

CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	
Project Title:	Pilot Project for Mitigation of Human Elephant Conflict in North Kanara District, Karnataka India
Date of Report:	31 st July 2011
Report Author and Contact Information	Dr. Prachi Mehta, RH 1, Ratan Park Phase 2, 127/5, Sus Road, Pashan, Pune 411021, Maharashtra, India Email: prachimehta1@gmail.com

CEPF Region:

Western Ghats (Sahyadri -Konkan Corridor)

Strategic Direction:

CEPF Strategic Directions 2: “Improving the Conservation of Globally Threatened Species through Systematic Conservation Planning and Action”

CEPF Investment Priorities 2.2: “Support efforts to conserve critically endangered and endangered species through creation and implementation of species recovery and management plans”.

Grant Amount: \$ 14,800

Project Dates: November 2009 – October 2011

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

1. WRCS: Dr. Prachi Mehta is executive Director at Wildlife Research and Conservation Society (WRCS), an NGO in based at Maharashtra, India. Since this grant was given to Dr. Mehta as an Individual, WRCS extended full support in terms of logistics and official contacts. The permission for carrying out the project was obtained without any problem because WRCS had already worked in Karnataka State on elephant conflict. WRCS offered office space, facility for correspondence, internet and library to the Researcher. Karnataka Forest Department: The project received good support from the Karnataka Forest Department. Senior officers such as PCCF (Wildlife), CCF (Project Elephant, Mysore), CF, Sirsi, Belgaum, and DCF of Yellapur, Dandeli and Haliyal supported and encouraged the project activities and helped in smooth functioning of the project.
2. Local Farmers of the Villages: This project was first of its kind to be implemented in the study area so it was a new experience for the farmers. However, they were largely co-operative and helped in many ways in the implementation of the project.

Conservation Impacts

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

The North Kanara District of Karnataka State represents the northern-most limit of the Asian elephants (CEPF Priority Species) in the Western Ghats. This particular population of elephants is a descendant of an earlier generation that faced severe persecution by local communities during late 19th century (Nair and Gadgil 1978). The North Kanara District has the largest forest cover in the state. Yet the landscape is fragmented with cultivation, plantations and village settlements. Although the intensity of human-elephant conflict in the district is relatively low, it is expected to rise in the near future due to increase in irrigation leading to increased sugarcane cultivation, summer paddy cultivation and encroachment. If elephants and local people have to co-exist, it is important that adverse impact of each other's presence and activities should be minimized. Through this project, we have introduced the concept of Community-based Conflict Management (CBCM) as a plan that empowers the local community in effective guarding methods and in reducing the crop loss. This is the main objective of the project and with sustained efforts, it is hoped that local communities will be able to reduce the crop damage while at the same time support action to protect and conserve wild elephants in the area.

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

The expected outcomes and achievements are mentioned below:

1. The project will obtain consensus of the local community for their involvement in conflict mitigation and cooperation with the Forest Department and attempt to get agreements in this regard.

While working on the project, we were successful in obtaining consensus on working with local communities and Forest Department for implementation of the project. We worked in only those villages where the farmers were willing to co-operate and were interested in experimenting with the suggested measures. We could not get a written agreement in this regard because it was difficult to get the entire village to agree on the project activities.

2. The project will organize community and form groups for patrolling, monitoring and conflict mitigation in cooperation with the Forest Department.

We worked mainly with individual farmers. The dynamics of each village varies greatly with the community composition, cropping pattern and attitudes of the farmers. Most farmers have a complacent attitude towards crop guarding and have a wait-and watch policy for taking any initiative. Though we could not form crop protection committees as we had planned, we worked with smaller groups of farmers.

3. The project will implement various mitigation techniques on an experimental basis to manage human elephant conflict. It will indicate feasible solutions that

are acceptable to the local community and the Forest Department for more vigorous long term implementation.

Through our project, we demonstrated to the village farmers the use of night guarding, early warning measures, and low-cost elephant deterrents such as battery-operated torches, chilly-rope, chilly smoke, chilly curtain and catapult bombs, which were subsequently used by most farmers quite frequently. The Forest Department staff & field staff also purchased the torches and worked with catapult bombs designed by a local farmer who works on the project, to drive away the elephants. The follow-up discussions revealed that the farmers as well as the field staff found the suggested measures to be useful for prevention of crop damage.

