

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	Vishwas (Bhau) Katdare
Project title	The Konkan Vulture Project: Monitoring and Awareness Drives at Identified Vulture Feeding Grounds
RSG reference	18650-2
Reporting period	January 2016 to December 2016, extended up to 31 st March (cost neutral)
Amount of grant	£4991.60
Your email address	sahyadricpn@gmail.com
Date of this report	8 th April 2017

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																		
Continuation of monitoring of nine vulture feeding grounds with the help of local community rangers				<p>Vulture colonies in Konkan region are located at Vihali (Dist. Ratnagiri), Patnus, Nanemachi, Ranawadi, Shrivardhan and, Chirgaon (all Dist. Raigad).</p> <p>There exists at least one carcass dumping ground within the radius of 15-20 km of every vulture colony. Initially, the plan was to monitor nine such locations around the vulture colonies wherein carcass dumping is done regularly. However, in the second quarter of the project, it was realised that it would be better to include the villages in which carcass dumping in open is done, but not at a fixed location. These locations were covered in the monitoring.</p> <p>All monitoring locations have been clustered for data analysis. There are seven clusters. Each cluster is named after the nearest nesting location (Annexure I and Annexure VI).</p> <p>Number of dead cattle dumped in the clusters in the project period was as follows:</p> <table border="1" data-bbox="871 1563 1251 1966"> <thead> <tr> <th>Cluster</th> <th>Number of carcass</th> </tr> </thead> <tbody> <tr> <td>Anjarle</td> <td>7</td> </tr> <tr> <td>Chirgaon</td> <td>22</td> </tr> <tr> <td>Gothe</td> <td>4</td> </tr> <tr> <td>Nanemachi</td> <td>7</td> </tr> <tr> <td>Patnus</td> <td>9</td> </tr> <tr> <td>Shrivardhan</td> <td>8</td> </tr> <tr> <td>Vihali</td> <td>11</td> </tr> <tr> <td>Total</td> <td>68</td> </tr> </tbody> </table> <p>Refer Annexure II for the list of</p>	Cluster	Number of carcass	Anjarle	7	Chirgaon	22	Gothe	4	Nanemachi	7	Patnus	9	Shrivardhan	8	Vihali	11	Total	68
Cluster	Number of carcass																					
Anjarle	7																					
Chirgaon	22																					
Gothe	4																					
Nanemachi	7																					
Patnus	9																					
Shrivardhan	8																					
Vihali	11																					
Total	68																					

			<p>villages in each cluster where open carcass dumping was observed.</p> <p>The monitoring process:</p> <p>The community rangers in the villages collected the information on dumping of dead cattle in their village (Annexure III). If vultures were found , the location was visited to confirm the number and species</p>
<p>Focussed awareness drives with the help of Animal Husbandry Department around 9 vulture feeding grounds</p>			<p>Details of the awareness drive are as follows,</p> <ul style="list-style-type: none"> • Community meetings were conducted in 85 villages (Annexure IV) • Discussion points in the community meetings, <ul style="list-style-type: none"> ○ Safe disposal of dead cattle and its significance for the vultures in Konkan. ○ Use of cattle health card - The health card was distributed in an earlier project.¹ The cattle health card is to be maintained by the cattle keepers to record medication of the cattle. It is a voluntary activity. In general, the record is not maintained regularly. ○ Sighting of vultures • Two stakeholder's workshops, one at Shrivardhan on 26th December 2016 at Shrivardhan and the other at Khed on 7th March 2017 were conducted. Participants of these workshops were frontline staff of the Forest Department, Coconut plantation owners and general community members (Annexure V).
<p>Ensure higher number of villagers use vulture safe carcass dumping ground</p>			<p>Regular awareness generation activities have started yielding results.</p> <p>There has been a steady increase in number of villagers practising carcass disposal in the identified</p>

¹ Critical Ecosystem Partnership Fund had given us a grant for vulture conservation efforts in Northern Western Ghats (June 2013 to Nov. 2015). <http://www.snmcpn.org/vultures/conservation-efforts>

				feeding grounds. In the meetings with the villagers wherein open dumping of dead cattle is practised, importance of their practice for vultures would be explained. These villagers were appealed to continue the practice. Positive results of this appeal are gradually yielding.
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

Nesting of long-billed vultures: These nest in the basaltic rocky escarpments at Ranawadi and Nanemachi. With a pair of binoculars, it is somewhat difficult to identify active nests (with eggs and later juveniles). The difficulty is due to body colour of the vultures camouflages with the rocky escarpment.

