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Subscribe to our newsletter and join our community of sustainability enthusiasts!By 2050, the worlds population may reach a whopping 10 billion and with more people comes more demand for food, fashion, travel, housing and related aspirations. An increasing number of people are unable to meet basic needs while two to three billion new urban consumers are born who will receive the majority of their nutrition from social media. In a world stretched thin for resources and under the threat of global biodiversity loss and climate change, our lifestyles decisions are putting the planet at risk. We need targeted action.Sustainable living means understanding how our lifestyle choices impact the world around us and finding ways for everyone to live better and lighter. Applying a people lens to sustainability is new, timely and opportunities are great. Sustainable living and lifestyles for the first time appear in the Sustainable Development Goals (4 Education and 12.8 Responsible Consumption). UN Environment Programme is at the forefront of looking into what sustainable lifestyles are and how decision-making can be better harnessed for sustainability. How can governments and business better support and measure change?Read more The environment encompasses all the living and non-living things around us, forming the natural world that supports life on Earth. It includes everything from the air we breathe and the water we drink to the forests, oceans, and countless ecosystems that maintain the planet's balance. Each part of the environment, from the smallest insect to the largest forest, plays a unique role in sustaining biodiversity, regulating climate, and providing resources essential for human survival. In this article from theadailyECO, we explore what the environment is, its key components, how human activity impacts its balance, and what actions we can take to protect it. Contents The environment encompasses all the chemical, physical, and biological elements that living beings interact with. Is a complex system that includes both natural and artificial elements. While natural elements like air, water, soil, and living organisms form the foundation, human activities have led to the creation of artificial elements such as buildings, roads, and industrial products.For humans, the environment is not just the physical space we inhabit. It also encompasses the cultural and social factors that shape our experiences, beliefs, and behaviors. These intangible aspects, like traditions, customs, values, and social norms, are just as much a part of our environment as the physical world around us.This interconnectedness between natural and human-made elements means that our actions have a significant impact on the environment. For example, deforestation, pollution, and climate change are all consequences of human activities that disrupt the delicate balance of the natural world.Conversely, the environment also shapes our way of life. Natural resources like water and minerals are essential for our survival and well-being. The climate and geography of a region influence our culture, economy, and daily lives.Therefore, it's crucial to recognize that the environment is a dynamic system where humans and nature are intertwined. By understanding this relationship, we can make informed decisions to protect and preserve our planet for future generations.Wood might seem endless, but its far from it. Discover why conserving it is key in this other article. As mentioned earlier, the environment consists of various components that can be broadly categorized into physical and biological elements. Understanding these components is essential for appreciating the complexity of our surroundings and the interactions that occur within them.Physical componentsAir and atmosphere: the atmosphere is the layer of gases surrounding the Earth, vital for sustaining life. It provides oxygen for breathing, protects us from harmful solar radiation, and helps regulate temperature. The composition of the atmosphere influences weather patterns and climatic conditions, making it essential for all living organisms.Water bodies: water is a fundamental component of the environment, existing in various forms such as oceans, rivers, lakes, and groundwater. These water bodies support aquatic life, facilitate transportation, and play a crucial role in the water cycle. Freshwater sources are especially important for drinking water and agriculture, providing essential resources for both humans and ecosystems.Land and soil: land encompasses all terrestrial surfaces, including mountains, plains, and valleys. Soil is a critical component that supports plant growth and sustains terrestrial ecosystems. Healthy soil contains nutrients, organic matter, and microorganisms that contribute to its fertility. The type of land and soil influences the kinds of vegetation and animal species that can thrive in an area.Climate and weather: climate refers to the long-term patterns of temperature, humidity, wind, and