
JOURNAL OF COASTAL AND RIVERINE FLOOD RISK

Review and rebuttal of the paper

Experience From the 2021 Floods in the Netherlands: Household Survey Results on Impacts and Responses

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Editor handling the paper: Vana Tsimopoulou & Miguel Esteban

The paper has significantly improved, albeit the main concern is length. However, the length is substantiated as the study presents clearer picture of the disaster and how it has affected households in the Netherlands. The present version of the manuscript is publishable though it can be strengthened further if the author addresses some minor issues.

If there is one comment to be made, the framework chosen by the authors is one sticking point that may initially be problematic as it does not present anything new or significant. While the decision of the authors to choose the disaster management cycle as a framework may be questioned by other researchers as being dated, the fact that this is widely used by authorities make the read relatable to disaster managers and policymakers than academics. Thus there is a tradeoff but nothing significant. The only revision this review will recommend is on how recovery is framed. Page 2, Lines 21-23 and 24-27 reads:

Society attempts to return to a similar standard of living prior to the flood during the recovery phase (Thieken et al., 2007). Efforts are made to restore essential services and infrastructure, and support affected households and businesses, where flood damage will be repaired... The recovery phase also provides an opportunity to enhance society's resilience to future flood events, where the disaster prevention and mitigation phase follow. Disaster prevention is aimed at reducing flood hazard, where governmental bodies take measures to enhance protection standards for a region (de Moel & Aerts, 2008).

This is a bit outdated with respect to global frameworks and resilience discourses Post 2015. While it is understandable that the study used the disaster risk management cycle as its model, the way of framing recovery here is to simply bring back to previous levels. Current frameworks and studies have focused on the concept of "building back better" where one takes the post disaster situation as an opportunity to institute recovery that creates a better society than previous conditions. There is already a heavy set of literature on resilience-building and build back better. The suggestion is to revise this in reference to resilience building and the Sendai Framework for Disaster Risk Reduction. On a similar vein, revise Figure 1's description of recovery.

In relation to this comment, Page 21, Section 4.3 needs to revise the paragraph on compensation. While the policy implications section refer directly to flood disaster management, the paper would benefit greatly to discuss how the findings could drive risk transfer or disaster insurance mechanisms. The findings and this section had a discussion on compensation. Contemporary frameworks and global policies on disaster risk reduction has placed emphasis on risk insurance, and yet, there is a challenge on implementing this at a national or local level. The study may infer more deeply on the potential willingness of people affected to invest in insurance OR another mechanism unto which risk transfer can happen. Moreover, what implications can be had when having compensation delayed, as experienced by the respondents?

The authors provided a descriptive analysis of various aspects of the 2021 flood in Limburg, the Netherlands, highlighting the role of early warnings and access to flood risk information in preparedness and response at the household level.

While extensive data with large sample size was presented with some interesting observations, meaningful discussion and implications for flood risk management are inadequate. Moreover, results from t-test are insufficiently reported. Hence, revision is recommended.

Furthermore, the authors did not identify a research gap that can be addressed by data analysis of this paper. The results are informative but do not provide new insights for the scientific literature of flood risk management. Hence, consideration for publication as a flood damage and response report is recommended rather than publication as a research article.

If the authors and editors prefer the manuscript to be considered for publication as a research article, a major revision of reframing research question addressing literature gap and rigorous statistical analysis are necessary.

While detailed comments are in the attached document, major comments and concerns are summarized below.

The authors provided high quality survey data for the local context. However, what new insights can the dataset provide to the scientific literature is unclear.

In Results, sometimes the authors assumed causal relationship between factors (ex., warnings and emergency FDM measures) without supports from statistical analysis. Either provide analyses to support such arguments or rephrase properly for observation of descriptive analysis. This applies to various discussion throughout the manuscript. See comments in the attached document for details.

t-test results are reported insufficiently. t-value and degree of freedom (if not t-distribution) should be reported. Besides, descriptive results (i.e., percentage) are presented together with t-test results in figures and tables, which are highly confusing and raises more questions rather than providing answers.

In Discussion, purely comparing numbers of different flood disasters are not meaningful to provide insights. In this section, insights from the current survey should be compared with discussions from existing literature. Besides, this section should be more concise and can be combined with policy implications when suitable to avoid repeating findings.