

### **Final Evaluation Report**

| Your Details        |  |  |  |  |
|---------------------|--|--|--|--|
| Full Name           | Cristina Cecilia Nunez Godoy   |  |  |  |
| Project Title       | Which program will halt deforestation? Landowners' Preferences for Forest Conservation Programs in the Gran Chaco of Argentina |  |  |  |
| Application ID      | 28455-2  |  |  |  |
| Grant Amount        | £6000  |  |  |  |
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| Date of this Report | April 9 <sup>th</sup> , 2020.  |  |  |  |



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

| Objective   | Not<br>achieved | Partially achieved | Fully<br>achieved | Comments  |
|---|-----------------|--------------------|-------------------|---|
| Collect GIS map layers from public and private organizations to identify important areas for habitat connectivity   |                 |                    |                   | We successfully obtained GIS map layers from the National Geographic Institute of Argentina, National Parks Administration, Nature Conservancy, Institute of Spatial Data Infrastructure of Argentine Republic, ProYungas organisation, and the Argentine Ministry of Environment.  |
| 2) Determine where enrolment in conservation initiatives needs to be targeted to produce a landscape composed of high priority, contiguous forested lands and habitats.  3) Collect data from individuals, companies, and indigenous communities who own forested lands in the important areas identified in objective 2. |                 |                    |                   | We successfully combined spatial data on Salta province and Chaco region boundaries, public protected areas, parcels boundaries, land management planning of argentine native forests, and species distribution and richness to identify important private parcels for contiguous forested lands.  Survey administration with private landowners was completed. Through governmental databases we were able to obtain contact information for 607 parcels from which we omitted 347 parcels owned by landowners living in other provinces. The remaining 260 parcels were owned by 153 landowners. We obtain 81 completed surveys and were able to survey all the indigenous communities and academic organisations owning a parcel in our study site. Prior to survey administration, we sought permission from survey subjects. This ensured their trust and cooperation. |
| 4) Determine how PES program may be improved, or whether other incentive-based initiatives would more effectively engage landowners and communities in  |                 |                    |                   | Descriptive statistics related to demographics, adoption of incentive-based initiatives as well as Principal Component Analysis on attitudes toward the adoption of policies and reasons for owning forested lands has been completed. Detailed data analysis is in progress.   |



| conservation, and the amount of compensation needed to keep native forest on these private lands.  |   |
|--|---|
| 5) Interact with governmental agencies, rural extension groups, cattle and crop associations, and local NGOs to gain a thorough understanding of the context and policy impacts. | I was able to participate in the Expo Rural organised by the Sociedad Rural Salteña (cattle raising organisation of Salta). I also participated in the "Workshop for the formation of the promoter group of the multi-actor and multi-sector platform for the sustainable development of the Great Argentine Chaco" (supported by the Nature Conservancy), and the IV Annual <i>Prograno</i> Meeting "Campo y Ciudad". I participated in events hosted by the LEAC lab of the National University of Salta. |

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

We underestimated the effort, time, and money needed to reach 153 landowners throughout the entire province. We faced a high number of unoccupied/abandoned houses, incorrect or incomplete addresses, and no-one-at-home cases. To overcome these difficulties, it was necessary to search landowners' names on online telephone directories and make several visits to try contacting landowners as well as to travel more to meet the timescale. We also needed to visit and contact landowners several times to arrange meetings.

Finally, my Rufford application was accepted on July 30th, 2019. Yet, funds were not available through my university department until October 11th. During this period, execution of project's activities relied on borrowed money from friends, family, and local collaborators.

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

- a) Spatial identification of forested lands where enrollment in conservation initiatives needs to be targeted to produce a landscape composed of high priority, contiguous forested lands. Conservation efforts targeting these areas will increase the amount of forests under protection, improve viability of protected areas, and consolidate blocks of forest on private lands to provide environmental services and nature conservation for the long term.
- b) Involvement of key stakeholders and strengthen local networks. Forest owners, local private and public universities, local NGOs, and governmental natural resource agencies have been involved in every step of our project. Moreover, these



stakeholders have shown strong interests in participating in future activities related to this project which is key to the success of future conservation actions.

c) Field-based information on landowner's preferences for PES programme's attributes and factors influencing landowners' willingness to participate in incentive-based initiatives has been gathered from face-to-face surveys. This information will provide provincial and national agencies in Argentina with tools to improve incentive-based policy to promote long-term conservation in the Chaco ecoregion Because forest owners are a heterogenous group, this resource will be extremely useful in providing information for conservation policy design and outreach.

