

Final Evaluation Report

Your Details	
Full Name	Iris Emefa Kutorkor Niiikwei
Project Title	Conservation of the Critically Endangered Endemic Talbotiella gentii in Eastern Ghana
Application ID	33910-1
Date of this Report	August 2023

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
Population status of the species				We conducted an intensive survey on the species in its habitat. We recorded 78 individuals (standing populations) of the species during our trips to the site. This excluded juveniles, which are less than 5 years old. Forty-three individuals (standing populations) of <i>T. gentii</i> were in five groups, with seedlings growing under them, with the exception of about eight single standings. The group standings of the species had a closed canopy with an average height of about 5 m. It was observed that the species occurred below 800 ft. Again, the recorded number of species were recorded in a diameter stretch of about 300m ² .
Habitat threats (anthropogenic activities)				From our study, habitat loss through tree felling, wildfires and farming were the major threats to the survival of the species. Wildfires and farming are the leading threats to the survival of the species. It happens that the habitat of the species also has been leased to EcoPlanet Bamboo. EcoPlanet Bamboo is operating a Public Private Partnership (PPP) with the Government of Ghana, through the Ghana Forestry Commission. At end of 2022, a total of 1,200 ha of bamboo has been planted. They intend to embark on restoration of native and endemic species, which might include <i>T. gentii</i> . Improper placement and maintenance of bamboo increases fire hazard, therefore there are speculations that this might escalate the rate of the species going extinct in the Bandai Hills Forest Reserve.
Educational outreach and Awareness creation				Community education and awareness creation was conducted in the major town fringing the reserve, Abrewapong.

			<p>It is the closest town to the remnants population of <i>T. gentii</i>'s habitat. We engaged all factions in the community starting from elders to students. It was realised that the older generation that is 45 years and above have a bit of knowledge about the species and know it is prohibited by Forestry Commission to even cut it. However, we realised that the young generation, which is 19 years, and below has no knowledge about the species particularly the students in primary schools. This pose dangers for the future conservation of the species. However, they were educated on the importance of trees including the species and its conservation. The middle generation had a mixed feeling. Their dilemma was that they are not interested in conservation but farming. We encountered three who have intentionally planted some of the species over the years in the farms and constantly doing so to ensure the survival of the species. About 200 exercise books were donated to the school in Abrewapong.</p>
Habitat restoration			<p>We planted about 800 nursed seedlings in the June/July 2022 rainy season. They were interplant with plantain suckers, which give water to the planted <i>T. gentii</i> species during tree season. Again, we have nursed and planted about 1200 seedlings of <i>T. gentii</i>, 500 seedlings of Prekese (<i>Tetrapleura tetraptera</i>) and 500 seedlings of Ofram (<i>Terminalia superba</i>) in July.</p>
Training Workshop			<p>Ten people were trained on the collection of seeds of <i>T. gentii</i> and proper measures to undertake during nursery. The same group were trained in proper agriculture practices to ensure the survival of the species when planted. One of the best agriculture practices was inter planting the seedlings of <i>T. gentii</i> from nursing with plantain. This practice ensures continues supply of water in dry seasons.</p>

2. Describe the three most important outcomes of your project.

a). During this project we recorded 78 individuals (standing populations) of the species during our trips to the site excluding juveniles. This gives a better comprehension of the species conservation status and its habitat and a proof that it is critically endangered. This revelation of the remnants population is very crucial as its conservation of eminent importance. This project has discovered one of the few places which habitat is endangered harbouring significant population of the rare and Critically Endangered *T. gentii*.

b). Again, through our community education programmes, we have been able to mobilise community support towards the conservation of trees in the Abrewapong. Not just that, we have the support of the traditional leaders to conserve the Critically Endangered *T. gentii*. In addition, about 200 local people have been informed through the awareness programmes of the importance of trees including *T. gentii*. This number include student pupils and is very important for future conservation purposes. This creates security for the future.

c). As part of this project, we embarked on a restoration activity to restore the degraded habitat of *T. gentii* in Bandai Hills Forest Reserve. This encompasses a land of 3 ha, and we consider it a top priority in conserving *T. gentii*. This restoration exercise was done by integrating plantain suckers to constantly provide water even in dry seasons. This is considered a best practice as a 'modified taungya system' to saving the species from extinction. This also gives an opportunity to a farmer to farm while taking care of the planted species.

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

Fortunately, we did not encounter any major difficulty during the project. However, we encountered a minor issue, which had to do with the collapse of a bridge, which is used to cross over the main river to Abrewapong and the habitat of *T. gentii*. It was until its construction that we started the full project. This delayed the time of commence of the project.

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

We believe this project could not have been successful without the local communities. First, traditional leaders were actively involved in introducing the project to the communities. We engaged in a series of discussions with various leaders, farmers and students in communities to explore ways to better conserve the species.

Second, during the field survey, we had two people from the local communities who served as guides during the entire time in Bandai Hills Forest Reserve. Again, 10 local people were involved in the collection of seeds and planting seedlings. They were remunerated from the project funds. Again, we purchased 1000 seedlings of *T. gentii* from a farmer who is a local supplier, providing him with income from the project.

Third, we purchase all our food and water, which were consumed during the entire duration of the project from local vendors that ensure their involvement and benefited them financially.

Last, students from schools in local communities benefited academically through the donation of exercise books.

5. Are there any plans to continue this work?

Yes.

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

We have already shared the results from this project with traditional leaders in local communities. Again, we intend to share the technical reports to the Forest Service Division of Forestry Commission of Ghana.

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

- Monitor the planted trees to ensure their survival for a long-term conservation and extending the restoration to other degraded areas in Bandai Hills Forest Reserve.
- Map other areas in Ghana where the species do occur to estimate *T. gentii*'s nationwide population status and distribution.
- Increase the capacity and skills of local people in communities through alternative livelihood as an alternative income source to reduce their dependency on resources from the reserve.

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?

Yes, the Rufford logo was used in the following materials: PowerPoint presentations during the workshop and conservation outreaches. Rufford Foundation was also acknowledged at all times during educational programmes.

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

Iris Emefa Kutorkor NiiKwei (Project lead) led the full execution of the project, implemented plans, and handled funds. She also liaised with local communities for their cooperation for the success of the project. She provided project updates, writing and submission of project report.

Mr. Elvis Antwi-Baffour (Member) He led the team to collect and assess threats the species face in its habitat. In addition, he co-led in social survey and assisted in the organization of conservation education activities.

Mr. Prince Adu-Tutu (member) He was responsible for co-providing project updates, writing and submission of project report. He co-led the community education and awareness creation campaign of this project.

Miss. Veronica Dandzo-Adzagudu (Member) Helped develop distributional maps for the species of the project.

Frank (Local person) he assisted with meeting with traditional leaders. He was one of the locals who guided and aided in navigating the reserve.

10. Any other comments?

We like to extend gratitude to The Rufford Foundation for supporting this project for species conservation. Your assistance has been vital in safeguarding remnants population of *T. gentii* in its habitat.

Pictures below:



Figure 1: Wildfire outbreak alleged to be set by Fulani herdsmen.



Figure 2: Mr Frank and colleague returning from safeguarding *T. gentii* population from fire.



Figure 3: Local people putting out a fire outbreak in the habitat of *T. gentii*.



Figure 4: The aftermath of an outbreak of wildfire.



Figure 5: Firewood gathered to be fetched to the local community.



Figure 6: *Tetrapleura tetraptera* in nursery.



Figure 7: Nursed *T. gentii* still in nursery.



Figure 8: *T. gentii* seedlings in nursery.



Figure 9: *Terminalia superba* seedlings in nursery.