



ATSAF Academy
Academy for International Agricultural Research for Development

Junior Scientists Tandems

Final Report

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Start and end date of stay at IARC/ GRI: Aug 2023 – Jan 2024

**Title: Analysing Charcoal Value Chains in the Changing Landscapes of Turkana,
NW-Kenya**

Funded by the German Federal Ministry for Economic Cooperation and Development (BMZ)



Final report for my research exploration scholarship as a junior scientist at Alliance of Bioversity International and CIAT in Kenya (August 2023- January 2024)

Preamble

I am pleased and grateful to report on my career exploration at the Alliance of Bioversity International and CIAT (ABC) Kenya. The Council for Tropical and Subtropical Agriculture Research ATSAF Academy, GIZ, and ABC supported me through the Junior Scientists Tandems (JST) fellowship. I studied Integrated Natural Resource Management at the Albrecht Daniel Thaer Institute of Agricultural and Horticultural Sciences of the Humboldt University in Berlin, Germany. The JST program allowed me to also collect data for my master's thesis and my official scholarship period started in August 2023 and ended in January 2024. The objective of the scholarship was first to gain experience working in a CGAIR+ environment and second to facilitate data collection for my Master's thesis requirement on the topic "*Analysing Charcoal Value Chains in the Changing Landscapes of Turkana, NW-Kenya*".

Arrival in Nairobi

After months of planning, it was time to embark on a journey to Kenya. I traveled to Nairobi at the end of July 2023. On my first day, I was welcomed and introduced to all the staff, given a workstation and an official gate pass card to access the ABC offices at the ICIPE premises in Kasarani, Nairobi Kenya. I was then introduced to the students who were also doing their research in different fields of study and institutions. I was also introduced to the organizational procedures and protocols.

Over the next few weeks, I attended many informative meetings, including staff coffee meetings on Thursdays, where I also practiced public speaking and facilitation skills. I also received training on blockchain technologies in preparation for the fieldwork phase of the activities of the project 'Restoration Challenge Grant Platform for smallholders and communities, with Blockchain-Enabled Crowdfunding (my Farm Trees)', to which my internship and data collection was attached.

I also obtained all the necessary approvals to conduct research in Kenya, including ethical approval from Humboldt University, approval from the Kenya National Commission for Science, Technology, and Innovation (NACOSTI), a letter from the County Commissioner, and approval from the Ministry of Education in Turkana County to conduct research in Turkana. These were necessary to meet the requirement to conduct research in Kenya.

About the ABC Project

The ABC project was designed to facilitate and increase support for smallholder and rural community engagement and investment in restoration. The platform uses mobile phone technology and payment transfer services to provide small grants/payments for smallholder, community, and school-led restoration work - mainly tree planting - matched by co-investment.

Mobile technology allows for efficient and effective verification of work and transfer of payments. Another key innovative focus of the platform was the integration of blockchain technology across the restoration value chain to provide transparency, build trust, facilitate real-time monitoring, evaluation, and verification, and support the mobilization of funds for restoration. From the selection of appropriate species, seed procurement, and seedling propagation, to the planting and maintenance of trees and the transfer of payments, each transaction will be marked by a unique, traceable, unalterable, and verifiable blockchain.

The project focuses on improving and expanding access to the restoration market - both for restoration investors and for rural communities and smallholders in areas where restoration needs and opportunities are high. If successful, the approach and underlying technology will help shift land use incentives towards restoration, with potentially far-reaching and positive impacts that can be replicated, scaled up, and incorporated into other restoration initiatives.

Part of my work was focused on training village scouts and the community in the use of the mobile phones provided by the Platform, as well as the mobile phones connected to the Platform:

- General phone skills, charging procedures, use of cellular service vs. wifi, accessing the Platform mobile application, use/access to the built-in camera and stored photos, and managing restoration photos to stay within the phone's memory limits,
- For Platform-provided mobile phones with pre-paid minutes, training on permitted and non-permitted uses and how to stay within pre-paid mobile data limits,
- -Training on how to electrically charge mobile phones and, for communities without reliable electricity, training on how to access Platform-provided support (solar electric charging station(s)) that will be made available,
- Training on where and how to access technical support in case of difficulties in using the platform-provided or platform-connected mobile phones and myFarm tool applications.

