

Review of: "The Consequences of Political and Economic Choices: Exploring Disaster Vulnerability with the Structure, Resource, and Behaviour Change model (SRAB)"

Kang ning Xiong

Potential competing interests: No potential competing interests to declare.

The Mekong Delta in Vietnam has experienced natural disasters such as drought and saline intrusion, which have seriously affected the agricultural sustainability and livelihoods of the people in the region, thus it is important to study the root causes of disaster vulnerability in the region for sustainable regional development. Disaster vulnerability is an important cause of sustainable regional economic and social development. Disaster vulnerability studies are important for regional sustainable development and people's livelihood improvement. The paper is based on scientific issues such as the paucity of research on disaster vulnerability in the Vietnamese context and the unclear link between the historical evolution of disaster vulnerability and current agricultural behavior. Based on the Structure-Resource-Behavior Change (SRAB) model with the case of Tan Hung Commune, Soc Trang Province, Vietnam, using field surveys, semi-structured interviews, and other research methods. Focusing on the root causes of disaster vulnerability in the Mekong Delta of Vietnam. May provide a reference base for future prevention efforts. However, this paper has some deficiencies as follows

- 1.The overall structure and logic of the paper is clear. However, there is one section that needs to be adjusted: the section "Current Farming System and Vulnerability to Natural Risks" should be part of the study background/status of the study area.
- 2.The abstract is incomplete. It lacks an overview of the research methods and does not elaborate on the theoretical or practical significance of the findings. It is recommended that the content of each part of the abstract be fully condensed and adjusted according to the purpose, methods, results, conclusions and significance.
- 3.Keyword selection is not refined enough. Words and phrases that are consistent with the theme of the paper and can summarize the content of the theme should be selected; the three keywords of behavior, resources, and structure can be refined into "structure-resource-behavior model"; the keyword "water-related disaster" is not representative, and there is a conceptual interaction between "water-related disaster" and "vulnerability", so the keyword should be set to " disaster vulnerability" following the rules of keyword selection.
- 4.The introduction section lacks a review of the research progress in the relevant literature, reflecting a lack of grasp of the current status of research. It is suggested to add the status of research on the literature related to disaster vulnerability in the Mekong region.
- 5.The article has made a lot of relevant discussions on the background of the study, but lacks the elaboration of the

significance of the study and the statement of the research objectives is relatively simple. It is suggested to enrich the description of research significance, research objectives and content.

6. In the research methodology, there is a lack of detailed introduction of the model framework, descriptions related to its use and operation, and no mention of the advantages and disadvantages of the model framework and the issues that should be paid attention to in practical application. It is recommended to enrich the content related to the model framework.

7. The study data were mainly based on interviews with affected farmers, supplemented by literature and archival records, and the data were more comprehensive, but the list of interview questions and the reliability and validity tests were missing. It is suggested to add the list of questionnaire design questions.

8. Firstly, the conceptual aspect of the study content: there is a lack of elaboration on the concept of disaster vulnerability. It is suggested to add the concept of disaster vulnerability combining. Secondly, The review of "the Root Cause of Disaster Vulnerability" is incomplete: this section lists the methods for analyzing the root causes of disaster vulnerability and thus proposes the structure-resource-behavior change model, which has a clear logic, but there is relatively little literature review on the methods for analyzing the causes of disaster vulnerability, and only one vulnerability assessment model is mentioned - the stress release model. However, there is relatively little literature review on the methods of disaster vulnerability analysis, and only one vulnerability assessment model is mentioned - the pressure and release model. It is recommended to add a review of the framework model and theoretical studies on the causes of disaster vulnerability analysis.

9. The paper uses the structure-resource-behavior change model (SRAB) to break through the time frame limitation of disaster vulnerability research and link the current state of human-caused vulnerability with its historical evolution, which is innovative. However, the article only analyzes the research background, model construction and cause investigation, relevant measures or recommendations are not put forward based on the results of the analysis, and innovation needs to be further improved.

10. The conclusion section is not in-depth enough. No corresponding solution measures are proposed; no research gaps, research outlook, and future issues that need attention in related research fields are pointed out. Although this paper focuses on the causes of disaster vulnerability through the model framework, it is necessary to propose corresponding measures to reduce disaster vulnerability based on the model analysis results combined with the actual situation of the region, so as to highlight the guiding significance of this study.

11. The discussion section is relatively simple. It is suggested that the discussion be written: first, to reveal the reasons for the emergence of findings that are contrary or differ significantly from most studies; second, to present new research findings through the discussion of related studies; third, to try to reveal the mechanisms involved when exploring the relationship between the two, using the literature of others.

12. It is recommended to add related charts to enrich the visual expression. Based on the structure-resource-behavior change (SRAB) model, the study restores the development process of local disaster vulnerability, thereby revealing the

causes of disaster vulnerability, with clear logical ideas, but lacks visual representation of the historical evolution and the interaction of the three stages. It is recommended to add relevant charts to facilitate a better understanding of the research model.

In conclusion, based on the structure-resource-behavior change (SRAB) model, this study restores the development process of local disaster vulnerability, thereby revealing the causes of disaster vulnerability, which is innovative. However, the article writing issues should not be neglected, and the author should carefully consider and revise the main issues such as abstract, introduction, research methods, conclusions and discussion around the research content.