

## **Scaling and contextualizing climate-conflict nexus in historical agrarian China**

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This study examines climate-conflict nexus in historical agrarian China in multi-scalar and contextualized approach, illustrating what and how socio-political factors could significantly mediate the climate-violent link in pre-industrial society. Previous empirical large-N studies show that violent conflict in historical agrarian society was triggered by climate-induced food scarcity. The relationship was valid in China, Europe, and various geographic regions in the Northern Hemisphere in pre-industrial era. Nevertheless, the observed relationship has only been verified at a macro level (long-term variability of the nexus is emphasized and data over large area are aggregated), and somewhat generalized in nature (only physical environmental factors are controlled). Three inter-related issues remain unresolved:

First, the key explanatory variable of violent conflicts may change substantially at different spatio-temporal scales. It is necessary to check whether the climate-conflict nexus is valid at a micro level (about short-term variability of the nexus and data in finer spatial resolution), and explore how the nexus changes along various spatio-temporal dimensions.

Second, as the climate-conflict nexus has only been demonstrated in a broad sense, it is necessary to check whether and how the nexus is mediated by local socio-political context. More non-climatic factors pertinent to the cause and distribution of conflicts (e.g., governance, adaptive mechanisms, etc.) should be considered.

Third, the methodology applied in the previous studies assumes spatially-independent observations and linear relationship, which may simplify the climate-conflict link. Moreover, the solitary reliance on quantitative methods may neglect those non-quantifiable socio-political dynamics which mediates the climate-conflict nexus.

I plan to address the above issues by using disaggregated spatial analysis and in-depth case studies, with close attention to local and temporal differences and non-linear nature of the climate-conflict link. China will be chosen as study area. Study period will be delimited to AD1–1911.

This study represents pioneering research which systematically examines the climate-conflict nexus in pre-industrial society over extended period in multi-scalar and contextualized perspective. By comparing and evaluating the climate-conflict link along various spatio-temporal dimensions and in different socio-political context, it may help to deepen the theoretical understanding of, and also resolve the current debate over, the climate-conflict relationship. Given the large potential changes in climatic regimes projected in coming decades, the findings in this study may have important implications for the social impact of climate change in tropical countries that are in some ways similar to pre-industrial society.