

## Final Evaluation Report

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Your Details	
<b>Full Name</b>	Kathelyn Paredes Villanueva
<b>Project Title</b>	Application of Timber Tracing Methods in Tropical Forests: Identifying Bottlenecks Along the Timber Chain of Custody
<b>Application ID</b>	30784-2
<b>Date of this Report</b>	18-07-2023

**1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Characterise Cedrela chain of custody				
Identify bottlenecks and potential points for application of timber tracing methodologies (DNA and stable isotopes) in order to improve timber control				During interviews in the field, unfortunately there was little awareness about the need to precisely identify timber origin. Most of the forest users seemed to be satisfied with the current control system. Although we identified potential ways for implementation of the timber tracing methods, raising awareness and policy issues were identified as core needs.
Identify key steps for their implementation				

**2. Describe the three most important outcomes of your project.**

- a) One paper published in international journal.
- b) Derive data from *Cedrela's* chain of custody and provide guidelines for application of timber tracing methods in Bolivia.
- c) Give support to the institutions in charge of timber harvesting and regulation by providing information about the steps to follow and origin of suspicious timber under legal.

**3. Explain any unforeseen difficulties that arose during the project and how these were tackled.**

Coordination with local foresters and their availability during dry/harvesting season was challenging but in most of the cases we travelled to their specific locations to make the interviews. In addition, COVID-19 restrictions limited organization of meetings with large groups.

Laboratory analyses has been delayed by the collaborating institutions. For the isotopic analyses, results from the collaborating researcher (Leicester University, UK) were not obtained to date yet. For the genetic component, initial analyses were planned to be performed at Wageningen University (NL) however the genetic lab continued busy running analyses with other students. For this reason, alternative collaboration was started with Ole Kim Hansen at Copenhagen University who is

currently performing the genetic analyses with the help of a master's student. Since there has been a long wait for a reply from the Wageningen University researcher, the primers that were meant to re-use for this project had already expired and we had to buy new ones.

**4. Describe the involvement of local communities and how they have benefitted from the project.**

During the collection of the samples, forest professionals playing a role in each community were contacted. Their opinions were collected to be considered in the analyses for potential ways of application of the timber tracing methods. I also gave a presentation in each of the communities where we sampled in order to make community participants know about the availability of this identification methods.

**5. Are there any plans to continue this work?**

Since we are still waiting for the genetic analyses results, I am planning to continue preparing the manuscript for publication of results and include these results when they are ready. On the other hand, this project about identification of bottlenecks of the timber chain of custody is only one element of the whole problem about illegal timber trade, a topic I am passionate about and I continue to study now as part of my postdoc. Currently I am focusing even more on the isotopes analyses but now with the assistance of people from US and Japan. I am planning to include part of the lessons learned from fieldwork in a second manuscript part of my current postdoc.

**6. How do you plan to share the results of your work with others?**

Working results will be shared with the institutions and local stakeholders to get feedback and suggestions during a visit to communities and universities during winter (dry season) this year. A presentation of results to stakeholders and target group including local authorities (Autoridad de Fiscalización y Control de Bosques y Tierras) and forest engineers will be organised during the same visits this year.

**7. Looking ahead, what do you feel are the important next steps?**

After our interviews to local stakeholders, we got unexpected results regarding their perception on the need for identification and illegal logging. So, we realised that important extension and awareness activities have to be organised together with local authorities to make the identification of illegal timber trade efficient. Our current project planning is now including activities for networking with the current and potential authorities and key stakeholders as part of our strategies for implementation of the timber identification methods.

**8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?**

Yes, each of my presentation included Acknowledgments section as part of my PowerPoint slides. The Rufford Foundation is also mentioned in the manuscript that is still in preparation. Additionally, photos of the fieldwork activities mentioning The Rufford Foundation were shared in my personal social platforms (LinkedIn and Twitter).

**9. Provide a full list of all the members of your team and their role in the project.**

**Raquel Cárdenas** as field assistant for interviews and sample collection, **Pablo Vargas** for contacting communities' representatives and photo captures during sample collection and interview with stakeholders, **Miguel Cuaidiai** supported the timber identification and contacts to timber traders in the field. Extra support was provided by locally hired car drivers and several local foresters in each community.

**10. Any other comments?**

Once the manuscript is published, the paper will be shared with The Rufford Foundation team and social media.

