

### 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	Eliot Logan-Hines (Runa Foundation)		
Project title	A Community Based Approach Towards the Management, Restoration and Delineation of Buffer Zones in Napo, Ecuador		
RSG reference	13435		
Reporting period	March 2013-April 2014		
Amount of grant	£6,000		
Your email address	eliot@runa.org		
Date of this report	May 23 <sup>rd</sup> 2014		



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

	Not	Partially	Fully	
Objective	achieved	achieved	achieved	Comments
Creation of buffer zone delineation map			х	Project site changed from Alto Tena to Santa Rita.
Rehabilitation of 15-20 ha of degraded pastureland		x		Local land owners were reluctant to plant seedling and guayusa in pasture citing high expected mortality. Some areas were planted but this was closer to 5 ha.
The planting of 4,000 guayusa cuttings			Х	5,700 cuttings were distributed to the Santa Rita cooperative.
The creation of local nursery capable of distributing 10,000 plants.		x		Due to perceived management issues, multiple household level nurseries were created. Some production also took place within the Runa nursery for easier distribution.
Capacity building for 50 community members regarding planting and nursery management techniques.			x	All workshops were well attended and participants reported applied lessons to gather and propagate seeds and develop local nurseries.
A median agricultural income increase for participating farmers of 15% within 3 years of planting due to increased productivity.			x	TBD. Due to a low per capita income (\$1,200 yr) and the likelihood of increased guayusa and timber fast growing production (especially Cedrelinga caentiformus) it is likely that incomes will increase by 20%.
All results and lessons learned from the project will be disseminated to local stakeholders including communities and government agencies. The results will also be submitted for publication.			In progress	The results sharing portion is still on- going, however, the results from this project will be shared with cooperatives through literature and at assembly meetings. For more details regarding the dissemination of results please see section 6.
Decreased usage of forestland for timber and agricultural expansion.			x	Based on guided transects into the Colonso forest there was no evidence of logging (stumps, skid trails), land clearing or hunting. These activities had been reported to be common prior to the project.



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

Based on the plant biodiversity studies conducted during the buffer zone and agroforestry delineation process most of the farms surveyed already had a diverse mixture of plant species and farmers had strong opinions about which species to plant within agroforestry systems. This somewhat limited the impact of the enrichment planting. Members of the community were also somewhat reluctant to plant trees and guayusa cuttings within pasture systems. Likewise many respondents were understandably reluctant to talk about illegal logging, which made establishing a forest use baseline somewhat difficult. Another difficulty encompassed earlier on was that one of the original communities chosen for the pilot project (Alto Tena) was heavily involved in the construction of a nearby university and were not generally available to work on the project. For this reason the project site was moved to the nearby community of Santa Rita.

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

- The delineation of a 550 ha buffer community buffer zone along the border of the Colonso Protection Forest included 270 ha of mixed use forest and the mapping over 180 ha of agroforestry and pasture lands located along the border of the Colonso forest in the community of Santa Rita. The delineation of these areas was used to prioritize the planting of guayusa cuttings in combination with three timber species (*Cedrelinga caentiformus, Cedrela odorata, Schizolubium parahybum*) and one edible nut bearing species (*Caryodendron orinocensis*). The participatory mapping process was also supported by a community land use planning workshop hosted within the town of Santa Rita and two local interns trained in the use of GPS devices, data management and field survey techniques.
- The creation of a community based seedling distribution network is in the community of Santa Rita. This involved the georeferencing of seed trees (primarily *Cedrelinga caentiformus*), and the collection of wild seedlings. Currently the community has planted over 5,300 seedlings in community nurseries. Runa Foundation is working to arrange the purchase of the seedlings by the government agency National Institute for Agricultural Research (INIAP) and the distribution of these seedlings for plantations amongst nine Guayusa cooperatives.
- The distribution of over 6,000 guayusa seedlings amongst nine Guayusa cooperatives for planting within agroforestry systems and degraded pasturelands.

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

The Kichwa community of Santa Rita (population 1,500) was actively involved in the planning and execution of the project. Santa Rita directly benefited in the following ways: 1) community mapping and land use planning, 2) seed tree mapping, 3) the training of local interns in field mapping and survey techniques and 4) the establishment of locally owned seedling nurseries. Beyond this the community of Santa Rita enthusiastically participated in the buffer zone delineation and forest mapping process. According to Santa Rita president Bolivar Alvarado, "this project has allowed us to map our own lands and finally measure how much of our community is used for 'chacras' and how much forest we have. This will help us to protect the land that gives us water, food, timber and the air we breathe."



