensified Mission Indradhanush 5.0? What is Mission Indradhanush?

# For Mains:

GS2: Social Issues Why in the news?

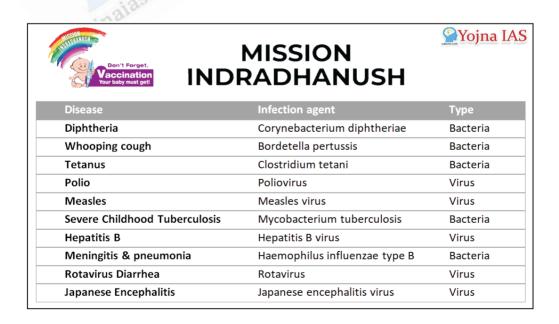
Intensified Mission Indradhanush (IMI 5.0), the national immunisation campaign, is set to conclude all three rounds on October 14, 2023.

# **Intensified Mission Indradhanush (IMI 5.0)**

- Intensified Mission Indradhanush (IMI 5.0) is a nationwide immunisation campaign launched by the Government of India in 2023.
- It is the fifth phase of the Mission Indradhanush initiative, which was launched in 2014 with the aim of increasing full immunisation coverage among children in India.
- **Aim:** To ensure that routine immunisation services reach children and pregnant women who have previously missed or dropped out of vaccination programs.
- Objectives of IMI 5.0:
- to enhance immunisation coverage for all vaccines provided under the Universal Immunization Programme (UIP) as per the National Immunization Schedule (NIS).
- focus on improving Measles and Rubella vaccination coverage to eliminate Measles and Rubella by 2023.
- to use the U-WIN digital platform for routine immunisation in pilot mode across all districts in the country.

# **About Mission Indradhanush**

- Mission Indradhanush was initiated by the Government of India on December 25, 2014, under the Ministry of Health and Family Welfare.
- This mission primarily focuses on enhancing Routine Immunization coverage in the country and striving to achieve a comprehensive immunisation rate of 90% across India by 2022.
- The mission is designed to provide vaccination against **eight vaccine-preventable diseases nationally.**
- These include Diphtheria, Whooping Cough, Tetanus, Polio, Measles, severe Childhood Tuberculosis, Hepatitis B, and diseases like meningitis & pneumonia caused by Haemophilus influenza type B.
- The mission addresses Rotavirus Diarrhea and Japanese Encephalitis in specific states and districts.



**Sources:** Press Information Bureau (pib.gov.in)

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# Q1. With reference to Mission Indradhanush, consider the following statements:

- 1. It aims to reach 100% of the children and pregnant women by 2022.
- 2. The mission aims to offer immunisation against seven diseases that can be prevented through vaccination on a nationwide scale.
- 3. The Intensified Mission Indradhanush (IMI 5.0) focuses on improving Measles and Rubella vaccination coverage to eliminate Measles and Rubella by 2023.

# Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (b)

# Q2. Consider the following:

- 1. Tetanus Virus
- 2. Polio Virus
- 3. Measles Bacteria
- 4. Severe Childhood Tuberculosis Bacteria

# How many of the abovementioned pairs are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four

Answer: (b)

Q3. Discuss the significance and objectives of Mission Indradhanush in the context of India's vaccination programs. Analyze the challenges and impact of immunisation efforts.

# **GLOBAL HYDROGEN REVIEW 2023**

This article covers "Daily Current Affairs" and the Topic details "Green Hydrogen". This Topic has relevance in the Science and Technology section of the UPSC CSE exam.

# For Prelims:

About Green Hydrogen? About IEA?

### For Mains:

GS 3: Science and Technology Green Hydrogen Initiatives in India?

# Why in the news?

As per the 2023 Global Hydrogen Review published by the International Energy Agency (IEA),

even though there is growing global political backing, green hydrogen represents a mere fraction, accounting for less than 1% of both hydrogen production and utilization worldwide.

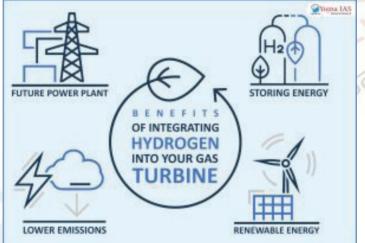
# Green Hydrogen:

- Green hydrogen is a colorless, odorless, tasteless, non-toxic, and highly combustible gas.
- Hydrogen, as an element, is the lightest, simplest, and most abundant substance in the universe.

