

## The Rufford Foundation Final Report

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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**

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Grant Recipient Details	
Your name	Nikunj Jambu
Project title	Avifaunal conservation through research, awareness and generating alternative livelihood options in Purna Wildlife Sanctuary, Gujarat
RSG reference	17768-1
Reporting period	August 2015 to August 2016
Amount of grant	£4983
Your email address	nikunj.friends.25@gmail.com
Date of this report	05/09/2016

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 carry out point transects, trails, and nocturnal survey			✓	We divided the entire area of the sanctuary into 4 X 4 km <sup>2</sup> grids. We then laid 23 random transects, which we walked during different seasons. Here are the details: <ul style="list-style-type: none"> <li>• Intensive surveys to document species that tend to be missed during transects.</li> <li>• Nocturnal surveys to document nocturnal species.</li> <li>• Recording of bird calls.</li> <li>• Documentation of over 180 species in total.</li> </ul>
To assess status of warblers through call recordings and analysis.			✓	We recorded more than 700 bird calls during the study period. The highlight here includes eight warbler species that were documented, with the help of the analysis of recorded calls through RAVEN Pro.
Socio-economic assessment			✓	We interviewed a total of 223 households from seven different villages in and around the sanctuary. Of the 223 households surveyed in this socio-economic assessment, 105 were actively involved in hunting. We documented that the local people (called Dangis) hunted more than 85 species of birds.
Nature education workshops			✓	We consulted a team of experts in the field of designing educative content modules. After brainstorming for 3 days and post-multiple school visits at the site, the panel designed a 6-month module. We introduced these modules in schools across 28 villages. We targeted the parents of these same villages for awareness activities.
Nature trails – for school children	✓			Noticing that the grasping level and participation of the children was not adequate, our team voted this idea to

				be premature in the current stage. Therefore, we dropped the plan to execute it.
Training local people (Dangis) as bird guides			✓	We trained 10 local community people as bird guides. The government officials of the Forest Department introduced these people as bird guides, during the Dangs Bird Festival.
Promoting the area as a bird sanctuary			✓	We conceptualised and organised an event, the Dangs Bird Festival, with funding from the North Dang division of the Forest Department. The festival was a runaway success, with 60 participants and volunteers in attendance. The following were the objectives of the festival: <ul style="list-style-type: none"> <li>• Promotion of the Dangs district as a birding sanctuary.</li> <li>• Raising of awareness about the uniqueness of Dangs and its biodiversity.</li> <li>• Sensitisation of the importance of birds in the moist deciduous ecosystem.</li> </ul> We received applications from more than 150 individuals, of which 16 volunteers actively participated in the project.
Home stay concept (on experimental basis)			✓	We could convince one household each from five Dangi villages to host travellers in their house. Thus, we were successful in plating the concept of home stays in the communities.
Website and mobile app			✓	We have registered a URL to host a website for a 2-year period. The URL is <a href="http://www.purnawls.com">www.purnawls.com</a> . Currently, the website is undergoing updates. When complete, the site will showcase project reports and gatherings of the dissertation.
Bird booklet printing			✓	We printed and distributed a booklet on birds, during the Dangs Bird Festival, 2016.

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

To a great extent, our team did not face any major difficulties during the course of the project. However, much like any other fieldwork, we did face a few minor

problems, which we could easily solve during the course of work. Here are a few of them:

- Hunting is a sensitive issue in the Dangis. Therefore, while carrying out socio-economic surveys among the Dangis, we had to be very tactful and careful in asking questions related to hunting. There were a couple of instances when questions about hunting agitated the villagers, some of them even abusing the team. We had foreseen this problem. We tackled these situations by always having a forest guard staff accompany us in our interaction with the local people - including every interview or field activity.
- Claiming the time of the local people for lengthy interviews was a difficult feat in itself. Most people are busy during the daytime, either out in the field on work or tending to their household chores and caring for children. In the evenings, we experienced a different set of problems: the village folk either retire early to bed or were too drunk to answer. We had to make multiple visits to complete a single interview. On many instances, interviews were made while the locals were working in the field or watching their children at home. During non-cultivating seasons, many young people had also migrated to cities to look for odd jobs in exchange for daily wages. This was also another reason behind us having to make multiple visits to the villages to complete the questionnaire surveys.
- We had to take forest staff with us at all times for our work. Often, it was difficult for us to get the department to assign guards to accompany our team. On many instances, the staff are burdened with lots of responsibilities. Given that the area is a wildlife sanctuary, the staff assigned to us had to manage their regular work in addition to helping us. There also have been instances when the guards never showed up, owing to miscommunication between officials and ground-level staff. We also had to think up ways to utilize any such unintended breaks to finish off some other project activity, thereby using time on field judiciously.

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

- **Research**

We divided the entire area of Purna Wildlife Sanctuary (WLS) into 4 X 4 km<sup>2</sup> grids and we laid 23 random transects.

