Final Evaluation Report

Your Details	
Full Name	José Luis Pérez González
Project Title	Ensuring the conservation of the harlequin toad (*Atelopus laetissimus*) through strategies built with the local community of the Sierra Nevada de Santa Marta
Application ID	34085-1
Grant Amount	£5,000
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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
Evaluate the population status of *Atelopus laetissimus* in San Pedro SNSM				According to our schedule of activities, we were able to carry out the four field events to monitor the population status of *A. laetissimus* in San Pedro SNSM.
Epidemiological monitoring of *A. laetissimus* in San Pedro SNSM				We were able to obtain epidemiological samples (swabs) from the population during each of the field visits to later carry out the analyses that would determine the presence/absence of the BD fungus.
Raising awareness in the local community about the importance of amphibians and harlequin toads in the SNSM				We carried out five environmental education workshops with the community and local actors, in addition to two comprehensive activities focused on children and young people on the conservation of biodiversity in their territory.
Design of conservation strategies and actions together with the local community				We work directly with the community in the construction of a conservation plan with specific actions to reduce threats to amphibian communities in the region with activities such as solid waste recycling, design of conservation agreements, and development of a pilot reforestation plan on a small scale.
The signing of voluntary conservation agreements with local actors				We finished our activities with the signing of the first six conservation agreements with local actors who own private land to conserve biodiversity and the amphibian community through the commitment and protection of their natural resources.

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

Having a prior approach to the community and knowing the land where we will carry out our research and environmental education activities with local actors has allowed us to practically guarantee the success of our project, so there are few unforeseen events that can disturb the normal development of our schedule of

activities. Particularly during this year, the winter season was one of the main adversities we had to face since there is only one access road, which is quite remote and difficult to manage when there are strong rainy seasons, which in some months of the year, mainly from June to July were difficult and we had to reorganise some visits, fortunately, we had flexible times in our schedule that foresee this type of scenario and we were able to meet all the objectives. Regarding the issue of the pandemic caused by Covid-19, we had to reorganise spaces in such a way that we could provide the necessary guarantees to have the biosafety protocols and that all the members of the work team that travelled to carry out the activities had their respective vaccination schedules, also when there were slight symptoms of contagion or flu, the workshops and meetings were rescheduled until there were negative PCR tests that showed us that there was no risk at the time of carrying out our activities together with the local community.

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

1. Our most important result at a scientific level during the execution of this project is to obtain data and relevant information that join the global efforts to save the species of the genus *Atelopus*. Our analyses show a stable trend in the population and currently, there are still no traces of the BD fungus detected, although the presence of the fungus has been documented in other locations for the Sierra Nevada de Santa Marta, which motivates us to continue our long-term population and epidemiological monitoring efforts with these species of the gender.

2. At the level of work with the community and local actors, we had a great impact from our activities, resulting in the construction of a work route with specific actions to mitigate threats to biodiversity, such as the implementation of ecological points in strategic areas for the collection of solid waste and recycling, the initial construction of a pilot phase for small-scale reforestation with native plants led by the women of the community, in addition to an important focus on environmental education work for the new generation as they are the children and young people who formed the first ecological workgroup for the conservation of the natural resources of the territory. Within these activities, talks were given to local actors, a colourful harlequin workshop of the SNSM, and the first championship of the harlequin toad in San Pedro de la Sierra, for being the guardians of amphibians in the region.

3. The first signing of voluntary conservation agreements, after several days of approaches, dialogues, and sensitisation to the owners of private properties where these populations of the harlequin toad still persist, committing in the medium and long term to protect natural resources within their properties, providing a window of opportunity to ensure the habitat for this species and the amphibian community that coexists with it, in addition to working together to improve conditions and mitigate specific threats that may affect the species.

4. What do you consider to be the most significant achievement of this work?

Without a doubt, the work and union developed with the local community led by local actors, which allowed us for the first time to advance in specific actions to mitigate the threats faced by the population of the harlequin toad in San Pedro de

SNSM, in addition, to allow us to implement within our conservation projects for the first time the signing of voluntary agreements for the protection of harlequin frogs in the community of San Pedro de la Sierra, which gives us very high expectations to continue our efforts for the preservation of these endemic and critically endangered species, maintaining our work ideology based on building solutions by uniting the visions and contributions of the different actors of the local communities.

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

The active participation of local communities has been fundamental. Without a doubt, they have benefited from multiple perspectives during the project because they have developed interest, commitment, sensitivity and empowerment towards the conservation of biodiversity in general. In the meantime, they have also benefited from the community cohesion promoted through active participation in the development of strategies to promote sustainable development and improve the quality of life of their community.

