

## The Rufford Small Grants Foundation

### Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
<b>Your name</b>	Jose Antonio Sierra Huelsz
<b>Project title</b>	Linking tourism, markets, communities and forests: assessing management practices for tropical conservation and local livelihoods
<b>RSG reference</b>	14184-1
<b>Reporting period</b>	December 2013 – December 2013
<b>Amount of grant</b>	£5985
<b>Your email address</b>	jashpat@gmail.com
<b>Date of this report</b>	01/08/2015

**1. Please 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
Integration of local knowledge and databases			X	From interviews data, form local forest inventories we are compiling an extensive database that contains local preferences and ecological indicators for more than 50 polewood species.
Getting detailed records of current polewood management practices			X	On-site we recorded the harvest of more than 6,000 individual trees in five communities. We recorded where, how, and what was harvested and the criteria for this decisions.
Analysis of institutions and regulations on management			X	We conducted 38 structured interviews, more than 90 semi- structured and non-structured interviews. In addition we did an extensive archival work in the regional branch of the federal Ministry of the Environment where we reviewed official forest management records for 20 communities' form 1984 until 2014.
Workshops for results devolution	X			Due to time constraints I did not organise these workshops during the Rufford Grant period. However in the second half of 2015 I will coordinate workshops in which our results will be discussed with local stakeholders including regional environmental authorities.
Participate in an ongoing Best Management Practices initiative	X			An inter-institutional BMP initiative was taking off when I first propose this project to the Rufford Foundation. While currently the original BMP initiative is no longer active, during this project I have been in communication with authorities and environmental NGOs working in the region.
Within community diversity and gender roles		x		I was able to conduct 38 in-depth structured interviews to harvesters in five communities, and shorter semi-structured interviews to 20 other community members, in addition of the >60 interviews to a diverse set of stakeholders related with polewood commercialization and regulation. While gender roles in forest management where explored, I did not conducted full structured interviews to community members no involved in polewood management. I will address this aspect prior the devolution of our results.

**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

For most of the time project advanced with only minor complications. However, three factors limited our capacity of delivering all the expected results.

1. Obtaining official and local permits for working in the field consume a larger amount of time than anticipated. In order to make better use of time we conducted first all activities that do not require any permission or permits.
2. Obtaining on-site data of polewood harvests was more demanding in terms of time and economic and human resources than initially expected. Additionally, communication between our team and polewood harvesters crews were not always efficient (often due to lack of good cell phone signal) and that resulted in some unfruitful trips to the forest.
3. A family health situation required my full attention for over a month. In my absence, our team was able to continue working on the field advancing a significant portion of the project.

Taking advantage of the relationships that were built and strengthen during the RSGF funded project, I will be able to advance in fully integrating local community diversity in the assessment and to devolve and discuss the results of this project.

**3. Briefly describe the three most important outcomes of your project.**

We described in depth commercial polewood management for tourism construction in central Quintana Roo. We compiled from actual harvest data the most extensive list of polewood species in the region (95 tree species, compared with the previously reported 35 species).

We assessed the factors that influence what polewood species are harvested (species abundance, local governance, official regulations and personal and consumer preferences). Polewood management is globally relevant case study that contributes to understand the management of highly diverse forest products adding new insights to one of the oft-pursued goals of tropical forestry: the marketing of “lesser-known species” as an opportunity for silvicultural improvement. Regionally our data contributes to assess species vulnerability, and provides locally appropriate hints on options for improving polewood sustainability management.

In addition to the current polewood management practices, we also gathered information on how management of a diverse suite of forest products that are used in tourism related constructions (including polewood, thatching and some larger roundwood species) has evolved through time in the region. This historical perspective allows a deeper understanding and more realistically planning to the future.

**4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).**

This project was focused in analysing community forest management practices. Recording on-site polewood harvesting was one of the central components of the project. For making this happen, we needed to obtain the acceptance of communal authorities, forest technical service providers and from each harvesting crew that I accompanied. During this process we were able to discuss this project, and forest management in the region.

