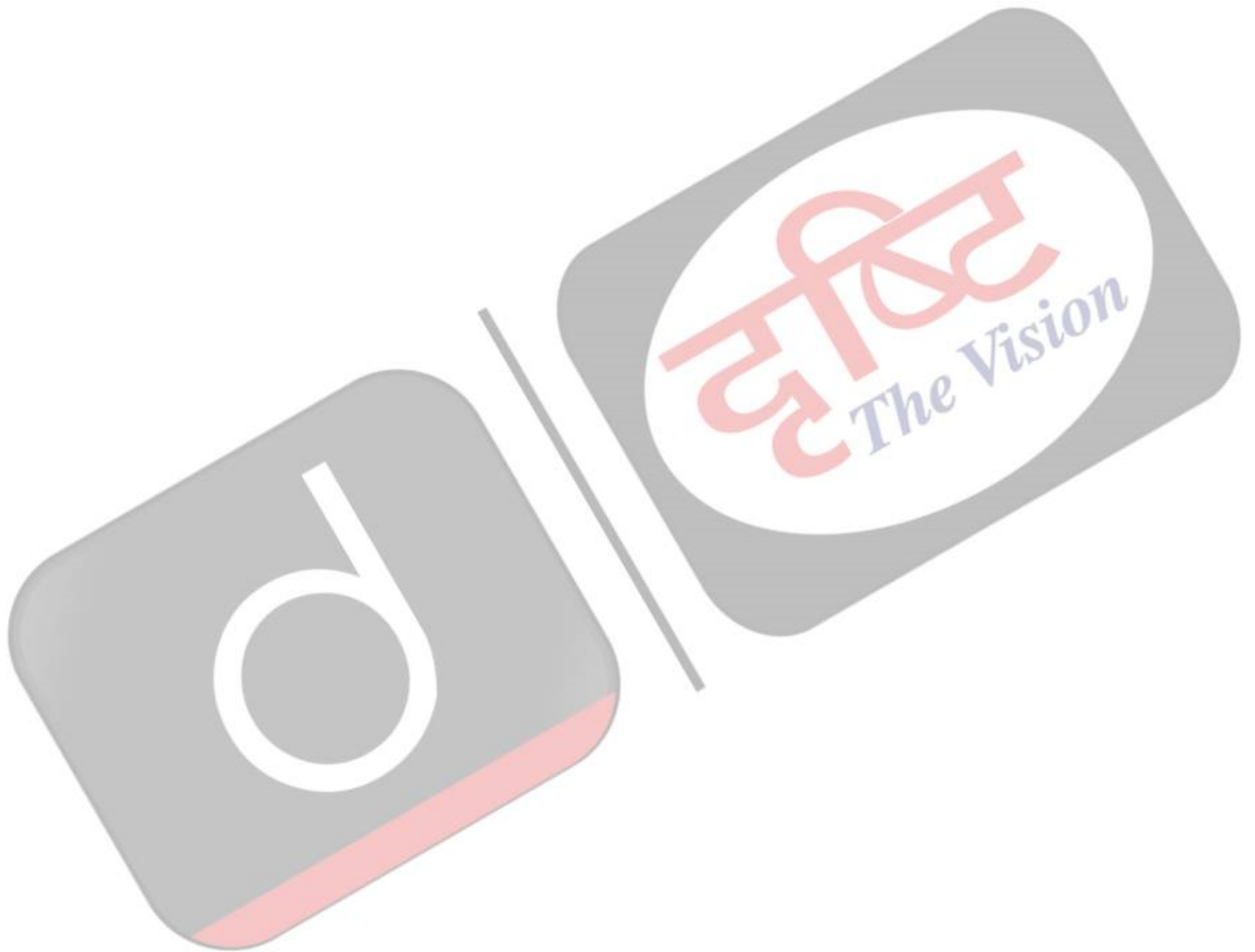




Good Governance

//



GOOD GOVERNANCE

As per World Bank, Good Governance is the manner in which power is exercised in the management of a country's economic and social resources for development.

References:

- Bhagavad Gita
- Kautilya's Arthashastra: Welfare of people considered paramount in the role of King
- Mahatma Gandhi emphasised "su-raj" (good governance)
- SDG 16: Improvement in governance, inclusion, participation, rights, and security

Key Attributes (as per Human Rights Council)

- ↳ Transparency
- ↳ Responsibility
- ↳ Accountability
- ↳ Participation
- ↳ Responsiveness (to the needs of the people)

8 Principles Given By UN



Good Governance in India - Initiatives

National Good Governance Day: 25th December (coincides with birth anniversary of former PM Atal Bihari Vajpayee)

■ Transparency & Accountability

- ↳ Right to Information (**Article 19 (1)**) and RTI Act, 2005
- ↳ E-Governance (Min. Govt. - Max. Governance); Digital India Program
- ↳ Central Public Grievance Redress and Monitoring System (CPGRAMS)

■ Decentralisation and Local Governance

- ↳ NITI Aayog (Cooperative Federalism)
- ↳ 73rd and 74th Const. Amendments

■ Citizen Participation and Empowerment

- ↳ Make in India Initiative, MyGov Platform, RTE Act, 2009

■ Legal Reforms

- ↳ Model Police Act (2015), e-FIRs, eCourts Project, SUPACE portal

■ Good Governance Index (Prepared by DARPG)

Related Challenges

- ↳ **Corruption:** India ranked 93/180 on Corruption Perception Index (CPI) 2023
- ↳ **Inequality and Social Exclusion:** India's wealth inequality is at a 60-year high (in 2024) (top 1% owning 40.1% of wealth)
- ↳ **Inadequate Judicial Infrastructure:** 5 cr+ cases pending in various courts, (~80,000 in the SC alone)

Suggestions

- ↳ Need to create a secure data platform to engage citizens in policy decisions
- ↳ AI-powered Grievance Redressal
- ↳ **Sevottam Model:** Proposed by 2nd Administrative Reforms Commission (ARC) for public service delivery



Drishti IAS

[Read more...](#)

Allegations of Child Labour in Trade Negotiations with Australia

For Prelims: [India-Australia Economic Cooperation and Trade Agreement](#), [Bonded labour](#), [Child labour](#), [International Labour Organization](#), [Article 24](#), [Article 23](#)

For Mains: Child labour and forced labour in India, Issues Related to Children, Forced labour in India.

[Source: IE](#)

Why in News?

The Indian Ministry of Commerce and Industry has firmly refuted allegations of [child labour](#) made in a recent report by **Australia's Joint Standing Committee on Trade and Investment Growth**.

