

Review of: "A Research Note on Natural Reclamation Processes that Support Mangrove Biodiversity Spheres: Sedimentation in Three Major River Deltas in Northwestern Luzon Using Aerial Imagery."

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Potential competing interests: No potential competing interests to declare.

Article title: A Research Note on Natural Reclamation Processes that Support Mangrove Biodiversity Spheres: Sedimentation in Three Major River Deltas in Northwestern Luzon Using Aerial Imagery.

The article deals with a pertinent topic and one of the major mangrove areas. However, at its present structure, it fails to address the complex issues of mangrove regeneration appropriately. There are several portions in the article that need a thorough revision, Some of these are as follows:

Introduction

1. Give a brief overview about the existing literature regarding natural reclamation of mangroves in river delta /estuarine environment.
2. **"One is the mixing..... kaolinite clay"**:What are other prerequisite for emergence of mangrove ecosystem in an estuarine environment such as these?
3. **"The mangrove serves as*Falco peregrinus*, etc.)**:
 - i) Add 'comma' between the species names.
 - ii) There is no need to write both local and scientific name of the floral and faunal species.

Methods

4. **"The main method(RS-GIS)**: Remote sensing and GIS is an umbrella term, be more specific about the methods used in this study.
5. **"The Macro, meso, and to some.....spectral resolutions."**:Add 'comma' between 'spatial' and 'temporal'
6. **"Ground truthing may be carried out if feasible."**:This is irrelevant in the present context, as you have conducted ground truthing using DJI Mavic Pro 2 COTS-RPAS.
7. **"To carry out change detection.....spatial resolution was used."**:The methodology should be more detailed.

A one liner is not sufficient to attract a broader range of researcher.

8. **“The DJI Mavic Pro 2.....new sediments in the delta.”**:Since, the DJI Mavic Pro2 COTS-RPAS was launched in 2018, I am assuming that the ground truthing was also conducted in the same year or thereafter. Considering the dynamic nature of the study sites, large temporal gap of > 5 years between the year of investigation and ground truthing is not acceptable.

Results

9. **“The area of interest (AOI)..... and the 2013 data.”**:

- i) What factors were considered for delineation of the AOIs?
- ii) Are they constant for all three cases?
- iii) This AOI delineation process should be discussed in method section.

10. **“This new landform is then viewed.....appearing as deeper reds.”**:How vegetation density was determined using False color composite (FCC) image?

11. **“Aside from the orthogonal views..... in the new landform (Figure 8).”**:What is the areal coverage of mangrove vegetation within the newly developed landforms?

12. **“In the case of the Aringay delta..... in such analysis of sedimentation.”**:Repetition of same thing throughout the result section.

13. **Figure 5,9,13**: What is the difference between the two lower panel photographs of the respective figures?

14. **Figure 5,6,9,10,13,14**: There is no such coordinate system referred as “Projected WGS 84 UTM 51N.”

15. The AOI of the Aringay river delta, represented in figure 5 & 6 does not match with each other.

16. The image depicted in Figure 7 is Bauang river delta and not of Aringay river delta. This is a major mistake.

17. **Figure 7,11,15**: There is no relevance of these maps until and unless the worldview 2 datasets were utilized for mapping mangrove vegetation cover within the newly developed landmasses.

18. The image depicted in Figure 11 is not Bauang river delta, it is Amburayan river delta.

19. In the studied ecosystems, the demarcation of landforms developed through sedimentation of any river cannot be done without having prior knowledge about erosion and accretion processes.