

Junior Scientists Tandems

Final Report

Name of student: Edwin Oyieng

German Research Institution (GRI):

Supervisor at German Research Institution (IARC):

National University (Country): Justus-Liebig University

Supervisor at National University: Prof. Dr. Sven Koenig

International Agricultural Research Center (Country): ILRI

Supervisor at IARC: Dr. Julie Ojango

Start and end date of stay at IARC/ GRI: 1st December 2024 – 31st May 2025

Title: Evaluating the lamb survival and ewe productive life of the Red Maasai sheep and its crosses to the Dorper sheep

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Introduction

I learnt about the Junior Scientists Tandem (JST) fellowship through an online platform. I then shared the opportunity with my supervisors who encourage me to apply for the fellowship. My supervisors helped me to get the necessary documents that were needed for the application, and I put in my application in good time. Few weeks later I received an email from JST that I had been offered the 6 months fellowship. I was excited and proceeded with accepting the offer and also filling all the required documents for the scholarship to kick-start. At that time, I was working on my second objective of my PhD thesis which is registered at the Institute of Animal Breeding and Genetics at the Justus-Liebig University in Giessen (JLU). The PhD work was a collaboration between JLU and the International Livestock Research Institute (ILRI). For the second objective, I was to work with scientist at ILRI and therefore the JST fellowship came in at the right time. The second objective was aimed at analysing the survival of lambs and the length of the productivity of ewes.

Research work

My JST fellowship started on 1st December 2024. The research work started with collating the data and cleaning it in readiness for analysis. I was initially not conversant with this type of analysis and so I had to read a lot about it and got help from my ILRI supervisor, Dr. Julie Ojango. With her help I was able to start the analysis. I encountered various challenges through the analysis but Dr. Julie was always ready to help and assist me in understanding the analysis. After a lot of trials and errors, I was able to get results from the analysis, and I was ready to start writing a paper. I wrote the first draft and shared it with the co-authors who were very quick to respond and give me further feedback. Two weeks into my JST fellowship, I was able to submit the paper to the small ruminant journal for publication. Once submitted, it was almost Christmas holidays, and I went home to spend it with family.

In January 2025 after resuming from holidays, I followed up the with journal on the status of my paper. Two weeks later, I got feedback that my paper has been accepted but with major changes. I had to re-run the analysis so as to respond to the queries raised by reviewers and I



was able to submit it again in March 2025. While waiting for feedback from the journal engaged in other activities within the institute. I accompanied colleagues for field work in various parts of the country where I visited other livestock farmers and learnt about their animal husbandry practices.

Experience

The experience at ILRI, Nairobi, Kenya was very enriching. I got to attend several team meetings, and I was able to understand how the projects in the institute are developed and implemented. During the fellowship I also got to interact with other scientists in the same field as mine and other fields. This made me learn more about the sector as a whole and how different teams collaborate to make the projects successful. Additionally, I engaged in other social activities like watching football matches with colleagues, running and taking lunch time walks around the institute.

Technically, I acquired valuable data analysis skills and how to present results. I also learnt how to respond to reviewers' comments from the journal. Additionally, I learnt the importance of time management, proper planning but also being flexible to accommodate changes that might come up. I also learnt people management skills through the interactions I had with various people within the institute both within my area of work and other cross-cutting programs. Last but not least, I gained valuable skills in how to network and maintain healthy relationships in the workplace.

Conclusions

My career exploration stay at ILRI in Kenya was very productive and a good learning experience. During the six months, I learnt a lot about analysing survival data and interacted with different scientists where I got to learn a lot about the international landscape in terms of animal breeding and genetics. The staff were also very welcoming and supportive, and I felt at home. In general, my stay was very peaceful and productive.



I managed to analyse the data that I had to work on and wrote a scientific paper. I submitted the paper for publishing in the Smallruminant research Journal. After several revisions, the paper was accepted and published. The paper is titled *Lamb survival and ewe longevity in a crossbreeding program between indigenous and exotic sheep in semi-arid lands*. The DOI of the article is <https://doi.org/10.1016/j.smallrumres.2025.107520>

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