

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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This manuscript describes mangrove areas in river deltas near Manila in The Philippines. The authors present aerial photographic evidence of transformation of mangrove fields in relation to river sedimentation. The topic is of interest to the readers of this journal, and yet the following should be considered for improving this article:

1. The main objective of this article is not well defined. It seems to simply determine whether the mangrove expanded into the sea or receded from the sea. This is a rather crude analysis of the problem that can easily be determined by teenagers from aerial photography and comparison with past records.
2. The scientific essence is rather weak. To attribute the surficial gains to sedimentation seems rather obvious and simplistic. There is mention of organic versus inorganic components, yet there is no measurement of any of this. I question whether there is any gain in knowledge on coastal sedimentation.
3. I do not understand why there is no further analysis of the sediment input from the river. If sedimentation is the main driver of the system, why is there no discussion of the sediment contribution in terms of quantity and quality of the material brought to the delta.
4. The mangroves are certainly subject to oceanic forces like those of tides, currents and typhoons which can be quite powerful in this area. Granted that the sites are located on the protected side of the island, there could still be a lot more information regarding the wind, fetch, tides currents and typhoon frequency in this area.
5. There is an allusion to an increased sediment load to be associated to the urban supply from Manila in the conclusions. What is this based upon? All statements that are neither proven nor substantiated in the paper should not be in the conclusions.
6. There is a figure with salt groundwater above fresh groundwater. This does not make any sense. The saltwater intrusion should follow the Ghyben-Herzberg theory. Moreover, all of this salinity intrusion is measurable. I wonder why we cannot find any field measurements on the saltwater intrusion and impact on mangrove growth and development.
7. It is not clear what the scientific contribution to biodiversity (stated in the title) really is. Where is the biodiversity information in the paper? How can biodiversity be investigated from aerial imagery? Is there potential for novelty here?
8. Some figures seemed to include sketches taken from the web and used for a power point presentation. While this is acceptable at conferences, there may be copyrighted material in this article that should not be used without

permission.

In a nutshell, this article is not ready for immediate publication. Despite obviously useful aerial photographs, field measurements are lacking and the contention regarding the effect of the sediment load from the rivers is qualitative, and not substantiated with measurements. The real objectives cannot simply be based on a comparison of old and new photographs. Is there more knowledge to be gained in terms of biodiversity from aerial photographs. While I see potential, the contribution is very meager at this point. The conclusions need to line up with what the research really contributes to the subject – which is rather speculative at this point.

I recommend to give the author the opportunity to really improve this article in depth. Acceptance (from my perspective) should depend on the quality of the revisions and cosmetic changes will not be sufficient. An itemized response would be appreciated if I'm asked for a re-review.