precipitation in a particular region, while weather describes short-term atmospheric conditions. Both climate and weather significantly impact ecosystems, influencing the types of plants and animals that can inhabit specific areas. Changes in climate can lead to shifts in biodiversity and the health of ecosystems.Biological componentsPlants and vegetation: plants are essential to life on Earth. They produce oxygen through photosynthesis and serve as the base of most food chains. Vegetation varies widely, from dense forests to arid deserts, and is influenced by climate, soil, and geographical factors. Biodiversity in plant life contributes to ecosystem stability and resilience.Animals: animal life, or fauna, includes a vast range of species that interact with their environment. Animals play crucial roles in ecosystems as pollinators, predators, and scavengers. Their behaviors and populations are closely tied to the availability of food, water, and shelter.Microorganisms: microorganisms, including bacteria and fungi, are often overlooked but are vital to ecological processes. They decompose organic matter, recycle nutrients, and help maintain soil health. Microorganisms also play essential roles in various biogeochemical cycles, such as the nitrogen and carbon cycles.Humans: humans significantly impact the environment through activities like agriculture, urbanization, and industry. As a biological component, our ability to modify the environment sets us apart. It's important to highlight the interconnectedness of these components. For instance, climate influences vegetation, which in turn affects animal populations and soil quality. Curious about whats happening beneath our feet? Learn how soil pollution affects us all.As mentioned before, human activities, influenced by cultural values and technological advancements, can disrupt these natural systems, leading to environmental issues like climate change, pollution, and biodiversity loss. Humans depend on a variety of natural resources to sustain their daily lives and drive development. Renewable resources, such as solar, wind, and water energy, can be replenished naturally or are constantly available, offering sustainable options for energy and materials when managed responsibly. In contrast, non-renewable resources, including fossil fuels, minerals, and metals, are finite and deplete with continued use.Overreliance on these resources can strain the environment and limit future availability. This is why, sustainable resource management is crucial, involving careful planning, balanced consumption, and a shift towards renewable alternatives to minimize ecological impact. The environment faces numerous challenges that threaten ecosystems and human health. These include: Climate change: driven by greenhouse gas emissions, is causing global temperatures to rise, leading to extreme weather events, rising sea levels, and disrupted ecosystems.Pollution: from air and water contamination to plastic waste, affects all aspects of the environment, harming wildlife and human health.Deforestation: the clearing of forests, reduces carbon storage, disrupts biodiversity, and erodes soil.Biodiversity loss: resulting from habitat destruction, pollution, and overexploitation, threatens species and the ecosystem services they provide.Resource depletion: including water scarcity and declining fish stocks, limits access to essential resources, jeopardizing food security and economic stability.Did you know everyday choices can have multiple environmental effects? Learn more about this in our next article.Environmental protection aims to preserve ecosystems and minimize human impact on the environment. Key strategies include adopting sustainable practices like using renewable energy sources and reducing resource consumption.Effective resource management is essential, involving responsible extraction, conservation efforts, and promoting the regeneration of natural resources. Establishing protected areas, such as national parks, provides safe havens for wildlife and helps maintain natural habitats. By implementing these measures, we can safeguard the environment and ensure a sustainable future for generations to come.You can support environmental protection with simple individual actions. Here are some ways you can help:Reduce your carbon footprint: walk, bike, or use public transport instead of driving. Choose energy-efficient appliances, turn off lights, and reduce heating and cooling use at home.Manage waste: recycle paper, glass, and plastics. Compost organic waste to reduce landfill use. Avoid single-use plastics, and bring reusable bags, bottles, and containers.Conserve resources: save water by taking shorter showers and fixing leaks. Use only what you need and avoid wasting food and other resources.Support sustainable products: choose products made from renewable or recycled materials, and support companies with sustainable practices.Protect natural spaces: respect local wildlife and natural areas. Avoid disturbing ecosystems, and participate in local clean-ups