

Earth Syst. Dynam. Discuss., author comment AC2 https://doi.org/10.5194/esd-2022-16-AC2, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on RC2

Nusrat Molla et al.

Author comment on "Governing change: a dynamical systems approach to understanding the stability of environmental governance" by Nusrat Molla et al., Earth Syst. Dynam. Discuss., https://doi.org/10.5194/esd-2022-16-AC2, 2022

Thank you for your encouraging and thoughtful response. We have attached a point-by-point response to your feedback. In summary, we have added discussion to clarify the conceptual and mathematical meaning of stability in the introduction and modeling approach sections, and restructured the introduction and renamed a section to make those definitions more prominent. Additionally, to make the concepts discussed throughout the paper more accessible to a wide audience, we have added an example system that is introduced through the first figure, and refer to that figure throughout the paper. We have also included a more detailed discussion of modeling assumptions, including high-level structural assumptions and those about actors' behavior. Finally, we have added to the supplementary information (included in the attached document) additional detail about the derivation of the generalized model and objective function gradient used to optimize actors' strategies. We hope these revisions clarify the reasoning behind the model and help make our study accessible to a broader audience.

Please also note the supplement to this comment: https://esd.copernicus.org/preprints/esd-2022-16/esd-2022-16-AC2-supplement.pdf