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

This work will be continued through a grant from the MacArthur Foundation to help the communities of Santa Rita, Rukullacta and Puni Kotona practice improved forest management planning over 35,000 ha of primary forest, secondary forest and agroforestry systems. This phase of the project will emphasise increasing value chains for non-timber forest products, mixed species tree plantations within agroforestry systems and integrated natural forest management. Another key intervention in this project will focus on biodiversity conservation by addressing unsustainable hunting intensities and illegal logging through community land use planning, patrolling and establishing annual hunting quotas. This project fulfilled a key prerequisite of this work by successfully establishing a mechanism for acquiring and distributing locally sourced seedlings, thereby allowing for increased use of agroforestry systems as opposed to natural forests for timber production.

This effort will also be complemented by an on-going landscape scale project funded by the Center for International Forestry Research (CIFOR) to help create hunting management plans in order to ensure that wildlife resources are sustainably managed. A special emphasis will be placed on large bodied, slow reproducing species such as spider monkey (*Ateles belzebuth*), woolly monkey (*Lagothrix poeppigii*), tapir (*Tapirus terrestris*), spectacled bear (*Tremarctos ornatus*) and both collared and white-lipped peccaries (*Pecari tajacu* and *Tayassu pecari*).

Another follow up will be a study detailing both plant and animal biodiversity within local *chakra* agroforestry systems. This research will look at how local animal populations including threatened species use these systems as enriched foraging habitat. The research will make recommendations on how these systems can be made even more productive over the long-term both as animal habitat and in terms of food and financial security for local farmers.

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

Project details will be shared via the Runa Foundation website. Runa is also working to produce a forestry investment manual detailing the sourcing of different seed species, seed propagation, financial incentives, harvest volumes and growth curves for agroforestry species. Results will be disseminated to the nine guayusa cooperatives associated with Runa representing some 180 communities and 2,800 farmers in Napo, Orellana and Pastaza provinces in the form of written documents and workshops. Runa will also submit a paper for publication by December 2014 detailing plant and animal biodiversity within managed agroforestry systems and the implications for maintaining both biodiversity and food security.

These results will be shared with government stakeholders including the Ecuadorian Ministry of Environment (MAE), INIAP and the Ministry of Livestock and Agriculture (MAGAP) through participation in agricultural roundtable discussions. Runa will also present results of these studies at conferences including the International Society of tropical Foresters conference held yearly at Yale University, the Forest, Climate, and Livelihood Research Network conference held in Sweden in November 2014 and potentially other agroforestry related conferences in Ecuador and abroad.



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

This project was originally scheduled for completion in March 2014 but was completed on May 20<sup>th</sup> 2014. The buffer zone delineation and mapping largely ran ahead of schedule, however there were delays in the acquisition of seed material, which lead to delays in completing the project.

## 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	Actual	Difference	Comments
Two land use planning	Amount	Amount	C190	Markshans required slightly loss
workshops	£1150	18/0	-£180	time than budgeted were
workshops				conducted in evenings and did not
				require refreshments
Nursery management	£575	£350	-£225	Higher than expected understanding
workshop				of nursery management.
Stakeholder workshop	£575	£400	-£175	
Buffer zone delineation	£600	£900	£300	More time spent on cataloguing
(Data collection)				plant biodiversity and conducting
				agroforestry surveys. Hired 2 local
	61000	64.000	<u> </u>	Interns.
Butter Zone delineation	£1000	£1000	0	Amount budgeted for staff salary.
(analysis, GIS data)				
Nursery construction	£1400	£1600	£200	Nursery supplies and transportation, creation of central nursery
Seed collection	£200	£800	£600	Some species unavailable locally and
				had to be ordered.
Planting (timber	£250	£30	-£220	Less time spent on labour, based on
species)				results of stakeholder workshop,
				cooperative members took
				responsibility for planting
Planting costs (guayusa)	£250	£50	-£200	
TOTAL	£6,000	£6,000	0	

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

In order to create an ecologically and financially sustainable system for enriching agroforestry systems Runa Foundation will continue to assist local guayusa cooperatives to create, source and manage local nurseries. Beyond this there is a need for integrated forest management in order to address unsustainable and logging and commercial hunting. This we hope to be addressed in a second round of funding from the Rufford Foundation in conjunction with a joint research project with the Center for International Forestry Research (CIFOR). This work will focus in part on creating an integrated management plan or the buffer zone delineated during this project.



## 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?

The Rufford Logo was used on brochures and other materials distributed to farmers and government agencies.