- The allegations surfaced amid ongoing negotiations between **India and Australia for the Comprehensive Economic Cooperation Agreement (CECA)**, which aims to broaden the existing [Economic Cooperation and Trade Agreement \(ECTA\) signed in 2022](#).

What are the Allegations Made by the Australian Panel?

- The Australian committee's report, highlighted concerns about child and forced labour in India, based on claims by the Community and Public Sector Union (CPSU) and the State Public Services Federation (SPSF Group).
- The report recommended that the Australian Government include human rights, labour, and environmental chapters in its trade agreements, aligning with [United Nations](#) and [International Labour Organisation conventions](#) and declarations signed by Australia.
- **Facts Supporting Australia's Claim:**
 - According to the [2023 Global Slavery Index](#) estimates by **Walk Free**, an international human rights group focused on the eradication of modern slavery, there were **11 million people living in modern slavery in India** on any given day in 2021, the highest number of any country.
 - As per Census 2011, the total child population in India in the **age group (5-14) years is 259.6 million**.
 - Of these, **10.1 million (3.9% of total child population) are working**, either as 'main worker' or as 'marginal worker'. In addition, more than 42.7 million children in India are out of school.

How has India Responded?

- **Child Labour is Prohibited:** The Indian government has categorically refuted the allegations, stating that existing rules and regulations **prohibit child labour and bonded labour**.
- **Constitutional Protection:** India's Constitution protects labour rights and empowers **both central and state governments to enact laws like the Bonded Labour System (Abolition) Act, 1976 to safeguard workers' rights**, including forming unions and preventing harassment.
- **Strict Licensing and Compliance:** All business entities in India are licensed by local governing bodies and must comply with **labour welfare laws prescribed by the union and state governments**.
- **Comprehensive Records:** Processing units maintain comprehensive records related to processing, quality checks, employee training, and compliance with applicable rules and regulations.

What does India's Legal Framework Say About Child Labour and Forced

Labour?

▪ Constitutional Rights:

- **Article 23:** It prohibits **trafficking in human beings and forced labour**, ensuring protection against exploitation and degrading work conditions.
 - It allows for **compulsory service for public purposes, with no discrimination based on religion, race, caste, or class.**
 - The article aims to eradicate practices that exploit individuals and uphold principles of equality, justice, and respect for human rights.
- **Article 24:** Of the Indian Constitution **prohibits the employment of children under 14 in factories, mines, or hazardous occupations.**
 - The aim is to protect children from exploitation, ensure their health and development, and provide access to education.
 - The government can determine specific hazardous occupations and enforce this provision through legislation and regulations.
 - Article 24 is closely connected to **Article 21A**, which **ensures the right to education for children aged 6 to 14.**
 - By banning child labour, Article 24 supports the fulfilment of the right to education and ensures that children can develop their potential and skills through proper schooling.
- **Article 39:** It **outlines principles that the State should follow**, including ensuring equal rights to livelihood for men and women, equal pay for equal work, **protection of workers' health and children's well-being, and opportunities for children to develop in a healthy and dignified manner.**

▪ Legislations Against Child Labour:

- **Child Labour (Prohibition & Regulation) Act, 1986 (amended in 2016):**
 - Bans employing children under 14 in all work. However, **it makes an exception for work in family businesses, outside of school hours** and during vacations, and in the entertainment industry (subject to safety measures), provided it does not affect their school education.
 - Restricts adolescents (14-18) from hazardous occupations.
 - Lists expand progressively based on recommendations.
- **Factories Act, 1948:** No children under 14 in factories.
- **Mines Act, 1952:** No children under 18 in mines.
- **Juvenile Justice (Care and Protection of Children) Act, 2015:**
 - Working children are considered "in need of care and protection."
 - A child in need of care and protection is defined as a child who is **homeless, engaged in illegal labour**, living on the streets or begging, living with an abusive guardian, at risk of drug abuse or trafficking, facing exploitation, suffering from incurable diseases or disabilities, a victim of armed conflict or natural disasters, or at risk of early marriage.
- **National Policy on Child Labour (1987):** Focuses on rehabilitation of children already working.
- **The Right of Children to Free and Compulsory Education (RTE) Act, 2009:** Ensures free education and **indirectly prevents child labour by keeping children in school.**
- In 2001, there were **1.26 crore working children aged 5-14 out of a total child population of 25.2 crore.** A survey in 2004-05 estimated the number of working children at 90.75 lakh.
 - By 2011, the number of working children in the **same age group had further reduced to 43.53 lakh**, indicating successful government efforts.

▪ Legislations Against Forced Labour:

- **Bonded Labour System (Abolition) Act, 1976:** Criminalises bonded labour (debt traps).
 - The act freed all bonded labourers, liquidated their debts, and made the **practice of bondage punishable by law.**
 - The Act is being **implemented by the State Governments.** District Magistrates have been given responsibilities for implementing the Act, and vigilance committees are required to be formed at district and sub-divisional levels. Offences under the Act can result in imprisonment for up to three years and fines of up to two thousand rupees.

- **Central Sector Scheme for Rehabilitation of Bonded Labourer, 2021:**
 - Launched in 1978, by the Ministry of Labour, **provides financial assistance for the rehabilitation of freed bonded labour**, shared by Central and State Governments.
 - The scheme was later modified and revamped in 2016 and 2022, **offering financial assistance of Rs. 1-3 lakhs per beneficiary**.
 - State Governments are not required to pay matching contributions for cash rehabilitation assistance.
 - A total of 315,302 bonded labourers have been released till date, and from 1978 to January 2023, a total of 296,305 bonded labourers have been rehabilitated.

Note:

- Bonded labour, defined by the [National Human Rights Commission of India](#), is a form of slavery called **debt bondage** that has persisted for centuries.
- It is considered the most severe form of modern slavery, where workers are forced to **work for long periods with little pay**. This can include being coerced to work without pay for a specific period by an employer as a way to settle a debt.
- In 1983, the [Supreme Court](#) ruled in the *People'S Union For Democratic Rights (PUDR) vs. Union of India* case that the **right against forced labour includes the right to a minimum wage**.
 - The Court recognised that migrant and contract labourers often had no choice but to accept work for less than the minimum wage, and held that this economic compulsion was a form of forced labour.
- The Court emphasised the need for a constitutional guarantee of the minimum wage to address this issue.

What are International Labour Organisation Conventions Regarding Child Labour?

