Review of: "Social and Environmental Drivers of Black-Necked Crane (BNC) Habitat Suitability in Bhutan: Insights From Maxent Modelling and Conservation Implications"

Antoine Adde[1]

1 Eawag: Das Wasserforschungs-Institut des ETH-Bereichs

Thank you for giving me the opportunity to review this manuscript. I believe that several important points need to be addressed before this study can be validated. I have attached as supplementary material a PDF file containing my detailed comments. A summary follows.

Firstly, it seems that the authors made extensive use of ChatGPT or a similar language model, which produces a lot of sentences that are inappropriate for a scientific manuscript and makes the text unnecessarily long and inefficient at conveying information.

Secondly, the analytical framework is convoluted, making it easy to get lost, just like Figure 2, which is intended to guide us. I would suggest rethinking the way the method is described by stratifying the sub-sections better and by being clearer about the chronology of the analyses. The introduction (weirdly stratified into two sections), the discussion, and the conclusion (disproportionately long compared to the discussion) also deserve to be reworked.

Finally, my major expectation lies in addressing the absence (or lack of a detailed description and associated results) of a robust cross-validation and repeated validation strategy incorporating more metrics than the single AUC. This is crucial in view of the very small sample of species occurrence data used in the text (as it stands, one might think that a single ROC analysis was performed on 70% of the 23 points; is it the case?). Specific methods for modelling rare species, such as an ensemble of small models, could (should?) have been considered.

Please have a look at the attached PDF document for my detailed comments.

Best regards.