

Final Evaluation Report

Your Details	
Full Name	Adane Tsegaye
Project Title	Ensuring sustainable co-existence between local communities and elephants around Chebra Curchura National Park, Ethiopia.
Application ID	39147-2
Date of this Report	3/06/2024

1. 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 Identify community segments those are more vulnerable to human-elephant conflicts.				The vulnerability to human-elephant conflict among the different segments of local communities and villagers showed significant difference between villages, and among the community segments, based on proximity to the park boundary and the type of their major livelihoods. Indigenous people such as Menja, Bach and Tsara communities who earn their livelihood by collecting and selling wild honey, spices and root plants from the national park/forests and live in forest areas near to the park boundary were found to be more vulnerable to the conflict compared to people living in the villages. Among the 20 park adjacent villages, three (Chebra, Seri and Yora) experienced severe human-elephant conflicts due their close proximity to the park boundary and the absence of buffer zone and barriers such as big mountains between the villages and the park. As a responsible body to collect firewood for coking and looking after domestic animals, women were found to be more vulnerable to the conflict than men.
To Identify the presence or absence of human-elephant conflicts in each village, and its economic costs.				Similar to the previous study the conflict showed a significant difference between the different park adjacent villages around the park. Among the 20 Park adjacent villages only three villages (Chebra, Seri and Yora) experienced severe human-elephant conflicts due their close proximity to the park boundary.
To Conduct environmental education and awareness raising				Awareness creation/raising to local communities on issues such as; values and sustainable utilisation of natural resources was properly conducted in the

<p>programs together with the community leaders from the elementary school level to community leaders and local administrators.</p>			<p>20 park adjacent villages twice during the project time (one in each season) and environmental education from primary schools level to community leaders and local administrators were also successfully given in the 20 park adjacent villages in two turn and in 28 primary and secondary schools with participation of community leaders and local administrators in the 20 villages.</p>
<p>To Conducting practical survey on the spatial and temporal patterns of human-elephant conflicts.</p>			<p>Similar to the result of the data collected via interview. Our practical survey on the spatial and temporal patterns of human-elephant conflicts showed that out of the total 20 park adjacent villages only three (Chebra, Seri and Yora) experienced severe human-elephant conflicts due their close proximity to the park boundary.</p>
<p>To Conduct evaluation workshops to access the impacts of the implanted project during phase I and II based on the achievement of stated objectives (measurable behavioural changes on the wildlife and target population).</p>			<p>Both assessment phase I and II conducted to evaluate the impact of the project showed that illegal activities such as number of castles that came to the park for grazing, Number of illegal firewood collectors, and forest fire incidence during the dry and wet seasons showed 15% decline on average compared to the baseline data. However, the number of elephants poached increased from the baseline one to three during the project time this may be due to the conducive condition created for the poachers due to the newly constructed internal gravel road from western to eastern part of the park in the area that was inaccessible both for poachers and the park staff.</p>

<p>To compare the effectiveness of different techniques that local communities implemented as human-elephant conflict mitigation measures and record if there are seasonal variations.</p>			<p>We have implemented different human-elephant conflict mitigation techniques during both dry and wet seasons and recorded if there are seasonal variations. Chilli fence was constructed at a demonstration site to close the corridor between Seri village and the park boundary and elephants didn't cross the fence during the dry season, but they had crossed the fence two times during the wet season. This may be due to the chilli being washed away by heavy rain during wet season that had reduced its effectiveness. Honeybee fence was the second effective techniques there was 300m fence constructed across the shortest corridor between Chebera village and the park the elephants were crossed the fence only three times one during the dry season and twice during the wet season. Other techniques that used to be implemented by the local communities such as sound noise including the sound of barking dog and hammering materials made of metal, guarding , fire smoking and smoking chilly and elephant dung were found to be ineffective, the local communities trust in the implementation of these different traditional mitigation techniques is also generally weak. The local communities were also less positive towards the effectiveness of most of the traditional techniques in chasing elephants away from their farmlands. They believed that elephants had already adapted and that is why they do not respond to most of these techniques.</p>
<p>To conduct practical trainings on implementation of different human-elephant conflict mitigation techniques.</p>			<p>Practical training was given on how to construct chilli and honey beehive fences for 38 farmers that share immediate border with the national park from Chebera, Seri and Yora villages where the human-elephant conflict is at the apex</p>
<p>Implement a combination of the conflict mitigation</p>			<p>As already mentioned, we have successfully implemented a combination of the conflict mitigation techniques in</p>

<p>techniques on elephant corridors and farmlands.</p>				<p>the elephant corridors and farmlands in our demonstration site in the three villages and compared their effectiveness in chasing elephants from the farmlands during the project time.</p>
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2. Describe the three most important outcomes of your project.

