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comment

Interactive comment on "Socio-Hydrologic Modeling of the Dynamics of Cooperation in the Transboundary Lancang-Mekong River" *by* You Lu et al.

Anonymous Referee #3

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I found this to be an interesting paper on an important topic. I have two major comments for consideration by the authors and editors.

1. While I find the sentiment analysis an interesting and potentially valuable aspect of the paper, it seems problematic to review only English language media. It has limited the authors to the study of a single downstream country, which in its own right is troubling when the purpose of the study is to contribute to cooperation analysis in a diverse, multi-country transboundary basin. Additionally, English language media is, in its very nature, designed for consumption by outsiders and elites. This could yield biased sentiment relative to native language publications, which may be more indicative

of populist sentiments and of the concerns and insecurities of the country.

2. I appreciate that the authors have considered some examples of specific drought events in their analysis, as it is an acknowledgement of the fact that cooperation can be most important for extreme events. However, I still worry that the approach presented here has a "look where the streetlight is" approach to assessing benefits and risks of cooperation vs. non-cooperation. For example, I see no consideration of uncertainty in the presentation of results, when in fact (as the authors acknowledge at times) there are deep uncertainties in many parameter estimates. For me this is clearest in the case of fisheries, where the potential for catastrophic impacts during extreme events or long-term ecological consequences of changing water conditions falls outside the range of any analysis that might be calibrated to the first few years of experience. Given the centrality of fishing in this basin, and the fact that it is one of the most contentious topic areas with respect to dam construction, I worry that an analysis like this one can understate the impact of dams and miss the low-probability, high-impact risks and benefits of changes in river management. It seems a problem more suited to robust decision making frameworks than to optimization. I don't insist that the authors completely change their framework for this manuscript. But at a minimum I would like to see: (1) acknowledgement of deep uncertainty and discussion of the implications of this uncertainty when interpreting results; (2) some form of sensitivity analysis that accounts for parameter uncertainty in the presentation of key results.

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