# **Production of Green Hydrogen**

- Green hydrogen is generated through a process called electrolysis. It involves using renewable energy sources such as solar, wind, or hydropower to split water molecules into hydrogen and oxygen.
- Hydrogen is not naturally found in its pure form in the environment; it typically exists in compounds, including water, biomass, and hydrocarbons.

Various methods have been developed to extract hydrogen from these compounds. These methods
can be categorized into conventional and renewable technologies based on the raw materials and
energy sources used.



# Green Hydrogen Initiatives in India Paris Agreement Commitment

- Under the Paris Agreement, India is committed to reducing its greenhouse gas emissions by 33-35% from the 2005 levels.
- The agreement aims to limit global warming to below 2°C compared to pre-industrial levels.

# **Net-Zero Economy Pledge**

- At the 2021 Conference of Parties in Glasgow, India reaffirmed its commitment to transition from a fossil-dependent economy to a net-zero economy by 2070.
- This transition emphasizes reducing carbon emissions and environmental impact.

# Green Hydrogen as an Alternative Fuel

- India's government has recognized the potential of green hydrogen as a key element in achieving energy independence by 2047.
- The goal is to position India as a global hub for green hydrogen production and a significant hydrogen exporter.

# **Ambitious Non-Fossil Energy Capacity**

- India has initiated the production of green hydrogen as part of its strategy to expand non-fossil energy capacity.
- The target is to achieve 500 gigawatts of non-fossil energy capacity by 2030.

# Pioneering Green Hydrogen Pilot Plant

- In April 2022, the public sector Oil India Limited (OIL) established India's first green hydrogen pilot plant.
- The plant, located at the Jorhat pump station in eastern Assam, produces 99.99% pure green hydrogen.
- It is powered by a 500 KW solar plant and has an initial capacity to generate 10 kg of hydrogen per day, with plans to scale production to 30 kg per day.

# The International Energy Agency (IEA):

- The International Energy Agency (IEA) is an autonomous intergovernmental organization.
- It was established in 1974 by developed countries, operating under the umbrella of the Organization for Economic Co-operation and Development (OECD).
- The IEA was founded in response to the oil embargo, a pivotal event in the energy sector.

# **Membership and Engagement**

- The IEA is composed of 30 member countries, and it also has eight associate nations.
- Additionally, four countries Chile, Colombia, Israel, and Lithuania are currently seeking full membership in the organization.
- India joined the IEA as an Associate member in March 2017, but it had been engaging with the IEA well before formal association.

# **World Energy Outlook Report**

- The IEA annually releases the "World Energy Outlook" report, which is a significant publication in the energy sector.
- This report provides valuable insights and projections into global energy trends and challenges.

# **Main Focus Areas**

- The IEA's activities are guided by four main areas of focus:
  - **Energy Security:** Ensuring a stable and reliable supply of energy to member and associate countries.
  - **Economic Development:** Promoting policies and strategies that support economic growth in the energy sector.
  - **Environmental Awareness:** Advocating for environmentally sustainable energy practices and technologies.
  - o **Global Engagement:** Collaborating with nations and organizations worldwide to address energy-related challenges on a global scale.

# Q.1 Consider the following statements about the International Energy Agency (IEA):

- 1. The IEA releases the "World Energy Outlook" report
- 2. It operates as an autonomous intergovernmental organization under the United Nations.
- 3. India is a full member of the IEA.

# How many of the above statement/s is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

# **ANSWER: A**

# Q.2 Consider the following statements about Green Hydrogen:

- 1. It is considered green when produced using renewable energy sources like wind or solar power through a process called electrolysis.
- 2. Green Hydrogen is primarily used for electricity generation and is not suitable for other applications.
- 3. India has recently become the largest global producer of Green Hydrogen.

# How many of the above statement/s is/are correct?

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- (a) Only one
- (b) Only two
- (c) All three
- (d) None

**ANSWER: A** 

Q.3 Green Hydrogen is gaining global attention as a key element in the transition towards a sustainable energy future. Analyze the potential of Green Hydrogen in mitigating India's energy and environmental challenges.