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CLIMATE CHANGE AND ITS EFFECT TO BIODIVERSITY LOSS

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ABSTRACT

The increasing emission of carbondioxide and other climate relevant gases have warmed up the globe and the repercussions of creating warmness are clear, According to UN Convention on Biological Diversity. That climate change among others is one of the direct causes of biodiversity loss, and could trigger a significant loss of plants and animals. The Warming of Climate will increase the extinction of nature and leads to a threat to species in future. The development of Plant growth and reproduction of organisms depend on seasonal pattern that is closely related to climate and climate change may results in seasonal cycles variation and ultimately the ratios between predators and their prey in the food webs in different ecosystem. The inhibition of Biodiversity induces to face vulnerable food supplies, shortage of water supply and ultimate cause change in the Ecosystem in future, Thus the effect of climate change gives a threat to biodiversity loss leads to a clear threat to our natural resources.

KEYWORDS: Biodiversity, Climate, Ecosystem and Diversity.

INTRODUCTION

The objective of the present study was to investigate the nature of the effect between biodiversity and temperature due to climate change. The most important pressures on biodiversity and ecosystem services are habitat change such as land use changes, physical modification of rivers or water withdrawal from rivers, and loss Climate change poses major threats to biodiversity.[1,3] of coral reefs, climate change, results in invasive species, overexploitation, and pollution occurrence. Climate change is already having an impact on biodiversity, and is projected to become a progressively more significant threat in the coming

decades. Loss of Arctic sea ice threatens biodiversity across an entire biome and beyond.[2] The related pressure of ocean acidification, resulting from higher concentrations of carbon dioxide in the atmosphere, is also already being observed in the prevailing environment.

DISCUSSION

Ecosystems are already showing negative impacts under current levels of climate change which is modest compared to future projected changes. In addition to warming temperatures, more frequent extreme weather events and changing patterns of rainfall and drought can be expected to have significant impacts on biodiversity.[3] Climate change alone is expected to threaten with extinction approximately one quarter or more of all species on land by the year 2050, surpassing even habitat loss as the biggest threat to life on land. Species in the oceans and in fresh water are also at great risk from climate change, especially those that live in ecosystems like coral reefs that are highly sensitive to warming temperatures, but the full extent of that risk has been calculated. Climate change may have already resulted in several recent species extinctions. Many species ranges have moved poleward and upward in elevation in the last century[4] and this is likely not to cease. Local communities are disaggregating and encompassing more warm-adapted species.[5]

The release of carbon, for example stored in vegetation and soils would be large enough to significantly influence atmospheric CO2 concentrations and global climate. There is still uncertainty concerning the Amazon ―tipping point‖. However, if an extensive dieback of the Amazon forest would occur within the next several decades a negative feedback loop regarding biodiversity, regional and global climate will be a possible scenario.[6] Global estimates predict major losses of biodiversity due to global climate change, which are generally higher than current rates of loss and also much higher than rates of species extinctions documented in fossil records.[7] One of the first global studies estimated that by 2050, 15–37% of species are committed to extinction under intermediate climate warming.[8] Malcom and colleagues stated in 2006 that the extinction rate of endemic species could reach up to 39–43% under worst-case scenarios, which represents a potential loss of 56,000 endemic plant species and 3,700 endemic Diversity (2013), 5119 vertebrate species.[9] Biodiversity hotspots for conservation priorities are particularly vulnerable because they are not only characterized by their endangerment, but also by their high level of endemism.[10]

CONCLUSION

Biodiversity issues suffer from insufficient integration into broader policies, and stringent strategies and programs at international, national and local levels are mostly far from being functional. Future initiatives must start to overcome the lack of connections between the regarding sectors. They must be able to adapt in an appropriate way towards increasing knowledge, raising public awareness and responsibility and thus towards changing conditions. The recent establishment of an institution like the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), which has to complement to existent structures like the Intergovernmental Panel on Climate Change (IPCC), might be a first step into this direction.

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