



CONCEPTS IN NEWS

November 2024

Environment

Concept	Definition	Easy Explanation
Carbon Border Adjustment Mechanism	Tax on imports based on the carbon emissions produced during their production.	Charging extra on products from countries with less strict emission controls.
Regenerative Agriculture	Farming practices aimed at restoring soil health and biodiversity.	Agriculture that helps improve soil and environment rather than deplete it.
Nutrient Cycling	The movement and exchange of nutrients in ecosystems.	Recycling of essential nutrients in nature, like nitrogen and carbon, to keep ecosystems healthy.
Biodiversity Offsetting	Compensating for biodiversity loss from development projects by creating equivalent biodiversity elsewhere.	Restoring biodiversity in one area to offset destruction in another.
Renewable Purchase Obligation	Mandate for companies to buy a certain percentage of energy from renewable sources.	Companies are required to use a certain amount of green energy.
Bio-remediation	Using living organisms to clean polluted areas.	Using plants, bacteria, or fungi to remove pollutants from soil or water.



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Urban Heat Islands	Urban areas that are significantly warmer than their rural surroundings due to human activities.	Cities being hotter than nearby rural areas because of buildings and activities.
Carbon Border Adjustment Mechanism (CBAM)	A climate policy that imposes tariffs on imported goods based on their carbon emissions during production.	A tax on goods from countries with high carbon emissions to encourage cleaner production methods.
Methane Clathrates	Ice-like structures trapping methane in the deep ocean and permafrost, potentially releasing it due to warming.	Frozen methane in the ocean or permafrost that can release greenhouse gases if melted.
Polar Vortex Disruption	A breakdown of the cold-air circulation in the Arctic, leading to extreme weather events in mid-latitude areas.	When Arctic cold air escapes southward, causing unusual cold weather in places like the US or Europe.
Biosphere Reserve Corridors	Protected areas connecting biosphere reserves to ensure wildlife migration and biodiversity.	Pathways that connect nature reserves to help animals move safely and maintain ecosystems.
Geoengineering Solutions	Large-scale interventions in Earth's climate systems to combat climate change effects.	Techniques like reflecting sunlight or capturing carbon to reduce global warming.
Circular Economy in Solar PV Recycling	Recycling solar panels to reduce waste and reuse valuable materials.	A process to recycle old solar panels and reuse parts to reduce waste and promote sustainability.
Biofuel Production	Fuel made from organic materials	Fuel derived from plants or other organic matter.
Bio-capacity	Ecosystem's ability to regenerate resources	The ability of nature to provide resources and absorb waste.
Carbon Capture and Storage (CCS)	Technology to capture and store carbon emissions	Capturing CO ₂ emissions and storing them to reduce pollution.
Ecosystem-Based Adaptation	Using natural solutions for climate adaptation	Relying on nature to adapt to climate change.
Circular Economy	System to minimize waste through recycling	Reducing waste by reusing and recycling resources.
Blue Carbon	Carbon stored in coastal ecosystems	Carbon captured by ocean and coastal ecosystems.
Regenerative Agriculture	Farming practices that restore soil health	Sustainable farming that helps soil recover and stay fertile.
Geoengineering	Deliberate manipulation of the environment	Modifying environmental processes to combat climate change.
Marine Heat Waves	Unusually warm ocean temperatures	Periods when ocean water is significantly warmer than normal.





Nutrient Cycling	Movement of nutrients in the ecosystem	How essential nutrients circulate through the environment.
Graded Response Action Plan (GRAP)	A framework for tackling pollution in Delhi-NCR based on different levels of air quality, with specific measures activated as pollution worsens.	A plan with specific steps to reduce pollution based on how bad the air gets.
National Mission on Natural Farming (NMF)	A government initiative promoting sustainable agriculture by reducing chemical use and increasing natural inputs in farming.	A program to support farming that avoids chemicals and focuses on natural methods.
Bhartiya Prakritik Krishi Paddhati (BPKP)	A sub-scheme under Paramparagat Krishi Vikas Yojana encouraging natural farming practices to ensure environmental and economic sustainability.	A plan to help farmers grow crops naturally without using artificial fertilizers or pesticides.
Plastic Pollution Treaty Talks	Ongoing global negotiations under the UN to create a legally binding treaty to end plastic pollution by 2040.	Discussions to create a global agreement to stop plastic pollution.
Single-Use Plastics Ban	A prohibition on specific plastic items intended for one-time use to reduce environmental damage.	A ban on throwaway plastic items like straws or bags to save the environment.



