



June 2024

MONTHLY CURRENT AFFAIRS

DETAILED EXPLANATION OF CURRENT AFFAIRS



Industrial Accidents	1
Tobacco Epidemic in India	10
Wipo treaty protecting genetic resources and traditional knowledge	14
Understanding the Grades and Characteristics of Indian Coal	20
Promotion is Not a Fundamental Right	28
Women in Corporate Roles in India	37
Tonga Volcano Impacting Weather	45
Open Network for Digital Commerce	50
First Command and Control Compatibility Board meeting between India & U.S. held in New Delhi	56
RBI's Repatriation of Gold from UK to India	59
Creation of Andhra Pradesh and Special Category Status	65
India's Looming Financial Crisis	71
Proportional Representation	72
Comprehensive Immunization Schedule Unveiled for Women	81
WHO Designation of CCRAS-NIIMH as Collaborating Centre	85
VidyutRakshak: Technological Advancement in the Indian Army	86
Exercise Red Flag 2024	88
Decoding Heart Rate Signals To Refine Brain Stimulation Therapies for Depression	91
SACRIFICE AND MEDIEVAL EPIDEMICS	92
Immediate military assistance in event of war	93
India Inc. seeks tax relief for middle class and MSMEs	95
A New Diatom Genus Discovered	96
World Investment Report 2024	97
Pottery fragments discovered during digging	99
The NITI Aayog's project in Great Nicobar	100
Sabari rail project	101
Multi-Utility Legged Equipment (MULE)	103
President highlights neet,references emergency in parliamentary address	105
U.S. Supreme Court Order Reduces Federal Agency Power	106
India Lacks Diagnostic Tests for Emerging Infectious Diseases	107

INDUSTRIAL Accidents

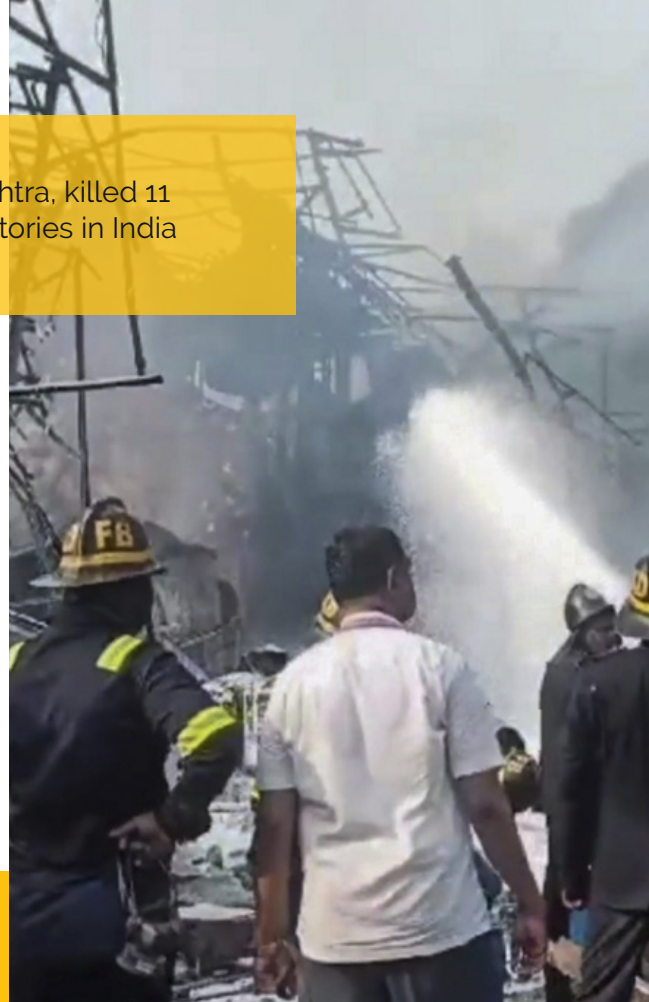


Why in News?

Recently, an explosion at a chemical plant in Thane, Maharashtra, killed 11 people. Industrial accidents like this are a big problem for factories in India and around the world.

What are the Key Factors Contributing to Industrial Accidents in India?

PROBLEMS IN THE CHEMICAL INDUSTRY:



INADEQUATE REGULATION AND MONITORING:

- There are too many overlapping regulations (15 Acts and 19 rules) without a unified approach for the chemical industry.
- This causes confusion and weakens safety oversight and enforcement.

Lack of a Comprehensive Chemical Risk Database:

- There is no central database on industrial chemicals and their risks.
- This makes it difficult to assess hazards and develop safety protocols.

Insufficient Worker Training and Awareness:

- Untrained, temporary workers often operate boilers without proper safety and emergency training.
- This leads to confusion and increased risks during accidents, especially with hazardous chemicals.

Poor Investment in Worker Safety:

- Some industries cut costs by neglecting safety equipment and infrastructure like proper ventilation and fire safety.
- An IIT Kanpur study in 2023 emphasized the need for more investment in worker safety to reduce accidents.

Lack of Maintenance:

- The Visakhapatnam gas leak involving benzimidazole highlighted concerns about maintenance and operations.
- In the Neyveli incident, a boiler unexpectedly exploded during maintenance, even though it was not operational and only involved a furnace and steam production.

What are the Consequences of Such Industrial and Chemical Accidents?

- » Industrial accidents cause a lot of deaths and injuries. For example, an explosion at a chemical factory in Thane killed 11 people.
- » Chemical leaks, explosions, and bad waste disposal hurt the environment a lot. They make the air, water, and soil dirty. For instance, the Bhopal Gas Tragedy in 1984 was awful. A gas leak from a Union Carbide plant killed thousands and made many others sick.
- » Fixing things after accidents costs a ton of money. Companies have to pay to repair buildings, help victims' families, and treat injured workers. According to a study by the US Environmental Protection Agency, accidents can also lower property values in nearby areas by 5-7%, which hurts the local economy.
- » Industrial accidents can leave people with deep emotional scars. Survivors, witnesses, and victims' families can suffer from anxiety, depression, and PTSD.
- » When accidents happen often, people stop trusting the government and companies to keep them safe. They get scared and might fight against new industrial projects.

What are the Legal Safeguards against Chemical/Industrial Disasters?

- » The Sendai Framework for Disaster Risk Reduction (2015-2030) aims to lessen the impact of disasters worldwide. The UN Convention on the Transboundary Effects of Industrial Accidents (1992) helps countries work together to prevent and handle industrial accidents. It encourages sharing information, planning for emergencies, and supporting each other during crises.
- » The Flexible Framework for Accident Prevention and Preparedness (CAPP) (2006) by UNEP helps countries, especially developing ones, create programs to prevent and prepare for chemical accidents. It gives guidance tailored to each country's needs.
- » The OECD Programme on Chemical Accidents (1990) focuses on preventing accidents by sharing information and promoting best practices in chemical safety.
- » In India, laws like the Bhopal Gas Leak (Processing of Claims) Act, 1985, the Environment Protection Act, 1986 (EPA), and the Public Liability Insurance Act, 1991 (PLIA) are crucial. The PLIA mandates insurance for industries dealing with hazardous substances, providing financial help to those affected by accidents involving these substances.
- » The National Environment Appellate Authority Act, 1997, sets up the National Environment Appellate Authority (NEAA). It hears appeals regarding restrictions on certain industrial activities under the EPA, ensuring a fair process.
- » The Hazardous Waste (Management Handling and Transboundary Movement) Rules, 1989, require industries to identify accident risks, take preventive measures, and report hazards to the authorities.
- » The National Disaster Management Authority (NDMA) has issued guidelines on Chemical Disaster Management. These give directions to various authorities for making detailed disaster management plans.
- » Other laws like the Factories Act, 1948, and the Insecticides Act, 1968, also contribute to ensuring industrial safety.

Way Forward

- » Creating a strong regulatory framework is crucial. The International Labour Organization (ILO) suggests having clear national rules and assigning different government agencies specific roles to enforce safety regulations.
- » According to the World Bank in 2018, having strict regulations on chemical safety is vital for preventing chemical accidents.
- » Improving monitoring and enforcement is essential. A study by IIM Ahmedabad in 2020 blames weak enforcement for India's industrial accidents. They suggest imposing stricter penalties and conducting more frequent inspections by qualified personnel.
- » It's important to have a central database to document risks related to industrial chemicals, as highlighted by the Bhopal Gas Tragedy of 1984. This helps in understanding and managing these risks effectively.
- » The OECD promotes the Global Harmonized System of Classification and Labelling of Chemicals (GHS), which provides a standard way to classify chemicals, helping in better risk assessments.
- » Investing in worker training is crucial. A 2017 study by the National Safety Council of India (NSCI) found that many accidents happen because workers aren't aware of safety protocols. NSCI recommends comprehensive training programs for all staff levels.
- » Encouraging industries to adopt environmentally friendly technologies (ESTs) is important. These technologies reduce the use of hazardous materials, improve waste management, and lower the risk of accidents, as suggested by the UNEP.
- » Providing incentives and support for upgrading safety measures can motivate companies to improve safety. This could include offering financial aid such as tax breaks or subsidies for upgrading infrastructure and adopting new technologies.

CONCLUSION

The frequent industrial accidents in India highlight the pressing need to fill regulatory and knowledge gaps in the country's industrial sector. To tackle this issue, both the government and industry stakeholders must collaborate closely, taking a comprehensive and forward-thinking approach. By doing so, India can progress towards safer and more sustainable industrial development.





SYMPATRIC SPECIATION



SYMPATRIC Speciation

Why in News?

A new study from IIT Bombay talks about how new species can develop even when they live in the same area. This goes against the old idea that new species only form when groups of animals are separated by geography.

What is Sympatric Speciation?

Speciation is when a group of animals or plants becomes different from the rest of their species. Sympatric speciation happens when new species develop in the same place where their ancestors lived.

Allopatric speciation, on the other hand, is when new species form because some animals or plants get separated from the rest of their species by something like a river, mountain, or canyon. They end up living in different places and gradually become different from each other.

For example, when the Grand Canyon formed, it split a group of squirrels into two separate populations. Over time, these squirrels changed so much that now there are different types of squirrels living on the north and south sides of the canyon.

But birds and other animals that could fly or move easily across the canyon didn't get split into separate groups. They could still mate with each other and didn't become different species.



What are the Key Highlights of the Study?

The study looked at three important things: disruptive selection, sexual selection, and genetic architecture, by simulating a population of birds.

Disruptive Selection: This is when animals with different traits do better than those with average traits because of how resources are spread out. For example, birds with small beaks might be better at getting nuts, while those with longer beaks might be better at getting nectar from flowers. The study found that this kind of selection can split a population even if they all live in the same place.

Sexual Selection: This is when animals pick mates based on certain traits. The study found that if birds pick mates based on traits that help them get resources, like beak size for getting food, it can lead to new species forming. But if they pick mates based on things like feather color, it doesn't lead to new species. Also, picking mates based on specific traits might mean their babies aren't as healthy.

Genetic Architecture: This means how genes influence traits. Even if the selection for traits isn't very strong, if the genes allow for those traits to change, new species can still happen. For example, even if the birds don't have strong reasons to change their beak size, if their genes make it easy to change, new species can still develop.

India in **TRADE DEFICIT** with Top Trading Partners

Why in News?

Recent official data reveals that India had a trade deficit with 9 out of its top 10 trading partners during the 2023-24 period. This means that India imported more goods and services from these countries than it exported to them.

What is the Current Status of India's Trade Deficit?

In the last fiscal year, India's overall trade deficit decreased to \$238.3 billion from \$264.9 billion in the previous year. However, the trade deficit with China, Russia, South Korea, and Hong Kong increased compared to the year before. On the other hand, the trade gap with the UAE, Saudi Arabia, Russia, Indonesia, and Iraq decreased.

China became India's biggest trading partner in 2023-24, with a total trade of \$118.4 billion, surpassing the US. However, the US held the top position in trade with India in the previous two fiscal years. India had a trade surplus of \$36.74 billion with the US in 2023-24, as well as with the UK, Belgium, Italy, France, and Bangladesh.

India has free trade agreements with four of its top trading partners: Singapore, the UAE, South Korea, and Indonesia (as part of the Asian bloc).

What are the Reasons Behind India's Trade Deficit?



India faces challenges due to its heavy reliance on energy imports, particularly crude oil, which accounts for more than 85% of its needs. Fluctuations in global oil prices can greatly affect India's trade deficit.



Certain Indian industries, such as pharmaceuticals and semiconductors, heavily depend on imported raw materials and intermediates. This reliance on imports increases the value of imports and contributes to the trade deficit. For example, the pharmaceutical sector imports a significant amount of Active Pharmaceutical Ingredients (APIs) from China.



Additionally, India struggles to export enough manufactured goods to balance its imports. Factors such as lower manufacturing capabilities and competitiveness in the global market compared to countries like China and the US contribute to this imbalance.



What are the Key Impacts of the Trade Deficit on the Indian Economy?

Benefits

A trade deficit isn't necessarily negative if it involves importing raw materials or intermediary products, as it can boost manufacturing and exports.

A trade deficit can lead to currency depreciation, making Indian exports more competitive globally due to lower prices.

In the short term, a trade deficit ensures a wider variety of goods and services are available to citizens, improving living standards by offering more choices.

In some cases, a trade deficit can drive domestic businesses to innovate and become more efficient to compete with imported goods. This can create jobs in export-oriented sectors like packaging, shipping, and logistics.

CHALLENGES

- Over-reliance on imports can hinder domestic innovation and production in certain sectors, reducing the availability of domestically produced goods.
- A large trade deficit, especially in sectors with significant import penetration, can lead to job losses in related industries.
- For instance, cheap textile imports from Bangladesh have caused some Indian industries to close down, resulting in job losses.
- A persistent trade deficit can weaken the value of the rupee, making imports even pricier.
- Reduced exports can lower government revenue from export duties, impacting funding for social programs and infrastructure development.
- To finance a trade deficit, India may need to borrow from foreign sources, increasing external debt and interest payments.
- This could deplete forex reserves further and signal economic instability to investors, leading to reduced foreign investment.

What Measures can be taken to Control the Trade Deficit?

Trade agreements

Negotiating and implementing Free Trade Agreements (FTAs) with key partners can lower tariffs and other barriers for Indian exports, boosting their competitiveness abroad. For instance, the India-UAE CEPA aims to reduce tariffs on over 80% of bilateral trade, potentially benefiting exports of Indian textiles, pharmaceuticals, and agricultural products.

Improving Export Infrastructure:

Investing in infrastructure development, like upgrading ports, roads, and logistics networks, can make the export process smoother and lower transportation costs.

Import Substitution:

Encouraging the use of domestic substitutes for imported products through public procurement policies and campaigns promoting locally made goods can reduce reliance on imports. For example, promoting the use of domestically produced steel in government infrastructure projects can boost the domestic steel industry.

Rationalizing Imports:

Analyzing import data can help identify non-essential or luxury goods that could be substituted with domestically produced alternatives. For instance, the government could discourage the import of certain electronic items through higher tariffs, prompting consumers to choose domestically produced options.

Skilling the Workforce:

Investing in skill development programs can create a workforce with the expertise needed for modern industries, enhancing domestic production capabilities and reducing reliance on imports.

Managing Currency and Debt Levels:

The Reserve Bank of India (RBI) should manage the rupee's exchange rate effectively, aiming for a balance that promotes exports without causing excessive depreciation. Additionally, the government should focus on fiscal consolidation to reduce its debt burden, creating a more stable economic environment for domestic industries to thrive.

CONCLUSION

Absolutely, addressing the trade deficit and promoting sustainable economic growth requires a tailored approach. There's no universal solution because the effectiveness of measures depends on factors like trade partners, types of imports and exports, and global economic conditions. The Indian government must evaluate the situation carefully and implement a mix of strategies to tackle the trade deficit effectively and foster long-term economic development.

TOBACCO EPIDEMIC IN INDIA

TOBACCO EPIDEMIC IN INDIA

WHY IN NEWS?

Tobacco is the leading cause of preventable illness and death worldwide.

In India, nearly 260 million people use tobacco, making it the country with the second-highest number of tobacco users after China.



WHAT ARE THE STATISTICS ABOUT **TOBACCO** CONSUMPTION IN INDIA?

1

No Significant Decrease in Bidi or Cigarette Consumption: According to the National Family Health Survey (NFHS), there hasn't been a notable reduction in bidi or cigarette consumption between districts with the National Tobacco Control Programme (NTCP) and those without it. This could be due to insufficient staff, resources, and monitoring.

2

Cigarettes and Bidis Have Become More Affordable: Over the past 10 years, cigarettes, bidis, and smokeless tobacco products (SLTs) have become cheaper. The Goods and Services Tax (GST) system has made them even more affordable by lowering prices through an integrated tax system.

3

Tobacco Use Higher Among Women: Tobacco use has decreased in all groups except women, where it increased by 2.1% between 2015 and 2021.

HOW IS INDIA FIGHTING AGAINST **TOBACCO**?

INTERNATIONAL COMMITMENT: WHO Framework Convention on **Tobacco Control (FCTC):****

- » India is one of the 182 signatories of this convention, demonstrating its commitment to global tobacco control.
- » The convention aims to reduce tobacco use worldwide by helping countries develop strategies to reduce demand and supply and create effective national tobacco control policies.

WORLD NO TOBACCO DAY

OBSERVED EVERY YEAR ON **MAY 31ST** TO RAISE AWARENESS ABOUT THE HARMFUL EFFECTS OF **TOBACCO CONSUMPTION**.

INTERNATIONAL COMMITMENT: WHO Framework Convention on **Tobacco Control (FCTC):****

NATIONAL LEGISLATION:

- » Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply, and Distribution) Act (COTPA) 2003:**
- » Regulates various aspects of tobacco, including production, supply, advertising, promotion, distribution, sale, packaging, and labeling.

NATIONAL TOBACCO CONTROL PROGRAM (NTCP) 2007:**

STRENGTHENS THE IMPLEMENTATION OF COTPA AND COMPLIANCE WITH FCTC.

KEY FUNCTIONS INCLUDE

Public Awareness Campaigns

Educating the public about the health risks of tobacco use through mass media campaigns.

Smoking Cessation Initiatives

Providing quitlines, counseling, and behavioral interventions to help people stop smoking.

Enforcement Mechanisms

Ensuring the enforcement of COTPA provisions through designated authorities.

The Prohibition of Electronic Cigarette act (peca), 2019:

Bans e-cigarettes in India.

National Tobacco Quitline Services (NTQLS):

mCessation Programme: Uses mobile technology to support tobacco cessation, launched in 2016 as part of the government's Digital India initiative.

Tobacco Taxation:

India heavily taxes tobacco, with a 53% tax on cigarettes and a much lower 16% tax on bidis, which are a cheaper alternative. Public health experts advocate for higher taxes on bidis to discourage use and increase government revenue.

What are Hidden Costs of Tobacco Beyond Health Risks?'

Soil Depletion: Tobacco farming rapidly depletes soil nutrients, necessitating more fertilizers, which further degrade soil quality.

Deforestation: Tobacco production leads to deforestation, as significant amounts of wood are needed for processing. Up to 5.4 kg of wood is required to process 1 kg of tobacco.

Waste Generation: The production and consumption of tobacco generate massive amounts of waste, totaling 170,000 tonnes annually in India.

Economic Burden: Tobacco use imposes substantial healthcare costs, estimated at Rs. 1.7 lakh crore in 2017-18, which exceeds the national health budget of Rs. 48,000 crores.

Health Risks for Workers: Over 6 million people working in the tobacco industry are at risk of health issues due to tobacco absorption through the skin.

Waste Management Cost: The cost of cleaning up tobacco waste is significant.

What are Challenges to Effective Tobacco Control in India?

Non-compliant Products: Smokeless tobacco products like gutkha and smuggled items evade regulations under the Cigarettes and Other Tobacco Products Act (COTPA), making it challenging to control their production, sale, and marketing.

Weak Fines: The fines for violating COTPA regulations, which haven't been updated since 2003, are low. For instance, the maximum fine for first-time violations of packaging restrictions is only Rs. 5,000, which doesn't serve as a strong deterrent.

Surrogate Advertising: Tobacco companies cleverly use ads for unrelated products like elaichi to indirectly promote their tobacco brands, circumventing regulations on tobacco marketing. These ads indirectly encourage tobacco use.

Stalled Amendments: Proposed amendments to strengthen COTPA in 2015 and 2020 haven't been passed by the Indian government, leaving regulatory gaps unaddressed.

Limited Enforcement Capacity: The National Tobacco Control Programme (NTCP) lacks adequate staff, resources, and monitoring systems to enforce COTPA effectively nationwide.

Effective Lobbying in Tobacco Industry: Despite the ban on e-cigarettes, enforcement of the policy is incomplete. Additionally, tax breaks for small tobacco companies create disparities in pricing, making harmful products more affordable.

Conflict of Interest with Government: The government's 7.8% stake in ITC Ltd., India's largest tobacco company, raises concerns about its commitment to tobacco control.

Way Forward

Strengthening Legislation: Updating the Cigarettes and Other Tobacco Products Act (COTPA) and the National Tobacco Control Programme (NTCP) is crucial to bolster tobacco control efforts in India.

Higher Tobacco Taxes: Tobacco taxes, particularly on bidis and smokeless tobacco, fall below the recommended WHO target of 75%. Raising taxes would discourage consumption and provide revenue for public health initiatives.

Effective Monitoring: Consistent monitoring is necessary to track tobacco use trends, pinpoint areas of COTPA violations, and evaluate the impact of anti-tobacco campaigns.

Support for Tobacco Farmers: Implementing public programs to assist tobacco farmers in transitioning to alternative crops would alleviate the economic challenges posed by reduced tobacco cultivation.

Data-Driven Strategies: Timely collection of data on tobacco use patterns is essential for understanding evolving trends and identifying new tactics employed by the tobacco industry. This data is vital for crafting effective tobacco control policies.



WIPO

TREATY PROTECTING

GENETIC RESOURCES AND

TRADITIONAL KNOWLEDGE

WHY IN NEWS?

The World Intellectual Property Organization (WIPO) has just finished a new treaty on Intellectual Property (IP), Genetic Resources (GRs), and Traditional Knowledge (ATK). This is a big win for countries in the global South, like India.

The treaty was agreed upon by over 150 countries, including many developed nations, at an international meeting.

PROTECTION OF BIODIVERSITY:

The WIPO Treaty aims to balance the rights of countries rich in biodiversity and traditional knowledge with the global Intellectual Property Rights (IPR) system. For the first time, traditional knowledge and wisdom, which have supported economies, societies, and cultures for centuries, are now part of the global IP system.

INCLUSIVE INNOVATION:

The treaty promotes inclusive innovation by recognizing the connection between local communities and their genetic resources (GRs) and associated traditional knowledge (ATK).

DISCLOSURE REQUIREMENTS

The treaty will require countries to make it mandatory for patent applicants to disclose the country of origin or source of the genetic resources when their invention is based on these resources or associated traditional knowledge.

How is this Treaty Significant for India and the Global South?

India: India, a hotspot of biodiversity with rich traditional knowledge, now sees these systems recognized in the global IP system for the first time with this treaty.

Prevention of Misappropriation: The treaty prevents the misuse of Indian genetic resources (GRs) and traditional knowledge (TK) in countries without existing disclosure laws. By establishing mandatory disclosure obligations, it offers added protection, preventing their misappropriation. This is crucial because several Indian herbs and products have previously been falsely claimed as foreign inventions, leading to contested patent applications.

Global Standards: The treaty sets new global standards within the IP system for countries that provide genetic resources and traditional knowledge.

Global South: The Global South, with its vast traditional knowledge on medicinal plants, agriculture, and other areas, benefits from the WIPO Treaty, which protects this knowledge from misappropriation. The WIPO Treaty helps combat biopiracy by creating a legal framework to protect genetic resources and traditional knowledge from unauthorized commercial exploitation.



What are the Past Cases Surrounding Traditional Knowledge and Genetic Resources in IPR?

Traditional Knowledge: The Turmeric Case

- Turmeric, a tropical herb from India, is widely used in the country for medicinal, culinary, and dye purposes. It is known as a blood purifier, for treating the common cold, and as an antiparasitic for skin infections.
- In 1995, the US granted a patent for using turmeric powder for wound healing to the University of Mississippi Medical Center. However, the patent was later revoked after the Indian Council for Science and Industrial Research (CSIR) provided evidence of prior use.

