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EnviStats-India Glossary

Government of India
Ministry of Statistics & Programme Implementation

www.mospi.gov.in

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Revision Summary of this Document

Version Number	Date of Issue	Brief Description of Change
Ver1.0	March 3, 2022	First Version
Ver1.1	March 3, 2023	Terms/ Definitions related to the new set of accounts published in EnviStats India Vol. II 2022 included in the document
Ver1.2	March 3, 2024	Terms/Definitions related to the new set of accounts published in EnviStats India Vol. II 2023 included in the document
Ver1.3	March 3, 2025	Terms/Definitions related to the new set of accounts published in EnviStats-India 2024 included in the document

Glossary

Term	Definition
A	
Abiotic	Physical rather than biological; not derived from living organisms
Above-Ground Biomass (AGB)	Component of the carbon pool consisting of all living vegetation above the soil, inclusive of stems, stumps, branches, bark, seeds and foliage.
Abstraction	Amount (of water) that is removed (from any source), either permanently or temporarily, in a given period of time.
Acidification (Ocean Acidification)	A large proportion of the carbon dioxide that enters the atmosphere through combustion processes is taken up by the ocean, causing the seawater to acidify. Strictly speaking the seawater remains basic. But when the acidity, or pH value, of the water decreases in the direction of less basic, it is referred to as acidification of the water.
Acidification of Soil- Acidity - Moderate(E1)/ Acidity - Severe (E2)	Soil pH is one of the most-important soil properties that affects the nutrient uptake by plants and thereby influencing the crop productivity. Any soil processes or management practices which lead to build-up of hydrogen cations (also called protons) in the soil results in soil acidification. If the pH is 4.5 to 5.5 then it is called moderate and if the pH is < 4.5, then it is mapped under severe category.
Adaptation	Adjustment or preparation of natural or human systems to a new or changing environment which moderates harm or exploits beneficial opportunities.
Adaptive Capacity	Ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.
Aerosols	Small particles or liquid droplets in the atmosphere that can absorb or reflect sunlight depending on their composition.

Afforestation	Planting of new forests on lands that historically have not contained forests.
Agricultural Land	Land primarily used for farming and for production of food, fibres and other commercial and horticultural crops.
Agroforestry	Agroforestry is a collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence.
Airborne Diseases and Conditions	Diseases and conditions associated with the environment are caused or worsened by exposure to unhealthy levels of pollutants (such as PM, SO_2 or O_3), usually found in urban settlements and, in particular, in cities with weaker air quality regulations and/or enforcement capabilities.
Alternative Energy	Energy derived from non–traditional sources e.g. solar, hydroelectric, wind.
Anemones	Marine animals in the Phylum Cnidaria that resemble flowers and are often found attached to substrates in shallow waters.
Angiosperms	Seed–bearing vascular plants.
Annex I Countries/Parties	Group of countries included in Annex I (as amended in 1998) to the United Nations Framework Convention on Climate Change comprising of all the developed countries in the Organization of Economic Co–operation and Development (OECD) and economies in transition. By default, the other countries are referred to as Non–Annex I countries.
Annex II Countries	Subset of the Annex I Countries which have a special obligation to help developing countries with financial and technological resources. It includes the 24 original OECD members and the European Union.
Annual Replenishable Ground Water Resource	Quantity of groundwater recharged during monsoon and non-monsoon seasons.
Anthropogenic	Made by people or resulting from human activities. Usually used in the context of emissions that are produced as a result of human activities.
Aquaculture	Farming of aquatic organisms, including fish, molluscs, crustaceans and aquatic plants. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection

	from predators, etc.
Aquaculture-Marine	Marine aquaculture is farming of aquatic organisms which almost always happen in the open sea (Salmon, Oyster, Mussel, Scallops). These organisms prefer clean water.
Aquaculture Pond	Water bodies used for the breeding and rearing of fresh-water or marine fish in captivity.
Aquatic Resources	Comprise fish, crustaceans, molluscs, shellfish, aquatic mammals and other aquatic organisms that are considered to live within the boundaries of the Exclusive Economic Zone (EEZ) of a country throughout their lifecycles, including both coastal and inland fisheries.
Aquatic Vegetation	Plants that grow partly or wholly in water whether rooted in the mud, as a lotus, or floating without anchorage, as the water hyacinth.
Aquifer	A geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.
Area under Non- agricultural Uses	Land occupied by buildings, roads and railways or under water, e.g. rivers and canals, and other land put to uses other than agriculture.
Artificial Reservoirs	Man-made reservoirs used for storage, regulation and control of water resources.
Assets	Assets are stores of value representing a benefit or series of benefits accruing to an economic owner by holding or using the entity over a period of time. It is a means of carrying forward value from one accounting period to another.
Ash Pond	Water body created for discharging effluents in industry, especially in thermal power plants
Atmosphere	The gaseous envelope surrounding the Earth. The dry atmosphere consists almost entirely of nitrogen (78.1% volume mixing ratio) and oxygen (20.9% volume mixing ratio), together with a number of trace gases, such as argon (0.93% volume mixing ratio), helium, radiatively active greenhouse gases such as carbon dioxide (0.035% volume mixing ratio) and ozone. In addition, the atmosphere contains water vapour, whose amount is highly variable but typically 1% volume mixing ratio. The

	atmosphere also contains clouds and aerosols.
Atmospheric Lifetime	Average time that a molecule resides in the atmosphere before it is removed by chemical reaction or deposition. This can also be thought of as the time that it takes after the human–caused emission of a gas for the concentrations of that gas in the atmosphere to return to natural levels. Greenhouse gas lifetimes can range from a few years to a few thousand years.
Atomic Energy	The energy that is released through a nuclear reaction or radioactive decay process.
B	
Backwater	A creek, arm of the sea or series of connected lagoons, usually parallel to the coast, separated from the sea by a narrow strip of land but communicating with it through barred outlets.
Barren and Unculturable Land	Land which cannot be brought under cultivation except at an exorbitant cost, are classified as unculturable whether such land is in isolated blocks or within cultivated holdings. Includes all barren and unculturable land like mountains, deserts, etc.
Barren Rocky/Stony Waste	Rock exposures of varying lithology often barren and devoid of soil and vegetation cover.
Below-Ground Biomass (BGB)	Component of carbon pool consisting of the biomass contained within live roots.
Biochemical Oxygen Demand (BOD)	Biochemical oxygen demand (BOD, also called biological oxygen demand) is the amount of dissolved oxygen needed (i.e. demanded) by aerobic biological organisms to break down organic material present in a given water sample at certain temperature over a specific time period. The BOD value is most commonly expressed in milligrams of oxygen consumed per litre of sample during 5 days of incubation at 20 °C and is often used as a surrogate of the degree of organic pollution of water.
Biodiversity	Variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, including diversity within species, between species and of ecosystems. It is a measure of ecosystem health.

Biofuels	Gas or liquid fuel made from plant material (biomass). Includes wood, wood waste, wood liquors, peat, railroad ties, wood sludge, agricultural waste, straw, tires, fish oils, tall oil, sludge waste, waste alcohol, municipal solid waste, landfill gases, other waste and ethanol blended into motor gasoline.
Biogenic	Substances produced by living organisms such as plants, animals, fungi or bacteria are referred to as biogenic.
Biogeographic Zone	Large distinctive units of similar ecology, biome representation, community, and species.
Biological Resources	Renewable resources that are capable of regeneration through natural (non–managed or managed) processes. Include timber and aquatic resources and a range of other animal and plant resources (such as livestock, orchards, crops and wild animals), fungi and bacteria.
Biomass	Refers to the density of organic matter expressed as oven-dry tonnes per unit area.
Biome	A distinct community of plants, animals or fungi that occupy a distinct region. It is often referred to as an ecosystem.
Bio-mining of legacy waste	The process refers to the excavation of old dumped waste and make windrow of legacy waste thereafter stabilization of the waste through bio-remediation i.e. exposure of all the waste to air along with use of composting bio-cultures, i.e. screening of the stabilized waste to recover all valuable resources (like organic fines, bricks, stones, plastics, metals, clothes, rags etc.) followed by its sustainable management through recycling, co-processing, road making etc.
Biosphere	Part of the Earth system comprising all ecosystems and living organisms, in the atmosphere, on land (terrestrial biosphere) or in the oceans (marine biosphere), including derived dead organic matter, such as litter, soil organic matter and oceanic detritus.
Biosphere Reserves	Large areas of biodiversity where flora and fauna are protected, with a view to achieve a balance between conserving biodiversity, encouraging economic and social development and preserving cultural values.

Biota	All animal and plant life of a particular region or time. Biotic (living) factors function with the abiotic (non–living) factors to form a complex unit such as an ecosystem.
Biotic	Relating to or resulting from living organisms
Blue Carbon	Blue carbon is the carbon stored in coastal and marine ecosystems. Coastal ecosystems such as mangroves, tidal marshes and seagrass meadows sequester and store more carbon per unit area than terrestrial forests and are now being recognized for their role in mitigating climate change.
Blue Economy	According to the World Bank, the blue economy is the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem." Blue economy is understood as a subset of the national economy comprising an entire ocean resources system and human-made economic infrastructure in marine, maritime, and onshore coastal zones within the country's legal jurisdiction. It aids the production of goods and services that have clear linkages with economic growth, environmental sustainability, and national security.
Blue Revolution	The Blue Revolution, with its multi-dimensional activities, focuses mainly on increasing fisheries production and productivity from aquaculture and fisheries.
Bore Holes	Deep round hole made by a special tool or machine, especially one that is made in the ground when searching for oil or water.
Boron	Boron, a chemical element, may occur in natural waters through weathering of rocks, soil leaching, or find its way into a watercourse through industrial waste effluents. Many cleaning compounds contains boron. Concentrations in unpolluted waters do not exceed 0.1 mg/L.

BPL Families	BPL or Below Poverty Line is an economic benchmark used by the Government in India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid. It is determined using various parameters which vary from state to state and within states.
Brackish Water	Water with salinity content between that of freshwater and marine water.
Built-up Land	Area of human habitation developed due to non-agricultural use and that has a cover of buildings, transport and communication, utilities in association with water, vegetation and vacant lands.
By-product	A by-product is a secondary product derived from a production process, manufacturing process or chemical reaction; it is not the primary product or service being produced.
C	
Canopy	The cover of branches and foliage formed by the crowns of trees.
Canopy Cover	Percentage of the ground covered by a vertical projection of the outermost perimeter of the natural spread of the foliage of plants.
Canopy Density	Percent area of land covered by the canopy of trees. It is expressed as a decimal coefficient, taking closed canopy as unity.
Captive Facility (waste treatment)	A captive facility is one that is permitted to store, treat and/or dispose hazardous wastes that they generate.
Carbon Capture and Sequestration	Set of technologies that can greatly reduce carbon dioxide emissions from new and existing coal and gas-fired power plants, industrial processes and other stationary sources of carbon dioxide. It is a three−step process that includes capture of carbon dioxide from power plants or industrial sources; transport of the captured and compressed carbon dioxide (usually in pipelines); and underground injection and geologic sequestration, or permanent storage, of that carbon dioxide in rock formations that contain tiny openings or pores that trap and hold the carbon dioxide.

Carbon Cycle	All parts (reservoirs) and fluxes of carbon. The cycle is usually thought of as four main reservoirs of carbon interconnected by pathways of exchange. The reservoirs are the atmosphere, terrestrial biosphere (usually includes freshwater systems), oceans and sediments (includes fossil fuels). The annual movements of carbon, the carbon exchanges between reservoirs, occur because of various chemical, physical, geological and biological processes. The ocean contains the largest pool of carbon near the surface of the Earth, but most of that pool is not involved with rapid exchange with the atmosphere.
Carbon Dioxide	A naturally occurring gas and also a by–product of burning fossil fuels and biomass, as well as land–use changes and other industrial processes. It is the principal human caused greenhouse gas that affects the Earth's radiative balance. It is the reference gas against which other greenhouse gases are measured.
Carbon Dioxide Equivalent (CO2e)	A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as "million metric tons of carbon dioxide equivalents (MMTCO2Eq)." The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP. MMTCO2Eq = (million metric tons of a gas) * (GWP of the gas)
Carbon Dioxide Fertilization	The enhancement of the growth of plants as a result of increased atmospheric CO2 concentration. Depending on their mechanism of photosynthesis, certain types of plants are more sensitive to changes in atmospheric CO_2 concentration.
Carbon Footprint	The total amount of greenhouse gases that are emitted into the atmosphere each year by a person, family, building, organization, or company. A person's carbon footprint includes greenhouse gas emissions from fuel that an individual burn directly, such as by heating a home or riding in a car. It also includes greenhouse gases that come from producing the goods or services that the individual uses, including emissions from power plants

	that make electricity, factories that make products and landfills where trash gets sent.
Carbon Intensity	Carbon intensity is a term often used within the energy sector. It is a measure of carbon dioxide and other greenhouse gases (Carbon Dioxide Equivalent (CO2e)) per unit of activity, like generating a product.
Carbon Pool	Components of an ecosystem that can either accumulate or release carbon.
Carbon Sequestration	The removal and storage of carbon from the atmosphere in carbon sinks (such as oceans, forest or soils) through physical or biological processes, such as photosynthesis.
Carbon Sinks	Natural systems, such as oceans and forests, that absorb more carbon dioxide than they release, helping to reduce greenhouse gases in the atmosphere.
Carbon Storage	The capacity of ecosystems to retain carbon over time, providing climate regulation benefits.
Catastrophic losses	Catastrophic losses are reductions in assets due to catastrophic and exceptional events.
Catchment	Area having a common outlet for its surface run-off.
Census Household	A group of persons who commonly live together and would like to take their meals from a common kitchen unless some exigencies prevent any of them from doing so. These may be one-member households or two-member or multi–member households. For census purposes each of one of these types is regarded as a household.
Census Houses	A building or part of a building having a separate main entrance from the road or common courtyard or staircase etc., used or recognised as a separate unit, it may be inhabited or vacant and may be used for residential or non– residential purposes.
Chlorofluorocarbons (CFCs)	Gases covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere, CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are being replaced by other compounds: hydro–chlorofluorocarbons, an interim replacement for CFCs that are also covered under

	the Montreal Protocol and hydro–fluorocarbons, which are covered under the Kyoto Protocol. All these substances are also greenhouse gases.
Circular Economy	A circular economy keeps materials, products, and services in circulation for as long possible. The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.
Class–I cities	Towns with a population of 1,00,000 or more.
Class–II towns	Towns with population greater than 50,000 but less than 99,999.
Climate	Climate in a narrow sense is usually defined as the "average weather," or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands of years. The classical period is 3 decades, as defined by the World Meteorological Organization (WMO). These quantities are most often surface variables such as temperature, precipitation and wind.
Climate Change	Climate change refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.
Climate Change Adaptation	Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
Climate Change Evidence	Different processes that substantiate the occurrence of changing climate patterns at the global, regional and local levels. The evidence of global warming and climate change is unequivocal, including global temperature rise, extreme events, sea level rise, shrinking ice sheets and glacial retreat.

