Extinction Of Species: Global, National And Personal Perspective

Q: Are humans causing species-wide extinction?

Introduction

Is it possible to visualize a world without animals? No bird flying in the sky; no fish swimming in the water; no animal in the forest. Nobody would be able to live in a world without animals, as it is not a fascinating, thrilling, or attractive place. But the monumental hazard to animals is human. There are 100,000,000 different species in the world and at least 10,000 species go extinct every year. A huge number of species are in danger due to the environmental change caused by humans. Figure 1 shows the “Increase in the number of species assessed for The IUCN Red List of Threatened Species (2000-2019).” So, we can see from this evidence that year by year more and more species are becoming extinct as by the end of the 19th century there were around 10,000 threatened species but as the years progress this rate started to rise immensely, going as far as reaching 30,000 endangered species by 2019. The rapid loss of species 1,000 and 10,000 higher than the natural extinction rate. The species go extinct even before the science find and report them. The sudden change of environment and human’s new development are at times not sufficient enough to fulfill the needs of many animals due to which they become extinct.

The research that I have provided with concludes the answer to the question that, “Are humans causing species-wide extinction?” The research provides several different viewpoints on the topic, future prediction as well as the issues and an effective course of action/solution which will determine the answer to the question and also provides detailed hindsight in addition to providing comprehensive and detailed analysis of wildlife species in endangerment.

Figure 1: https://www.iucnredlist.org/resources/summary-statistics

Global Perspective

The extinction of species is a global issue that needs to be determined. Almost 1,300 total species in the United States on the verge extinction. “More than one in 10 of the UK’s wildlife species are threatened with extinction and the numbers of the nation’s most endangered creatures.”“The new report found that 56% of species declined between 1970 and 2013, and 53% between 2002 and 2013.” (1) “Three of the UK's 25 bumblebee species are now extinct and a further eight are under pressure. Two-thirds of moths and more than 70% of butterflies are also in long term decline.”(2) If the extinction rate of species remains the same, we will lead to just 50% left. In Africa, three to five million population of African elephants was decreased by hunting. In the 1980s 100,000 elephants were put to death every year and almost 80% herds were extinct in some regions. The extinction of species is a global issue and has profound importance. According to International Union for Conservation of Nature's Red List of Threatened Species 71,576 species are close to extinction.

“According to IUCN counts, the countries with the highest numbers of species at risk of extinction are Ecuador (2,301), the U.S., Malaysia (1,226), Indonesia (1,206) and Mexico (1,074). India, China, Brazil, Tanzania and Australia round out the top ten; each of those nations has more than 900 species at risk of extinction on the IUCN Red List.”(3)

National Perspective

“Pakistan has rich sources of biodiversity, which belong to a unique blend of habitat and ecosystem types.”(4)The only factor which effect 1000 of species in Pakistan is the harshness of the environment. The species have learned to survive in the environment but this lead to their extinction. “Pakistan has a number of the world’s rarest animals like Indus River dolphin, Snow leopard, Western Tragopan, Markhor, etc. All these and other species are in decline due to a combination of threats such as habitat loss and overuse of natural resources.”(5)There are some important factors that negatively affect the biodiversity of Pakistan Such as, Degradation of habitat, Lust for hunting & over-harvesting, Deforestation, Land conversion, Soil erosion Trade, Chemical pollution. (6). There are more than 105,500+ species assessed in Pakistan from which 28,000+ are threatened species and the number of targeted species in 2020 is 160,000.

Issues Of Extinction Of Species

There are many reasons, which lead to the extinction of species, some of which are, human developments and technological advancements. The overpopulation of humans is directly proportional to human development. Overpopulation is the root cause of deforestation, mining, and such other environmental issues. Environmental changes make the environment unhealthy for the species. Unsustainable human population growth is also one of the main causes of the extinction crises. Figure 2 and figure 3 clearly show the poor condition of the environment and we can imagine how badly animals suffer. Other causes of extinction of species are climatic change, population genetics etc. We change in the world very quickly but animals adopt environmental changes very slowly. Rise of different human activities may lead to the destruction of the environment as well as the resources which may lead to serious climatic changes and affect the extinction of species. “Population genetics do affect the evolution of animals thus risks extinction to certain species. Genus extinction could be as a result of limited geographic range thus can lead to mass extinction.”(7)Overhunting also engenders the extinction of species. This is due to overpopulation, tradition and culture. Hunting for fun and sports etc. Overhunting can affect the wildlife, food chain. These problems are increasing and if they are not addressed out, they will overshadow the future.

In my opinion Environment change or basically, habitat loss is the most important issue for the extermination of the species. It is because environmental change can lead to the loss of animal habitat. This can be detrimental for the species. “Human actions threaten wildlife in two main ways: by destroying and damaging the places where species live, and by using them in ways that are unsustainable.”(8). Human activities cause environmental changes in quite a lot of ways (either directly or indirectly) their actions lead to severe consequences that degrade the environment thus causing biodiversity loss they do it by causing deforestation, overpopulation, pollution and global warming, harvesting natural resources for industrial production and urbanization. Clearing habitats for agriculture is the principal cause of habitat destruction. Other important causes of habitat destruction include mining, logging, trawling, and urban sprawl.

Even if a small element of an ecosystem breaks down, the whole system's balance is threatened.

"Since the origin of life on Earth, it's fair to say that more species have gone extinct than are currently alive now," said Dr. Anthony Giordano, president and chief conservation officer of the Society for the Preservation of Endangered Carnivores and their International Ecological Study (SPECIES). (9)" Almost 300 species are at extinction on the island of Ireland. "The Endangered Species Act (ESA), passed in 1973, was enacted to halt the rapid loss of plant and animal life. (10)" The extinction of species only leads to loss of biodiversity. Animal extinction is a huge hazard and global crises affecting everything around us including you.