The Neem Case

- This case involved a patent granted to W.R. Grace for a formulation using azadirachtin, an active ingredient from the neem plant, which has long been recognized for its medicinal and pesticide properties in traditional medicine systems like Ayurveda and Unani.
- The patent gave the company exclusive rights to use azadirachtin in a specific storage solution, leading to an outcry and re-examination at the United States Patent and Trademark Office (USPTO) and the European Patent Office (EPO). The EPO eventually ruled against the patent, stating it lacked innovation, although the USPTO upheld it.

GENETIC RESOURCES Wheat Varieties Case (2003)

This case involved the biopiracy of Indian wheat varieties known as Nap Hal and Nap Hal-49, which were patented by a European company claiming to be the inventors.

Indian authorities provided evidence that these wheat varieties were originally from India and were not novel inventions. As a result, the patents were revoked.

BASMATI RICE CASE (2000)



A US company was granted a patent for Basmati rice by the USPTO, falsely claiming to have invented the new variety. This led to a conflict between Indian and American agricultural organizations.



The patent claims were eventually narrowed when the applicants admitted they didn't invent Basmati rice.

What are India's Initiatives Related to Protecting Traditional Knowledge and Genetic Resources?

TRADITIONAL KNOWLEDGE:

The TKDL is a comprehensive database of medicinal formulations in various languages.

Established in 2001 in response to India's challenges in overturning patents on traditional remedies like turmeric and neem.

This joint effort by the CSIR and the Department of AYUSH aims to protect India's rich medicinal knowledge from being wrongly patented, a problem that was occurring in an estimated 2,000 cases per year.

The TKDL has been crucial in protecting India's traditional medicinal systems globally.

PATENTS (AMENDMENT) ACT, 2005:

- This act aims to protect the rights of indigenous communities by requiring patent applicants to disclose the origin of biological resources in their inventions.
- Failure to disclose this information, especially related to traditional knowledge, can result in the patent being refused.

TRADEMARK ACT, 1999:

- Trademarks distinguish goods and prevent confusion about the source of a product.
- The act allows for the protection of agricultural and biological products, including those from indigenous communities.
- Indigenous groups can use trademark registration to differentiate their brand and ensure unique quality.

Biological diversity act, 2002:

- This act provides for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising from the use of genetic resources.

Geographical Indications (GI):

- GIs protect products that have a specific geographical origin and possess qualities or a reputation due to that origin. This includes agricultural, natural, and manufactured goods.

Genetic Resources: National Gene Bank

- The National Gene Bank conserves the genetic diversity of India's flora and fauna, ensuring the preservation and sustainable use of genetic resources.

Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001:

- This act ensures that plant breeders and farmers who provide Plant Genetic Resources (PGR) for developing new varieties receive a fair share of commercial gains.
- The PPV&FR Act 2001 includes provisions for access and benefit-sharing (ABS) along with Plant Breeder's Rights (PBRs).

National Bureau of Plant Genetic Resources (NBPGR):

- An Indian institute under the Indian Council of Agricultural Research (ICAR) that plays a key role in conserving and protecting the genetic diversity of cultivated plants and their wild relatives in India.

National Bureau of Animal Genetic Resources (NBAGR):

- Part of ICAR, NBAGR aims to conserve, characterize, and utilize animal genetic resources for sustainable livestock development in India. It maintains a genbank repository.

Microbial and Insect Biodiversity:

- The National Bureau of Agriculturally Important Insects (NBAII) acts as a central agency for the collection, characterization, documentation, conservation, exchange, and utilization of agriculturally important insect resources.

INDIA TO IMPORT WHEAT AFTER 6 YEARS

WHY IN NEWS?

India, the world's second-largest wheat producer, plans to start importing wheat again after a six-year break to replenish its reserves and control rising prices. This move is driven by three consecutive years of poor harvests.

To facilitate this, India is expected to remove a 40% import tax on wheat, enabling private traders to buy wheat from countries like Russia, though in limited quantities.

WHY INDIA DECIDED TO RESUME WHEAT IMPORTS?

DECLINING WHEAT PRODUCTION:

- » India's wheat production has decreased over the last three years due to unfavorable weather, leading to a significant drop in output.
- » The government estimates this year's wheat crop to be 6.25% lower than the previous year's record production of 112 million metric tons.

DEPLETION OF WHEAT RESERVES:

- » As of April 2024, wheat stocks in government warehouses have fallen to 7.5 million tons, the lowest in 16 years.
- » This depletion is due to the government selling over 10 million tons from its reserves to control domestic prices.

SHORTFALL IN WHEAT PROCUREMENT BY GOVERNMENT:

- » The government aimed to procure 30-32 million metric tons of wheat in 2024 but has only managed to purchase 26.2 million tons so far.

SURGE IN DOMESTIC WHEAT PRICES:

- » Domestic wheat prices have remained above the government's minimum support price (MSP) of 2,275 rupees per 100 kg and have been rising recently.

POLICY RESPONSE

- » To address these issues, the government has decided to remove the 40% import duty on wheat, allowing private traders and flour millers to import wheat, mainly from Russia.

WHAT ARE THE POSSIBLE IMPLICATIONS OF THE DECISION?

DOMESTIC MARKET:

ENHANCED AVAILABILITY AND PRICE STABILITY:

Abolishing the import duty will likely increase wheat supplies in the domestic market, helping to mitigate price hikes.

Replenishing Strategic Reserves:

- » Lower import costs can help the government replenish depleted wheat reserves, bolstering food security by creating a buffer against unforeseen disruptions in domestic production.

GLOBAL MARKET:

POTENTIAL UPWARD PRICE PRESSURE:

Although India's estimated import volume (3-5 million metric tons) is modest, it could contribute to a rise in global wheat prices, given current high prices driven by production concerns in major exporting nations like Russia.

Limited Overall Impact:

- » India's import requirement is unlikely to significantly influence the global market, as larger players will continue to have a more substantial impact on global wheat price trends.



CONCLUSION

India's decision to resume wheat imports after a six-year gap is a pragmatic move to address domestic supply and price concerns caused by declining wheat production and depleted government reserves.

While these imports may have a moderate impact on global wheat prices, the primary focus for the Indian government is to ensure food security and price stability for its citizens.



UNDERSTANDING

THE GRADES AND CHARACTERISTICS of

INDIAN COAL

Why in News?

A recent report by the Organized Crime and Corruption Reporting Project says that in 2014, the Adani Group falsely labelled low-quality Indonesian coal as high-quality. They increased its value and sold it to Tamil Nadu's power company, TANGEDCO. The report comes from a group funded by billionaire George Soros.

COAL QUALITY AND GRADATION



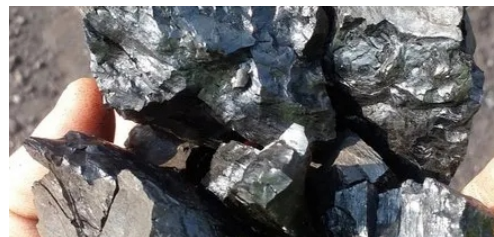
UNDERSTANDING COAL QUALITY

Coal quality is measured by its Gross Calorific Value (GCV), which is the amount of heat or energy produced when the coal is burned. Coal is a fossil fuel made up of carbon, ash, moisture, and various impurities. Higher carbon content means better quality coal.

TYPES OF COAL

COAL IS CATEGORIZED INTO:

- Non-coking coal:** Graded based on Gross Heat content.
- Coking coal:** Graded based on ash content.
- Semi coking coal and weakly coking coal**:** Graded based on ash and moisture content.



COAL GRADES

Coal has 17 grades, with grade 1 being the highest quality. Grade 1 coal generates over 7,000 kcal/kg, while the lowest grades produce 2,200-2,500 kcal/kg. Higher carbon content in coal means a higher grade.

APPLICATION CONTEXT

THE USEFULNESS OF COAL VARIES BY APPLICATION. FOR EXAMPLE:

- » **Non-coking coal:** Used in thermal power plants. It can have higher ash content but still generate enough heat for boilers and turbines.
- » **Coking coal:** Essential for steel production, it requires minimal ash content.

WHAT ARE THE CHARACTERISTICS OF INDIAN COAL?

LOW CALORIFIC VALUE

Indian coal has historically been known for its high ash content and low calorific value compared to imported coal. The average GCV of domestic thermal coal ranges from 3,500-4,000 kcal/kg, while imported thermal coal has a GCV of over 6,000 kcal/kg.

High Ash Content

Indian coal has an average ash content of over 40%, compared to less than 10% in imported coal. Burning high-ash coal results in more particulate matter, nitrogen, and sulfur dioxide emissions.

GOVERNMENT POLICIES

Since 1954, the government has controlled coal prices to prevent the use of high-grade coking coal for power generation. To manage coal production, meet power needs, and reduce pollution, the government recommends using imported coal with lower ash and moisture content. In 2012, the Central Electricity Authority (CEA) suggested blending 10-15% imported coal with Indian coal for power boilers designed for low-quality domestic coal.

WHAT IS CLEAN COAL?

ABOUT CLEAN COAL

Clean coal refers to technologies and practices aimed at reducing the environmental impact of coal energy production by increasing its carbon content and reducing its ash content. These methods strive to make coal a cleaner energy source, lessening its negative effects on the environment and human health.

PRODUCTION OF CLEAN COAL

KEY ASPECTS OF CLEAN COAL TECHNOLOGY INCLUDE:

- ➡ **Carbon Capture and Storage (CCS):** Capturing carbon dioxide emissions from coal-fired power plants and storing them underground to prevent them from entering the atmosphere.
- ➡ **Coal Washing:** Removing impurities from coal before it is burned to reduce emissions of ash, sulfur, and other pollutants.
- ➡ **Flue Gas Desulfurization (FGD):** Also known as scrubbers, this technology removes sulfur dioxide from the exhaust flue gases of coal-fired power plants.
- ➡ **Gasification:** Converting coal into synthetic gas (syngas), which burns cleaner than coal.
- ➡ **Advanced Combustion Techniques:** Improving the efficiency of coal combustion to reduce emissions and increase energy output.

DISADVANTAGES ASSOCIATED WITH COAL WASHING

Coal plants use washing techniques, employing blowers or baths to remove ash and moisture. However, this process is costly and increases power production expenses.

COAL GASIFICATION

An alternative method is coal gasification, which converts coal into gas. Integrated Gasification Combined Cycle (IGCC) systems use steam and pressurized air or oxygen to create syngas (a mixture of carbon monoxide, hydrogen, CO₂, and water vapor). The syngas is cleaned and burned in gas turbines to produce electricity. IGCC increases coal efficiency by generating both steam and syngas, resulting in cleaner and more efficient power production.

FUTURE OF COAL IN INDIA

PRODUCTION

In 2023-24, India produced 997 million tonnes of coal, marking an 11% increase over the previous year. Most of this coal was produced by the state-owned Coal India Ltd and its subsidiaries.

COAL IN INDIA'S ENERGY ECONOMY

Coal remains the mainstay of India's energy economy, even as the country aims to transition its electricity sector away from fossil fuels.

CHANGE IS IN THE AIR

For the first time this year, renewable energy made up 71.5% of the record 13.6 GW power generation capacity added by India in the first quarter. During this period, coal's share (including lignite) of total power capacity dropped below 50% for the first time since the 1960s.



DIVERGENT VIEWS EMERGE WITHIN IAMAI ON PROPOSED DIGITAL COMPETITION BILL

Why in News?

Divergent Stance on the Digital Competition Bill

Four members of the Internet and Mobile Association of India (IAMAI) have taken a different position on the proposed Digital Competition Bill (DCB). They have written to the Ministry of Corporate Affairs (MCA) urging the quick implementation of regulations to prevent anti-competitive practices.

Apprehensions About the Draft Bill

In May 2024, the IAMAI expressed concerns about the draft Digital Competition Bill 2024. The association argued against the need for ex-ante (before the event) regulations for digital markets in their submission on the draft bill.

About IAMAI

IAMAI is a key industry body that represents numerous digital entities, including major tech firms.

What is Digital Competition Bill, 2024?

About the Digital Competition Bill

The Digital Competition Bill aims to regulate large digital enterprises, including news aggregators, to ensure fair competition in the digital space. Proposed in March 2024, the bill seeks to:

Regulate Big Tech: Prevent companies like Google, Facebook, and Amazon from favoring their own services or using data from one business to benefit another.

Ex-Ante Regulations: Establish presumptive norms to curb anti-competitive practices before they occur.

Heavy Penalties: Impose substantial penalties, potentially amounting to billions of dollars, for violations.

NODAL MINISTRY

The Ministry of Corporate Affairs (MCA) is responsible for handling the draft of the Digital Competition Bill.

What is the need for such bill?

Ex Post Antitrust Framework in India

Currently, India operates under an ex post antitrust framework established by the Competition Act, 2002. However, there have been significant criticisms of this approach.

Criticisms of the Current Framework

- **Delays in Regulation:** One major criticism is that regulating aftermarket abuse occurs leads to delays. By the time the offending company is penalized, market dynamics may have changed, disadvantaging smaller competitors.
- **Ineffectiveness in Digital Markets:** In the complex world of digital markets, regulating after market abuse (ex-post) may not be optimal.
- **Advocacy for Ex-Ante Framework:** There's a call for a forward-looking, preventive, and presumptive law (ex-ante framework) that anticipates potential antitrust issues and establishes pre-determined boundaries to prevent abuse.



History of Anti-Competitive Practices by Big Tech

Big tech companies, notably Google, have a history of engaging in anti-competitive practices. For example, in 2023, Google was fined Rs 1.337 crore by the Competition Commission of India (CCI) for its anti-competitive conduct in the Android ecosystem.

High Market Barriers for New Entrants

Analysts argue that most of the innovation in the tech sector has been limited to a few big US-based companies. This is partly due to the high market barriers for new entrants, particularly in the online market. Once a company establishes significant market share, it becomes difficult for rivals to challenge their dominance, creating a default preference for their products or services.

What are the key proposals of the draft digital competition Bill 2024?

List of Core Digital Services (CDS)

The bill outlines core digital services (CDS) under Schedule I, including:

- | | |
|-------------------------------------|--|
| 1 ONLINE SEARCH ENGINES | 4 INTERPERSONAL COMMUNICATIONS SERVICES |
| 2 ONLINE SOCIAL NETWORKING SERVICES | 5 OPERATING SYSTEMS |
| 3 VIDEO-SHARING PLATFORM SERVICES | 6 WEB BROWSERS |
| 7 CLOUD SERVICES | 9 ONLINE INTERMEDIATION SERVICES (SUCH AS WEBHOSTING, SERVICE PROVIDERS, PAYMENT SITES, AUCTION SITES, APP STORES, E-COMMERCE MARKETPLACES, AND AGGREGATORS) |
| 8 ADVERTISING SERVICES | |



Systemically Significant Digital Enterprises (SSDEs)

The bill proposes to designate certain enterprises as Systemically Significant Digital Enterprises (SSDEs). SSDEs provide core digital services in India and have a significant presence and financial strength in the country.

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PARAMETERS FOR SSDE DESIGNATION

The bill proposes two tests to determine SSDE designation:

1. **Financial Strength Test:** Turnover in India not less than Rs 4,000 crore in the last 3 financial years, or global turnover not less than \$30 billion.
2. **Spread Test (User Base Test):** Core digital service should have at least 1 crore end users or 10,000 business users.

Obligations of SSDEs

SSDEs are prohibited from engaging in practices such as self-preferencing, anti-steering, and restricting third-party applications. Violations can result in fines up to 10% of their global turnover.

Associate Digital Enterprises (ADEs)

The bill proposes to designate associate digital enterprises (ADEs) to assess the role of data collected by one company within a major technology group in benefiting other group companies. ADEs have the same obligations as SSDEs based on their involvement with the core digital service offered by the main company. For example, Google Maps could be considered an associate entity because Google Search directs users to it. Similarly, YouTube's status as an ADE depends on the data shared between Google Search and YouTube, which affects the video recommendations made to users.

RELATIONSHIP BETWEEN THE HARAPPAN AND THE VEDIC AGE

Why in News?

Archaeologists are collaborating with Sanskrit scholars to decode the Rigveda, continuing research that may uncover connections between the people of the Vedic age and the Harappan civilization.



Indus Valley Civilisation (IVC)/ Harappa Civilisation (3300 - 1300 BCE):

The Indus Civilization, also known as the Harappan Civilization, was a Bronze Age civilization located in the northwestern regions of South Asia. It earned its name from Harappa, now in Punjab, which was the first site excavated in the early 20th century.

Alongside ancient Egypt and Mesopotamia, it was one of the three early civilizations of the Near East and South Asia, and the most extensive among them. Its sites covered an area from northeast Afghanistan, through much of Pakistan, into western and northwestern India.

The civilization prospered in the basins of the Indus River and along rivers that once flowed near the seasonal Ghaggar-Hakra river in northwest India and eastern Pakistan. Its cities were known for their urban planning, baked brick houses, sophisticated drainage systems, water supply systems, large non-residential buildings, and advancements in handicrafts (like carnelian products and seal carving) and metallurgy (including copper, bronze, lead, and tin).

Urbanization likely began as the region's soil gradually dried out during the third millennium BCE. However, the civilization eventually declined as weaker monsoons and reduced water supply forced its population to disperse eastward and southward.

The Vedic Age (1500 - 600 BCE):

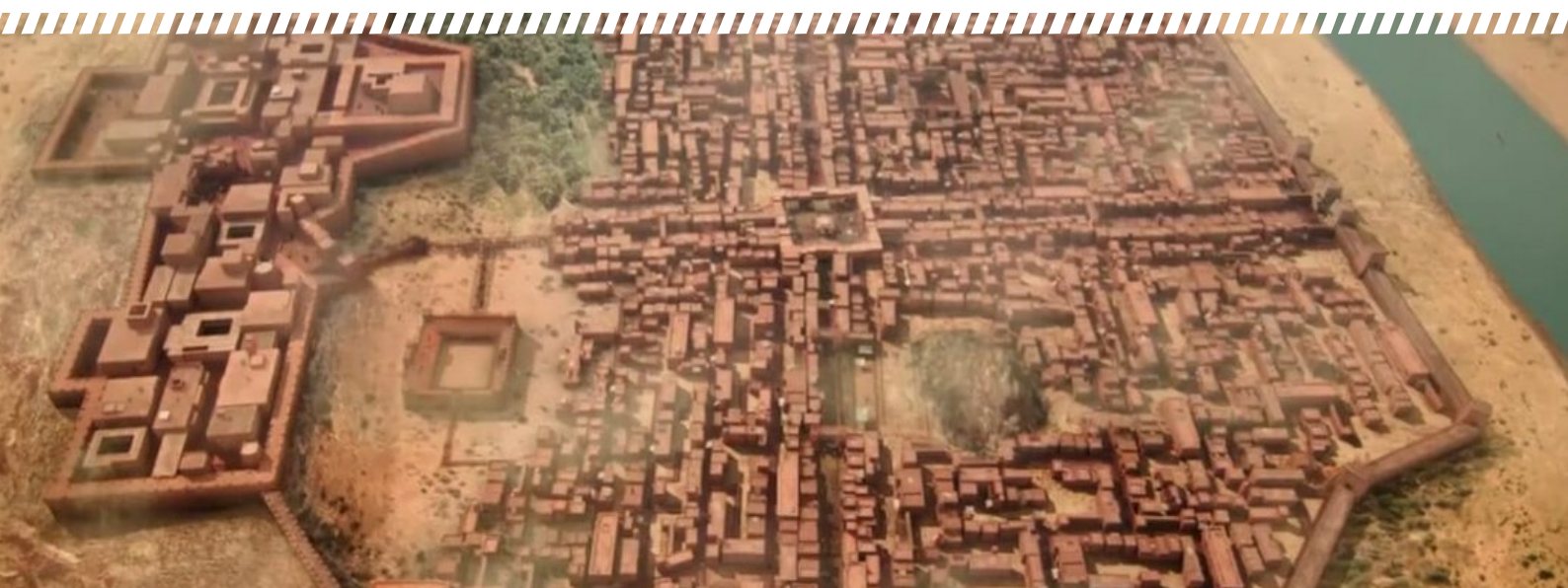
The Vedic age, occurring during the late Bronze Age and early Iron Age of India's history, saw the composition of Vedic literature, including the Vedas, in the northern Indian subcontinent. It marks the period between the decline of the urban Indus Valley Civilization (IVC) and the onset of the second urbanization, starting in the central Indo-Gangetic Plain around 600 BCE.

In terms of literature, social structures, and cultural development, the Vedic age is divided into two stages:

1. The Rigvedic period or Early Vedic period (circa 1500 BC to 1000 BC).
2. The Later Vedic period (circa 1000 BC to 600 BC).

During the Early Vedic period, the early Vedic Aryans lived in the region known as Sapta-Sindhu, an area of seven rivers, in and around present-day Punjab.

As the Vedic age progressed into the Later Vedic period, the Vedic Aryans gradually migrated eastward, settling in areas such as eastern Uttar Pradesh (Kosala) and north Bihar (Videha).



How Archaeologists are Establishing Relationships Between the Harappan and the Vedic Age?

ONGOING DEBATES

Recent NCERT Addition

The NCERT recently updated the Class 12 History textbook, suggesting that the Harappans were indigenous based on DNA evidence from the remains of a 4,600-year-old woman. However, a disclaimer was added, acknowledging the need for further research to confirm this relationship.

Dating of the Vedas

Some historians propose that the Vedas date back to around 2,500 BC, which would align with the time of the Indus Valley Civilization (IVC).



Archaeological Investigations

Establishing Harappan-Vedic Connection

Archaeologists are investigating the hypothesis that the Harappans and the Vedic people were the same. Renowned archaeologist Vasant Shinde emphasizes the importance of understanding Rigveda texts to correlate them with archaeological findings at Harappan sites.

Evidence from Excavations

- » At the Rakhigarhi site in Haryana, archaeologists discovered ritual platforms and fire altars, echoing the mention of fire worship in Rigvedic texts.
- » The Rigveda mentions the Saraswati River numerous times, and many Harappan settlements were found along the banks of the modern Ghagghar-Hakra river, believed to be the ancient Saraswati.
- » Archaeo-zoologists studying animal bones in the Surkotada region of Kutch, Gujarat, found bones that some researchers suggest belong to domesticated horses, as mentioned in the Rigveda. However, another group concluded they belonged to wild asses.

05/06/2024

PROMOTION IS NOT A FUNDAMENTAL RIGHT



PROMOTION IS NOT A FUNDAMENTAL RIGHT

Why in the News?

The Supreme Court recently confirmed that government employees in India do not have a guaranteed right to promotions. The Constitution doesn't set any rules for promotions, so it is up to the legislature and executive to decide.

What are the Constitutional Provisions Related to Reservation?

Here is a simpler version of the provided text:

Article 15 (6): This allows the government to create special measures for helping economically weaker sections of citizens, including reserving seats in educational institutions. These reservations can be in any educational institution, both private and government-aided, except for minority institutions under Article 30 (1).

Article 16 (4): This permits the government to reserve jobs for any backward class of citizens who are not adequately represented in government services.

Article 16 (4B): This lets the unfilled SC/ST quota from a particular year be carried forward to the next year. Both Articles 16 (4A) and 16 (4B) were added by the 77th Constitutional Amendment Act in 1995.

Article 16 (6): This allows the government to reserve up to 10% of jobs for economically weaker sections, in addition to existing reservations.

Article 335: This acknowledges the need for special measures to consider the claims of SCs and STs for jobs and promotions, to bring them to the same level as others.

82nd Constitutional Amendment Act, 2000: This added a condition to Article 335, allowing the government to relax qualifying marks for SC/ST candidates in exams.

What are the Pros and Cons of Reservation in Promotion?

Here is a simplified version of the pros and cons of reservation:

Pros of Reservation

Social Justice & Inclusion: Helps ensure that historically disadvantaged groups (SC, ST, OBC) are represented in higher positions.

Breaks Caste & Social Barriers: Promotes diversity in leadership, leading to a better understanding of societal issues.

Empowerment & Upliftment: Provides opportunities for marginalized communities to advance and compete at higher levels.

Positive Discrimination: Helps overcome past social and economic discrimination by giving disadvantaged groups a better chance.

Cons of Reservation

Merit vs Reservation: May overlook the most qualified candidates for promotion.

Demotivation & Frustration: This can cause frustration among general category candidates who feel they are being passed over.

Creamy Layer Issue: The more advantaged individuals within reserved categories might benefit the most, which can undermine the goal of upliftment.