- The Core Conventions of the ILO (also called fundamental/human rights conventions) are:

Convention	Key Provisions	Status in India
Forced Labour Convention, 1930 (No. 29)	Prohibits all forms of forced or compulsory labour, including debt bondage.	Ratified
Equal Remuneration Convention (No. 100)	Outlines principles for equal remuneration for work of equal value, regardless of gender. Focuses on gender discrimination in employment.	Ratified
Minimum Age Convention, 1973 (No. 138)	Stipulates that the minimum age for work should not be below the age of compulsory schooling and in any case not less than 15 years, with possible exceptions for developing countries.	Ratified
Worst Forms of Child Labour Convention, 1999 (No. 182)	Prohibits hazardous work likely to jeopardize children's physical, mental, or moral health, aiming at the immediate elimination of the worst forms of child labour for children below 18 years.	Ratified
Right to Organise and	Establishes rules for freedom of	Not Ratified

Collective Bargaining Convention (No. 98)	unionisation and collective bargaining, protecting workers from discrimination for union activities. Requires promotion of voluntary negotiations between governments and workers.	
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Drishti Mains Question:

Q. Examine the relationship between economic cooperation agreements and human rights obligations. Should human rights, labour, and environmental chapters be included in trade agreements? Justify your answer with examples.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims:

Q. International Labour Organization's Conventions 138 and 182 are related to (2018)

- (a) Child Labour
- (b) Adaptation of agricultural practices to global climate change
- (c) Regulation of food prices and food security
- (d) Gender parity at the workplace

Ans: (a)

Q. Consider the following countries: (2018)

1. Australia
2. Canada
3. China
4. India
5. Japan
6. USA

Which of the above are among the 'free-trade partners' of ASEAN?

- (a) 1, 2, 4 and 5
- (b) 3, 4, 5 and 6
- (c) 1, 3, 4 and 5
- (d) 2, 3, 4 and 6

Ans: (c)

Mains:

Q. Examine the main provisions of the National Child Policy and throw light on the status of its implementation. (2016)

Vietnam Push for Non-Market Economy Status

For Prelims: Economic and Social Development, [Anti-dumping duties](#), Types of Economies, [World](#)

[Trade Organisation \(WTO\).](#)

For Mains: Recent development in [India US relations](#), geopolitical challenges and way forward, [India-Vietnam Relations](#).

Source: [IE](#)

Why in News?

Vietnam has urged the **United States** administration to promptly reclassify its status from "**non-market economy**" to "**market economy**".

- This would provide relief to Vietnam, as currently goods imported from Southeast Asian nations are **facing high taxes** on imports.

What is USA's Concept of Non-Market Economies (NME)?

▪ **About:**

- In US, a **Non-Market Economy (NME)** refers to any foreign country that the **US Department of Commerce** determines **does not follow market-based cost or pricing structures**. Consequently, sales of goods in such countries may not accurately reflect their fair value.
- Countries in this list are Armenia, Azerbaijan, Belarus, China, Georgia, Kyrgyz Republic, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Vietnam.

▪ **Criteria:**

- The **United States** designates a country as **non-market economy** based on several factors namely:
 - If the country's currency is **convertible**.
 - If wage rates are determined by free bargaining between labour and management.
 - If joint ventures or other **foreign investment** are allowed
 - Whether the means of production are owned by the state.
 - If the state controls the allocation of resources and price and output decisions.
 - Other factors like **human rights**.

▪ **Anti-Dumping Duty on Non-market Economy:**

- The designation of a '**non-market economy**' allows the US to levy **Anti-dumping duties** on products imported from designated countries.
 - **Dumping** in international trade occurs when a country deliberately sets its **export prices lower than its domestic prices**, causing **harm to industries in the importing country**.
 - **Anti-dumping duties** are tariffs imposed by a country's government on imported goods that are sold at unfairly low prices, typically below their market value or the cost of production.
 - These duties are intended **to protect domestic industries from the harmful effects of dumping**, which can include undercutting prices, harming domestic producers, and distorting competition.

▪ **Determining the Level of Anti-Dumping Duty:**

- The US determines anti-dumping duties for non-market economies like Vietnam **by comparing the product's value to a third country**, such as Bangladesh, which is considered a market economy, and that value is then assumed to be the production cost for the company in the non-market economy.
 - This method is used because **non-market economies may not have transparent pricing mechanisms**, leading to reliance on surrogate countries for comparison.

▪ **NME and World Trade Organisation (WTO):**

- The **WTO does not explicitly recognize or endorse the NME status**. However, it allows members to use alternative methodologies to calculate normal values in

antidumping investigations.

- The [WTO Antidumping Agreement](#) provides flexibility for members to choose an appropriate methodology for NMEs. It does not prescribe a specific approach.

What is market Economy?

- It is a system in which **production decisions and the prices of goods and services** are **guided** primarily **by the interactions of consumers and businesses**, i.e. the law of supply and demand is allowed to determine what is available and at what price.
 - A market economy gives entrepreneurs the freedom to pursue profits by creating new products, and the freedom to fail if they misread the market.

What are Vietnam's Arguments Regarding its Non-Market Economy (NME) Status?

▪ Vietnam's Arguments:

- **Currency Convertibility:** Vietnam's currency is **convertible** into other currencies transparently based on market principles.
- **Wage Determination:** Wage rates result from **free bargaining** between labour and management.
- **Foreign Investment:** Foreign investment is **permitted**, and Vietnam has become an attractive destination for it.
- **Means of Production:** The government does not **own or control** the means of production significantly.
- **Resource Allocation:** The government does not have significant control over **resource allocation** or price/output decisions.
- **Market Principles:** Vietnam's economy operates on **market principles**, including legal frameworks, corporate governance, and diversified foreign relations.
- **Flaws in Calculations:** **Vietnam's Center for [WTO](#) and International Trade** has said that the method used to calculate anti-dumping duties is flawed because it results in artificially high dumping margins, which do not accurately reflect the actual practices of Vietnamese companies.

▪ US Apprehensions:

- The US Commerce Department is currently reviewing Vietnam's status.
- The US steelmakers and the American Shrimp Processors Association have asked the US administration not to change Vietnam's status to a market economy.
 - They cited Vietnam's restrictions on land ownership, weak labour laws, and lower shrimp duties that would hurt their members as reasons for their request.
- The change in Vietnam could benefit Chinese state firms invested in Vietnam by allowing them to bypass US tariffs more easily.



What is the Status of India and Vietnam's Bilateral Trade?