or conservation projects.Want to see how nature can thrive in cities? Discover the advantages of urban greenery.The environment is the lifeblood of our planet, providing essential resources like water, air, and food that sustain all living organisms. It's the foundation upon which life thrives, from the smallest microbe to the largest mammal.Human civilization depends entirely on the environment. We rely on it for the raw materials to build our homes, power our industries, and feed our populations. The air we breathe, the water we drink, and the food we eat all originate from the natural world. However, our increasing reliance on the environment has led to significant challenges. Certain human activities threaten the delicate balance of ecosystems and endanger the future of our planet. This is why protecting the environment is not just about preserving nature, but about ensuring the long-term survival of humanity. Wondering how trees contribute to a healthier planet? Discover their vital role in our ecosystem.If you want to read similar articles to What Is the Environment and Why Is It Important?, we recommend you visit our Environment (other category).Banerjee, S. (2012). Indias Revanchist Cities, Economic & Political Weekly, XLVIII(51). Google Scholar DNA (2008). (Retrieved on 31 October 2014).Census of India (2001). (Provisional) Slum Population in Million Plus Cities, (Retrieved on 31 October 2014). 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The environment is everything that is around us, which includes both living and nonliving things like soil, water, animals, and plants, which adapt themselves to their surroundings. It affects the growth and development of living things. It covers both biotic and abiotic components of the environment. The major components of the environment are the atmosphere (air), lithosphere (water), and biosphere (living component of the environment). In this article, we will study what is our environment, what are the components of the environment and what is the importance of the environment in detail.What is the Environment?The word Environment is derived from the French word *Environia* meaning to surround. The definition of Environment given by P. Gisbert is Environment is anything immediately surrounding an object and exerting a direct influence on it and as per E. J. Ross, Environment is an external force which influences us. Our Environment is made up of interacting systems of natural, physical, biological, and cultural factors that are connected both individually and collectively. Our Environment is comprised of both living and non-living things, that have a direct effect on human existence.Components of EnvironmentThe four major components of the environment are lithosphere (rocks), hydrosphere (water), atmosphere (air), and biosphere (life):LithosphereThe term Lithosphere is derived by combining the Greek word "lithos", which signifies rock, with the word "sphere." The lithosphere is the solid outer portion of Earth which includes Earth's crust as well as the underlying cool, dense, rigid uppermost portion of the upper mantle. At the center of the Earth is a structure called the Core, which has a diameter of around 7000 km and a radius of 3500 km. Surrounding the core is the 2900 km thick mantle. The lithosphere extends from the surface of Earth to a depth of approximately 100 km. The tectonic plates of Earth make up the majority of the lithosphere.HydrosphereIt includes all types of water bodies on Earth, such as freshwater (rivers, lakes, ponds, streams), marine (oceans, seas), and groundwater resources, among others. There are three states of water: gas (water vapour), liquid (water), and solid (ice). It occupies 71% of the planet's surface. The oceans contain 97.5% of all the water on Earth, which is salt water. Freshwater makes up only 2.5% of all water on Earth. Of total, 68.9% is in frozen forms, such as glaciers, while 30.8% is accessible as groundwater. A readily available quantity of 0.3% can be found in lakes, reservoirs, and rivers.AtmosphereThe earth is enveloped by thick gaseous layers that make up the atmosphere. It stretches up to 300 km. Life is supported by the atmosphere which contains a lot of oxygen. It is composed of gases such as nitrogen (78.08%), oxygen (20.95%), argon (0.93%), carbon dioxide (0.03%), and trace amounts of hydrogen, helium, and noble gases. The troposphere, stratosphere, mesosphere, and thermosphere, and exosphere are the layers that rise above the surface of the earth.The lowest layer is called the troposphere. It rises from ground level to a height of roughly 11 kms above sea level. The stratosphere is the next layer above. It stretches from the top of the troposphere to about 52 km above the ground. The ozone layer is present in stratosphere. Ozone molecules in this layer absorb ultraviolet light from the sun and convert the UV energy into heat. The mesosphere is located above the stratosphere. It rises to a height of approximately 85 kms above Earth. The mesosphere is where most meteors burn