Seniority & Efficiency: This can disrupt seniority-based promotion systems and affect overall efficiency.

What are the Reservation Developments in India?

Here is a simpler version of the summary of the **Indra Sawhney Judgment, 1992**:

In the Indra Sawhney Judgment of 1992, a nine-judge bench made these key decisions:

Promotion Reservations: Article 16(4) of the Constitution allows reservation in appointments but not in promotions.

27% Reservation: The court upheld the 27% reservation for OBCs but set a limit of 50% for total reservations unless there are exceptional circumstances.

Carry Forward Rule: This rule is valid but must also stay within the 50% limit. No reservations should be applied to promotions.

Relationship Between Articles 16(1) and 16(4): Article 16(4) does not override Article 16(1). Article 16(1) guarantees equality of opportunity as a fundamental right, while Article 16(4) is an enabling provision for reservations.

Exclusion of Creamy Layer: The court directed that the economically well-off (creamy layer) within OBCs should not receive reservation benefits. This exclusion does not apply to SCs and STs.

Article 16(1): Ensures equality of opportunity for all citizens in employment or appointment to any state office.

Way Forward

Here is a simplified version of the provided text:

Pros of Reservation

Social Justice & Inclusion: Helps ensure that historically disadvantaged groups (SC, ST, OBC) are represented in higher positions.

Breaks Caste & Social Barriers: Promotes diversity in leadership, leading to a better understanding of societal issues.

Empowerment & Upliftment: Provides opportunities for marginalized communities to advance and compete at higher levels.

Positive Discrimination: Helps overcome past social and economic discrimination by giving disadvantaged groups a better chance.

Data-Driven Approach: Collect data on the current representation of SC/ST/OBCs in various levels and departments. Use this information to set clear targets for filling reservation quotas.

Focus on Merit with Relaxation: Promote a system that focuses on merit but allows some relaxation in qualifying marks for SC/ST/OBC candidates in promotions. This ensures qualified candidates from these communities have better opportunities while maintaining competency.

Addressing Concerns: Recognize worries about unqualified candidates being promoted due to reservations. Propose solutions like rigorous training and mentorship programs for promoted SC/ST/OBC employees to help them excel in their new roles.

Long-Term Vision: Highlight that reservations are a temporary measure to achieve long-term social justice and equal opportunity in promotions. Support parallel initiatives that improve education and access to resources for these communities, aiming for a future where reservations are no longer needed.



“

Conclusion

The Supreme Court's stance on reservation in promotions has evolved to balance equality and affirmative action. The Court permits states to offer such reservations but imposes conditions to ensure administrative efficiency and safeguard the public interest.



Increased Recovery Under IBC

Why in the News?

Recent data from the Insolvency and Bankruptcy Board of India (IBBI) indicates that creditors in India have recovered nearly half of their claims under the Insolvency and Bankruptcy Code (IBC), 2016 when resolutions are completed within the 330-day deadline. However, delays in the process have reduced the amount of money recovered.



What are the Key Highlights of the Latest Data?

Recovery Rates and Timeliness

Total Recoveries: Since the inception of the Insolvency and Bankruptcy Code (IBC) in 2016, the resolution of 947 financially stressed companies has resulted in creditors receiving ₹3.36 lakh crore, which is 32.1% of their claims.

TRENDS IN RECOVERY RATES:

FY18 and FY19: Recoveries were at 54%.

FY21: Recoveries dropped to 22% due to the pandemic.

FY22: Recoveries slightly increased to 23%.

FY23: Recoveries improved to 36%.

FY24: Recoveries declined again to 27%.

Number of Resolutions:

- FY22: 144 resolutions.
- FY23: 189 resolutions.
- FY24: Reached a record of 269 resolutions, largely due to the government filling vacancies in the National Company Law Tribunal (NCLT) over the past two years.

CUMULATIVE RECOVERIES:

- ➡ Compared to the fair value of stressed companies at the time of insolvency admission, creditors have experienced stronger cumulative recoveries, reaching 85%.
- ➡ In terms of liquidation value, the recovery rate has reached 161.8% of the assets.
- ➡ **Impact of Delays:** Delays in the resolution process, averaging 679 days, have significantly reduced recovery rates to 26%, negatively affecting asset value and debt recovery. Experts emphasize the importance of timely initiation of the IBC for effective stress resolution.

What are the Proposed Measures to Strengthen IBC?

Strategies to Improve Insolvency Resolution and Recovery Rates

Reduce Delays

Streamline Processes: Resolve insolvency cases within the IBC's 330-day deadline. The current average duration of 679 days highlights the need to streamline procedures and reduce litigation.

Improve Recovery Rates

Enhanced Efficiency at NCLT: Ensure sufficient judges and staff at the National Company Law Tribunal (NCLT) to handle cases efficiently, expediting processing and reducing delays caused by backlogs.

Simplify Procedures: Review and simplify IBC procedures to eliminate unnecessary steps and standardize processes, speeding up approvals.

Sector-specific regimes

Specialized Insolvency Frameworks: Develop specialized insolvency regimes for sectors like real estate, which face unique challenges compared to other industries.

Cross-Border Insolvency Framework

Legal Framework: Establish an effective legal framework based on the UNCITRAL (United Nations Commission on International Trade Law) guidelines to handle insolvency cases involving companies with assets in multiple countries.

Review Timelines

Re-evaluate Timelines: Reassess the timelines mandated by the IBC to ensure they are efficient and minimize unnecessary delays.

Formal Prepack for All Companies

Pre-packaged Insolvency Process: Allow a formal pre-packaged insolvency process for all companies, not just Micro, Small, and Medium Enterprises (MSMEs). This involves agreeing on a resolution plan before initiating formal bankruptcy proceedings.

What are the Key Highlights of the Insolvency and Bankruptcy Code, 2016?

Overview of the Insolvency and Bankruptcy Code (IBC), 2016

Purpose: The IBC, 2016, provides a structured framework for resolving bankruptcy and insolvency for companies, individuals, and partnerships promptly.

Insolvency: This occurs when an individual or organization's liabilities exceed its assets, making it unable to raise sufficient cash to meet its debts as they become due.

Bankruptcy: A legal declaration that a person or company cannot pay their due and payable bills.

Amendment Act, 2021: This amendment aimed to provide a more efficient insolvency resolution framework for Micro, Small, and Medium Enterprises (MSMEs), ensuring quicker, cost-effective, and value-maximizing outcomes for all stakeholders.

Insolvency and Bankruptcy Board of India (IBBI)

Role: The IBBI serves as the regulatory authority overseeing insolvency proceedings in India.

Composition: The IBBI is led by a chairperson and three full-time members, appointed by the government, who are experts in finance, law, and insolvency. It also includes ex-officio members.

ADJUDICATION OF PROCEEDINGS

National Companies Law Tribunal (NCLT): Handles insolvency proceedings for companies.

Debt Recovery Tribunal (DRT): Manages proceedings for individuals.

These bodies play a crucial role in approving the initiation of the resolution process, appointing professionals, and endorsing the final decisions of creditors.

Insolvency Resolution Procedure

Initiation: The process can be initiated by either the debtor or the creditor upon default.

Management: Insolvency professionals are appointed to manage financial information and the debtor's assets.

Prohibition Period: There is a 180-day prohibition on legal action against the debtor during the resolution process.

Committee of Creditors (CoC)

Formation: Comprising financial creditors, the CoC is formed by insolvency professionals.

Responsibilities: The CoC decides on the resolution of outstanding debts, which may include debt revival, changes to the repayment schedule, or asset liquidation.

Deadline: The CoC must decide within 180 days, after which the debtor's assets may be liquidated if no resolution is found.

Liquidation Process

Proceeds from the sale of the debtor's assets are distributed in the following order:

- Insolvency resolution costs
- Secured creditors
- Dues for workers and employees
- Unsecured creditors

This structured approach aims to ensure an efficient and fair resolution of insolvency and bankruptcy cases, maintaining a balance between creditor recovery and debtor rehabilitation.



Pandemic Treaty

Why in the News?

During the recent annual meeting, the World Health Assembly (WHA) made significant amendments to the International Health Regulations (2005) (IHR). These changes aim to enhance global preparedness, surveillance, and responses to public health emergencies, particularly pandemics.

Additionally, the WHA committed to finalizing negotiations on a global pandemic agreement by 2025. These developments mark a crucial step towards improving international cooperation in addressing health crises worldwide.

What are the Key Amendments Agreed to IHR?

Definition:

Introduction of a definition of pandemic emergency to enhance international collaboration in response to potential pandemics.

Criteria include wide geographical spread, exceeding health system capacity, causing social and economic disruption, and requiring rapid international action.

Commitment to Solidarity and Equity:

Establishment of a Coordinating Financial Mechanism to support the identification and access to financing needed for developing countries.

Development and strengthening of core capacities and other pandemic emergency prevention, preparedness, and response-related capacities.

Cooperation for Effective Implementation:

Creation of a States Parties Committee to promote cooperation and effective implementation of the amended regulations.

Establishment of National IHR Authorities to improve coordination of implementation within and among countries.

Need for Global Health Cooperation:

Curbing Infectious Diseases:

Global cooperation is crucial in curbing pandemics like Covid-19, which can rapidly spread across borders.

Early detection and sharing of disease outbreaks enable a faster global response, as seen with the WHO's role in identifying and tracking COVID-19 variants.

Collaboration accelerates the development of vaccines, diagnostics, and treatments.

Chronic Disease Management:

Non-communicable diseases like heart disease and diabetes are a growing global concern. Knowledge sharing in prevention, treatment, and lifestyle interventions allows countries to learn from each other, as seen with initiatives like the Global Alliance for Chronic Diseases (GACD).

Health Equity and Access:

Global cooperation promotes technology transfer to address healthcare challenges in resource-limited countries. Sharing knowledge and technology allows developing countries to improve their healthcare systems, as seen with initiatives like the Medicines Patent Pool facilitating access to affordable generic drugs.

What is the Existing Framework for Global Health Cooperation?

Multilateral Agencies:

Various multilateral organizations like WHO, UNICEF, UNFPA, and UNAIDS play crucial roles in specific health areas such as child health, reproductive health, and HIV/AIDS.

The WHO serves as the central coordinating authority on global health within the United Nations system. It sets international health standards, provides technical assistance to countries, and coordinates the global response to health emergencies.

International Health Regulations (IHR):

A legally binding agreement between 196 countries outlining their rights and obligations regarding public health events with international implications.

Global Health Initiatives:

Targeted programs addressing specific health challenges, such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and Gavi, the Vaccine Alliance.

Public-Private Partnerships:

Collaboration between governments, NGOs, and the private sector to leverage resources and expertise. An example is the Bill & Melinda Gates Foundation.

Regional Organizations:

Regional bodies like the Pan American Health Organization (PAHO) and the African Union coordinate health efforts within their respective regions.



CONCLUSION

The recent amendments made by the World Health Assembly (WHA) to the International Health Regulations (IHR) and the commitment to establish a global pandemic agreement by 2025 represent a significant advancement in global health security.

These changes, which include introducing a definition for pandemic emergencies, emphasizing equity and financing, and enhancing national and international cooperation, are designed to better equip the world to detect, prevent, and respond to future health threats.

06/06/2024

WOMEN IN CORPORATE ROLES IN INDIA

Why in the News?

A recent report called "Women in Leadership in Corporate India" by a networking platform shows that women are still underrepresented in leadership roles in Indian companies. The percentage of women in these positions has stayed below 30% for a long time.

WHAT ARE THE FINDINGS OF THE REPORT?

Stagnation of Women's Representation in Corporates:

Women make up less than 30% of the workforce and senior leadership roles, and this number has been dropping since the pandemic. The decline is due to fewer women being hired for leadership positions.

WOMEN IN LEADERSHIP BY SECTOR:

Lowest Representation:

Construction, Oil, Gas, and
Mining, and Utilities:
11%
Wholesale and
Manufacturing: 12%
Accommodation and Food
Services: 15%

Moderate Representation:

Technology, Information
& Media,
Financial Services: 19%

Highest Representation:

Education: 30%
Government
Administration: 29%

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Lowest Representation:

- ➔ Construction, Oil, Gas, and Mining, and Utilities: 11%
- ➔ Wholesale and Manufacturing: 12%
- ➔ Accommodation and Food Services: 15%

MODERATE REPRESENTATION:

- ➔ Technology, Information & Media, Financial Services: 19%

HIGHEST REPRESENTATION:

- ➔ Education: 30%
- ➔ Government Administration: 29%

BREAKING THE LAW:

The Companies Act, 2013 requires women directors on company boards, but this rule is often ignored. From April 2018 to December 2023, 507 companies were fined for not complying, with 90% of them being listed companies



WHAT ARE THE FACTORS CONTRIBUTING TO LOWER REPRESENTATION OF WOMEN IN CORPORATIONS?

Factors Affecting Women's Representation in Corporates:

Unconscious Bias:

- ➔ Societal biases and stereotypes about women's abilities and leadership styles result in unfair evaluations and fewer advancement opportunities.

Reduction in Work-from-home Options:

- ➔ Fewer hybrid or remote work opportunities can limit women's participation in the workforce, as these arrangements often help them balance work and personal responsibilities.

Work-Life Balance Challenges:

- ➔ Women often carry a larger share of domestic and caregiving duties, making it harder for them to match the commitment and availability expected in corporate roles.

Limited Representation in Leadership:

- ➔ Few women in senior roles mean a lack of visible role models, making it harder for women to see themselves in leadership positions.

Safety Concerns:

- ➔ Safety issues and inadequate urban infrastructure can deter women from seeking and keeping jobs, especially in urban areas.

Lack of Mentorship and Sponsorship:

- ➔ Women have less access to mentors and sponsors who can support their career growth and help them navigate the corporate environment.

STRATEGIES TO IMPROVE WOMEN'S REPRESENTATION IN CORPORATES:

FLEXIBLE OR HYBRID WORK POLICIES:

- ➔ These policies are crucial for retaining women, especially at junior and middle management levels, helping them balance career aspirations and family commitments.

Skills-First' Approach to Hiring:

- ➔ Focus on candidates' relevant skills, qualifications, and experience rather than gender-based assumptions to reduce biases and promote meritocracy.

Promoting Diversity in Senior Leadership:

- ➔ Government initiatives can raise awareness of board diversity in listed companies. For example, Japan's "Nadeshiko Brands" program highlights companies that support women's empowerment and leadership as attractive investment opportunities.

Establish Networking and Support Groups for Women:

- ➔ **Creating a Strong Network:** These groups can help women professionals connect and collaborate, empowering them to reach leadership positions.
- ➔ **Peer Learning and Support:** Women can share experiences, learn from each other's successes and challenges, and build a strong support system.

Mentorship and Networking Opportunities:

- ➔ Providing mentorship and networking opportunities helps women navigate the corporate ladder. Experienced female leaders can offer guidance, support, and strategies for career advancement.

Shared Parental Leave Policies:

- ➔ These policies promote a more equitable distribution of caregiving responsibilities between men and women. Paid paternity leave, especially in the private sector, can support this goal.

CONCLUSION

The stagnation in the representation of women in corporate leadership roles in India is a concerning trend that requires concerted efforts to address. Implementing a multifaceted approach, including policy changes, organizational reforms, and cultural shifts, is essential to enhance gender diversity and unlock the full potential of women in the corporate sector.

KAZA Summit 2024 and Wildlife Product Trade



WHY IN THE NEWS?

Recently, the 2024 Heads of State Summit for the Kavango-Zambezi Trans-Frontier Conservation Area (KAZA-TFCA) took place in Livingstone, Zambia.

At the summit, member states renewed their calls to withdraw from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This demand arose due to repeated denials of permission to sell their abundant ivory and other wildlife products.

What are the Key Issues Discussed at the 2024 Summit?

The KAZA-TFCA Initiative:

The Kavango-Zambezi Trans-Frontier Conservation Area (KAZA-TFCA) spans across five southern African nations: Angola, Botswana, Namibia, Zambia, and Zimbabwe, along the Okavango and Zambezi river basins

Conservation Efforts: About 70% of KAZA land is under conservation, comprising 103 wildlife management areas and 85 forest reserves.

Elephant Population: This region is home to over two-thirds of Africa's elephant population, approximately 450,000 elephants. Botswana has around 132,000 elephants, and Zimbabwe has about 100,000.

Historical Dispute with CITES:

At the 2022 Conference of Parties in Panama, southern African countries, including those in KAZA, advocated for legalizing the ivory trade to finance conservation efforts and reduce human-wildlife conflicts.

Despite their large elephant populations and the challenges, they face, their proposal was rejected. These countries accused CITES of prioritizing anti-trade ideologies over scientific conservation methods.

Key Issues Discussed at the 2024 Summit:

AT THE 2024 HEADS OF STATE SUMMIT IN LIVINGSTONE, ZAMBIA, SEVERAL CRITICAL ISSUES WERE DISCUSSED:

Economic Impact of CITES Restrictions:

- ➔ Delegates emphasized the economic pitfalls of existing CITES restrictions and advocated for the right to sell wildlife products.
- ➔ Highlighted were elephant mortality rates and the lost economic potential from ivory stockpiles.
- ➔ The ban on ivory and wildlife product trade negatively impacts conservation funding, as revenue from sales could support wildlife management.

Decision-Making Concerns:

Delegates argued that CITES decisions are driven by populism and political agendas rather than scientific evidence, undermining the effectiveness of the organization in promoting sustainable conservation.

Calls to Exit CITES:

There were renewed appeals to exit CITES, with proponents suggesting that such a move could prompt the organization to reconsider its stance or allow KAZA states to independently manage their wildlife resources.

EXPLORING ALTERNATIVE MARKETS:

- ➔ In response to increasing restrictions on trophy hunting imports by Western countries, Zimbabwe and other KAZA states are exploring alternative markets, particularly in the East.
- ➔ **Trophy Hunting:** This practice involves selectively hunting wild animals, often large mammals, to obtain body parts like antlers or horns, which are seen as symbols of achievement or for display.

The discussions and decisions at the summit highlight the ongoing conflict between conservation needs and international trade regulations, with KAZA states pushing for more autonomy and flexibility in managing their wildlife resources.

WHAT ARE THE CAUSES OF THE WILDLIFE PRODUCT TRADE?

Factors Contributing to Wildlife Trafficking:

Organized Commercial Illegal Sourcing:

- ➔ Organized crime groups engage in remote operations like elephant and tiger poaching.
- ➔ These activities often merge with other criminal networks, exploiting power dynamics, illicit weapons, and money laundering channels.

BLACK MARKETS CREATE NEW DEMANDS:

- ➔ When legal sales decline, illegal traders find new ways to sell products, including rare animals and endangered species trophies.
- ➔ The scarcity of these items makes illegal markets more attractive to buyers.

Supplementary Livelihoods and Opportunism:

While major criminal groups drive some trafficking, many poor individuals participate to make ends meet.

CORRUPTION:

- ➔ Corruption severely undermines efforts to combat wildlife trafficking.
- ➔ This includes bribery at inspection points and higher-level influence on permit issuance and legal decisions

EXISTENCE OF LEGAL MARKETS FOR WILDLIFE PRODUCTS:

- ➔ Legal markets for wildlife products, such as bear bile trade in Lao PDR, complicate the recognition of products' origins, whether from legal or illegal sources.
- ➔ Japan has the world's largest legal ivory market, which further complicates efforts to curb illegal poaching.

What are the Measures Needed to Tackle Wildlife Crime?

Strategies to Combat Wildlife Trafficking:

Banning Illegal Wildlife Products:

- ➔ This approach aims to reduce demand by making it illegal to possess or trade goods derived from illegally obtained wildlife.

Effective Funding for Wildlife Protection:

- ➔ Funds should directly support agencies that protect wildlife, such as park rangers and anti-poaching teams.

Ivory-Specific Measures:

- ➔ An independent scientific review could assess the sustainability of the potential ivory trade from KAZA countries.
- ➔ CITES and KAZA countries could collaborate on exploring alternative sources of income for conservation, such as promoting ecotourism ventures and carbon offset programs within the KAZA region.

BEST PRACTICES:

TRAFFIC and WWF Campaigns:

- ➔ TRAFFIC's technical expertise supported a WWF campaign in Thailand, significantly reforming Thai legislation and nearly eliminating the domestic ivory market.
- ➔ In China, WWF and other NGOs played a crucial role in implementing a domestic ivory ban.

Stockpile Destruction:

- ➔ Gabon, Congo, and the USA have recently destroyed stockpiles of confiscated ivory to prevent its return to the black market and publicly condemn the ivory trade and poaching.

By combining these strategies, nations can address both the supply and demand sides of wildlife trafficking, promote sustainable conservation practices, and reduce illegal wildlife trade.

AMRUT (ATAL MISSION FOR REJUVENATION AND URBAN TRANSFORMATION) SCHEME

Why in the News?

Recently, the AMRUT scheme has been in the spotlight due to the difficulties it's encountering in tackling infrastructure problems concerning water, mobility, and pollution.

What is the AMRUT Scheme?

Overview of AMRUT Scheme:

AMRUT 1.0:

- ➔ Launched on June 25, 2015, in 500 selected cities across India, covering about 60% of the urban population.
- ➔ Aims to enhance basic infrastructure and implement urban reforms, including water supply, sewerage, drainage, green spaces, non-motorized transport, and capacity building.

AMRUT 2.0 Scheme:

- ➔ Launched on October 1, 2021, for 5 years (FY 2021-22 to FY 2025-26), absorbing AMRUT 1.0.
- ➔ Aims for universal coverage of water supply from 500 cities to about 4,900 statutory towns and coverage of sewerage/septage management in these cities.
- ➔ Focuses on promoting the circular economy of water through recycling/reuse of treated sewage, rejuvenation of water bodies, and water conservation.
- ➔ Includes reforms agenda for ease of living, such as reducing non-revenue water, strengthening urban planning, and improving urban finance.

Components of AMRUT 2.0:

- ➔ **Pey Jal Survekshan:** Ensures equitable water distribution, promotes wastewater reuse, maps water bodies, and fosters healthy competition among cities.
- ➔ **Technology Sub-Mission for Water:** Utilizes global technologies in water management.
- ➔ **Information, Education, and Communication (IEC) Campaign:** Raises awareness about water conservation.

Status of AMRUT 2.0 Scheme:

Fund Allocation:

The total outlay for AMRUT 2.0 is Rs. 2,99,000 crore for ongoing projects until March 2023.

Impact:

Positive impact on women's lives, as it reduces the effort in fetching water and leads to a decrease in waterborne diseases due to safe drinking water availability.

Challenges:

- Despite the scheme's implementation, around 200,000 people die annually due to inadequate water, sanitation, and hygiene.
- India's disease burden from unsafe water and sanitation is significantly higher compared to China's, with limited improvement.
- A NITI Aayog report predicts groundwater depletion in 21 major cities by 2030, leaving 40% of India's population without access to drinking water.
- A large percentage of urban Indian households lack piped water and sewerage system connections.

What are the Challenges in the Implementation of AMRUT Scheme?

Challenges and Concerns with AMRUT Scheme Implementation:

State Project Implementation:

- ➔ Despite regular fund releases, states like Bihar and Assam have struggled to complete projects or utilize the PPP model, resulting in less than 50% execution completion in most states.

AMRUT Program Scope:

- ➔ The scheme focuses on a project-focused approach rather than a holistic perspective, potentially limiting its effectiveness in addressing broader urban development issues.

Potential Overlaps and Convergence Challenges:

- ➔ Overlap between AMRUT and other schemes, such as the Swachh Bharat Mission, could lead to funding allocation challenges and increased workload in addressing specific urban issues.

Unaddressed Air Pollution:

- ➔ The National Clean Air Programme was launched to tackle deteriorating air quality, which remained unaddressed since AMRUT 2.0 shifted solely to water and sewerage, leaving unresolved air quality issues from AMRUT 1.0.

Non-Inclusive Governance Structure:

- ➔ The scheme lacks organic participation from elected city governments, resulting in a less inclusive approach for urban people and potentially hindering effective governance and decision-making.

What are the Steps Needed to Revamp the AMRUT Scheme?

Financial Challenges and Solutions:

Diversification of Financial Resources:

- ➔ Local urban bodies should diversify financial resources to implement local projects instead of relying solely on a top-down funding approach.

HOLISTIC APPROACH:

Considering Climate Change and Infrastructure:

- ➔ Urban water management should consider climate change, rainfall patterns, and existing infrastructure to cater to evolving challenges effectively.