Science and Technology

Concept	Definition	Easy Explanation
Digital Public Goods	Open-source digital solutions beneficial for society.	Free online tools or software meant to help everyone, like open education platforms.
Data Localization	Requirement for companies to store data within a country's borders.	Keeping data physically stored within the country rather than abroad.
Interoperability Standards	Standards ensuring different digital systems can work together smoothly.	Rules to make sure different tech systems can communicate and operate with each other.
Digital Twin Technology	Virtual models that accurately represent physical objects or systems.	A digital copy of a real-world object, like a virtual replica of a factory.
Quantum Computing	Advanced computing that uses quantum mechanics to process information at high speeds.	Super-fast computers that work on quantum physics principles.





End-to-End Encryption	Secure method to protect data by encrypting it from sender to receiver.	A way of sending messages or data that only the intended receiver can read.
Quantum Encryption	Using quantum mechanics to create highly secure communication methods.	A super-secure way of protecting messages using quantum technology.
Internet of Things (IoT)	Network of connected devices that communicate and share data with each other.	Devices, like fridges or cars, connected to the internet and talking to each other.
Quantum Dot Sensors	Nanoscale semiconductors that detect light, pressure, or temperature with high precision.	Tiny devices that can detect even the smallest changes in light, pressure, or temperature.
Silent Hypoxia	A condition where oxygen levels in the body drop dangerously low without noticeable symptoms.	A hidden drop in oxygen levels that can be life-threatening but without immediate warning signs.
Genomic Editing Techniques	Tools like CRISPR to alter DNA sequences for treating genetic disorders or improving traits.	Cutting-edge technology to fix or improve genes to cure diseases or boost certain traits.
Deepfake Detection Algorithms	Software designed to identify manipulated videos or images created using AI.	Tech that can detect fake videos or photos generated by advanced AI tools.
Hydrogen Blending Policies	Guidelines for mixing hydrogen with natural gas in pipelines to reduce emissions.	Adding hydrogen to existing gas supplies to make them cleaner and eco-friendly.
Smart Meter Technology	Advanced meters that monitor energy usage in real-time and provide data to optimize consumption.	Electric meters that help track and save energy more efficiently.
Quantum Computing	Computing using quantum-mechanical phenomena	Advanced computing using principles of quantum mechanics.
Artificial Intelligence Ethics	Rules for responsible use of AI	Guidelines for fair and safe AI use.
Blockchain	Decentralized digital ledger technology	A secure, digital record-keeping method.
Gene Editing	Altering DNA for desired traits	Changing genes to produce certain traits.
Quantum Entanglement	Phenomenon where particles remain connected	When particles instantly affect each other, even at a distance.
Exoplanet	Planet outside our solar system	A planet located in another star system.
Deep Learning	Machine learning technique using neural networks	A type of AI that mimics the human brain.





Gravitational Waves	Ripples in space-time caused by cosmic events	Waves in space caused by movements of massive objects.
Distributed Ledger	Decentralized database system	A record-keeping system spread across multiple locations.
Bioluminescence	Light produced by living organisms	Natural light emitted by some plants and animals.
Moiré Superconductors	Advanced materials that exhibit unique electrical properties at low temperatures due to their twisted atomic layers.	Special materials that carry electricity very efficiently when it's cold.
tWSe2 (Twisted Bilayer Tungsten Diselenide)	A 2D material with potential superconducting properties, studied for quantum applications.	A super-thin material with special properties for futuristic technologies.