Climate Change Mitigation	Efforts to reduce or prevent greenhouse gas emissions and may involve using new technologies, incorporating and increasing renewable energies, making older equipment more energy efficient and changing management practices or consumer behaviour. Protecting natural carbon sinks like forests and oceans, or creating new sinks through silviculture or green agriculture, are also elements of mitigation.
Climate Change–related Statistics	According to UNECE, environmental, social and economic data that measure the human causes of climate change, the impacts of climate change on human and natural systems and the efforts by humans to avoid and adapt to these consequences.
Climate Feedback	A process that acts to amplify or reduce direct warming or cooling effects.
Climate Lag	The delay that occurs in climate change as a result of some factor that changes only very slowly. For example, the effects of releasing more carbon dioxide into the atmosphere occur gradually over time because the ocean takes a long time to warm up in response to a change in radiation.
Climate Model	A quantitative way of representing the interactions of the atmosphere, oceans, land surface and ice.
Climate resilience	Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate.
Climate Sensitivity	In Intergovernmental Panel on Climate Change (IPCC) reports, equilibrium climate sensitivity refers to the equilibrium change in global mean surface temperature following a doubling of the atmospheric (equivalent) CO2 concentration. More generally, equilibrium climate sensitivity refers to the equilibrium change in surface air temperature following a unit change in radiative forcing (degrees Celsius, per watts per square meter). One method of evaluating the equilibrium climate sensitivity requires very long simulations with Coupled General Circulation Models (Climate model). The effective climate sensitivity is a related measure that circumvents this requirement. It is evaluated from model output for

	evolving non–equilibrium conditions. It is a measure of the strengths of the feedbacks at a particular time and may vary with forcing history and climate state.
Climate System (or Earth System)	The five physical components (atmosphere, hydrosphere, cryosphere, lithosphere and biosphere) that are responsible for the climate and its variations.
Closing Stock	Closing Stock refers to the quantity available at the end of the accounting period after incorporating any additions and deductions in the stock.
Coastal and Ocean Floor Ecosystems	Ecosystems located at the interface of land and sea, including estuaries, coral reefs, and seabeds, which support diverse marine life.
Coastal Sand	Sands that are accumulated as a strip along the seacoast due to action of seawater. These are classified as wasteland if not being used for any purpose like recreation.
Coastal Wetland	Include estuaries, lagoons, creek, backwater, bay, tidal flat /mudflat, sand /beach, rocky coast, mangrove, salt marsh /marsh vegetation and other hydrophytic vegetation and saltpans.
Coastline	The line that separates land from the ocean or a lake. The coastline is a proxy for the shoreline's position, and is used to assess erosion and accretion trends.
Co-Benefit	The benefits of policies that are implemented for various reasons at the same time including climate change mitigation acknowledging that most policies designed to address greenhouse gas mitigation also have other, often at least equally important, rationales (e.g., related to objectives of development, sustainability and equity).
Coliform	Group of bacteria (most common being the Escherichia coli or E. coli which can grow at elevated temperatures) found in the intestinal tract (therefore in the faeces) of humans and other animals. These rod–shaped microorganisms aid in digestion and are largely harmless. If ingested through contaminated food or water, however, they may cause bacterial or viral gastroenteritis, Hepatitis A, typhoid fever and associated problems. Total coliform includes Faecal Coliform bacteria as well as other types of Coliform bacteria that are naturally found

	in the soil.
Combustion	Combustion is the controlled burning of substances in an enclosed area, as a means of treating and disposing of waste.
Community / Biological Community	All the creatures living in a specific locality. This notion is now used to denote the creatures living in a specific type of locality or habitat. The word community is often used synonymous to 'habitat'.
Concentration	Amount of a chemical in a particular volume or weight of air, water, soil or other medium.
Conductivity	Measure of water's capability to pass electrical flow. This ability is directly related to the concentration of ions in the water. These conductive ions come from dissolved salts and inorganic materials such as alkalis, chlorides, sulphides and carbonate compounds.
Conference of the Parties (COP)	The COP is the supreme decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC). All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements. Its first session was held in Berlin, Germany, in 1995 and it meets on a yearly basis. The COP's role is to promote and review the implementation of the Convention. It periodically reviews existing commitments in light of the Convention's objective, new scientific findings and the effectiveness of national climate change programs.
Conservation Reserves and Community Reserves	Conservation Reserves and Community Reserves denote those protected areas of India which typically act as buffer zones or connectors and migration corridors between established national parks, wildlife sanctuaries and reserved and protected forests of India. Such areas are designated as conservation areas if they are uninhabited and completely owned by the Government of India but used for subsistence by communities and community areas if part of the lands is privately owned.

Consumerism	Consumerism is a socio-economic phenomenon centered around the widespread and often excessive acquisition of goods and services. In consumerist societies, individuals prioritize material consumption as a means of expressing identity and pursuing well-being. This behavior is heavily influenced by advertising and marketing strategies that promote constant consumption, driving a cycle of production, acquisition and consumption. Critics argue that this pattern contributes to environmental degradation and social inequality while potentially diminishing overall life satisfaction.
Contiguous Space	A term referring to areas that are connected or adjacent to one another, often used in habitat and ecosystem discussions.
Continental Shelf	The part of the sea floor that adjoins a landmass; over the continental shelf, the water is less than 200m deep. The outer margin of the continental shelf is marked by the continental slope which runs down to the abyssal region.
Cooling Pond	An artificial lake used for the natural cooling of condenser- cooling water serving a conventional power station.
Coral	A hard limestone structure (fan, ball, brain, whip, antler, table, tupe, cup -shaped) built by many flowerlike organisms that have very thin skins but are often beautifully coloured.
Coral Bleaching	The process in which a coral colony, under environmental stress, expels the microscopic algae (zooxanthellae) that live in symbiosis with their host organisms (polyps). The affected coral colony appears whitened.
Coralline Algae	Red algae of the order Corallinales with calcium deposits in their shell walls. Calcareous, stony or coral like algae, typically appearing pink. The encrusting forms are called pink paint and the turfing forms pink turf. Coralline algae are important reef builders in temperate to tropical seas.

Coral Reefs	Consolidated living colonies of microscopic organisms found in warm tropical waters. The term coral reef or organic reef is applied to the rock–like reefs built–up of living things, principally corals. They consist of accumulations of calcareous deposits of corals and coralline algae with the intervening space connected with sand, which consists largely of shells of foraminifera. Present reefs are living associations growing on this accumulation of past.
Cost Accounting Method	A method of noting and analysing all the costs involved in performing any process, project or in the production of a specific product.
Creek	A notable physiographic feature of salt marshes, especially low marshes, these creeks develop, like rivers, into definite channels.
Critical or Critically Endangered	A taxon is critical when it is facing an extremely high probability of extinction in the wild in immediate future.
Crop-Cutting Experiments	Crop Cutting Experiments or CCE, refer to an assessment method employed by governments and agricultural bodies to accurately estimate the yield of a crop or region during a given cultivation cycle.
Cropland	These are the areas with standing crop as on the date of satellite overpass.
Cropping Intensity	It is the ratio of Net Area Sown to the Total Cropped Area or Gross Area Sown.
Crops	Plants or agricultural produce grown for food or other economic purposes, such as for textiles or livestock fodder
Crown Area	It is the area of horizontal projection of a tree crown on the ground.
Crown Cover	The canopy formed by the crowns of all the trees in a forest or in an uneven aged forest by the crowns of all trees in a specified crowns class.
Cryosphere	One of the interrelated components of the Earth's system, the cryosphere is frozen water in the form of snow, permanently frozen ground (permafrost), floating ice and glaciers. Fluctuations in the volume of the cryosphere cause changes in ocean sea level, which directly impact

	the atmosphere and biosphere.
Cultivable Waste	Land available for cultivation but not taken for cultivation or abandoned after a few years for one reason or the other. Such lands may be either fallow or covered with shrubs and jungles not put to any use. These may be assessed or unassessed and may lie in isolated blocks or within cultivated during the year and the last five or more consecutive years in succession, will be included in this category.
Cultivated Biological Resources	Animal and tree, crop and plant resources yielding repeat products whose natural growth and regeneration are under the direct control, responsibility and management of an institutional unit.
Cultural Services	The non-material benefits people obtain from ecosystems are called cultural services. They include aesthetic inspiration, cultural identity, sense of home, and spiritual experience related to the natural environment. Typically, opportunities for tourism and for recreation are also considered within the group.
Culturable Command Area (CCA)	The area which can be irrigated from a scheme and is fit for cultivation.
Culturable Waste Land	Lands available for cultivation, which are either not taken up for cultivation or taken up for cultivation once but not cultivated during the current year and the last five years or more in succession for one reason or other. Such lands may be either fallow or covered with shrubs and jungles, which are not put to any use. They may lie in isolated blocks or within cultivated holdings. Land once cultivated but not cultivated for five years in succession are included in this category at the end of the five years.
Current Fallow	Cultivable area kept fallow during the current agricultural year. Any seedling area in the current agricultural year not cropped in the same year is also treated as current fallow.
Current Shifting Cultivation	This describes the growing of crops for a few years on selected and clear plots, alternating with a lengthy period of vegetative fallow when the soil is rested. The land is cultivated for less than 33 percent of the time.
D	

Dams	Artificial barrier which impounds or diverts water. A dam is generally considered hydrologically significant if it is either (i) One and one quarter feet (0.4 meters) or more in height from the natural bed of the stream and has a storage of at least 15 acre-feet; or (ii) has an impounding capacity of 50 acre-feet or more and is at least six feet (2 meters) above the natural bed of the stream.
Dead Organic Matter (DOM)	Component of carbon pool that contains all non-living woody biomass and can be divided into wood (fallen trees, roots and stumps with diameter over 10cm) and litter (greater than 2mm and less than 10cm diameter) components.
Deciduous	These are the forest types that are predominantly composed of species, which shed their leaves once a year, especially during summer. It also includes tree clad area with tree cover lying outside the notified forest boundary areas that are herbaceous with a woody appearance.
Decoupling economic growth	The term decoupling refers to breaking the link between "environmental bads" and "economic goods." Decoupling occurs when the growth rate of an environmental pressure is less than that of its economic driving force (e.g. GDP) over a given period. Decoupling can be either absolute or relative. Absolute decoupling is said to occur when the environmentally relevant variable is stable or decreasing while the economic driving force is growing. Decoupling is said to be relative when the growth rate of the environmentally relevant variable is positive, but less than the growth rate of the economic variable.
Deforestation	Practices or processes that result in the conversion of forested lands for non–forest uses. The term specifically excludes areas where the trees have been removed as a result of harvesting or logging and where the forest is expected to regenerate naturally or with the aid of silvicultural measures.
Degradation due to anthropogenic factors (G)	Decreased biological productivity, diversity and resilience of the land due to human economic activities like mining, brick kiln activities, industries etc.

Degradation due to anthropogenic factors (G) - Industrial effluent affected areas (G1)	Areas where the human activity is observed in the form of industry along with other supporting establishments of maintenance. This includes areas with heavy metallurgical industry, thermal, cement, leather, petrochemical, engineering plants etc., and lands which have been deteriorated due to large scale industrial effluent discharge.
Degradation due to anthropogenic factors (G) - Mining and dump areas (G2)	Areas subjected to removal of different earth material (both surface and sub-surface) by manual and mechanized operations. It includes surface rocks and stone quarries, sand and gravel pits, mine dumps, etc.
Degradation due to anthropogenic factors (G) - Brick kiln areas (G3)	Areas that are degraded including brick kiln per se and area dug for making bricks.
Degraded Land under Plantation Crop	Degraded lands that have been brought under plantation crops after reclamation, and are located outside the notified forest areas.
Degraded Pastures/Grazing Land	Lands in non-forest areas that are either under permanent pastures or meadows, which have degraded due to lack of proper soil and water conservation and drainage development measures.
Detritus	Debris of any kind, produced by erosion, decay, rubbish, waste. Organic debris from decomposing plants and animals. In the ocean, dead (and alive) plankton organisms rain down to the sea bottom to make up the detritus found there.
Dense Forest	Forests whose crown density is 40 percent or above.
Depletion	In physical terms, it is the decrease in the quantity of the stock of a natural resource over an accounting period that is due to the extraction of the natural resource by economic units occurring at a level greater than that of regeneration.
Derelict Water	Water which is abundant or unused. Such water may be useful in aquaculture practices after treatment and settlement. Usually, the stagnant waters of fresh water ponds and lakes which are in habituated with weeds come under this category.
	Sandy areas confined to arid environment where the rainfall is scanty. These lands are characterized by

Desertic Sand	accumulation of sand in the form of varying size of sand dunes and height that have developed as a result of transportation of soil through winds. There are two categories of desert sands based on their vertical approximate heights - Semi- stabilized to stabilized dunes with >40 m height; and Semi-stabilized to stabilized moderately high dunes with heights ranging between 15 and 40 m.
Desertification	Land degradation in arid, semi–arid and dry sub–humid areas resulting from various factors, including climatic variations and human activities.
Diatoms	Single-celled, hard-shelled algae with a carapace of silica. Most diatoms in the ocean are a component of the plankton, and they are among the most important producers of oxygen in the ocean. They are also an important nutrient base for higher organisms. Diatoms also occur in freshwater and on the sea floor.
Disasters	Unforeseen and often sudden events that cause great damage, destruction and human suffering. They often exceed local response capacities and require external assistance at the national or international level. Depending on their cause, disasters can be both natural and technological.
Discharge	The quantity of water flowing across a section of a channel in a unit time is called the discharge. Common units are cubic feet per second (cfs), second-day feet (sdf), and cubic meter per second (cumecs). Two types of discharges are often measured and recorded: i. instantaneous discharge - the discharge at a particular instant of time; and ii. mean discharge- the arithmetic mean of individual discharges during a period of time.
Dissipative Losses	Material residues that are an indirect result of production and consumption activity.
Dissipative uses of Products	Products that are deliberately released to the environment as part of production processes.

DO or Dissolved Oxygen	Amount of oxygen dissolved (and hence available to sustain marine life) in a body of water such as a lake, river, or stream. DO is the most important indicator of the health of a water body and its capacity to support a balanced aquatic ecosystem of plants and animals. Wastewater containing organic (oxygen-consuming) pollutants depletes the dissolved oxygen and may lead to the death of marine organisms.
Domestic extraction	Domestic extraction (DE), is the input from the natural environment to be used in the economy. DE is the annual amount of raw material (except for water and air) extracted from the natural environment.
Drainage Area	The land area where precipitation falls off into creeks, streams, rivers, lakes, and reservoirs. Also known as watershed, catchment area and drainage basin.
Driving Force–Pressure–State–Impact–Response (DPSIR) framework	An analytical framework that is based on the causal relationship between its D–P–S–I–R components. Driving forces are the socio–economic and socio–cultural forces driving human activities, which increase or mitigate pressures on the environment. Pressures are the stresses that human activities place on the environment. State, or state of the environment, is the condition of the environment. Impacts are the effects of environmental degradation. Responses refer to the responses by society to the environmental situation.
Dryland Farming	A technique that uses soil moisture conservation and seed selection to optimize production under dry conditions.
E	
E-Waste	'E-waste' means electrical and electronic equipment, including solar photo-voltaic modules or panels or cells, whole or in part discarded as waste, as well as rejects from manufacturing, refurbishment and repair processes.
Eccentricity	Extent to which the Earth's orbit around the Sun departs from a perfect circle.