Nature-Based Solutions and People-Centric Approach:

- The scheme needs nature-based solutions and a comprehensive methodology with a people-centric approach, empowering local bodies to address urban water management issues.

COMMUNITY ENGAGEMENT:

Encouraging participation:

- ➔ Engaging community groups, including NGOs and resident associations, can enhance the effectiveness of housing schemes by soliciting ideas and feedback from grassroots levels.

Learning from success stories:

Studying Successful Case Studies:

- ➔ Learning from successful case studies, such as the "Water Availability for All" initiative in Dahanu Taluka, can provide valuable insights for addressing similar challenges in housing initiatives.

INNOVATION AND RESEARCH:

Establishing Innovation Hubs:

- ➔ Innovation hubs can foster industry-specific research and development related to health and housing issues, spurring innovative solutions and technologies.





TONGA VOLCANO IMPACTING WEATHER

WHY IN THE NEWS?

A recent study in the Journal of Climate found that the Hunga Tonga-Hunga Ha'apai Volcano eruption in January 2022 has greatly affected global weather.

WHAT ARE THE EFFECTS OF THE HUNGA-TONGA VOLCANO ON THE CLIMATE?

EXTRAORDINARY OZONE HOLE IN 2023:

The underwater eruption of the Hunga Tonga-Hunga Ha'apai Volcano in January 2022 released 100-150 million tonnes of water vapor, increasing the stratosphere's water content by about 5%. This extra water vapor harms the ozone layer and acts as a strong greenhouse gas.

The study found that the large ozone hole seen from August to December 2023 was partly due to this eruption. The water vapor took almost two years to reach the polar stratosphere over Antarctica, causing the early appearance of the ozone hole.

Wet Summer of 2024 in Australia:

The study's model predicted a positive phase of the Southern Annular Mode for the summer of 2024, indicating a higher chance of a wet summer in Australia. This prediction went against the expected El Niño conditions and was made two years in advance.

REGIONAL WEATHER DISRUPTIONS:

The study forecasts colder and wetter winters for northern Australia until around 2029. North America might experience warmer winters, while Scandinavia could have colder winters. These changes are linked to the Tonga eruption's effect on atmospheric waves, impacting local weather patterns. This highlights the importance of region-specific climate predictions and adaptation plans.

Minimal Impact on Global Temperatures:

The eruption's effect on global mean temperatures was very small, only about 0.015°C. The extremely high temperatures observed for about a year cannot be blamed on the Tonga eruption.

PERSONALITY RIGHTS

Why in the News?

The recent conflict between a Hollywood actress and OpenAI shows how important personality rights are regarding AI models.

The actress claimed that OpenAI used her voice without permission after she had refused to license it to the company's CEO. Earlier, the New York Times sued OpenAI and Microsoft, accusing them of using its copyrighted content without permission to train AI models like ChatGPT.



WHAT ARE PERSONALITY RIGHTS?

PERSONALITY RIGHTS

DEFINITION:

Personality rights allow individuals to protect their identity, which falls under the broader categories of privacy and property rights. These rights cover different elements of a celebrity's public persona, such as their name, voice, signature, images, distinctive features, mannerisms, and poses.

Types: Right to Privacy:

- Protects an individual's control over their personal information and affairs.
- Prevents unauthorized disclosure of personal details or intrusion into one's private life.
- Supported by the Supreme Court judgement in the Puttaswamy v Union Of India, 2017 case.

Right of Publicity:

- It grants individuals control over the commercial use of their name, image, likeness, or other recognizable characteristics.
- It allows them to decide if and how these aspects of their identity are used in product endorsements or advertising.

Importance:

- These rights are crucial for celebrities as their names, photos, or voices can be easily exploited by companies in advertisements to boost sales.

What is the Status of Personality Rights in India?

Legal Framework for Personality Rights in India

Overview:

While personality rights are not explicitly mentioned in Indian statutes, they are protected through principles related to privacy and property rights.

Key Legal Provisions:

Article 21 of the Indian Constitution:

- The right to privacy, enshrined in Article 21, provides legal protection for personality rights in India.

Copyright Act, 1957:

Though not directly addressing personality rights, it offers some protection through concepts like "passing off" and "deception" in Intellectual Property Rights (IPR) cases.

Passing Off: Occurs when someone misrepresents their goods or services as belonging to someone else. This can relate to personality rights if:

- A celebrity's name or image is used to endorse a product without permission, misleading the public into thinking the celebrity is associated with the product.
- A character or image similar to a well-known personality deceives the public into thinking it's the real person.

Deception: Using a person's name or likeness deceptively or misleadingly can constitute copyright infringement, especially if it harms the person's reputation.

Indian Trademarks Act, 1999:

- Section 14 restricts the use of individual names and representations without permission.

Court Judgments:

- Courts have recognized the right of publicity, allowing celebrities to protect their name, likeness, and persona from unauthorized use.
- *Krishna Kishore Singh vs. Sarla A Saraogi, 2021*: The Supreme Court held that the right to publicity is distinct from the right to privacy and affirmed that publicity rights are inheritable and devisable.
- *ArunJaitley vs. Network Solutions Private Limited, 2011*: The Delhi High Court observed that an individual's popularity or fame is significant on the internet as well as in real life. The court stated that a name can acquire its distinctive significance.

Examples:

Jackie Shroff Case (May 2024):
The Delhi High Court upheld Jackie Shroff's personality and publicity rights, preventing various e-commerce stores, AI chatbots, and others from using his name, image, voice, and likeness without consent.

Anil Kapoor Case (September 2023):
The Delhi High Court restricted 16 entities from using Anil Kapoor's name, image, or likeness for commercial purposes without permission.

D.M. Entertainment Pvt. Ltd. vs. Baby Gift House, 2010:
The Delhi High Court ruled in favor of Daler Mehndi's company, which sued shops selling dolls that mimicked Mehndi's appearance and sang his songs. The court upheld Mehndi's right to control his public image commercially.

WHAT IS THE STATUS OF AI REGULATION IN INDIA?

AI Regulation in India Current Status:

India does not have a specific regulation for artificial intelligence (AI). However, various advisories, guidelines, and IT rules provide legal supervision for the advancement of AI, Generative AI, and large language models (LLM).

KEY INITIATIVES:

NITI Aayog's Leadership:

- In 2018, NITI Aayog released the "National Strategy for Artificial Intelligence #AIForAll." This document outlines the responsible development and deployment of AI in sectors such as healthcare, agriculture, education, and smart infrastructure.

DATA PROTECTION AND GLOBAL COLLABORATION:

- The Digital Personal Data Protection Act (2023) empowers the government to address privacy concerns arising from AI use.
- India's membership in the Global Partnership on Artificial Intelligence (GPAI) promotes collaboration on responsible AI development, data governance, and ethical considerations.

MANY FACETS OF TRUTH

Why in the News?

For thousands of years, philosophers have grappled with questions about truth—what it is, how we can know it, and whether it's the same for everyone or different depending on who you ask. This has led to a wide range of viewpoints on the idea of truth.

What are the Various Thinkers' Perspectives on Truth? Theories of Truth

Correspondence Theory:

- Thinkers like Aristotle and Bertrand Russell argue that truth depends on how well our statements match reality. In other words, a statement is true if it accurately reflects what's happening in the external world.
- For example, saying "The grass is green" is true because it matches the fact that grass actually has the color green.
- However, this theory struggles with abstract truths like mathematical theorems that don't directly relate to physical reality.

COHERENCE THEORY:

- Thinkers like Immanuel Kant and Friedrich Hegel propose that truth comes from the internal consistency of ideas. A statement is true if it fits with the established knowledge framework.
- Scientific theories are considered true if they're internally consistent and explain various phenomena. Yet, this approach can lead to closed belief systems resistant to new evidence.

PRAGMATIC THEORY:

- Thinkers like William James and John Dewey suggest that truth depends on practical usefulness and successful outcomes.
- For instance, the theory of gravity is true because it helps predict object movements and build stable structures.
- However, this view makes truth relative to context and ignores objective facts independent of human usefulness.

MAHATMA GANDHI'S QUEST FOR TRUTH

Divine Truth and Non-Violence:

- Gandhi saw truth as more than factual accuracy—it was the ultimate reality, God itself.
- He believed truth was evident but required removing ignorance to see clearly. He linked absolute truth with non-violence (ahimsa).
- Truth, for Gandhi, wasn't just a concept but an eternal principle, akin to God, making truth and non-violence inseparable.

THE UNENDING QUEST:

- Gandhi's pursuit of truth involved introspection, constant questioning, and accepting mistakes. He saw truth as a continuous journey of self-discovery rather than a fixed destination.

TRUTH IN ACTION:

- Gandhi's dedication to truth shaped his methods of protest, leading to the concept of Satyagraha, or "truth force."
- Satyagrahis, Gandhi's followers, aimed to awaken oppressors' consciences through civil disobedience and unwavering honesty.

What are the Dilemmas and Complexity of Truth?



THE COMPLEXITY OF TRUTH

Symbolism in India's National Emblem:

- The three lions on the Ashokan pillar in India's national emblem represent three perspectives of truth: personal truth, your truth, and an observer's truth. There's also a fourth, unfathomable dimension of truth often referred to with the saying, "God only knows the truth."

CHALLENGES FOR THE ELECTION COMMISSION:

- During elections, the Election Commission of India faces challenges due to political parties using clever language to engage in caste or communal speech, making it difficult for the commission to take action.
- While the Model Code of Conduct (MCC) prohibits explicit appeals on these grounds, loopholes allow parties to make divisive statements indirectly.

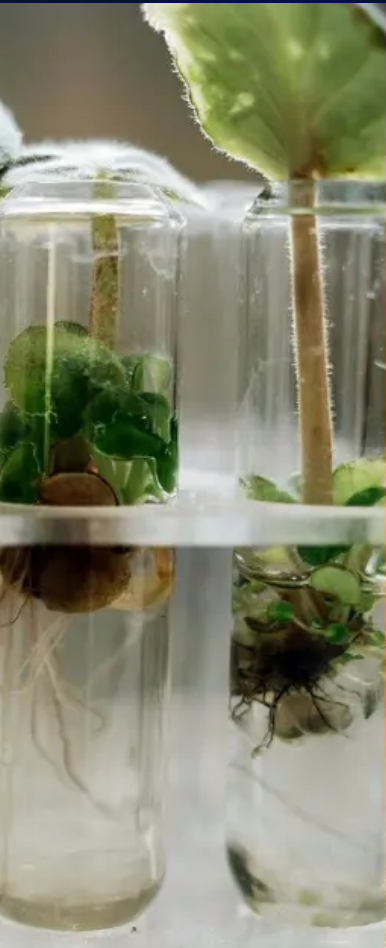
The Dilemma of Truth and Deception:

- Historical and mythological narratives, such as Yudhishtira's half-truth in the Mahabharata, illustrate ethical dilemmas when truth is manipulated.
- Yudhishtira's false declaration of Ashwathama's death led to misinterpretation and contributed to Dronacharya's demise.
- This story highlights the moral complexities that arise when the truth is distorted for strategic purposes, potentially resulting in the loss of moral integrity.

CONCLUSION

The saying "Satyameva Jayate" is like a compass for India's democracy. But, to make it work in our daily lives, everyone must commit to acting ethically. This needs politicians and citizens to wake up to it together. Keeping truth alive in a democracy needs constant watchfulness, thinking, and sticking to the law and good values.

08/06/2024



OPEN NETWORK FOR DIGITAL COMMERCE

WHY IN THE NEWS?

In May 2024, the Open Network for Digital Commerce (ONDC) had its busiest month, with 8.9 million transactions. That's a big 23% increase from the previous month.

What is ONDC?

The Open Network for Digital Commerce (ONDC) is like a big network of online markets where sellers, like brands, can sell directly to buyers without any middlemen. It was started in 2021 by the Ministry of Commerce as part of Digital India. ONDC helps with delivering groceries, home stuff, food, and more.

It's not a profit-making organization and aims to help local online shops in different industries to be found easily by any app. It's kind of like UPI but for e-commerce, making things fairer for everyone.

The Quality Council of India is ensuring different online shops can join and improve this network. Here are its main goals:

- ➔ Making e-commerce fair and open for everyone.
- ➔ Helping small, local businesses join in.
- ➔ Giving more choices to buyers.
- ➔ Making things cheaper.

HOW IT WORKS:

ONDC isn't just one website like Amazon or Flipkart. It's more like a hub where buyers and sellers from different websites can connect.

WHAT ARE THE POTENTIAL ADVANTAGES OF ONDC?

Here's a simplified version:

Empowering Consumers:

- ➔ ONDC gives consumers more information, so they can make better choices and have more options to buy from. This might mean lower prices for them.

BOOSTING COMPETITION:

- ➔ ONDC makes the competition fairer by giving smaller sellers a chance. This encourages more sellers to join, offering a wider range of products and maybe lower prices for buyers.

INNOVATION:

- ➔ ONDC's open system encourages new ideas and improvements.

Cost Efficiency:

- ➔ ONDC's setup could make things run smoother and save money by cutting down on unnecessary steps.

Boosting Small Businesses:

- ➔ ONDC makes it easier for small businesses to join the online market, creating a more diverse and fairer digital shopping world.

WHAT ARE THE CHALLENGES TO ONDC?

HERE'S A SIMPLIFIED VERSION:

Complexity Factor:

ONDC is more complex compared to user-friendly systems like UPI. It might not be as easy for people to use.

BREAKING ESTABLISHED HABITS:

People are used to how current e-commerce sites work. ONDC needs to be easy to use to compete.

Dispute Resolution Concerns:

ONDC only handles buying and selling online, not the whole transaction process. This might cause more disputes about deliveries, product quality, etc., as ONDC isn't directly involved.

Lack of a Robust Grievance Redressal Mechanism:

- ➔ It's not clear who's responsible for customer service on ONDC, which might make people hesitant to join.

Challenges from Existing E-commerce Platforms:

- ➔ Big e-commerce sites already have loyal customers and special deals. ONDC needs good plans to attract and keep customers in this tough competition.

PRICE ADVANTAGE UNCERTAINTY:

- ➔ ONDC might be unable to control prices or offer big discounts as big players do.

WAY FORWARD

Here's a simplified version:

Enhancing Digital Infrastructure:

- ➔ The government can help ONDC by improving internet access in rural areas and promoting digital skills for everyone.

Promoting Digital Literacy:

- ➔ Teaching people how to use ONDC in their language will help both buyers and sellers, especially small businesses. Making ONDC easy to use is important.

Targeted Outreach Programs:

- ➔ Special programs with enough funding are needed to get small sellers, like local shops, to join ONDC. Giving them support and incentives can help them get started.

Dispute Resolution Framework:

- ➔ Having a system to solve problems like unclear pricing or disputes between buyers and sellers is important. This will make everyone trust ONDC more.

CONCLUSION

The success of ONDC depends on teamwork between the government, businesses, and society.

By focusing on improving internet access, teaching people digital skills, helping sellers join, and solving problems quickly, ONDC can bring fairness, openness, and more competition to online shopping in India.



ROLE OF NUCLEAR TECHNOLOGY IN GLOBAL FOOD SAFETY



Why in the News?

A recent International Symposium called "Safe Food for a Better Life," held by the Food and Agriculture Organisation (FAO) and the International Atomic Energy Agency (IAEA), talked about how nuclear technologies are crucial for making sure our food is safe.

The symposium also pointed out how nuclear technology can help in making sure we have enough food for everyone, ensuring food security.

What is the Application of Nuclear Technology on the Food Safety Standard?

Supporting the One Health Approach:

- ➔ The One Health approach sees human, animal, and environmental health as connected. Nuclear methods can detect and monitor harmful substances in food and the environment. For example, Polymerase Chain Reaction (PCR) tests, a nuclear technique, quickly identify animal diseases.

Food Irradiation:

- ➔ Using ionizing radiation, food irradiation removes harmful bacteria and pests, making food safer and last longer.

Stable Isotope Analysis:

- ➔ This nuclear method checks the origin and authenticity of food, detecting any fake products and confirming labels.

Soil and Water Management:

- ➔ Nuclear fallout helps scientists study soil erosion. Radioactive elements from nuclear events indicate soil health and erosion rates.

Pest Control:

- ➔ Techniques like the Sterile Insect Technique (SIT) use nuclear methods to control pests in agriculture, reducing the need for chemical pesticides.

Plant Breeding and Genetics:

- ➔ Nuclear technology helps develop crop varieties resistant to climate change. By exposing seeds to radiation, genetic diversity increases, aiding breeding efforts.

What is the Need for Tech-Related Advancements in Food Security?

CLIMATE CHANGE:

- ➔ Climate-related issues like droughts, floods, and changing temperatures can harm crop growth and food supply. That's why we need to promote climate-smart agriculture (CSA).

Food Waste:

- ➔ About one-third of the food produced globally is wasted each year, according to the FAO. This is around 1.3 billion tons. Also, in 2020, around 3.1 billion people couldn't afford a healthy diet.

Increasing Population:

- ➔ The world's population is expected to reach 9.7 billion by 2050, putting a lot of pressure on food production. We need technological advancements to meet this demand.

Limited Resources:

- ➔ There's not much arable land or freshwater available. Technology like vertical farming, hydroponics, and better irrigation can help us produce more food with what we have.

What Challenges are Associated with Using Nuclear Technology for Food Safety?

Geographical and Regional Variations:

- ➔ Different regions have unique climates and farming methods, which can make it hard to use nuclear techniques everywhere. Adjusting isotopic techniques for soil and water management may need specific adaptations for different soil types, climates, and irrigation methods.

Limited Funding and Technology:

- ➔ Building facilities for food preservation and pest control using irradiation needs a lot of money, which can be hard to get due to budget limits. Also, accessing advanced techniques or specialized equipment can be tough because of high costs or technology transfer rules.

Regulatory Challenges:

- ➔ Using nuclear tech in agriculture has strict rules to ensure safety. Getting approvals and licenses can be slow and complicated. Also, issues like intellectual property rights can slow down progress.

Lack of Allied Infrastructure:

- ➔ There aren't enough labs or experts in nuclear agriculture, which limits how much we can use these techniques.

WAY FORWARD

Developing Infrastructure and Facilities:

- ➔ Invest funds and resources to establish facilities like food irradiation centres and labs equipped for nuclear technology. These facilities can help preserve perishable food, reduce waste, and ensure food safety.

Regulatory Reforms and Streamlining Processes:

- ➔ Develop safety guidelines for handling radioactive materials in agriculture and form a regulatory body to approve and commercialize mutant crops. This will ensure safety while making the approval process smoother.

Promoting Public-Private Partnerships:

- ➔ Encourage partnerships between research institutions, private companies, and the industry to share nuclear technology. Offer incentives for companies to invest in developing and selling nuclear-based agricultural products.

International Cooperation and Knowledge Sharing:

- ➔ Work with international organizations like the Joint FAO/IAEA Centre to share knowledge and technology. Collaborating internationally can help improve nuclear agriculture practices globally.



SPECIAL MARRIAGE ACT, 1954

Why in the News?

The recent decision by the Madhya Pradesh High Court regarding the marriage of a Muslim man and a Hindu woman, even though it was registered under the Special Marriage Act (SMA), has sparked widespread discussion.

The court rejected the couple's request for protection and assistance in registering their marriage, stating that it didn't align with personal laws.

A 'registered marriage' refers to a civil marriage under the SMA, conducted in a registrar's office without any religious ceremonies.

WHAT IS THE RECENT JUDGEMENT OF THE MP HIGH COURT?

The petitioners argued that since they intended to marry under the Special Marriage Act, they didn't need the Islamic Nikah ceremony. They planned to continue following their religions without the Hindu petitioner converting to Islam. However, the High Court noted that according to Islamic law, the marriage of a Muslim man with a Hindu woman is not considered valid. Even if such a marriage is registered under the Special Marriage Act, it would still be seen as irregular. The court stressed that personal laws take precedence over the Special Marriage Act in this situation and dismissed the couple's petition.

What is the Special Marriage Act, of 1954?

The Special Marriage Act of 1954 (SMA) allows couples to marry without changing their religion, unlike other marriage laws which may require conversion. Here's how it works:

About SMA:

- It's a law for civil marriage, where the state approves the marriage, not the religion.
- Other laws, like the Muslim Marriage Act and Hindu Marriage Act, often require one spouse to convert.
- SMA lets couples from different religions or castes marry without converting.

Who Can Apply:

- Anyone from any faith – Hindu, Muslim, Sikh, Christian, Jain, Buddhist, etc.
- Some rules like not marrying close relatives still apply.
- Minimum age for marriage: 21 for men, 18 for women.

Procedure:

- Couples need to inform the "Marriage Officer" of their district at least 30 days before.
- They and three witnesses sign a declaration.

After that, they get a "Certificate of Marriage."

Notice Period:

- The notice is kept public for 30 days.
- Anyone can object if they think the marriage breaks SMA rules.
- The Marriage Officer investigates any objections.

CONCERNS:

Objections: Sometimes, people object to delay or stop the marriage.

Privacy: Publishing notices can invade privacy.

Social Stigma: Couples may face discrimination for inter-caste or inter-religious marriages.

CONCLUSION

The recent ruling by the MP High Court emphasized the challenges faced by interfaith couples in India due to conflicts between personal laws and secular marriage laws. It highlights the need for a better understanding of legal frameworks and social dynamics related to marriage.

FIRST COMMAND AND CONTROL COMPATIBILITY BOARD MEETING BETWEEN

India & U.S.

held in New Delhi



The first Command and Control Compatibility Board (CCCB) meeting for 2024 between India and the U.S. was held at Manekshaw Centre, New Delhi from 04-07 June 2024. The meeting had participation of a 29 member United States delegation led by Mr Paul Nicholson, Executive Director, US INDOPACOM and a 38 member Indian delegation led by Brigadier Rahul Anand of Headquarters Integrated Defence Staff.

The CCCB is the Technical Expert Group formed under Article XI of the Communication Compatibility and Security Agreement (COMCASA) between India and USA, and is held twice a year. After signing of the historic agreement in September 2018, this is the seventh such meeting between both nations to calibrate, reinforce and achieve steady progress in the bilateral Defence partnership.

During this four day interaction, the Subject Matter Experts from both sides had several rounds of extensive discussions to understand interoperability scenarios and operational communications needs. Focused discussions with the US delegation were helpful in working out mutually agreed solutions for the current communications interoperability needs of the Indian Tri-Services. The successful outcome of this meeting is a true reflection of the strengthening relationship between the militaries of India and US.

STATE OF THE OCEAN REPORT 2024:

The Report aims to support the identification of policy and management priorities and focus areas for research. Its findings should stimulate research and policy actions contributing to the 2030 Agenda, the Climate Change and Biodiversity conventions, and the Sendai Framework for Disaster Risk Reduction.

Framed around the seven Outcomes of UN Decade of Ocean Science for Sustainable Development (2021-2030), the Report covers physical, chemical and biological parameters describing the state of the ocean, summarizes threats posed to the ocean, illustrates access to observation infrastructure, data and information and provides new insights on ocean literacy, indigenous and traditional knowledge.

Key messages include:

- Global trends are detected but important to consider local changes
- Ocean observation is critical infrastructure to manage risk and meet future demands of sustainable ocean industries.
- Access to knowledge remains unequally distributed.
- Marine protected areas, coastal protection and marine spatial planning are important tools, if applied in the context of sustainability, to address ocean change.
- Collaboration between all types of knowledge holders, governments and private sector is critical to increase ocean knowledge and understanding.

BIOPHARMACEUTICAL ALLIANCE

Aim of the Alliance:

The alliance aims to coordinate bio policies, regulations, and research and development support measures among participating countries. Inaugural meeting held in San Diego during the Bio International Convention 2024, emphasized the importance of a reliable and sustainable supply chain. The initiative originated from discussions between South Korea and the U.S. and expanded to include Japan, India, and the EU.