- a) Identification of the effective human-elephant conflict mitigation/prevention techniques mainly chilli and honeybee hive fences, which can save the farmers time and resources wasted by implementing other techniques that were used to implement by the local communities and now found to be ineffective.
- b) The farmers are capacitated through practical training on how to construct chilli and honey beehive fences so that they can implement the technics independently to prevent/minimise the conflict.
- c) Awareness creation/raising to local communities on issues such as values and sustainable utilisation of natural resources and environmental educations from primary schools level to community leaders and local administrators was found to be the most effective method to reduce illegal activities, included uncontrolled resource extrications. Thus, it has to be escalated for better protection of the park.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

N/A

4. Describe the involvement of local communities and how they have benefited from the project.

All activities were conducted through full participation of the local communities. They were practically involved in identification of effective human-elephant conflict prevention and mitigation measures through practical training, implementation and data recording in the demonstration sites. They had also practised the proper implementation of the techniques that has been identified being effective in chasing elephants from their farmlands such as chilli and honeybee hive fence constructions. Awareness creation/raising to local communities around the park and schools on issues such as values and sustainable utilisation of natural resources and environmental education from primary schools level to community leaders and local administrators were also conducted with full participation of the local communities, community leaders and administrators.

5. Are there any plans to continue this work?

Yes, we have a plan to continue our work to escalate the impacts of community education in minimising the illegal activities and uncontrolled extraction of resources from the park, escalating demonstration and trainings on management of human-elephant conflict mitigation measures that are identified to be effective in particular and conservation of natural resources in general. Also, the possibility of opening the elephants previous corridor between the park and Kaffa Biosphere reserve which was the elephants wet season home range and currently blocked by illegal settlements which is vital in the management and conservation of the wildlife resources of the park and ensure sustainable co-existence between the wildlife and the local communities around the park.

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

The result of this project was already communicated to all concerned and responsible local regional and national governmental and non-governmental organisations including the local administrators, the national park and local communities on the regional and zonal level task forces quarterly evaluation workshop held in Addis Ababa and Ameya on January 2 and 14 2023 respectively. We also published a manuscript entitled Local's attitude towards African elephant conservation in and around Chebera Churchura National Park, Ethiopia on PLOS ONE journal using the findings of both projects supported by Rufford Small Grant. We have also prepared and submitted another manuscript to Journal of Human Dimension Wildlife to be published as a peer-reviewed journal to make it available for the international and scientific communities.

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

The important next step should be preparation for another important next work that can sustain and improve the better conditions created both in human-elephant conflict mitigation/prevention and reducing the existing pressure on the natural resources of the park by escalating the fruitful experience gained through awareness creation and environmental education, securing the elephants previous corridor and ensuring sustainable co-existence between the elephants and local communities.

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

The Rufford Foundation logo was used during presentations/PPs presented in training and workshops conducted with local communities and stakeholders at national, regional and local level. Awareness about The Rufford Foundation was also made for stakeholders at all levels that were participated in the project. It is also acknowledged on the manuscripts prepared for publications on international journals and different websites.

9. Provide a full list of all the members of your team and their role in the project.

Mr. Adane Tsegaye (the team leader)

Mr. Teshale Ayemeta (Team member)

Afework Bekle (Dr: Professor).

One of the team member **Mr Teshale Ayemeta** is my colleagues working at Chebra Churchura National Park as senior experts. He is a biologist in his field of specialization and has 10 years of work experience in the park he worked as a data collector, trainer, data analyst and interpreter etc.

Professor Afework Bekele is my advisor, instructor and a well-known international researcher at Addis Ababa University Department of Zoological Sciences, Ethiopia. (Supervisor, Data analysis, Co Author, trainer etc).

10. Any other comments?





Samsung Quad Camera
Shot with my Galaxy M12



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Shot with my Galaxy M12

