

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	Dr. M. Anuradha
Project title	Conservation of <i>Pterocarpus santalinus</i> (Red sandal wood or Red sanders) rare, endangered, threatened and red listed tree of South India.
RSG reference	26.12.2006
Reporting period	June 08, 2007 to January 07, 2009 (18 months)
Amount of grant	£ 4960/-
Your email address	rishifoundation@gmail.com
Date of this report	March 14, 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
Collection of seeds and coppice cuttings			Collected 50 kgs of Seeds and more than 4000 Coppice cuttings	Developed contacts with local agencies, who assured their continuous help for the collection of seeds and coppice cuttings. Rishi Foundation explained the objective of the project and requested them to develop 5000 plants in the vicinity by July 2009.
Networking of conservation group			4 major groups are formed. Each group mentioned has more than 200 farmers and self help groups.	<p>1. Andhra Pradesh – M. Sujatha, Accounts Officer, Andhra Pragathi Grameena Bank. Arranged 15 meetings with farmers.</p> <p>2. Kerala – Dr. C.N. Manoj, Founder Trustee, Pelican Foundation, Cherthala, Alleppey has assured plantation upto 25 acres involving local communities.</p> <p>3. Tamil Nadu – Mr. C. Bhoopathy, Attur, Salem leading herbal trader had expressed interest to cultivate on large scale by motivating farmers in his network.</p> <p>4. Karnataka – Rishi Foundation. Each state co-ordinators are in turn networked to various other NGOs, schools and colleges through whom the message of conservation and planting of saplings were carried out.</p>
Development of nursery and multiplication of planting stocks on large scale.			4000 coppice cuttings were planted in poly bags. Seeds were kept for germination	40% of the coppice cuttings dried without sprouting. 20% of seeds germinated. The growth of the seedlings is very slow.

<p>Training people in the vicinity for raising the planting stocks and educating them about the Red Sanders.</p>			<p>A progressive farmer at Tirupathi, Andhra Pradesh has been identified who was trained and given with all the inputs and demonstrated to raise the saplings from seeds and coppice cuttings. Finance is being provided for him. Another 10 more farmers from different states have also shown interest to start their own nursery in July 2009. Technical assistance is being extended to them</p>	<p>He has been asked to develop and maintain 5000 cuttings and the same saplings would be distributed in the coming rainy season that is July and August 2009. As the germination and coppice collection is seasonal this aspect can be done only yearly once. As soon as we started the project we got only one season to work with and hence taking time to take over.</p>
<p>Conduct awareness camps</p>			<p>25 meetings at village level and network group were conducted in Kurnool, A.P and other states. These meetings were organised by states representatives In Kurnool district of Andhra Pradesh 35 villages were covered in the awareness camps. In Karnataka spiritual organisations like Pyramid Valley, Temples and Mutts were approached and they accepted to plant in large scale. In collaboration with Padmashreeeducational institute, a week long eco awareness campaign was organised. During the programme rural school children were called for the campaign and distributed saplings to plant in their school</p>	<p>Went on very successfully. Strong network of motivated people came forward for the support. The list of people and organisations interested in plantations: The bottle neck here is building up of the stocks as per the requirement. This is taking more time as the tree is slow growing and coppice collections are little faster compared to seedlings. However coppice collection would be made vigorously in July 2009. After developing the nursery plants need to be maintained minimum of one year before distribution. If transplanted early mortality is higher and hence this project is taking more time than expected.</p>

			premises.	
Supply of saplings			62 farmers are supplied with saplings in Andhra Pradesh & Karnataka	There are 120 more farmers who wanted to cultivate in large area.
Ensuring planting stocks			5000 saplings were ensured to the following states. Andhra Pradesh – 2500 Karnataka – 1000 Kerala – 500 Tamil Nadu - 1000	It needs lot of transportation expenses. Apart from this many farmers are requesting for permit from the Government to cultivate though it is not needed. Hence help from Dr. Venugopal, Additional Principal Chief Conservator of Forests, Karnataka and Mr. D. B. Shankar Rao, Deputy Conservator of Forests, Hyderabad, Andhra Pradesh has been solicited to clear the misconception and they accepted to provide no objection for cultivation. In this regard it would be much beneficial if we can organise a national level seminar by involving all stake holders, forest officials and communities to clear the doubts regarding taking up cultivation. As every there is one or other news in the paper regarding smuggling of logs, farmers being unaware of rules and regulations are getting confused and are worried and have several misconceptions.