DRUG SUPPLY SHORTAGES DURING THE COVID-19 PANDEMIC

Vaccines: Shortages of Covid-19 vaccines occurred globally, impacting various countries' vaccination efforts.	Therapeutics: Drugs such as Remdesivir, used for treating severe Covid-19 cases, experienced shortages in many countries.	Medical Oxygen: As COVID-19 cases surged, many countries faced shortages of medical oxygen, crucial for treating severe respiratory symptoms.	Personal Protective Equipment (PPE): Shortages of PPE, including masks, gloves, and gowns, occurred worldwide, posing risks to frontline healthcare workers.
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FREE EQUITABLE AND FAIR DRUG SUPPLY ENSURES:



INDIA AS PHARMACY OF THE WORLD:

India has earned the title “Pharmacy of the World” due to its robust generic pharmaceutical industry, supplying affordable and quality medicines globally. This reputation grew during the HIV/AIDS pandemic when Indian companies provided affordable antiretroviral drugs to African countries. India's generic industry became a major supplier after the establishment of the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

10/06/2024



RBI'S REPATRIATION OF GOLD FROM UK TO INDIA

WHY IN THE NEWS?

The Reserve Bank of India (RBI) recently brought back over 100 tonnes of gold from the UK to its vaults. This is the biggest gold transfer since the early 1990s and shows the RBI's changing strategy for managing its gold reserves.

HOW MUCH GOLD DOES RBI HAVE?

GOLD STOCK:

According to the World Gold Council, the RBI is one of the top five central banks buying gold. During the global financial crisis in 2009, the RBI purchased 200 tonnes of gold. More recently, it bought 65.11 tonnes in FY 2022, 34.22 tonnes in FY 2023, and 19 tonnes in FY 2024.

WHY DID THE RBI DECIDE TO MOVE THE GOLD BACK TO INDIA?

PROTECTION AGAINST INFLATION:

- Gold holds its value well when inflation is high. Unlike currencies that can lose purchasing power, gold's historical performance suggests it can even increase in value during inflationary times. This means the RBI can potentially earn good returns even in tough economic situations.

HEDGE AGAINST GEOPOLITICAL UNCERTAINTY:

- The current geopolitical climate, such as the Russia-Ukraine war and the resulting sanctions on Russia, may have prompted the RBI to move its assets to domestic control. Gold is considered a haven during such uncertainties, protecting against geopolitical risks.

Diversification and Liquidity:

- Including gold in its reserves helps the RBI diversify its foreign exchange holdings. Gold is a secure and liquid asset, meaning it can be easily bought and sold on the international market at a clear price. This gives the RBI flexibility and more options for managing its reserves.

Strength and Confidence:

- Having a significant amount of gold shows India's strong economic growth and ability to protect its financial assets, boosting confidence in the stability of the Indian economy. This is a marked improvement from the 1991 economic crisis when India had to pledge its gold reserves for foreign currency.

WHAT IS THE SIGNIFICANCE OF GOLD IN THE ECONOMY?

LIMITED SUPPLY & INTRINSIC VALUE:

- Gold has a limited supply due to geological constraints, unlike currencies that central banks can print. This scarcity, along with its unique physical properties and historical importance, gives gold intrinsic value.

Hedge Against Inflation:

- Gold has historically held its value well during inflation. A 2023 World Gold Council study found a positive correlation between gold prices and US inflation over the past 50 years, making gold an effective hedge against inflation.

Diversification & Stability:

- Gold helps diversify a country's foreign reserves, reducing reliance on a single currency and providing stability during economic challenges. Holding gold reserves also signals confidence in a country's economy to international investors.

CONCLUSION

The RBI's decision to bring over 100 tonnes of gold back from the UK to its domestic vaults is a major strategic step.

It shows the bank's focus on improving logistical efficiency, diversifying storage, and its confidence in the stability of the Indian economy.

This move aligns with global trends, as central banks aim to enhance the security of their foreign exchange reserves in uncertain times.

Rise of minilateralism

Why in the News?

Recently, increasing Chinese aggression in the Indo-Pacific region has led to the formation of the Squad, underscoring the growing importance of "minilateralism." The Squad is a multilateral group consisting of the US, Japan, Australia, and the Philippines.

What is Minilateralism?

About:

Minilaterals are informal, targeted initiatives designed to address specific threats, contingencies, or security issues with a small number of states (usually three or four) sharing common interests.

These arrangements focus on specific purposes rather than broad inclusivity and do not have permanent or formal institutional structures. Outcomes and commitments within minilaterals are non-binding and voluntary, relying on the willingness of participating states.

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Reasons for the Rise of Minilateralism:

- ➔ **Evolving Global Order:** The changing nature of threats and the evolving global order have challenged the effectiveness of multilateral frameworks in resolving local conflicts and issues.
- ➔ **US Leadership and Multipolar World:** Inconsistent US global leadership and the rise of a multipolar world, coupled with geopolitical rivalry between the US and China, have exposed weaknesses in multilateral organizations.
For instance, the UN Security Council's permanent membership reflects outdated power structures and has been ineffective.
- ➔ **Global Institutions Struggling:** Global institutions like the World Trade Organization (WTO) have had difficulties reaching consensus on complex issues due to diverse memberships and conflicting priorities.

Contrast with Multilateralism:

- ➔ **Multilateralism:** Involves formal efforts by three or more states to build trust and avoid conflict through the institutionalization and observation of rules and norms for a common vision of regional or international order. Examples include the World Trade Organization (WTO), which emphasizes broad and inclusive participation.
- ➔ **Minilateralism:** Focuses on more specific, urgent issues with flexible, ad-hoc coalitions, such as the Quad for Indo-Pacific security and economic concerns.

Contrast with Regional Organizations:

- ➔ **Minilateralism:** Addresses urgent, specific issues with flexible, ad-hoc coalitions.
- ➔ **Regional Organizations:** Address a broad range of issues, including economic integration and security, through structured and formal cooperation, such as the European Union (EU).

WHAT ARE THE ADVANTAGES OF MINILATERALS?

Minilaterals allow countries with shared interests and values to bypass stagnant frameworks and resolve common concerns. For example, the Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement (MVA) was created even though SAARC failed to facilitate a similar initiative.

ADVANTAGES OF MINILATERALS:

Flexible and Modular Approach: Minilaterals provide a flexible, modular approach to international cooperation. They can be quickly formed to address specific issues without the extensive formalities of multilateral frameworks.

Trade Agreements: This flexibility is evident in trade agreements like the Trans-Pacific Partnership (TPP) and the Regional Comprehensive Economic Partnership (RCEP), which were concluded as minilateral agreements.

Rapid Decision-Making: The voluntary and non-binding nature of minilaterals allows for rapid decision-making and adaptation to changing circumstances.

Strategic Alliances and Regional Security:

- ➔ **Issue-Specific Partnerships:** Minilaterals facilitate the creation of issue-specific partnerships and strategic alliances, especially in regions like the Indo-Pacific.
- ➔ **Examples:** The Quadrilateral Security Dialogue (Quad) and the Trilateral Cooperation and Oversight Group (TCOG) effectively address regional security concerns more effectively than larger, more formal organizations.

DISASTER RESPONSE:

Prompt Assistance: Regional multilateral forums can quickly assist affected nations in case of disasters.

Example: India sent the Indian Naval Ship (INS) Kesari, carrying food and medical assistance, to countries in the southern Indian Ocean to help with the COVID-19 pandemic as part of the Mission Sagar initiative.

What are the Issues Associated With Minilateralism?

Minilaterals can have drawbacks that include forum shopping, undermining critical international organizations, and reducing accountability in global governance.



DRAWBACKS OF MINILATERALS:

- ➔ **Forum Shopping:**Minilaterals may lead to forum shopping, where countries choose the most favorable platform, undermining critical international organizations.
- ➔ **Reduced Enforcement of Norms:** By promoting voluntary commitments instead of legally binding ones, minilaterals may weaken the enforcement of international norms and standards.
- ➔ **Impact on Multilateral Engagement:** Preference for minilaterals may reduce countries' incentive to engage with multilateral frameworks, affecting the relevance and effectiveness of organizations like the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF).
- ➔ **Dependency on Leadership and Political Will:**Minilateral success often depends on leadership, political will, and bilateral relations among members. Changes in leadership or strained relations can derail minilateral initiatives, as seen with the initial failure of the Quad due to leadership changes in Japan and Australia.
- ➔ **Negative Impacts on Non-Members:**Minilateral alliances may have negative impacts on countries not part of the negotiations, reducing their incentive to engage with existing multilateral efforts. For example, the focus on plurilateral initiatives in the Doha trade negotiations hindered broader multilateral progress.

WAY FORWARD

INTEGRATION WITH MULTILATERALS:

Minilateralism should complement rather than undermine the work of larger multilateral organizations. For example, in climate action, minilateralism can foster cooperation on renewable energy technologies and involve sub-national and non-governmental actors to develop innovative solutions.

The International Solar Alliance (ISA) serves as an example, promoting increased deployment of solar energy technologies.

FORWARD-LOOKING PERSPECTIVES:

A forward-looking approach is crucial to understanding how minilaterals will impact security and strategic outcomes in various regions. Ensuring plurality and diversity in minilateral institutions can accommodate different groupings' needs and address issues of shared interest.

For example, India's Security and Growth for All in the Region (SAGAR) initiative aims to deepen economic and security cooperation with maritime neighbors and assist in building their maritime security capabilities.

CLEAR OBJECTIVES:

To maximize effectiveness, minilateralism should establish clear, measurable objectives. This approach enhances their role as a diplomatic tool and streamlines negotiations before multilateral platforms.

ADAPTATION TO EVOLVING SECURITY LANDSCAPE:

The rise of the 'Squad' and similar minilateral groupings reflects a strategic adaptation to the changing security landscape in the Indo-Pacific. These initiatives signify a proactive approach to addressing regional security challenges.





WHY IN THE NEWS?

Recently, the latest QS World University Rankings for 2025 were released, showing significant improvements for Indian universities and notable global standings.

What are the Key Highlights of the Rankings?

About QS World University Rankings:

QS Quacquarelli Symonds (QS) provides data, expertise, and solutions for the global higher education sector. For the 2025 QS World University Rankings, QS analyzed 17 million research papers, 176 million citations, data from 5,600 institutions worldwide, and insights from 175,798 academics and 105,476 employers.

TOP GLOBAL INSTITUTES:

Massachusetts Institute of Technology (MIT): Maintained its position as the best institute globally for the 13th consecutive year.

Imperial College London: Improved from sixth to second place.

Harvard University and University of Oxford: Jointly held the third rank.

REGIONAL HIGHLIGHTS:

- ➔ ETH Zurich: Maintained its position as the top institution in Continental Europe for the 17th year.
- ➔ Asia: The National University of Singapore (NUS) retained its prominent position, ranking eighth globally.

INDIA'S POSITION:

- ➔ With 46 universities, India ranks as the seventh most represented globally and the third in Asia, following Japan (49 universities) and China (71 universities).
- ➔ 61% of Indian universities improved their rankings, with IIT Bombay securing the top spot in India.
- ➔ Citations per Faculty indicator shows strong performance for India, scoring 37.8, surpassing the global average of 23.5.

Research and Collaboration:

- ➔ India performs well in Citations per Faculty but lags in the International Faculty Ratio and International Student Ratio, indicating the need for greater international collaboration.

Top Indian Institutes:

- ➔ **IIT Bombay:** Leading in India climbed from 149th in 2024 to 118th in 2025.
- ➔ **IIT Delhi:** Achieved the second position in India, moving up 47 ranks from 197th to 150th.
- ➔ **IIT Indore:** The only Indian institute that declined in ranking, dropping from 454th to 477th.

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CREATION OF ANDHRA PRADESH AND SPECIAL CATEGORY STATUS

WHY IN THE NEWS?

The recent 10th anniversary of Andhra Pradesh's bifurcation into two states, Andhra Pradesh and Telangana, marks a significant political shift. This offers a compelling opportunity to examine its extensive implications on the political, economic, and historical landscape of the Telugu people.



HOW ANDHRA PRADESH HAS BEEN DIVIDED ON A LINGUISTIC BASIS?

Background:

During the Nagpur session of the Indian National Congress in December 1920, it was decided to reorganize Provincial Congress Committees based on language, aiming to promote the interests of linguistic groups. This led to demands for linguistic states, reflecting the post-independence linguistic reorganization movements.

AGITATION FOR LINGUISTIC STATE:

PottiSreeramulu, a Gandhian activist, played a crucial role in this movement. His hunger strike in October 1952 demanded a separate state of Andhra Pradesh for Telugu-speaking people. His sacrifice intensified the agitation and compelled the Indian government to reconsider its stance on linguistic reorganization.

COMMISSIONS FOR LINGUISTIC REORGANISATION OF STATES:

SEVERAL COMMISSIONS WERE SET UP BY THE CENTRAL GOVERNMENT TO EXAMINE STATE REORGANIZATION ON LINGUISTIC LINES:

1. **Dar Commission (1948):** Did not support linguistic reorganization, prioritizing administrative efficiency.
2. **JVP Committee (1948-1949):** Also recommended against linguistic reorganization due to administrative difficulties.
3. **Fazal Ali Commission (1953-1955):** Recommended the creation of linguistic states with reservations to ensure national integration and administrative convenience. Its recommendations led to the formation of states based on linguistic lines.

STATES REORGANISATION ACT (1956):

Based on the Fazal Ali Commission's recommendations, this act reshaped state boundaries, creating linguistic states. Telugu-speaking areas of Hyderabad state were merged with Andhra state, forming the enlarged Andhra Pradesh.

FORMATION OF ANDHRA STATE:

PottiSreeramulu's death sparked protests, leading to the decision to create Andhra State on linguistic grounds. It was India's first linguistic state, carved out from Madras State.

ANDHRA PRADESH REORGANISATION ACT, 2014:

On June 2, 2014, Telangana was created by separating the northwestern part of Andhra Pradesh. This act addressed the demands for a separate Telangana state.

SPECIAL CATEGORY STATUS (SCS) ISSUE:

Since the bifurcation in 2014, granting Special Category Status (SCS) to Andhra Pradesh has been a contentious issue.

WHAT IS SPECIAL CATEGORY STATUS (SCS)?

Special Category Status (SCS) is a classification granted by the Centre to certain states to aid development, considering their geographical and socio-economic disadvantages. The scheme was introduced in 1969 based on the recommendation of the Fifth Finance Commission.

FACTORS CONSIDERED FOR GRANTING SCS TO A STATE INCLUDE:

- Hilly and difficult terrain
- Low population density and/or significant tribal population
- Strategic location along international borders
- Economic and infrastructural backwardness
- Non-viable nature of State finances

The 14th Finance Commission abolished the 'special category status' for states, except for the Northeastern and three hill states.

States with Special Status include Arunachal Pradesh, Assam, Himachal Pradesh, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, and Uttarakhand.

WHAT ARE THE IMPORTANT FACTS ABOUT THE STATE OF ANDHRA PRADESH?

BORDERED:

Andhra Pradesh is bordered by Chhattisgarh to the north, Odisha to the northeast, Telangana and Karnataka to the west, Tamil Nadu to the south, and the Bay of Bengal to the east.

FESTIVALS:

- Ugadi
- PeddaPanduga
- Pongal

TRIBES:

- Chenchu
- Gadabas
- Sawara
- Kondh
- Kolam
- Porja

Art & Culture:

- TholuBommalata (Puppet show)
- Dappu (The Dance of Percussion)
- VeeraNatyam (The Dance of the Brave)
- TappetaGullu (The Dance of the Rain God)
- Kolattam
- Lambadi (The Dance of Nomads)
- Kuchipudi
- BhamaKalapam
- Yakshagana
- Kalamkari (Textile Art)

Wildlife and Bird Sanctuary:

- Nagarjunsagar-Srisailem Tiger Reserve
- Pulicat Lake Bird Sanctuary
- Coringa Wildlife Sanctuary (Mangrove forests)
- Krishna Wildlife Sanctuary
- Atapaka Bird Sanctuary (Kolleru Lake)
- Papikonda Wildlife Sanctuary

CIC Jurisdiction over MPLADS Funds

WHY IN THE NEWS?

Recently, the Delhi High Court ruled that the Central Information Commission (CIC) does not have jurisdiction to comment on the utilization of funds under the Members of Parliament Local Area Development Scheme (MPLADS).

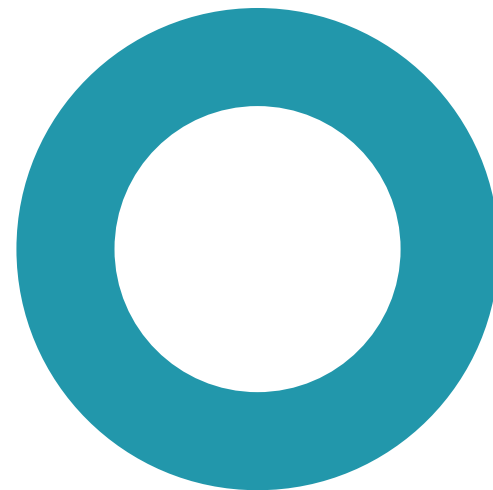
WHAT IS THE BACKGROUND OF THE COURT'S RULING?

Key Events:

- ➔ In 2018, the Central Information Commission (CIC) expressed concerns about some MPs holding back their MPLADS funds until the last year of their term, suspected for electoral advantage.
- ➔ The CIC suggested to the Ministry of Statistics and Programme Implementation (MoSPI) to prevent this "abuse" and implement guidelines for equal fund distribution over the five-year term.
- ➔ MoSPI challenged the CIC's ruling on an RTI application in the Delhi High Court.

COURT'S RULING:

- ➔ The Delhi High Court stated that the CIC cannot comment on how MPs utilize MPLADS funds.
- ➔ The RTI Act is limited to providing access to information under public authorities' control.
- ➔ As per Section 18 of the RTI Act, the CIC can only address issues related to information sought under RTI or any issue leading to information dissemination.
- ➔ However, the Court upheld the part of the CIC's order instructing the public authority to publish details of funds MP-wise, Constituency-wise, and workwise under the RTI Act.



WHAT IS THE MPLADS SCHEME?.

About:

The Members of Parliament Local Area Development Scheme (MPLADS) is a Central Sector Scheme introduced in 1993.

OBJECTIVE:

It allows MPs to recommend developmental works focusing on creating durable community assets like drinking water facilities, primary education, public health, sanitation, and roads in their constituencies. Since June 2016, MPLADS funds can also be used for national schemes like Swachh Bharat Abhiyan and the conservation of water through rainwater harvesting.

Implementation:

MPs recommend works to the Nodal District Authority, which implements the projects. The authority maintains details of works executed and funds spent.

Functioning:

MPs receive Rs. 5 crore annually in two instalments. Funds are non-lapsable. Lok Sabha MPs recommend projects in their constituencies, while Rajya Sabha MPs spend in their states. Nominated MPs can recommend works anywhere.

Concerns:

- Breach of Federalism: MPLADS infringes on local self-governing institutions' domain.
- Implementation Lapses: The scheme can be used for patronage and faces mismanagement issues.
- No Statutory Backing: It lacks statutory regulation, making it subject to arbitrary changes.
- Criticism: Several commissions recommended its termination due to its centralization and conflict with state powers.

Way Forward:

- Transparency and Accountability: Implement an online tracking system and regular audits.
 - Citizen Participation: Involve citizens in prioritizing development needs.
 - Evidence-Based Decision Making: Encourage MPs to use data for impactful projects.
 - Convergence: Streamline MPLADS with other government schemes for larger projects.
 - Strengthening Local Agencies: Enhance capacity for efficient project execution.
- Addressing Lapsing Funds: Explore alternatives like rolling over funds or creating a national pool

WHAT ARE THE CONCERNS RELATED TO AUTONOMY OF CIC?

APPOINTMENT PROCESS:

The Central Information Commission (CIC) and Information Commissioners (ICs) are appointed by a committee comprising politicians, potentially allowing political considerations to influence the selection, compromising impartiality.

TENURE AND REMOVAL:

Originally, Information Commissioners had a fixed 5-year term guaranteed by the RTI Act. However, the RTI (Amendment) Act, 2019 removed this, giving the central government control over their terms, raising concerns about their independence.

SALARIES, WAGES, AND ALLOWANCES:

The RTI Act (2005) linked the salaries of the CIC and ICs to those of the Chief Election Commissioner and Election Commissioners. The 2019 amendment removed this link, allowing the central government to decide their pay, raising concerns about government influence.

FUNDING AND RESOURCES:

The CIC relies on the central government for budgetary allocations and administrative support, limiting its autonomy and effectiveness.

ENFORCEMENT POWERS:

While the CIC can order disclosure of information and impose penalties, the lack of a robust enforcement mechanism hampers effectiveness, making it difficult to ensure compliance.

WHAT ARE THE REFORMS PROPOSED TO STRENGTHEN THE CENTRAL INFORMATION COMMISSION?

Establishment of an Independent Selection Committee:

An independent selection committee, including members from the judiciary, civil society, and other independent bodies, should be formed to reduce political influence and ensure competent and unbiased leadership for the CIC.

Fixed and Non-Renewable Tenures:

A fixed term, such as 5 years, without the possibility of renewal, should be implemented, along with safeguards against premature removal, ensuring the independence of CIC officials.

Financial and Administrative Autonomy:

The CIC should have financial autonomy with a separate budget allocation and timely disbursement. They should also manage administrative affairs, including staff recruitment and infrastructure.

Enhanced Enforcement Powers:

Granting contempt powers to hold non-compliant individuals or organizations accountable, imposing fines on public authorities for non-compliance, and establishing an effective mechanism for decision enforcement would strengthen the CIC's enforcement capabilities.

IPEF Ministerial Meeting 2024

Why in the News?

Recently, India took part in the Indo-Pacific Economic Framework for Prosperity (IPEF) Ministerial Meeting held in Singapore on 6th June 2024, highlighting the progress made in boosting economic cooperation among partner nations in the Indo-Pacific region.

What are the Key Highlights of the Meeting?

IPEF members signed three agreements focusing on the Clean Economy, Fair Economy, and the overarching IPEF Agreement. However, India has not formally signed these agreements yet as the domestic approval process is still ongoing.

Clean Economy Agreement:

This agreement aims to speed up efforts towards energy security, climate resilience, and reducing greenhouse gas emissions. India has taken a leading role in launching a new collaborative effort called a "Cooperative Work Programme" (CWP) focused on recovering valuable resources from electronic waste, known as e-waste urban mining.

IPEF Catalytic Capital Fund:

This fund was established to support clean economy infrastructure projects in IPEF emerging and upper-middle-income economies. Founding supporters like Australia, Japan, Korea, and the US have provided USD 33 million as initial grant funding to catalyze USD 3.3 billion in private investment.

Fair Economy Agreement:

This agreement aims to establish a more transparent and predictable business environment, promote fair competition, and strengthen efforts against corruption. India highlighted a training program in Digital Forensics & System-Driven Risk Analysis that it will offer to other IPEF partners.

IPEF Upskilling Initiative:

This initiative offers digital skills training, mainly to women and girls, in IPEF partner countries. In the last two years, it has provided 10.9 million upskilling opportunities, with 4 million in India alone.

What is IPEF?

About:

The Indo-Pacific Economic Framework for Prosperity (IPEF) was launched on 23rd May 2022 in Tokyo, Japan, comprising 14 countries. It aims to strengthen economic engagement and cooperation among partner countries to advance growth, economic stability, and prosperity in the region.

Members:

The 14 IPEF partner countries are Australia, Brunei, Fiji, India, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, the United States, and Vietnam. Together, they represent 40% of global GDP and 28% of global goods and services trade.



PILLARS

THE IPEF IS STRUCTURED AROUND FOUR MAIN PILLARS:

(I) Fair and Resilient Trade:

Aims to promote economic growth, peace, and prosperity in the region.

(II) Supply Chain Resilience:

Seeks to make supply chains more resilient, robust, and well-integrated. Focuses on improving logistics, connectivity, and investments in critical sectors. Aims to enhance worker roles through upskilling and reskilling initiatives.

(III) Clean Economy:

Aims to advance cooperation on clean energy and climate-friendly technologies. Focuses on research, development, commercialization, and deployment of clean energy. Encourages investment in climate-related projects in the Indo-Pacific region.

(IV) Fair Economy:

Focuses on implementing effective anti-corruption and tax measures. Highlights India's strong steps in improving legislative and administrative frameworks to combat corruption.

India has joined Pillars II to IV of IPEF while holding an observer status in Pillar I.

INDIA'S LOOMING FINANCIAL CRISIS

India's rapid credit growth and excessive lending, driven by hype around digital infrastructure, risk leading to a financial crisis without a shift towards sustainable economic policies.