A key aspect for successfully working with Mayan communities was to create a team that includes qualified local members. The intercultural skills of Santos Colli Balam, an alumnus from a regional Intercultural Mayan College, were essential for this goal. Santos helped me to integrate and train a

larger team with members of his home community. On some days when there was intensive polewood harvest activity we were up to 6 people working together in the field collecting data.

When our project demanded significant amount of time or effort besides their normal activities, economic compensation was provided to local harvesters and other community members.

While this project has not yet directly benefitted the communities that we worked with, the results will be included in new forest management plans that are required for them to continue to be legally harvesting polewood. In addition, our results will be used by some communities that are in the process to become FSC certified.

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

RSG allowed me to complete the fieldwork for my PhD dissertation, and for the first semester of 2015 I will be analysing the data and writing the document at the University of Florida. After completing my dissertation, in the fall of 2015 I will go back to Mexico and share and discuss my results in Quintana Roo. My plans are to continue working in this region doing research and conservation and development practice. The results sharing process will be decisive to decide in detail the following steps. During this sharing process, I will put extra effort in exploring intra-community variation including gender roles and rights of title holders vs. non-title holders, acknowledging the potential conflicts of interest that any change could represent in regional stakeholders.

There are several operational and regulatory aspects that have room for improved sustainability; any change would depend on the interest of the involved parties. Some specific management practices may apply only to some local contexts. I have established good communication with some local and international NGOs working in the region, and we are seeking new opportunities for collaboration in the best forest management practices for the region. My RSGF funded fieldwork has been central for having an intensive on-the-ground experience that will allow me to contribute with forest based conservation and development initiatives in the Yucatan Peninsula.

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

- We are preparing four papers to be published in specialised scientific journals.
- I am presenting individual reports to local forest communities and forest technical service providers that have helped me in this research in order to include our results in the new forest management plans.
- I was invited by the regional offices of the Global Environment Facility / United Nations Development Programme to conduct a series of workshops in fall of 2015 when I will be presenting my results. Workshop structure still needs to be defined, but we are planning to have at least two, one with polewood producer's only and other one with a diverse set of stakeholders including environmental authorities.

#### **7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?**

We used the RSG during a one year period as projected; however, weather conditions, permit availability, and personal events accounted for significant variation in fieldwork intensity across the year.

**8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.**

Item	Budgeted Amount	Actual Amount	Difference	Comments
Living expenses for a UIM student	1669	2484.75	(-) 815.75	Originally I planned to pay 6 months of living expenses. I decided to continue working with him and I paid him for 10 months. This former UIM student and I formed the core team that lead this project.
Local field assistant	2023	957	(+) 1116	Having an UIM alumnus working with me side-by side all the time reduce the need for extra assistance and helped to have a more solid team. Local field assistance was arranged only at specific moments, especially when large number of harvesters were working at the same time.
Rent of room in Felipe Carrillo Puerto for 12 months	1153	1084	(+) 69	Variation in exchange rates are responsible of this difference.
Hostel room in polewood markets at for 20 nights	324	268.8	(+) 55.2	Staying with new made friends in the tourism hubs allowed saving in lodging. Conversely, we expended more in staying in the state capital for longer that planned originally for obtaining official permits, and conducting archival research in the offices of the Ministry of the Environment.
Local transportation	496	793	(-) 297	After the initial weeks in the field I realized that using public transportation was not the most efficient way to get the fieldwork done and traveling across the state. I borrowed a car and the expenses that I present here are the cost of gasoline and car maintenance.
Round-trip USA-Mexico Airfare	320	180.5	(+) 139.5	I did not fly from the US as planned, when I received the RSG I was already in Central Mexico. I expend this money for a round trip from Central Mexico to the Yucatan Peninsula.
Material for botanical collection	0	122	(-)122	This expense was not originally planned. I bought material for collecting botanical specimens and measuring trees including scissors, plant press, plant dryer, flexometers, cords, etc.
Camping gear	0	96	(-)85	Three sets of mosquito nets, and tarps.
<b>TOTAL</b>	<b>5985</b>	<b>5986.5</b>		