up. The thermosphere is the layer of extremely rare air above the mesosphere. The thermosphere absorbs UV and high energy X-rays from the Sun, which can cause it to heat up to thousands or even hundreds of degrees. The top thermosphere can have temperatures as high as 2,000C.BiosphereIt includes every area of Earth where life is present. It includes both living things and non-living objects in the environment. There could be ecosystems in the soil, air, water, or on land that sustain life. Geologist Edward Suess first used the word "biosphere" to refer to any area of Earth where life is present. It stretches from the polar ice caps to the equator, with a living form appropriate for the local environment existing in each zone. An ecosystem is a part of the biosphere that influences the state of the planet as a whole.The biotic and abiotic components of the environment begin to have significance when they start interacting. For example, biotic components such as plants provide nourishment for other living organisms. The soil is an abiotic component that provides nutrients and other essential components to promote plant growth. Both biotic and abiotic factors create and rely on one another, including soil, nutrients, and other abiotic factors.The components of the environment can be broadly divided into two categories: Biotic Components and Abiotic ComponentsAlso known as biological component of environment. It consists of flora and fauna as well as human beings that make up the ecosystem. Ecosystems are created by the interactions of plants, animals, and microorganisms with abiotic materials. These ecosystems also feature different populations of producers, consumers, and decomposers among other organism types. Fungi, bacteria, animals, plants, and animals are biotic factors. And based on the energy source, these biotic components can be further separated into producers, consumers, and decomposers.Producers (Autotrophs) These are plants and other photosynthetic organisms that use carbon dioxide, water, and sunlight to produce food on their own. They serve as the foundation of the food chain because they transform solar energy into a form that other organisms may use.Consumer (Heterotrophs) Consumers are the organisms which depend on producers for energy. Examples of consumers include herbivores (plant eaters), carnivores (meat eaters), and omnivores (both plant and animal eaters).Decomposers (Saprophytes) They decompose organic debris and dead organisms into simpler chemicals, which they then consume as food. They are crucial to the recycling of nutrients within ecosystems because they return nutrients to the soil for plant uptake.Also known as physical component of environment. It is the non-living portion of the ecosystem. The abiotic component of an ecosystem is made up of the environment, water, light, air, soil, humidity, nutrients, and other physical and chemical factors. In general, abiotic components of ecosystem differ from one ecosystem to the other. The aquatic environment has abiotic components such as salinity, nutrients, and dissolved oxygen. Type of soil, rain, wind, temperature, altitude, sunlight, and nutrients are all significant abiotic components in terrestrial ecosystems. These abiotic components can be grouped into different categories:Physical Factors: These consist of factors including air pressure, temperature, humidity, and light intensity. These elements define an area's climate and have a big impact on the kinds of species that thrive there.Chemical Factors: These include the water and soil composition, which includes the pH, nutrition levels, and presence of different minerals. These elements have an impact on the nutrients that are available to plants and other living organisms.Geological Factors: An area's underlying geological features, including the kinds of rocks and soil, drainage, the availability of nutrients, and the general suitability of the habitat, can all be impacted.Topographic Factors: The topography of the area, including its mountains, valleys, and water bodies, affects the micro-habitats, water flow, and local weather patterns.Types of EcosystemsAn ecosystem is characterized as the structural and functional component of the biosphere that consists of living and non-living elements interacting with one another. Two major categories can be used to classify ecosystems: Natural EcosystemThe term "natural ecosystem" describes ecosystems that arise organically. They are capable of functioning and sustaining themselves without human intervention. They fall into two categories: terrestrial and aquatic ecosystems. Artificial EcosystemThis ecosystem is the one that has been created by humans. It has been noted that artificial ecosystems share several traits with natural ecosystems. But human beings make and maintain them. For example, gardens, parks, dams, aquariums, and crop fields. Importance of Our EnvironmentOur environment includes sun, land, water, air and soil, all of which play an important role for human survival. It preserves genetic diversity