Rapid credit growth is often viewed as a pathway to prosperity but frequently leads to financial crises. Economist Robert Shiller describes this as "irrational exuberance," a term echoed by economists Carmen Reinhart and Kenneth Rogoff. They argue that financial booms are often followed by crises, despite assurances that "this time is different." India currently mirrors this pattern, driven by hype around its digital infrastructure, which is expected to spur financial innovation and inclusion. However, this narrative has led to poorly regulated financial sectors and excessive lending. Recent reports by international and domestic bodies have praised robust growth in bank lending, yet this masks underlying risks.

The financial sector's focus on consumer lending over prudent investments has created a debt-ridden populace. This unsustainable borrowing, coupled with India's high household debt-service ratio, signals potential financial instability. The financial industry's unchecked growth and the government's failure to promote long-term economic stability exacerbate this issue. To avert a crisis, India needs policies that emphasize productivity-enhancing investments and avoid the pitfalls of excessive credit growth. This approach should balance economic growth with financial stability, ensuring sustainable development and preventing future economic downturns.

PROPORTIONAL REPRESENTATION



Why in the News?

Recently, more people in India, including citizens and political parties, have agreed that the current First-Past-The-Post (FPTP) voting system should be replaced with a Proportional Representation (PR) system.

What is the First-Past-The-Post (FPTP) Electoral System?

About:

The First-Past-The-Post (FPTP) electoral system is one where voters select a single candidate, and the candidate with the most votes wins. This is also known as the simple majority or plurality system. It is one of the oldest and simplest electoral systems, used in countries like the UK, the US, Canada, and India.

FEATURES:

- ➔ Voters choose from a list of candidates from various political parties or independents.
- ➔ Voters mark their choice on a ballot paper or electronic voting machine.
- ➔ The candidate with the most votes in a constituency wins.
- ➔ The winner only needs the most votes, not necessarily more than 50%.
- ➔ This system can lead to disproportionate representation in assemblies, such as parliaments, as parties may not get seats matching their overall vote percentage.

ADVANTAGES:

1. **Simplicity:** Easy for voters to understand and for officials to manage, making it cost-effective and efficient.
2. **Clear and Decisive Winners:** Provides definitive results, contributing to stability and credibility.
3. **Accountability:** Candidates directly represent their constituents, enhancing accountability compared to Proportional Representation (PR) systems.
4. **Candidate Selection:** Voters choose specific candidates, unlike PR systems where votes are for parties and representatives are selected from party lists.
5. **Coalition-Building:** Encourages social groups to unite locally, promoting unity and preventing fragmentation into many community-based parties.

What are Proportional Representation (PR) Systems?

About:

Proportional Representation (PR) is an electoral system where political parties receive seats in the legislature in proportion to the share of votes they receive in elections.

TYPES:

1. Single Transferable Vote (STV):

- ➔ Voters rank candidates in order of preference, casting only one vote.
- ➔ Allows voters to choose their most preferred candidate, including independents.
- ➔ The President of India is elected through this system by an electoral college using a secret ballot.

2. Party-List PR:

- ➔ Voters vote for a party, not individual candidates.
- ➔ Parties receive seats based on their vote share, with a minimum threshold of 3-5% to be eligible for seats.

3. Mixed-Member Proportional Representation (MMP):

COMBINES FPTP AND PR SYSTEMS.

- ➔ Voters elect one candidate per constituency via FPTP, and additional seats are allocated based on overall party vote share.
- ➔ Used in countries like New Zealand, South Korea, and Germany for balanced and diverse representation.

ADVANTAGES

1. Ensures Every Vote Counts:

Each vote contributes to seat allocation, enhancing voter participation in democracy.

2. Diverse and Representative Government:

Smaller parties and minority groups gain representation, bringing more perspectives and ideas to Parliament.

3. Reduces Gerrymandering:

Seat distribution is based on vote proportion, reducing the impact of manipulating district boundaries.

DISADVANTAGES

1. Unstable Governments:

Increased representation for smaller parties can make forming stable coalitions challenging.

2. More Complex:

PR systems are more complicated than FPTP, harder for voters to understand, and for governments to implement.

3. Expensive:

Running PR elections requires significant resources and funds.

4. Neglect of Local Needs:

Leaders may prioritize party agendas over local issues, with shared constituency representation diluting accountability.

WHY THERE IS A NEED TO SHIFT FROM THE FPTP SYSTEM TO THE PR SYSTEM?

DISADVANTAGES OF FPTP:

1. OVER OR UNDER REPRESENTATION:

- ➔ The FPTP system can lead to political parties being overrepresented or underrepresented in terms of seats compared to their vote share.
- ➔ Example: In the first three elections after independence, the Congress party won about 75% of seats in the Lok Sabha with just 45-47% of the vote share.
- ➔ In the 2019 Lok Sabha Elections, the BJP received 37.36% of the vote but won 55% of the seats.

2. LACK OF REPRESENTATION FOR MINORITY GROUPS:

- ➔ In a two-party FPTP system, smaller parties with a significant vote share may not win any seats, leaving a large portion of the population unrepresented.

3. STRATEGIC VOTING:

- ➔ Voters might vote for a candidate they don't fully support to prevent a less preferred candidate from winning, which can result in voters not truly expressing their preferences.

4. Disadvantage for Smaller Parties:

- ➔ Smaller parties often struggle to win in FPTP systems and may need to align with larger national parties, which can undermine local self-government and federalism.

5. Country Examples:

- ➔ The UK and Canada also use FPTP, but their Members of Parliament (MPs) have more accountability to their local constituencies.

Way Forward

Law Commission Recommendation:

Mixed Member Proportional Representation (MMPR):**

- ➔ The Law Commission's 170th report (1999) recommended experimenting with the MMPR system.
- ➔ Suggested filling 25% of Lok Sabha seats through a PR system by increasing the Lok Sabha's strength.
- ➔ Proposed considering the entire nation as one unit for PR based on vote share or at the state/UT level, given India's federal structure.

UPCOMING DELIMITATION EXERCISE:

CHALLENGES:

- ➔ Redrawing constituencies based on population shifts may disadvantage states with slower population growth.
- ➔ This could violate federal principles and lead to resentment in states losing representation.

NEED FOR FAIR REPRESENTATION:

- ➔ Ensure fair representation for all states, regardless of population growth.
- ➔ Consider current representation levels to create a fairer balance.
- ➔ Investigate alternative systems like MMPR for better representation.

RECOMMENDATION FOR MMPR SYSTEM:

EQUITABLE DISTRIBUTION OF POWER:

- ➔ Implement the MMPR system for additional seats or at least a quarter of the existing seats in each state/UT.
- ➔ Empower southern, northeastern, and smaller northern states by giving them a stronger voice in Parliament, even with an increase in total seats.

CONCLUSION

As India progresses as a democracy, exploring electoral reforms such as proportional representation and mixed member proportional representation could result in a more balanced and fair system.

Implementing these changes carefully, taking into account India's unique federal structure and diverse population, could improve the democratic process and ensure that every vote truly matters.



ASPIRATIONAL GOALS OF RBI

Why in the News?

Recently, the Reserve Bank of India (RBI) has set several aspirational goals to prepare for India's rapidly growing economy, aiming to be "future-ready" by its centenary year, RBI@100.

DIGITAL PAYMENT SYSTEM UNIVERSALISATION:

- ➔ Domestic and Global Expansion: Expanding the use of India's digital payment systems (like UPI, RTGS, NEFT) within India and internationally, and integrating payment systems with other countries.
- ➔ Central Bank Digital Currency (e-Rupee): Phasing in the implementation of the e-Rupee.

WHAT ARE THE ASPIRATIONAL GOALS OF RBI?

Capital Account Liberalisation and INR Internationalisation:

Capital Account Convertibility: Proposing full convertibility of the capital account, allowing free conversion between the rupee and foreign currencies for capital transactions.

Internationalization of the Rupee: Allowing non-residents to use the rupee for cross-border transactions and improving rupee account accessibility for people outside India.

Calibrated Interest-Bearing Non-Resident Deposits: Taking a cautious approach towards interest-bearing deposits for non-residents.

Promotion of Indian MNCs and Global Brands: Supporting overseas investments by Indian multinational corporations.

GLOBALISATION OF INDIA'S FINANCIAL SECTOR:

- ➔ **Domestic Banking Expansion:** Growing the banking sector in line with national economic growth.
- ➔ **Top Global Banks:** Aiming to position 3-5 Indian banks among the top 100 globally and establishing the Reserve Bank as a model central bank in the global south.
- ➔ **Support for GIFT City:** Assisting the International Financial Services Centres Authority (IFSCA) to make GIFT City a leading international financial hub.

MONETARY POLICY FRAMEWORK REVIEW:

- ➔ **Balancing Act:** Maintaining a balance between price stability and economic growth from an Emerging Market Economy perspective.
- ➔ **Policy Communication:** Improving communication about monetary policy and addressing spillovers from debt overhang in key economies.

CLIMATE CHANGE INITIATIVES:

- ➔ Guiding stress testing asset portfolios against climate risks and strengthening payment systems against climate risks.
- ➔ Proposing disclosure norms and a government taxonomy for climate risks.

SHORT AND MEDIUM-TERM MEASURES:

- ➔ **Trade Arrangements:** Standardizing approaches for trade invoicing, settlement, and payment in rupee and local currencies.
- ➔ **Financial Market Strengthening:** Developing a global rupee market and adjusting the foreign portfolio investor regime.
- ➔ **Rupee Masala Bonds:** Reviewing taxes on rupee masala bonds.
- ➔ **Global Bond Indices:** Including Indian Government Bonds in global bond indices.

WHAT ARE THE CHALLENGES IN ACHIEVING THE ASPIRATIONAL GOALS OF RBI?

Triffin Dilemma:

- ➔ **Description:** Conflict between domestic monetary policy goals and the role as an international reserve currency issuer.
- ➔ **Manifestation:** Conflict between maintaining stability in India's domestic economy and meeting global demand for the Rupee.

EXCHANGE RATE VOLATILITY:

- ➔ **Concern:** Opening the currency to international markets can increase exchange rate volatility, especially initially.
- ➔ **Impact:** Fluctuations can affect trade and investments, potentially impacting economic stability.

IMPACT ON EXPORT:

- ➔ **Effect:** Internationalisation of the Rupee may increase its demand globally, making Indian exports relatively costly.
- ➔ **Challenge:** Increasing Indian products' share in the competitive global market despite limited international demand for the Rupee.

CYBERSECURITY THREATS:

- ➔ **Risk:** Digital payment systems are vulnerable to cyberattacks, leading to fraud and financial losses.
- ➔ **Necessity:** Building trust requires robust security measures to protect user data and ensure transaction safety.

HIGH NON-PERFORMING ASSETS (NPAS):

- ➔ **Concern:** Indian banks, especially public sector ones, struggle with high non-performing assets.
- ➔ **Impact:** This makes them less resilient to absorb shocks during a global financial crisis.

WHAT ARE THE CHALLENGES IN ACHIEVING THE ASPIRATIONAL GOALS OF RBI?

TRIFFIN DILEMMA

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IMPACT ON EXPORT:

- **Effect:** Internationalisation of the Rupee may increase its demand globally, potentially raising costs for Indian exports.
- **Challenge:** Despite limited international demand for the Rupee, increasing Indian products' share in the competitive global market is crucial.

LIMITED INTERNATIONAL DEMAND:

Challenge: The Rupee's share in the global forex market is low (~1.6%), while India's global goods trade share is higher (~2%), indicating the need to increase the demand for Indian products.

CONVERTIBILITY CONCERN:

- ➔ **Issue:** Limited convertibility of INR for capital transactions may restrict its use in international trade and finance.

Cybersecurity Threats:

- ➔ **Risk:** Digital payment systems are susceptible to cyberattacks, leading to fraud and financial losses.
- ➔ **Need:** Strengthening security measures to protect user data and ensure transaction safety is essential.

High Non-Performing Assets (NPAs):

- ➔ **Concern:** Indian banks, especially public sector ones, struggle with a high percentage of non-performing assets.
- ➔ **Impact:** This reduces their ability to absorb shocks during a global financial crisis.

What are the Steps Needed to Reach the Aspirational Goals?

Convertibility of Rupee:

- ➔ **Goal:** Aim for full convertibility by 2060, allowing free movement of financial investments between India and abroad.
- ➔ **Benefits:** Easy buying and selling of the rupee for foreign investors, enhancing liquidity and attractiveness. Tobin Tax can be used to safeguard against currency speculation.

Reforms Suggested by Tarapore Committee: Preconditions for Capital Account Liberalisation:

- ➔ Fiscal consolidation, inflation control, low non-performing assets, low current account deficit, and strengthening financial markets.

Strong Fiscal Management:

- ➔ Reduce fiscal deficits to less than 3.5%, maintain inflation rate at 3%-5%, and decrease banking non-performing assets to less than 5%.

Liberalised Scheme for Personal Remittance:

- ➔ Introduce a more liberal scheme for personal remittances to facilitate easier foreign exchange transactions for individuals.

Pursue a Deeper Bond Market:

- ➔ Enable more investment options in rupees for foreign investors and Indian trade partners, while developing the corporate bond market in India.

Increase Rupee in International Trade:

- ➔ Optimize trade settlement formalities for rupee import/export transactions, such as rupee swap agreements and payment of Russian oil in Indian rupee.



Globalisation of India's Financial Sector:

- ➔ Encourage domestic banking expansion and support Indian banks in enhancing their global presence through licensing reforms, branch network expansion, and strategic partnerships.

Monetary Policy Framework Review:

- ➔ Conduct a comprehensive review of the monetary policy framework to ensure alignment with price stability and economic growth goals.
- ➔ Enhance transparency and clarity in monetary policy communication, for example, by releasing meeting minutes.

Climate Change Initiatives:

- ➔ Issue guidelines for stress testing of asset portfolios to assess climate change risks and develop resilience measures against climate-related risks in payment systems.
- ➔ Propose disclosure norms for climate risk reporting and contribute to the development of a standardized government taxonomy.

UN REPORT ON GLOBAL DEBT CRISIS



Why in the News?

Recently, a report by the UN Trade and Development (UNCTAD) titled "A World of Debt 2024: A Growing Burden to Global Prosperity" has uncovered an unprecedented global debt crisis. The report highlights that around 3.3 billion people currently live in countries where paying interest on debts exceeds spending on either education or health.

WHAT ARE THE KEY HIGHLIGHTS OF THE REPORT?

Rapid Increase in Public Debt:

- ➔ The Institute of International Finance estimates that global debt, including households, businesses, and governments, will reach USD 315 trillion in 2024, which is three times the global GDP.
- ➔ Global public debt is growing rapidly due to recent crises like COVID-19, rising food and energy prices, and climate change, along with a slow global economy and increasing bank interest rates.
- ➔ Net interest payments on public debt in developing countries reached USD 847 billion in 2023, a 26% increase compared to 2021.

Regional Disparity in Debt Growth:

- ➔ Public debt in developing countries is increasing at twice the rate of developed countries, reaching USD 29 trillion in 2023 (30% of the global total), up from 16% in 2010.
- ➔ Africa's debt burden is growing faster than its economy, with the number of African countries having debt-to-GDP ratios above 60% increasing from 6 to 27 between 2013 and 2023.

Higher Debt Servicing Share of Income & Impact on Climate Initiatives:

- ➔ Roughly 50% of developing countries now allocate at least 8% of their government revenues to debt servicing, doubling in the last ten years.
- ➔ Developing nations are spending more of their GDP on interest payments (2.4%) than on climate efforts (2.1%), constraining their ability to address climate change.

3 Shifts in Official Development Assistance (ODA):

ODA, aimed at promoting economic development in developing countries, has decreased for two consecutive years, dropping to USD 164 billion in 2022.

More aid is given as loans instead of grants, increasing from 28% in 2012 to 34% in 2022, adding to debt burdens.

Funds for dealing with debt relief and restructuring have significantly decreased from USD 4.1 billion in 2012 to USD 300 million in 2022, making it harder for countries to manage current borrowing and access future loans.



WHAT ARE THE INITIATIVES RELATED TO SOLVING THE DEBT CRISIS?

Heavily Indebted Poor Countries (HIPC) Initiative:

- ➔ The IMF and World Bank's initiative addresses debt crises in the world's poorest countries, recognizing their struggle to repay debts while maintaining crucial investments.
- ➔ By offering debt relief, the program frees up resources for these nations to invest in healthcare, education, and poverty reduction, fostering long-term economic growth and social progress.

Debt Management and Financial Analysis System (DMFAS) Programme:

- ➔ UNCTAD's DMFAS program helps developing countries manage debt responsibly by providing training and technical support.
- ➔ It improves borrowing practices, including tools for recording debt, assessing risks, and negotiating effectively, promoting sustainable debt management to avoid future crises.

Global Sovereign Debt Roundtable (GSDR):

- ➔ Co-chaired by the IMF, World Bank, and G20 presidency, the roundtable aims to comprehensively address debt challenges.
- ➔ It brings together debtor countries and creditors to foster a common understanding of issues related to debt sustainability, debt restructuring challenges, and potential solutions.

WHAT MEASURES SHOULD BE TAKEN TO ADDRESS THE GLOBAL DEBT CRISIS?

Inclusive Governance, Transparency, and Accountability:

The World Bank's 2022 International Debt Statistics report highlights a worrying increase in public debt, especially for low-income countries, emphasizing the need for increased participation of these nations in decision-making processes. Financial transparency and accountability are crucial, as emphasized by the UN Office for Sustainable Development, to prevent debt crises.

Contingency Financing:

The IMF plays a vital role in providing emergency financial support.

Measures proposed in a 2019 IMF Report titled "Three Steps to Avert a Debt Crisis" include increased access to Special Drawing Rights (SDRs) to strengthen developing countries' reserves during emergencies.

Managing Unsustainable Debt (Managing Debt Challenges):

Existing frameworks for debt restructuring, like the G20 Common Framework for Debt Treatment, need improvement. Including automatic provisions for suspending debt payments for countries facing crises would provide essential flexibility to stabilize their economies.

Scaling up Sustainable Financing:

Multilateral Development Banks (MDBs) need to play a bigger role in long-term financing for Sustainable Development Goals (SDGs).

Attracting private investment towards sustainable projects, such as clean energy, is crucial. Fulfilling existing commitments for aid and climate finance, particularly for developing countries, is essential for facilitating this transition.



COMPREHENSIVE IMMUNIZATION SCHEDULE UNVEILED FOR WOMEN

In a landmark development, health authorities have introduced a meticulously crafted immunization schedule tailored specifically for women. This pioneering initiative aims to bolster women's health and fortify their immune systems against a spectrum of diseases throughout various life stages.

Crafted by a panel of medical experts, the schedule encompasses a diverse array of vaccines designed to address the unique health needs of women. From adolescence through adulthood and into the golden years, this comprehensive regimen offers targeted protection against prevalent illnesses and conditions.



KEY HIGHLIGHTS OF THE IMMUNIZATION SCHEDULE INCLUDE:

ADOLESCENT VACCINATIONS:

- **HPV Vaccine:** Shielding against cervical cancer and other HPV-related diseases.
- **Tdap Vaccine:** Safeguarding against tetanus, diphtheria, and pertussis.

POSTPARTUM AND BEYOND:

- **Hepatitis B Vaccine:** Fostering long-term immunity against hepatitis B infection.
- **Tetanus Vaccine:** Providing ongoing defense against tetanus in the postpartum period and beyond.
- **Pneumococcal Vaccine:** Shielding against pneumococcal diseases such as pneumonia and meningitis.

MIDLIFE AND SENIOR VACCINATIONS:

- **Shingles Vaccine:** Guarding against the painful and debilitating effects of shingles.
- **HPV Vaccine (for selected age groups):** Offering continued protection against HPV-related diseases.



This groundbreaking initiative underscores a concerted effort to prioritize women's health and empower them with the tools necessary to lead healthier, more resilient lives. Health authorities urge women of all ages to consult with healthcare providers to ensure adherence to this tailored immunization schedule and optimize their preventive health measures.

2. Allegations Over NEET-UG 2024

The National Eligibility cum Entrance Test for Undergraduate (NEET-UG) 2024 has found itself embroiled in a storm of controversy as allegations of bias and unfairness rock the prestigious medical entrance examination.

Background: NEET-UG serves as the gateway for aspiring medical and dental students across India, determining admission to undergraduate programs in various medical colleges and universities. However, the latest iteration of the exam has stirred widespread discontent among students, parents, and educational stakeholders.

ALLEGATIONS OF BIAS:

- **Syllabus Discrepancies:** Critics have raised concerns over apparent inconsistencies and discrepancies in the NEET-UG syllabus, claiming that certain topics were either inadequately covered or omitted altogether. This perceived disparity has fueled speculation regarding the fairness and equitability of the examination process.
- **Regional Disparities:** Another contentious issue revolves around regional variations in question difficulty levels, with candidates from certain states reportedly facing disproportionately challenging questions compared to their counterparts elsewhere. This alleged disparity has sparked outrage among students who feel disadvantaged by the perceived uneven playing field.

TECHNICAL GLITCHES AND OPERATIONAL HICCUPS:

- **Online Examination Woes:** Reports have emerged citing technical glitches and logistical hurdles encountered during the online administration of NEET-UG 2024. From connectivity issues to system malfunctions, these disruptions have cast doubt on the integrity and reliability of the examination process, exacerbating the prevailing sense of disillusionment among stakeholders.

CALLS FOR INVESTIGATION AND REFORM:

- **Demand for Transparency:** In light of the mounting allegations, there have been widespread calls for an independent inquiry to investigate the veracity of the claims and ascertain the extent of any improprieties. Transparency and accountability are paramount in restoring faith in the integrity of NEET-UG and safeguarding the interests of aspirants.
- **Reformative Measures:** Additionally, stakeholders are advocating for comprehensive reforms aimed at enhancing the robustness and inclusivity of the NEET-UG framework. This entails revisiting syllabus specifications, standardizing question difficulty levels, and implementing stringent quality control measures to uphold the meritocratic principles underpinning the examination process.

Awaiting Official Response: As tensions escalate and scrutiny intensifies, all eyes are now trained on the relevant authorities to address the burgeoning crisis surrounding NEET-UG 2024. A prompt and decisive response is imperative to assuage concerns, uphold the sanctity of the examination, and chart a path forward towards ensuring equitable opportunities for all aspiring medical professionals.

3. US Europe will lock up Russian assets until it pays for ukraine war

In a significant escalation of international pressure, the United States and European Union have jointly announced plans to freeze Russian assets until reparations for the ongoing conflict in Ukraine are fulfilled. This bold move represents a concerted effort to hold Russia accountable for its actions and to exert economic leverage in support of Ukraine's sovereignty and territorial integrity.

Background: Tensions between Russia and Ukraine have reached a boiling point in recent months, with escalating military aggression and territorial incursions drawing condemnation from the international community. The invasion of Ukraine's eastern regions and the annexation of Crimea have sparked a humanitarian crisis and triggered widespread condemnation and sanctions against Russia.

FREEZING OF ASSETS:

- **Unified Front:** The coordinated decision by the US and Europe to freeze Russian assets underscores a unified stance against Russian aggression and underscores the severity of the situation.
- **Economic Consequences:** By freezing Russian assets, the US and EU aim to inflict significant economic repercussions on Russia, compelling Moscow to reconsider its belligerent actions and engage in constructive dialogue to resolve the conflict.
- **Reparations:** The freeze on Russian assets will remain in place until Russia fulfills its obligations to provide reparations for the damage caused by its military intervention in Ukraine. This includes compensating Ukraine for infrastructure destruction, loss of life, and economic destabilization.

International Ramifications:

- **Global Response:** The decision to freeze Russian assets reflects a broader international consensus on the need to hold Russia accountable for its actions and uphold the principles of sovereignty and territorial integrity.
- **Diplomatic Channels:** While punitive measures such as asset freezes serve as a means of exerting pressure on Russia, diplomatic channels remain open to facilitate dialogue and negotiation aimed at achieving a peaceful resolution to the conflict.



Impact on Russia:

- **Economic Strain:** The freeze on Russian assets is expected to exacerbate the economic strain already facing Russia due to existing sanctions and isolation from the international financial system. This could further weaken the Russian economy and compel Moscow to reconsider its military adventurism.
- **Political Fallout:** The punitive measures imposed by the US and Europe are likely to intensify domestic and international scrutiny of Russia's leadership, potentially eroding support for President Vladimir Putin's government and prompting calls for accountability.

“

Path Forward: As tensions continue to escalate and the humanitarian crisis in Ukraine deepens, the US and Europe remain steadfast in their commitment to supporting Ukraine's sovereignty and achieving a peaceful resolution to the conflict. The freeze on Russian assets represents a decisive step towards holding Russia accountable for its actions and advancing the cause of peace and stability in the region.

