Point by point report

Reviewer 1

We would like to extend our sincere appreciation for all of the work and dedication provided by the reviewer to improve the quality of the present work.

The reviewer requested several linguistic modifications that have been correctly addressed.

Find it very helpful. Thank you!

Reviewer 2

We sincerely thank the reviewer for the constructive and positive feedback. We took into consideration all the comments related to the references. As for the questions, please to find the replies in the report.

- **Questions/ answers in methodology:**

Q1: Households Density (HD), Old Buildings Rate (OBR) and Natural (ND) are new indicators, right? In the text, it's difficult to identify the ones that are susceptible to be taken in this study areas from literature and the new once that you considered.

R. We understand that this can create confusion; the table 1 identifies the references considered in this study for each indicator.

Q2: What are the advantages of adopting these particular case studies over others in this case?

R. we thank you for raising this question, discussed in the "Introduction section", the selected municipalities as case studies are experiencing a rapid urban development combined with massive problems of flooding, besides to the ancillary difficulties which lead to exponential growth in flood planning needs and endeavors. In addition, they have been reported by several studies as vulnerable to multiple climatic and non-climate hazards such as erosion and morphological changes, as well as negative process of fast urbanization. We believe that by showing all these characteristics, they represent a preferred target for the study of the resilience in coastal areas and could serve as a model for other southern Mediterranean sites facing the same issues. This was highlighted in Page 5-lines 135-140.

Q3: It is mentioned in …. historical records of 2014 are taken. Why are more recent data not included in the study? Are there any changes to situation in recent years?

R. In developing countries like Morocco, one of the most relevant challenges is data availability. Unfortunately, the 2014 census is the last official sources. Our proposed approach deals with this issue and used only available data. This was highlighted in line 364.

Q4: It is mentioned, "To avoid subjectivity an equal weighting was adopted". How you gave them equal weights while each parameter might have different importance level?

R. We adopted equal weighting considering the importance of each dimension and as mentioned to avoid subjectivity associated with the allocation of weights which can be specific to each geographic zone. In addition, our approach is built in such way that can be modified and adapted following the cases. This was highlighted in page 7 line 216-218

Questions/ answers in results and discussion:

Q1: It is mentioned, that "the high level of natural resilience is more prevalent in areas with high altitudes". Did you get any observation about this relevant? Because it's not always true, some areas with high altitude can be affected by landslide and slumping during floods.

R. We agree with the reviewer, not all areas of high altitudes are resilient. However, in our case, the study areas are low-lying coastal plains what led us to consider that "the high level of natural resilience is more prevalent in areas with high altitudes".

Q2: Are there a strong relationship between vulnerable area and resilience, can you say that all the areas with high vulnerability to the flood have automatically low resilience?

R. Our approach is a multi-dimensional assessment and depending on the type of vulnerability we are talking about (Physical, economic or social…) as well as the specific characteristics of the study area, this positive correlation could be true or not.

Q3: Can you globalize the conclusions of this work on the Nord Mediterranean Moroccan coast that are quite similar in different aspect, or is it just particularly adapted to those tree municipalities? If the response is yes, it will be interesting to mention that in your conclusions, if no please give the raison.

R. We are confident that our approach could be adapted successfully in different areas of the southern Mediterranean. The rest will depend on the specific geographic, economic and climatic of the studies areas, even if, for example, at the level of North Africa, the similarities are generally enough to allow the generalization of certain conclusions. This has been added in the conclusion

Q4: Your results are the combination of all the indicators that you establish for this work, in your opinion whish one represents the important factor for resilience in the Moroccan Mediterranean coast area?

R. The social and the economic components could be most significant in term of resilience enhancement in this case. But, there is no doubt that's resilience assessment could be done in a holistic way takin also into account natural and physical components.

Q5: I know that this subject is new research subject, especially in Nord African region, have you looked to projects in the same contexts in semi-arid coast region? It will be interesting to discuss your results with their conclusions.

R. In these contexts really few studies have been carried out especially in the southern Mediterranean where no studies are available. In Africa, the available work of Kotzee et al., (2016) has been done in South Africa by using a social-ecological index for measuring flood resilience as a composite index approach. Details are added in the revised version line:324-325

Kotzee, I., & Reyers, B. (2016). Piloting a social-ecological index for measuring flood resilience: A composite index approach. Ecological Indicators, 60, 45-53.

Q6: Please find bellow some corrections related to spelling

R. Thank you very much, we have taken seriously all comments in the new revised version of our manuscript.