6. Are there any plans to continue this work?

Our work represents a process to contribute to the long-term conservation of a population of *Atelopus laetissimus* in the Sierra Nevada de Santa Marta through work with local communities. In the development of this phase of the project we were able to develop a baseline by evaluating the population and epidemiological status of *Atelopus laetissimus*, raising awareness in the local community about its importance, designing strategies to mitigate threats, and signing voluntary conservation agreements in conjunction with the local actors. Without a doubt, we intend to continue this project by implementing these conservation strategies hand in hand with the communities and generating an exchange of benefits to guarantee their participation and ensure the conservation of the *Atelopus* species in the SNSM in the short, medium, and long term.

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

We plan to share our work through interviews with the local and international press, massively sharing our audio-visual material through digital media (web page and social networks); In addition, we intend to share our experiences based on scientific articles, support in symposiums and national and international congresses and with local government entities (National Natural Parks of Colombia), initiatives (Atelopus Survival Initiative) and international partners (Amphibian Survival Alliance).

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

The schedule of activities was carried out successfully during the estimated times. Once the funds were received from the Rufford grant, we were able to cover our annual budget to carry out the activities contemplated in the project. The requested funds covered transportation, food, and lodging while on field trips, on the other hand, the purchase of necessary materials was also supported to develop the education workshops with the local community and produce the dissemination

materials that increased the appropriation of the community on the biodiversity present in the territory. Our schedule of activities ran smoothly, despite the latent health emergency in Colombia. Using the biosafety protocols and the vaccination system, the restrictive measures for mobility were minimal during the year of the project.

9. 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
Bd detection and Real Time PCR assays	800	831	+31	*See above*
Pesola Digital Scale	150	124	-26	
Head Flashlight	500	550	+50	
Biosecurity kit	250	200	-50	
Outreach material	100	100		
Banners	250	250		
Meetings with local community. Each workshop including	700	700		
Food and lodge for team	750	750		
Field guides (mules, guiding fee and food)	500	500		
Car Maintenance (annual insurance and mechanic)	500	472	-28	
Fuel and tolls	500	523	+23	
TOTAL	**5000**	**5000**		Exchange rate: 1 GBP = 4812 COP

The main difference in budgets is due to the instability of the Colombian currency and its devaluation. However, these changes were related to items such as fuel, laboratory, and electronic supplies; but this did not have great relevance within the activities of the project during the current year.

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

Our aspirations for the future are to give long-term continuity to this project, adapting to changes and continuing to strengthen the work with local communities to guarantee the conservation of endemic and threatened amphibians as umbrella species for the protection of the territory and its biodiversity. It is in our interest to continue applying for the grants offered by the Rufford Foundation programme, which provides the opportunity to continue the achievements obtained during this

project and provide solutions to the different problems faced by harlequin frogs in the Sierra Nevada de Santa Marta.

11. 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?

During the execution of this project, we used and made known during the different environmental education activities and meetings with environmental entities our allies, among which is The Rufford Foundation, in addition to explaining to the community how the support received from the organisation and the objectives that we had to develop to successfully complete the project. Likewise, we place The Rufford Foundation on our website as partners and we have also given publicity through our social networks, tagging the organisation in the different activities carried out.

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

José Luis Pérez González: Leader and scientific coordinator of the project. Coordinate the schedule, create research protocols, train team members for research and education and outreach activities, define tasks and responsibilities, and ensure integration of work and achievement of objectives.

Jeferson Villalba Fuentes: Fieldwork Coordinator. Coordinate field trips, protocols, and methodologies for population monitoring and associated data analysis. Organization of meetings with local and indigenous communities and environmental authorities in the study area.

Yurladis Mariño: Community leader in San Pedro de la Sierra, president of Rural Women Building Future, coordination and planning of environmental education activities, and meetings with environmental entities in San Pedro de la Sierra.

Sintana Rojas Montaño: Coordinator of environmental education. Coordinate methodologies in environmental education activities and workshops in local schools and focus groups in the local community.

José Daniel Barros: Communication and Education Coordinator. Organization and planning of environmental education activities, dissemination of results of the activities, and workshops developed during the execution of the project.

13. Any other comments?

It was a project developed in an integral way with local actors and that has had a positive impact on the conservation of the harlequin toads of the Sierra Nevada, we attach some images of the scientific process and work with the communities during the implementation of carvings, Jordanian awareness, construction of threat mitigation actions and population monitoring to know the current status of the populations of *A. laetissimus* in San Pedro de la Sierra Nevada and ensure their conservation.

Figure 1. Scientific work focused on population and epidemiological monitoring of A. laetissimus, obtaining relevant information on environmental parameters, survival and BD Fungus.

Figure 2. Work with local communities focused on the new generations (children and young people) to increase awareness and social empowerment about the conservation value of amphibian species in the region, especially the Atelopus species in the SNSM.

Figure 3. Didactic and playful material was created to facilitate the transmission of information and accurately communicate the conservation message about the territory, natural resources, and amphibian communities in the region.

Figure 4. Implementation of specific mitigation actions such as ecological points for the proper management of solid waste, the construction of a small-scale reforestation plan, and the signing of voluntary conservation agreements by farm owners in San Pedro de la SNSM.