and biodiversity, which ensures the survival of life. Earth is habitat for different living species and we all are dependent on the environment for our basic necessities such as food, water etc. The environment not only maintains the balanced climate but all those components which are necessary for life are received by the environment itself as well. Environmental resources, comprising both renewable and non-renewable resources, are readily available for use in the production of goods and services. The production and consumption of different activities produce waste, which is mainly in the form of garbage, and environment itself helps to remove that waste generated. We, human beings, are able to appreciate the scenic beauty of mountains, oceans, rivers, lakes, deserts etc. only because the environment still persists.It is foremost duty of each and every person to protect and preserve our environment. Our environment provides a space for our ecosystem and supports its growth. Until and unless we save our environment, animals, crops, and eventually ourselves, are at risk. We, human beings, cannot survive if there were no environment for our dwelling. Also, we would also be unable to discover other alternatives of survival.Our Environment DayWorld Environment Day is a global event that takes place on June 5th every year. World Environment Day is organized by the United Nations and is designed to raise awareness and encourage action on pressing environmental issues.On this day, people and organizations around the world participate in various activities to promote environmental sustainability and address challenges such as climate change, pollution, deforestation, and loss of biodiversity. The theme for World Environment Day changes each year, focusing on different aspects of environmental conservation.Also Read: For other uses, see Environment (disambiguation).Environment means what surrounds us. It may be living or non-living things. It includes physical, chemical and other natural forces. Living things live in their environment. They constantly interact with it and adapt themselves to conditions in their environment. In the environment there are different interactions between animals, plants, soil, water, and other living and non-living things. The word environment is used to talk about many things. For example, trees, rivers, and oceans are a part of the environment. People in different fields of knowledge use the word environment differently. Electromagnetic environment is radio waves and other electromagnetic radiation and magnetic fields. The environment of a galaxy may mean the interstellar medium, or it may mean other nearby galaxies.In psychology and medicine, a person's environment is the people, physical things and places that the person lives with. The environment affects the growth and development of the person. It may affect the person's body and mind. The conditions of living organisms in an environment are affected by the weather and climate changes in the environment. They are also greatly affected by other living things.Main article: Natural environmentIn biology and ecology, the environment is all of the natural materials and living things, if those things are natural, it is a natural environment.Environment includes the living and non-living things that an organism interacts with, or that have an effect on it. Living elements that an organism interacts with are known as biotic elements: animals, plants, etc. Abiotic elements are non-living things which include air, water, sunlight etc. Studying the environment means studying the relationships among these various things. An example of interactions between non-living and living things is plants getting their minerals from the soil and making food using sunlight. Predation, an organism eating another, is an example of interaction between living things.Environmentalists think we should protect the natural environment, to keep it safe. Things in the natural environment that we value are called natural resources. For example, fish, insects, and forests. These are renewable resources because they come back naturally when we use them. Non-renewable resources are important things in the environment that are limited for example, ores and fossil fuels after a few thousand years. Some things in the natural environment can kill people, such as lightning.Ecological units which are natural systems without much human interference. These include all vegetation, microorganisms, soil, rocks, atmosphere, and natural events.Universal natural resources and physical phenomenon which lack clear-cut boundaries. These includeclimate, air, water,energy,radiation,electric charge, andmagnetism.Environmental chemistryEnvironmental factorEnvironmental revitalizationEnvironmentalismEcologyRetrieved from " Fact Checked Content Last Updated: 03.05.2023 12 min reading time Content creation process designed by Content cross-checked by Content quality checked by Save Article Save Article The living environment is represented by the space in which organisms (biota) live and interact with each other or with the non-living environment (the abiota).Plants, animals, protozoa, and other organisms are known as biota. In order to survive, they interact with non-living elements that support life, known as the abiota, such as air, water, and soil. The living environment can be broken down into smaller ecosystems or environments. Fig. 1: The living environment. A coral reef is a marine ecosystem where the living organisms correspond to the biosphere, the aquatic medium is part of the hydrosphere and the ocean crust and sediments correspond to the lithosphere (although the atmosphere is not visible here, it is interlinked to the other spheres, for example interchanging gases with the water)Some living environment examples are (Fig. 1):Soils, rocks, etc. as the lithosphere.Seas, groundwater, etc. as the hydrosphere.Air, as the atmosphere.Animals, plants, etc., as the biosphere.Glaciers, ice caps, etc., as the cryosphere.Grasslands, deserts, artificial floating islands, etc., which combine any or all of the above.These components mix and interact in different types of ecosystems.Our living environments have been separated into these main spheres:The Atmosphere: the gas mixture surrounding the planetThe Lithosphere: the crust and upper mantle, thus, the rocky layer of the planetThe Hydrosphere: the water present on our planet in all its forms, including the Cryosphere (frozen water)The Biosphere: all living things.The roles and functions of our living environment are multifaceted. The presence of life on Earth has not only brought modifications to the climate but has also enabled our evolution. It is essential to conserve natural areas and encourage biodiversity to ensure continued habitation for all organisms on Earth.Functions of the living environmentExamplesUnique resources Timber (pinewood), fuel (biological oils), food (edible mushrooms), fibres (wool), medicine (peppermint).Ecosystem services Planetary homeostasis through the mediation of biogeochemical cycles, freshwater filtration through soil and sediments, interspecies relationships such as pollination and seed dispersal.Life-enabling Our planets living environment is the only one that we know can harbour life, for now.Cultural, spiritual, recreational New methods of intra-species communication, such as speech and writing inspired by other species. Table 1: Some of the functions of the living environment with examples.Planetary homeostasis refers to the regulation of a planet's environment by its natural systems. This includes the moderation of a planet's temperature, keeping its atmosphere in balance, and helping renew its resources.Several hypotheses have been used to explain the origins of life. According to the panspermia hypothesis, life may have been caused by extraterrestrial microscopic life carried onto Earth by falling space debris and meteorites. Another theory is that life originated exclusively from the chemical reactions during the primordial exhalation of the Earth, which led to the production of amino acids and other organic compounds (abiogenesis). There is no universally accepted theory for how life on Earth first appeared. It is possible that both panspermia and abiogenesis led to life on Earth. Space itself (interplanetary, interstellar, etc.) is an environment. Some people believe it is a yet undiscovered living environment, but it would be one of the most extreme we know of. Let's start with the Big Rock - the Earth's humble beginnings. Some 5 billion years ago, the earth began accumulating stellar materials and debris in its orbit. Skipped to 0.5 billion years later and the intense surface heat caused heavy metals to melt and aggregate into a core, which nowadays also sustains the magnetosphere. We think that the Earth remained abiotic for another 0.7 billion years, until the first signs of life appeared in the form of bacterial communities. These communities were discovered in 3.7 billion-year-old rocks. At this point, the key was heated: Earth had become a living environment.Future discoveries could change our definition and perception of what constitutes life and a living environment, and how we can identify them. We learned about the first signs of life on Earth (biosignatures) through the use of sophisticated technology (spectroscopy instruments) that interpreted a type of carbon molecule species (isotope) left by living matter (cyanobacteria) in rock formations (stromatolites).Up to about 2.2 billion years ago, the major atmospheric gases were carbon dioxide (CO2), water vapour, and nitrogen (N2). The first two were produced by volcanoes and evaporation from the oceans with the help of solar radiation (insolation). At the same time, water was maintained liquid by the atmospheric pressure of around 1 bar. This is about the same as on Earth today, which is approximately 1.013 bar.As life developed, photosynthetic bacteria, followed by algae and plants, started to consume CO2, sequestered or locked it in their cells, and then released oxygen (O2) as a by-product.1. In