Figure 2: https://intpolicydigest.org/2015/04/08/the-environmental-impact-of-china-s-investment-in-africa/

Figure3: https://www.dlapiper.com/en/morocco/insights/publications/2018/08/democratic-republic-of-congo-mining-code/

Consequences

The consequences of extinction cause a butterfly or ripple effect as the food web gets completely imbalanced and predator to prey relation may also cause many problems although extinction of animals on top of the food chain or the alpha's of the wild seems to cause the most major consequences but the extinction of small animals may also cause subtle changes. For example lack of cougars in Utah, U.S.A led to massive deer population increase.In Africa, where lions and leopards are being lost to poachers, there is a surge in the number of olive baboons, who are transferring intestinal parasites to humans living nearby, etc. also the word extinction means that there will be no trace; left of the animal on the face of the earth and reproduction or recreation of said species will not be possible thus lowering overall biodiversity in the environment. Humans can also be affected by not lack of forestation to stop floods, source of consumption, less oxygen, less resources etc. also medicine and skin extracted from animals will be no more thus causing many detrimental issues for years, decades, and centuries to come.

Solutions

The solutions for resolving this issue of extinction of species are found in our everyday behaviour. Educating and spreading awareness about endangered species and how human activities affect the wildlife so that everyone should contribute the endangered species around them. The wildlife can be protected by reducing overpopulation so that the need for deforestation and urbanization is not needed. Another way to tackle the extinction of species could be to reduce the excess amount of hunting, done by humans as many people hunt on illegal terms as well as hunt for sports. This tends to call the death of many animals and there is no sustainable way around it. Climate changes are becoming one of the biggest human activities to impact animal extinction in the masses. As global warming and more carbon dioxide is now present in the atmosphere, wildlife habitat are becoming more exposed to the dangers of extreme climate change and sever amounts of pollution caused by humans. As melting of ice caps as well as coral reef degradation are just some of the examples of the consequences of severe climatic changes. "Arctic sea ice is now declining at a rate of 12.85 per cent per decade,

relative to the 1981 to 2010 average. Figure 4 shows the average monthly Arctic sea ice extent each September since 1979, derived from satellite observations."(11) We should support the organizations that are protecting endangered species. We should grow more plants because it is a shelter of the native wildlife. Each and everyone should recycle and buy sustainable products because they are less harmful to the environment. We should stop the use of wild animals for entertainment purposes. We should boycott the products which are made from different species.e.leather, cow skin etc. Together we can make the change and we can stop the extinction of species.

In my perspective, the most effective solution to save endangered species is to reduce overpopulation. It is because overpopulation is a factor of human activities. Overpopulations further cause climatic changes and excess amount of hunting.

Figure 4: https://climate.nasa.gov/vital-signs/arctic-sea-ice/

Source evaluation:

The sources used in this report vary quite extensively in its reliability as data needed to be collected from a variety of different sources to come to a conclusion. When it comes to the recentness of my sources they are mostly recent i.e. after 2010, with most of my figures and resource being collected from recent research of 2016-2019. Except for the book used in resources (13) as well as some of the articles that I collected for my national perspective data collection i.e. (article 4, 5, 6, 7, 8)'s dates are not listed. But in the reliability of my sources most of them were reliable for example collections from NASA, the WWF fund, the guardian etc. and were authentic sites while others showed no signs of biasness or hints of vested interest except for the blog used via recourse (12). As well as some journals or news sites that could have twisted wordings and exaggerated their studies to attract readers and also data from a legal firm in figure 3 could be bias since the regulation of policies and to challenge the authority is their occupation. But throughout most of my work I made sure my research came from reliable sources as well as dated ones. Especially while gathering facts and statistics I was very particular on the authenticity and reliability of my research.

Personal Perspective

Previously I never thought about the extinction of species. I have been listening, to the fact that the extinction of species is an issue but I never imagined that species were so endangered worldwide. They play an important role in human's life. In my research I found that human activities are the root cause of the extinction of species. On the other hand, I have completely changed my perspective on this topic. Now I belief that this is a very important issue, the number of dangerous activities of humans and the environmental complications cause the extinction of species. We should imagine the extinction of species and their negative effects on the world. Many people have not still realized about this global issue or they have never thought about this issue before. They may be unaware about this issue in short. People should change their beliefs because inner changes create outer changes. So it is time to move on, bring a change and make this world a better place for the species as well as for the humans.

Future Perspective

“The unchecked species loss would wipe 18% off global economic output by 2050.”(12)Future research should educate the individuals about the effects of the extinction of species because this is a very important issue that may affect the world in future. This issue is never to be forgotten because the effects of this will be everlasting. In my view, if every one of us has an aim to save the endangered species, we can, soon be, successful in our aim.

Conclusion

My aim to choose this topic of humans and other species was to find out whether the extinction of species is important or not. I came to the conclusion that we develop and change things quickly in the world, not realizing the fact that animals change very slowly. Figure 5 and figure 6 show that animal life is in serious danger. This is our duty to save the endangered species and help them. Many of them are going to vanish from the face of the earth soon. At the same time, the overpopulation of humans is the root cause of the extinction of the species. “About 1 per cent of the animals in the world disappear every year because humans are killing them. We cannot always protect animals from nature, but we can protect them from us.”(13) We cannot ignore this yet because our own activities contribute to the destruction of the species.

And my answer to the question at hand would be that yes human activities are a major reason for species-wide extinction. According to a review in the journal Science issued by the national geographic study, “current extinction rates are up to a thousand times higher than they would be if people weren't in the picture. (14)” As human activity in the past century or so seems to be doing one of two things either creating new issues leading to biodiversity loss or acting as catalyst’s to already existing problems.

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