- India and Vietnam share **traditionally close and cordial bilateral relations**. Over the years, their economic ties have strengthened significantly.
- **Financial Year (FY) April 2020 - March 2021:**
 - Bilateral trade between India and Vietnam reached **USD 11.12 billion**.
 - Indian exports to Vietnam amounted to **USD 4.99 billion**.
 - Indian imports from Vietnam stood at **USD 6.12 billion**.
- **Recent Trends:**
 - In **2022**, bilateral trade continued to grow, reaching **USD 15 billion**.
 - Vietnam is India's **15th largest trading partner**, and India is Vietnam's **8th trading partner** globally.

Read more: [India and Vietnam Relations](#)

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims:

Q. In the Mekong-Ganga Cooperation, an initiative of six countries, which of the following is/are not a participant/ participants? (2015)

1. Bangladesh
2. Cambodia

3. China
4. Myanmar
5. Thailand

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2, 3 and 4
- (c) 1 and 3
- (d) 1, 2 and 5

Ans: (c)

Q. Consider the following pairs: (2020)

	River	Flows into
1.	Mekong	Andaman Sea
2.	Thames	Irish Sea
3.	Volga	Caspian Sea
4.	Zambezi	Indian Ocean

Which of the pairs given above is/are correctly matched?

- (a) 1 and 2 only
- (b) 3 only
- (c) 3 and 4 only
- (d) 1, 2 and 4 only

Ans: (c)

Mains:

Q. 'What introduces friction into the ties between India and the United States is that Washington is still unable to find for India a position in its global strategy, which would satisfy India's National self-esteem and ambitions'. Explain with suitable examples. (2019)

30 Years of TRIPS

For Prelims: [World Intellectual Property Organization's \(WIPO\)](#), Patent Criteria in India, [National IPR Policy](#), [TRIPS](#)

For Mains: [Issues relating to Intellectual Property Rights](#), Role and Importance of a Strong IPR Ecosystem, India's Current Scenario, Significance of TRIPS

[Source: WTO](#)

Why in News?

Recently, [World Trade Organisation \(WTO\)](#) members commemorated the **30th anniversary** of the Agreement on [Trade-Related Aspects of Intellectual Property Rights \(TRIPS\)](#).

- In [Marrakesh](#), an important agreement was made that helped create the WTO in 1995. This agreement, called TRIPS, has had a long-lasting effect.

How does the TRIPS Agreement Evolved?

- **The Venetian Patent Statute (1474):** It was the first codified patent system in Europe that granted inventors a temporary monopoly on "new and ingenious devices".
- **The Industrial Revolution and the Need for International Standards (19th Century):** Rapid technological advancements created a need for the harmonisation of patent laws.
 - The [Paris Convention \(1883\)](#) was the first step taken to protect intellectual work in other countries.
 - The [General Agreement on Tariffs and Trade \(GATT\)](#) addressed intellectual property in a limited way.
 - [The Uruguay Round](#), spanning from 1987 to 1994, led to the Marrakesh Agreement establishing the WTO, including the TRIPS Agreement.
 - The WTO Agreement on TRIPS is the most comprehensive multilateral agreement on intellectual property (IP).



INTELLECTUAL PROPERTY RIGHTS (IPRs)

IP refers to intangible assets owned/legally protected by an individual/company from outside use or implementation without consent.



NEED FOR IPR

- Encourages Innovation
- Economic growth
- Safeguard rights of creators
- Enhances ease of doing business



RELATED CONVENTIONS/TREATIES (INDIA SIGNATORY TO ALL)

- WIPO Administered (first recognised IPR under):**
 - Paris Convention for the Protection of Industrial Property 1883 (**Patents, Industrial Designs**)
 - Berne Convention for the Protection of Literary and Artistic Works 1886 (**Copyrights**)
- WTO - TRIPS Agreement:**
 - Ensures adequate standard of protection
 - Argues for incentives for technology transfer to developing countries
- Budapest Treaty 1977:**
 - International recognition of the deposit of micro-organisms for the purposes of patent procedure
- Marrakesh VIP Treaty 2016:**
 - Facilitate access to published works by visually impaired persons and persons with print disabilities
- IPR also outlined in **Article 27** (Universal Declaration of Human Rights)



INDIA AND IPRS - INITIATIVES

- National IPR Policy 2016:**
 - Motto:** "Creative India; Innovative India"
 - Compliant with TRIPS Agreement
 - Brings all IPRs to single platform
 - Nodal Dept - Department of Industrial Policy & Promotion (Ministry of Commerce)
- National (IP) Awareness Mission (**NIPAM**)
- Kalam Program for Intellectual Property Literacy and Awareness Campaign (**KAPILA**)

World Intellectual Property Day: 26th April

Intellectual Property	Protection	Law in India	Duration
Copyright	Expression of Ideas	Copyright Act 1957	Variable
Patent	Inventions- New Processes, Machines, etc.	Indian Patent Act 1970	20 years Generally
Trademarks	Sign to distinguish business goods or services	Trade Marks Act 1999	Can last Indefinitely
Trade Secrets	Confidential Business Information	Protected without Registration	Unlimited time
Geographical Indication (GI)	Sign used on specific geographical origin and possess qualities due to site of origin	Geographical Indications of Goods (R & P) Act, 1999	10 years (Renewable)
Industrial Design	Ornamental or aesthetic aspect of an article	Design Act, 2000	10 years



What has been the TRIPS Agreement's Role in International Collaboration?

- Harmonisation of IP Laws:** TRIPS set minimum standards for IP protection across member countries.
 - This created a **more predictable legal environment** for international trade and

collaboration in research and development (R&D).

- **Increased Transparency:** TRIPS **obligated members to disclose their Intellectual Property (IP) laws** and regulations, fostering greater transparency in the global IP system.
- **Knowledge Sharing:** TRIPS provisions on **technology transfer** encourage collaboration between developed and developing countries.
 - Developed countries are obligated to provide mechanisms for **transferring technology** to developing countries under certain conditions.
- **Promotion of Social and Economic Welfare:** WTO highlighted TRIPS' role in **balancing rights with obligations** to promote social and economic welfare, aligning with the **SDGs'** objectives.
 - During the late 1990s crisis, TRIPS' flexibilities were crucial for access to **antiretroviral treatments**, illustrating its significance in public health emergencies.

What are the Challenges Related to TRIPS?