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

Vigorous awareness campaign using all available media tools resulted in enquires from far of places like Mumbai, Maharastra and Chittorgarh, Rajasthan. But transporting saplings and coppice cuttings to long distances was difficult. To do it in large scale at Bangalore for complete establishment it is taking 1 ½ year time. As soon as the awareness camps are completed there is heavy demand for planting in the same season and we are not ready with that many saplings. Hence the list of farmers and requirements details are being maintained and assured them plants in this 2009 rainy season. Some of them are having fear for planting, as this is high value tree, they fear theft and smuggling from their fields. Plants raised from seed germination takes minimum 2 years, hence saplings were raised from coppice cuttings were distributed this year. Fine tuning of optimization of

nursery technique from seeds is needed to improve the success rate. Hence large collections of seeds were made and kept ready.

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

- ❖ More than 25 meetings were conducted in Andhra Pradesh, Tamil Nadu, Karnataka and Kerala to create awareness and to explain the need for planting Red Sanders and the long term economic benefits of cultivating the same. Saplings were distributed in the awareness camps conducted at all the four southern states of India.
- ❖ Survey, collections of seeds and coppice cuttings were made in large numbers. Progressive farmer from Tirupathi area has been identified for development and maintenance of saplings nursery for continues availability of saplings. He was invited for several talks and encouraged to develop nursery having 5000 plants raised from coppices. By July 2009 developed saplings from his nursery would be supplied to farmers, spiritual centres and colleges.
- ❖ A week long “**Eco-Week 2008**” was organised in collaboration with Padmashree Group of Institutions, Bangalore. Several competitions, quiz programmes, cultural events are organised by involving student community. Rural school children were educated by volunteers about the environment and explained various concepts of conservation by showing models to them. They were also supplied with Red Sanders’ saplings and requested them to plant in their school premises. The programme also saw active participation of environmentalists, policy makers and Government representatives like Dr. Seenappa, Visiting Professor, Bangalore University, Prof. R.K. Somashekar, Head, Department of Environmental Sciences, Bangalore University, Prof. Rajeev Gowda, Indian Institute of Management, Bangalore and Dr. C.N. Ashwath Narayan, Member of Legislative Assembly, Government of Karnataka. By planting of Red Sanders saplings by these personalities, the message of need to conserve and propagate Red Sanders was aptly conveyed.

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

For South India, the implementation site was divided representing each state headed by the following: Andhra Pradesh - M. Sujatha, Accounts Officer, Andhra Pragathi Grameena Bank, Kerala - Dr. C.N. Manoj, Founder Trustee, Pelican Foundation, Karnataka – S. Balasubramanya and Tamil Nadu – Mr. C. Bhoopathy.

Entire concept was explained to the leaders and in turn to communities through their network. This concept worked very efficiently because of communication and awareness camps are in local languages. Each zone is now having a network of more than 200 self help groups. In order to achieve the objectives, efforts were made to follow LEAP method. That is **L**earn, **E**xperience and **E**valuate, **A**dapt and **P**romote.

Step One – Learn

Before plunging into action participants were made to understand about the theme of the project, its nature, scope, context, problems and possible solutions. Dr. M. Anuradha, PI, guided the

participants by conducting awareness camps at the villages by pooling people from near by villages at a common place. A knowledgeable person like Head Master of the school was involved and made him the guest of honour in each meeting. He /She identified progressive farmers/person who can really take the project forward.

Step Two – Experience and Evaluate

Once the participants understand the issue thoroughly by listening and watching the posters and CDS presented to them they were given chance to apply the acquired knowledge in world of work. Small debates, question and answer sessions were conducted at their villages after a week. This enabled them to think and act. Then they were directed to integrate theory into practice. Here PI and volunteers ensured that the participants make clear decisions and explain the importance of it.

