Project Update: May 2023

Project activities conducted from March to May 2023

March 2023- Project launching

After rescheduling our project plan timetable to accommodate administration and funding processes, our research officially commenced in March 2023. The first step involved applying for research permits to work in the Uluguru Forest Mountains. We obtained the permit from the Tanzania Forest Fund and the Morogoro Municipal District Council, allowing us to collaborate with the village communities in the area.

After obtaining the permit, the project team started to organise meetings with key stakeholders including Sokoine University of Agriculture, Tanzania Forest Service, and the village councillors. During these meetings, we thoroughly explained the project's objectives, goals, and the planned activities that would be carried out throughout the project's duration. It was essential to engage these stakeholders and ensure their understanding and support for the project (Figure 1&2).

By taking these initial steps, we established a solid foundation for the project, ensuring that all necessary permits were obtained, and key stakeholders were informed and involved. This laid the groundwork for the successful execution of the planned activities in the Uluguru Forest Mountains.





Figure 1. Visiting Uluguru Forest Nature Reserve. Figure 2. Visiting village officials.

April to May 2023 -Forest field work survey

After the successful project launch and dissemination of the itinerary to all stakeholders, the project team proceeded with field work in the forests of the Uluguru mountains. The primary objective was to assess the current conditions of the forests and observe the various human activities and disturbances present in the area (Figure 3&4).

The team focused on documenting human activities conducted in forest areas which have significant impacts on the forest ecosystem. By closely observing and recording these activities, the team aimed to understand their extent and consequences to the ecosystem. During fieldwork, the project team also collected GPS coordinates of

areas experiencing human disturbances and degradation. These coordinates will serve as valuable data points for future analysis and planning.

In addition to data collection, the team engaged in informal discussions with stakeholders surrounding the Uluguru mountain forest. These discussions centred around the existing challenges of forest protection and conservation in the face of population growth and high unemployment rates. By listening to the stakeholders' views and concerns, the project team aimed to gain insights and identify potential solutions for addressing these challenges.

Through fieldwork activities such as assessments, data collection, and stakeholder discussions, the project team acquired valuable information and first hand observations regarding the current state of the Uluguru mountain forests. These findings will contribute to developing effective strategies for forest protection and conservation in the context of the local challenges faced.



Figure 3. Project team surveying the forest. Figure 4. Forest survey with Forest Ranger.

Preliminary findings

The Uluguru Mountain Forest plays a vital and critical role in conserving the diverse plant and animal species within the region. During our forest survey, we were able to observe the significant role of this forest in conservation of biodiversity. Despite the limited elevational gradient covered, we were able to identify a wide range of plant and bird species, underscoring the forest's ecological importance.

However, it is crucial to acknowledge the challenges faced by the forest due to its close proximity to the neighbouring villages. Various anthropogenic activities that occur within this vicinity pose a serious threat to forest health and its ability to provide essential ecosystem services. Our survey revealed several concerning activities that contribute to this degradation as explained here after.



Figure 5 & 6: The view of the Uluguru Mountain.

Human activities observed in the project area

During the preliminary field survey, our team observed various human activities taking place within the forest reserve, including charcoal making and tree cutting for poles and timbers (Figure 8,9&10). These activities pose a significant threat to the structural integrity and conservation of biodiversity in the area. Additionally, during our meeting with the management of the Uluguru Mountain Forest Nature Reserve, they presented compelling evidence of human encroachment within the forest. This evidence included confiscated bicycles and motorbikes that were used for transporting illegal timber and poles from the forest.



Figure 7. Bicycles used for illegal activities. **Figure 8.** Collected timber due to illegal lumbering.



Figure 9. Charcoal kiln construction. Figure 10. A fresh charcoal kiln.

Ongoing project activities and future plan

The project team is preparing for upcoming activities focused on conservation education and awareness. Workshops will be conducted in various villages, targeting key stakeholders such as village environmental committees, villagers, students and others. These workshops aim to raise awareness about the importance of preserving the Uluguru Mountain Forest and its biodiversity, highlighting the negative impacts of activities like charcoal making and illegal timber extraction. Engaging with local communities and students will foster collaboration and create advocates for sustainable practices. Following the workshops, restoration action activities, including tree planting in the forest and nearby schools, will be implemented to restore the ecosystem and foster a sense of responsibility towards the environment. These activities aim to ensure the long-term sustainability and preservation of the Uluguru Mountain Forest's invaluable ecosystem services.