

## CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

<b>Organization Legal Name:</b>	Rural Agency for Social and Technological Advancement
<b>Project Title:</b>	Conservation of the Critically Endangered vultures in Wayanad and the neighbouring areas of Kerala as part of establishing a Vulture Safe Zone in South India.
<b>Date of Report:</b>	
<b>Report Author and Contact Information</b>	Mr. C. Sashikumar

**CEPF Region: Western Ghats (Multiple)**

**CEPF Strategic Direction: 2 - Improve the conservation of globally threatened species of the Western Ghats through systematic conservation planning and action.**

**Grant Amount: \$ 19,998.18**

**Project Dates: 1<sup>st</sup> September 2013 to 31<sup>st</sup> October 2014**

**Implementation Partners for this Project (please explain the level of involvement for each partner):**

1. Kerala Forest and Wildlife Department: Cooperation in conducting field surveys of vultures, sharing vulture sight records collected by the staff.
2. Animal Husbandry Department: Cooperation in implementing the ban of diclofenac and promoting use of alternative veterinary non-steroidal anti-inflammatory drugs (NSAID) like meloxicam etc.
3. Drugs and Pharmacy Association, Kerala, Wayanad district branch: Spreading awareness among medical shop owners on the ban of Diclofenac and stopping illegal sales.

### Conservation Impacts

***Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.***

The Vulture conservation project in Wayanad, Kerala aimed to implement targeted awareness activities and sampling in the Wayanad District, which lies within 100 km radius of the existing vulture habitat in south India (the Mysore-Nilgiri-Wayanad-Sathyamangalam landscape) so as to establish a "South Indian Vulture Safe Zone" (Appendix 1.). Wayanad Wildlife Sanctuary has a small breeding population of vultures. There were no systematic efforts done in the past to monitor the population and to deploy appropriate conservation measures to protect the species. With the CEPF grant, for the first time the population of the Oriental White-rumped Vulture (*Gyps bengalensis*), Indian Long-billed Vulture (*Gyps indicus*) and Red-headed Vulture (*Sarcogyps calvus*) has been assessed in the area. We were also able to bring vulture conservation into the forefront of conservation priorities in the sanctuary, where the earlier priorities were

elephants and tigers. Awareness was created among the local people, cattle owners and medical shop owners on the ban of diclofenac, a non-steroidal anti-inflammatory drug (NSAID) widely used in India as a painkiller for livestock, which was proven to be the major cause of the catastrophic decline of vultures in south Asia. Currently there is a positive awareness among people on the importance of conserving vultures.

It also engaged a network of forest officials, veterinarians, cattle owners and Kuruma and Kattunaikka indigenous communities and to support implementation and monitoring of the ban on veterinary use of diclofenac and other drugs toxic to vultures. The project within a short span of a year has made considerable impact in making the region free of diclofenac. The project helped to the survival of Oriental White-rumped, Indian and Red-headed Vultures. This is the first time the Indian Vulture was recorded in Wayanad WLS in the last two decades.

Activities of the project for the conservation of Indian White-rumped, Red-headed and Indian Long-billed Vultures which are in the category Critically Endangered species of the IUCN are accordance with the overall CEPF goal (Investment Priority 2.2) to avoid species extinction at global level by contributing to the conservation of two critically endangered vulture species, *Gyps bengalensis*, *Gyps indicus* and *Sarcogyps calvus*, two species of which are listed in the species outcomes (p.81) of the Ecosystem Profile with site specific action plans.

***Please summarize the overall results/impact of your project against the expected results detailed in the approved proposal.***

***(Hint:***

**Wayanad and the two neighboring districts of Kerala safe for vultures as part of establishing a Vulture Safe Zone in the Mysore- Nilgiri-Wayanad-Sathyamangalam area of south India**

Availability of diclofenac for veterinary use (30 ml vial) was monitored in the study area through dummy purchase method and we were able to identify one shop in Sulthan Bathery in Wayanad selling the same (Appendix 2.). Based on this, we conducted a series of discussions with all the medical shop owners near to the sanctuary and also conducted mass awareness to the drugowners association of the district (Appendix 3, 4). Due to this, they have agreed not to sell the 30 ml vials of injectable diclofenac. Currently there is more awareness among drug shop owners and forest officials. This was reflected in the second survey in the medical shops (dummy purchase) in which no 30 ml vials of diclofenac were available from any of the medical shops (Appendix 2).