Economic Territory	Area under the effective control of a single government. It includes the land area of a country, including islands, airspace, territorial waters and territorial enclaves in the rest of the world. Economic territory excludes territorial enclaves of other countries and international organizations located in the reference country.
Ecology	The branch of science dealing with the relationships of organisms to one another and to their physical surroundings. The study of the relationships of animals and plants to their animate and inanimate surroundings.
Economic Activity	Activity for profit or for a living. Economic activity relating to the sea has very many aspects: freight, transport, ferrying, charter boating, boat repair, fishing, marine farming, living, building, sightseeing, ecotourism, diving and so on.
Ecosystem	A dynamic complex of plant, animal and microorganism communities and their non–living environment interacting as a functional unit.
Ecosystem Accounting	Ecosystem accounting is a coherent framework for integrating measures of ecosystems and the flows of services from them with measures of economic and other human activity. Ecosystem accounting complements, and builds on, the accounting for environmental assets as described in the System of Environmental-Economic Accounting (SEEA) Central Framework (e.g. water resources, soil resources). In ecosystem accounting as described in the SEEA Ecosystem Accounting (SEEA EA), the accounting approach recognises that these individual resources function in combination within a broader system and within a given spatial area.
Ecosystem Assets	Spatial areas comprising a combination of biotic and abiotic components and other elements which function together. Some examples are forests and wetlands.
Ecosystem Condition	Overall quality of an ecosystem asset in terms of its characteristics. Measures of ecosystem condition are generally combined with measures of ecosystem extent to provide an overall measure of the state of an ecosystem asset.

Ecosystem Condition Account	This account organizes biophysical information on the condition of different ecosystem types. The ecosystem condition account organizes data on selected ecosystem characteristics and the distance to a reference condition to provide insight into the ecological integrity of ecosystems.
Ecosystem Extent	Size of an ecosystem asset, commonly in terms of spatial area.
Ecosystem Extent Account	This account serves as a common starting point for ecosystem accounting. It organizes information on the extent of different ecosystem types (e.g. forests, wetlands, agricultural areas, marine areas) within a country in terms of area.
Ecosystem Services	Benefits supplied by the functions of ecosystems and received by humanity.
Ecosystem Services Flow Account (physical and monetary terms)	This set of ecosystem accounts measures the supply of ecosystem services and the use of those services by economic units, including households, enterprises and government.
Electrical Conductance/Conductivity (EC)	Electrical Conductance (Conductivity) of water is its ability to conduct an electric current. Salts or other chemicals that dissolve in water can break down into positively and negatively charged ions. These free ions in the water conduct electricity, so the water electrical conductivity depends on the concentration of ions. Salinity and Total Dissolved Solids (TDS) are used to calculate the EC of water, which helps to indicate the water's purity. The purer the water the lower the conductivity.
Emissions	Substances released to the environment by establishments and households as a result of production, consumption and accumulation processes. Emissions to air are those released to atmosphere, while those to water are released to water resources.
Emissions Factor	A unique value for scaling emissions to activity data in terms of a standard rate of emissions per unit of activity (e.g., grams of carbon dioxide emitted per barrel of fossil fuel consumed, or per pound of product produced)

Endangered Species	Species in danger of extinction and whose survival is unlikely if the causal factors continue operating. Included are species whose numbers have been reduced to a critical level or whose habitats have been so drastically reduced that they are deemed to be in immediate danger of extinction.
Endemic Species	Refers to a species that is native to where it is found.
Energy Efficiency	Using less energy to provide the same service.
Energy from natural inputs	Energy from natural inputs denotes physical flows from the environment to the economy that are derived principally from stocks of timber and mineral and energy resources.
Energy Intensity	Energy intensity is a measure of the energy inefficiency of an economy. Energy intensity is defined as the amount of energy used to produce a given level of output or activity. Using less energy to produce a product or provide a service results in reduced energy intensity. It is calculated as units of energy per unit of GDP.
Energy losses	Energy losses include energy losses during extraction, distribution, storage and transformation.
Energy products	Energy products refer to products exclusively or mainly used as a source of energy that has a positive monetary value. Such products include energy suitable for direct use (e.g., electricity and heat) and energy products that release energy while undergoing some chemical or other process (including combustion). By convention, energy products also include peat, biomass and waste when and only when they are used for energy purposes.
Energy Production	Capture, extraction or manufacture of fuels or other energy products in forms that are ready for general consumption.
Energy residuals	Energy residuals are flows of energy from the economy to the environment and comprise energy losses as well as other energy residuals (primarily dissipative heat generated through end use of energy products for energy-related purposes, for example, fuel combustion and electricity-powered operation of an appliance).

Enhanced Greenhouse Effect	The concept that the natural greenhouse effect has been enhanced by increased atmospheric concentrations of greenhouse gases (such as CO2 and methane) emitted as a result of human activities. These added greenhouse gases cause the earth to warm.
Enteric Fermentation	Livestock, especially cattle, produce methane as part of their digestion. This process is called enteric fermentation and it represents one-third of the emissions from the agriculture sector.
Environment Statistics	Environmental data that have been structured, synthesized and aggregated according to statistical methods, standards and procedures. The scope of environment statistics covers biophysical aspects of the environment and those aspects of the socio–economic system that directly influence and interact with the environment.
Environmental Awareness	The gradual understanding of environmental issues and the recognition of the connections among human actions, development, sustainability and human responsibility in these processes. Environmental awareness involves the realization that humans and ecosystems co–exist in a shared environment, which is ultimately the biosphere. Awareness fosters pro–environmental attitudes and predispositions for action and changed behavior.
Environmental Data	Largeamounts of unprocessed observations and measurements about the environment and related processes.
Environmental Education	The process of sharing and constructing environmental information and knowledge, as well as information on how humans interact with the environment. Environmental education may be curriculum– and classroom–based or experiential and may be provided on–site or in community settings by government agencies or NGOs.

Environmental Engagement	The transformation of perceptions and attitudes into concrete, pro–environmental actions. Individual and social participation and engagement in environmental processes intended to improve and protect the local and global environment are a concrete manifestation of understanding, motivation and commitment to protecting and improving the environment, expressed through behaviour.
Environmental Goods and Services Sector (EGSS)	A heterogeneous set of producers of technologies, goods and services that: (i) measure, control, restore, prevent, treat, minimise, research and sensitize environmental damages to air, water and soil as well as problems related to waste, noise, biodiversity and landscapes. This includes "cleaner" technologies, goods and services that prevent or minimise pollution; and (ii) measure, control, restore, prevent, minimise, research and sensitise resource depletion. This results mainly in resource–efficient technologies, goods and services that minimise the use of natural resources.
Environmental Indicators	Environment statistics that have been selected for their ability to depict important phenomena or dynamics. Environmental indicators are used to synthesize and present complex environment and other statistics in a simple, direct, clear and relevant way.
Environmental Indices	Composite or more complex measures that combine and synthesize more than one environmental indicator or statistic and are weighted according to different methods.
Environmental Information	Quantitative and qualitative facts describing the state of the environment and its changes as described in the different components of the FDES.
Environmental Perception	Individuals' and groups' notions of, attitudes towards and evaluations of the environment, both as a whole or with respect to specific environmental issues. Individuals and communities make decisions and judgments and take actions based on subjective perceptions of environmental information and experiences. Values and attitudes thus "filter" information and transform it into perception in a

	culturally specific manner.
Environmental Protection Activities	Those activities whose primary purpose is the prevention, reduction and elimination of pollution and other forms of degradation of the environment. These activities include the protection of ambient air and climate, wastewater management, waste management, protection and remediation of soil, groundwater and surface water, noise and vibration abatement, protection of biodiversity and landscapes, protection against radiation, research and development for environmental protection and other environmental protection activities.
Environmental Regulation and Instruments	Policy responses to regulate and establish acceptable limits for protecting the environment and human health.
Environmental Resources	Naturally occurring living and non–living components of the Earth, together constituting the biophysical environment, which may provide benefits to humanity. Environmental resources include natural resources (such as sub–soil resources (mineral and energy), soil resources, biological resources and water resources) and land. They may be naturally renewable (e.g., fish, timber or water) or non–renewable (e.g., minerals).
Environmental-Economic Accounting	Environmental-economic accounts are integrated statistics that illuminate the relationship between the environment and the economy, both the impacts of the economy on the environment and the contribution of the environment to the economy. Environmental-economic accounts can provide information about the extraction of natural resources, their use within the economy, natural resource stock levels, the changes in those stocks during a specific period and economic activity related to the environment. Environmental-economic accounts present this information in physical and monetary terms, as appropriate.

Environmental Equity	The extent to which all groups of people in a region or country (regardless of race, ethnicity, economic status, or income) receive equal treatment and protection under environmental statues, regulations, and practices. Unlike environmental racism, equity also considers the disproportionate burden of risk that any group of people (defined by gender, age, income, or race) is exposed to. Also known as environmental justice.
Estuaries	An estuary is a partially enclosed, coastal water body where freshwater from rivers and streams mixes with salt water from the ocean.
Eutrophication	Eutrophication is characterized by excessive plant and algal growth due to the increased availability of one or more limiting growth factors needed for photosynthesis (Schindler 2006), such as sunlight, carbon dioxide, and nutrient fertilizers. Eutrophication occurs naturally over centuries as lakes age and are filled in with sediments.
Evapotranspiration	Combined process of evaporation from the Earth's surface and transpiration from vegetation.
Evergreen/Semi-Evergreen	This category comprises of tall trees, which predominantly remain green throughout the year. It includes both coniferous and tropical broad-leaved evergreen species. Semi- evergreen is a forest type that includes a combination of evergreen and deciduous species with the former dominating the canopy cover.
Ex-situ Conservation	Ex-situ conservation is the relocation of endangered or rare species from their natural habitats to protected areas equipped for their protection and preservation.
Exclusive Economic Zone (EEZ)	An Exclusive Economic Zone (EEZ) is a concept adopted at the Third United Nations Conference on the Law of the Sea (1982), whereby a coastal State assumes jurisdiction over the exploration and exploitation of marine resources in its adjacent section of the continental shelf, taken to be a band extending 200 miles from the shore.

Extended Producers Responsibility (EPR)	Extended Producer Responsibility (EPR) is defined as an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle. An EPR policy is characterised by: 1. the shifting of responsibility (physically and/or economically; fully or partially) upstream toward the producer and away from municipalities; and 2. the provision of incentives to producers to take into account environmental considerations when designing their products. While other policy instruments tend to target a single point in the chain, EPR seeks to integrate signals related to the environmental characteristics of products and production processes throughout the product chain.
Extinct Species	Species that are no longer known to exist in the wild after repeated searches of the type in localities and other known or likely places.
Extraction	Extractions are reductions in stock due to the physical removal or harvest of an environmental asset through a process of production.
Extreme Events	Events that are rare within their statistical reference distribution at a particular location. An extreme event is normally as rare as or rarer than the 10th or 90th percentile.
F	
Fallow (Cover)	Lands which are taken up for cultivation but are temporarily allowed to rest, un-cropped for one or more season, but not less than one year.
Fallow Land other than Current Fallow	Includes all lands, which were taken up for cultivation but are temporarily out of cultivation for a period of not less than one year and not more than five years.
Fauna	The animal life of a particular region or time
Feasibility Mineral Resource (UNFC classification code: 211)	Part of measured mineral resource, which after feasibility study has been found to be economically not mineable. Possibly economically viable subject to changes in technological, economic, environmental and/or other relevant conditions.

Flared (Natural Gas)	Excess gas combusted during the production of natural gas from oil and natural gas wells. Natural gas consists primarily of methane, but also contains other gases and some Volatile Organic Compounds (VOCs). VOCs can combine with Nitrogen Oxides (NOx) under the right weather conditions to form ozone. For various operational, safety and environmental reasons, methane and VOCs, are combusted or flared.
Flood Irrigation	One of the oldest methods of irrigating fields also known as surface or furrow irrigation, where farmers flow water down small trenches running through their crops.
Flood Plain	Flat area adjacent to rivers that is periodically flooded.
Flora	The plant life of a particular region or time
Fluorides	Fluorides appear in unpolluted natural water as the result of the interaction of the water with fluorine containing minerals. Natural surface water contains fluorides in amounts which usually do not exceed 1 mg/L. Fluorides may also be contributed to surface waters through industrial wastes, such as, from glass industry and some ore enriching plants.
Fluorinated Gases	Powerful synthetic greenhouse gases such as hydro–fluorocarbons, perfluorocarbons and sulphur hexafluoride that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone–depleting substances (e.g., chlorofluorocarbons, hydro–chlorofluorocarbons and halons) and are often used in coolants, foaming agents, fire extinguishers, solvents, pesticides and aerosol propellants.
Fluorocarbons	Carbon–fluorine compounds that often contain other elements such as hydrogen, chlorine, or bromine. Common fluorocarbons include chlorofluorocarbons (CFCs), hydro–chlorofluorocarbons (HCFCs), hydro–fluorocarbons (HFCs) and perfluorocarbons (PFCs).
Flush system Latrine	The type of latrine which is connected to underground sewerage system, from which human excreta and wastes are flushed out by water.

Foraging Grounds	It is a specific location or area, where animals, including birds, search for food resources.
Forcing Mechanism	A process that alters the energy balance of the climate system, i.e. changes the relative balance between incoming solar radiation and outgoing infrared radiation from Earth. Such mechanisms include changes in solar irradiance, volcanic eruptions and enhancement of the natural greenhouse effect by emissions of greenhouse gases.
Forest	Includes all actually forested area on the lands so classed or administered as forests under any legal enactment dealing with forests, whether state-owned or private. It does not include land that is predominantly under agricultural or urban land use.
Forest Area	Area recorded as a forest in the Government records. It is also referred to as 'recorded forest area'.
Forest Cover	Forest Cover refers to all lands more than one hectare in area, with a tree canopy density of more than 10 percent irrespective of ownership and legal status. Such lands may not necessarily be a recorded forest area. It also includes orchards, bamboo and palm.
Forest Inventory	The measurement of certain parameters of forests to assess the growing stand and stock and other characteristics of forests.
Forest Plantation	These are the areas of tree species of forestry importance, raised and managed especially in notified forest areas. The species mainly constitute teak, sal, eucalyptus, casuarinas, bamboo etc.
Fossil Fuel	A general term for organic materials formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years.
Freshwater	Naturally occurring water having a low concentration of salt.