Counting of successful nests is possible only after a juvenile is located in the nest. The adult incubating the eggs remains idle in the nest. Similarly the juveniles that hatch out remain in the nest until they are able to take a flight. Therefore there is hardly any clue to identify active nests except fresh and dense white patchy marks on the rocky escarpment formed below the nesting due to droppings of nesting birds.

Monitoring of the vulture feeding grounds: There are two types of disposal of dead cattle. The first is dumping of the dead cattle at random location, within the boundary of the village but far from the human habitation. The other type is dumping at a specific location within the village boundary. At the feeding locations wherein dumping of carcass is done at a specific location, it is comparatively easier to monitor number of dead animals being discarded and number of vultures feeding on them. However, it is somewhat difficult in the locations where the dead cattle are discarded at random. Therefore it is also difficult to monitor number of vultures visiting these locations.

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

- ❖ In the last 2 years, number of vultures in Konkan region has not decreased I have been regularly monitoring the vultures in Konkan region since 2003 and, with help of community rangers from 2013 onwards. A systematic survey conducted in 2013-14 had estimated that number of vultures (both extant species) in Konkan region is around 200. The monitoring and field observations done in this project indicate that the number is almost the same. It has not decreased. Perhaps, regular awareness generation on safe disposal of dead cattle and banning use of diclofenac medicine have positively contributed in retaining the number of vultures in Konkan region.

- ❖ Confirmation that disposal of dead cattle in open has important role in survival of existing natural population of the vultures in Konkan region

At the start of the project, monitoring of nine fixed feeding locations was planned. However, reports from the community rangers from various clusters led me to monitor other locations wherein open disposal of dead cattle at random locations away from the habitation is practiced. These locations are within the radius of 20 km from one or the other colony (nesting location) of vultures. Almost 130 such locations have been listed. These locations, as a group, form an exclusive region within Konkan region. In my opinion, there is some relation between presence of vulture colonies in the region bordering Raigad and Ratnagiri districts and the exclusive region, more or less coinciding with the same region, of villages regularly practising open disposal of dead cattle. I guess availability of the food in this exclusive region is one of the reasons of presence of active vulture colonies in this region.

Presently, in other parts of Konkan region, especially in Sindhudurg district and central and Southern parts of Ratnagiri I have observed that dead cattle are commonly buried. I guess, it may not be a coincidence that in this region vulture sighting in this region is nil and vulture colonies are totally absent.

- ❖ Finding that systematic study of vulture colonies is needed to shed light on certain important aspects of biology of vultures in Konkan region.

Despite of adverse situation i.e. diminishing food base in particular, vultures in the region bordering Ratnagiri and Raigad districts of Konkan have not only survived but also successfully maintained more or less the same population. This leads to the following questions which warrant detailed systematic study:

- Whether availability of food is sufficient or not.
- How far vultures of a particular colony go to forage.
- What is the scenario of breeding colonies and food for these colonies in other geographical regions?

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

Local community members were involved in monitoring of the vulture colonies and feeding locations. They were paid nominally to pass on the information to me whenever vultures were sighted around their location. Similarly they keep me informed on the disposal of dead cattle in their area.

Coconut plantation owners in Shrivardhan are now well aware of the vulture monitoring and need for conservation. They pass on the information whenever any noticeable change is observed in the vulture colony in their plantation.

5. Are there any plans to continue this work?

Yes. Following is planned for the future.

- Study relation between available food and population of vultures.
- Population status of breeding colonies in Maharashtra state

- Policy advocacy at state and national level for the long-term conservation of the vulture colonies.

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

The findings of the project will be shared with the Maharashtra State Forest Department and the Animal Husbandry Department. The findings will be published on the website www.snmcpn.org.

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

The RSG was utilised regularly over a year for monitoring of the nesting and the feeding grounds – From January 2016 to December 2016. It was utilised for the awareness generation as well. The awareness generation exceeded the anticipated duration of the project. A few village level meetings, anti-diclofenac drives and a workshop for stakeholders was conducted in February and March 2017. Thus the project exceeded its scheduled duration.

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
Compensation for community rangers at 9 locations for 10 months	450	444	-6.00	
Fuel for local travel to 9 dumping sites and vulture colonies	2500	2592.58	92.58	Covered more number sites therefore more travel
Lodging and meals for the monitoring work	800	890.69	90.69	Covered more number sites therefore more travel and subsequent lodging and meals expenses
Awareness generation workshop for frontline staff of the forest Department and AHD and the community members	250	214.90	-35.10	
Telecommunication	160	107.31	- 52.69	
Printing of literature for	150	94.29	-55.71	

awareness generation				
Office supplies	50	56.51	6.51	
Team Member Salary	600	591.36	-8.64	
Total	4991.64	4991.64		The exchange rate per £ sterling = 100 INR (as mentioned in the budget)

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

Conduct studies to seek answers to the following for better conservation action:

- What is the relation between available food and population of vultures?
- What is the status of breeding colonies in Maharashtra state?

