

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.

Thank you for your help.

Josh Cole, Grants Director

| Grant Recipient Details | |
|----------------------------|---|
| Your name | Professor Dr. A .Z. M. Manzoor Rashid |
| Project title | Participatory training and extension approach to promote community livelihood and conservation through Agar (<i>Aquilaria agallocha</i>) and rattan cultivation |
| RSG reference | 13729-2 |
| Reporting period | |
| Amount of grant | £ 6000 |
| Your email address | pollen_forest@yahoo.com |
| Date of this report | 15.9.2014 |

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 |
|---|--------------|--------------------|----------------|---|
| Increased resource base for the sustained supply of raw materials | | x | | Increasing volume /quantity of agar tress has been noticed during the study and field work on a constant basis. However the number of rattan groves is decreasing due to various socio-economic and management reasons. |
| Increased community engagement in agar and rattan cultivation | | | x | |
| Skill development through training on propagation, cultivation and management of agar and rattan plants | | x | | It is a continuous process. A group of farmers and practitioners have received on farm training and experience through field visit. Researcher also acquainted with the prospects and problems prevailing in the sectors. |
| Strengthened extension programme | | | x | Knowing about the promising outcome through agar cultivation particularly more and more people are now showing interest about the cultivation and processing techniques. |
| Increased awareness about the scope of participatory projects under a legal frameworks | | x | | |

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

The project encountered unexpected delay and difficulties in grounding and making necessary field contacts due to unstable political situation prevailing throughout the country for a long period (particularly November 2013 - January 2014). This influenced the project implementation and outcome in many ways. For example anticipated field work was planned during November-January as this is the suitable season (winter) to travel extensively in forest and village areas.

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

Several studies have identified the scarcity and inadequacy of supply of raw materials as the major constraints for the development of agar and rattan based enterprises in Bangladesh (Uddin et al., 2008; Chowdhury et al. and Rashid et al., 2006). Sustainable supply of raw materials appears to be a critical factor in sustaining the industries. In this regard community engagement in propagation, cultivation and management and initial processing techniques may help flourish the sectors through creating sustained supply of quality raw materials.

Developing partnership between forest department and the local community in raising agar and cane plantation through collaborative approach can be a viable option in mitigating shortages of raw material and for that, degraded, denuded and unutilized khas¹ land can be selected through an agreement like social forestry projects. Adequate training and extension support can help these two sectors play crucial role in employment generation as well as in earning foreign currency in the long run. The cultivation will also help replenish the depleting biodiversity. Under these consequences the project aimed at achieving several objectives such as:

- Increasing resource base for the sustained supply of raw materials.
- Promoting community engagement in agar and rattan cultivation.
- Training potential and interested people on propagation, cultivation and management of agar and rattan plants.
- Strengthening the outreach (extension) programme in order to popularise the cultivation of agar and rattan plantation.
- Harnessing the scopes of participatory projects under a legal framework.

This Rufford supported project has managed to create significant impact on community regarding the importance of agar and rattan cultivation as a sustainable and economically viable means of livelihood apart from contributing to biodiversity conservation. Based on the proposed methodology the project undertook several activities. On the basis of implementation, three salient outcomes can be mentioned as the success indicator of the project

- A. The project introduced agar tree and its associated processing technology to general people, practitioner and researcher as lucrative means to sustain livelihood.
- B. The project managed to promote raw material source to existing and interested entrepreneurs
- C. The project has identified the detailed procedure of exporting agar wood and oil conforming the CITES guidelines. This development will help gain confidence of the cultivators and entrepreneurs engaged in the business particularly in exporting the agar wood and oil produce through legal channel. This arrangement will benefit both state and the community engaged in the business.
- D. In regards to rattan, the project has managed to create positive influence on forest dependent community and local farmers about the planting source and potential species having local and international market demand.

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

Agar-based small scale enterprises play a significant role in creating employment and livelihood opportunities for a large number of people and adding to foreign currencies. An exploratory survey was conducted as part of the project in Sujanagar and Dakshinbhag union under Maulvibazar district during the period of September, 2013 to March, 2014. The project engaged a significant number of people in the process actively and passively. The inception workshop and several Focus Group Discussions (FGD) have identified potential stakeholders to be included in the project and

accordingly four local community members have been selected as field research associate in order to assist the research team member on temporary basis.

