

# The effectiveness of environmental policies on reducing deforestation in the Brazilian Amazon

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## Annex D. Addendum on Valorization of the Dissertation

Following the requirements of the “Regulation governing the attainment of doctoral degrees Maastricht University 2014,”<sup>97</sup> this addendum explains the non-academic value of this dissertation. The purpose of the addendum is to show the “process of creating value from knowledge, by making knowledge suitable and/or available for social (and/or economic) use and by making knowledge suitable for translation into competitive products, services, processes and new commercial activities.” (Adapted definition based on the National Valorization Committee 2011:8).<sup>98</sup>

The valorization is arranged in five topic areas as recommended in the regulation: (1) relevance, (2) target groups, (3) activities/products, (4) innovation, and (5) schedule & implementation.

(1) Relevance — What is the social (and/or economic) relevance of your research results (i.e., in addition to the scientific relevance)?

The topic of this dissertation is highly relevant to the future survival of our planet. Climate change threatens biodiversity and ecosystem services that are fundamental to the survival of humankind. Forests, once a reliable carbon sink, have recently become net carbon emitters. They rank second only to fossil fuels in carbon emissions.<sup>99</sup> If we want to limit the risks of climate change by reducing carbon emissions, we must find ways to preserve forests and turn them back into net carbon sinks.

This dissertation uses the Brazilian Amazon, the world’s largest stretch of tropical forest, to evaluate the effectiveness of different forest conservation policies, using a mixed methods approach.

(2) Target groups — To whom, in addition to the academic community, are your research results of interest and why?

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<sup>97</sup> <http://www.promotiewijzer.nl/en/regulation-doctoral-degrees.html>.

<sup>98</sup> <http://www.promotiewijzer.nl/en/regulation-doctoral-degrees.html>.

<sup>99</sup> According to Pearson et al. 2017, Brazil ranks second on a worldwide comparison of carbon emissions from deforestation and forest degradation.

My research addresses several audiences. It is first and foremost tailored to an academic audience. However, given that it resulted from my practical work as an evaluator at KfW Development Bank, it also has an audience of international development practitioners that negotiate environmental policies and projects with governments in developing countries and in emerging economies. Furthermore, this research is relevant to the government and environmental agencies of Brazil, as well as other countries with large tropical forests and indigenous peoples that are stewards of forest preservation. Lastly, this research is addressed to the international community at large in that it highlights what works and what does not in forest preservation, which is important for limiting carbon emissions and mitigating the effects of climate change.

(3) Activities/Products — Into which concrete products, services, processes, activities, or commercial activities will your results be translated and shaped?

My research on the Indigenous Lands Project, jointly funded by KfW Development Bank and the World Bank’s Rainforest Trust Fund, is based on an *ex post* evaluation I conducted as a Senior Project Manager for KfW Development Bank in Frankfurt. The work involved a field trip to Brazil. An evaluation report was sent to the German Federal Ministry for Economic Cooperation and Development (BMZ) and a short version is published on KfW’s website ([https://www.kfw-entwicklungsbank.de/PDF/Evaluierung/Ergebnisse-und-Publikationen/PDF-Dokumente-A-D\\_EN/Brasilien\\_Indianergebieten\\_2013\\_E.pdf](https://www.kfw-entwicklungsbank.de/PDF/Evaluierung/Ergebnisse-und-Publikationen/PDF-Dokumente-A-D_EN/Brasilien_Indianergebieten_2013_E.pdf)).

Based on a collaboration between KfW Development Bank and AidData, I published a paper entitled “Indigenous land rights and deforestation: Evidence from the Brazilian Amazon,” jointly with my co-authors from AidData in the peer-reviewed *Journal of Environmental Economics and Management* in July 2017.

In 2016, I presented the paper during the 18th Annual BIOECON Conference entitled “Instruments and Incentive Mechanisms for Biodiversity Conservation and Ecosystem Service Provision,” September 14–16, 2016 at Kings College, Cambridge, U.K., and received valuable feedback.

In November 2017, I was asked to submit a chapter on the “Effectiveness of forest protection policies in the Brazilian Amazon” as part of a Springer book on “Strategies for forest conservation in South America,” edited by Felix Fuder. This chapter is part of this dissertation. An extended version of chapter 6 will be published at a later time.

(4) Innovation — To what degree can your results be called innovative in respect to the existing range of products, services, processes, activities, and commercial activities?

This research was novel in that it used impact evaluation methods to test the effectiveness of land rights for indigenous peoples and their impact on forest preservation. It triangulated the findings with field work in the state of Amazonas, something only few researchers are allowed to conduct, due to Brazil's protection of indigenous communities through FUNAI, which highly restricts access to these communities.

This research is also novel in its highlighting of the positive impact environmental policies can have on forest preservation, something that is missing from earlier econometric models that modeled deforestation using statistical methods.

(5) Schedule & Implementation — How will this/these plan(s) for valorization be shaped? What is the schedule, are there risks involved, what market opportunities are there and what are the costs involved?

I plan to publish this research in two additional articles. The first article entitled "Effectiveness of forest protection policies in the Brazilian Amazon" will be published as part of a Springer book on "Strategies for forest conservation in South America," edited by Felix Fuder. A second article based on chapter 6 of this book will be published at a later date together with my co-author Elias Cisneros.

Given that I currently work for the World Bank that implements projects similar to the Indigenous Lands Project and that conducts policy dialogues with developing countries and emerging economies, I will use this research in the future for my work in the field of climate change and environmental policies.