

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Heidy Amely García de la Vega
Project title	Restoration and conservation of the Bocas del Polochic wetland in El Estor, Guatemala, to reduce the negative impact of extraction and agro-industrial activities.
RSG reference	9322-1
Reporting period	Final
Amount of grant	£5,916
Your email address	hgarcia@defensores.org.gt
Date of this report	April 2012

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
Establishment of 3 ha of native vegetation of the wetland in the primitive and recuperation zone of the protected area.			X	With the support of the project financed by the National Council of Science and Technology (CONCYT), a total of 10 ha of the primitive zone were restored, some of the species planted were: Cuje, Zapotón (<i>Pachira acuatica</i>), Guamo (<i>Inga fissicalix</i>) and Palo de Sangre (<i>Pterocarpus officinales</i>).
Establishment of 4 ha of forest for firewood purposes, with native fast-growing species			X	4 ha were reforested, however the percentage of survival of the plantation was low (50%) due to the severe rainy season that affected the area in 2011. Therefore, a replanting was carried out, and it is expected to have positive results.
Revolving fund for 15 families and donation of 15 wood-saving stoves.		X		The revolving fund for the 15 families was created. The 15 wood-saving stoves were granted. A monitoring system was established to demonstrate the reduction in the use of firewood; a contract was signed with the beneficiaries. However, the revolving fund is still in the process to benefit new families.

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

During the project the main difficulty was the establishment of 4 ha of forest with firewood purposes, because after the planting, the rainy season of 2011 was very strong, causing long periods of flooding which damaged the level of survival of the planted species. In the monitoring of the growth of the plantation it was observed that species such as "madre cacao" (*Gliricidia sepium*) doesn't stand long periods of flooding. This species is the most often used for the consumption of firewood in the area because of its quality and speed of regrowth. It was necessary to carry out a replanting, because only 50% of survival was achieved in the first, using another species called "cuje" (*Inga spp.*) which has had better results.

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

- Establishment of 4 ha with Rufford Small Grants and additional funding from CONCYT to achieve a total of 10 ha of native forest reforested in the primitive zone of the protected area, restoring highly degraded areas within the wetland.

- A complete characterisation of the beneficiary families awarded with wood-saving stoves was carried out. The information collected includes the effect of conventional wood cooking stoves over health and economy of the families and the environment. This information was used as the baseline to assess the impact of the wood-saving stoves in the health and economy of the families and the reduction in the use of firewood in a period of time. The added value of this work is the establishment of a monitoring system that will evaluate the effects of the stoves and demonstrate its replicability in other zones of the protected area.
- The use of conventional wood cooking stoves is linked to the cultural use of fire by Q'eqchi' communities, however they cause serious health problems and the use of firewood is a cause of the degradation of the forest. The implementation of the wood-saving stoves with these families has generated a change in the attitude of women, involving them in the importance of protecting the forest and especially in health care for themselves and their children.

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

The local communities were involved from the beginning of the project; they participated in the planting of the forest for firewood purposes. A group of 15 families was organised to plant areas where they live along the Polochic River. Plots were planted with the purpose of restoring the banks of Polochic River, protecting community plots using the plantation as live barrier and using the trees in the future to obtain firewood inside their own plots. Each beneficiary has now a small forest for firewood inside their own plot, a live barrier against possible flooding and the banks of Polochic River where restored.

In addition, women from the community formed the beneficiary group to receive the wood-saving stoves, creating a direct link between the plantation and the harvesting of firewood. Each woman was trained in the installation and use of the stove to obtain the best results. Results from the monitoring in the use of the stoves, show that most women used 10 pieces of firewood (of approximately 60 cm long) daily, with the use of the new stove the use of firewood has reduced to only three pieces daily, which has a positive impact in the family economy and the sustainable use of the forest.

Mrs. Olivia de Jimenez who is benefited by the programme says: "I can't believe it, now I use three pieces of firewood, before I used between 10 to 12 pieces a day and also there is no smoke".

