

# Review of: "Larache's Coastal in Morocco: Evaluating Dredging's Impact on Fisheries and Shoreline evolution"

Chaimae Benaissa<sup>1</sup>

<sup>1</sup> Université Abdelmalek Essadi

**Potential competing interests:** No potential competing interests to declare.

**Title:** "Larache's Coastal in Morocco: Evaluating Dredging's Impact on Fisheries and Shoreline Evolution"

Overall, this article provides valuable insights into dredging activities in Larache, Morocco. However, there are notable areas that require attention to enhance clarity and scientific rigor.

**Linkage of Results with Dredging Impact:** While the article highlights potential negative environmental impacts, the link between dredging activities and these effects is often speculative or attributed to synergic natural impacts. It would be beneficial to strengthen this connection through more concrete evidence or analysis.

**Temporal Analysis:** The study period spans from 2011 to 2020. Considering the potential evolution of dredging impacts, it would be insightful to include data from the subsequent years to assess the ongoing effects on the coast and the local population.

## Specific Textual Feedback:

**1.1. Coastline Impacts of Dredging:** The sentence discussing the intensive dredging at the Sebou River's tidal delta could be clarified for better understanding. Consider rephrasing to highlight concerns about the potential loss of the northern part of Mehdiya Beach.

**1.2. Biological Impacts of Dredging:** Address the repetition in the sentence mentioning "marine animals," as it already includes crustaceans and mollusks.

**2.2.2 Fauna:** Ensure that all scientific names, especially for marine mammals and fishery resources, are presented in italic font.

**6. Discussion of the Results:** Clarify that adverse weather conditions do not directly cause increased water temperatures, pH, and oxygen levels. Attribute these changes to climate change, which is altering the natural balance of our oceans.

## General Reviewer Comments:

- It is preferable to modify the first figure to add the map grid and modify its quality.
- The abstract should include results.

- Clarify the start and current status of dredging in the area.
- Consider unifying the introduction and discussion without sub-titles.
- Verify and update the reference list to ensure all mentioned sources are included.
- Recommend collecting samples of economic fish species for a more comprehensive evaluation of their biological characteristics.
- Explore the impact of dredging on fishing gear and methods due to changes in depths.

**Additional Reviewer Comments:**

- Address the absence of the term "Shorelineevolution" in the title.
- Improve the clarity and accuracy of Figure 1, including variations in elevations and extensions of sedimentary areas.
- Explain the meaning of "Dayas" for better reader understanding.
- Include the location of Tangier in Figure 2.
- Provide data on dredging operations and their potential correlation with erosion areas indicated in Figures 5 and 7.
- Ensure proper citation of Figures and Tables in the text.
- Correct numbering inconsistencies in Figures and Tables.

**Considerations from External Review:**

- Enhance the article's content, improve writing, and provide more information on the Larache region.
- Consider using advanced satellite image analysis programs for a comparative coastline analysis.
- Include statistical analysis to define relationships between population development, sand mining demand, and dredging consequences.
- Differentiate factors causing a decrease in fishing and use a methodology to separate these influences.
- Provide a concise and well-supported conclusion based on reliable methodology. Eliminate unnecessary tables and figures.

Incorporating these suggestions will undoubtedly elevate the article's scientific rigor and overall impact.