- **Balance Between Rights and Access:** TRIPS' focus on strong IP rights can limit access to essential medicines, educational materials, and agricultural technologies in developing countries.
- **Biopiracy and Traditional Knowledge:** Concerns exist regarding the **patenting of genetic resources** and traditional knowledge from developing countries without fair compensation.
 - TRIPS' provisions on disclosure of the origin of genetic resources and traditional knowledge are seen as inadequate.
- **Enforcement Issues:** Enforcing IP rights, particularly in areas like **copyright infringement and counterfeiting**, remains a challenge for many developing countries.
 - Lack of resources and robust legal systems can hinder effective IP protection.
- **Data Privacy:** International discussions are needed to address data ownership, privacy, the issue of **e-commerce**, and the patentability of data-driven inventions in the context of **Artificial Intelligence (AI)** and **big data**.
- **Global Health Equity:** Amidst ongoing debate on flexibilities within the TRIPS agreement, like compulsory licensing, access to affordable medicines still remains a challenge, especially in the global south.

Way Forward

- **Standardisation and Capacity Building:** Developing **common standards** and best practices for IP enforcement across countries, along with **capacity-building initiatives** for developing nations, can create a fairer global IP landscape.
- **Open Innovation and Knowledge Sharing:** Exploring models like **open-source collaboration** and **Creative Commons licenses** can promote innovation while ensuring knowledge accessibility.
- **Addressing Emerging Technologies:** Establishing **clear guidelines for IP ownership** and rights related to **artificial intelligence (AI)** and other emerging technologies will be crucial for fostering responsible innovation.

Drishti Mains Question:

Q. Discuss the evolution and impact of the TRIPS Agreement on global intellectual property rights, trade, and development. How has TRIPS influenced access to medicines, technology transfer, and economic growth, especially in developing economies?

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims:

Q1. With reference to the 'National Intellectual Property Rights Policy', consider the following statements: (2017)

1. It reiterates India's commitment to the Doha Development Agenda and the TRIPS Agreement.

2. Department of Industrial Policy and Promotion is the nodal agency for regulating intellectual property rights in India.

Which of the above statements is/are correct?

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

Ans: (c)

Q2. Consider the following statements: (2019)

1. According to the Indian Patents Act, a biological process to create a seed can be patented in India.
2. In India, there is no Intellectual Property Appellate Board.
3. Plant varieties are not eligible to be patented in India.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

Ans: (c)

Mains:

Q. In a globalized world, Intellectual Property Rights assume significance and are a source of litigation. Broadly distinguish between the terms—Copyrights, Patents and Trade Secrets. **(2014)**

Navigating India's Transition to Sustainability

For Prelims: [Business Responsibility and Sustainability Reporting](#), [National Stock Exchange](#), [SEB](#), [Environmental, Social, and Governance \(ESG\)](#), [BRSR](#)

For Mains: Measures to Improve Corporate Governance in India.

Source: PWC

Why in News?

Recently, PwC India, a professional services network has published a report called '**Navigating India's Transition to Sustainability**'.

- The Report has focused on **sustainability initiatives** of leading companies in India.

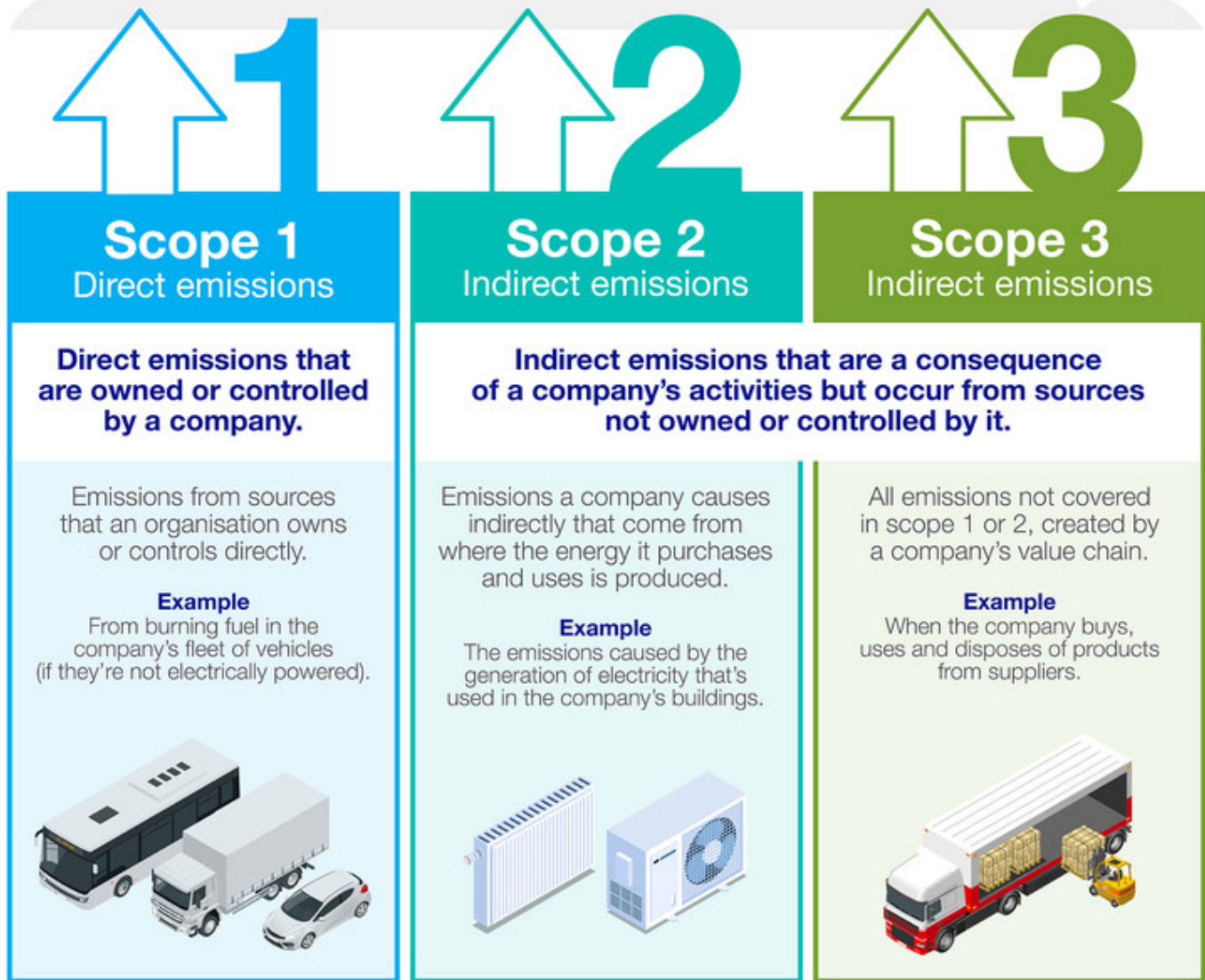
What are the Key Findings of the Report?

