

Final Evaluation Report

Your Details	
Full Name	Daniela Alejandra Rativa Gaona
Project Title	The seed dispersal role by the Ranchería river under the anthropogenic effects of a dam and coal mining in the tropical dry forest of La Guajira, Colombia
Application ID	29414-1
Grant Amount	1st Rufford Small Grant
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Date of this Report	19/01/21

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
Two field trips to the Ranchería River region to carry out seed sampling				The field trip was carried out before the grant was assigned but this money helps us the cost of the first travel.
A field trip to collect data about Ranchería River's water quality and physicochemical parameters'				Due to the health contingency of COVID-19, this field trip was delayed until the last months of the project. But the end goal was successfully achieved.
Seed identification collected on the field in association with an specialist (Colombian National Herbarium, COL)				Due to the health contingency of COVID-19, the Colombian national herbarium was closed, which prevented the advancement of the identification of botanical material.
Ecológica land floristic analysis about the region. Identify the effects on the river caused by the El Cercado dam and the El Cerrejón coal mine				Due to the scarcity of botanical information, data are lacking to finalize the floristic and ecological analyzes, but we have made progress with the data obtained so far.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

The health contingency of COVID-19

- Incomplete identification of botanical material: To carry out the analyses, the information obtained before the closure of the institutions was used.
- Changes on the trip dates of field work: When the national borders of Colombian opened, we made the travel as soon as possible to obtain water quality data
- Change in the budget of sample water: We do a fewer sample were taken per zone

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

1. We generate new information, not available before in the environmental reports of the region, about the water characteristics of the Rancheria river.
2. We identify changes on seeds composition through Rancheria river generated by the dam and coal mine activity or presence.
3. We collect seeds of species that are not reported for the región.

4. Briefly describe the involvement of local communities and how they have benefitted from the project.

We hired three people from the region to guide in the field and support our work locating sampling points. Additionally, we provided them with information about the equipment use and the importance of the river's ecosystems on the dry forest.

5. Are there any plans to continue this work?

No, due to the social and political conditions of the region it is not convenient. In addition, the conditions of the medical contingency would not allow us to continue

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

Once the analysis is finished, these results will be included in a scientific article in an indexed journal. We want to do a complete scientific divulgation work that facilitate the communications of our results with the people of the region. This will be including talks and infographics.

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

Due to the contingency, in the first months the Hanna equipment was purchased and only up to 9 months later we were able to move the items again. We planned to execute the total of the scholarship in the first 6 months but we achieved it in 12 months.

8. **Budget:** 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Daniela Rátiva- Gaona's travel to Ciudad de México- Bogotá- Ciudad de México	370	715	+352	This item has exceeded the budget because the field conditions, the project methodology and the conditions of the pandemic did not allow us to execute the entire project in fewer field trips, for that reason I had to travel two more times than expected
Payments for local team	100		-100	
Multiparameter Hanna pH / ORP / CE / OD / Pressure / Temperature Meter HI 98194	1250	2344	+1094	This change is explained by the acquisition of the Hanna's turbidity accessory. This is important because provide us information about the contamination at the river generated by the mining
Payments for Seed Determination Assistant	400	238	-162	
Services of the Colombian National Herbarium for 8 weeks	500		-500	The Colombian National Herbarium allowed me to use its facilities "for free" as a type of scholarship, that is to say that this item was not going to be executed and can be used for another activity.
Testing water quality	700	1417	+717	This item has a very high cost in the region, despite having previously investigated the value they could have, the laboratory that had quoted us is no longer in the region and the new laboratory has raised the costs, and this item has increased a lot.
Hotel to three people for ten days	250	62	-188	We only paid hotel for three nights

Food for three people for ten days	500	80	-420	We paid food two persons and only for five days
Construction material of 45 seed traps	180		-180	
Fuel for 10 days at Valledupar	300	22	-278	We paid fuel only for two days
Rent a car for ten days at Valledupar	250	71	-179	
Travel to Elisabet Wehncke Valledupar- Bogotá- Valledupar	100	97	-3	
Travel to Daniela Rátiva-Gaona, Bogotá- Valledupar- Bogota	100	166	+66	This item has exceeded the budget because the field conditions, the project methodology and the conditions of the pandemic did not allow us to execute the entire project in fewer field trips, for that reason I had to travel more times than expected
Banking expenses		25	+25	We do not consider this expense
TOTAL	5000	5237	+237	

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

We must finish the determination of the botanical material and once the results of the water analysis arrive, relate the results found.

We must also generate clear and simple information to transmit to the communities about the water quality of their rivers.

10. 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, during 2020 I participated in two events. In March 2020, I did a talk at a university symposium when the people asked about the scholarship and the application process; the logo was used in the slide. In October 2020, I participated in the 2nd International Conference Conservation Latin America and Caribbean 2020 held on-line from 9 - 13 November 2020, and the logo was used on the cover and in the acknowledgments slides of that participation talk. In addition, within my institution we made known my participation in the scholarship and some students have asked me about applying to the scholarship

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Elisabet Wehncke: She is the director and project coordinator. She took care of the design, execution and accompaniment in all field trips, she was driver, traps designer, chef and many other things. In addition to accompanying me in writing and guiding me in the analyzes.

Nestor A. Mariano: He supported us with the experimental design and statistical analyzes for the whole study

Edgar Leonardo Linares: He helped us determine all the botanical material collected in the field trips. In addition, he is the seed expert in Colombia, so he has guided us in any of the possible answers about the dispersion of seeds

Paula Ortiz: She was the auxiliary researcher who helped us with the organization and determination of seed collected

Jorge Fragoso: He was our assistant in field work. He helped us locate the sampling points, to put and remove the traps

Jorge Maestre: He accompanied us to take water samples at the Ranchería River. He learned to use Hanna equipment and supported us during sampling.

Jose Villalobos: He was our driver and logistics help at the field trip for the sampling of water on the River Ranchería

Patricia Saavedra: She is the administrator of CENSAT who was in charge of receiving the money, buying the air tickets, executing the purchase of Hanna equipment and organizing the project administratively.

Sonia Medina: She is the accountant de Censat who helped us with the right organization and execution of money

12. Any other comments?

Thank you for the trust and support you have given me. Despite the changes, delays and pandemic covid-19, the project could be implemented.