

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

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
Your name	Muhammad Sutono
Project title	Developing commodity of non timber forest product of dragon bloods as the conservation and poverty alleviation effort for local community around the buffer zone of Kerinci Seblat National Park.
RSG reference	53.11.08
Reporting period	June 2009 – October 2010
Amount of grant	£5,949
Your email address	<a href="mailto:tono_jambi@yahoo.com">tono_jambi@yahoo.com</a>
Date of this report	

**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
Increase people's income and reduce pressure on indigenous forests (Adat Forest) around KSNP.		V		<p>The general objective of this project only partially achieved. There has not been an increase in community income through the activities of cultivation of dragon blood, because the plant will produce 6-7 years after planting. Now the farmers already have the skills to cultivate dragon blood, so the efforts to propagate can be done anytime, if there are seeds obtained from the forest.</p> <p>The impact of interaction of this project with the community of Baru Pangkalan Jambu Village, can be seen from the reduction in community activities that threaten the sustainability of indigenous forests (Adat forest), such as illegal logging and wildlife poaching.</p> <p>Other impact of this project is a new initiative to increase the income of community through developing of the natural honey (bee). This initiative has even received financial support from the government through the Bureau of Watershed Management of Batanghari in Jambi Province. Now, 10 units (boxes) of bee farm has been developed in indigenous forest (Adat Forest) in Baru Pangkalan Jambu Villages.</p>

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

An unforeseen difficulty that arose during the project was to get good dragon blood's seed to be used on cultivation. This:

1. Delayed the training in dragon blood cultivation techniques. Dragon blood seeds are needed as a material for the practice of breeding techniques.

2. Led to Inhibition of activity to make the demonstration plots of dragon blood plant. This project plans to create about 3,000 seedlings from 5 kg seeds, but only about 2,000 seeds are available and the quality is very bad (still raw), so the percentage of living is also very low.

Difficulty in getting good seed dragon blood was caused by:

1. The rainy season which occurs almost throughout the year, so more people cannot go into the forest to find the dragon blood seeds.
2. Dragon blood plants are already scarce because of deforestation as well as harvesting techniques by farmers. This has been happening for a long time.

Actually, the community in Baru Pangkalan Jambu Villages is already familiar with the dragon blood plant but only now they learn about the farming and breeding techniques, so that their experience seedling of dragon blood plant are still lacking, and the result is a low success rate. Anticipation of the project is to conduct this practice repeatedly.

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

Outcomes of the project are :

- A. 50 farmers in Baru Pangkalan Jambu village have skills in conducting of dragon blood plant. Training in breeding and cultivation techniques for dragon blood plant was conducted on August 8<sup>th</sup> and 9<sup>th</sup> 2009. The training was attended by 53 farmers and 70% of them were women. The training was conducted for 2 days with the topics and key speakers as follows:
  1. Introduction to the anatomy and physiology of dragon blood plants; this topic presented by Bambang Irawan, PhD (Lecturer in Plant Breeding at the Faculty of Agriculture at University of Jambi).
  2. Business plan for dragon blood plantation; presented by Elwamendri, MSi (Lecturer in Social Economics of Agriculture at the Faculty of Agriculture at University of Jambi).
  3. The techniques and practices of breeding and experience in cultivation of dragon blood; presented by H. Lukman Hakim (dragon blood farmer from the village of Lamban Sigatal, Sarolangun District).
- B. 10 farmers increased their knowledge about techniques of maintenance the dragon blood plant, by looking directly at dragon blood plantation managed by the community.

Field visit activities were conducted on 7<sup>th</sup> to 9<sup>th</sup> Oktober 2009 and followed by 10 farmers from the Baru Pangkalan Jambu villages. Field visit was to Lamban Sigatal Villages, Sarolangun District of Jambi province and was guided by two dragon blood farmers in the Lamban Sigatal village. In the field visit, farmers from the Baru Pangkalan Jambu villages have been studying:

1. The practice continued on the seeding technique.
2. Planting techniques in the field.
3. Techniques on how to harvest and extract fruit dragon blood for "lulun" (powder) and ready for sale.

- C. Planting of dragon blood seedlings which has produced about 700 seedlings from more than 2,000 seeds sown.

Actually, 700 living seedlings of the 2,000 that sowing is relatively poor because the percentage of living plants is only 35%. But it can be tolerated because the farmers are still in the learning stage and some technical errors made by accident. From our reflection together with farmer groups, we suspected that an error occurred when cleaning the seeds before soaking in atonic liquid.

