

Journal: NHESS

Title: **Assessing floods and droughts in the Mékrou River Basin (West Africa): A combined household survey and climatic trends analysis approach**

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Iteration: Third review

I think that authors mostly addressed my concerns, although some criticalities are still unresolved (see below) and should be fixed. After these further corrections, the paper can be considered for publication in NHESS.

Still “open” questions

Introduction

The literature should be better organised to improve the comprehensibility of the manuscript. Some suggestions:

- Page 1 lines 22-27: this part includes repetitions, please check
- Page 2 line 25 – page 3 line 9: this part is very disorganized; it includes many logical gaps. I would rephrase
- Page 3 line 17 -32: the description of the case study area should be moved in another section, before the description of the methodology

Section 2

I think that a table summarising main information (i.e. data, parameters) collected by means of the survey should be added to increase the comprehensibility of the manuscript and the analyses of significant variables in Section 3.4.

Section 3

Pg. 12 line 18

“Only a small percentage of the respondents (68 out of in total 660 interviewed households) stated that they had not experienced any flood occurrence during the last two years (Table 4).” → The table reports the opposite, please check

Pg. 14 line 7

“According to the multivariate regression model, the average cost of floods per household during the flood events of the last two years (2014-2015) was equal to 390.92 euro” → Data from the survey were mainly reported in FCFA. Please, be consistent to allow comparison; the same can be state for model results on droughts

Section 4

Pg. 15 line 27

“The cost assessment is two-folded based on the sample estimations and the application of two linear multivariate regression econometric models. The average cost of flood events in the period 2014-2015 was estimated at 495 euro per affected household, based on the average declared losses. The average cost of extreme droughts was 391 euro per household” → I still think that a comparison between observations and models’ results is required along with a discussion on usability of such results (difficulty in damage estimation). Nonetheless, given that the main reason for the models is to explain significant variables for damage costs, a comment on significant variables should be added to section 4 as it reports main conclusions from the other sections but this one.

Pg. 15 line 23

“In developing countries where information is limited such a coupling approach could integrated local

characteristics and perceptions into natural hazards planning policies providing more efficient mitigation measure” → some examples should be supplied on the use/usefulness of collected information in practice, to be more explicative. Reported examples are not real examples but generic (authors rephrase previous concepts) and do not help readers to appreciate the real value of the research

Tables

Figure 1 → the caption and the legend should include the meaning of numbers

Figure 2 → The figure is still not clear. Data in the table are not understandable without a description that is still lacking. I do not understand the link between the data reported in the table and the graph