

## 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. 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. 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

#### Grant Recipient Details

<b>Your name</b>	CHETANA, HC
<b>Project title</b>	Identifying biological constraints in natural regeneration of native tree species in abandoned tea and coffee plantation of the Western Ghats, India.
<b>RSG reference</b>	48.08.06
<b>Reporting period</b>	18 months
<b>Amount of grant</b>	£5000
<b>Your email address</b>	<a href="mailto:chetan@atree.org">chetan@atree.org</a> / <a href="mailto:chetana.hc@gmail.com">chetana.hc@gmail.com</a>
<b>Date of this report</b>	03.01.2009

**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
<b>Active and abandoned tea plantations</b>				
1) How does perch point play roll in seed input to the plantations and how it different from without perch			75%	Due to the tea plantations access permission could not able to do seasonal sampling at active tea plantations
2) To identify the plant species which colonise tea plantations and to identify the agents mediating their dispersal.			100%	
3) To study how the factors such as proximity to forest, size, structure, and species diversity, of these forest patches determine the diversity of colonising plant species and the rate of colonisation in plantations.			100%	
4) To compare seed germination of colonising tree species in plantations and natural forest patches and identify the constraints of germination in plantations			50%	It is time consuming because for each species seasonal fruiting and collection and sowing germination took us much time. Since we do not have any secondary
<b>Abandoned coffee plantation:</b> I have done preliminary survey within PA's but have recorded very small area (less than 1 ha) under coffee. In this patch there is good regeneration and most native species have come up.				

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

Project was delayed due to unseasonal rains and renewal of forest permission (1 year) all of which took time. Moreover, two abandoned tea plantations are located in the core of the protected area which can be accessed by a full day's walk and logistically it's difficult to spend more than 10 days at a stretch in such remote places.

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

Animal dispersed seeds dominate the soil seed bank and there were no wind or passively dispersed species in the plantations. Perches for birds and bats play a major role in attracting volant frugivores into the plantation thereby increasing seed input into the plantation.



**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
Per diem (£76 per mo X 18mo) + contingency	1368 +500	1868		
Local travel/fuel/hiring charges	625	625		
Accommodation	200	200		
Food	250	250		
Field assistants	567	562	5	
Camping costs	350	350		
Field equipment	724	720	4	
Film/batteries for camera trap photography	175	175		
Publications/output	250	250		
<b>TOTAL</b>	<b>5009</b>	<b>5000</b>	<b>9</b>	

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

1. Have tagged seedlings and also removed some tea bushes for monitoring colonisation and survival of native species in tea plantations. These have to be monitored for another 1 or 2 years.
2. We need to identify where natural restoration would work and where it won't since the current study has clearly highlighted that elevation, slope and other edaphic factors play a major role in colonization.
3. Abandoned plantations come with social issues of employment loss and other labour issues that need to be addressed for the viability of restoration activities.

Based on this preliminary study, site specific information will be monitored for another year, and it will be tested with other parameter such as canopy cover, land cover, slopes and social unrest at large spatial scale in the Western Ghats and try to understand how to overcome such constraints to restore native species in abandoned tea plantations other than in PA's.

**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, I have used RSG logo in all my presentations and also when interacting with the local forest department.

**11. Any other comments?**

I am extremely thankful to Jane Raymond and Josh Cole for accepting my request for extension and giving enough time for making this report.