

Review Form2

Book Name:	Mathematics and Computer Science: Contemporary Developments
Manuscript Number:	Ms_BPR_2340
Title of the Manuscript:	CONSERVATION OF FORESTRY BIOMASS AND WILDLIFE POPULATION: A MATHEMATICAL MODEL
Type of the Article	Book chapter

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimumof3-4 sentences may be required for this part.	This manuscript presents a significant contribution to the scientific community by offering a novel non-linear mathematical model that addresses the complex dynamics between forestry biomass and wildlife populations. The inclusion of factors such as illegal trade and the depletion of forestry biomass adds a layer of realism to the model, making it highly relevant for conservation efforts. The mathematical analysis of equilibrium points and system persistence provides valuable insights into the stability and sustainability of ecosystems. I appreciate the manuscript's interdisciplinary approach, combining mathematical modeling with ecological conservation, which can potentially guide policymakers in creating more effective strategies for preserving both wildlife and forestry resources. However, please note the following 1. In the model (2.1) – (2.3), Author(s) used two equations with variables W and Wc (W is wild life population and Wc is wild life conservation) then why not two equations for B (density of forestry biomass)? 2. Page 4: Just after the equation (3.6) (i.e. From the equations (3.5) and (3.6), we get2) remove 2 at the end or provide some explanation of its presence here. 3. Page 4: Recheck whether the derivative of H(B*) i.e. H'(B*) is negative Or with some condition(s), it will be negative? 4. In the section 4 Local Stability: One eigenvalue of each of the variational matrices V(E0), V(E1) and V(E2) is zero. Author(s) should provide its significance.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract of the article is comprehensive, as it outlines the key aspects of the study, the development of a non-linear mathematical model, the relationship between forestry biomass and wildlife population, the impact of illegal trade, and the mathematical analysis of equilibrium points and stability. However, it would be better to mention any significant results derived from the analysis so that it could enhance its clarity.	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimumof3-4 sentences may be required for this part.	The manuscript appears to be scientifically robust and technically sound, as it rigorously applies the theory of nonlinear ordinary differential equations to model the interaction between forestry biomass and wildlife populations. The authors have not only constructed a well-defined mathematical framework but also performed a thorough analysis of the equilibrium points and their stability, which is crucial for understanding the long-term behavior of the system. Additionally, the incorporation of numerical simulations to validate the theoretical findings further enhances the scientific credibility of the study.	

Review Form2

Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	It would be better to include some recent references in the manuscript. The manuscript would benefit from the inclusion of more recent references, particularly studies that address current trends in conservation biology and ecological modeling. Incorporating recent research would not only strengthen the manuscript's relevance but also align it with the latest advancements in the field, further enhancing its scientific credibility.	
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	NA	
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

Name:	Shyam Sundar
Department, University & Country	Pranveer Singh Institute of Technology, India