Our field monitoring of vulture population indicates that vultures rarely move out of sanctuary areas. However they are seen flying over fringe human habitats which is a potential risk. Our experience shows that monitoring should be continued at least three years to make the region to declare safe for vultures.

## **Establishment of a network of tribals, cattle owners, veterinarians, drug control department, forest department, academicians and nature conservation institutions and social welfare organizations to join hands in vulture conservation**

The project activities started on 1st September 2013 and we were able to progress substantially during the past one year. One of the major achievements is that, we are able to establish a network among forest staff, veterinary doctors, forest watchers and local people to monitor vulture population in the region and to monitor the ban of veterinary use of diclofenac and other drugs toxic to vultures. Some of the young veterinary doctors have come forward to co-operate with the programme while another segment is still having an opinion that diclofenac is not the major issue in Kerala! (No protocols have been made yet, but contact numbers have been kept for communication. An email discussion group is also being planned.) We regularly interacted with the faculty and students of the Kerala Veterinary and Animal Sciences University (KVASU), Wayanad and as a result, they are fully cooperating in our efforts in eradicating the use of diclofenac. The post graduate students of Veterinary Sciences and M.Sc. Wildlife and Animal sciences of KVASU regularly participated in the programmes organized by the project.

We identified 12 nests of the Oriental White-rumped Vulture in the study area; 8 nests of these were successful (Annexure 5, 6). This means that there is a minimum population of 24 breeding adults and 8 new recruitments in the study period. The breeding activities commenced in the month of October and the last fledgling flew away in the month of July showing a very long breeding period which stretch to the heavy south-west monsoon in the region. We have also established a vulture population monitoring system in the Sanctuary with the participation of forest watchers and field staff. This involves recording all the sighting of vultures in various locations of the sanctuary. This process enabled us to estimate the total population. In December 2013, a synchronized vulture survey was conducted in the sanctuary for two days in which 72 Indian White-rumped Vultures in 24 encounters and 11 Red-headed vultures in 9 encounters and three Indian Long-billed vultures were also recorded during the survey. The encounter rate for White-rumped Vulture is more than 6 birds/ 10 km. Considering the timings of the encounters, the population of the vultures in the Sanctuary could be safely estimated as 35 Oriental White-backed, 5 Red-headed and 2 Indian Long-billed Vultures (Annexure 7.).

### **Food availability for vultures**

During the study period we assessed the food availability for vultures. We recorded the carcasses available in the sanctuary through periodic surveys. Major part of diet was the carcasses of Spotted Deer, Indian Gaur and Indian

Elephant calves; most of these were killed by Tigers (*Panther tigris*) and Wild Dogs (*Cuon alpinus*). Our surveys along the roads in side sanctuary recorded 15 carcasses out of which 13 were of Spotted Deer (*Axis axis*), one Gaur (*Bos gaurus*) and one Elephant (*Elephas maximus*) calf. A fresh carcass of a spotted deer was found completely consumed by vultures within an hour in the Tholpetty range of the sanctuary in March 2014. We also received information from the forest staff on the occurrence of carcasses in the sanctuary (Annexure 8.).

According to the WWF study (2011) the Tiger population has been estimated to 76 individuals inside the sanctuary. This approximately translates to the availability of carcasses at least 5 deer-sized animals, killed in a day in the sanctuary by tigers.

**Hectares Protected: NIL**

**Species Conserved:**

Oriental White-rumped Vulture *Gyps bengalensis* (IUCN STATUS: Critically endangered)

Indian Long-billed Vulture *Gyps indicus* (IUCN STATUS: Critically endangered)

Red-head Vulture *Sarcogyps calvus* (IUCN STATUS: Critically endangered)

The threat from diclofenac was present before the project started. However with regular awareness program we were able to stop the sale of 30ml vials in the medical shops. This is a good achievement towards the conservation of vultures in this habitat. Secondly capacity building of forest watchers and staff to identify vultures, counting numbers in carcasses etc. have been done. This will also help in immediate action by the forest department in case of any critical incidences. Also a baseline information is generated for future course of action.

