Summary and Conclusion

Summary:

The research paper "Impact of Human Activities on Forest Resources and Wildlife Population" explores how human activities such as deforestation, industrialization, urbanization, and agriculture contribute to the depletion of forestry biomass and endanger wildlife populations. A mathematical model is developed to analyze the relationship between human activities, forest depletion, and wildlife population decline. The study finds that forest resources are essential for wildlife survival, but increased human intervention significantly reduces forest cover and disrupts ecological balance.

The model assumes that wildlife population growth depends on forestry biomass, which is impacted by human activities. The study uses stability analysis and numerical simulations to examine various depletion factors and their effects. Results indicate that human population growth, industrial expansion, and land-use changes accelerate forest loss and biodiversity decline. Furthermore, the findings highlight that non-consumptive human activities, such as tourism and recreational activities, also influence wildlife behavior and habitat conditions.

Conclusion:

The study emphasizes the urgent need for sustainable management of forest resources to ensure biodiversity conservation. Key recommendations include enforcing stricter regulations to control deforestation, promoting afforestation initiatives, and adopting eco-friendly industrial practices. The research suggests that improved forest management, reforestation, and conservation policies can mitigate the adverse impacts of human activities on forest ecosystems and wildlife populations.

Additionally, global cooperation and policy interventions are necessary to balance human development with environmental conservation. The study also highlights the importance of community engagement and awareness programs to encourage sustainable resource use. The

findings reinforce the need for a multi-disciplinary approach combining environmental science, policy-making, and community-driven conservation efforts to protect forest resources and ensure the survival of wildlife species.