Policy advocacy at state and national level for the long-term conservation of the vulture colonies.

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

Yes. The RSGF logo has been used in all the posters used for generating awareness about the ban on the usage of diclofenac. It was also used in the handouts that were distributed to the locals. A sticker was widely distributed and displayed at important locations like veterinary clinics, pharmacy shops etc. also had the RSGF logo. The outreach material of the project is presented in Annexure VII

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

12. Any other comments?

Annexures

Annexure I: Monitoring Clusters

Sr. No.	Cluster	Villages monitored
1	Anjarle	Ade
		Anjarle
		Borthal
		Chandivane
		Harnai
		Ilane
		Ravtoli
		Satamba
		Sukondi
2	Chirgaon	Chandore
		Chikhalap
		Chirgaon
		Dehen
		Deoghar Kond
		Ghonse
		Kakal
		Kalanagar
		Kanghar
		Kharsai
		Krishnanagar
		Pashti
		Pedhambe
		Purar
		Revli
		Sai
		Songhar
		Surai
		Tamhane Shirke
		Varvatane
Vihule		
Mendadi		
Wave		
3	Gothe	Ambadawe
		Borkhat
		Devhare
		Dhamani

Sr. No.	Cluster	Villages monitored
		Gothe
		Kalkavane
		Kante
		Malegoan
		Nayane
		Pacharal
4	Kangwai	Bhomadi
		Kangwai
		Pichdoli
		Velvi
		Virsai
5	Nanemachi	Dahiwad
		Dongaroli
		Karnavadi
		Kelad
		Mandle
		Mangharun
		Nanemachi
		Pane /Pane Waghete
		Pishawi
		Ranawadi
		Sav
		Shevate
		Varandhaghat
6	Patnus	Borle
		Degaon
		June Mangaon
		Lonshi
		Mangaon
		Morba
		Panhalghar
		Patnus
		Tamhani
		Unegaon
		Usarkond/Usar
		Wadgaon Kond
		Waghose
7	Shrivardhan	Aravi
		Dandguri
		Devkhol

Sr. No.	Cluster	Villages monitored
		Dhangar
		Diveaagar
		Kasarkond
		Kherdi
		Kondivali
		Nagaloli
		Naviwadi
		Pangloli
		Shekhadi
		Shirvane
		Shiste
		Shrivardhan
		Valwati
		Wadghar
		8
Dhavade		
Humbari		
Kalambani Kh.		
Nandivali		
Rasalwadi		
Shingri		
Vihali		
Wadgaon Bk.		
Wadgaon Kh.		
Wadi Beed		
Wadibeldar		

Annexure II: List of villages in which dumping of dead cattle was observed and number of carcass observed

SN	Villages monitored	Cluster	No of carcass
1	Sukondi	Anjarle	7
2	Chandore	Chirgaon	6
3	Chikhalap	Chirgaon	1
4	Chirgaon	Chirgaon	3
5	Dehen	Chirgaon	1
6	Kakal	Chirgaon	1
7	Kanghar	Chirgaon	1
8	Krishnanagar	Chirgaon	1
9	Pedhambe	Chirgaon	2
10	Sai	Chirgaon	2
11	Surai	Chirgaon	1
12	Varvatane	Chirgaon	1
13	Vihule	Chirgaon	1
14	Mendadi	Chirgaon	1
15	Devhare	Gothe	1
16	Kalkavane	Gothe	3
17	Nanemachi	Nanemachi	3
18	Ranawadi	Nanemachi	2
19	Sav	Nanemachi	1
20	Shevate	Nanemachi	1
21	Degaon	Patnus	1
22	Lonshi	Patnus	1
23	Patnus	Patnus	4
24	Tamhani	Patnus	1
25	Usarkond/Usar	Patnus	1
26	Waghose	Patnus	1
27	Diveaagar	Shrivardhan	1
28	Kasarkond	Shrivardhan	1
29	Kherdi	Shrivardhan	2
30	Pangloli	Shrivardhan	1
31	Shekhadi	Shrivardhan	2
32	Shrivardhan	Shrivardhan	1
33	Birmani	Vihali	1
34	Nandivali	Vihali	2
35	Vihali	Vihali	3
36	Wadgaon Bk.	Vihali	3
37	Wadi Beed	Vihali	2