- We walked these 23 transects during different seasons of the year.
- We recorded more than 180 species of birds, the first time anyone had carried out any such documentation in this WLS.
- We recorded over 700 birdcalls during different seasons.
- We recorded eight warbler species, again for the first time from the sanctuary.
- Moreover, our intensive nocturnal surveys lead to the documentation of many birds that were never recorded earlier in the area.
- We also documented the presence of critically endangered birds such as the Indian vulture and the forest owl.

- **Assessment of the Socio-Economic Status of Villagers**

Our team interviewed nearly 223 households across seven villages in and around the WLS. Here are some of the startling facts we found out:

- Hunting is practiced in a least 105 households of the 223 households surveyed. This is only by admission.
- The local people hunt more than 85 species of birds.
- Our surveys statistically correlated hunting based on the following criteria:
  - Income.
  - Age group.
  - Caste.
  - Species preference.
- The data that we collated were informative, yet shocking. We hope these findings will now form the scientific basis of our future endeavours, the first of which will be carried out with a sole focus on Avifaunal hunting.
- **The Dangs Bird Festival, 2016**

During the course of the project, the team conceived a new idea to popularise Purna WLS as a bird sanctuary. We decided to organise a bird festival, which facilitated people from all parts of India to visit Dangs and engage in bird watching over a period of 3 days. As no funds were asked for this event, our team approached a government officer, the Field Director of Purna WLS. The efforts, dedication, and enthusiasm of the team convinced the officer to allocate funds from the government department for the event. Thus, the Dangs Bird Festival became a reality, in collaboration with the Ahwa North Forest Department.

The three-day event was, by far, the biggest success of our efforts:

  - The festival brought together 60 participants and volunteers, from all over India.
  - Purna WLS gained a place in the map of the country as a popular birding destination.
  - It also had in attendance many local people, travellers and bird guides.
  - The high turnout and enthusiastic response of the people moved the field director of the Sanctuary to declare the Dangs Bird Festival an annual event to be held every January.

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

In one aspect or the other, we made sure local communities were integral to meeting the objective of the project:

- The Forest Department staff, who accompanied us during our field surveys, were always local people from nearby villages. During the course of the project, they developed a keen interest in our work. Many were inquisitive, wanting to know more about the work we were doing. We soon realised this to be a very good platform to spread the message of avifaunal conservation to the grassroots-level staff who work on the field every day of their work period. We held several sessions to educate field staff and to inculcate in them a sense of pride in the natural heritage and create an urge to seek more knowledge about the forests, including the birds, which they were protecting as part of their jobs.

- We interacted with people from the local communities on a daily basis, during the course of our fieldwork and the surveys. We imparted training to selected individuals as bird guides. They even participated in Dangs Bird Festival, 2016. A few of them are now contractual guides in the eco-campsite situated inside Purna WLS. Convincing locals to offer their house as a home stay for visiting strangers was not as challenging as what we expected. The experiment was a success. The local people benefited from it. A local Dangi tribal dance group even performed at the Bird Festival.

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

The more time I spend among the local people and interact with them, the better I am aware of the causes of the current situation there. Many new ideas were conceived during the course of the project. Interactions with the Dangi people revealed many lacunas, which need to be addressed furthermore. Yes, we plan to continue work in this region. The project was but an effort to understand the biodiversity and conservation issues this region faces. Any solution will have to be administered over the years, in partnership with the community and the government. I have discussed in detail my plans and strategies in my answer to question number 9.

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

- The team is in the process of writing four different papers. The results of our findings will be published in journals, after they are peer reviewed.
- I am in the process of writing a Conservation Action plan, based on the findings of the project. I will shortly submit it to the Field Director of Purna WLS.
- I will be submitting a detailed report of the project to the Principal Chief Conservator of Forests (PCCF Wildlife, Gandhinagar) and the Field Director of Purna WLS.
- To take it to wider audiences across boundaries, the detailed report will also be uploaded on the website that I am creating as part of the project.
- To popularise the Dangs Bird Festival, I am in the process of writing an article to be published in a national-level conservation magazine, Sanctuary Asia.
- As part of our volunteering program, two students from the prestigious Aligarh Muslim University joined me for a long-term participation. They have decided to do their dissertation on the following topics:

- The study of warblers through bioacoustics.
- The socio-economic status analyses of the Dangi people.

They have successfully completed their work and have submitted their dissertation to their respective department. Also, one of the two student volunteers was selected for poster presentation in the reputed Students Conference on Conservation science (SCCS) to be held in Bangalore later this year. She will be presenting study on bio-acoustics assessment of warblers of the sanctuary.

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

The Rufford Foundation grant (RSG) was used over a period of 1 year between August 2015 and August 2016, a duration consistent with the approved length of the project.

**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
Travel	£1400	£1650	-£250	<ul style="list-style-type: none"> <li>The team hired a vehicle at £80 per month (totalling £960).</li> <li>The remainder £690 was used for diesel purchase</li> <li>Several hikes in diesel costs resulted in the additional cost.</li> </ul>
Equipment • Garmin GPS etrex 30	£179	£175	+£4	
Equipment • Nikon A211 8X42 binocular	£60	£60	£0	
Equipment • Matter EDT 301746 compass	£10	£10	£0	
Equipment • Nikon 8397 ACULON laser rangefinder	£179	£185	-£6	The mentioned model being unavailable at the time of purchase, the team chose a different model.
Equipment • Call recorder - zoom H4n sp Handy recorder	£232	£232	£0	
Food	£786	£800	-£14	
Rent for accommodation	£382	£420	-£38	Owing to high demand of houses in the region, the team could not find a house of rent in the specified budget. Instead, we had to choose a bit more expensive house, at £35 per month.

