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## **CURRENT HUMAN IMPACT ON ECOLOGY**

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**Abstract**: Humans impact the physical environment in many ways: overpopulation, pollution, burning fossil fuels, and deforestation. Changes like these have triggered climate change, soil erosion, poor air quality, and undrinkable water

**Keywords**: Human, environmental, degration, deterioration, habitat destruction, impact, ecology.

**Аннотация**: Люди влияют на физическую окружающую среду разными способами: перенаселение, загрязнение окружающей среды, сжигание ископаемого топлива и вырубка лесов . Подобные изменения спровоцировали изменение климата, эрозию почвы, плохое качество воздуха и непригодность воды для питья.

**Ключевые слова:** Человек, окружающая среда, деградация, деградация, разрушение среды обитания, воздействие, экология.

### INTRODUCTION.

The term anthropogenic designates an effect or object resulting from human activity. The term was first used in the technical sense by Russian geologist Alexey Pavlov, and it was first used in English by British ecologist Arthur Tansley in reference to human influences on climax plant communities.[20] The atmospheric scientist Paul Crutzen introduced the term "Anthropocene" in the mid-1970s.[21] The term is sometimes used in the context of pollution produced from human activity since the start of the Agricultural Revolution but also applies broadly to all major human impacts on the environment.[22][23][24] Many of the actions taken by humans that contribute to a heated environment stem from the burning of fossil fuel from a variety of sources, such as: electricity, cars, planes, space heating, manufacturing, or the destruction of forests.[25]

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Human impact on the environment (or anthropogenic environmental impact) refers to changes to biophysical environments[1] and to ecosystems, biodiversity, and natural resources[2] caused directly or indirectly by humans. Modifying the environment to fit the needs of society (as in the built environment) is causing severe effects[3][4] including global warming,[1][5][6] environmental degradation[1] (such acidification[1][7]), mass extinction and biodiversity as ocean loss, [8] [9] [10] ecological crisis, and ecological collapse. Some human activities that cause damage (either directly or indirectly) to the environment on a global scale include population growth,[11][12][13] neoliberal economic policies[14][15][16] and growth, [17] overconsumption, overexploitation, pollution, rapid economic and deforestation. Some of the problems, including global warming and biodiversity loss, have been proposed as representing catastrophic risks to the survival of the human species.[18][19]

## THE MAIN PART.

Human impact on the environment (or anthropogenic environmental impact) refers to changes to biophysical environments and to ecosystems, biodiversity, and natural resources caused directly or indirectly by humans.

Human activity is causing environmental degradation, which is the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems; habitat destruction; the extinction of wildlife; and pollution. It is defined as any change or disturbance to the environment perceived to be deleterious or undesirable.[74] As indicated by the I=PAT equation, environmental impact (I) or degradation is caused by the combination of an already very large and increasing human population (P), continually increasing economic growth or per capita affluence (A), and the application of resource-depleting and polluting technology (T).[110][111]

According to a 2021 study published in Frontiers in Forests and Global Change, roughly 3% of the planet's terrestrial surface is ecologically and faunally intact, meaning areas with healthy populations of native animal species and little to no human footprint. Many of these intact ecosystems were in areas inhabited by indigenous peoples.[112][113]

### CONCLUSION.

Biodiversity generally refers to the variety and variability of life on Earth, and is represented by the number of different species there are on the planet. Since its introduction, Homo sapiens (the human species) has been killing off entire species

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either directly (such as through hunting) or indirectly (such as by destroying habitats), causing the extinction of species at an alarming rate. Humans are the cause of the current mass extinction, called the Holocene extinction, driving extinctions to 100 to 1000 times the normal background rate.[117][118] Though most experts agree that human beings have accelerated the rate of species extinction, some scholars have postulated without humans, the biodiversity of the Earth would grow at an exponential rate rather than decline.[119] The Holocene extinction continues, with meat consumption, overfishing, ocean acidification and the amphibian crisis being a few broader examples of an almost universal, cosmopolitan decline in biodiversity.

Human overpopulation[120] (and continued population growth)[121] along with overconsumption, especially by the super-affluent,[122] are considered to be the primary drivers of this rapid decline.[123][124] The 2017 World Scientists' Warning to Humanity stated that, among other things, this sixth extinction event unleashed by humanity could annihilate many current life forms and consign them to extinction by the end of this century.[36] A 2022 scientific review published in Biological Reviews confirms that a biodiversity loss crisis caused by human activity, which the researchers describe as a sixth mass extinction event, is currently underway.[125][126]

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