## 9. Looking ahead, what do you feel are the important next steps?

I divide the important next steps in three broad categories: 1) this project, 2) future research, 3) important institutional challenges

### **This project**

I will complete the data analysis and wrapping-up the writing of four papers/chapters that are focused on: an assessment of polewood species vulnerability, assessing the factors that influence polewood species selection, describing the current use of polewood and other forest products demanded by the tourism construction sector in the Caribbean coasts of Mexico, and describing the evolution of the market and the management of polewood and other forest products demanded by the tourism construction sector in the Caribbean coasts of Mexico.

This project will formally end after presenting and discussing the results to different audiences in the region. The following steps will depend upon how stakeholders react to our results, and what agreements can be made in this process.

### **Further research**

While some action is possible even without further research, if conditions are met, additional research would allow more detailed management decisions. In case of further local interest and additional funding opportunities I would like to lead some of the following research topics.

**Silvicultural experiments.** Permanent plots with different polewood harvesting regimes are essential for long-term planning and assess harvest impacts more realistically. Plots including different harvest intensities and under selective harvests vs. clear-cutting treatments, mature forest vs. secondary forest, and harvest different harvest intensities, are essential to accurately measure the regeneration capacity, growth and yields under contrasting scenarios.

**Monitoring populations of vulnerable species.** Our study is helping to identify what polewood species are more vulnerable to harvests, and what factors influence their vulnerability. Monitoring the most vulnerable polewood species may be included as part of a larger research agenda, in certification schemes or local best forest management initiatives. Preferred polewood species, polewood species that are harvested also for other uses (non-timber forest products, saw timber), or those that play key roles for providing wildlife habitat and food, should be prioritised for monitoring.

**Monitoring polewood harvest and demand.** Our data suggests that polewood harvest intensity is been highly variable in time and space. Monitoring of polewood and timber harvest in the region has been limited in scope and inconsistent in time. The long term sustainability will depend upon the development of cheap and easy monitoring schemes that provide indicators of what and how is harvested.

**Institutional and market challenges.** Current regulations and governance arrangements have potential to be improved for polewood sustainability and local livelihoods.

Linking tourism certification with forest certification has a great potential in the region. In the Yucatan a number of hotels and some tourism attractions are certified as sustainable by the same organisations that certify forest management. If the certified tourism companies are encouraged or obligated to purchase from regionally certified forest operations there would be an identifiable market for sustainably managed polewood (and many other tropical forest products).

The management of secondary forests is currently under a legal grey area, official policies discourage and often criminalise their use. If the use of secondary forests for polewood harvesting is facilitated, some harvest pressure from mature forests can be released. Our results can contribute to an on-going legislative effort that is supported by some scholars to simplify the commercial management secondary forests.

Stagnant polewood prices disincentivise good forest management practices that imply extra cost. Arguably the most important example of needed but sometimes costly best management practice is rotating the harvested areas. Complying with this legally required practice implies that distance to harvest blocks will vary over the years, in some cases the transportation costs can be so high that under current polewood prices, harvesting in the farthest corners of a communal forest may not be economically viable. Inter-communal organisation to convene in minimum prices may be an opportunity for improving forest management in general.

In this region timber harvest (including polewood) is not widespread, however in the state there are some local hotspots where illegal harvests are significant. Corruptions make illegal timber harvesting possible, but often also increases the transportation costs of legally harvested timber. If this systemic problem is addressed forest management has more space for improvement.

**10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?**

I have included the RSGF logo in a poster that I presented at the IUFRO (International Union Forest Research Organisation) 2014 World Congress. Abstract available (section "Abstracts") at <http://www.iufro.org/events/congresses/2014/>

**11. Any other comments?**

I very much appreciate the support provided by RSGF