▪ About:

- The report analyses how companies are adapting to the **Business Responsibility and Sustainability Reporting (BRSR)** disclosures mandated by the **Securities and Exchange Board of India (SEBI)**.
- The analysis covers the **BRSR** reports of the **top 100 companies** for the financial year ended 31st March 2023.
- The business sector is seen as a critical enabler in achieving **India's net zero vision by 2070**.
 - **Net Zero** is referred to as **carbon neutrality**, i.e. achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere.

▪ Key Findings of the Report:

- **51%** of India's top 100 listed companies by **market capitalisation** disclosed their data for FY23 despite it being a voluntary disclosure in **BRSR**.
- **34%** of the companies have reduced their **Scope 1** emissions and **29%** have reduced their **Scope 2** emissions.
 - **Scope 1** covers emissions from sources that an **organisation owns or controls directly**.
 - **Scope 2** is emissions that a company causes **indirectly and come from where the energy it purchases and uses** is produced.
- **44%** of the top 100 listed companies conducted the **life-cycle assessment** of their products or services.
- **49%** of companies have increased their energy consumption from **renewable sources** and **31%** of companies have disclosed their **net-zero targets**.
- Key initiatives leading to emission reduction include transitioning to energy-efficient technologies such as LEDs, adopting efficient air-conditioning, ventilation, and heating systems, shifting to renewable sources for energy needs, purchasing carbon offsets, and entering into off-site power purchase agreements.



Note:

- **Business Responsibility and Sustainability Reporting (BRSR)** aims to facilitate more meaningful engagement between businesses and their stakeholders by focusing on **Environmental, Social, and Governance (ESG)** considerations.
- **ESG** goals encompass a framework of guidelines that compel companies to adhere to improved **governance, ethical conduct, environmentally sustainable practices**, and social responsibility in their operations.
 - The **environmental criteria assess** a company's role as a custodian of the environment.
 - **Social** criteria evaluate the company's handling of relationships with employees, suppliers, customers, and the communities in which it operates.
 - **Governance focuses on the leadership**, executive compensation, auditing, internal controls, and shareholder rights within a company.



How Significant is the Report for India?

- The report sheds light on India's journey towards sustainability, emphasising **ESG** considerations.
 - The report encourages companies to be accountable for their sustainability efforts.
- The report aligns with the **BRSR** framework introduced by the **SEBI**. The report serves as a guide for compliance and transparent disclosure.
- The report showcases India's commitment to sustainability, enhancing investor confidence.
 - Globally, sustainable practices are becoming a competitive advantage, and this report positions India favourably.
- Policymakers can draw insights from the report to shape regulations and policies that promote sustainable practices.
- The shift towards sustainability in India isn't merely about meeting regulations but it's also about fostering growth in a responsible manner.
 - The report emphasises the need to balance economic development with environmental and social well-being.

What are the Initiatives taken to Ensure ESG Compliance in India?

- In 2011, the **Ministry of Corporate Affairs (MCA)** released the **National Voluntary Guidelines (NVGs)** on Social, Environmental and Economic Responsibilities of Business, marking an early step in defining **ESG** disclosure standards for companies.
- The **SEBI** introduced the **Business Responsibility Reports (BRR)** in 2012, requiring the top 100 listed entities by market capitalisation to include BRR in their annual reports. This was later extended to the top 500 listed entities in 2015.
 - In 2021, SEBI replaced the BRR reporting requirement with the more comprehensive **Business Responsibility and Sustainability Report (BRSR)**.
- The BRSR seeks disclosures from listed entities on their performance against the nine principles of

the **'National Guidelines on Responsible Business Conduct' (NGBRCs)**.

- Companies have the opportunity to use different reporting frameworks in order to show their commitment to ESG practices like [Global Reporting Initiative \(GRI\)](#), **Carbon Disclosure Project (CDP)**, and **Sustainability Accounting Standards Board (SASB)**.

SEBI

- **SEBI** is a **Statutory Body** established in 1992 in accordance with the provisions of the **Securities and Exchange Board of India Act, 1992**.
- The basic functions of **SEBI** is to protect the interests of investors in securities and to promote and regulate the securities market.
- The headquarters of SEBI is situated in Mumbai. The regional offices of **SEBI** are located in Ahmedabad, Kolkata, Chennai and Delhi.

Drishti Mains Question:

The Securities and Exchange Board of India plays a vital role in overseeing and regulating the securities market in the country. Discuss its significance and the obstacles it encounters.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims:

Q. Which of the following is issued by registered foreign portfolio investors to overseas investors who want to be part of the Indian stock market without registering themselves directly? (2019)

- (a) Certificate of Deposit
- (b) Commercial Paper
- (c) Promissory Note
- (d) Participatory Note

Ans: (d)

Mains:

Q. Economic growth in the recent past has been led by an increase in labor activity." Explain this statement. Suggest the growth pattern that will lead to creation of more jobs without compromising labor productivity. (2022)

Xenotransplantation

Source: IE

Why in News?

Recently, the first recipient of a modified pig kidney transplant passed away after his groundbreaking [xenotransplantation surgery](#). His death was not linked to the transplant.

What is Xenotransplantation?