Economy

Concept	Definition	Easy Explanation
Strategic Petroleum Reserve	Reserve of petroleum held by the government for emergency purposes.	Oil stored by the government to be used in times of crisis.
Black Swan Events	Unpredictable events with significant impact on the economy or society.	Rare, unexpected events that can drastically affect economies or systems.
Open Market Operations	Central bank's buying or selling of government securities to control money supply.	The government buys or sells bonds to manage how much money is circulating.
Shadow Banking	Financial services provided outside the traditional banking system.	Non-bank financial companies that operate like banks.
Universal Basic Income	A proposed program providing a fixed income to all citizens regardless of employment.	Giving everyone a set amount of money regularly, regardless of whether they have a job.
Capital Account Convertibility	Freedom to convert local financial assets into foreign financial assets and vice versa.	Allowing people to freely exchange their currency for foreign currency.
Biocapacity	The capacity of an ecosystem to generate resources and absorb wastes.	How much nature can produce resources and absorb pollution.
Counter-Cyclical Fiscal Policy	Government policies aimed at countering economic fluctuations.	Policies that help boost the economy during recessions and control inflation during booms.
Geo-Economic Rebalancing	Adjusting economic policies and strategies to adapt to global shifts in economic power.	Changing strategies to balance economic power in response to shifts in the global economy.





Carbon Pricing	Pricing mechanism to charge emitters of carbon dioxide.	Charging businesses for emitting carbon, to encourage lower emissions.
Threshold Capital Buffers	Extra capital banks must hold to absorb losses during financial crises.	A financial cushion banks keep to avoid collapse during tough times.
Green Hydrogen Supply Chains	The logistics and infrastructure required to produce, transport, and store hydrogen made using renewable energy.	The entire process of making and delivering clean hydrogen fuel.
Fossil Fuel Subsidy Reforms	Changes in policies to reduce financial support for fossil fuels and encourage cleaner energy sources.	Removing discounts on coal, oil, or gas to promote renewable energy.
NCQG (New Collective Quantified Goal)	A global climate finance target agreed by developed countries to aid developing nations in addressing climate change.	A fund set by rich nations to help poorer ones tackle climate issues.
Decentralized Energy Systems	Energy systems that generate power closer to where it is consumed, reducing transmission losses.	Localized power sources like solar or wind farms near homes and businesses.
Fiscal Stimulus	Government spending to boost the economy	Financial help from the government to stimulate economic growth.
Sovereign Wealth Fund	Government-owned investment fund	A state-owned fund for investing national resources.
Shadow Banking	Financial activities by non-bank entities	Financial services provided outside traditional banks.
Universal Basic Income	Government payment to all citizens	A fixed income given by the government to everyone.
Capital Convertibility	Freedom to exchange local currency for foreign	Ability to freely exchange domestic currency for foreign currency.
Counter-Cyclical Policy	Economic policy to stabilize business cycles	Measures to balance economic highs and lows.
Credit Default Swap (CDS)	Insurance on debt defaults	A financial contract to protect against debt non-payment.
Debt Monetization	Funding government debt through central banks	Creating money to pay off government debt.
Liquidity Trap	Situation where low interest rates fail to boost spending	When low interest rates don't encourage more spending.
Carbon Border Adjustment	Tax on imports based on carbon emissions	Import taxes adjusted according to the product's carbon footprint.
Electoral Bonds	A financial instrument introduced in 2018 to enable political donations in India while ensuring donor anonymity.	A way for people or companies to donate money to political parties without their names being revealed.





National Election Fund	A proposed mechanism for creating a centralized fund to ensure transparency and reduce black money in political donations.	A big pot of money where people can donate openly, and the government shares it with political parties.
Aadhaar-based Payment System (ABPS)	A system allowing payments through Aadhaar-linked bank accounts, enhancing financial inclusion.	A way to pay or receive money directly using your Aadhaar number.
Political Funding Reforms	Measures to improve transparency, accountability, and fairness in financial contributions to political entities.	Changes to make money donations to political parties clearer and more honest.