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

Local communities were involved only as survey participants. Their participation allowed them to gain information about the PES programme and forest law regulations.

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

The period of this grant represents the data collection phase of this project. Beyond the timeframe of the grant, plans to continue this project involve:

- (a) Provide stronger scientific base and technical recommendations for conservation and management of native forest management in the Chaco ecoregion (1-2 years).
- (b) Improve the number of initiatives prioritising conservation in private lands surrounding and connecting protected areas (2-3 years).
- (c) Increase the number of private properties enrolled in conservation initiatives (2-4 years).

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

Once the analyses is completed, research results will be disseminated in English and Spanish through: (a) participatory meetings with landowners and indigenous communities, and local NGOs and collaborators; (b) personal meetings with key government officials (e.g., Ministry of Environment and Sustainable Development, environmental protection agency of Salta); (c) peer-reviewed articles in top-tier open-access journals to reach the broad scientific community; (d) participation in national and international conferences, and seminars and poster competitions at University of Florida and National University of Salta; and (e) brochures in PDF format that I will distribute via social media and personal networks to reach the general public.

Until recently, my plan was to share preliminary results at the Fieldwork Festival of the UF's Tropical and Conservation Development programme on March 13<sup>th</sup>, 2020, the Graduate Student Research Day 2020 on April 7th, the 5th Annual Research Symposium of the UF's School of Natural Resources and Environment on April 23<sup>rd</sup>, and the 57th Annual Meeting of the Association for Tropical Biology and



Conservation (ATBC). However, all these events had been cancelled because of the COVID-19 disease.

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

The RSG funds were planned to be used for 7 months (June-Dec 2019) but they were used from July 2019 to December 2019.

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.

Exchange rate (average from July to December) \$80 Argentine pesos to \$1 Pound Sterling.

| Item                      | Budgeted<br>Amount | Actual<br>Amount | Difference | Comments  |
|---------------------------|--------------------|------------------|------------|---|
| In-country transportation | 1021               | 1005             | -16        | I managed to get a few phone numbers. It saved me some bus/taxes trips. |
| Rental car                | 650                | 875              | +225       | Increased with inflation  |
| Gas rental car            | 966                | 1313             | +347       | Increased with inflation  |
| Lodging                   | 1662               | 1050             | -612       | Able to rent cheap rooms.   |
| Food                      | 966                | 825              | -141       | Budgeted amount included June.  |
| Health Insurance          | 275                | 211              | 64         | Paid doctor visits and medicine only when sick                          |
| Miscellaneous             | 160                | 160              |            |   |
| University's overhead     | 300                | 300              |            |   |
| Sub-total                 | 6000               | 5739             | -261       |   |
| Fieldwork assistant       |                    | 320              | -320       | I occasionally hired a fieldwork because of safety concerns.            |
| Total                     | 6000               | 6063             | +63        | Cover with personal funds   |

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

Important next steps will be to retain current PES participants as well as to incorporate others by adjusting PES to landowner's preferences and to offer to landowners the possibility to purchase their lands and incorporate them to the public protected areas system.



# 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?

All events where I intended to use the Rufford Foundation logo has been cancelled because of the COVID-19 disease. However, I mentioned surveyed landowners that my research was funded by Rufford Foundation and RF will receive publicity on my peer-publications and future talks in seminar and conferences once COVID-19 quarantine periods are no longer needed.

- 11. Please provide a full list of all the members of your team and briefly what was their role in the project.
- **Dr. Elizabeth Pienaar**, my advisor, is overseeing my research into how Argentina's PES program may be redesigned. She guided me in the design and implementation of survey and is guiding my data analysis, and presentation and publication of results.

**Dr Lyn Branch**, my co-advisor, has over 30 years of experience working in Argentina, assessing logistical constraints with field work, and She is guiding my interpretation of research results for conservation.

**Dr Marilyn Swisher**, professor at the University of Florida, had provided me with a research foundation that encourages use of multiple designs to strengthen the quality of conclusions and the use of multi-method ways of collecting and analysing data.

**Dr Jose Soto**, professor at the University of Arizona, will provide guidance in analysing and interpreting data from the choice experiments.

**Dr Andres Talamo**, local collaborator, professor at the University of Salta was instrumental at providing logistical support and sharing knowledge from more than 10 years of experience working on the Chaco Forest conservation as well as contributed to connect with stakeholders and NGOs working in the Chaco Forest area.

#### 12. Any other comments?

Thank you for supporting this project. Looking forward to continuing our relationship towards the chaco forest conservation.