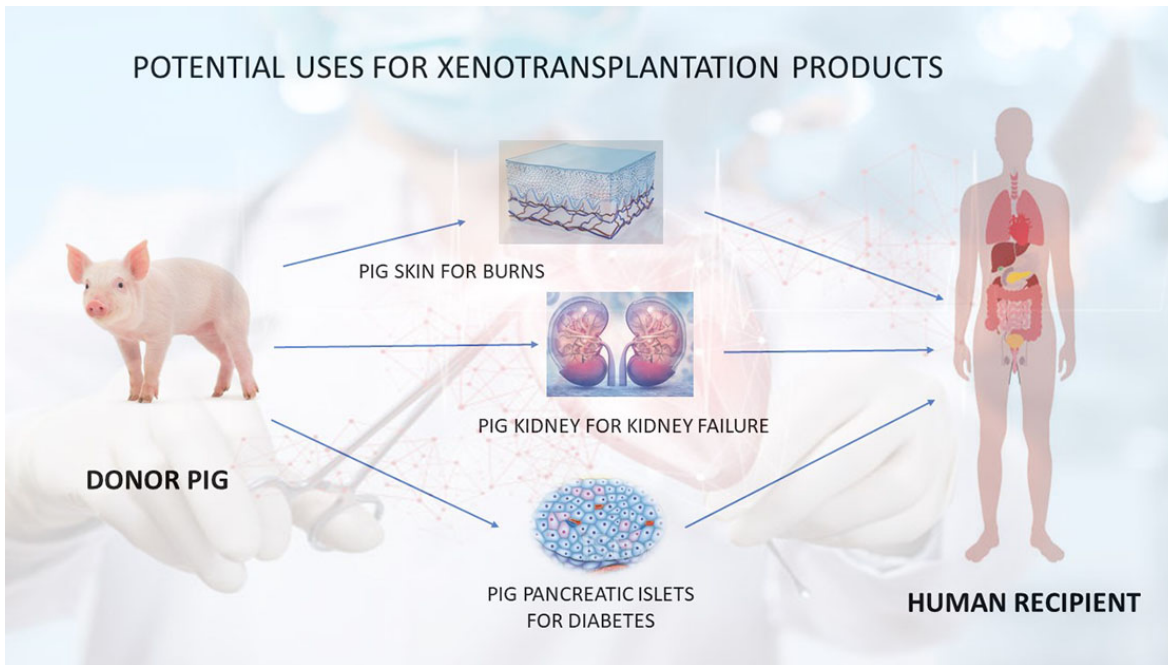
- **Definition:**
 - According to the **US Food and Drug Administration (FDA)**, "Xenotransplantation is any procedure that involves the **transplantation, implantation or infusion** into a human recipient of either **live cells, tissues, or organs from a nonhuman animal source**, or **human body fluids, cells, tissues or organs** that have had ex vivo contact with **live nonhuman animal cells, tissues or organs**.
- **Purpose:** The primary aim is to address the shortage of **human donor organs**.
 - For instance, in the United States, nearly 90,000 people are waiting for a kidney transplant, with over 3,000 dying annually while still waiting.
- **Historical Context:** The practice dates back to the 1980s, with the heart being one of the first organs attempted for transplantation from animals to humans.
- **Procedure:** In xenotransplantation, the animal organ selected, such as a pig kidney, undergoes **genetic modifications to improve its compatibility with the human body**.
 - This involves using **gene-editing technologies like CRISPR-Cas9** to remove certain pig genes that produce sugars with **antibodies** our immune systems react to and adding human genes to improve the organ's compatibility.
- **Complications in Xenotransplantation:**
 - **Organ Rejection:** Preventing the human body from rejecting the pig organ is a significant challenge. Techniques such as embedding the **pig's thymus gland with the kidney** help reduce immune responses.
 - **Infection Risks:** The FDA highlights concerns about potential infections from both recognised and unknown infectious agents, which could spread to close contacts and the general population.
 - **Retroviruses:** There is a risk of **cross-species infection by retroviruses**, which may remain latent and cause diseases years after infection.
- **Xenotransplantation in India:** In 1997, a surgeon in Assam, performed a **xenotransplantation procedure by transplanting a pig's heart into a human patient**.
 - Unfortunately, the patient passed away a week later, leading to legal repercussions.

CRISPR-Cas9

- It is a revolutionary technology that allows **scientists to modify the genome by adding, removing, or altering sections of the Deoxyribonucleic Acid (DNA) sequence**.
- It consists of two key molecules, an enzyme called Cas9, which acts as molecular scissors to cut the DNA, and a piece of **RNA called guide RNA (gRNA)** that guides Cas9 to the right part of the genome.
 - The guide RNA is designed to bind to a specific sequence in the DNA, allowing the Cas9 enzyme to make a precise cut.
- This triggers the cell's DNA repair machinery, which can be used by scientists to introduce changes to the genes in the cell's genome.
- **Emmanuelle Charpentier and Jennifer A. Doudna** received the **2020 Nobel Prize in Chemistry** for finding a powerful tool in gene technology called CRISPR/Cas9.

Why are Pigs Often Used for Xenotransplantation?

- **Historical Use:** Pig heart valves have been used in human surgeries for over 50 years.
- **Similarity to Humans:** Pigs have anatomical and physiological similarities to humans. Their widespread farming makes them a cost-effective and accessible source.
- **Size Matching:** Various pig breeds offer a range of organ sizes, which can be matched to the specific needs of human recipients.



UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q1. With reference to agriculture in India, how can the technique of 'genome sequencing', often seen in the news, be used in the immediate future? (2017)

1. Genome sequencing can be used to identify genetic markers for disease resistance and drought tolerance in various crop plants.
2. This technique helps in reducing the time required to develop new varieties of crop plants.
3. It can be used to decipher the host-pathogen relationships in crops.

Select the correct answer using the code given below:

- (a) 1 only
 (b) 2 and 3 only
 (c) 1 and 3 only
 (d) 1, 2 and 3

Ans: (d)

Q2. Consider the following statements: (2022)

DNA Barcoding can be a tool to:

1. assess the age of a plant or animal.
2. distinguish among species that look alike.
3. identify undesirable animal or plant materials in processed foods.

Which of the statements given above is/are correct?

- (a) 1 only
 (b) 3 only
 (c) 1 and 2
 (d) 2 and 3

Ans: (d)

Heat-Waves Threatens Litchi Farmers

[Source: DTE](#)

Why in News?

Recently, high temperatures and scorching westerly winds have created an unsuitable climate for the growing litchi fruits in Bihar's Muzaffarpur district.

- This has spelt doom for hundreds of litchi farmers, who were already worried about low flowering this year due to erratic weather.

What are the Challenges Associated with the Recent Heat Waves in Bihar?

- **Impact of Heatwaves on Litchi Orchards:**
 - Scorching temperatures and strong westerly winds has caused a **significant drop in immature litchi fruits.**
 - The **National Research Centre on Litchi (NRCL)** advises **increased irrigation** in orchards to combat rising temperatures and maintain moisture levels, but small farmers struggle with costs.
- **Effect of Climate Change on Litchi Production:**
 - Litchi thrives under **specific microclimatic conditions**, with an ideal temperature range of **30-35°C** during the critical second half of April for optimal fruit development.
 - **Deviations from this range** disrupt natural growth processes, leading to smaller, less sweet litchi.
- **Expected Reduced Harvest:**
 - The anticipated litchi harvest is expected to be **delayed and potentially halved** compared to previous years.
 - Farmers face **significant crop losses** and are planning to **request government support to offset these losses.**
 - Muzaffarpur and surrounding areas contributing nearly **40% of India's litchi production**, a poor harvest here has a significant national impact.

What are Heat Waves?