Annexure III: List of Community Rangers

Sr. No.	Ranger's Names	Village Name
1	Mr. Krishna Pawar	Gothe
2	Mr. Rajesh Bhavne	Borkhat
3	Mr. Birajdar	Vihali
4	Mr. Chandrakant Mahadik	Pangloli
5	Mr. Mahendra Pawar	Kangwai
6	Mr. Sanjay Bothare	Gothe
7	Mr. Bharat Mandavkar	Kante
8	Mr. Laxman Chalke	Vadvali
9	Mr. Shantaram Vaghe	Kasarkond
10	Mr. Shailesh Posture	Ambadve
11	Mr. Ram Munde	Patnus
12	Mr. Kamlakar Marangale	Patnus
13	Mr. Ganesh Dhaktu Thembe	Jadhav Vadi
14	Mr. Baban Pawar	Karanvadi
15	Mr. Baban Kachre	Kelad
16	Mr. Vilas Ravji Umbrajkar	Pishvi
17	Mr. Kashiram Mhamunkar	Nanemachi
18	Mr. Parshuram Kelaskar	Shrivardhan
19	Mr. Kashinath Kap	Shrivardhan
20	Mr. Amit Kap	Shrivardhan
21	Mr. Chandrakant Sahdev	Vihule
22	Mr. Yashwant Kadam	Goregav
23	Mr. Dipak Karkare	Khadkoli
24	Mr. Suresh Ghogte	Kanghar
25	Mr. Bhau Pandurang Nalvalkar	Pane
26	Mr. Chandrakant Ambaji Kamble	Ganesh Nagar (Kherdi)
27	Mr. Rajendra Namdev Mirgal	Nanglol
28	Mr. Kasim Jalgavkar	Sai
29	Mr. Barku Parshuram Katekar	Vaki
30	Mr. Prajyot Pandurang Gaykavad	Kakal
31	Mr. Sadanand Mahadev Mahadik	Vihule
32	Mr. Mangesh Vaman Shirke	Krushnanagar
33	Mr. Manohar Dhondu Aagre	Tamhani Shirke
34	Mr. Harshad Harishchandra Shinde	Unegav
35	Mr. Dinesh Chachle	Shrivardhan

Annexure IV: List of villages in which community meetings have been conducted

SN	Villages in which community meetings were conducted	Cluster
1	Ade	Anjarle
2	Anjarle	
3	Borthal	
4	Chandivane	
5	Harnai	
6	Ilane	
7	Ravtoli	
8	Satamba	
9	Sukondi	
10	Chandore	Chirgaon
11	Chikhalap	
12	Chirgaon	
13	Dehen	
14	Deoghar Kond	
15	Kakal	
16	Kalanagar	
17	Kanghar	
18	Kharsai	
19	Krishnanagar	
20	Pedhambe	
21	Purar	
22	Revli	
23	Sai	
24	Songhar	
25	Surai	
26	Tamhane Shirke	
27	Varvatane	
28	Vihule	
29	Wave	
30	Borkhat	Gothe
31	Devhare	
32	Dhamani	
33	Gothe	
34	Kalkavane	
35	Malegoan	
36	Nayane	
37	Bhomadi	Kangwai

SN	Villages in which community meetings were conducted	Cluster
38	Kangwai	
39	Pichdoli	
40	Velvi	
41	Virsai	
42	Dahiwad	Nanemachi
43	Dongaroli	
44	Mandle	
45	Mangharun	
46	Nanemachi	
47	Pane /Pane Wagheti	
48	Sav	
49	Borle	Patnus
50	June Mangaon	
51	Lonshi	
52	Morba	
53	Panhalghar	
54	Patnus	
55	Unegaon	
56	Usarkond/Usar	
57	Wadgaon Kond	
58	Waghose	
59	Aravi	Shrivardhan
60	Dandguri	
61	Devkhol	
62	Dhangar	
63	Diveaagar	
64	Kasarkond	
65	Kherdi	
66	Nagaloli	
67	Naviwadi	
68	Pangloli	
69	Shekhadi	
70	Shiste	
71	Shrivardhan	
72	Valwati	
73	Wadghar	
74	Birmani	Vihali
75	Dhavade	
76	Humbari	

SN	Villages in which community meetings were conducted	Cluster
77	Kalambani Kh.	
78	Nandivali	
79	Rasalwadi	
80	Shingri	
81	Vihali	
82	Wadgaon Bk.	
83	Wadgaon Kh.	
84	Wadi Beed	
85	Wadibeldar	