Frost Heaving	Process in glacial and periglacial environment where intense frost action and freezing of water evolves peculiar forms of rock, regolith and soil. The water crystallizes to ice below the surface horizon leading to micro-relief variations on the surface. This process affects the germination and root growth of several crops there by limiting the productivity of land.
Frost Shattering	A type of land degradation/desertification typically seen in cold mountainous arid areas. In this, water enters cracks in rocks during the day and during the cold night it freezes. This exerts pressure on the rocks causing the cracks to widen and shattering the rocks into pieces. Frost shattering is a common occurrence in the mountainous regions of Uttarakhand, Jammu and Kashmir, Arunachal Pradesh and Himachal Pradesh.
Fuel Switching	Substituting one type of fuel for another. In the climate–change discussion, it is implicit that the substituted fuel produces lower carbon emissions per unit energy produced than the original fuel, e.g., natural gas for coal.
G	
General Circulation Model (GCM)	A global, three–dimensional computer model of the climate system which can be used to simulate human–induced climate change. GCMs represent the effects of such factors as reflective and absorptive properties of atmospheric water vapour, greenhouse gas concentrations, clouds, annual and daily solar heating, ocean temperatures and ice boundaries.
Genetic Resources	Genetic material of plants, animals or microorganisms containing functional units of heredity that are of actual or potential value as a resource for future generations of humanity.
Geographic Coordinate System (GCS)	A geographic coordinate system uses a three-dimensional spherical surface to define locations on earth. Any location on Earth can be referenced by a point with longitude and latitude coordinates.

Geographic Information System (GIS)	An integrating technology that helps to capture, manage, analyse, visualize and model a wide range of data with a spatial or locational component.
Geological Formation	Formed rock types/ sedimentary layers under the surface of the earth.
Geological Map	Maps representing the distribution of different types of rock and surficial deposits, as well as locations of geologic structures such as faults and folds.
Geomorphological Map	Maps depicting the features of the Earth´s physical surface.
Geospatial Information	The location and characteristics of different attributes of the atmosphere, surface and sub–surface. It is used to describe, display and analyse data with discernible spatial aspects, such as land use, water resources and natural disasters. Geospatial information allows for the visual display of different statistics in a map–based layout, which can make it easier for users to work with and understand the data.
Geosphere	The soils, sediments and rock layers of the Earth's crust, both continental and beneath the ocean floors.
Glacial Degradation	Degradation attributable to perpetual snow-covered areas. The types of degradation included are frost heaving and frost shattering.
Glacier	A multi–year surplus accumulation of snowfall in excess of snowmelt on land and resulting in a mass of ice at least 0.1 km2 in area that shows some evidence of movement in response to gravity. A glacier may terminate on land or in water.
Glaciology	Glaciology is the study of ice in the environment. Important components are seasonal snow, sea ice, glaciers, ice sheets and frozen ground. Ice in all its forms plays a prominent role in climate and environmental change.
Global Average Temperature	An estimate of Earth’s mean surface air temperature averaged over the entire planet.
Global Warming	The recent and ongoing phenomenon of global average increase in temperature near the Earth’s surface.

Global Warming Potential	Measure of the total energy that a gas absorbs over a particular period of time (usually 100 years), compared to carbon dioxide.
Government Environmental Protection and Resource Management Expenditure	Includes government expenditure whose primary aim is to protect the environment and manage its resources.
Grass / Grazing land	These are the areas of natural grass along with other vegetation, predominantly grass-like plants and non-grass-like herbs. It includes natural /semi-natural grass/grazing lands and manmade grasslands.
Green Wash	The extent of wooded areas generally shown in light green colour on the Survey of India (SOI) toposheets.
Greenhouse Effect	Trapping and build–up of heat in the atmosphere (troposphere) near the Earth's surface. Some of the heat flowing back toward space from the Earth's surface is absorbed by water vapour, carbon dioxide, ozone and several other gases in the atmosphere and then reradiated back toward the Earth's surface. If the atmospheric concentrations of these greenhouse gases rise, the average temperature of the lower atmosphere will gradually increase.
Greenhouse Gas (GHG)	Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydro–chlorofluorocarbons, hydro–fluorocarbons, perfluorocarbons, sulphur hexafluoride.
Green Building	Green or sustainable building defines constructing healthier, more energy efficient and eco-friendly buildings. A Green Building uses less energy, water and natural resources, creates less waste and is healthier for the people living inside compared to a standard building.
Green Energy	Green energy is the energy that can be produced using a method, and from a source, that causes no harm to the natural environment.
Green Farming	Also known as Organic Agriculture, Green Framing is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasises the use of management practices in

	preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible,
	agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific function within the system.
Green Growth	Green growth is economic progress that fosters environmentally sustainable low-carbon and socially inclusive development.
Green Jobs	Green jobs are decent jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency.
Green Mobility	The term green mobility refers to the use of transportation methods to achieve environmentally friendly and efficient mobility. The green mobility promotes walking and cycling in the cities. It encourages transportation modes which are not dependent on fossil fuel for its operation.
Gross Area Irrigated	An irrigated plot growing crop in more than one season, is counted as many times as it is cropped to arrive at gross area irrigated. In case of mixed crops, the area under component crops as reported by household is considered.
Gross Area Sown	This represents the total area sown once and/or more than once in a particular year, i.e. the area is counted as many times as there are sowings in a year. This total area is also known as total cropped area or total area sown.
Grossly Polluting Industries	As defined by Central Pollution Control Board (CPCB), MOEF&CC, industries discharging effluents into a water course and (a) Handling hazardous substances, or (b) Effluent having BOD Load of 100 Kg per day or more, or (c) A combination of (a) and (b).

Groundwater	Water that collects in porous layers of underground formations known as aquifers, that supplies wells and springs. The upper surface of the zone of saturation, where all openings in rocks and soil are filled, forms the water table.
Groundwater Recharge	The amount of water added from outside – either naturally or through artificial recharge - to the zone of saturation of an aquifer during a given period of time.
Growing Stock	The sum (by number or volume) of all the trees growing/living in the forest or a specified part of it.
Gullied / Ravinous Land	Gullies are formed as a result of localized surface run-off affecting the unconsolidated material resulting in the formation of perceptible channels causing undulating terrain. They are mostly associated with stream courses, sloping grounds with good rainfall regions and foothill regions. These are the first stage of excessive land dissection followed by their networking which leads to the development of ravinous land. Ravines are basically extensive systems of gullies developed along river courses.
H	
Habitat	Site or environment where a plant or animal lives, such as forest.
Habitat Fragmentation	Process during which larger areas of habitat are broken into a number of patches of smaller area, isolated from each other by a matrix of habitats unlike the original habitat.
Halocarbons	Compounds containing either chlorine, bromine or fluorine and carbon. Such compounds can act as powerful greenhouse gases in the atmosphere. The chlorine and bromine containing halocarbons are also involved in the depletion of the ozone layer.
Halophyte	A plant adapted to living in salty soil, as along the seashore.
Hazardous Waste	Any waste which by reason of characteristics such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger or is likely to cause danger to health or environment, whether alone or in contact with other wastes or substances.

Heat Stress	The physiological strain experienced by marine organisms due to elevated water temperatures, affecting their health and behavior.
Heat Waves	A prolonged period of excessive heat, often combined with excessive humidity.
Hermatypic Corals	Those corals which build reefs by depositing hard calcareous material for their skeletons, forming the stony framework of the reef. Corals that do not contribute to coral reef development are referred to as ahermatypic (non-reef-building) species.
High Altitude Lakes	Lakes occurring in the Himalayan region. All lakes above the contour line of 3000 m above mean sea level have been classified as high-altitude lakes.
Hotspots (Biodiversity)	A biodiversity hotspot region must follow two criteria: i. It must have at least 1,500 vascular plants as endemics — which is to say, it must have a high percentage of plant life found nowhere else on the planet. A hotspot, in other words, is irreplaceable. ii. It must have 30% or less of its original natural vegetation. In other words, it must be threatened.
Household	A household is a group of persons who commonly live together and would take their meal from common kitchen unless the exigencies of work prevented any of them from doing so. There may be a household of persons related by blood or a household of unrelated persons or having a mix of both. Examples of unrelated households are boarding houses, messes, hostels, residential hotels, rescue homes, jails, ashrams, etc. These are called "Institutional Households".
Human Settlements	Refer to the totality of the human community, whether people live in large cities, towns or villages. They encompass the human population that resides in a settlement, the physical elements (e.g., shelter and infrastructure), services (e.g., water, sanitation, waste removal, energy and transport) and the exposure of humans to potentially deleterious environmental conditions.
Hydrocarbons	Substances containing only hydrogen and carbon. Fossil fuels are made up of hydrocarbons.

Hydro–chlorofluorocarbons (HCFCs)	Compounds containing hydrogen, fluorine, chlorine and carbon atoms. Although ozone depleting substances, they are less potent at destroying stratospheric ozone than chlorofluorocarbons (CFCs). They have been introduced as temporary replacements for CFCs and are also greenhouse gases.
Hydro–fluorocarbons (HFCs)	Compounds containing only hydrogen, fluorine and carbon atoms. They were introduced as alternatives to ozone depleting substances in serving many industrial, commercial and personal needs. HFCs are emitted as by–products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are powerful greenhouse gases with global warming potentials.
Hydrologic Cycle	The process of evaporation, vertical and horizontal transport of vapour, condensation, precipitation and the flow of water from continents to oceans. It is a major factor in determining climate through its influence on surface vegetation, the clouds, snow and ice and soil moisture. The hydrologic cycle is responsible for 25 to 30 percent of the mid–latitudes' heat transport from the equatorial to Polar Regions.
Hydropower Generation	Water used in generating electricity at plants where the turbine generators are driven by falling water
Hydrosphere	The component of the climate system comprising liquid surface and subterranean water, such as: oceans, seas, rivers, fresh water lakes, underground water etc.
I	
Improved Drinking Water Source	Includes the use of – piped water into dwelling, plot or yard; public tap or standpipe; borehole or tube well; protected dug well; protected spring; rainwater collection and bottled water (if a secondary available source is also improved).
Improved Sanitation Facility	Defined as one that hygienically separates human excreta from human contact. Improved facilities include flush/ pour flush toilets connected to a sewer, septic tank, or pit, ventilated improved pit latrines, pit latrines with slab and composting toilets.

In-situ Conservation	The process of protecting an endangered plant or animal species in its natural habitat is commonly known as in-situ conservation. In situ conservation is the on- site conservation of genetic resources in natural populations of plants or animal species such as forest genetic resources, in natural populations of tree and animal species.
Incinerable (Waste)	Waste which can be incinerated without causing pollution to the environment or damage to the incineration plant.
Incineration	Incineration is a method of waste disposal that involves the combustion of waste.
Indicated Mineral Resource (UNFC classification code: 332)	Mineral resources where the tonnage, densities, shape, physical characteristic, grade and mineral content can be estimated with reasonable level of confidence based on exploration, sampling and testing information, location of borehole, pits etc.
Indirect Emissions	Indirect emissions from a building, home or business are those emissions of greenhouse gases that occur as a result of the generation of electricity used in that building. These emissions are called 'indirect' because the actual emissions occur at the power plant which generates the electricity, not at the building using the electricity.
Industrial Minerals	Geological materials which are mined for their commercial value, which are not fuel (fuel minerals or mineral fuels) and are not sources of metals (metallic minerals) but are used in the industries based on their physical and/or chemical properties.
Industrial Revolution	A period of rapid industrial growth with far−reaching social and economic consequences, beginning in England during the second half of the 18th century and spreading to Europe and later to other countries including the United States. The industrial revolution marks the beginning of a strong increase in combustion of fossil fuels and related emissions of carbon dioxide.
Inferred Mineral Resource (UNFC classification code: 333)	Mineral resources where the tonnage, grade and mineral content have been inferred from geological evidence and the tonnage can be estimated with low level of confidence.

Infrared Radiation	Infrared radiation consists of light whose wavelength is longer than the red colour in the visible part of the spectrum, but shorter than microwave radiation. Infrared radiation can be perceived as heat. The Earth's surface, the atmosphere and clouds all emit infrared radiation, which is also known as terrestrial or long–wave radiation. In contrast, solar radiation is mainly short–wave radiation because of the temperature of the Sun.
Inland Fisheries	Inland fishery is the rearing of fish in freshwaters like canals, ponds, reservoirs, and rivers.
Inland Wetlands	Inland areas of land that are either temporarily or permanently covered by water. Includes ox-bow lakes, cut-off meanders, playas, marsh, etc. which are seasonal as well as permanent in nature. It also includes manmade wetlands like waterlogged areas (seasonal and perennial).
Institutional Dimension of Environment Statistics	Refers to the institutional factors necessary to develop and strengthen the sustained production, dissemination and use of environment statistics. It comprises the legal framework that establishes the mandates and roles of the main partners, the institutional setting and institutional development level of environment statistics units and the existence and effectiveness of inter–institutional cooperation and coordination mechanisms at the national level and with specialized international agencies.
In–stream Water Use	Refers to the use of water without moving it from its source or when water is immediately returned with little or no alteration.
Insufficiently Known	A taxon is insufficiently known when an evaluation has been made but the available data are inadequate to assign a category.
	The IPCC was established jointly by the United Nations Environment Programme and the World Meteorological Organization in 1988. The purpose of the IPCC is to assess information in the scientific and technical literature related to all significant components of the issue of climate change. The IPCC draws upon hundreds of the world's expert scientists as authors and thousands as

Intergovernmental Panel on Climate Change (IPCC)	expert reviewers. Leading experts on climate change and environmental, social and economic sciences from some 60 nations have helped the IPCC to prepare periodic assessments of the scientific underpinnings for understanding global climate change and its consequences. With its capacity for reporting on climate change, its consequences and the viability of adaptation and mitigation measures, the IPCC is also looked to as the official advisory body to the world's governments on the state of the science of the climate change issue. For example, the IPCC organized the development of internationally accepted methods for conducting national greenhouse gas emission inventories.
Intertidal Mudflats	The unvegetated areas that are alternately exposed and inundated by the falling and rising of the tide. They may be mudflats or sand flats depending on the coarseness of the material of which they are made.
Intertidal Zone	The intertidal zone is the area where the ocean meets the land between high and low tides.
Inundation	Submergence of land by water, particularly in a coastal setting.
Invertebrates	Animals without a backbone, such as jellyfish, octopuses, and crabs, that play critical roles in marine ecosystems.
Irrigated Area	Area irrigated for cultivation through sources such as canals, tanks, tube-wells, other wells and other sources.
Irrigation	Process of purposely providing land with water other than rain water by artificial means.
Irrigation Potential Created (IPC)	The Irrigation potential created by a project at a given time is the aggregate gross area that can be irrigated annually by the quantity of water that could be made available by all the connected and completed works up to the end of the water courses or the last point in the water delivery system.
Irrigation Potential Utilized (IPU)	The Irrigation potential utilized is the total gross area actually irrigated by a project/scheme during the agricultural year under consideration.
Irrigation Water	Water artificially applied to land for agricultural purposes.