Step Three – Adapt

The knowledge and skill gained would be of no use if not applied practically and hence participants are facilitated to adapt the acquired knowledge practice it and extend to the field activity. Many of them came forward to plant Red Sanders either on the bunds or in fields in huge acreage. However initially we distributed 2 to 5 saplings for each person who is interested and requested them to plant and observe. After 3 months many of them are happy with the performance of the plant and continued expressing the interest to extend the plantation. For such people saplings would be supplied in this rainy season.

Step Four – Promote

The knowledge of conservation and cultivation of Red Sanders was disseminated to others without confining it to awareness camps. Participants were encouraged to build up the capacity of the community to conserve, cultivate Red Sanders and further extend the same to other endangered, endemic and rare plants.

Group leaders / coordinators were instructed to take the below mentioned steps during the course of the project effective address the above steps as part of the participatory rural appraisal mechanism.

1. To fully understand the print/audio/video material prepared and know need for conservation and cultivation of Red Sanders.
2. To understand the expectations and experiences of each farmer/participant at the beginning of the sessions to enable good planning and execution.
3. To explain the importance of demo plots, field visits and issue based discussion and provide them maximum opportunity in hands on training.
4. To guide the participants in action plan of cultivation and dissemination of knowledge in the community.

5. Are there any plans to continue this work?

Yes, conservation of tree species is a long term effort and needs continuous efforts and awareness generation. There are lot of misconceptions and strong doubts about the legal aspects of growing Red Sanders. There is dire need to address this issue and also to initiate programmes to create awareness about Red Sanders in non-traditional areas.

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

A seminar would be organized by inviting Scientists, Forest officials, Conservation experts, traders, industry experts and representatives working in this plant and farmers who are interested to take up cultivation. A dossier with facts and fads about this tree is getting ready for extensive distribution.

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

Being tree species this needs more than one year for establishing saplings which are suitable to transplantation. Hence, only less number of saplings was distributed and major focus was made on generating awareness, seed and coppice collections for raising nursery. Now in the month of July 2009 large number of saplings would be distributed. The actual time scale of 18 months is not sufficient for completion of the project to the exact level. Scaling up and continuation of the project is needed for another one to one and half year.

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
Shade house with mist facility and nursery item	588.00	587.56	0.43	
Manpower Research Assistant	1260.00	1258.04	1.96	
Field Assistant	700.00	700.27	0.27	
Travel	588.00	587.99	0.01	
Meeting & Awareness	1177.00	1172.27	4.72	
Transportation	353.00	353.00	0.00	
Miscellaneous and overheads	294.00	293.69	0.69	
TOTAL	4960.00	4952.82	7.18	Exchange Rate : 1 £ = Rs. 80.84

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

The top prior activity needed is to popularise and encourage Red Sanders conservation and take up cultivation for its socio-economic value. Our experience is people are very much concerned and they are ready to take up this activity at all levels. Only bottle neck is availability of year round planting stocks and misconceptions about the legal problems when tree needs to be cut after 15 – 20 years. That responsibility would be taken up by us given an opportunity. The other problem is farmers are ignorant of laws and have strong doubts about the need for permissions to cultivate this tree. Hence a special platform is need of the hour involving farming communities, forest officials, scientists NGOs working in similar areas. On this common platform a policy need to be made and clarify all the misconceptions of farmers about growing the plant, because there is no ban on cultivation of this tree.

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. We did a mention about RSGF and may scientists and NGOs have requested us to give the details of the grant and reference for the same. We provided all the details whom so ever requested.



Left: *Pterocarpus santalinus* (Red sanders). Middle: Seeds of Red sanders being segregated. Right: Red sanders coppices



Left: Nursery being maintained. Middle: One year old saplings in nursery. Right: Awareness meeting.



Left & Middle: Red sanders sapling being distributed to farmers. Right: Prof. Seenappa at Eco-week 2008.



Left: Planting of Red sanders by students. Middle: Visiting of Head Master of nearby School. Right: Students viewing models & charts



Left: Red Sanders sapling given to Head Master. Middle: Eminent guests in animated discussion. Right: Prof. R.K. Somashekar and Dr. C. N. Aswathnarayana planting Red Sanders.



Left: Prof. R.K. Somashekar and Dr. C. N. Aswathnarayana planting Red Sanders. Middle: PI conveying message to dignitaries. Right: Students enacting skit on conservation.