Annexure V: Photos of Stakeholder's workshop at Shrivardhan (December 2016) and at Khed (March 2017)

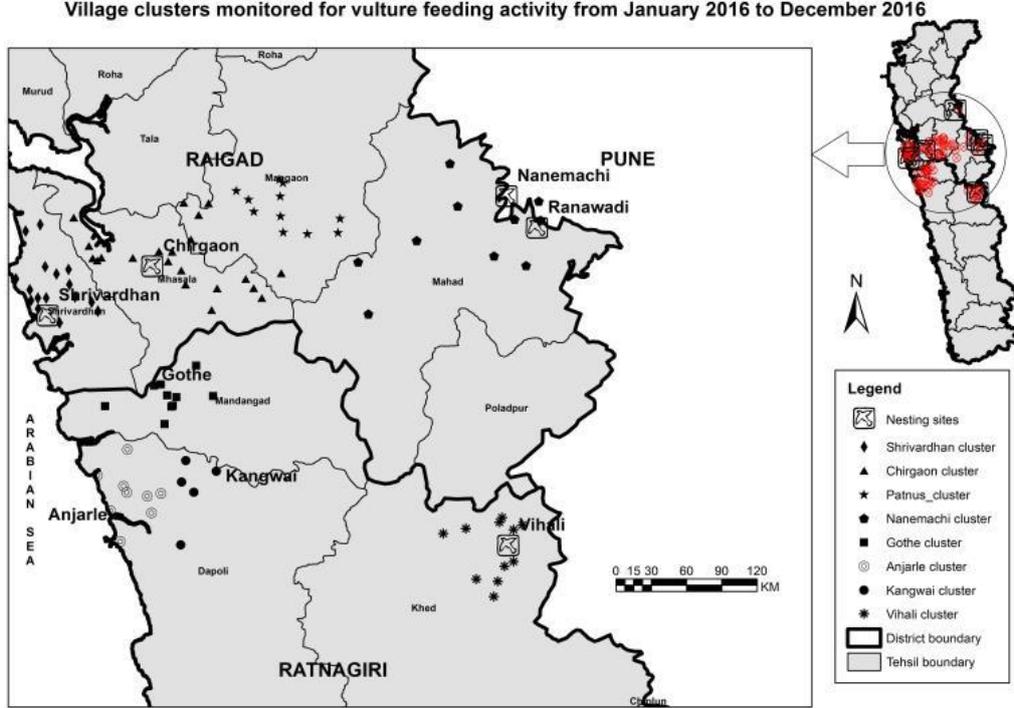
Workshop with the stakeholders, Shrivardhan, 26th December 2016



Workshop with the stakeholders, Khed, 17th March 2017



Annexure VI: Map of monitoring sites



Annexure VII: Awareness generation material used



खालील सुचना पाळा आणि गिधाडांना वाचवा

हे करावे:

- ✓ नारळ बागायतदारांनी गिधाड आणि त्यांच्या घरट्यांचे संरक्षण करावे.
- ✓ गिधाडांवर काही अप्रासंगिक अपघात उदभवला तर त्याची माहिती वन विभाग व सहाद्री निसर्ग मित्र यांना त्वरित कळवावी.
- ✓ गुरांच्या उपचारासाठी मेलॉक्सिकॉम किंवा अन्य औषधे जी गिधाडांसाठी धोक्याची नाहीत अशा औषधांचा वापर करावा.
- ✓ गुरांच्या उपचाराच्या नोंदी सहाद्रीने दिलेल्या नोंदणी पत्रावर कराव्यात.

हे करू नये:

- ✗ औषध विक्रेत्यांनी गुरांच्या उपचारासाठी डायक्लोफेनॅक विकणे.
- ✗ गुरांच्या उपचारासाठी डायक्लोफेनॅक, किटोप्रोफेन आणि अंसिक्लोफेनॅक यांचा वापर.
- ✗ गिधाडांचे घरटे असलेल्या झाडावर चढणे.

संपर्क:
सहाद्री निसर्ग मित्र, चिपळूण: ०२३५५ २५३०३०,
९३२४३९९३४७, ९९३००९३३१७
संकेत स्थळ: www.snmcpn.org
ईमेल: sahyadricpn@gmail.com

दायक्लोफेनॅकमुळे गिधाडांचे मृत्पिंड निकामी होऊन मृत्यू होतो

SAVE THE VULTURE
दायक्लोफेनॅक टाळा
गिधाडे वाचवा

Forest Department, Ratnagiri
सहाद्री निसर्ग मित्र
Rufford Foundation
वन विभाग, महाराष्ट्र शासन