IUCN Red list (of Threatened Species)	The IUCN Red List of Threatened Species is the world's most comprehensive inventory of the global conservation status of plant and animal species. It uses a set of criteria to evaluate the extinction risk of thousands of species and subspecies. These criteria are relevant to all species and all regions of the world.
K	
Known Mineral Deposits	Mineral deposits are naturally occurring accumulations or concentrations of metals or minerals of sufficient size and concentration that might, under favourable circumstances, have economic value. Commercially recoverable mineral deposits, potential commercially recoverable mineral deposits and non–commercial and other known mineral deposits are called known mineral deposits.
L	
Lagoons/Backwaters	Such coastal bodies of water, partly separated from the sea by barrier beaches or bass of marine origin, are more properly termed lagoons. As a rule, lagoons are elongate and lie parallel to the shoreline. A creek, arm of the sea or series of connected lagoons, usually parallel to the coast, separated from the sea by a narrow strip of land but communicating with it through barred outlets are referred to as 'backwaters'.
Lake/ Pond	Larger bodies of standing water occupying distinct basins. These wetlands occur in natural depressions and are normally fed by streams/rivers.
Land	Space provided for natural ecosystems, human habitats and human activities. As this space is finite, the expansion of human activities can reduce the space occupied by natural ecosystems, thus reducing ecosystems' capacity to yield ecosystem goods and services for all living beings. From the resource perspective, land is a unique environmental resource that delineates the space in which economic activities and environmental processes take place and within which environmental resources and economic assets are located.
Land Affected by Salinity/Alkalinity	Land that has excess soluble salts (saline) or high exchangeable sodium.

Land Cover	Land cover refers to the observed physical and biological coverof the Earth's surface and includes natural vegetation and abiotic (non-living) surfaces.
Land Put to Non–agricultural Uses	Land occupied by buildings, paths, etc. or under water (e.g. tank, canals, etc.) and land put to uses other than agricultural production.
Land under Miscellaneous Tree Crops	Includes all cultivable land which is not included in 'Net area sown' but is put to some agricultural uses. Lands under Casuarina trees, thatching grasses, bamboo bushes and other groves for fuel, etc. which are not included under 'Orchards' are classified under this category.
Land Use	Reflects both the activities undertaken and the institutional arrangements put in place for a given area for the purposes of economic production, or the maintenance and restoration of environmental functions. Land being "used" means the existence of some kind of human activity or management. Consequently, there are areas of land that are "not in use" by human activities.
Land with Dense Scrub	Areas with scrubs dominating the landscape and having shallow and skeletal soils, at times chemically degraded, extremes of slopes, severely eroded and are subjected to excessive aridity. They have a tendency for intermixing with croplands.
Land with Open Scrub	Similar to land with dense scrub, except that it has sparse vegetative cover or is devoid of scrub and has a thin soil cover.
Landfill	Land waste disposal site in which waste is generally spread in thin layers, compacted and covered with a fresh layer of soil each day.
Landfillable (Waste)	Hazardous waste which cannot be recycled or incinerated safely, is deposited in specially created sites where the waste is deposited for final disposal and covered. These landfills are designed to minimize the chance of release of hazardous waste into the environment.
Least Developed Country	A country with low indicators of socio–economic development and human resources, as well as economic vulnerability, as determined by the United Nations.

Legacy Waste	Municipal Solid Wastes (MSW) that has been collected and kept for long periods of time on some barren land or landfill is called Legacy waste.
Lifecycle	The cyclical sequence of different stages through which organisms pass during their lives. Stages usually include egg, larva, juvenile and adult. Adults reproduce to create the next generation of eggs, thus completing the cycle.
Lithological Map	Map differentiating the regions based on the rocks found in the region.
Lithology	Lithology is the general characteristics of sediments, rocks, and rock types present in a stratigraphic division of earth, used by geologists to characterize rocks based on their physical appearance.
Litter	Woody material of trees having diameter < 5 cm which is not decomposed.
Littoral/Swamp/Mangrove Forest	Areas on coastal tidal flats, estuaries salt marshes etc where the canopy cover/density is above 10% and tropical and subtropical vegetation species are densely colonized.
Livestock	Animal species that are raised by humans for commercial purposes, consumption or labour.
Long–Period Average (Monsoon)	Calculated on the basis of an average annual rainfall received during a significantly long period. In India, reference period used by IMD is 1951–2000.
Longwave Radiation	Radiation emitted in the spectral wavelength greater than about 4 micrometres, corresponding to the radiation emitted from the Earth and atmosphere. It is sometimes referred to as 'terrestrial radiation' or 'infrared radiation,' although somewhat imprecisely.
Losses of energy during distribution or transmission	Losses of energy during distribution or transmission are losses that occur between a point of abstraction, extraction or supply and a point of use.
Losses of energy during storage	Losses of energy during storage are losses of energy products held in inventories, which may be caused by evaporation, leakages, wastage or accidental damage.
Losses of energy during transformation or conversion	Losses of energy during transformation or conversion refer to the energy lost, for example, in the form of heat, during the transformation or conversion of one energy product into another energy product.

M	
Magnetic Disintegration	This is technology where in all Inorganic / Non-Bio-degradable waste except Ceramics, stone, glass, iron etc. is treated and subjected to complete molecular destruction. Final residue remaining is 2% of the total waste fed in the form of Ionic ash.
Major Irrigation Scheme	A scheme having Culturable Command Area (CCA) more than 10,000 hectares is classified as major irrigation scheme.
Managed Expansion/ Regression	Managed expansion / regression represents an increase /decrease in the area of a land cover type due to human activity. Generally, the managed expansion /regression of one land cover type will also lead to the recording of a matching entry for managed regression /expansion of another land cover type. A matching entry is not recorded if there is a managed expansion in the total area of land within scope of the account (e.g., in the case of land reclamation).
Mangrove	An association of halophytic trees, shrubs and other plants growing in brackish to saline tidal waters of tropical and sub-tropical coastlines.
Materials recovery facility (MRF)	Materials recovery facility (MRF), also known as materials reclamation facility or materials recycling facility, solid- Waste management plant that processes recyclable materials to sell to manufacturers as raw materials for new products.
Marine	Relating to the sea or ocean. This term encompasses all aspects of oceanic environments, including the organisms that inhabit them, the ecosystems they form, and the physical and chemical processes occurring within marine waters.
Marine Ecosystem	A complex network of living organisms (plants, animals, and microorganisms) and their physical environment in the ocean, including habitats like coral reefs, estuaries, and the open sea.
Marine Biodiversity	The variety of life forms found in marine environments, including species diversity, genetic diversity, and ecosystem diversity, essential for ecosystem resilience and functioning.

Marine Fisheries	The marine fishery is the rearing of fish in seawater or saltwater or marine environment.
Measured Mineral Resource (UNFC classification code: 331)	That part of mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence i.e. based on detailed exploration.
Medium Irrigation Scheme	A scheme having Culturable Command Area (CCA) more than 2,000 hectares and up to 10,000 hectares individually is classified as medium irrigation scheme.
Mega-diverse	The mega-diverse countries are those that harbour the largest indices of biodiversity, including a large number of endemic species.
Megafauna	Megafauna refers to large organisms, typically weighing 50 kg or more, and is commonly used in the field of paleoecology and deep-sea biology to describe the largest body size class of organisms associated with the seafloor. Species such as whales and large fish species play significant roles in marine ecosystems.
Methane (CH4)	A hydrocarbon that is a greenhouse gas with a global warming potential most recently estimated at 25 times that of carbon dioxide (CO2). Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production and incomplete fossil fuel combustion.
Metric Ton	Common international measurement for the quantity of greenhouse gas emissions. A metric ton is equal to 1000 kilograms.
Metropolitan Cities	Cities with a population of more than 4 million (or 40 lakh).
Mineral	The term 'Mineral' means a class of substances occurring in nature, formed as a result of geological processes, which is of definite chemical composition and usually, a characteristic crystal structure, but sometimes also includes rocks formed by these substances.
Mineral Resources	A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are

	reasonable prospects for eventual economic extraction.
Minimum Support Price (MSP)	Minimum support price (MSP) is a "minimum price" for any crop that the government considers as remunerative for farmers and hence deserving of "support". It is also the price that government agencies pay whenever they procure the particular crop.
Mining	Mining is the extraction of valuable minerals or other geological materials from the earth, usually from an ore, lode, vein, seam, reef or placer deposit. These deposits form a mineralized package that is of economic interest to the miner.
Mining /Industrial wastelands	Areas where waste debris is accumulated after extraction of minerals or areas of stockpile of storage dump of industrial raw material or slag/effluents or waste material or quarried/mixed debris from earth's surface.
Mining Pools	Water accumulated in abandoned quarries that had earlier been used for the extraction of stone, ore, coal, gravel or minerals.
Minor Irrigation Scheme	A scheme having Culturable Command Area (CCA) up to 2,000 hectares individually is classified as minor irrigation scheme.
Minor Minerals	Minor minerals mean building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral.
Mitigation	A human intervention to reduce the human impact on the climate system; it includes strategies to reduce greenhouse gas sources and emissions and enhancing greenhouse gas sinks.
Moderately Dense Forest	All lands with forest cover having a canopy density between 40 to 70 percent.
Monitoring Well	A well-constructed or used for the purposes of water level or water quality data collection.

Multilateral Environmental Agreements	Agreements that address, via international cooperation, environmental problems, especially those which have a trans–boundary nature or are global in scope. For the most relevant MEAs, participant or signatory countries are usually expected to report on progress periodically, either on a mandatory or voluntary basis.
Municipal Solid Waste (MSW)	Includes commercial and residential wastes generated in municipal or notified areas in either solid or semi–solid form excluding industrial hazardous wastes but including treated bio–medical wastes. It consists of household waste, wastes from hotels and restaurants, construction and demolition debris, sanitation residue and waste from streets.
N	
National Parks	Represent Category II type of protected areas, i.e., protected areas managed mainly for ecosystem protection and recreation. These areas are protected from human exploitation, pollution and stand for conservation of wild nature.
Natural Biological Resources	Consist of animals, birds, fish and plants that yield both once–only and repeat products for which natural growth and/ or regeneration is not under the direct control, responsibility and management of institutional units.
Natural Capital	Natural capital is another term for the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.
Natural Capital Accounting (NCA)	An umbrella term covering efforts to make use of an accounting framework to provide a systematic way to measure and report on stocks and flows of natural capital. NCA covers accounting for individual environmental assets or resources, both biotic and abiotic (such as water, minerals, energy, timber, fish), as well as accounting for ecosystem assets (e.g. forests; wetlands), biodiversity and ecosystem services, in both physical and monetary terms.

Natural Expansion/ Regression	Natural expansion / regression is an increase /decrease in area resulting from natural processes including seeding, sprouting, suckering, layering or erosion by sea. As in the case of managed expansion /regression, generally, the natural expansion of one land cover type will also lead to the recording of a matching entry for natural regression of another land cover type. A matching entry is not recorded if there is a natural expansion /regression in the total area of land (e.g., in the case where land is created through volcanic activity or landslide or eroded by sea).
Natural Gas	Underground deposits of gases consisting of 50 to 90 percent methane (CH4) and small amounts of heavier gaseous hydrocarbon compounds such as propane (C3H8) and butane (C4H10).
Natural inputs	Natural inputs are all physical inputs that are moved from their location in the environment as a part of economic production processes or are directly used in production.
Natural Variability	Variations in the mean state and other statistics (such as standard deviations or statistics of extremes) of the climate on all time and space scales beyond that of individual weather events. Natural variations in climate over time are caused by internal processes of the climate system, as well as changes in external influences, such as volcanic activity and variations in the output of the sun.
Nearshore	The part of a beach from the low tide line to the depth where wave action is no longer influenced by the bottom, i.e. to where the depth exceeds the wave base
Net Annual Groundwater Availability (Resources)	Net annual ground water availability is the available resource after deducting the natural discharges from the Annual Replenishable Ground Water Resource.
Net Area Irrigated	Total of all areas irrigated from different sources, counting each area irrigated only once even though it was irrigated more than once in the same year.
Net Sown Area	Sown area with crops and orchards, counting in the area sown more than once in the same year, only once. The net area sown was defined as the difference between the total geographical area of all plots of land of the holding and the sum of the areas of land under (1) forest, (2) barren &

	uncultivable wastes, (3) put to non–agricultural uses, (4) culturable wastes, (5) permanent pastures & other grazing land, (6) miscellaneous tree crops excluding orchards and (7) all type of fallow lands.
Niche Habitats	Specific environments that support particular species or communities, emphasizing the importance of habitat diversity.
Nitrogen Cycle	The natural circulation of nitrogen among the atmosphere, plants, animals and microorganisms that live in soil and water. Nitrogen takes on a variety of chemical forms throughout the nitrogen cycle, including nitrous oxide (N2O) and nitrogen oxides (NOx).
Nitrogen Oxides (NOx)	Gases consisting of one molecule of nitrogen and varying numbers of oxygen molecules. Nitrogen oxides are produced in the emissions of vehicle exhausts and from power stations. In the atmosphere, nitrogen oxides can contribute to formation of photochemical ozone (smog), can impair visibility and have health consequences; they are thus considered pollutants.
Nitrous Oxide (N2O)	A powerful greenhouse gas with a global warming potential of 298 times that of carbon dioxide (CO2). Major sources of nitrous oxide include soil cultivation practices, especially the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production and biomass burning. Natural emissions of N2O are mainly from bacteria breaking down nitrogen in soils and the oceans. Nitrous oxide is mainly removed from the atmosphere through destruction in the stratosphere by ultraviolet radiation and associated chemical reactions, but it can also be consumed by certain types of bacteria in soils.
Non-Forest Land	Land without forest cover.
Non-fossil energy sources	Fuels that are not derived from fossil sources. Non-fossil fuels are typically sourced from solar, wind and water etc. These include solar energy, geothermal energy, wind energy, biomass from plants, hydropower from flowing water.
Non-Methane Volatile Organic Compounds	Organic compounds, other than methane, that participate in atmospheric photochemical reactions.