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

This project involves the community in all activities, that is:

1. Planning the training activities, field trips, and making the demonstration plot. This has increased the capacity of communities to develop action plans. The farmers have frequently interacted with each other, so that raises a lot of ideas to improve their welfare.
2. Being a training committee and prepare consumption, equipment, meeting rooms and accommodation. In this case, the community has increased their ability in terms of organising events.
3. As the audience on training of dragon blood cultivation techniques and field visits to see practice dragon blood plantation. In this case, the people gain knowledge and skills to developing dragon blood plant; in the long term it will add to their livelihood variation.
4. The communities makes the demonstration plot of dragon blood plants, so that they have obtained the seeds to planted on their land plantation. In the long term it will be produce the resin and increase their income.

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

- Communities already have the skills to cultivate dragon blood. Dragon blood seedlings produced is still low and there is still a need for more effort to search the seed of dragon blood, so the planted dragon blood could be more significant results/impact. Moreover, there is still requirement for the addition of skills to care for already planted dragon blood.
- At present, there have been other initiatives to increase farmers' income through the development of the forest bees; this activity was financed by the government. Therefore, in future there should be support for quality improvement and marketing of honey produced.

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

The project resulted in:

- a. Dragon blood seeds. The seedlings have been directly distributed to people who are members of farmer groups .
- b. Knowledge of farming techniques dragon blood, a financial analysis of farming dragon blood, and techniques for making organic fertilizer (compost). This knowledge is already written in the Indonesian language, I am not sure to write in English. If needed will be sent in a separate document.

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

This project started in June 2009 and finished in November 2010 but personally I will continue this work even if no longer supported by the RSG. Work remaining to be followed by the project team is to increase the number of seedlings dragon blood, and I have already ordered an additional 1,500 seeds for farmers elsewhere. If the seed was obtained in a few weeks, my team will return to the field for the facilitation of breeding activity.

I built commitment with the project team that we will work to successfully develop 2,000 dragon blood seeds and not only work for 12 months. In addition, we are also committed to looking for other ideas with the community of Baru Pangkalan Jambu villages in order to increase their income. As described above, currently there is one other initiative that is the development of forest bees.

**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
	£	£ 1 = Rp 16.759,64	£	£ 1 = Rp 15.600	£	Rp	
Training on conducting of dragon blood for 50 person of farmers	1.451,6	24.329.000	1.456,1	22.415.000	- 4,5	1.914.000	Amount of money received was Rp. 92.820.000,- with the exchange rate 1 £ = Rp. 15.600,- Therefore, some unit cost must be reduced to adapt the lack of funds.
Comparative study to Lamban Sigatal Village for 10 person of farmers	435,6	7.300.000	519,2	8.100.000	- 83,6	- 800.000	
Creating Demonstration Plots on conducting of dragon bloods	824,0	13.810.000	903,8	14.100.000	- 79,8	- 290.000	
Operational cost for team project	2.937,4	49.230.000	2.804,5	43.750.000	132,9	5.480.000	
Other cost	300,7	5.040.000	192,3	3.000.000	108,4	2.040.000	
<b>Total</b>	<b>5.950</b>	<b>99.709.000</b>	<b>5.876,0</b>	<b>91.665.000</b>	<b>74</b>	<b>8.044.000</b>	<b>actual remaining : Rp. 1.155.000,- (£ 74,03)</b>

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

The important next steps :

- a. Continue the cultivation of seedlings from the 1,500 dragon blood seeds that have been ordered
  - b. Facilitate community to maintain the dragon blood plants produced.
  - c. Facilitate other initiatives which is also in progress, in order to build a market network for the forest honey which will be produced.
  - d.
- 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 use the RSGF logo. I will send some advanced document for publication in RSGF website.

**11. Any other comments?**

There is difficulty to controlling the fully results of the project because it depends on other participants like the community of Baru Pangkalan Jambu villages, resource persons for training, and also dragon blood farmers in the Lamban Sigatal villages as a guides for field visits. Moreover, natural factors also greatly affect the search of dragon blood seeds, and determine the percentage of dragon blood seedling growth.

I think this project might be considered as low performance project by the RSGF, but I will keep working to secure the investment of this project in the village of Baru Pangkalan Jambu, for the next time it can provide a real impact for the community in order to increase their prosperity.