Final Evaluation Report

Your Details	
Full Name	Letkhosei Baite
Project Title	Forest Inventory and Establishing Nurseries for Community Based Restoration of a River Catchment in North-East India
Application ID	38209-1
Date of this Report	26 June 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
Identifying sites for restoration			Fully achieved	We used a time-series of remotely sensed images to identify areas that have been degraded over the years in the catchment area of Tuivang River. We used Landsat and Sentinel-2 images for identifying degraded and barren areas. We developed a Forest Degradation Map and a Barren Area Map for the study area.
Documenting the native floristic diversity through Field Surveys		Partially Achieved		Our initial plan was to conduct surveys in all the eight degradation classes identified in activity 1 and record the species diversity in these patches. However, due to the ethnic violence in the region, we could not conduct surveys in all different categories as planned. We had a total of 35 plots. We recorded 63 tree species including three species of bamboo and one cane species.
Document traditional knowledge of tree species and identify plants for restoration through Interview Surveys			Fully achieved	We interviewed 40 villagers in nine villages within the study area. We documented tree species that have become rare and locally extinct due to over-exploitation, and tree species that are of high economic value.
Conducting awareness and education programs for village			Fully achieved	We conducted six meetings in six villages in the catchment area. 78 people attended these meetings. 28 female members

communities				and 35 students participated in these programmes.
Establishing nursery and collection of seedlings from forests			Fully achieved	We raised around 2000 seedlings of different plant species in the nurseries.
Monitoring and maintaining of nursery and seedling			Fully achieved	More than 80% of the seedlings survived until the planting period.
Experimental Planting of the nursery raised seedlings			Fully achieved	Experimental planting was done in a 0.3 ha barren area. We used 600 saplings of nine different species.

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

a) 0.3 ha area was restored. 600 saplings of nine native species were planted. Village headman agreed to declare the restored site as a protected site.

b) Around 78 people attended our awareness and education programme. We created awareness about the importance of forests in the catchment areas and the need to protect these forests among 28 female members and 35 students participated through our programmes.

c) We developed a detailed Forest Degradation Map and documented 63 tree species including three species of bamboo and one cane species in the landscape.

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

This project was initiated in October 2022. However, in May 2023 the state of Manipur witnessed an eruption of ethnic violence, so we could not continue the work in the area until September 2023. We resumed the work in September 2023; however, the progress was slow due to continued events of violence in Manipur. We avoided all travel outside the project site during this period.

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

Local communities were involved throughout this project. The PI, Letkhosie Baite, and one of the team members, Dr. James Haokip, are from the local Kooki tribe. Field assistant of the project belonged to the local tribal community. Local

communities were interviewed, and their opinions were considered while selecting species for nursery raising and for planting. Free, prior and informed consents were obtained from the village head and individuals while conducting interview surveys and group meetings. Local people acted as labour and volunteers while preparing nursery beds and for planting. The site for restoration was selected in consultation with village headman and his council members. Local people involved actively in preparing site for planting, digging planting holes, and planting of saplings. They also have agreed to protect and maintain the plantation.

5. Are there any plans to continue this work?

We would like to continue the work in the area. The nurseries can be maintained to provide saplings to village communities to plant in their home gardens and in other degraded sites. We can extend the plantation into other barren areas and restore more such patches in future.

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

We will share our work through posts on social media and through popular articles in news media.

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

The work received positive feedback from local communities. There was an increased awareness among the local communities on the importance of forests and rivers. They involved actively in restoration planting and have come forward to protect and conserve plantations and willing to restore other barren areas in their surroundings. This is a great opportunity for restoring degraded forests and we should continue working in the area. Maintaining nurseries and providing economically beneficial saplings to local communities could help in achieving greater conservation success in future.

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?

We mentioned the source of funding for the project in every meeting that we conducted. The name of The Rufford Foundation was printed on the education and awareness materials that were distributed to the local people. The Rufford Foundation name and logo were shown on the signboard that was installed at the restoration site.

Dr. James Haokip and other field team with the village volunteers at the restoration site.

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

Letkhosei Baite – Project Lead. Conducted vegetation surveys, Interviews with local communities, conducted education and awareness meetings, established and maintained nurseries.

Rajat Nayak – Team member. Performed remote sensing analysis, generated forest degradation and barren area maps, trained the researcher and field assistant in conducting vegetation surveys, helped with preparing questionnaire surveys, preparing education and awareness material, and in data analysis.

James Haokip – Team member. Interacted with village heads and local communities, trained the field team in conducting interview surveys, conducted education and awareness meetings, played major role in finalising the site for restoration and coordinating the planting activity.

Ngamsei Philip – Team member. He was the field assistant for the project. Conducted vegetation surveys, Interviews with local communities, helped with preparing nursery beds and maintaining nurseries, helped in transplanting and conducting planting.

10. Any other comments?