(NMVOCs)	
Non-renewable Resources	A non-renewable resource (also called a finite resource) is a resource that does not renew itself at a sufficient rate for sustainable economic extraction in meaningful human time-frames.
Normal Year	The year during which the precipitation or stream flow approximates the average for a long period of record.
Nuclear Radiation-related Diseases and Conditions	Include, but are not limited to, thermal burns from infrared heat radiation, beta and gamma burns from beta and gamma radiation, radiation sickness or "atomic disease", leukaemia, lung cancer, thyroid cancer and cancer of other organs, sterility and congenital anomalies or malformations, premature aging, cataracts and increased vulnerability to disease and emotional disorders. Exposure to nuclear radiation could occur from a nuclear explosion or an accident involving a nuclear reactor.
O	
Observation Well	A well-constructed in a specific location for the purpose of observing (measuring) changes in water level. An existing well perhaps drilled for a different purpose may also be used to observe water level changes. Observation wells are typically used for short duration data collection such as before, during and after an aquifer test. Wells that are used to collect data on a long-term basis are usually referred to as monitoring wells.
Ocean Acidification	Increased concentrations of carbon dioxide in sea water causing a measurable increase in acidity (i.e., a reduction in ocean pH). This may lead to reduced calcification rates of calcifying organisms such as corals, molluscs, algae and crustaceans.
Ocean Deoxygenation	The decline of oxygen levels in the ocean, which can adversely affect marine life and ecosystems.
Ocean Warning	The increase in ocean temperatures due to climate change, impacting marine ecosystems and species distributions.
Open Forest	Lands with forest cover having a canopy density between 10 to 40 percent.

Opening Stock	Opening Stock refers to the quantity available at the beginning of the accounting period.
Ore	Ores are concentrations of minerals in rock that are high enough to be economically extracted for use.
Other Degraded Land - Barren Rocky / Stony Waste Areas (H2)	Rock exposures of varying lithology often barren and devoid of soil and vegetal cover. They occur in hills as openings or as isolated exposures on plateau and plains.
Other Degraded Land - Mass movement/ Mass Wastage (H1)	Landslide areas and areas with mass wastage in terms of foothill depositions, where the coarse material like sand and pebbles gets deposited because of erosion in upper catchment area.
Other Degraded Land - Miscellaneous (H3)	Primarily includes riverine sand areas, sea ingression areas mainly with sand deposition excluding the sandy areas of desert region.
Other Degraded Land (H)	Refer to degraded lands covering mass movement/ mass wastage, barren rocky / stony waste areas.
Other Fallow Land	All lands which are taken up for cultivation in the past, but are temporarily out of cultivation for a period of not less than one year and not more than five years including the current agricultural year are classified under 'other fallow'.
Other Non–cultivated Biological Resources	Include wild berries, fungi, bacteria, fruits, sap and other plant resources that are harvested, as well as wild animals that are trapped or killed for production, consumption and trade.
Other Wooded Land	Land not classified as "Forest", spanning more than 0.5 hectares; with trees higher than 5 metres and a canopy cover of 5–10 percent, or trees able to reach these thresholds in situ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.
Other Workers	As per Census of India, Office of Registrar General of India (O/o RGI), workers other than cultivators, agricultural labourers or workers in Household Industry, are termed as 'Other Workers' (OW).

Ox–bow Lakes/ Cut off Meanders	A meandering stream may erode the outside shores of its broad bends and in time, the loops may get cut–off, leaving basins. The resulting shallow crescent–shaped lakes are called oxbow lakes.
Oxidize	To chemically transform a substance by combining it with oxygen.
Ozone	Ozone, the triatomic form of oxygen (O3), is a gaseous atmospheric constituent. In the troposphere, it is created by photochemical reactions involving gases resulting both from natural sources and from human activities (photochemical smog). In high concentrations, tropospheric ozone can be harmful to a wide range of livingorganisms. Tropospheric ozone acts as a greenhouse gas. In the stratosphere, ozone is created by the interaction between solar ultraviolet radiation and molecular oxygen (O2). Stratospheric ozone plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric ozone, due to chemical reactions that may be enhanced by climate change, results in an increased ground–level flux of ultraviolet (UV–) B Radiation
Ozone Depleting Substance (ODS)	A family of man–made compounds that includes, but are not limited to, chlorofluorocarbons (CFCs), bromofluorocarbons (halons), methyl chloroform, carbon tetrachloride, methyl bromide and hydro–chlorofluorocarbons (HCFCs). These compounds have been shown to deplete stratospheric ozone and therefore are typically referred to as ODSs.
Ozone Layer	The layer of ozone that begins approximately 15 km above Earth and thins to an almost negligible amount at about 50 km, shields the Earth from harmful ultraviolet radiation from the sun. The highest natural concentration of ozone (approximately 10 parts per million by volume) occurs in the stratosphere at approximately 25 km above Earth. The stratospheric ozone concentration changes throughout the year as stratospheric circulation changes with the seasons. Natural events such as volcanoes and solar flares can produce changes in ozone concentration, but man–made changes are of the greatest concern.

Ozone Precursors	Chemical compounds, such as carbon monoxide, methane, non–methane hydrocarbons and nitrogen oxides, which in the presence of solar radiation react with other chemical compounds to form ozone, mainly in the troposphere.
P	
Particulate Matter (PM)	Very small pieces of solid or liquid matter such as particles of soot, dust, fumes, mists or aerosols. PM10 is particulate matter 10 micrometers or less in diameter, PM2.5 is particulate matter 2.5 micrometers or less in diameter.
Parts per Billion (ppb)	Number of parts of a chemical found in one billion parts of a particular gas, liquid, or solid mixture.
Parts per Million by Volume (ppmv)	Number of parts of a chemical found in one million parts of a particular gas, liquid, or solid.
Parts per Trillion (ppt)	Number of parts of a chemical found in one trillion parts of a particular gas, liquid or solid.
Pastures and Grazing Land	Include all grazing lands irrespective of whether they are permanent pastures and meadows or not. Grazing lands within forest area shall be included under this category.
Percentile	A measure used in statistics indicates the value below which a given percentage of observations in a group of observations fall.
Perfluorocarbons (PFCs)	A group of chemicals composed of carbon and fluorine only. These chemicals (predominantly CF4 and C2F6) were introduced as alternatives, along with hydrofluorocarbons, to the ozone-depleting substances. In addition, PFCs are emitted as by–products of industrial processes and are also used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they are powerful greenhouse gases: These chemicals are predominantly human–made, though there is a small natural source of CF4.
Permanent Pastures and other Grazing Lands	Includes all grazing lands whether they are permanent pastures and meadows or not. Village common grazing land is included under this head.
Petajoules	One petajoule (PJ) equals 1015 joules. Joule is a unit of energy equalling 0.24 calories.

pH	The logarithm to the base 10 of the reciprocal of Hydrogen ion concentration.
Phenology	The timing of natural events, such as flower blooms and animal migration, which is influenced by changes in climate. Phenology is the study of such important seasonal events. Phenological events are influenced by a combination of climate factors, including light, temperature, rainfall and humidity.
Photosynthesis	Process by which plants take CO2 from the air (or bicarbonate in water) to build carbohydrates, releasing O2 in the process. There are several pathways of photosynthesis with different responses to atmospheric CO2 concentrations.
Physiographic Zone	A physiographic zone constitutes geographical areas that exhibit broad similarities in factors responsible for the growth of tree vegetation. Physiographic zones are used as strata for assessing tree cover in the country.
Phyto-plankton	Suspended microscopic plant organisms, usually drifting in the sunlit surface waters.
Piezo Meter	A piezometer is a purpose-built observation well that facilitates measurement of liquid pressure above a geodetic datum of the selected aquifer.
Plantations	These are the areas under agricultural tree crops planted adopting agricultural management techniques. It includes agricultural plantation (like tea, coffee, rubber etc.), horticultural plantation (like coconut, areca nut, citrus fruits, orchards, fruits, ornamental shrubs and trees, vegetable gardens etc.) and agro-horticultural plantation.
Polychaete Worms	Polychaetes are a diverse and abundant group of segmented worms that inhabit marine environments, playing vital roles in the ecosystem as scavengers and prey.
Ponds	A small, quiet body of standing water, usually shallow enough to permit the growth of rooted plants from one shore to another
Precession	The wobble over thousands of years of the tilt of the Earth's axis with respect to the plane of the solar system.

Precipitation	The total volume of atmospheric wet precipitation, such as rain, snow and hail, on a territory in a given period of time.
Prefeasibility Mineral Resource (UNFC classification code: 221 and 222)	That part of an indicated and in some circumstances measured mineral resource that has been shown by prefeasibility study to be not economically mineable. Possibly economically viable subject to changes in technological, economic, environmental and/or other relevant conditions.
Probable Mineral Reserves UNFC classification code: 121 & 122)	Economically mineable part of indicated or in some cases a measured mineral resource.
Production Boundary	The production boundary includes (a) the production of all individual or collective goods or services that are supplied to units other than their producers, or intended to be so supplied, including the production of goods or services used up in the process of producing such goods or services; (b) the own-account production of all goods that are retained by their producers for their own final consumption or gross capital formation; (c) the own-account production of housing services by owner-occupiers and of domestic and personal services produced by employing paid domestic staff.
Protected Area Management Categories	Depending on the strictness of protection the classification for protected areas include: strict nature reserve; wilderness area; national park; natural monument or feature; habitat/species management area; protected landscape/seascape; and protected area with sustainable use of natural resources.
Protected Areas	Geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long- term conservation of nature with associated ecosystem services and cultural values.
Protected Forest (PF)	An area notified under the provisions of the Indian Forest Act or other State Forest Acts, having limited degree of protection. In protected forest all activities are permitted unless prohibited.
Proved Mineral Reserves (UNFC classification code: 111)	Economically mineable part of measured mineral Resource.

Provisioning Services	Provisioning services are those ecosystem services representing the contributions to benefits that are extracted or harvested from ecosystems.
Pyrolysis	The pyrolysis process is the thermal decomposition of materials at elevated temperatures, often in an inert atmosphere.
Q	
Quintile	A quintile is one of five values that divide a range of data into five equal parts, each being 1/5th (20 %) of the range.
R	
Radiation	Energy transfer in the form of electromagnetic waves or particles that release energy when absorbed by an object.
Radiative Forcing	A measure of the influence of a particular factor (e.g. greenhouse gas (GHG), aerosol, or land use change) on the net change in the Earth's energy balance.
Ramsar Convention	The Ramsar Convention on Wetlands is an inter-governmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. The Convention was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975. Since then, almost 90% of UN member states, from all the world's geographic regions, have acceded to become "Contracting Parties".
Rann Area	An extensive salt marsh of western India between the Gulf of Kutch and the Indus River delta.
Rare Species	The species with small world populations that are not at present endangered or vulnerable but are at risk. These species are usually localised within restricted geographic areas or habitats or are thinly scattered over a more extensive range.
Reappraisals	Reappraisals can be upward or downward and can reflect changes due to the use of updated information that permits a reassessment of the size of the area of different land covers, for example, from new satellite imagery or interpretation of satellite imagery. The use of updated information may require the revision of previous estimates to ensure a continuity of time series.

Recharge	The downward movement (percolation) of rain, snowmelt or surface water through the soil, weathered material and rock layers to replenish the ground water/aquifer stores. Concentrated zones of ground water recharge may occur through stream beds.
Reclassifications	Reclassifications are changes in assets that result from situations in which an asset is used for a different purpose. A reclassification of an asset in one category should be offset by an equivalent reclassification in another category.
Reconnaissance Mineral Resource (UNFC classification code: 334)	Estimates of Mineral Resources based on regional geological studies and mapping, airborne and indirect methods, preliminary field inspections as well as geological inference and extrapolation
Recorded Forest Area (RFA)	Same as 'forest area', i.e., geographic areas recorded as forests in Government records.
Recyclable (Hazardous Waste)	A hazardous waste is said to be recyclable, if it can be used, reused, or reclaimed.
Recycling	Collecting and reprocessing a resource so it can be used again.
Reef	A mound of carbonate formed in shallow tropical marine environments by corals, algae and a wide range of other organisms.
Reflectivity	Ability of a surface material to reflect sunlight including the visible, infrared and ultraviolet wavelengths.
Reforestation	Planting of forests on lands that have previously contained forests but that have been converted to some other use.
Refurbishment (e-waste)	Refurbishment means repairing of used electrical and electronic equipment and it should be carried out in such a way that there should not be any damage to health and environment.
Refuse Derived Fuel (RDF)	Refuse Derived Fuel is a fuel produced from refuse such as industrial waste, municipal solid waste (MSW), or commercial waste.

Regulating Services	Regulating and maintenance services are those ecosystem services resulting from the ability of ecosystems to regulate biological processes and to influence climate, hydrological and biochemical cycles, and thereby maintaining environmental conditions beneficial to individuals and society.
Re–injected (Natural gas)	Gas which is re–injected into an underground reservoir, typically one already containing both natural gas and crude oil, in order to increase the pressure within the reservoir and thus induce the flow of crude oil.
Relative Sea Level Rise	The increase in ocean water levels at a specific location, considering both global sea level rise and local factors, such as local subsidence and uplift. Relative sea level rise is measured with respect to a specified vertical datum relative to the land, which may also be changing elevation over time.
Remaining Resources	Mineral resources that have not yet been declared as economically viable, but are potentially valuable and for which reasonable prospects exist for eventual economic extraction.
Remote Sensing	Science of obtaining information about objects or areas from a distance, typically from aircraft or satellites.
Renewable Energy	Energy captured from resources that are naturally replenishing such as biomass, hydro, geothermal, solar, wind, ocean thermal, wave action and tidal action.
Renewable Resources	Natural resources that are replaced by natural processes and forces persistent in the natural environment. A renewable resource is one that can be used repeatedly and does not run out because it is naturally replaced. Examples of renewable resources include solar, wind, hydro, geothermal, and biomass energy.
Renewable Water Resources	Resources are generated by precipitation and inflows of water from neighbouring territories and reduced by evapotranspiration.
Reserved Forests (RF)	An area so constituted under the provisions of the Indian Forest Act or other State Forest Acts, having full degree of protection. In reserved forests all activities are prohibited unless permitted.