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WHO Designation of CCRAS-NIIMH as Collaborating Centre



WHY IN NEWS

The National Institute of Indian Medical Heritage (NIIMH), Hyderabad, has been designated as a WHO Collaborating Centre for "Fundamental and Literary Research in Traditional Medicine" by the World Health Organization.

NIIMH, under the Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of Ayush, is the first institute to receive this designation for fundamental and literary research in traditional medicine.

The recognition is for a period of four years, starting from June 3, 2024. NIIMH's achievements include various digital initiatives, such as the AMAR Portal and SAHI Portal, and housing significant historical manuscripts and artefacts.

The institute will aid WHO in standardizing traditional medicine terminologies and updating the Traditional Medicine Module for ICD-11, supporting global research methodologies in traditional medicine.

DRDO's AI Tool Development

Why in News:

Ingenious Research Solutions Pvt Ltd., a woman-led start-up, has developed an AI tool named 'Divya Drishti' for personal identification under DRDO's Technology Development Fund.

The AI tool, 'Divya Drishti,' integrates face recognition with physiological parameters like gait and skeleton for robust biometric authentication.

This innovation minimizes false positives and identity fraud, and has applications in Defence, Law Enforcement, Corporate, and Public Infrastructure. Developed with guidance from DRDO's Centre for Artificial Intelligence & Robotics (CAIR), the tool represents a significant advancement in identification technology.

CSIR-ASPIRE Scheme and Bio economy

Why in News:

The Union Minister announced that 300 women scientists will receive research grants for three years under the CSIR-ASPIRE scheme.

The CSIR-ASPIRE scheme, launched on International Women's Day, received around 3000 proposals, with 301 research proposals selected for support.

Additionally, it highlights the importance of biomanufacturing and bio-foundry in driving India's future bioeconomy and green growth, noting the significant growth of India's bio-economy from \$10 billion in 2014 to over \$130 billion in 2024.

The initiatives underscore the government's commitment to supporting women in science, promoting sustainable practices, and advancing India's bioeconomy.

VIDYUTRAKSHAK

TECHNOLOGICAL ADVANCEMENT IN
THE INDIAN ARMY



Why in news?

The Indian Army (IA) has unveiled 'VidyutRakshak', an innovative integrated generator monitoring, protection, and control system. This launch signifies a major step in the Army's "Year of Tech Absorption" initiative, demonstrating its commitment to improving operational efficiency through advanced technology. Developed by Major Rajprasad R S, who also created the patented 'Portable Multi-Target Detonation Device', VidyutRakshak was showcased during 'Exercise Bharat Shakti'.

Key Features of VidyutRakshak

- **VidyutRakshak** is an Internet of Things (IoT) enabled system, allowing generators to connect and exchange data with other IoT devices and the cloud.
- It is compatible with all existing IA generators, regardless of their type, make, rating, or vintage. This system not only monitors generator parameters but also predicts and prevents faults, ensuring optimal performance and longevity.
- The user-friendly interface automates manual operations, enhancing efficiency and reliability.

Portable Multi-Target Detonation Device

The Portable Multi-Target Detonation Device, developed by Major Rajprasad, enables long-range demolition up to 2.5 km, both wired and wirelessly. This microprocessor-based system can target and fire at multiple points individually or simultaneously, enhancing the tactical capabilities of soldiers.

Pantanal Wetlands: An Ecological Treasure Under Threat

Why in news?

Brazil's Pantanal wetlands, the world's largest freshwater wetland, are currently ravaged by fires. The El Nino weather patterns, exacerbated by climate change, are contributing factors to these destructive fires.

Geographic and Ecological Significance

The Pantanal is a low-altitude alluvial plain seasonally flooded and drained by the Paraguay River and its tributaries. It spans approximately 150,000 sq km across central-western Brazil, extending into Bolivia and Paraguay, with 80% located in Brazil.

Biodiversity and Habitat

Recognized as a World Heritage Site by the IUCN, a Ramsar Site of International Importance, and an Important Bird Area, the Pantanal is a crucial habitat. It features a flooded grassland savanna ecosystem and is home to the world's largest jaguar species, the endangered tapir, and giant anteaters.

Conservation Status

Despite its recognition and ecological importance, the Pantanal faces significant threats from climate-induced fires, underscoring the urgent need for enhanced conservation efforts to protect this vital ecosystem.



EXERCISE RED FLAG 2024

Why in News:

The Indian Air Force (IAF) successfully participated in Exercise Red Flag 2024 held in Alaska in June.

KEY HIGHLIGHTS:

- ▶ **Participants:** IAF, Republic of Singapore Air Force (RSAF), Royal Air Force (RAF) of the UK, Royal Netherlands Air Force (RNLAf), German Luftwaffe, and US Air Force (USAF).
- ▶ **IAF Aircraft:** Rafale aircraft with aircrew, technicians, engineers, controllers, and experts.
- ▶ **Missions:** Beyond Visual Range (BVR) combat exercises, Offensive Counter Air, and Air Defence roles.
- ▶ **Achievements:** Over 100 sorties flown, active involvement of IAF crew in mission planning and leadership.

About Exercise Red Flag 2024:

- ▶ Exercise Red Flag 2024 took place over a two week period, in Alaska focusing on aerial combat training. Its goal was to bring aircrew from countries and simulate challenging scenarios.
- ▶ The Indian Air Force (IAF) joined the exercise with Rafale fighter jets, C 17 Globemaster transport planes and IL 78 air refuelers with the aim of enhancing cooperation and readiness for combat, across nations.
- ▶ **Tenure/Timeline:** Held four times a year.

Miscellaneous Points:

- ▶ Despite challenging weather and sub-zero temperatures, the IAF maintenance crew ensured the serviceability of all aircraft.
- ▶ The IAF contingent will also participate in exercises with the Air Forces of Greece and Egypt before returning to India.

Deep Sea Mission

Why in News:

India is set to become the sixth country to have its own Deep Sea Mission, with the first stage of harbor trials planned for September 2024.

KEY HIGHLIGHTS:

- ▶ **Development:** Led by the National Institute of Ocean Technology (NIOT) with collaboration from the Indian Space Research Organisation (ISRO).
- ▶ **Technology:** Development of 'Matsyayaan 6000,' capable of reaching 6000m depth, and 'Titanium Hull' for extreme pressure endurance.
- ▶ **Stages:** First stage of harbor trials by September 2024, subsequent trials to be completed by 2026.
- ▶ **Features:** Focus on mineral exploration, ocean sciences, exploration of marine flora and fauna, and conservation of marine biodiversity.
- ▶ **Capabilities:** Includes the development of 'Self-Floatation' technology for emergency conditions, enabling submersion for 72 hours.
- ▶ **Economic Impact:** Potential significant contribution to the Indian economy through exploration and exploitation of rare earth metals and polymetallic nodules in the Indian seabed.



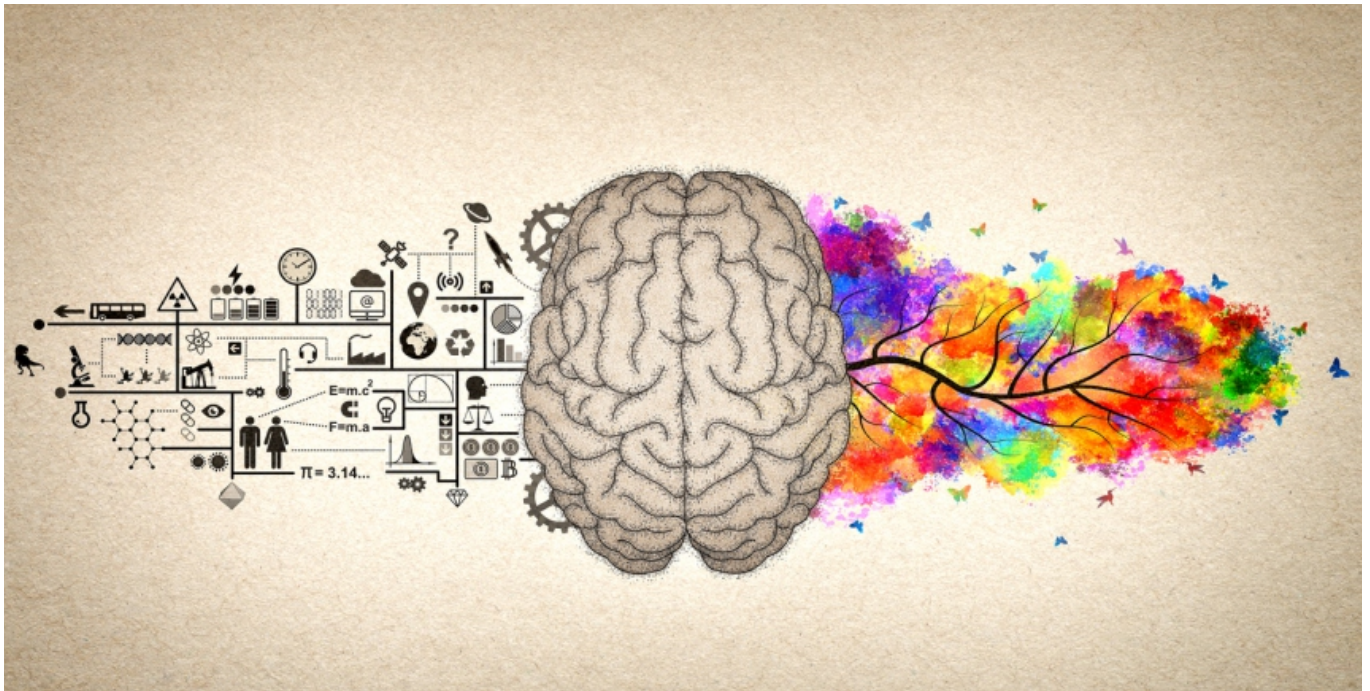
About Deep Sea Mission:

India's Deep Sea Mission, scheduled for a 2024 launch is geared towards sending a team of three scientists to delve 5,000 meters into the sea to investigate concealed mineral reserves. This expedition will signify India's voyage into the deep sea following its manned space missions, in 2023. The mission forms part of an initiative to foster a blue economy and support individuals whose livelihoods rely on the ocean.

DECODING HEART RATE

SIGNALS TO REFINE BRAIN STIMULATION

THERAPIES FOR DEPRESSION



A study by Brigham and Women's Hospital suggests that monitoring heart rate during transcranial magnetic stimulation (TMS) could help pinpoint effective stimulation sites in the brain for depression treatment, potentially eliminating the need for MRI scans

“Their goal was to figure out how to harness TMS treatment more effectively, get the dosing right, by selectively slowing down heart rate and identifying the individual best spot to stimulate the brain.”

Research Methodology and Findings

Researchers looked at functional MRI scans from 14 people and identified spots in their brains believed to be optimal targets for depression based on previous studies done on connectivity and depression. Each participant had 10 spots identified in their brains, both optimal ('connected areas') and non-optimal for depression treatment. Researchers then observed what happened to heart rate when they stimulated each spot.

The finding could help in both individualizing TMS therapy for depression treatment, by choosing a personalized treatment spot on the brain, and making it more accessible because an MRI wouldn't need to be done beforehand.

GENOMES REVEAL LEGACIES OF HUMAN

SACRIFICE AND MEDIEVAL EPIDEMICS



The legacy of human sacrifice, as revealed through genomic studies, can profoundly impact our understanding of current affairs in several ways:

1. **Historical Context and Cultural Practices:** Genomic analyses can provide insights into ancient civilizations and their practices, such as rituals involving human sacrifice. Understanding these practices helps contextualize historical events and their influence on modern cultures.
2. **Genetic Ancestry and Lineage:** Studies of ancient genomes can reveal genetic lineages and migrations influenced by past practices like human sacrifice. This understanding contributes to our knowledge of human evolution and population movements over time.
3. **Ethical and Moral Reflection:** Uncovering evidence of human sacrifice prompts ethical and moral reflections on the value of human life, past and present. It encourages discussions on how societies have evolved in their treatment of individuals and groups.
4. **Impact on Contemporary Societies:** Discoveries about ancient human sacrifice can challenge contemporary societies to confront their own rituals and practices involving violence or exploitation. This awareness can lead to reevaluations of cultural norms and ethical standards.
5. **Scientific and Archaeological Collaboration:** Genomic research often involves collaboration between geneticists, archaeologists, and anthropologists. This interdisciplinary approach enhances our understanding of human history and its implications for current societal structures.
6. **Educational and Cultural Awareness:** By integrating findings from genomic studies into education and public discourse, societies can foster greater awareness of their cultural heritage and promote respect for diverse historical narratives.

H5N1 pose a threat for humans

H5N1, also known as avian influenza or bird flu, does pose a threat to humans. Here are some key points to consider:

1. **Pathogenicity:** H5N1 is a highly pathogenic strain of influenza A virus that primarily affects birds, particularly poultry. However, it can also infect humans and other mammals.
2. **Human Cases:** Since its identification in the late 1990s, H5N1 has sporadically infected humans, causing severe respiratory illness and, in many cases, death. Human cases are typically linked to direct contact with infected birds or contaminated environments.
3. **Transmission:** Human-to-human transmission of H5N1 is rare but possible. The concern lies in the potential for the virus to mutate or reassort with human influenza viruses, potentially leading to a new strain capable of sustained human-to-human transmission, which could spark a pandemic.
4. **Public Health Concerns:** Governments and health organizations closely monitor H5N1 due to its pandemic potential. Preparedness plans, surveillance systems, and rapid response strategies are in place to detect and mitigate outbreaks.

IMMEDIATE MILITARY ASSISTANCE IN EVENT OF WAR

A new [agreement between Russia and North Korea](#) reached by their leaders requires the countries to use all available means to provide immediate military assistance in the event of war.



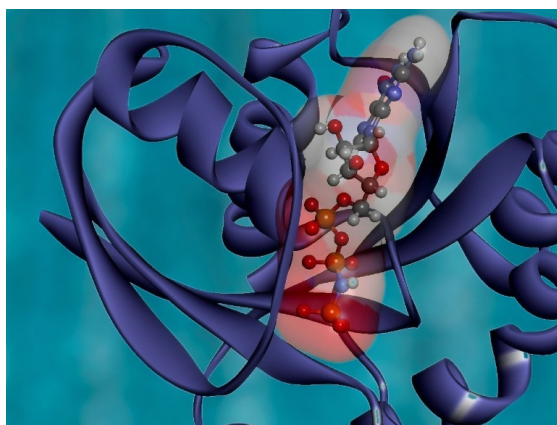
The agency said Article 4 of the agreement states that if one of the countries gets invaded and is pushed into a state of war, the other must deploy "all means at its disposal without delay" to provide "military and other assistance".

The deal could mark the strongest connection between Moscow and Pyongyang since the end of the Cold War. Both Mr. Kim and Mr. Putin described it as a major upgrade of their relations, covering security, trade, investment, cultural and humanitarian ties.

The summit came as the U.S. and its allies expressed growing concerns over a possible arms arrangement in which Pyongyang provides Moscow with badly needed munitions for its war in Ukraine, in exchange for economic assistance and technology transfers that could enhance the threat posed by Mr. Kim's nuclear weapons and missile programme.

North Korea and the former Soviet Union signed a treaty in 1961, which experts say necessitated Moscow's military intervention if the North came under attack. The deal was discarded after the collapse of the USSR, replaced by one in 2000 that offered weaker security assurances.

South Korean officials said they were still interpreting the results of the summit, including what Russia's response might be if the North comes under attack, and whether the new deal promises a similar level of protection with the 1961 treaty.



AI that predicts protein structures change the life sciences. How?

Proteins are one of the most important molecules of life, with almost every biological function from birth to death being regulated by them in some way. Each protein is made up of a string of smaller building blocks called amino acids, which contain all the information to transform proteins — from a single sequence to a folded, functional 3D structure.

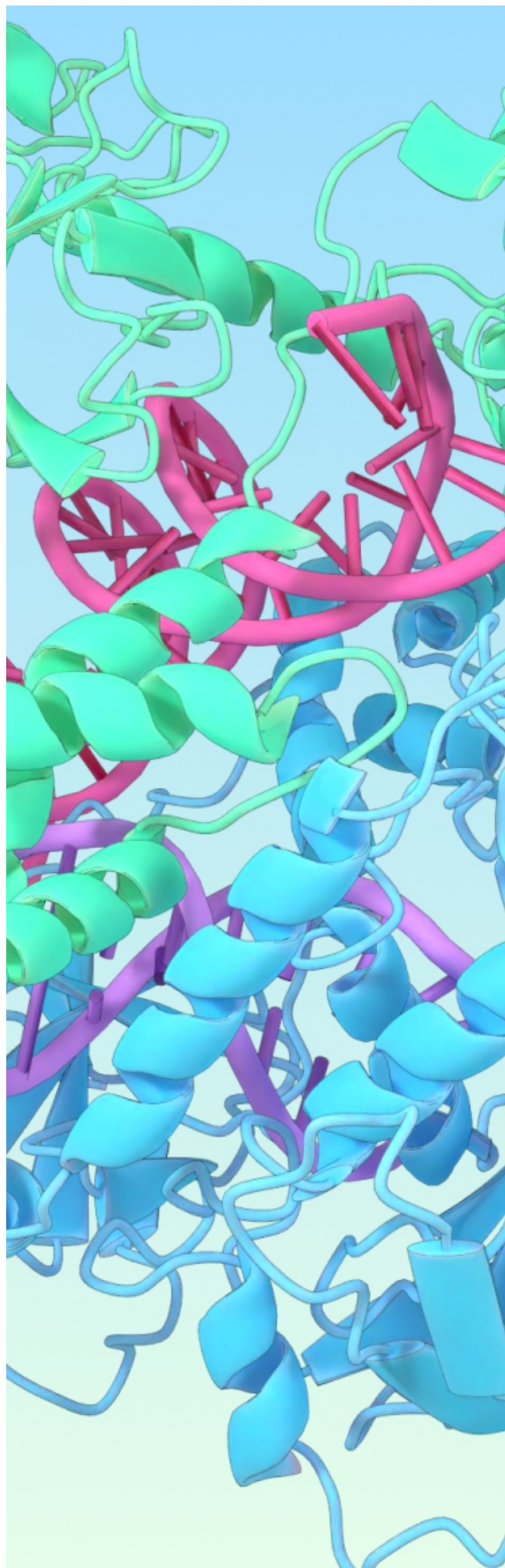
The highly improved AlphaFold 2 was introduced in 2021. AlphaFold uses machine learning and artificial intelligence (AI) to accurately predict protein structures from an amino acid sequence, seemingly solving the protein-folding problem without learning any of the deeper physical principles that drive this biological process.

“AlphaFold 2 predicted the structure of proteins with revolutionary levels of accuracy,

“AlphaFold 3 is even more accurate for proteins, but can also predict the structure of DNA, RNA, and all the other molecular components that make up biology. The interaction of all these biomolecules is what makes up the processes of life, so it is important to be able to predict the structure of these interactions.”

Its accuracy at predicting protein-protein interactions is also incredibly high — but not its reliability when it comes to interactions between small molecules and proteins. Proteins use a language of 20 amino acids whereas small molecule ligands “have a much larger vocabGreater variations in the dataset and the use of diffusion techniques can lead to the model coming up with answers that look plausible but aren't real. Adding more training data can help circumvent this problem, but not entirely get rid of it.

Nevertheless, AlphaFold 3 predicts protein structures and interactions better than other models right now. Academics and companies can potentially use it to find drug candidates that can bind to proteins and help cure diseases. In fact, DeepMind's spin-off company Isomorphic Labs is using AlphaFold 3 for this very purpose: drug discovery. However, this option isn't open to everyone yet.





INDIA INC. SEEKS TAX

RELIEF FOR MIDDLE CLASS AND MSMES

Income tax relief for the middle class to boost consumption, a rethink of the mandatory 45-day payment deadline for micro and small enterprises, restructuring of GST rates, measures to promote exports and simplify IT imports, were some of the ideas presented by industry leaders to Finance Minister Nirmala Sitharaman in pre-Budget consultations held on Thursday.

The Indian Venture and Alternative Capital Association sought a review of the Competition Commission of India's definition of 'control' which covers private equity investors with minority stakes in its ambit.

Assocham urged the government to raise the basic income tax exemption limit to ₹5 lakh with the standard deduction doubled to ₹1 lakh to adjust for inflation. Such tax concessions would lead to growth in consumption without affecting the government's fiscal position

The Bengal Chamber of Commerce said changes to the IT Act mandating payments to SMEs within 45 days had made things difficult as 60-90 days of credit was the industry norm.

Myanmar armed groups accuse military of breaking ceasefire

An alliance of Myanmar ethnic armed groups have accused the junta of repeatedly violating a China-brokered ceasefire in the north of the country this month and causing civilian casualties.

Beijing brokered a truce between the junta and the "Three Brotherhood Alliance" in January after months of fighting that displaced more than half a million people near China's southern border.

The ceasefire allowed the alliance — made up of the Ta'ang National Liberation Army (TNLA), the Myanmar National Democratic Alliance Army (MNDAA), and the Arakan Army (AA) — to hold swathes of territory it had seized in northern Shan state.

On Tuesday junta troops had launched a drone attack that had killed one TNLA member and seriously wounded four others. The attacks were the latest violation this month by the junta, which had shelled TNLA positions and cut roads and restricted the flow of goods to TNLA-controlled towns.

In October last year, the alliance launched a surprise offensive across northern Myanmar, seizing several towns and lucrative border hubs that are vital for trade with China, dealing a blow to the cash-strapped and isolated junta.

Border trade with China during April-May was down by almost a third compared to the same period last year.

A NEW DIATOM GENUS DISCOVERED

Why in news?

Researchers from the Agharkar Research Institute, Pune, have discovered a new genus of Gomphonemoid diatom named *Indiconema* in the clean waters of the Eastern Ghats. The presence of *Indiconema* species has been reported in both the Eastern and Western Ghats. This unique diatom differs from its relatives by having a pore field at both ends, rather than just the foot pole. Researchers suggest that *Indiconema* is related to *Afrocybella*, a genus endemic to East Africa, based on morphological features. Early studies noted similarities between Gomphonema species from India, East Africa, and Madagascar.

Diatoms:

- Description: Tiny, microscopic algae that are crucial to aquatic ecosystems.
- Oxygen Production: Responsible for producing 25% of the world's oxygen.
- Food Chain: Serve as the primary producers in oceans, forming the base of the aquatic food chain.
- Water Quality Indicators: Sensitive to chemical changes, making them excellent indicators of water quality.
- Diversity in India: Nearly 6,500 diatom taxa, with 30% being endemic.
- Habitats: Thrive in diverse biogeographic zones ranging from freshwater to marine environments, sea level to high mountains, and alkaline lakes to acidic swamps.
- Eastern and Western Ghats: Unique physiographic, edaphic, and climatic gradients in these regions host distinct diatom communities specific to these geographical locations.

5G Intelligent Village and Quantum Encryption Algorithm

Why in News?

The Department of Telecommunications (DoT) has unveiled two initiatives under the Jai Anusandhan movement, funded by the Telecom Technology Development Fund (TTDF) scheme, to promote innovation and technological advancement in India's telecommunications sector. These initiatives reflect the DoT's commitment to indigenous R&D, IP creation, and inclusive digital growth across the nation.

5G Intelligent Village:

- Objective: Transform rural life through 5G technology, driving digital inclusion and economic growth.
- Proposal: Titled "From Connectivity Gaps to Smart Solutions: Designing 5G Networks for Rural Innovation—5G Intelligent Villages," it focuses on agriculture, education, healthcare, governance, and sustainability.
- Scope: Ten villages across India have been selected.
- Applications: Utilize 5G's Ultra-Reliable Low-Latency Communication (URLLC) and massive Machine Type Communication (mMTC) in rural areas.
- Collaborations: Engage telecom providers, sensor manufacturers, CCTV suppliers, and IoT providers to explore 5G benefits and establish research and development hubs.

Quantum Encryption Algorithm (QEA):

- Objective: Develop an India-specific Quantum Encryption Algorithm to secure digital communication channels using quantum mechanics principles.
- Features: Offers unparalleled security, advanced encryption capabilities, and ultrafast, efficient encryption.

WORLD INVESTMENT REPORT 2024



Why in News?
The UN Conference on Trade and Development (UNCTAD) recently published the World Investment Report 2024.