**Corridors Created: NIL**

***Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.***

The major objective of the project was to make the Wayanad district and neighboring areas safe for vultures. We have made substantial progress in achieving this objective by creating awareness among different stake holders and by taking steps to eliminate the threat of 30 ml vial from the medical shops and its usage by networking with veterinarians (Annexure 9). 30 ml vial was not collected from any of the medical shops in the second survey conducted after the project. Also the veterinary doctors confirmed that they will not prescribe any drugs harmful to vultures. (Annexure 9)

On the monitoring of breeding success, we found that about 33% of the total nests failed at various stages; the actual cause of these nest failures was non known. Heavy rain and winds made severe threat to the successful breeding as we found two nests had fallen down before fledglings successfully moved out.

Prolonged monsoon contrary to the usual patterns in the district upset the field travel to nesting sites for some time during the project period. We have also learned that breeding biology monitoring should be conducted by selecting two three nests for close monitoring for at least three consecutive seasons.

**Were there any unexpected impacts (positive or negative)?**

One of the negative challenge was that the project period coincided with the on-going tense situation in Wayand district regarding the implementation of the Gadgil Panel and Kasthurirangan Committee reports on the Western Ghats and on a false propaganda that Wayanad WLS will be declared as a Tiger Reserve. Due to this, the local people, the print and visual media and the politicians were totally against Forest Department and conservation organisations. Local people set fire to forests at 15 locations in 2013. At Tholpetty Range of Wayanad WLS, fire devastated vast areas of forest near up to one of the vulture nesting site. Conservation-related reports could not find any place in newspapers. Though we had envisaged to take a team of journalists to visit the sanctuary and show them the vulture nesting sites, we had to drop it fearing that it may harm the overall goal of the project. During household survey, project staff were often asked “Is this survey for Kasthurirangan Committee?” We were also stopped from field visit during “high tension” days in the region. Our field surveys however gave good insight on the depth of negative information on conservation implications “injected” to the mind of people of Wayanad by vested interests. This helped us (and also the Forest Department) to strategise future course of action for forest and wildlife conservation in Kerala.

<b>Lessons Learned</b>
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*Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.*

On the specific objectives of the project, dummy purchase of drugs was a good method to know about the availability of diclofenac in the region. We were able to understand that diclofenac in 30 ml packaging, meant to be used for human use, is available in some of the veterinary medicine shops and they were dispensing it as veterinary medicine. We were able to identify such shops in the region. This purchased drug was used as a tool to assess the use of diclofenac in the study area.

We also learned that capacity building of field level staff of the Forest Department in data recording will yield good results as we were able to pool critical information on vulture population through forest watchers from various locations of the sanctuary. A smaller amount of time from an individual contributed for a larger data on vulture population (Annexure 10).

***Project Design Process: (aspects of the project design that contributed to its success/shortcomings)***

The current project design was appropriate to achieve the set objectives of the project and has contributed to the success of the project. This is an error. In the original proposal we planned to do a wall painting. However did do that realizing that there are other methods for effective communication.as most of the people were now looking forward to newer methods of communication.

***Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)***

One of the key factors of success of the project was the active participation and involvement of the Forest Department staff right from Wildlife Warden to the forest watchers. All of the Range Forest Officers were very active during the project period (Annexure 10.). Interim review of CEPF/ATREE TEAM also gave us critical comments and suggested some additional activities (e.g. survey of cattle in the Tribal settlements) which also contributed for overall understanding of the situation.

Decision not to involve media during the peak period of Gadgil-committee related conflicts also helped to implement the project successfully and was able to avoid media “attack” on vulture conservation project as they did it on Tiger conservation projects. However the results of conservation significance of vultures will be published through media once the project is completed (Annexure 15).