the past few centuries, the biggest gas-emitting sources have come from anthropogenic activities, especially from the utilization and burning of fuels. These fuels predominantly release CO2, CH4, and nitrous oxides (NOx) into the atmosphere, as well as particulate matter (PM). Several flying species may exploit the atmosphere and its air currents more than others. Some spend most of their life in mid-air, such as the common swift (lat. *Apus apus*). Others, such as Rppell's griffon vulture (lat. *Gyps rueppelli*), have been seen flying in the lower stratosphere.Meteorites are often formed of or contain ice, and it is believed that they have brought significant amounts of water to Earth. The Earth's orbital sphere is just the right distance from the sun to allow for liquid water, which is all known life forms. Water on Earth also absorbs vast quantities of heat and heat-trapping gases like CO2, helping keep global temperatures in check.The hydrosphere can be defined by water acidity (pH), temperature, and cyclicality, and is also affected by anthropogenic activities such as introduced species, deliberate eradication or chemical runoff. Water is abundant but uneven across the globe. This makes water resources highly valuable to industry (paint and coating manufacturers), agriculture (irrigation), domestic life (washing water) as well as wildlife (potable sources). Coral polyps are long-lived invertebrate organisms that remain sensitive to climate change. A colony of black coral (*Leiopathes abundantis*) found in Hawaii was estimated to be about 4265 years old2. Even small but definite changes in water pH and turbidity can cause deep-sea coral colonies to die in a few months when on average they could live up to a few hundred years. The living environmental and its organisms health are linked because chemical energy flows constantly between producers (e.g. plants), consumers (e.g. plant-eaters) and decomposers. This is called a food chain, system, or web. Fig. 2: Organisms organize in food chains or webs according to their diets. Just as nutrients move through the chain or web, chemicals and toxins do too.Sometimes, chemicals can accumulate in nature, through processes known as: bioaccumulation: usually accumulating in an organism over time through absorption,biomagnification: usually accumulating in an organism after predation.Mercury is a toxic metal, known to bioaccumulate and biomagnify in marine organisms. The problem of mercury bioaccumulation in fish has also been the target of human medical research. Humans recognize the negative aspects of these processes, and institute laws to protect fauna, flora, fungi, etc. from harmful human activities or natural disasters. Conservation and management: IUCN Red List, The Wildlife and Countryside Act 1981Climate change adaptation: The Great Green Wall of Sahel3, Climate Adaptation Scilly4Climate change mitigation: Biodiversity Net Gain UK 20215, the phasing-out of fossil fuel vehicles.As well as: Breeding and releasing programmes: Bison Rewilding PlanHabitat creation: Endangered Landscapes Programme in the Southern CarpathiansAll of this can be a lot to take in! Why not test your knowledge on some of the questions below.If you were to go to a forest or woodland and pick up a rotting piece of wood, how many biotic and abiotic elements would you be able to identify? You may be surprised to know that in the UK, a single rotting oak log can accommodate more than 900 individual invertebrates from forty different species6. And thats without counting lichens, mosses, fungi, amphibians or other organisms!The quality of our food, water, and air, all have a direct impact on our health and quality of life. Our food supply depends on healthy ecosystems. Our built environment has the capacity to influence life. Lets see if you can answer the following question:Would you be able to create a list of the effects that a hydroelectric dam can have on the living environment?The commissioning and placement of a hydroelectric dam on a river can influence the following abiotic factors in a living environment: alluvial deposits quantity, soil compaction degree, the volume and speed of river water flowing, usually expressed in cubic meters per second (m3/s). The living environments biota influenced by this type of construction can consist of migratory fish species, crustacean diversity, or humans living downstream from the hydro central. In its geologic history, both rapid and slow changes have occurred in the living environment. Rapid changes are typically correlated with extinction events, as they occur at rates faster than species can adapt. Species affected by such events can be grouped into:Keystone species: their disappearance affects the whole food web of a region, e.g. European rabbit *O. cuniculus*.Endemic species: found only in specific geographical areas, e.g. red grouse *L. lagopus scoticus*.Highly distinct species or of commercial interest: often needing strong regulations to avoid over-exploitation, e.g. South African abalone *H. midae*. How or why would