# Introduction

In the context of the GeoPasture project, our team conducted a field visit on Wednesday, June 5th, 2024, to Juja Farm in Juja. During the visit, we interviewed Mr. Jeremiah Ole Teeka, a pastoralist in the area. This visit aimed to gain a deeper understanding of the pastoralists lifestyle, their interactions with crop farmers, and the on-the-ground challenges that necessitate the development of a platform to mitigate conflicts between these two stakeholder groups.By gathering firsthand information about the existing challenges, we hope to identify the specific needs that the GeoPasture platform can address in mitigating conflicts between these stakeholders.

# Nature of the Field Visit

With the help of Dr. Lawrence Nderu, our project investigator, we arranged an interview with Mr. Jeremiah Ole Teeka. On the morning of June 5th, 2024, our team – Joan Kinoti, Moses Odeny, Sam Kelly, Melanie Minayo, Lynn Omae, and Faith Mosonik – departed for Juja Farm alongside George Gichuhi, who documented the visit as our photographer. Upon arrival, we met with Mr. Jeremiah and Dr. Nderu at the field location.

### Methods of collecting data

* Interview: We conducted an interview with Mr.Jeremiah whereby we had a questionnaire prepared in advance to be a guide as to what questions to ask.
* Observations: we walked from one homestead to another just to observe the lifestyle the pastoralists live and also the structure of the sheds for their livestock
* Recording: We recorded the conversation we had with Mr.Jeremiah that was later transcribed for the purposes of writing this report.
* Photography: We took a couple of photos that we intend to integrate in our website and mobile app. Click [**GeoPasture**](https://drive.google.com/drive/folders/1HwwPnt7-A7hucJmFPAQDZBddn-EIkcmr?usp=drive_link) to view the photos

# Findings and Observations

### Findings

Our interview with Mr.Jeremiah proved to be valuable and fruitful as it provided valuable insights into pastoralists and crop farmers within the Juja community. We will use a question answer format to report about the findings as shown below:

**1. What is the current level of collaboration(what is the relationship) and**

**communication between pastoralists and crop farmers in your community?**

According to Ole Teeka the relationship between him and other farmers is good and there is normally good communication between them, if disputes arise between them they always try to find common ground and resolve the issues between them without further escalating the issue

**Whenever disputes arise between pastoralists and agriculturalists, how are they**

**handled? Who handles them?**

The main dispute between them is when animals encroach into the farmer's farms and eat their produce and this causes disputes between the farm and animal owners. Normally the farmers and pastoralists are able to find a solution to resolve the dispute and compensate the farmer for his/her losses. sometimes in other situations, the situation might escalate and this will result in the involvement of law enforcement, but this is a very rare occasion

**2. What are the main challenges or barriers to effective collaboration and communication between the two groups?**

Sometimes either party may be too stubborn to listen to the other and they may want to involve the police to resolve their conflicts

**3. Are there existing initiatives or platforms that facilitate dialogue and cooperation between pastoralists and agriculturalists? How effective are they?**

Currently, there are no platforms to facilitate this. The main way of communication is through face-to-face communication. This form of communication is very effective as it enables immediate feedback between both parties enabling them to reach a common agreement

**4. How do you currently track the movement of your animals?**

Tracking of animals is done physically as the pastoralist normally walks with the animals as they graze. The animals are well known to the pastoralist and the pastoralist can easily know which animal belongs to him and which ones do not.

**5. What methods/technologies do you use for animal identification?**

**When an animal gets lost how do you retrieve it?**

The main method used to identify animals is by marking using either a symbol or initials. This is mainly done by carving it on the animal’s body using hot iron. This is very effective because it enables easy identification of your animals in case they get lost or destroy someone’s crops

**6. What features or functionalities would you find valuable in an app for tracking and managing livestock?**

According to Ole Teeka, finding a reliable source to obtain reliable weather data is an issue. In cases where he wants to look for pasture for his animals, he has to survey other areas that are far to check the pasture himself, then go back to bring animals when he finds pasture. The features that would be valuable to him as deduced from this are *reliable weather forecasting* and *efficient location of pastures.*

**7. How do you access weather forecasts and monitor pasture availability for your agricultural or pastoral activities?**

According to Ole Teeka, he doesn’t currently listen to or watch any weather updates on either Radio or TV. He uses traditional methods to infer weather forecasts from weather patterns. The example he used was: *If the rain has been experienced for a long duration in the region they brace themselves for the dry season to come by going to look for pastures in advance.*

**8. How does weather variability impact your decision making related to Livestock management?**

During the dry season when there is minimal grass, the animals eat the grass close to the soil or at the root level. This may cause infections in the lungs of the animals which when not looked at may lead to the animal's death. In preparation for this dry season, he looks for medicine before he relocates the animals to an area with greener pastures.

**9. What specific weather information is crucial for planning your farming or grazing activities?**

For grazing activity, the most crucial weather information is being able to

understand weather patterns to predict incoming harsh weather conditions.

**10. Can you describe the process of selling/buying farm products or animals in your community?**

The farm products are sold and/or bought at the local market. The factors that determine the price are the size of the animal and the health of the animal.

**11. What challenges or constraints do you face in marketing and selling your agricultural produce or livestock?**

The challenge faced by the seller is the buyers tend to disagree with the price that the animal is being sold for.

**12. Are there specific features or tools you would like to see in an app to facilitate marketing, sales, or market information access?**

The Interviewee did not mention any specific marketing feature for the application.

### Observations

**What is their lifestyle like?**

Pastoralists in this region typically lead a nomadic life, moving their herds across vast swathes of land in search of water and grazing pastures. Their homes, called manyattas, are often constructed with mabati for this very reason: to allow for easy dismantling and rebuilding when they migrate to new locations, minimizing the effort and cost of constructing permanent structures.

# Conclusion

The field visit offered valuable insights into collaboration, communication, and management practices between pastoralists and crop farmers. While occasional disputes arise, the visit revealed a generally positive relationship between these groups. Interestingly, traditional methods for animal tracking and weather forecasting were still in use. However, challenges were identified, including difficulties in marketing agricultural produce and livestock due to stubbornness and pricing disagreements.

This visit was crucial. It provided firsthand observation of existing agricultural practices, the challenges faced by these stakeholders, and potential areas for improvement through the GeoPasture platform. By addressing these challenges, GeoPasture has the potential to enhance productivity and foster even greater cooperation between pastoralists and agriculturalists.

# Recommendations

While our initial field visit provided valuable insights, to gain a more comprehensive understanding of the challenges faced by both pastoralists and agriculturalists in Juja, we recommend expanding the scope of our research. Conducting an additional field visit with a larger sample size would be beneficial. This would allow us to interview more pastoralists and, crucially, include the perspectives of crop farmers as well. By gathering a broader range of viewpoints, we can ensure a well-rounded approach to problem-solving and develop a GeoPasture platform that effectively addresses the needs of all stakeholders in the community.