***Other lessons learned relevant to conservation community:***

Conservation of vultures in a protected area involve multi-stakeholder participation which include Forest Department, Animal Husbandry Department, cattle owners and general public living close to the vulture habitat. Survival of

vulture population in the study area is very much linked to the status of carnivore population such as Tiger and Wild Dogs within the vulture habitat. So conservation of vultures is possible through conserving a healthy habitat of herbivores and carnivores.

We also found that there is critical communication gap in top to bottom communication systems about Indian forest conservation laws. Authorities failed to convince people on the importance of conservation of the Western Ghats and its wildlife. Delay in providing compensation to victims of man-animal conflict was one of the major reasons behind the movement against forest conservation in Kerala. Life loss, crop damage etc should be compensated adequately and the compensation amount should be increased from time to time based on the value of economic loss to the stake holder like a farmer or cattle owner. Conservation will be possible only with the cooperation of local people.

### ADDITIONAL FUNDING

*Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.*

Donor	Type of Funding*	Amount	Notes
Kerala Forests and wildlife Department	Hall, service of forest staff and their time Meals training		Contribution in kind only
(other NGOs)			
RASTA	Hall and office space for project implementation Service of accounting staff		Contribution in kind only

*\*Additional funding should be reported using the following categories:*

- A** *Project co-financing (Other donors contribute to the direct costs of this CEPF project)*
- B** *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)*
- C** *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

### Sustainability/Replicability

*Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.*

In the beginning the veterinary doctors of the region said that the diclofenac will not be available in Wayanad as they are not prescribing it and it is not a threat to vultures of Wayanad. However we decided to do a dummy purchase of medicines and it proved that the diclofenac on 30 ml vials, marketed as multiple doses for human use, and was available in some of the medical shops. This strategy was a success to underline our assumption and the purchased drugs helped us to convince the people about the threat from diclofenac to vulture conservation (Annexure 2).

Secondly, we encouraged the forest watchers from indigenous communities to monitor nest sites and nesting location and forest guards to record the vulture sightings from various locations at centralized place in each range. This also helped us to collect sufficient data to monitor vulture population(see graph prepared on the data). Since this was directly done by the staff of the forest department, even after completion of the project, the vulture monitoring will continue at least by recording the flock size of vultures at each location. This will bring sustainability to population monitoring. Currently the data is maintained at FD level. In future a web portal can be developed to make it more public. Ebird will be an option.

***Summarize any unplanned sustainability or replicability achieved.***

Though the Drug shop owners (Annexure 2.) were reluctant in the beginning to share details about diclofenac sales, towards the end they came forward collectively to support vulture conservation after we presented the programme in the annual general meeting of the Wayaad chapter of the Kerala Drug Owners Association (Annexure 11.) They invited us to publish a details on the vulture conservation programme, an appeal to stop selling of diclofenac and the Central Government's order on the ban of diclofenac and (Annexure 13, 14.). This level of cooperation was unexpected and gave us a boost to our conservation efforts.

### **Safeguard Policy Assessment**

***Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project***

On the safeguard policy, we have developed GRM poster in local language and affixed in different localities. The indigenous community members have benefitted from the project as many of them especially Kattunaikka members are working as Forest watchers. They have actively participated in the conservation program in field monitoring vultures.( Appendix 12 )



## Performance Tracking Report Addendum

### CEPF Global Targets

**(Enter Grant Term)**

Provide a numerical amount and brief description of the results achieved by your grant.  
Please respond to only those questions that are relevant to your project.

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from 1 <sup>st</sup> September 2013 to 31 <sup>st</sup> October 2014. (Attach annexes if necessary)
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No			Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	No			
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	No			
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.	No			

**If you answered yes to question 5, please complete the following table.**



### **Additional Comments/Recommendations**

We have also learned that breeding biology monitoring should be conducted by selecting two or three nests for close monitoring for at least three consecutive seasons so that the critical information on species biology will be revealed which is very much required for conservation of species. During the project period breeding success of the Indian White-rumped vulture was only 66%. We do not know what are the threat factors affecting the breeding process. To understand the details a three year long study on breeding biology should be conducted.

### **Information Sharing and CEPF Policy**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, [www.cepf.net](http://www.cepf.net), and publicized in our newsletter and other communications.

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