International Relations

Concept	Definition	Easy Explanation
Non-Proliferation Treaty	International treaty aimed at preventing the spread of nuclear weapons.	A global agreement to stop the spread of nuclear arms.
Cross-Border Insolvency	Legal process for dealing with insolvent debtors whose assets or debts are across different countries.	Handling the debt or bankruptcy of a business with assets in multiple countries.
Strategic Autonomy	A nation's ability to pursue its national interests independently without reliance on other countries.	When a country makes its own decisions without depending on others.
Hybrid Warfare	Warfare strategy combining conventional and unconventional methods, including cyber-attacks and propaganda.	Using a mix of traditional and digital warfare tactics.
Geo-Economic Rebalancing	Reorienting economic relations to shift global economic power.	Adjusting international economic ties to balance global influence.
Cyber Diplomacy	The use of diplomatic measures to address cyber threats and international cybersecurity.	International efforts to protect against and respond to cyber-attacks.
Regulatory Sandboxes	Controlled environments for testing new policies or technologies before widespread implementation.	A safe space to test new policies or tech without full regulations.
Blue Economy	Sustainable use of ocean resources for economic growth, improved livelihoods, and jobs.	Using ocean resources in a way that boosts the economy while protecting marine life.
Digital Sovereignty	A country's control over its digital infrastructure and data.	A nation's right to control its own digital networks and information.





Vaccine Hesitancy	Reluctance or refusal to vaccinate despite the availability of vaccines.	People being unsure or against getting vaccinated, even when vaccines are available.
Paris Accord Differentiation Principle	Recognizes that developed nations should take greater responsibility for addressing climate change.	Rich countries must do more to fight climate change than poorer ones.
Golden Crescent and Golden Triangle (Drug Trade)	Two major regions in Asia known for the illegal production and trafficking of drugs like heroin.	Areas in Asia famous for illegal drug production and trade.
The Arab Peace Initiative	A proposal by Arab countries for resolving the Israeli-Palestinian conflict through mutual recognition.	A plan by Arab nations to bring peace between Israel and Palestine.
Global Commons Management Policies	International frameworks to protect shared resources like oceans, space, and the atmosphere.	Rules to take care of resources that belong to everyone on Earth.
Panchsheel Principles	Five principles of peaceful coexistence agreed upon by India and China in 1954.	Guidelines for nations to live peacefully and respect each other's boundaries.
Geopolitics	Politics influenced by geography	How geographic factors affect international relations.
Hybrid Warfare	Combining traditional and unconventional tactics	Using a mix of traditional and cyber warfare.
Strategic Autonomy	Independence in decision-making in global affairs	A nation's ability to make independent decisions.
Non-Proliferation Treaty	Agreement to prevent the spread of nuclear weapons	A treaty to limit the number of nuclear weapons worldwide.
Cyber Espionage	Spying via digital methods	Using digital tools to gather secret information.
Data Sovereignty	Control of data within national borders	Keeping data within a country's own boundaries.
Geo-economic Rebalancing	Shifting economic influence across regions	Changing global economic power and influence.
Indo-Pacific Strategy	Strategy focused on the Indo-Pacific region	Policies directed towards the Indo-Pacific area.
Bilateral Diplomacy	Direct negotiations between two countries	Direct relations between two nations.
Extradition	Process of sending a criminal back to the original country	Returning a criminal to the country where they committed a crime.
UNSC Resolution 1701	A United Nations Security Council resolution adopted in 2006 to end the Israel-Hezbollah conflict and establish peace in Lebanon.	A UN decision to stop fighting between Israel and Hezbollah and bring peace in Lebanon.