species be affected by a changing living environment and climate, one might ask?7 There are certain environmental standards that need to be met for the biota to at least reach sexual maturity and reproduce, thus ensuring species continuation, and for the Earth's systems to maintain certain temperature, atmospheric, pressure, or humidity thresholds, or bring a cyclical quality to them. Some of the most important standards for life on Earth are:Water quality and availability (ex. impacted by human drainage)Light levels (ex. impacted by vegetation clearance)Gas levels, especially of oxygen and carbon dioxide (ex. impacted by eutrophication)Nutrient availability (ex. impacted by agricultural practices)Temperature (ex. impacted by concrete-covered ground)Natural disaster occurrence (ex. volcanism)Biology is the science that studies living organisms, thus it deals with the biotic component of the living environment. Biology focuses on living beings typically at the organism level, while ecology and environmental science focus usually on levels above the organism level (as species, populations, interaction with other organisms and abiotic factors, etc.)This area of study falls under Environmental Science and touches upon Ecology. It looks at the interaction of living organisms as well as how an understanding of this informs how we as humans can be more sustainable. Hopefully, you now have a better understanding of the living environment and why it is so important for us to manage it with care!Highly specific intra- and extraplanetary conditions in the formative stages of Earth's development allowed life to develop and survive.Physical and chemical exchanges between the major earth systems which are the land, water and atmosphere sustain the living environment.Human interactions with their environment are significant enough to produce measurable changes in Earth's systems. Research, critique, data collection, spatial analysis, observations and knowledge progress allow for measures to be taken to conserve, protect or enhance the living environment's characteristics. We are part of a distinct global ecosystem that constantly tries to achieve homeostasis. Is living environment the same as biology? No, living environment is not the same as biology. Environmental science studies everything that has to do with the environment, such as ecology, and including the non-living parts, such as physical geography. In Biology, on the other hand, a lot of focus would be given, for example, to cell structure and function. What is the living environment? The living environment is represented by the space in which organisms (biota) live and interact with each other or with the non-living environment (the abiota). What is a non-living environment? A non-living environment represents the abiota such as water, soils, air, etc. summarized as the lithosphere, hydrosphere and atmosphere. What is a good living environment? A good living environment can be summarized as one in which a rich variety of species can grow and multiply or pass on their genes. A more specific definition of a good living environment depends on the species/frame of reference. What do you learn in living environment? In living environment you learn environmental science topics, as a sub-discipline that teaches us about its role and functions, examples of earth systems, its creation and homeostasis, its ecology and energy flow, and how it influences our development as a species. Save Article At StudySmarter, we have created a learning platform that serves millions of students. Meet the people who work hard to deliver fact based content as well as making sure it is verified. Lily Hulatt is a Digital Content Specialist with over three years of experience in content strategy and curriculum design. She gained her PhD in English Literature from Durham University in 2022, taught in Durham Universitys English Studies Department, and has contributed to a number of publications. Lily specialises in English Literature, English Language, History, and Philosophy. Get to know Lily Gabriel Freitas is an AI Engineer with a solid experience in software development, machine learning algorithms, and generative AI, including large language models (LLMs) applications. Graduated in Electrical Engineering at the University of So Paulo, he is currently pursuing an MSc in Computer Engineering at the University of Campinas, specializing in machine learning topics. Gabriel has a strong background in software engineering and has worked on projects involving computer vision, embedded AI, and LLM applications. Get to know Gabriel Access over 700 million learning materials Study more efficiently with flashcards Get better grades with AI Sign up for free Already have an account? Log in Good job! Keep learning, you are doing great. Don't give up! Next Open in our app StudySmarter is a globally recognized educational technology company, offering a holistic learning platform designed for students of all ages and educational levels. 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