

Review of: "Urban Green Infrastructure Planning for the Bangkok Metropolitan Region: An Empirical Study for Greenspace Expansion"

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Potential competing interests: No potential competing interests to declare.

The article is extremely interesting and very useful for improving territorial planning strategies, from a perspective that considers green spaces and the ecosystem services that these spaces provide to the population. It is a methodologically robust work with exhaustive detail of the methodological strategy used. The methodology proposed and the selection of variables used for the analysis are very interesting due to the diversity of aspects they include, as well as the incorporation of the analysis related to equity in access to green spaces, performed with AccessMod5Tool. Additionally, I find it interesting that they have incorporated the maps of the variables that were taken into account for the analysis (figures 2 and 3), since it helps the reader better interpret the subsequent results.

I congratulate the authors for the relevant contribution made and mention below some specific points that I think would be important to incorporate and some suggestions to make reading more fluid.

Regarding the points to be incorporated, it would be important to 1) include the validation of the land cover/use map, 2) clarify in the methodology based on which criteria the ranges chosen were taken for each of the variables analyzed, 3) clarify what they were based on to establish the relative importance of the criteria compared in table 3, 4) in point 3.2.2, it would be advisable to clarify what range of values the NDBI index has and how it is calculated (or cite a paper that describes it), since it is not an index as widely used as the NDVI, 5) In point 3.2.4, it is not clear how the land value is established and what Thai Baht means, 6) in point 3.2.6, I recommend to incorporate the citation of the source from which the ecotourism sites were obtained, 7) It is not clear to me whether the information on ecotourism spots and ecological patches comes from the Bangkok Metropolitan Administration or from other sources that are not mentioned in the paper, 8) it is not clear from where they obtained the flooding situation map, 9) in the results, it is not clear how the results of the analysis of green spaces are integrated with that of accessibility, 10) In the first paragraph of results, it talks about "economic factors and field investigations within the study area"; it is not clear in the methodology what economic factors were used, as well as what type of field research was carried out. Similarly, in point 4.4, it refers to "regular field surveys" that had not been mentioned in the methodology, 11) In figure 7, it mentions random points that are not mentioned in the methodology; it would be advisable to include them in the methodology and to clarify how many points were taken.

Some suggestions for quotes to incorporate: 1) In the introduction on page 5 when it says "BMR is experiencing subsidence..." and talks about rapid urbanization, groundwater extraction, etc., I recommend adding a quote that substantiates this statement, 2) in the description of the study area, I recommend citing previous studies carried out in the area that contribute to this work, 3) on page 30, the paragraph that begins with "Bangkok Metropolitan Area has prioritized

economic expansion...” should go with a quote from an article that supports it.

Some suggestions to make reading more fluid:

1) The content of the introduction is adequate, but there are ideas related to the benefits of green spaces that are repeated successive times in the different paragraphs (e.g., climate change adaptation, recreational spaces, help manage stormwater runoff). I suggest you try to reformulate the introduction so that it is more abbreviated and less repetitive. 2) The analysis carried out is very interesting, but the most concrete results that can contribute to the planning of the study area are lost in the article. I suggest you try to separate the topics of the results into subheadings to better organize the information and to add a paragraph at the end of the results that outlines the main findings that can be taken into account for planning the study area. I also recommend to include in the discussion a paragraph that summarizes the main recommendations for the study area according to the results of the analysis carried out, 3) In Figure 2, I think the study area would be better understood if 3 scales were included in this figure. That is, a more general map of the region in which Thailand is located, then the map of Thailand, and finally in a larger size (as in this figure), the map of Bangkok. On the regional map and on the map of Thailand, I recommend that only the political boundaries be present, since the altitude (as shown on the map of Thailand) makes it more difficult to visualize the political boundaries. It would also be interesting to include green spaces on the map of Bangkok. 3) I recommend to evaluate the possibility of including a map with a satellite image to better identify the coverage of Bangkok. 4) In the methodology, it is advisable to clarify the spatial resolution of the Sentinel images used and the DEM, so that those who are not specialists in the subject have a better understanding of the scale of analysis, 5) In the methodology, when they mention that they use on-the-ground resources, it would be appropriate to specify what they are, 6) In Table 1, it is not clear to me why in land use/land cover the settlements class is “Moderate,” 7) Figure 4 is a very good summary of the methodology, so I recommend moving it to the beginning of the methodological section, after the figure of the study area, since it summarizes the entire process and helps to follow the explanation. It would be interesting if the analysis carried out with AccessMod5Tool were also included in that figure, 8) Figure 7 is not very clear; I would try to improve it, for example, by making a map of the total study area with good definition and in which the sampling points are superimposed. Additionally, I recommend moving it to an annex, 9) Figure 8 should be moved to an annex, 10) In the methodology, in each of the subtitles that describe the variables analyzed, I recommend removing the part that describes the ranges used and the surface area occupied by each of them, since it is information that is already in table 2.