Reserves	Estimates of deposits, that are valuable and legally, economically and technically feasible. Economically mineable parts of measured and/or indicated mineral resources are placed under 'reserve' category.
Reservoir/Barrage	A pond or lake built for the storage of water, usually by the construction of a dam across a river or by dykes constructed for irrigation/water facilities.
Residuals	Flows of solid, liquid and gaseous materials and energy, that are discarded, discharged or emitted by establishments and households through processes of production, consumption or accumulation.
Resilience	A capability to anticipate, prepare for, respond to and recover from significant multi–hazard threats with minimum damage to social well–being, the economy and the environment.
Resource Management Activities	Activities whose primary purpose is preserving and maintaining the stock of natural resources and hence safeguarding against depletion. These activities include, but are not limited to, reducing the withdrawals of natural resources; restoring natural resource stocks; the general management of natural resources (including monitoring, control, surveillance and data collection); and the production of goods and services used to manage or conserve natural resources. They cover the management of mineral and energy resources; timber resources; aquatic resources; other biological resources; water resources; research and development activities for resource management; and other resource management activities.
Resources - Proved, Indicated, Inferred	Based on the depth of the resource and the scope of exploration, resources are classified into proved, indicated and inferred resources. While proved resources (also referred to as reserves) are those which have been reliably estimated and can be recovered economically, indicated resources are identified based on combination of direct measurement and reasonable geological assumptions. Inferred resources are based on geological evidence and assumed but have not yet been verified. In respect of coal resources in India, Proved Resources are

	coal resources falling within 200 m radius from a borehole point (or observation point). Indicated resources occur in the area falling between radii of 200m and 1km from a borehole point and Inferred resources occur in the area falling between radii of 1km and 2km from a borehole point.
Reused Water	Wastewater supplied to a user for further use with or without prior treatment.
River /Stream / Canals	Rivers /streams are natural course of water flowing on the land surface along a definite channel /slope regularly or intermittently towards a sea in most cases or in to a lake or an inland basin in desert areas or a marsh or another river. Canals are artificial water course constructed for irrigation, navigation or to drain out excess water from agricultural lands. These are linear water features of the landscape.
River Basin	River Basin is the basic hydrological unit for water resources planning and management. It includes the drainage area of a river and its tributaries.
Riverine Sand	Sand accumulated in the flood plain of the river as sheets or sand bars. It also includes inland sand which was accumulated along the abandoned river courses or by reworking of sand deposits by wind action leading to long stretches of sand dunes or sand cover areas.
Riverine Wetlands	Areas, especially in plains, where water accumulates leading to formation of marshes and swamp. A swamp is a wetland dominated by trees or shrubs, while a marsh is a frequently or continually inundated wetland characterised by emergent herbaceous vegetation adapted to saturated soil conditions.
Runoff	Water which is not absorbed by the soil and flows to lower ground, eventually draining into a stream, river, or other body of water. It is that part of precipitation that flows toward the streams on the surface of the ground or within the ground. Runoff is composed of base flow and surface runoff.

Rural Land Cover	These are the lands used for human settlement where the majority of population is involved in the primary activity of agriculture. These are the built-up areas, smaller in size, mainly associated with agriculture and allied sectors and non-commercial activities. They can be seen in clusters non- contiguous or scattered.
S	
Saline / Salinity	Salinity is the presence of soluble salts in soils or waters. Salinity in water is usually defined by the total dissolved solids content (TDS, mg/L or g/ L) or the chloride content (Cl, mg/L) although the chloride ion comprises only a fraction of the total dissolved salts in water.
Saline Soil	Saline soils have a high amount of soluble salts. Saline soils often exhibit white salt deposits or crusts, visible at the soil surface. They have adequate water infiltration rates.
Saline-Sodic Soil	These soils have both have both detrimental levels of neutral soluble salts and a high proportion of sodium ions. Plant growth in these soils can be adversely affected by both excess salts and excess sodium levels.
Salinization / Alkalization - Rann	Areas formed due to saline water intrusion in the coastal areas of arid and semi-arid regions which barely supports any grass.
Salinization / Alkalization - Saline/ Sodic/ Saline Sodic (D1-D9)	Degradation of land due to accumulation of soluble salts, thereby affecting the crop growth. Based on the type of salt problem, it has been divided into saline, sodic and saline- sodic.
Salt Marsh	Natural or semi–natural halophytic grassland and dwarf brushwood on the alluvial sediments bordering saline water bodies whose water level fluctuates either tidally or non– tidally.
Salt Pans	Shallow rectangular man–made depressions in which saline water is accumulated for drying in the sun for making salt.
Salt Water Intrusion	Displacement of fresh or ground water by the advance of salt water due to its greater density, usually in coastal and estuarine areas.
Salt-Affected Land	Generally characterized as land that has excess salt in the soils with patchy growth of grasses.

Sand (Coastal / Desert / Riverine)	Land with accumulation of sand, in coastal, riverine or inland areas. These lands are mostly found in deserts, riverbeds and along the shores.
Sand/Beach	Beach is an un–vegetated part of the shoreline formed of loose material, usually sand that extends from the upper berm (a ridge or ridges on the backshore of the beach, formed by the deposit of material by wave action, that marks the upper limit of ordinary high tides and wave wash) to low water mark. Beach comprising rocky material is called rocky beach.
Sandy Area	These can occur in coastal, Riverine or inland areas. Desertic sands are characterized by accumulation of sand developed in situ or transported by Aeolian processes. Coastal sands are the sands that are accumulated as a strip along the sea-coast. Riverine sands are those that are seen as accumulations in the flood plain as sheets which are the resultant phenomena of river flooding.
Satellite Account	Satellite accounts provide a framework linked to the central (national or regional) accounts, allowing attention to be focused on a certain field or aspect of economic and social life in the context of national accounts; common examples are satellite accounts for the environment, or tourism, or unpaid household work.
Scrub	Forest land with poor tree growth mainly of small & stunted trees having canopy density less than 10%.
Scrub Forest	Forest type consisting of two sub-classes viz., scrub dominated degraded forest land and agriculture land inside notified forest areas. Scrub dominated: Land, as notified under the Forest Act and those lands with various types of forest cover with less than 20 % of vegetative cover, are classified as degraded forest. These lands are generally confined to the fringe areas of notified forest. Agricultural land inside notified forest land: This category refers to areas that have been notified under the Forest Act, in which agriculture is being practiced.
Scrub Land	Includes both land with dense scrub and land with open scrub.

Seagrass meadows	A seagrass meadow refers to a marine habitat found in shallow water coastal areas that is formed by seagrass plants, such as Posidonia oceanica, and has high ecological and economic importance.
Sea Surface Temperature	The temperature in the top several feet of the ocean, measured by ships, buoys and drifters.
Seaweeds	Seaweeds are macroscopic algae growing in the marine and shallow coastal waters and on rocky shores. Seaweeds are wonder plants of the sea, the new renewable source of food, energy, chemicals and medicines with manifold nutritional, industrial, biomedical, agriculture and personal care applications.
Sediments	Matter that is carried by wind or water and is then deposited on the surface of the land or the sea bottom.
Seismotectonics	Seismotectonics is a term generally applied to the study of earthquake occurrence and characteristics and its relation to the tectonics of a particular region and the overall dynamics of the Earth's crust.
Sessile Species	Species that are fixed at one location and do not move about their environment.
Shallows	The marine environment located close to the surface. Here the influences of waves, wind, tides, sun and cooling are most pronounced. Yet in these exacting circumstances an amazingly rich community is found, which is easy to study.
Shifting Cultivation Areas	Growing of crops for a few years on selected and clear plots, alternating with a period of vegetative fallow when the soil is rested. Includes abandoned areas, that were earlier under shifting cultivation but subsequently left idle for more than one year but less than 5 years, thereby giving a scope for the regeneration of secondary vegetation such as bamboo or grasses.
Shoreline systems	The dynamic interfaces between land and sea, including beaches, dunes, and coastal wetlands, which are essential for both ecology and human activities.
Silt	Sedimentary particles ranging in size from 1/256th to 1/16th of a mm

Sink	Any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas or aerosol from the atmosphere.
Slim Hole	Slim holes are usually drilled to recover core, take water samples, measure thermal and fluid flow properties. Once the reservoir has been adequately defined and slim holes happen to be in an optimal location and depth, they can be used for observation and monitoring of the geothermal reservoir during production.
Slums	Residential areas where dwellings are unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and design of such buildings, narrowness or faulty arrangement of street, lack of ventilation, light, or sanitation facilities or any combination of these factors which are detrimental to the safety and health.
Snow and Glaciers	These are the areas under snow cover confined to the Himalayan region.
Social Cost of Carbon	The social cost of carbon (SCC) is an estimate, in dollars, of the economic damages that would result from emitting one additional ton of carbon dioxide into the atmosphere.
Sodic Soil	Sodic soils have a high amount of exchangeable sodium on the cation-exchange sites. Sodic soils have low salinity and often a very high pH. Excess exchangeable sodium has an adverse effect on the physical and nutritional properties of the soil, with consequent reduction in crop growth, significantly or entirely.
Sodium Adsorption Ratio (SAR)	SAR is a measure of the amount of Sodium (Na+) relative to Calcium (Ca2+) and Magnesium (Mg2+) in the water extracted from a saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.
Soil Carbon	A major component of the terrestrial biosphere pool in the carbon cycle. The amount of carbon in the soil is a function of the historical vegetative cover and productivity, which in turn is dependent in part upon climatic variables.

Soil Erosion	Soil erosion is the displacement of the upper layer of soil, caused by the dynamic activity of erosive agents, that is, water, ice (glaciers), snow, air (wind), plants, animals, and humans.
Soil Organic Matter (SOM)	The SOM carbon pool is divided into mineral and organic soil carbon and contains biomass less than 2 mm diameter.
Soil Resources	Comprise the top layers (horizons) of soil that form a biological system.
Solar Radiation	Radiation emitted by the Sun. It is also referred to as short–wave radiation. Solar radiation has a distinctive range of wavelengths (spectrum) determined by the temperature of the Sun.
Spatio-temporal scales	The dimensions of space and time that ecological phenomena occur, critical for ecological modeling and understanding processes.
Species	Group of individual specimens having close resemblance but differing from others and belonging to the same genus.
Spit	A sand or coarser deposit extending from shore out into open water.
Sponge	Aquatic animal of the phylum Porifera, with pores in its body wall and a rigid skeleton. Sponges are very primitive animals, colonies of individuals, that evolved early in the history of the earth. They are attached to the substrate and filter the water for phyto plankton.
Stage of Development	Stage of ground water development is denoted by the percentage of utilization with respect to recharge and can be computed as: Stage of development = (Existing Gross Draft for All Uses)/ (Net Annual Ground Water Availability) * 100
Sterilization Loss	The sterilization of mineral resources makes considerable amount of minerals inaccessible for future use. Sterilization loss can be defined as loss due to extraction of one unit of the desired product, from the natural reserves, For example- a ratio of 1:4.7 is approximately suggested by the Expert Committee on Road Map for Coal Sector Reforms under the chairmanship of Shri T.L. Sankar, released in December

	2005 by Ministry of Coal, GoI[1] to know the proportion of the coal extracted and coal sterilized during the extraction process (1 unit of Coal extraction involves 3.7 units of sterilization loss).
Stocks of Mineral Resources	Defined as the amount of known deposits of non–metallic and metallic mineral resources
Stocks of Non-renewable Energy Resources	Defined as the amount of known deposits of mineral energy resources.
Strategic Minerals	Strategic minerals (also known as Critical Minerals) are a broad-based category that constitutes various minerals and elements; the majority of which are minor metals. Geography and availability of domestic supply often defines which minerals are deemed "critical" for any particular region or country.
Stratosphere	Region of the atmosphere between the troposphere and mesosphere, having a lower boundary of approximately 8 km at the poles to 15 km at the equator and an upper boundary of approximately 50 km. Depending upon latitude and season, the temperature in the lower stratosphere can increase, be isothermal, or even decrease with altitude, but the temperature in the upper stratosphere generally increases with height due to absorption of solar radiation by ozone.
Stratospheric Ozone	See 'Ozone Layer'.
Stream Flow	Volume of water that moves over a designated point over a fixed period of time. It is often expressed as cubic feet per second.
Sub-soil Resources	Underground deposits of various minerals that provide raw materials and energy sources for humans. When considered as resources for human use, these sub-soil elements differ fundamentally from ecosystems in that they are non-renewable. Their use thus results in permanent depletion.

[1] http://www.indiaenvironmentportal.org.in/files/expertreport-1.pdf

Sulphate Aerosols	Particulate matter that consists of compounds of sulphur formed by the interaction of sulphur dioxide and sulphur trioxide with other compounds in the atmosphere. Sulphate aerosols are injected into the atmosphere from the combustion of fossil fuels and the eruption of volcanoes. Sulphate aerosols can lower the Earth's temperature by reflecting away solar radiation (negative radiative forcing).
Sulphur Hexafluoride (SF6)	A colourless gas soluble in alcohol and ether, slightly soluble in water. A very powerful greenhouse gas used primarily in electrical transmission and distribution systems and as a dielectric in electronics.
Surface Water	Comprises all water that flows over or is stored on the ground's surface, regardless of its salinity levels. Surface water includes water in artificial reservoirs, lakes, rivers and streams, snow, ice and glaciers.
Sustainable Development Goals	The Sustainable Development Goals (SDGs) or Global Goals were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. They are a collection of 17 interlinked objectives that emphasize the interconnected environmental, social and economic aspects of sustainable development by putting sustainability at their centre.
Symbiotic Relationship	A close and long-term biological interaction between two different species, which can benefit one or both partners. These relationships are often categorized into three main types: mutualism, commensalism, and parasitism.
System of Environmental-Economic Accounting (SEEA)	The System of Environmental Economic Accounting (SEEA) is the accepted international standard for environmental-economic accounting, providing a framework for organizing and presenting statistics on the environment and its relationship with the economy. It brings together economic and environmental information in an internationally agreed set of standard concepts, definitions, classifications, accounting rules and tables to produce internationally comparable statistics. The SEEA is produced and released under the auspices of

	the United Nations, the European Commission, the Food and Agriculture Organization of the United Nations, the Organisation for Economic Co-operation and Development, International Monetary Fund and the World Bank Group.
T	
Tanks/Ponds	An artificial pond, pool or lake formed by building a mud wall across the valley of a small stream to retain the monsoon or to store water, including those constructed for industrial purposes.
Taxonomy	Taxonomy is the science of naming, describing and classifying organisms and includes all plants, animals and microorganisms of the world.
Technological Disasters	Disasters arising as a result of human intent, negligence or error, or from faulty or failed technological applications. The three types of technological disasters are: industrial accidents which cover accidents associated with chemical spill, collapse, explosion, fire, gas leak, poisoning, radiation and other; transport accidents which cover accidents associated with air, road, rail and water; and miscellaneous accidents which cover accidents associated with collapse, explosion, fire and other disasters of varied origin.
Thematic Accounts	These accounts organise data on themes of specific policy relevance. Examples of relevant themes include biodiversity, climate change, oceans and urban areas.
Thermal Expansion	The increase in volume (and decrease in density) that results from warming water. A warming of the ocean leads to an expansion of the ocean volume, which leads to an increase in sea level.
Threatened Species	Any species which is vulnerable, endangered or critically endangered.
Timber Resources	Defined by the volume of trees, living and dead, which can still be used for timber or fuel.