Blue Line (Israel-Lebanon)	A demarcation line set by the UN in 2000 to confirm Israel's withdrawal from Lebanon.	A border line marked by the UN to separate Israel and Lebanon.
Ceasefire Monitoring (US, France, UNIFIL)	Efforts led by the United Nations Interim Force in Lebanon to oversee ceasefire agreements between Israel and Lebanon.	Teams from the UN and other countries watching to make sure there's no fighting between Israel and Lebanon.



Polity

Concept	Definition	Easy Explanation
Juvenile Justice Act	A law in India to handle crimes committed by minors in a sensitive and age-appropriate manner.	This law ensures that children who commit crimes are treated with care, focusing on their rehabilitation.
UIDAI Circular	Notifications or guidelines issued by the Unique Identification Authority of India regarding Aadhaar.	Rules and guidelines related to the use and management of Aadhaar cards in India.
Census Delimitation	Process of dividing the country into districts or regions based on population data from the census.	Changing boundaries of regions to match current population data for better representation.
Delimitation Suspension	Temporarily stopping the process of redefining electoral boundaries.	Pausing adjustments to electoral boundaries to align with current population data.
Population Disparities	Differences in population density and demographics across regions.	Variation in the number of people living in different areas, leading to unequal distribution.
84th Constitutional Amendment	Amendment regarding freezing the number of seats in Parliament based on population.	Freezing the allocation of parliamentary seats based on a past census.
Electoral Bonds	Financial instruments allowing individuals and companies to fund political parties anonymously.	A way to donate money to political parties without revealing the donor's identity.
Cooperative Federalism	A governance approach where central and state governments collaborate on policy and development.	Central and state governments working together for the country's progress.
AFSPA (Armed Forces Special Powers Act)	A law that grants special powers to armed forces in "disturbed areas" to maintain public order.	A law that allows soldiers to take strong action in conflict zones.





Electoral Proportional Representation	A voting system where seats are distributed based on the percentage of votes received by parties.	A way of voting where parties get seats based on the number of votes they win.
Probity in Governance	Adherence to ethical standards and integrity by public officials in their duties.	Doing government work honestly and ethically.
Right to Dignity in Deceased Identification	Ensuring respectful treatment and proper identification of deceased individuals during disasters or conflicts.	Making sure dead individuals are identified and treated respectfully.
Judicial Review	Courts' power to examine laws	Courts checking if laws follow the constitution.
Fiscal Federalism	Division of financial powers among government levels	How financial powers are divided in federal systems.
Electoral Bonds	Financial instruments for political donations	Tools used to fund political parties anonymously.
Anti-Defection Law	Law to prevent political party switching	Rules that stop politicians from changing parties.
Doctrine of Harmonious Construction	Legal interpretation to avoid conflicts	A way to interpret laws so they don't conflict.
Model Code of Conduct	Guidelines for election campaigns	Rules for political parties during elections.
Sunset Clause	A clause that ends a law after a certain period	A rule that makes laws expire after a set time.
Public Trust Doctrine	Principle that government holds resources for public	The idea that some resources are for everyone's benefit.
Cooperative Federalism	Cooperation among national and state governments	When central and regional governments work together.
Constitution Day	Celebrated on November 26th to commemorate the adoption of the Indian Constitution in 1949.	A day to remember when India officially adopted its Constitution.
National Register of Indian Citizens (NRIC)	A register identifying Indian citizens, ensuring their inclusion in official demographic records.	A list of people who are officially considered citizens of India.
National Population Register (NPR)	A database of usual residents in India, created under the Citizenship Act 1955 and used for census purposes.	A record of people living in India, whether they are citizens or not.
42nd Amendment Act (1976)	An amendment to the Indian Constitution, often called the "mini-Constitution," that brought major changes, including the insertion of "socialist" and "secular" in the Preamble.	A change in the Constitution in 1976 that added key ideas like socialism and secularism to its main goals.
Secularism and Socialism in Preamble	Fundamental principles introduced in the Preamble through the 42nd Amendment,	Two ideas added to India's main goals: no official religion and fair sharing of resources.





	ensuring no state religion and equitable wealth distribution.	
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