Key Findings:

- ➔ Global foreign direct investment (FDI) experienced a 2% decrease, amounting to \$1.3 trillion in 2023, attributed to an economic slowdown and escalating geopolitical tensions.
- ➔ Europe's FDI flows saw a significant increase, shifting from a negative \$106 billion in 2022 to a positive \$16 billion, driven by volatility in conduit economies. In contrast, FDI decreased by 3% in Africa, 8% in Asia, and 1% in Latin America and the Caribbean.
- ➔ Investment in critical minerals nearly doubled, while sectors such as infrastructure and the digital economy saw reduced investments.
- ➔ International investment in sectors crucial for the Sustainable Development Goals (SDGs) in developing countries declined in 2023.
- ➔ The sustainable finance market continues to expand, but signs of a slowdown are evident, with greenwashing emerging as the most significant challenge.

Innovative Light Up-Conversion Device

Why In News?

The Indian Institute of Science (IISc) has achieved a significant breakthrough by developing a device that converts infrared light into visible light.

Potential Impact:

This innovation could revolutionize various fields, especially defence and optical communications.

The Science Behind the Innovation:

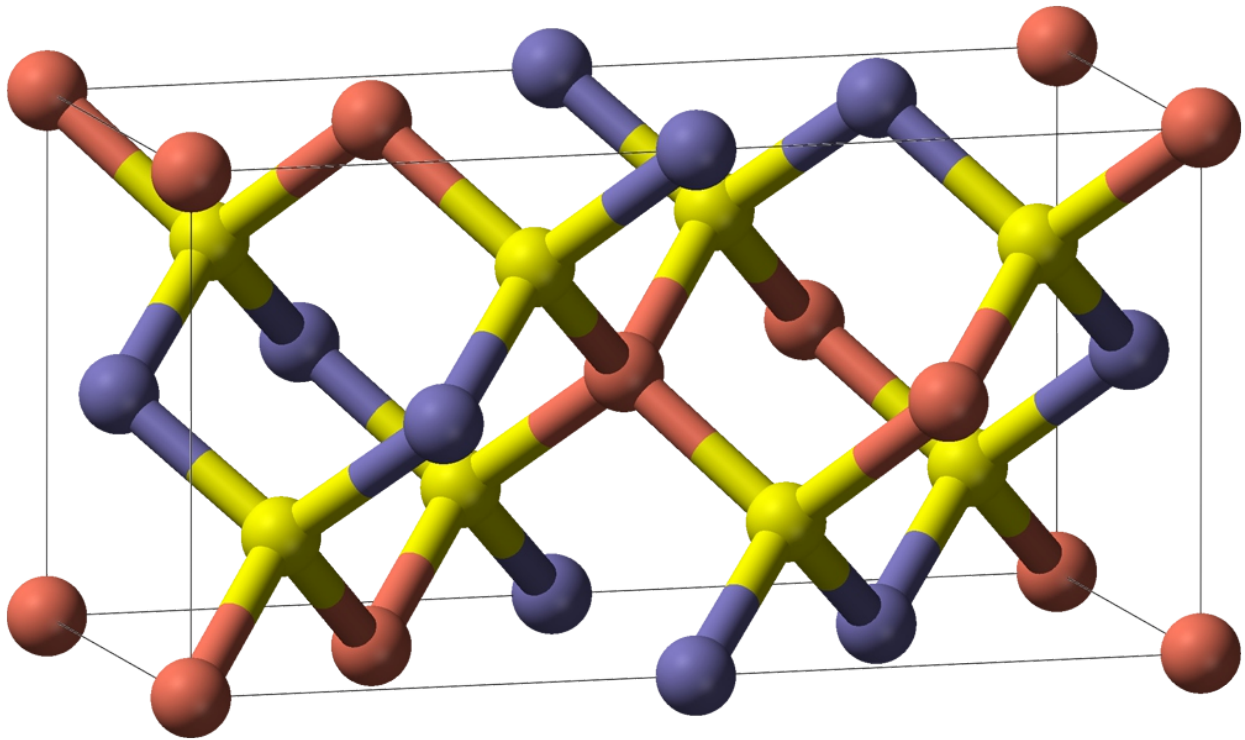
- ➔ The human eye can only perceive light within the visible spectrum, with red light at the lowest frequency visible to us.
- ➔ Infrared light, with an even lower frequency, is invisible to the human eye.
- ➔ The new device developed by IISc can up-convert **short infrared light frequencies**, making them **visible to the human eye**, thus transforming **invisible light** into **visible light**.

Technical Details:

- The IISc team utilized a 2D material to create a "non-linear optical mirror stack" for up-conversion and wide-field imaging.
- The design comprises layers of **gallium selenide** on top, **silicon dioxide** in the middle, and a **gold reflective surface** at the bottom.
- Traditional infrared imaging methods rely on bulky, inefficient sensors with exotic semiconductors or micro-bolometer arrays, which detect heat or absorption signatures and often face export restrictions.
- The IISc device offers a more efficient and domestically produced alternative.

Technical Process:

- An input infrared signal and a pump beam are directed onto the mirror stack.
- The nonlinear optical properties of the stack material cause frequency mixing, resulting in an output beam with an increased (up-converted) frequency.



POTTERY FRAGMENTS

DISCOVERED DURING DIGGING

Why in News??

Pottery fragments featuring geometric symbols discovered during digs in Perumbalai, Tamil Nadu.

Key Findings:

- During the archaeological excavations undertaken by the Tamil Nadu government's Department of Archaeology at Perumbalai in Dharmapuri district discovered the "resembling geometric symbols" which were among the potsherds.
- The lowermost level of the site dates back to the 6th Century BCE as per the AMS dates.
- Most of the excavated early historic sites such as Vallam, Kodumanal, Keeladi, Uraiur, Karur and many other sites always found Tamili (Tamil-Brahmi)-inscribed potsherds and graffiti-bearing potsherds together.

POTTERY ASSEMBLAGE:

- The potteries unearthed from the site at various stratum demonstrate the proper chronological sequences of pottery assemblage. The pottery occurring from the lowermost level is very thin and the fine BRW and black ware are the more dominating types.
- The clay used for making the potteries was fine and well-levigated clay. Undoubtedly, from the shapes and size of the pottery, it belongs to the Iron Age.
- Swastik-like symbols were also collected. Interestingly, a fully shaped black-and-red ware bowl containing the swastik sign is exposed. These graffiti marks are confined to the Iron Age and early historic period.
- Burnished ware, black and red ware, russet-coated black and red ware, russet-coated red ware, red ware and black ware were unearthed. Among them, russet-coated ware served as table ware, and may be considered the elite ware of the site.

Nuclear study provides major update on plutonium isotope fission

A part of the fission energy carried away by neutrons is called the prompt fission neutron spectrum. 'Prompt' stands for neutrons Pu-240 might emit right after it has captured a neutron with the energy to destabilize it

Pu-240 undergoes spontaneous fission, and emits alpha particles. The isotope is considered a contaminant of weapons-grade plutonium, where its composition by weight is restricted to under 7%

Researchers also reported a higher-than-expected rate of second-chance fission of Pu-240. They also reported finding signs of 'a smaller contribution from third-chance fission' but added that this 'was difficult to observe in the data directly'



THE NITI AAYOG'S

Project in Great Nicobar

25/06/2024

The Congress party demanded an "immediate suspension" of all clearances granted to NITI Aayog's mega project on Great Nicobar island in light of "violations of due process, legal and constitutional provisions protecting tribal communities, and the project's disproportionate ecological and human cost.

In March, 2021, NITI Aayog unveiled a ₹72,000 crore plan called 'Holistic Development of Great Nicobar Island at Andaman and Nicobar Islands'.

The project requires the diversion of about 130 sq. km of forest land and the felling of around 10 lakh trees. In January, 2021 the Indian government denotified two wildlife sanctuaries — the Galathea Bay wildlife sanctuary and the Megapode Wildlife Sanctuary — to make way for the project.

The key points related to frequent earthquakes in the context of the Great Nicobar Island:

1. **Seismic Activity and Risk:** The Andaman and Nicobar archipelago, including Great Nicobar Island, lies in a seismically active region known as the "ring of fire." This area is categorized as Zone V, indicating it has the highest seismic hazard.
2. **Frequency of Earthquakes:** Over the past decade, the region has experienced nearly 500 earthquakes of varying magnitudes. This frequent seismic activity underscores the geological instability of the area.
3. **Risk Assessment Concerns:** Researchers and local stakeholders, including the Campbell Bay panchayat and disaster management experts, have expressed concerns about the NITI Aayog's project failing to adequately assess earthquake risks. This omission is critical given the region's susceptibility to seismic events.
4. **Potential Impacts:** The proposed infrastructure projects such as the transshipment terminal and the international airport are significant developments that could be adversely affected by earthquakes. Without proper risk assessment and mitigation strategies, these projects may face heightened vulnerability to seismic hazards.

While the NITI Aayog's mega project aims to develop Great Nicobar Island, concerns regarding seismic risks highlight the importance of thorough evaluation and planning to safeguard both infrastructure and the local population from potential earthquake impacts.

WHEAT STOCK LIMITS TO CURB HOARDING:

- The Centre, amid concerns of wheat shortage, invoked the Essential Commodities Act.
- A Stock Limit Order, effective June 24, mandates maximum quantities of wheat that can be held.
- The order remains in effect until March 31, 2025.
- Traders and wholesalers are restricted to holding a maximum of 3,000 tonnes of wheat. Retailers, including big chains, are limited to 10 tonnes, with big chain depots allowed up to 3,000 tonnes.
- Processors can hold up to 70% of their monthly installed capacity multiplied by the remaining months of FY2.
- The Food Ministry emphasized that the measure aims to prevent hoarding, clarifying it does not indicate a wheat shortage.



SABARI RAIL PROJECT

Amidst ongoing uncertainties surrounding the long-standing Angamaly-Erumeli Sabari Railway project, the Kerala government has formally urged the Union Ministry of Railways to prioritize it as a crucial connectivity route to the popular Sabarimala hill shrine, instead of the newly proposed Chengannur-Pampa corridor.

V. Abdurahiman, the State's Railways Minister, emphasized that the approval of the new line should not come at the expense of the Angamaly-Erumeli Sabari project, which has already incurred expenditures totaling ₹250 crore. The state has already earmarked lands for acquisition along its alignment and allocated ₹100 crore in the current year's budget for its advancement.

Union Railway Minister AshwiniVaishnaw, Kerala highlighted several advantages of the Angamaly-Erumeli Sabari line over the Chengannur-Pampa route. Notably, the former offers a more direct route for pilgrims traveling from northern Kerala and neighboring states, who constitute over 80% of Sabarimala visitors arriving by train.

Moreover, Kerala argued that unlike the seasonal nature of pilgrimages to Sabarimala (lasting 114 days annually), the Chengannur-Pampa line serves primarily as a feeder route with limited connectivity to major towns. In contrast, the Angamaly-Erumeli Sabari line is poised to become central Kerala's third railway corridor, connecting strategically with planned railway projects from Erumeli to Punalur and Punalur to Thiruvananthapuram.

Furthermore, Kerala highlighted the potential connectivity benefits to the upcoming Vizhinjam International Seaport, facilitating international freight movement.

Tamil Nadu has decided to permit controlled culling of wild boars in agricultural fields near forested areas.

The Tamil Nadu government has opted to permit the controlled reduction of wild boar populations that pose a threat to farmers in agricultural lands near forested areas.

According to Forest Minister M. Mathiventhan, this decision follows recommendations from the Farmers' Conflict Resolution Committee. The committee, comprising officials from Forest, Revenue, Agriculture, and Horticulture departments, alongside scientific experts and wildlife advocates, was formed to assess the impact of elephant and wild boar raids on crops.

During discussions on his department's budgetary demands, Minister Mathiventhan outlined the zoning of areas adjacent to reserve forests into three categories: Zone A (within one kilometer of forest borders), Zone B (one to five kilometers), and Zone C (beyond five kilometers). He emphasized that culling of wild boars would not be permitted within five kilometers of the reserve forest.

While farmers have long sought government approval for wild boar culling, concerns have been raised by experts regarding the potential for indiscriminate killing.

Mr. Mathiventhan stressed that any culling activities must adhere strictly to scientific principles, taking into consideration the severity and frequency of conflicts on farmlands situated beyond Zone C.



MULTI-UTILITY LEGGED EQUIPMENT (MULE)

Why in News?

Robotic MULEs (Multi-Utility Legged Equipment) are being inducted into the Indian Army.

- ➔ Surveillance Capabilities: Equipped with thermal cameras and various sensors, enabling effective surveillance operations.
- ➔ Communication Range: Operates up to 10 kilometres from its base using Wi-Fi or Long-Term Evolution (LTE).
- ➔ Combat Integration: Can be armed with small weapons, allowing engagement with the enemy and reducing human risk.
- ➔ Reconnaissance Support: Remotely controlled, providing real-time footage to military posts for enemy identification.
- ➔ Terrain Versatility: Capable of operating in diverse terrains such as snow and mountains, with the ability to climb slopes up to 45 degrees and steps up to 18 cm high.

SIMILAR DEVELOPMENTS

- ➔ **China:** Inducted gun-equipped robotic dogs into its military, demonstrated during a joint military exercise with Cambodia.
- ➔ **United States:** Integrated robotic dogs into the military and state police departments.

Multi-Omics in Transforming Diagnosis and Treatment of TB and Cancers in India

Why in News?

India's use of genomics has significantly transformed diagnoses, management, and treatment of diseases like tuberculosis (TB) and cancers, driven by advanced technologies and data analytics.

Key Initiatives

- ➔ Genome India Project: Launched in January 2024, this project involves sequencing 10,000 genomes from 99 ethnic groups to create a reference genome for the Indian population. This helps in identifying novel genes and understanding inherited disorders and diseases.
- ➔ Consortium for Cellular and Molecular Biology (CCMB): Focuses on sequencing TB bacteria to identify mutations, correlate treatment outcomes, and develop a sequence-based method to predict drug resistance.
- ➔ Indian Council of Medical Research (ICMR): Sequencing 3,000 genomes to understand genetic diseases and create population-specific databases.

Research and Development

- ➔ AI and Machine Learning: Used to analyze extensive datasets from proteomics, transcriptomics, and epigenomics to develop multi-omics approaches.
- ➔ National Institute of Biomedical Genomics (NIBMG): Conducting research to detect mutations and correlate them with treatment outcomes. Scientists are also creating a genetic map for the Indian population.
- ➔ Genomic Surveillance Consortium (INSaGOG): Sequencing around 32,000 samples to identify genetic patterns in COVID-19 and other diseases.

Disease-Specific Efforts

- ➔ Tuberculosis: Genomic analysis to understand drug resistance and epidemiology, leading to better treatment and reduced adverse events.
- ➔ Cancers: The Indian Cancer Genome Consortium (ICGC) and other initiatives are using genomics to characterize cancer genomes, identify variants linked to risk and treatment response, and facilitate the discovery of novel biomarkers.

Rare Genetic Disorders

- ➔ Program for Rare Genetic Disorders (PaGeD): Aims to identify genetic causes of rare diseases and develop therapies for children. Newborn screening and family management of genetic disorders are key focuses.

AI and Multi-Omics

- ➔ Algorithm Development: AI and machine learning algorithms are being developed to enhance genomic analysis, predict diseases, and aid in personalized treatment plans.
- ➔ Clinical Trials: Genomic profiling is being used to select appropriate drug combinations for patients based on their genetic makeup.



PRESIDENT HIGHLIGHTS NEET, REFERENCES EMERGENCY IN PARLIAMENTARY ADDRESS



President Droupadi Murmu urged MPs to transcend “partisan politics” concerning the controversy over “paper leaks” in medical college admissions and government recruitment exams.

INDIA plans adjournment motion on NEET issue

Opposition parties from the Indian National Developmental, Inclusive Alliance (INDIA) bloc plan to move adjournment motions in both Houses of Parliament over alleged irregularities in the National Entrance-cum-Eligibility Test (NEET) and paper leaks in other public exams.

An adjournment motion aims to halt all other business in the House to focus on the issue it raises. Both Houses of Parliament are set to debate the Motion of Thanks to the President's address. While the government is unlikely to accept the adjournment motion, Education Minister Dharmendra Pradhan is prepared to respond to questions about NEET and other public exams and discuss measures to strengthen the National Testing Agency (NTA).

President Droupadi Murmu affirmed the government's commitment to investigating recent paper leaks and ensuring that those responsible are punished.

Reasi and the long-standing issue of cross-border terrorism:

1. **Strategic Location and Vulnerability:** Reasi, a district in Jammu and Kashmir, is strategically significant due to its proximity to the Line of Control (LoC) with Pakistan. This makes it a vulnerable target for cross-border infiltration by terrorists. The rugged terrain and dense forests provide cover for militants attempting to cross the border and infiltrate into Indian territory, exacerbating security challenges.
2. **Historical Context of Terrorism:** The issue of cross-border terrorism in Reasi and other parts of Jammu and Kashmir has been a persistent problem for decades. Since the late 1980s, there have been numerous instances of terrorist activities, including attacks on security forces, civilians, and infrastructure. This long-standing conflict has resulted in significant loss of life and disruption of daily life in the region.
3. **Security Measures and Counterterrorism Efforts:** To combat the threat of cross-border terrorism, Indian security forces have implemented various measures, including increased surveillance, intelligence operations, and military presence along the LoC. Efforts such as the construction of border fences, deployment of advanced monitoring technologies, and coordination between local and national security agencies have been crucial in addressing the infiltration attempts and ensuring the safety of the residents in Reasi.



U.S. SUPREME COURT ORDER REDUCES FEDERAL AGENCY POWER

The U.S. Supreme Court, with its conservative majority, struck down a 40-year-old legal precedent on Friday, significantly reducing the regulatory power of federal agencies over critical issues such as air quality and drug safety. In a 6-3 decision, the Court overturned the landmark 1984 ruling in *Chevron v. Natural Resources Defense Council*, which allowed judges to defer to government experts when interpreting ambiguous laws.

Chief Justice John Roberts, writing for the majority, stated that the *Chevron* ruling was "fundamentally misguided" and conflicted with the statutory requirement for courts to independently judge whether federal agencies have exceeded their authority. The decision split the Court along conservative-liberal lines, with the three justices appointed by Democrats dissenting.

The ruling drew swift backlash from lawmakers and non-profits. Environmental group Earthjustice criticized the decision, stating it "paves the way for industries to challenge regulations they oppose before judges who will now be more inclined to second-guess federal agencies."

GLOBAL GOVERNANCE REFORM

During a signing ceremony at the Great Hall of the People in Beijing, Chinese President Xi Jinping emphasized the need for the Global South to actively participate in reforming and developing the global governance system to make it more balanced and effective.

"China's commitment to peaceful development remains steadfast. We will not follow the path of colonial plundering or seek hegemony. Instead, we will pursue the path of peaceful development."

His comments were made at an event commemorating the 70th anniversary of the "Five Principles of Peaceful Coexistence." Xi highlighted that during the Cold War, newly independent countries aimed to protect their sovereignty and develop their national economies. The five principles were included in the China-India and China-Myanmar joint statements, advocating for their adoption as basic norms for state-to-state relations.

The Five Principles are mutual respect for sovereignty and territorial integrity, mutual non-aggression, non-interference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence.

The Five Principles of Peaceful Coexistence, born in Asia, quickly gained global recognition. The Non-Aligned Movement, emerging in the 1960s, adopted these principles as its guiding norms. Over the past 70 years, they have proven resilient and relevant, becoming universal norms for international relations and fundamental principles of international law.

He emphasized the significant role of the Global South in promoting human progress and called for greater openness and inclusivity. Xi urged the Global South to lead in building a community with a shared future for mankind.

30/06/2024



INDIA LACKS DIAGNOSTIC TESTS FOR EMERGING INFECTIOUS DISEASES

Why in News?

A recent case of Zika virus infection in Pune has highlighted India's preparedness for diagnosing emerging infectious diseases. The case involved a 46-year-old doctor whose diagnosis came after significant symptoms and hospitalization. Subsequent testing of his family revealed that his 15-year-old daughter was also infected. This is not the first Zika case in India; past years have seen outbreaks in Kerala and Uttar Pradesh

Zika Virus and Diagnostic Challenges

Zika Virus Characteristics: Zika, a mosquito-borne pathogen from the flavivirus family, includes dengue. Symptoms can range from mild to severe, making clinical diagnosis challenging.

Current Diagnostic State: India's apex body, the Central Drugs Standard Control Organisation (CDSCO), confirmed there is no approved diagnostic test for Zika. Reliance on classical symptoms and clinical suspicion hampers accurate diagnosis and understanding of disease spread.

HISTORICAL AND RECENT OUTBREAKS

Past Outbreaks: India has seen multiple Zika outbreaks, notably in Kerala and Uttar Pradesh, with significant cases as recent as 2021.

Nipah Virus Outbreaks: Kerala faced Nipah outbreaks in 2018, 2021, and 2023. Early identification relied heavily on clinical suspicion due to the lack of diagnostic tests.

Influenza: Multiple influenza outbreaks also highlighted the gaps in testing and surveillance.

INSTITUTIONAL SHORTCOMINGS

Over-Reliance on Apex Institutes: The lack of approved diagnostic tests leads to over-reliance on apex institutes. This has resulted in many cases being missed initially, complicating public health responses.

DIAGNOSTIC INFRASTRUCTURE AND RECOMMENDATIONS

Limitations in Current Infrastructure: The reliance on synthetic genomic data and clinical samples creates bottlenecks in developing accurate diagnostics.

COVID-19 Pandemic Lessons: India's response to COVID-19, which involved decentralizing testing and leveraging existing infrastructure, shows a potential path forward. The systematic approach for approvals and making tests widely available was crucial.

PROPOSED SOLUTIONS

Decentralization: Decentralizing testing facilities, involving public and private laboratories, and leveraging industry resources can enhance preparedness.

Improved Diagnostics: Developing accessible and affordable diagnostic tests for diseases like Zika, Nipah, and avian influenza is vital. This requires rapid validation of clinical samples and synthetic genomic data.

Future Preparedness: Establishing a better system for diagnostic approvals, surveillance, and data sharing is essential to handle emerging infectious diseases effectively.

OVERLORDS OF THE DEVELOPING WORLD: IMF'S IMPACT ON POOR COUNTRIES

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WHY IN NEWS?

Kenya is currently experiencing mass protests against a new finance bill introduced by President William Ruto. This bill, backed by the International Monetary Fund (IMF), proposes raising taxes on essential goods such as bread, cooking oil, sugar, and diapers. The government's attempt to implement this bill led to violent clashes, resulting in at least 30 deaths and over 200 injuries. Despite initially resisting, President Ruto eventually conceded to public pressure and announced he would not sign the controversial bill.

IMF's Role and Conditionalities

The protests highlight broader issues with IMF policies and their impact on developing countries. In 2021, Kenya signed a four-year loan agreement with the IMF for \$2.34 billion. By May 2023, this loan volume increased to \$3.6 billion, with funds released in tranches and subject to strict conditions. The IMF's influence often requires countries to implement austerity measures, such as increasing taxes and reducing public spending, to ensure loan approval and disbursement.

Historical Background and Criticism

The IMF was created in 1944 to promote international monetary cooperation and financial stability. However, its policies have been criticized for exacerbating inequality and poverty in developing countries. A 2002 World Bank-funded study by the Structural Adjustment Participatory Review International Network (SAPRIN) examined the impact of IMF's Structural Adjustment Programs (SAPs) in nine countries across four continents. The report found that SAPs led to the "impoverishment and marginalisation of local populations," including the dismantling of domestic manufacturing sectors, loss of employment, and reduced access to essential services.

Unwritten Mandate and Influence

The IMF, alongside the World Bank, operates with significant influence over the economic policies of borrowing countries. Their policies are often dictated by the interests of wealthier member countries, notably the United States, which holds a significant voting share. This power imbalance has led to accusations that the IMF and World Bank enforce a modern form of economic imperialism, where developing countries are pressured into adopting policies that primarily benefit Western financial interests.

Case Studies and Global Impact

The consequences of IMF policies are evident in numerous developing countries. Protests against IMF-imposed austerity measures have occurred in nations like Ghana, Zambia, and Pakistan. In Kenya, the proposed finance bill and subsequent protests are a direct result of IMF conditionalities tied to loan agreements. The reduction in public sector spending has led to diminished social services, exacerbating poverty and inequality.