Field assistant remuneration	£590	£590	£0	
Website and mobile app development	£275	£275	£0	A website and mobile app have been registered for a period of two years.
Nature Education activities and trails	£220	£160	+£60	The nature trails initiatives were dropped midway through the project. The upside of this was reduced expenditure.
Labour, guide fees and Sanctuary entry fees	£150	£0	+£150	The Field Director of Purna WLS waived off all fees. This money partially covered the vehicle rent and the extra cost for fuel.
Printing of materials	£320	£226	+£94	The remainder amount partially covered the vehicle rent and the extra cost for fuel.
Contingency	£200	£180	+£20	
<b>TOTAL</b>	<b>£4983</b>	<b>£4963</b>	<b>+£20</b>	

The remainder amount of 20 pounds has been set aside for printing the report.

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

We conceived many innovative ideas while working with the local villagers. We found that the vicious cycle that leads to bird hunting is much more complicated than expected. The pseudo-exposure of urbanisation has had a very disastrous impact on the mind-set of the local people.

- Our next step is to understand and document the problems that directly or indirectly lead to hunting of birds. We plan to make a documentary film and publish it to take it to wider audiences. This will help people understand the problem that actually leads to hunting. Moreover, this film will be a visual aid in our sensitisation efforts.
- Further, data that we gathered in our socio-economic surveys helped us quantify the fuel wood that the villagers collect per household. We noticed that besides trimming dry branches, they chop down entire trees to save time and energy. Our next step will be to identify, through field observations, plant species that are used by majority of bird species. In a subsequent stage, through advocacy, we plan to urge the local people to protect the given species of trees. This will ensure better habitat for birds and ultimately lead to their conservation. In addition, we plan to carry out the plantation of identified tree species in different locations in the sanctuary. We also intend to request the involvement of the forest department in the plantation initiatives.
- In Purna WLS, we discovered a good population of critically endangered bird species such as the forest owlet and Indian vulture. Our next step is to project

these iconic bird species as symbols of Dangi pride and to appeal for the conservation of all birds.

**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 used the RSGF logo in various instances:

- We used the logo in the merchandise that we distributed to the participants of the Dangs Bird Festival, 2016. The logo occupied a prominent place on the event stationery and collateral such as invitation cards, participant kits, onsite flexes and posters. RSGF logo was also printed on the certificates that were given to the event volunteers.
- The RSGF was also displayed on the master's dissertation theses that two of our interns submitted in Aligarh Muslim University.
- The RSGF logo will also be displayed on the website that is under construction as the part of this project.
- The logo was highlighted in the awareness booklet that we distributed among the local people.
- The team also intend to use the logo in the publication and conservation action plan that is due for submission.
- In addition, the RSGF logo will form a part of the article we are writing for the magazine, Sanctuary Asia.
- During the course of my work, I have ensured that RSGF received lot of publicity. The Field Director of Purna WLS was pleased with the support that RSGF is providing to budding conservationist. In fact, this fact inspired him to go out of his way on several occasions. It is owing to RSGF that the director agreed to provide all support required for my project. This made our work a smooth ride. Our event, the Dangs Bird Festival, got much media coverage.
- Further, a 10-minute talk about the Bird Festival was aired on radio. The programme even made a mention of our project and funding agency. A few of my junior scholars, having heard about the Rufford Foundation through my project, had applied for a RSGF grant. One of them has recently been awarded a RSGF small grants for his work on endangered plants. This project work has paved a way for another conservation effort.
- Moreover, other scholars who have submitted their proposals have sought my experience to getting through the proposal and other details. Also, I found that my project work dispelled many misconceptions that many people used to hold.

**11. Any other comments?**

- Besides providing funds and opportunity to work for conservation, this project has helped me develop as a person. This year has been a journey that I can never forget. It has boosted my confidence to carry out individual project, to take on challenges, overcome difficulties. The project, most importantly, has laid a very strong foundation for my future. This project has also helped me gain so many contacts and widen my network of people. My team is now



stronger than ever! I cannot thank The Rufford Foundation enough for this opportunity.

- Further, I want to mention another very important outcome of my project. One of the volunteer participants, a soil biologist, developed so much of interest in birding that she decided to do her PhD on woodpeckers. This is another source of pride for me. It makes me feel content and instils new hope in me to note that it is not too late to protect our natural heritage.

After our relentless efforts, and with the funding support that the Forest Department extended, the Dangs Bird Festival 2016 was a thumping success. May I use this opportunity to request RSGF to provide a mandate for grants to carry out such conservation events. I am sure it will a great help to many conservationists.

With this, I sign off, thanking RSGF for providing me this opportunity to do my part in the field of conservation.