Total Coliform	Total coliform counts give a general indication of the sanitary condition of a water supply. Total coliforms include bacteria that are found in the soil, in water that has been influenced by surface water, and in human or animal waste.
Total Dissolved Solids	Total dissolved solids (TDS) is the term used to describe the inorganic salts and small amounts of organic matter present in solution in water. The principal constituents are usually calcium, magnesium, sodium, and potassium cations and carbonate, hydrocarbon, chloride, sulphate, and nitrate anions.
Total Hardness (as CaCO3)	Hardness is most commonly expressed as milligrams of calcium carbonate (CaCO3) equivalent per litre. Water containing calcium carbonate at concentrations below 60 mg/l is generally considered as soft; 60–120 mg/l, moderately hard; 120–180 mg/l, hard; and more than 180 mg/l, very hard
Toxic Substance-related Diseases and Health Problems	Include, but are not limited to, chronic illnesses of the respiratory system (such as pneumonia, upper and lower respiratory diseases, asthma and chronic obstructive pulmonary diseases), cancer, infertility and congenital anomalies or malformations.
Toxic Substances	Include toxic pesticides (e.g., pesticides that have teratogenic, carcinogenic, tumorigenic and/or mutagenic effects) and toxic industrial chemicals (e.g., lead, arsenic, mercury and nickel, among others)
Trace Gas	Any one of the less common gases found in the Earth's atmosphere. Nitrogen, oxygen and argon make up more than 99 percent of the Earth's atmosphere. Other gases, such as carbon dioxide, water vapour, methane, oxides of nitrogen, ozone and ammonia, are considered trace gases. Although relatively unimportant in terms of their absolute volume, they have significant effects on the Earth's weather and climate.

Tree	A large woody perennial plant having a single well-defined stem (bole or trunk) and a more or less definite crown. It also includes bamboos, palms, fruit trees, etc. and excludes non-perennial non- woody species like banana and tall shrubs or climbers. For the purpose of assessing growing stock and tree cover, only those trees having diameter at breast height (dbh) of 10 cm or more are measured.
Tree Cover	It comprises of tree patches outside the recorded forest area exclusive of forest cover and less than the minimum mappable area (1 ha) and up to 0.1 ha. Such small patches comprising of block, linear and scattered trees are not delineated as forest cover during interpretation of satellite data. The areas of scattered trees are computed by notional numbers.
Trees Outside Forests (TOF)	Trees growing outside recorded forest areas.
Trophic level	Trophic level is defined as the position of an organism in the food chain and ranges from a value of 1 for primary producers to 5 for marine mammals and humans.
Troposphere	The lowest part of the atmosphere from the surface to about 10 km in altitude in mid–latitudes (ranging from 9 km in high latitudes to 16 km in the tropics on average) where clouds and "weather" phenomena occur. In the troposphere temperatures generally decrease with height.
Tropospheric Ozone (O3)	See 'Ozone'.
Tropospheric Ozone Precursors	See 'Ozone Precursors'.
Turbidity	Measure of the degree to which the water loses its transparency due to the presence of suspended particulates. The more total suspended solids in the water, the murkier it seems and the higher the turbidity. Turbidity is considered as a good measure of the quality of water.

Type of Structure	The structures have been classified into three categories, namely pucca, semi–pucca and kutcha on the basis of the materials used for construction. (a) Pucca Structure: A structure whose walls and roof at least are made of pucca materials. (b) Kutcha Structure: A structure which has walls and roof made of non–pucca materials. (c) Semi–Pucca Structure: A structure which has either the walls or the roof, but not both, made of pucca materials. Materials such as oven–burnt bricks, stone, stone–blocks, cement, concrete, jack–board (cement plastered reed), tiles and timber are pucca materials. Corrugated iron or asbestos sheets used in the construction of roof will also be treated as pucca materials.
U	
Ultimate Irrigation Potential (UIP)	The ultimate irrigation potential is the gross area that can be irrigated from a project in design year for the projected cropping pattern and assumed water allowance on its full development. The Ultimate Irrigation Potential of ground water may however, be taken as the total area that can be irrigated by utilizing the Annually Rechargeable Ground Water Resource Available for Irrigation considering the gross irrigation requirement of crops grown in a unit area.
Ultraviolet Radiation (UV)	The energy range just beyond the violet end of the visible spectrum. Although ultraviolet radiation constitutes only about 5 percent of the total energy emitted from the sun, it is the major energy source for the stratosphere and mesosphere, playing a dominant role in both energy balance and chemical composition. Most ultraviolet radiation is blocked by Earth's atmosphere, but some solar ultraviolet penetrates and aids in plant photosynthesis and helps produce vitamin D in humans. Too much ultraviolet radiation can burn the skin, cause skin cancer and cataracts and damage vegetation.
Unclassed Forests	An area recorded as forest but not included in reserved or protected forest category. Ownership status of such forests varies from state to state.

United Nations Framework Classification (UNFC) for Resources	UNFC is a principles-based system in which the products of a resource project are classified on the basis of the three fundamental criteria of environmental-socio-economic viability (E), technical feasibility (F), and degree of confidence in the estimate (G), using a numerical coding system.
United Nations Framework Convention on Climate Change (UNFCCC)	The Convention on Climate Change, which entered into force on 21 March 1994, sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. The Convention enjoys near universal membership, with 198 countries having ratified. Under the Convention, governments: • gather and share information on greenhouse gas emissions, national policies and best practices. • launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries • cooperate in preparing for adaptation to the impacts of climate change
Urban Land Cover	Urban areas are non-linear built up areas covered by impervious structures adjacent to or connectedby streets. This cover is related to centres of population. This class usually occurs in combination with, vegetated areas that are connected to buildings that show a regular pattern, such as vegetated areas, gardens etc. and industrial and /or other areas. It includes residential areas, mixed built-up,recreational places, public / semi-public utilities, communications, public utilizes /facility, commercial areas, reclaimed areas, vegetated areas, transportation, industrial areas and their dumps, and ash /cooling ponds.
Urban Agglomeration	(i) A city or a town with a continuous outgrowth, the outgrowth being outside the statutory limits but falling within the boundaries of the adjoining villages; or (ii) Two or more adjoining towns with their outgrowths, if any, as in (i) above; or

	(iii) A city and one or more adjoining towns with or without outgrowths all of which form a continuous spread.
V	
Vascular Plants	Land plants that use specialized lignified tissues (the xylem) for conducting water and minerals throughout the plant. They also have a specialized non–lignified tissue (the phloem) to conduct products of photosynthesis. Examples of vascular plants include trees, flowers, grasses and vines.
Vector–borne Diseases	Diseases transmitted by organisms (e.g., insects and arachnids) that carry viruses, bacteria, protozoa and other pathogens. Common vector–borne diseases include, but are not limited to, malaria, dengue fever, chikungunya fever, Acute Encephalitis Syndrome/Japanese Encephalitis and Kala–azar (Visceral leishmaniasis) and Filariasis.
Very Dense Forest	Lands with forest cover having a canopy density of 70 percent and above.
Vulnerability	Degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude and rate of climate variation to which a system is exposed; its sensitivity; and its adaptive capacity.
Vulnerable	Species believed likely to move into the endangered category in the near future if the causal factors continue operating. Included are species of which most or all the populations are decreasing because of overexploitation, extensive destruction of habitat or other environmental disturbance; species with populations that have been seriously depleted and whose ultimate security is not yet assured; and species with populations that are still abundant but are under threat from serious adverse factors throughout their range.
W	
Waste	Covers discarded materials that are no longer required by

	the owner or user.
Wastelands	Described as degraded lands which can be brought under vegetative cover with reasonable effort and which is currently underutilized and land which is deteriorating for lack of appropriate water and soil management or on account of natural causes.
Wastewater	Discarded water that is no longer required by the owner or user and contains dissolved or suspended waste materials
Water Abstraction	The amount of water that is removed from any source, either permanently or temporarily, in a given period of time by economic activities and households.
Water Body	A mass of water distinct from other masses of water. This category comprises areas with surface water in the form of ponds, lakes, tanks and reservoirs.
Water Erosion - Ravines (A6- Shallow /A7- Moderately deep to deep)	An intricate network of gullies developed along river courses.
Water Erosion - Rills (A4)	When the surface runoff in the event of water erosion goes in the form of a concentric flow, tiny water channels are formed in the field. One important feature of rills is that they do not occur at the same place repeatedly. This is a temporary concentric flow of runoff, which could vanish after ploughing the land.
Water Erosion - Sheet Erosion (A1- Slight /A2- Moderate/A3-Severe)	A type of water erosion where the soil particles are removed from the whole soil surface in the form of thin layers. Depending on the magnitude of soil loss, it has 3 severity classes, A1, A2 and A3 with soil loss of 10-20, 20-40 and >40 tons/ha/year soil loss respectively.
Water Erosion (A)	Displacement of soil material by water resulting in either loss of topsoil or terrain deformation or both. This category includes processes such as splash erosion, sheet erosion, rill and gully erosion.
Water Erosion -Gullies (A5)	Gullies are formed as a result of localized surface run-off affecting the unconsolidated material resulting in the formation of perceptible channels causing undulating terrain. If rills are neglected and the erosion continues for a long time, it develops in to gullies.

Water Logging - Sub- surface Water Logging (C3)	Cases of water logging where the water table is within 2 m from the surface. It adversely affects crop by virtue of saturating the root zone due to capillary rise. These areas are potential threat to get surface ponded in due course of time, if the water accumulation continues.
Water Logging - Surface Ponding (C1-Seasonal/C2-Permanent)	Water logging caused by flooding of river water, submergence by rainwater and human intervention in natural drainage systems that adversely affect the natural drainage, where the water stagnates for quite a long time. Depending the number of crops affected, it has been sub-divided into two severity classes, seasonal- affecting one crop and permanent - affecting more than one crop.
Water Logging	Excessive ponding / logging of water for quite some period leading to physical deterioration of land and affects the productivity of land or reduces the choice of taking crops.
Water Resources	Consist of freshwater and brackish water, regardless of their quality, in inland water bodies, including surface water, groundwater and soil water.
Water Vapour	The most abundant greenhouse gas, it is the water present in the atmosphere in gaseous form. Water vapour is an important part of the natural greenhouse effect. In addition to its role as a natural greenhouse gas, water vapour also affects the temperature of the planet because clouds form when excess water vapour in the atmosphere condenses to form ice and water droplets and precipitation.
Waterlogged (Man-made)	Water-logging in areas adjacent to canals due to seepage especially when canals are unlined.
Waterlogged / Marshy Land	Waterlogged land is that low lying land where the water is at/or near the surface and the water stands for most part of the year.
Waterlogged Areas	An area in which water stands near, at, or above the land surface, so that the roots of all plants except hydrophytes are drowned and the plants die. Spectrally, during the period when surface water exists, waterlogged areas appear more or less similar to lakes/ponds. However, during dry season large or all parts of such areas dry up and give the appearance of mud/salt flats. Man–made

	activities like canals can also cause waterlogging in adjacent areas due to seepage especially when canals are unlined. Such areas can be identified along the canal network.
Water-related Diseases and Conditions	Diseases and conditions resulting from micro-organisms and chemicals in the water that humans drink. They include, but are not limited to, diseases caused by biological contamination, such as gastroenteritis infections caused by bacteria, viruses and protozoa and water-borne parasite infections.
Watershed	The geographic area through which water flows across the land and drains into a common body of water, whether a stream, river, lake, or ocean.
Weather	Atmospheric condition at any given time or place. It is measured in terms of such things as wind, temperature, humidity, atmospheric pressure, cloudiness and precipitation. In most places, weather can change from hour–to–hour, day–to–day and season–to–season. Climate in a narrow sense is usually defined as the "average weather".
Weathering	Breakdown of rocks through contact with atmospheric conditions such as heat, water, ice and pressure.
Well	A hand dug or drilled hole to access groundwater.
Wetlands	Areas of land that are either temporarily or permanently covered by water. These are neither truly aquatic nor terrestrial; it is possible that wetlands can be both at the same time depending on seasonal variability. These could be natural or man–made and found both in the inland and coastal areas.
Wildlife Sanctuary	A natural habitat, owned by the government or private agency, which safeguards particular species of birds and animals.
Wind erosion - Stabilized dunes (B4) / Partially stabilized dunes (B5)	Depending on the rainfall and protection available from grazing, the bare sand dunes gradually establishes vegetal cover thus becoming stabilized. In partially stabilized dunes, the erosion / deposition is still active to some extent. When they establish a good vegetal cover either in the form of grasses, shrubs and scrubs, they get

	stabilized and erosion / deposition activity become minimal.
Wind erosion - Un- stabilized Dunes (B6)	Erosion common to the arid areas where due to wind, the sand starts moving and engulfing the adjoining agricultural lands, engineering structures and demands immediate attention for their stabilization. The un-stabilized sand dunes change their location and shape from season to season and hence they are often called shifting dunes.
Wind erosion - Sheet Erosion (B1-Slight/B2- Moderate/B3-Severe)	Uniform displacement of topsoil by wind action as thin layers / sheets. It can result in loss of topsoil and the deposition of the eroded material elsewhere which leads to formation of dune complexes.
Z	
Zoonotic Disease	Diseases caused by germs that spread between animals and people. Also known as zoonoses, these may be bacterial, viral, or parasitic, or may involve unconventional agents.

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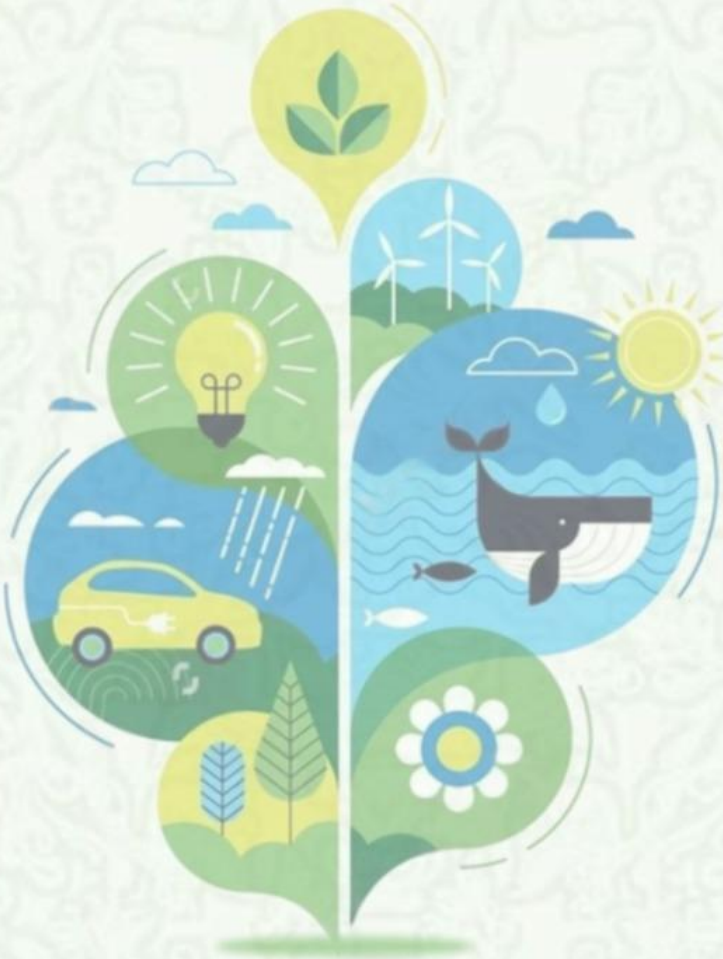

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