

Who bears the cost of forest conservation?

Although it provides global and regional benefits, forest conservation often imposes costs on local people. Protected Areas funded by multi-lateral donors are committed to adequately compensating local people who bear the costs of conservation, and the Convention on Biological Diversity requires Protected Areas to be “fair and equitable”.

We estimated the net local costs of a New Protected Area in Madagascar. We also estimated the value of the compensation received by local people.

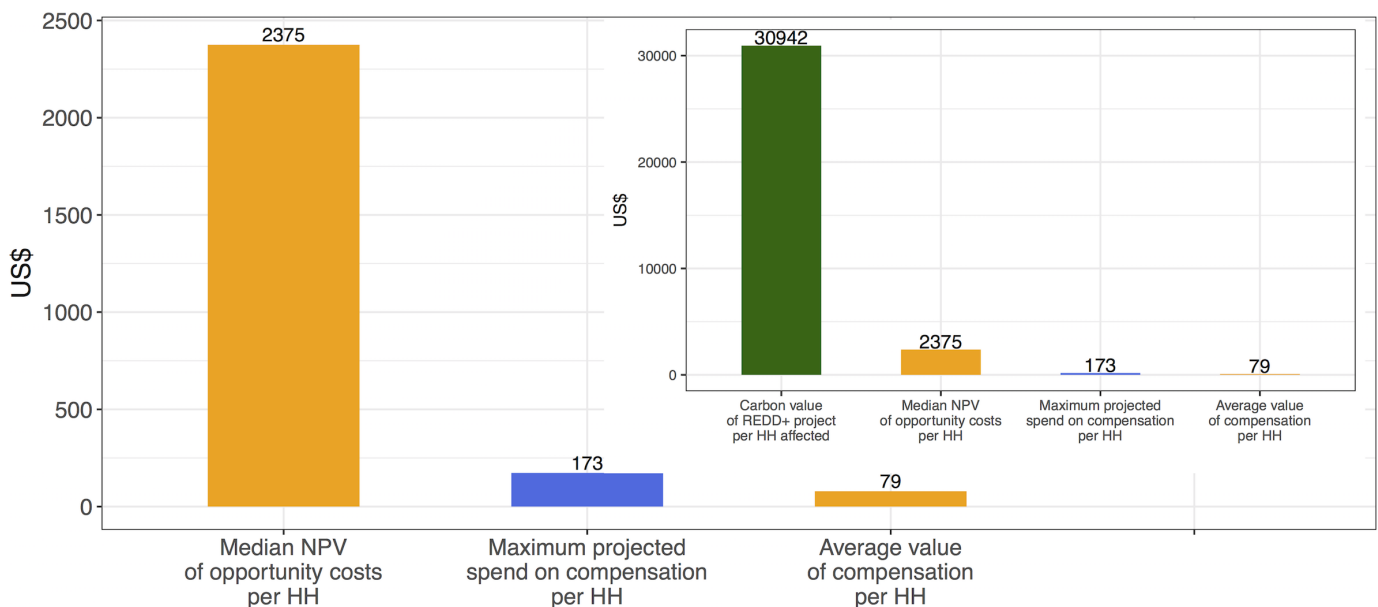
Net-costs are 40-120% of total annual income for median-income households (higher for poorer households). Approximately 75% of eligible households (20,000 people) did not receive any compensation. On average, the compensation that was received was worth only 5% of household opportunity costs. Achieving full compensation would require 40 times more than was spent, but only 10% of the global carbon benefits of the protected area.



Conclusions and recommendations:

The costs of protecting Madagascar’s forest are borne by local people, especially the poorest, and compensation has been inadequate. To address this, the amount spent on compensation will need to increase substantially. However, this could be spread over many years, and would be far less than the value of the carbon emissions that the protected area will avoid. If even a small proportion of this carbon value can be captured by Madagascar, it will be feasible to achieve full compensation for local people. If adequate compensation can be assured, Madagascar’s Protected Areas represent an excellent investment for the international community.

Study details: We used a discrete choice experiment with 453 households in four different sites to value the net opportunity costs of the Corridor Ankeniheny-Zahamena New Protected Area. We estimated incomes using a detailed survey with 102 of the households. We conducted a contingent valuation with 62 households who had received compensation, to estimate its value to them. The compensation received was worth 5% of the household's opportunity costs on average, and approximately 75% of households affected by the protected area received no compensation. The Protected Area has received certification to deliver 10 million tonnes of avoided CO₂ emissions from Verified Carbon Standard (VCS) over the first ten year period, with a global social value of \$110m (social cost of carbon = \$11/t CO₂). This is nearly 10 times the total estimated opportunity costs. Even if only a small proportion of the global value of protecting the forest can be captured, it is feasible to ensure full compensation for local people, who are among the poorest in the world.



Rakotonarivo, S., Hockley, N.J., Jones, J.P.G., Ramamonjisoa, B.S., Larsen, H.O., Mandimbiniana, R., Jacobsen, J., Nielsen, M. (submitted) Qualitative and quantitative evidence for the validity of choice experiments for estimating the welfare impacts of forest conservation in least developed countries .

Poudyal, M., Rakotonarivo, O.S., Hockley, N., Gibbons, J., M., Ramamonjisoa, B.S., Mandimbiniaina, R., Rasoamanana, A., Andrianantenaina, N.S., Jones, J.P.G. Who bears the cost of forest conservation?.