- **About:**
 - Heat waves are **prolonged periods of excessively hot weather.**
 - [India Meteorological Department \(IMD\)](#) considered heatwave if the **maximum temperature of a station** reaches **at least 40°C** or more **for Plains** and at least 30°C or more for Hilly regions.
 - **Based on Departure from Normal:**
 - **Heat Wave:** Departure from normal is 4.5°C to 6.4°C.
 - **Severe Heat Wave:** Departure from normal is >6.4°C.
 - **Based on Actual Maximum Temperature:**
 - **Heat Wave:** When actual maximum temperature $\geq 45^\circ\text{C}$.
 - **Severe Heat Wave:** When actual maximum temperature $\geq 47^\circ\text{C}$.
- **IMD's Initiatives and Tools to Combat Heat Waves:**
 - **Early Warning Systems:**
 - **Timely Forecasts:** IMD issues timely forecasts and heatwave warnings, often several days in advance.
 - **Colour-coded Alerts:** They utilise a colour-coded system (yellow, orange, red) to categorise the severity of heat waves.

- **Collaboration and Action Plans:**
 - IMD works closely with the [National Disaster Management Authority \(NDMA\)](#) to develop and implement heat action plans.
 - IMD conducts awareness campaigns to educate the public on heatwave risks, precautionary measures, and how to stay cool during extreme heat.
 - IMD has introduced the Heat Index that considers both temperature and humidity for a more accurate assessment of heat stress.
- **Leveraging Technology:**
 - **Mobile Apps:** IMD provides mobile apps like "Mausam" that disseminate weather updates, including heatwave warnings, directly to users' smartphones.
 - **Website and Social Media:** They maintain a user-friendly website and actively utilize social media platforms to share weather information and heatwave alerts.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. What are the possible limitations of India in mitigating global warming at present and in the immediate future? (2010)

1. Appropriate alternate technologies are not sufficiently available.
2. India cannot invest huge funds in research and development.
3. Many developed countries have already set up their polluting industries in India.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (a)

Mains

Q. Bring out the causes for the formation of heat islands in the urban habitat of the world. (2013)

Prerna Programme

Source: PIB

Recently, the Secretary, Department of School Education and Literacy virtually addressed the first alumni meeting of the [Prerana Program](#).

- Prerana is an '**Experiential Learning program**' that aims to offer a meaningful, unique, and inspiring experience to all participants, thereby empowering them with leadership qualities.
- It is driven by a strong commitment to integrate principles of the Indian education system and the philosophy of **value-based education**.

- It was launched by the Department of School Education & Literacy, Ministry of Education, Government of India.
- A batch of 20 selected students (10 boys and 10 girls) attend the program every week from various parts of the country.
- The curriculum is built around nine core values like Dignity and Humility, Valor and Courage, Hard Work and Dedication, Compassion and Service, Diversity and Unity, Integrity and Purity, Innovation and Curiosity, Faith and Trust, and Freedom and Responsibility.

Read more: [Rajasthan to Start Prerana Schools.](#)

China's Third Aircraft Carrier Completes Maiden Sea Trials

Source: [TH](#)

China's **third aircraft carrier, Fujian** has successfully completed its eight-day maiden sea trials.

- **Fujian** is an 80,000-tonne **supercarrier** with **electromagnetic catapults** for launching aircraft.
 - Trials focused on propulsion, electrical systems, and other equipment, achieving expected results.
- China is the **second country after the US** to field a supercarrier with this technology.
- China's first aircraft carrier **Liaoning** was commissioned in **2012** and the **second carrier Shadong** was launched in **2017**.
- China announced that it is building its **fourth aircraft carrier**, likely a **nuclear-powered supercarrier**.
- **Indian Navy's carriers:**
 - The Indian Navy operates two aircraft carriers namely the **INS Vikramaditya**, a **refurbished Russian carrier** commissioned in 2013, and the **INS Vikrant**, an **indigenously designed** and built carrier commissioned in September 2022.

Read more: [Indigenous Aircraft Carrier](#)

India's KABIL Eyes Lithium Acquisition in Australia

Source: [BS](#)

Khanij Bidesh India Ltd (KABIL), a joint venture of three public sector undertakings, is working to acquire a lithium block in Australia.

- KABIL is a joint venture of **National Aluminium Company Ltd (Nalco)**, **Hindustan Copper Ltd (HCL)**, and **Mineral Exploration and Consultancy Ltd (MECL)** the **Central Public Sector Enterprises (CPSEs)** under the **Ministry of Mines**.
 - It aims to identify, acquire, develop, process, and commercialise **strategic minerals** from overseas locations for supply in India, with a focus on battery minerals like **Lithium** and **Cobalt**.
- Lithium is a crucial mineral for the **energy transition**, as it is a fundamental component of **lithium-ion batteries** that power **electric vehicles** and **battery energy storage systems**.

Read more: [KABIL & CSIR-IMMT Sign Critical Minerals MoU](#)

International Nurses Day 2024

Source: [PIB](#)

[International Nurses Day](#) was celebrated on 12th May 2024, at the Ayurvigyan Auditorium, Army Hospital (R & R), New Delhi.

- International Nurses Day is celebrated annually on the **birth anniversary of [Florence Nightingale](#)** to recognize the contributions of nurses to society.
- The International Council of Nurses has declared the theme for this year as '**Our Nurses Our Future, The Economic Power of Care**'.
- Florence Nightingale was a British nurse, statistician, and social reformer known as the **foundational philosopher of modern nursing**.
 - She became famous for her work in nursing British and allied soldiers during the [Crimean War](#), where she earned the nickname "**Lady with the Lamp**."

Read more: [International Nurses Day](#)

Superplasticizers in Concrete

Source: [PR](#)

Superplasticizers are often added to **dry-pressed concrete** to make it easier to work with and to improve its density and surface finish.

- Superplasticizers are **sulfonated melamine formaldehyde condensates or sulfonated naphthalene formaldehyde condensates**.
 - It is a **water-reducing admixture** used in making concrete.
 - The **water-cement ratio** is an important factor in deciding the durability of concrete because concrete's impermeability, strength and durability are directly proportional to the water-cement ratio.
 - In regular cement pastes, when cement particles get close, they tend to stick together in big **clumps** because of the attraction between them. This means more water has to be added than necessary.
 - These can be overcome by adding superplasticisers at the appropriate stage of mixing the ingredients of concrete which reduces the inter-particle attraction of cement particles.
 - It helps to reduce inter-particle attraction between cement particles and to disperse the cement particles with less water.
 - Superplasticizers are used to produce "flowing" concrete for placement in inaccessible locations, and also to produce high-strength concrete with normal workability but very low water/cement ratio to reduce the heat of hydration in mass concrete.
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