

Human influence on biodiversity conservation of the Thar Desert of India

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Introduction

An increase in human population in recent years has greatly impacted global biodiversity. Environments that once were in balance have been destroyed and a great indication of this is the increase in desert areas worldwide. I have chosen to focus on the human impact on biodiversity in the Thar desert in India. The Thar desert is the smallest desert in the world and stretches 3,85,000 square kilometers through four states of India. Due to overpopulation in the Thar desert there is a constant threat of increased desert areas, a decrease in biodiversity and therefore an increase in uninhabitable areas. This is a global problem and the Thar desert only reflects the problems in desert areas worldwide.

The Thar desert is mainly occupied by dry grassland or by grassland interspersed with trees and thorny bushes. Temperatures are high and droughts are common so the vegetation in the area is limited to thorny shrubs and perennial herb as many plants can not survive these harsh conditions.

Over the past century the population in the Thar desert has increased dramatically and it is now the most populous desert in the world with a human density of 84 per square km. The inhabitants main occupation is agriculture and animal husbandry which has in turn caused a decrease in nutritious land for farming due through overgrazing. It is a matter concerning forage demand and supply, and high demands meeting low supplies have effected the environment negatively making life in the desert more hostile for the inhabitants. This is a problem that is only on the up rise and unless some course of action is taken, the human effect on the Thar deserts biodiversity will just become more destructive.

Conservation efforts

Several efforts have been made to preserve grassland areas in the Thar desert and one of the first efforts was made in 1927 by Ganga Singh, ruler of Bikaner, when the Ganga Canal was created. Later attempts to bring areas of the desert under cultivation were made and in 1960 the Gandhi Nahar Canal Project (IGNP) was set in action. The plan was to construct a canal through main parts of the Thar desert, but the project was never completed and at present the main canal is 649 km long with additional canals leading off it. The project has had a positive effect on the environment in some areas of the Thar desert and due to poor maintenance of the canal, leakages have led to water reservoirs being formed in areas around the canal. Plantations of both sides of the canal have helped attract many species that were previously not known to live in the Thar desert of India. Avian diversity has increased, but this has also led to a decrease of local desert species.



Conclusion

The human effect on the biodiversity on the Tsar desert is already a serious problem. Unless greater conservation plans are set in action, there is a threat that desert areas will expand and vegetation and species that previously thrived there will be wiped out. Prevention and conservation plans are essential as well as taking to use new technology in the agricultural field to help combat growing problems in the Thar desert. The Thar desert is only one of many places where human growth is seriously effecting the environment, but is a great indicator of the problems we are facing in our world today.

References

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