Nowadays work is focusing on the revolving fund for the women's group to give a new set of firewood-saving stoves to five new families and that they can enter the system. However, the fund still needs to be completed with the voluntary donation of Q.300 (about £2.40s) in a 5-month period.

5. Are there any plans to continue this work?

The plan is to continue with the planting of more forest for firewood purposes through the organisation of community groups to replicate the established link between firewood forests and the use of saving stoves. We believe that the model established in this project provided very good results which are the basis to replicate the activities with new communities. At the same time, a

monitoring system was created to evaluate the efficiency of the firewood forests and the saving stoves in the economy and family health, and also in the management of the forests of the protected area.

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

The results of this work will be presented to the Management Council of the Authority for the Sustainable Management of the Basin of Lake Izabal and Río Dulce (AMASURLI), which is a forum where government authorities, environmental and development NGOs, the National Council of Protected Areas, indigenous communities of the area are represented. Emphasis will be made to present the model that was developed together with the communities and the managers of the protected area, as a successful model to promote community development linked to the good management of forests.

At the same time, results will be presented to the Municipal Commission of Health (COMUSAN) to show the benefits of using firewood-saving stoves on the health of women and children.

A report with the characterisation of the 15 families and the results on the use of firewood saving stoves will be shared with partner environmental NGOs of the area.

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

The RSG was used in the period from March 2010 to March 2011. The targets set for the plantation established by the project were carried out on time. However, there was not enough time for the implementation of the revolving fund especially for the return of the stoves to new benefitted families. Therefore, currently we are working to recover the money to buy new saving stoves and deliver them to new families.

Currently the complementary project financed by CONCYT is being implemented. Work is being carried out in monitoring the plantation and reforestation of areas with low percentage of tree survival and maintenance of the plantation. The project is expected to last until June of 2012.

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
Onil Firewood-saving stoves	1006.04	1,068.87	(62.83)	Spending was raised initially with a rate of Q8.00 for a dollar (\$1.00), to receive the funds applied change was Q7.71, which meant less quetzales budget for the purchase of stoves and had to stop buying other

				materials to make the purchase.
Trees for forest plantation for firewood purposes (1110 trees/hectare * 4 hectares * £0.93/tree)	1030.30	1,030.09	0.21	
Technical assistance (1 person * 12 months of project * 6 hours/day)	1873.27	1,873.41	(0.14)	
Training events on revolving fund mechanism and use of firewood-saving stoves in community	312.21	241.74	70.47	No expense Q850.53 (70.47)
Materials and supplies for events and restoration	74.15	0.00	74.15	Did not make this charge, because it was necessary to adjust the funds for the purchase of stoves Onil.
Fuel restoration sites and training events	1111.47	1,111.39	0.08	
Food provisions during restoration activities	280.99	280.90	0.09	
Administrative fee (4% of total project budget)	227.57	227.57	0.00	

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

Important next steps are:

- Keep monitoring the use of the firewood-saving stoves and their impact on the reduction of firewood use.
- To maintain the established revolving fund it will be necessary to continue assisting the organised women's group, for them to be able to benefit more families.
- The area of the forest for firewood purposes must be expanded to benefit new families that will enter the scheme of the revolving fund and will benefited with new firewood-saving stoves.
- Replicate the model of this project, especially in the urban zone of the town of El Estor, because according to data generated by this project, the population of this town is the largest consumer of firewood in the area and those causing the greatest impact to the protected area.

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?

Yes the logo of the RSGF was used and shown:

- In training workshops held with women.
- In the firewood-saving stoves.

11. Any other comments?

The community involvement in the development of this project was the framework for the achieved success. Currently 15 families have small plantations for firewood purposes within their own plots that can be used in 2 years and is linked to the use of saving stoves; which creates a positive impact for the forest management of the protected area. It was a very enriching experience to see the cultural acceptability of Q'eqchi' families to the new saving stoves. Eventually they saw benefits in their health, in their economy (not having to purchase firewood or use so much time to get it), and especially in the conservation of the forests.