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	Dr.Vedharajan Balaji
Project title	Participatory Seagrass GIS Mapping and Monitoring in Palk Bay
RSG reference	9563-1
Reporting period	12 months
Amount of grant	£5183
Your email address	omcarfoundation@gmail.com
Date of this report	1st September 2013

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
To create awareness on sea grass conservation among 500 school students			✔	We have reached more than expected students due to the support of schools and interest of students.
Selection and training of village volunteers to work in sea grass field survey and awareness		✔		Due to time taken to train technical knowledge, the process was slow. However, two of the trained volunteers have now become staff of OMCAR Foundation working in awareness and field survey.
Seagrass Survey in intertidal area	✔			Seagrass beds dominated by fast growing algae due to eutrophication. Only small patches were available to demonstrate the participatory research methodology to the community.
Sea grass survey in subtide area		✔		We went by boat with villagers about 2 km from shore, where natural sea grass beds exist. Due to difficulty in arranging logistics and safety to all participants, only limited participants were joined in this survey.
Display Posters of Segrass bed GIS map in community halls.	✔			Please see number 2 unforeseen difficulties

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

During the course of the project, we found that this project approach can only help to create awareness not a complete GIS map of sea grass beds due to its vast size up to 8km from the shore, and intertidal sea grass beds were dominated by algae due to eutrophication caused possibly by shrimp farms. So, there is no possibility of preparing participatory GIS map of seagrass beds like we did with mangroves last year.

We understood the need for separating seagrass awareness and research into two independent activities, where the underwater research photos and videos can be used as a tool for creating awareness to local community.

So, in 2012 December we raised new project to buy Acoustic Underwater Vegetation Survey equipment, a research boat and more laboratory facilities to conduct a scientific underwater study. Now, our organization is fully equipped with advanced seagrass survey equipment, scuba gear, research boat and underwater video equipment. We have completed our seagrass acoustic survey in an area of 96 km^2 in the last 2 months.

This separate research project now integrated to find dugong feeding grounds, seagrass associated fish assemblages and sediment structures in 336 km^2 area, with the support Government of India in the next two years. We expect to prepare a complete GIS map of northern Palk Bay sea grass beds covering 35 villages, which will be displayed before the end of 2014. Thanks to Rufford Small Grants contribution in 2012, now become an eye opener to initiate a detailed exploration of underwater ecosystem and species conservation in Palk Bay.

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

- 686 students participated in seagrass awareness events including field trips with the support of RSG. Now it is followed up with the support of other funding partners.
- Of the 30 trained volunteers of this project, two became staff of OMCAR Foundation working specifically for sea grass environmental education and assisting field survey.
- Our project published in IUCN newsletter: http://www.iucn.org/about/union/commissions/cec/?12837%2FRaising-Seagrass-Awareness-among-Youths-in-Palk-Bay-India and local media.

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

The programme involved 686 students in seagrass awareness, raised 30 volunteers from local villages and adopted two of them to become full time staff at our organisation. Village leaders, coastal school teachers, forest department and the Indian Navy have participated in our seagrass awareness events and field trips. This needs to build up further to a strong stakeholder responsibility in seagrass conservation in the project area.

Our trained village women self help group members have been cooking lunch for our student visitors, while selected village men has been managing our Palk Bay Environmental education centre during the awareness events. So, our seagrass awareness events are designed to involve community not only as participants but also as organisers, cookers and mangers of the events through OMCAR Palk Bay Environmental Education Centre.

5. Are there any plans to continue this work?

Yes. OMCAR Foundation has already running follow up project of this initiative.

1. From January 2013, we have started an exclusive research project to map dugong feeding ground using advanced acoustic vegetation mapping equipments with our new research boat. This project already mapped 96 km^2 area.
2. From September 2013, we will start a new research project to map benthic sediment structure and seagrasss associated fish assemblages, recruiting new volunteers and staff.

3. From 2014, we aim to expand our experience and logistics to Gulf of Mannar Biosphere Reserve for helping government to create GIS map of seagrass beds there.

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

1. The events are already updated through facebook and yahoo groups.
2. The awareness events already published in IUCN news letter.
3. The results are through IUCN newsletters and sea grass watch newsletters.
4. The project is published in OMCAR website http://omcar.org/user/research.aspx?ID=45

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

49% (£2551) was used in the first month to purchase equipment and consumables for the project, as mentioned in the proposal. 42% percent (£2182) was used for awareness events and travel until August 2013. 5% (£259) additional cost occurred during field trips due to increased number of students. 4% (£207) still left at our organization to be used for printing GIS maps.

We faced fund shortage, while receiving calls to book new student groups from local schools to our field trips. We provided food, water, tea, biscuits, booklets, LCD projector, and sometimes transport cost also, as the students were from remote villages with limited bus availability. However, I have to thank our team members and volunteers who have been worked sometimes with very low logistical arrangements.

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
Seagrass conservation awareness programme and field education	1700	2500	800	Due to increased number of participants than planned project.
Three volunteer training programmes on participatory sea grass mapping and monitoring	157	300	143	
Travel (includes village introductory meetings, volunteer identification trips and boat rents for seagrass GIS mapping and monitoring)	225	225	-	
Display of 4 feet X 5 feet framed GIS maps of seagrass beds at three community halls	300	Not spent	-300	As explained in number 2.
Display of 10 feet X 6 feet flex posters at two public places	150	Not spent	-150	As explained in number 2.
Visual Documentation and Media publicity	100	100	-	
Field survey consumables	230	230	-	

Dive and snorkelling equipment	2291	2291	-	
GPS	30	30	-	
Total	5183	5676	493	

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

1. Raising seagrass conservation awareness to 6000 students at schools in 2014.
2. Making a short documentary of underwater seagrass beds of Palk Bay to show to local schools.(in progress)
3. Organising field trips for 1200 students for seagrass conservation education.
4. Raising 150 volunteers to support our organisation in village seagrass events/research in 2014.
5. Completing accurate seagrass GIS mapping work before 2014 in 96 km^2 coastal stretch area, using advanced acoustic techniques and groundtruthing.

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

Yes, we used Rufford Foundation logo in all of our environmental awareness events. It displayed in banners, our website, shared through yahoo groups. Please visit our website page http://omcar.org/user/research.aspx?ID=45 for more information about our field trips and this page http://omcar.org/user/Awareness.aspx?ID=2 to know about our school events.