

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

Thank you for your help.

**Josh Cole, Grants Director**

#### Grant Recipient Details

<b>Your name</b>	Manish Chandi
<b>Project title</b>	Disturbance to natural resources, sharing mechanisms and regulation: A study on natural resource management in the Nicobar Islands
<b>RSG reference</b>	11211-2
<b>Reporting period</b>	March 2012-March 2013
<b>Amount of grant</b>	£6000
<b>Your email address</b>	<a href="mailto:manish@ncf-india.org">manish@ncf-india.org</a>
<b>Date of this report</b>	17/04/2013

**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
What determines the relative strength of community institutions and resource regulation?		yes		Community structure and organisation is fairly homogeneous in the Nicobar islands, though this study documented a fair amount of variation in functioning and decision-making. The strongest institutional regulations were documented in communities with the scarcest natural resources, but even at these locations, the tsunami placed a significant strain on traditional forms of governance. There is great variation in the strengths of community institutions across islands. A SWOT analysis and comparison across the study area of roles, effectiveness, and perception by inhabitants describes this fully.
Is there a relationship between the availability of natural resources and socio-ecological resilience?			yes	Those communities with previous experiences of resource scarcity were more resilient to coping with changes in resource availability. Sociological and cultural resilience increased with connectivity among islanders and dependence on local resources in comparison to substitutes. This has been measured by addressing issues of socio-cultural continuity and resumption in economic activity.
How does the changing role of community leadership affect resource conservation?			yes	Roles of functionaries in community leadership within this archipelago have seen paradigm shifts post tsunami. Institutional change as well has brought with it shifts in power and equity (Ramanujam R. V., S. J. Singh, et al. (2012)) as well as changes in residential pattern which seem to imply changes in modes of collective action in the islands surveyed. The implications this has for resource conservation are intricately related to the previous two objectives.

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

Not applicable.

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

- **Understanding land-use systems:** As a part of my work on documenting availability of island resources (domestic and natural) I chose to document resource catchments along the coastlines of islands where I work. This work continued from the previous year and took into consideration the joint ownership of these resource catchments by various family and kin groups. I also measured resource availability and change in the wake of the tsunami of 2004. This was aided by information given on natural resources and domestic resources that were available to local communities, through interviews and site visits with key representative of kin-groups. On the one hand, this exercise has provided me with valuable data on the changed availability of natural resources on these islands. More importantly though, I engaged with local communities in this mapping process and it has helped emphasise the need among them to restore and recreate these island resource catchments by themselves, rather than relying on external rehabilitation efforts. From earlier Government maps that accounted for approximately 18 coastal place names (for example from an island such as Kamorta), this work has resulted in more than 300 indigenous coastal place names (of resource catchments) for those islands in the central and southern group where my work is based. This data is a small component of my overall work, but will be useful to the local communities much after this research, as well as to the Andaman administration in understanding and comprehending coastal land-use systems and joint ownership that are more often than not, not accounted for or comprehended during developmental planning exercises.
- **Documentation of traditional governance systems:** I will describe these islands based on their social structure and organisation in relation to natural resource availability; the Nicobarese community differentiate themselves according to island of origin and dialectic group within those found in the Nicobar archipelago. Within an inhabited Nicobar island, islanders organise themselves in subsets according to clan groups which are largely based on partitioning of available livelihood natural resources through space. These clan groups form the basis of sharing natural resources and socio-ecological management systems. Though largely based on kinship, with variation in systems of clan membership, I have been able to distinguish in social structure and organisation, which shows a clear relationship with island size and resource availability.
- **It is important to understand variation in traditional governance structures and resource partitioning,** which is of paramount importance in conserving scarce natural resources. These islands have not been subjected to over exploitation of resources not just due to the lack of large scale demands from economy and given their relative isolation but also due to such systems of access, tenure and regulation as practiced through these traditional systems of governance. Such information (on variation in traditional governance, structure and function) has not been available for not just administrative officers or researchers but also among the Nicobarese themselves, to realise the value of variation in their systems and how their traditional systems also tend to conserve resources, especially at this time of transition after a disaster and change. The tsunami of 2004 brought along with it many influences and changes, which have seemingly altered notions of social hierarchy and power. I will touch

upon these aspects through publications and make available this documentation to Tribal Councils in the areas I work to illustrate change that is being induced to earlier systems of livelihood and natural resource governance.

- Rehabilitation of a small community on Great Nicobar: Although not a direct planned outcome of this project, my involvement with the island communities has enabled me to assist officers of the Nicobar administration in a process of rehabilitation of one small community of Nicobarese from the southernmost island of Great Nicobar. This community was resettled in a forest patch closer to the main settlement on the island after their coastal settlements were destroyed by the tsunami. This has given rise to various dilemmas including a greater dependence on a more market-based system, issues of land ownership, productivity and resource tenure. As a direct outcome of the understanding of resource tenure and community identity I have acquired through this project, I have been helping facilitate a dialogue between the Nicobarese community and the Andaman & Nicobar administration toward an effective process of rehabilitation.