4. The project will initiate a monitoring and advance warning protocol for elephant movement.

We introduced the elephant monitoring protocol with farmers and field staff. The farmers have been keeping a detailed record of elephant movement in the area and inform the field staff of elephant presence in the area. The local field staff was regularly obtaining information from the farmers about the whereabouts of the elephants. A map of elephant movement based on the information provided by the field staff and farmers in the area is included in the Final Report (and Appendix 5).

5. The project will attempt to create positive attitude towards elephant conservation in the area by educating all the stakeholders about importance of elephant conservation.

We introduced the concept of Community-based Conflict Management (CBCM) to the Farmers and Forest officers. Through CBCM we have emphasized on change in attitude and responsibility towards conflict mitigation. This concept being new, it will require constant discussions with the stake-holders before they start adopting the practices.

We have distributed posters (Appendix 1) on the project activities in the villages and forest offices for awareness. A hand-book on crop guarding measures has been prepared for farmers and field staff (Appendix 2). Through the project, we arranged a workshop with senior forest officers to discuss the policy issues in conflict mitigation and benefits of CBCM approach (Appendix 3).

We have demonstrated to the farmers that a surefire way to reduce crop loss is by being alert, self-sufficient and diversify their sources of income. A beginning has been made reduce negative impact of elephant presence on people, but will require intensive follow-up actions to realize this outcome.

Based on the project activities, a handbook for crop protection has been published for the field staff and farmers with the support of Forest Department. The handbook will be distributed to farmers and field staff and will be useful a reference book for crop protection.

6. This project will be a pilot project in addressing the issue of human elephant conflict in North Kanara District. Based on the outcome of this project a long-term project will be formulated for conflict mitigation and elephant conservation in this area. The experience gained in this project will help the project proponent to formulate a larger scale action plan for elephant conservation.

The project was conceived as a pilot project to gather insights in to the human-elephant conflict and understand the spatial and temporal pattern of the conflict in the region.

Based on the initial results of the project, we were able to successfully extend the project for longer duration with the support of Asian Elephant Conservation Fund, USFWS. Our

continued activity and presence in the area will certainly help in contributing towards planning for long-term conservation of elephants in the area.

Please provide the following information where relevant:

Hectares Protected: NA

Species Conserved: Asian Elephant

Corridors Created: NA

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

Through this project, we implemented various mitigations measures to test their efficacy. Such a project will require longer-time frame to measure the success or failures as it is totally dependent on variables such as seasons, presence of elephants and co-operation of the farmers.

Were there any unexpected impacts (positive or negative)?

There were no unexpected impacts.

Lessons Learned

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.

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

A project that involves working with local communities should be designed for minimum period of 3 years. Developing the rapport and trust with the local people requires effort and constant presence in the area. A period of 12 to 14 months may not prove enough to demonstrate the success of the project. The short duration and plan of this project was thus a shortcoming, but with incident support from USFWS, this work can be continued in the same area for a longer time.

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

Setting up of demonstration plots of various measures is a good way to test the effectiveness and involve the farmers in the project activities. However, it is crucial that the efforts are continued for a longer period so that success and shortcomings can be evaluated by the farmers themselves and adapted along the way.

Other lessons learned relevant to conservation community:

Success of working with local community is also dependent on the perceptions of the local people. In areas that have human-wildlife conflict, the local people are completely dependent on the Forest Department as they believe that conflict mitigation is the responsibility of the local Forest Department and they themselves have no role to play in this. In response to this, the Forest Department usually carries out either translocations of problem animals or constructs physical barriers around Protected Areas to keep the wildlife from going in human-dominated areas. However, none of these measures have helped in containing the conflict and therefore in such areas, intensity of human-wildlife conflict never appears to reduce.

In case of elephant conflict, co-operative guarding and patrolling by farmers of the village can help in reducing the crop loss. The potential of community guarding has to be first recognized and accepted by the Forest Department. In the community based conflict management model, the role of Forest Department will be to provide training and guidance to the farmers in using low-cost measures and motivating them to carry out self-guarding. This concept has to be popularized and put in practice at the earliest in elephant conflict areas.

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
Asian Elephant Conservation Fund	B	US \$ 38649	http://www.fws.gov/international/DIC/species/ase/asian_elephant.html
Dandeli DCF	B	US \$ 60	Printing of "Handbook of Crop Guarding" Through Deputy Conservator of Forests (DCF) Dandeli Division
Wildlife Research and Conservation Society (WRCS)	A and B	US \$ 10000	Office Space, Facility for internet, library and computers, Communication with forest officers by telephone, fax, email. Printing and Xeroxing of documents and letters at Office.