Visiting to Turkana

Although the ABC project was implemented in three counties (Laikipia, Siaya, and Turkana) in Kenya, my focus as an intern was only on Turkana County where I also wanted to collect data for my thesis. Weeks of extensive planning and discussion led to our first field visit to Turkana, the trip was arranged to facilitate the introduction of different actors involved in the project.



Fig 1: Meeting with the Agro-Pastoralist community representatives in Kalemunyang

Three locations in Loima Sub-county, alongside Lodwar (the county capital of Turkana County), were the target of the first visit. These were Ata-Lokamusio in the Lorengippi/Lokiriama ward, Kabulokor, and Kalemunyang village in the Lobei/Kotaruk ward, all in the Loima sub-county.



Fig 2: Introduction to Agro-Pastoralist community representatives in Kabulokor

Our visit to three project sites in Turkana was essential in creating an opportunity to introduce my study topic and also seek the community approval to work and study with the community members in Loima Sub-County. It also allows for the exchanges of contacts and details about different factors to consider when planning for project visits and data collection activities. I also got a chance to coordinate with other master students attached to other ABC projects within the same localities. We planned on how to pool resources together in terms of transportation and material to be used. These also included the resources and venues to be used in the photovoice exercise and participatory video-making part.

Second Visit and stay in Turkana County

My second trip to Turkana unlike the first one was planned for a longer stay, I moved between Lodwar and specific project sites for months. The tasks were to kick-start the project activities, to represent ABC in the stakeholders' meeting which took place in Lodwar, and to start my data collection which involved recruiting and training photovoice participants from the agro-pastoralists and pastoralist communities in Turkana.



Fig 3 and 4: Stakeholders meeting at Stegra Hotel in Lodwar, Turkana.

Data Collection

I collected data for my master's thesis from October to December, I prepared my data collection guide then revised it according to the discussions and feedback from the first visit tests, and aligned it with the overall ABC restoration project. I worked with the focus group discussion guide, questionnaires (Kobo Toolbox), interview guide, and photovoice workshop schedules, and arranged transport (usually Motorbike known as bodaboda) within the study areas. I also coordinated with the community representatives of each community and they were ready for me when I arrived at the study sites. I managed to conduct several FGDs, surveys, photo voice, and in-depth interviews with stakeholders in the charcoal value chain.



Figure 5: Facilitating Photovoice training workshop with youth from the Agro-Pastoralist community in Kalemnyang



Figure 6: Photovoice training workshop with youth from the Pastoralist community in Lokiriama

Other Assignments and activities in Turkana and at the ABC

Fig.7 snapshots of activities I carried out in Turkana and Nairobi Kenya.



School Mapping Exercise in Loima Sub-County:



Training Youth in Blockchain Technology Applications:



Training in Photography for (Agro) pastoralist communities in Turkana



World Café Session at ABC end of project meeting

Fun Fact: Hiking at Ngong Hills near Nairobi.

I was honored to join the ABC hiking team at Ngong Hills for hiking activities on one of the weekends in Nairobi. Together we managed the so-called Seven Hills (20 Km) which was a fulfilling adventure with colleagues from the ABC and their family members.

Conclusion:

My stay in Kenya working in two counties located more than 700 km apart was challenging but, I worked under a very experienced team of professionals and my immediate supervisors were Dr. Christopher Kettle and Mr. Francis Oduor of the ABC who made sure I got all I needed for my work and research. Additionally, I worked with Dr. Celine Termote, the Lead officer of ABC, and Dr. Irmgard, who were in charge of another project of ABC in Kenya. My encounter in this great institute was filled with great memories and learning opportunities from highly professional and encouraging teams. I also received support from ATSAF colleagues and staff who offered one-on-one advice and courses such as an intercultural competence course which was very helpful during my stay in Kenya.

After approximately six months, it was time to leave Kenya and travel back to Germany. I wish to sincerely thank ATSAF, the Alliance of Bioersity and CIAT, the staff from all the institutions and people I worked with, and the community for supporting me in this life-changing experience in Kenya. This was a very enriching undertaking in my life and I will always walk with beautiful memories and experiences in my heart. I wish you all the best for future projects and work.

Ejok noi!! Ahsante sana!! (Turkana and Swahili for 'thank you very much').

