

# Review of: "The Role of Green Legacy in Promoting Sustainable Development and Combating Climate Change"

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

The authors address an important global topic of reforestation in the specific national context of the “Green Legacy” initiative in Ethiopia. Their objective in the study described in this paper is to identify the effect of planting and growing trees on climate change in Ethiopia and the challenges/opportunities that the initiative affords.

The paper’s empirical basis is a set of interviews and questionnaires with all employees of the Ministry of Agriculture, Environment Protection Authority, and the Ministry of Environment, Forest, and Climate Change. The quantitative data were analyzed with a binary logistical regression model. Qualitative data were added by telephone interviews with the directors of three chosen sectors of the Green Legacy program.

There is a major shortcoming in the approach described in the paper. The interviews and surveys were secondary sources commenting on reforestation, therefore the objective of this study to “Identify the effect of planting and growing trees on climate change in Ethiopia” is not actually addressed or evaluated. Indeed, there is evidence from many studies that growing trees are a major carbon sink over time, but this study does not provide a meaningful empirical basis that links tree planting and growth to changes in climate in Ethiopia. The statistical analysis of the data indicates degree of agreement of opinions of employees in three sectors regarding the tree planting and growing initiative and assumed impact on climate change. It could be reported as a measure of uniformity of belief in reforestation for climate change impact, which may be a good thing (or perhaps not, if the results of reforestation are not substantiated and linked to societal well-being, if not directly to climate change).

The paper would be improved if it was substantially shortened, lengthy redundant sections removed, and care taken to use more precise wording (e.g., “Another impact is that climate-changing rainfall patterns due to increases in temperature...” in section 2.2. The rainfall patterns are affected by climate change, not the other way around). As it is now, the paper can be considered an initial draft that would benefit from attentive mentorship and revisions.