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

As my work deals primarily with how local communities cope with changes to natural resource availability after a natural disaster, all my work entails the involvement of local communities.

(1) The importance of indigenous place names and sharing information of attributes to a location such as natural resources served not just my research in helping re-visualizing a local ecosystem but also local participants. Often during the course of such a mapping exercise several consultations between elders, community and clan heads took place and helped re-establish sharing patterns, ownership rights and the importance of such places. These records were then given back to the communities I've worked with for validation and their records as well. This work found special use when an island in the Nicobars was targeted for missile tests, and which we (the local community, journalists, and the Nature Conservation Foundation) were able to use information from my work and older literature to emphasise the significance of the location to local inhabitants. This among other petitions and media coverage eventually influenced the Ministry of Environment and Forests in New Delhi to direct project proponents to look for alternative locations where conservation value and local sentiments would not be thwarted. See ([www.thehindu.com/todays-paper/tp-features/tp-sundaymagazine/targeting-tillanchong/article2821785.ece](http://www.thehindu.com/todays-paper/tp-features/tp-sundaymagazine/targeting-tillanchong/article2821785.ece), [www.firstpost.com/blogs/indian-navy-jeopardizing-pristine-nicobar-island-457443.html](http://www.firstpost.com/blogs/indian-navy-jeopardizing-pristine-nicobar-island-457443.html)).

(2) I work with a core group of two to three men on each island, and also consult those women with whom I can communicate with. These field assistants are not just remunerated monetarily but also in kind with articles useful for their livelihood on their islands, such as tools to carve canoes, dry bags, torch lights, cloth and such material goods as is required. This is to emphasise the importance of their contribution not just in monetary terms but through understanding local needs and requirements as well.

(3) There also are areas of appreciative learning that have not found much place in the Nicobar Islands post disaster (by many of the younger generation in particular), especially in appreciation of indigenous lifestyles, conservation values, and traditional wisdom. I organised a small photo exhibition on the island of Chowra with large format prints of panoramas of their landscapes and habitats, of livelihood activities, and of species of interest found on their island. This was conducted during the major celebration of a church / ossuary festival that takes place yearly in November. This

was conducted with the help of my field assistants as well as others who I've worked with during earlier surveys.

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

Yes, this work is not over as yet; firstly, I am working on publications for both academia as well as popular articles to disseminate results and findings to a larger audience; secondly, putting such information to use with the Nicobar administration and the Nicobar Tribal Council is an important component of my work, that will take time given logistical and organisational requirements.

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

Maps created as a result of fieldwork have already been handed over to the District Administration and the Tribal Council's of Chowra and Kamorta Islands in Central Nicobar. Some other maps remain and will be handed over once completed with legends for appropriate interpretations of land use. Appropriate data sheets outlining resource catchments, attributes and ownership by clans will also be handed over to the Chairpersons of the Tribal Councils for their reference and potential use. I have designed three academic papers from this work, and have many popular articles to complete with not just stories from fieldwork, but the influence of rehabilitation programs, governance systems, sharing mechanisms as experienced in the Nicobar Islands. These will be sent to magazines and other popular media

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

The Rufford Small Grant was used from the month of March 2012 to February 2013. This was as planned and anticipated.

### 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
Principal Investigator per diem (@ £12.5/day for 12 months)	£2,810	£ 2,810	
Field Assistance (3 persons for 4 months)	£1,013	£ 1,013	
Data storage devices	£75	£ 75	
Batteries for torches, dictaphone & GPS	£19	£ 19	
Spare batteries for camera	£38	£ 38	
Stationary, printing photos, and documents for community institutions	£125	£ 125	
Postage, courier and communication including internet	£63	£ 63	
Airfare to Port Blair and back from the mainland over 2 visits	£750	£ 750	
Road, Rail and Ship Travel	£188	£ 188	
Local boat hire (3 islands in the Nicobars)	£250	£ 250	
Accommodation at 3 field locations	£419	£ 419	
<i>Contingency expenses</i>	£250	£ 250	
<b>TOTAL</b>	<b>£6000</b>	<b>£ 6000</b>	

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

Firstly I have to put together work from the field into a legible form for publications and my thesis, while also organising usable information for the Nicobar Tribal Councils of three islands I've worked in. The data from the last few field surveys are to be used in both these ways. I do have another question to address for my thesis, which has linguistic and political tangents that can be woven into evolving changes in natural resource management. I will be examining this question after I complete with tasks and commitments that have come from this last few visits for fieldwork before I move on.

**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?**

It has been used during slide presentations of the work in progress so far, and will be acknowledged in publications, the project report and also once the entire thesis is complete.

**11. Any other comments?**

The grant has helped me finish important mapping work over the season which is not just beneficial to the project but also to local communities I work with.