***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.

Although a lot of work has been carried out on the causes and possible solutions for human-elephant conflict in the country, very few trials have been performed to test the efficacy of the suggested measures in the field. The current project, supported by CEPF-ATREE is first of its kind to be implemented in the northern–most range of elephants in the Western Ghats. Conservation of elephants in this region is vital as this isolated population is vulnerable to retaliatory attacks by people. The ultimate goal of the project is to achieve conservation of elephants in the area by increasing the tolerance of the local community towards elephant presence. We demonstrated the use of various low-cost mitigation measures to the farmers so that they can independently adopt these measures to protect their crops. A few of the measures have worked well and farmers are also interested in adopting them. Working with local communities requires constant presence in the area and interactions on a regular basis. Since this was a pilot project for 14 months, we applied to Asian Elephant Conservation Fund (ANCF), USFWS for continuing the project.

Our proposal was approved by USFWS and we are now continuing our efforts on community involvement in the same area. This has benefitted in maintaining the sustainability of the project.

Summarize any unplanned sustainability or replicability achieved.

Based on the results of the current CEPF project, AECF provided the support for further sustainability of the project. This has helped in sustaining the project activities and strengthening the efforts towards elephant conservation.

While working on conflict mitigation, Mr. Ranjit Sahoo, an M.Sc student from “Ecology and Environment Science” course in Pondicherry University showed interest in working on elephant ecology for his dissertation. Mr. Sahoo worked on identification of individual elephants based on the visual as well as photographic method (Appendix 4. Poster of the work). He has identified 23 individuals which consist of 39 % of adults in a short duration of 2 months. We shall be continuing this work in the next phase as it will be useful to determine the population trend of elephants in the area.

The outputs of this project will be submitted to MIKE and Project Elephant for the records of the both agencies.

Safeguard Policy Assessment

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

. 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 July 1, 2007 to June 30, 2008. (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.	Yes	273700 ha	273700 ha	Conservation efforts on about 45 elephants in the area. Project activities were undertaken in Haliyal Reserved Forests with an area of 2737 km ²
4. Did your project effectively introduce or	Yes	Approximately 1500 ha	Approximately 1500	Project activities were carried out in Haliyal, Yellapur and Dandeli

strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.			ha	Division of North Kanara District. We worked in six villages initially but later farmers from other villages also participated
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.	Yes	Three local communities		The local farmers are now willing to experiment with simple low cost crop guarding techniques.

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

Total	2	3	1				1									4	4	4	
<p>If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit: Apart from the local communities such as Gaolis, Marathas and Siddis our project also provided training and guidance to the forest department field staff in conflict management. Our project local farmers in management of elephant conflict by using low-cost methods of crop guarding, cultivating income generating crops and introducing sourcing of additional income to off-set crop damage losses.</p>																			

Additional Comments/Recommendations

Since human-elephant conflict intensity is not very high in North Kanara District, the Forest Department must consider implementing the Community-based conflict management approach. So far the Forest Department has taken the responsibility of conflict mitigation and they are not able to contain the problem because of limited resources and manpower. Instead, if each village takes the task of guarding their own fields, there will be reduced crop loss in the area.

The Forest Department must not invest more funds in trenches and solar fences as they become dysfunctional in short time. If these measures have to be taken up, it should be done with full support of the local villagers and assurance that they will carry out required maintenance of the structures.

The Forest Department can allocate funds for extension and trainings of field staff and local farmers in taking up the suggested crop guarding measures, and in monitoring and tracking of elephants. During the crop raiding season, the field staff should inform the farmers of elephant presence around their area so that they can be prepared for crop guarding.

The Sahyadri –Konkan region is an important region for Asian elephant conservation. This region represents the northern-most limit of elephants in the Western Ghats region. The elephant population is small and conflict intensity is relatively lower, therefore it is possible to introduce the concept of community-based conflict mitigation in this region. Future work on conflict mitigation in this region must include Belgaum and Haliyal Divisions also.

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.ceph.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

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Appendices:

Appendix 1. Poster on Project Activities

Appendix 2 Hand-book on crop guarding measures

Appendix 3. Report of workshops with different stakeholders as part of the project giving details.

Appendix 4. Poster of MSc project funded by the grant
Appendix 5. A map of elephant movement .
Appendix 6: Detailed Stand-alone Project Report.