In the agar study sites two local community members were deployed for 6 months each to assist during field work and providing necessary information when required by the study team. Two individual studies conducted under this project with a view to fulfilling several objectives. The studies are as follows:

1. Sustainability of Agar (*Aquilaria agallocha Roxb.*) based small scale enterprises in Bangladesh: A focus on the policy, management and marketing strategy identify.
2. Agar (*Aquilaria agallocha Roxb.*) based small scale enterprise in north-eastern Bangladesh: some selected dynamics of community development”.

The first study included 50 respondents from different quarters mainly entrepreneurs, policy makers and traders were included. While in the second study 40 entrepreneurs, 20 nursery owners, 30 agar tree sellers and 50 workers were included in the study process. This significant number of community people helped to spread desired knowledge, practice and related information for further replication to interested people.

For rattan study another two local youths were given short term employment (3 months each) to help during the field study. They were also responsible for arranging FGD as per the convenience of the local community members.

5. Are there any plans to continue this work?

During the study several issues were raised by the participants, local community and the practitioners. These issues were noted down by the research team for further analysis with a view to identifying key attributes for future study. Of them, the process of agar formation found as a limiting factor in determining the price. Naturally formed agar wood is more demanding than artificially formed agar because of its quality. In this regard natural inoculation through stem borer believed to be the causal factor. The future study aims at introducing stem wood borer insect in the plantation of the farmers at their homestead agar plantation. However, this study needs additional budget, expert scientist and extensive surveillances by the local agar tree farmers.

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

The study outcomes have already being shared in various forms namely article presentation, open discussion with local farmers and practitioners. Very recently, a sharing meeting has been held with Bangladesh Forest Research Institute Scientists for possible future collaboration in enhancing the study in different dimension and sought technical collaboration from them.

Furthermore, two post-graduate students and one undergraduate student have been engaged as field researcher in the study. They played crucial role along with the community research members (who were selected from the field on temporary basis) in fulfilling project goals and objectives at their best. Apart from collecting data and information for the project documentation they conducted their Masters thesis and Honours review papers for the partial fulfilments of their respective degree on forestry. Two scientific articles are under preparation to be submitted in peer reviewed journals

for publication. Once published, it will help disseminating the outcomes of the study to wider scientific community and also to interested readers. A handy leaflet containing salient features of agar tree and its products is also under preparation using the logo of the Rufford. Once available these materials will further help in promoting training and extension of agar and rattan in rural Bangladesh

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

The project has imitated upon receiving the grant support from Rufford worth £6000. As per the work plan it was planned to implement the project within a time frame of July 2013 to May 2014. However the grant selection was confirmed during early July and amount was disbursed end of July due to some bank concerns. The official preparation started from August that involves selection of field researcher, identifying study location and creation of initial field contacts and review of the secondary information. Field survey was planned to initiate from August till October which was launched lately from October. After a couple of very preliminary visits, the political situation of the country turned unpredictably bad and continued to deteriorating until January 2014. So the progress of the work as per the work plan failed to keep pace with. Particularly October-January was the most crucial time period designed for the project that failed to be accomplished. As a result some of the planned activities have yet to complete.

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 |
|---|-----------------|---------------|------------|---|
| Inception cost | 40 | 55 | 15 | Political situation |
| Equipment and accessories | 435 | 435 | 0 | |
| Honorarium for Research Assistants | 640 | 640 | | |
| Honorarium for community focal points(4 person) | 640 | 700 | 60 | Demanded higher for extra time involvement |
| FGD and initial meetings | 60 | 60 | 0 | |
| Field visit with farmers | 600 | 620 | 20 | |
| Slay. Honorarium for local guide | 240 | 240 | 0 | |
| Honorarium for local guide n BFRI personnel | 280 | 280 | 0 | |
| Food and lodging | 1550 | 1600 | 50 | Political turmoil resulted in price hike |
| Travel | 750 | 800 | 50 | Political turmoil resulted in price hike |
| Workshop | 500 | 450 | -50 | |
| Photocopy | 140 | 120 | -20 | |
| Books and stationery | 230 | 200 | -30 | |
| | | | | Price hike and political turmoil influenced the pricing and cost a bit more than predictable. |
| TOTAL | 6105 | 6200 | 95 | |

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

The study opened up promising window for promoting agar and rattan as a means of community livelihood particularly for the poor and forest dependent people. Having technical, financial and policy support, these two sectors can earn a huge amount of foreign currency apart from sourcing livelihood options for the farmers, practitioners and many other stakeholders linked to these business.

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?

As mentioned earlier that the upcoming leaflet will bear the RSG logo as grant authority of the project. The publications under preparation will also acknowledge the financial support of the RSG while conducting the field research.