

The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford 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	Pham Van Vien
Project title	Disentangling drivers of regeneration pattern of IUCN's red-listed species in biodiversity hotspot (Cat Ba National Park, Viet Nam)
RSG reference	21165-1
Reporting period	From November 2016 to May 2017
Amount of grant	£ 5000
Your email address	phamvanvien2004@gmail.com
Date of this report	March 2018

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
A first-time systematic sampling for the region will inform about the current abundance, status, and distribution of threatened rare tree species				Because of terrain types in Cat Ba National Park, which are rough, steep and divided, sometimes we have to use random systematic sampling.
Environmental factors affecting the rare tree species' regeneration will be identified, respectively, and their importance for a successful establishment of the regeneration will be quantified. This study will focus on abiotic growth variables (i.e. soil conditions, light environment) and biotic growth variables (i.e. composition and structure of surrounding vegetation).				It is really difficult for taking soil samples for chemical analysis from field to laboratory, because some trips war really difficult to reach out. With a lot of abiotic and biotic factors we have to investigate in the field, which also took more time and human power.
Based on point 1 and 2 the extent of human activities on abundance and distribution of the rare tree species will be qualitatively described and quantified to assess if, how, and which activities negatively affect the occurrence of rare tree species.				We found that some human activities were not shown to significantly affect abundance and distribution of mature tree of rare species.
As an outcome, the study aims at developing a concrete plan of action for the Cat Ba National Park, based on recommendations which can be derived from the findings of points 1 – 3 to improve the conservation of the threatened species.				Our research is going on, so we just give some recommendations for managers and board of directors of Cat Ba National Park via the first glance after finishing the field trip. And we are continuous to give more feedback to managers after we do more research.

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

Firstly, topography of Cat Ba National park which are really rough, steep and divided by the sea, therefore we met the difficult on moving and transportation in local and regional.

Secondly, because of slippery on limestone or stone when it was raining, so we have been interrupted on rainy day.

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

With the objectives which were set up. We had got three most important outcomes follow:

First of all, we had identified the distribution and present of some rare species in IUCN red listed and Vietnam red listed in Cat Ba National Park in both mature tree and regeneration.

Secondly, we had investigated environmental factors which had essential effect on distribution and abundance of rare species. And then we continuously analyse and find out which factors have the most effect on rare species. It would be an important indicator for conservation plan of rare species in Cat Ba National Park.

Moreover, the regeneration are as important as mature tree, which show the replacement in the future of forest stand, so all information about regeneration such as distribution, abundance, qualification and quantity need to analyse as well.

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

With this project, the local communities will gain more information about rare species especially IUCN red listed species. According to that information, they will increase the awareness on how they have to participate in protection and conservation rare species in Cat Ba National Park. Besides, they knew the ecological value of rare species, which are more important than economic value. And It is worthy for keeping forest ecological diversity.

5. Are there any plans to continue this work?

1. I would like to continuous research deeply on my data and prepare for first and second publication.
2. I also would like to apply for second round of RSG

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

When I have a publication, I will share all information to Board of directors and managers of Cat Ba National Park. I also share my research result to Northeast

College of Agriculture and Forest which will become a teaching material for other people and students who are interested in. I share my publication to Silviculture and Forest Ecology of the Temperate Zones Department where I am studying as PhD student.

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

The money grant was used from November 2016 to May 2017. My PhD project started from May 2016 and will be finished in April 2020. So the Rufford Foundation grant is absolute properly with my project time scale.

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
Air and train tickets from Germany to Vietnam and return	£ 750	£620	£130	
Food & supplies for field inventory for 3 researchers	£ 1800	£1875	£-75	
Food & supplies for field inventory for 3 rangers	£ 1200	£1248	£-48	
Digital Camera	£ 350	£ 319	£31	
Soil sampling probe	£ 60	£46	£14	
Surveyor's Tape (50 m)	£ 10	£15	£-5	
Maps	£ 60	£65	£-5	
Personal protecting clothing and sleeping bags	£ 150	£150	£0	
First aid kit	£ 50	£47	£3	
Transportation in local and Park	£ 320	£364	£-44	
Writing scientific articles and reports	£ 250	£250	£0	
Total	£ 5000	£4999	£1	

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

After the gathering data in the field, in the next steps I need more data analysis to compare the different of rare species abundance and distribution from some parts of Cat Ba National Park. One of the most important is to find out the underlying factors which have more effect on distribution and abundance of both mature and

regeneration rare species. This result will be a strong evidence for protection and conservation plan in Cat Ba National Park. In addition, international publications of rare species in Cat Ba National Park is one of the best ways to promote the image of Cat Ba National Park to worldwide.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did The Rufford Foundation receive any publicity during the course of your work?

I used the Rufford Foundation logo in my presentations at Cat Ba National Park when I present the first data after the investigation completed. I also use the Rufford Foundation logo when I present at my Departments of Silviculture and Forest Ecology of the Temperate Zones. I will show the acknowledgement of the Rufford Foundation on my publications.

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

Name	Position	Organization	Activities
Pham Ba Su	Lecturer	Northeast college of Agriculture and Forestry	Botanist, Investigator, researcher
Mac Duy Tuan	Lecturer	Northeast college of Agriculture and Forestry	Botanist, Investigator, researcher
Pham Duy Lap	Lecturer	Northeast college of Agriculture and Forestry	Botanist, Investigator, researcher
Hoang Van Thap	Director	Cat Ba National Park	Consultant, Planning, researcher
Nguyen Van Thiep	Ranger	Cat Ba National Park	Mapping, planning
Doan Ngoc Son	Ranger	Cat Ba National Park	Investigator, Botanist
Hoang Van Cau	Ranger	Cat Ba National Park	Investigator
Hoang Van Sy	Ranger	Cat Ba National Park	Planning, Investigator
Vu Van Tinh	Farmer	Local Residence	Investigator
Nguyen Van Thiet	Ranger	Cat Ba National Park	Investigator
Pham Van Man	Ranger	Cat Ba National Park	Investigator
Nguyen Van Luc	Ranger	Cat Ba National Park	Investigator

12. Any other comments?

My sincere thanks to The Rufford Foundation for financial support to carry out my project.