



Soysambu Conservancy

Social Assessment of Protected Area

Sustain East Africa



March 2024

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Suggested citation

Please cite this report as such:

Brehony, P., Tyrrell, P., Muiyuro, R., Kang'ethe, E. 2024. Social Assessment of Protected Area for Soysambu Conservancy. Sustain East Africa, Nairobi, Kenya.

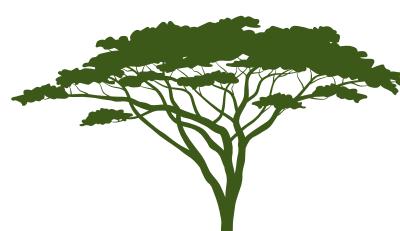
Acknowledgements

This Social Assessment of Protected Areas for Soysambu Conservancy is the result of a collaborative effort between Sustain East Africa, Soysambu Conservancy, and representatives from communities bordering the Conservancy. Thank you to the all those who helped to pull this together.

Particular thanks go to: Helen Jerotich, Community Education Officer (Soysambu Conservancy); Chief Joseph Mwangi and Assistant Chief Felicah Mugie of Mbaruk location; Chief Parit Sururu and Assistant Chief Henry Balozi of Kongasis, Ol Jorai location; and Chief Simon Mathare and Assistant Chief Benson Mungai of Kiptangwanyi location.

We would also like to acknowledgement the MCA of Eburru Mbaruk Ward, Michael Gathanwa, and his ward administration for their insights and input in highlighting areas where Soysambu Conservancy can continue to support neighbouring communities.

We also thank the Nyumba Kumi village elders from the three locations for their input, as well as the dedicated enumerators involved in carrying out the household surveys: Benedicta Wanjiru, Emmanuel Kooli, and Paul Waweru.



Summary

Context

The Social Assessment for Protected and Conserved Areas (SAPA) is a standardised, low-cost and relatively simple approach to assessing the social impacts of protected or conserved areas. SAPA can help identify the positive and negative social impacts of protected or conserved areas, understand the underlying causes of problems related to governance and identify actions that could improve the situation. The methodology can also be used to establish a baseline for social impacts and their overall contribution to human well-being against which changes can be tracked over time. It is a multi-stakeholder assessment methodology for use by site-level stakeholders.

Key findings

Positive social impacts

Based on the findings of the SAPA process, the main positive social impacts that contributed to household well-being in communities neighbouring or within Soysambu Conservancy were:

1. Improving access to water
2. Building or maintaining infrastructure
3. Supporting education
4. Supporting health projects
5. Providing outreach services and training

Soysambu Conservancy provides water to the community by building water tanks, ensuring access to clean and safe water for local residents. Furthermore, support for building or maintaining infrastructure, including police posts, schools, and roads, were reported to enhance the overall quality of life for community members.

Soysambu Conservancy's initiative to offer sponsorship opportunities for students, enabling access to education and fostering academic achievement, was seen as having a positive social impact. Additionally, Soysambu's contributions to local schools, such as providing school meals for students, school uniforms, desks, and sports equipment, positively impact educational outcomes and student well-being. The Conservancy also provides free guided educational trips to community members, offering valuable learning experiences.

“ We appreciate Soysambu for providing land to construct Lady Ann Secondary School.

Soysambu Conservancy's support for health projects, including the provision of equipment to clinics and cancer screening for women, contributed to improved healthcare access and outcomes within the community. Additionally, Soysambu Conservancy also provided anti-rabies vaccinations for dogs and donkeys, demonstrating a commitment to community health.

Soysambu Conservancy also offered outreach services in the form of training in improved livestock production, health, and waste management, empowering residents with valuable knowledge and skills.

Soysambu actively participates in environmental conservation initiatives, such as tree planting, contributing to the preservation of natural resources and biodiversity. Furthermore, some households also felt that providing access to firewood also demonstrated a commitment to community support.

Negative social impacts

Despite efforts to reduce the negative social impacts of Soysambu on surrounding community members, some negative impacts were still recorded. Most negative social impacts across the six case studies fall under these main categories:

1. Restricted access to services and utilities
2. Unequal distribution of benefits
3. Lack of appreciation of the community during emergencies
4. Human-wildlife conflict
5. Transmission of disease



Limited access to certain public utilities impacted by Soysambu, such as good roads, creates barriers to mobility and community well-being. Some residents claim that the challenges they face affect their daily lives and overall quality of life.

There was also a perceived unfairness in the distribution of benefits from Soysambu, including employment opportunities and community involvement in development projects, perpetuating feelings of exclusion. Some community members feel marginalized and overlooked in resource allocation and decision-making processes during the development of Soysambu's community projects, leading to social tensions and disparities.

Furthermore, some respondents expressed that they felt unappreciated by Soysambu Conservancy, particularly when they provided voluntary assistance during emergencies, such as bush fires. This lack of acknowledgement could result in strained relations between the community and the conservancy.

Some respondents also mentioned that they felt disease transmission from wildlife to livestock poses a significant concern to them. A number also mentioned that conflict with wildlife originating from Soysambu resulted in property damage and some injuries, with a lack of compensation (from KWS). In particular, conflict with baboons, vervet monkeys, porcupines, buffalo, and hyenas was mentioned.

“

My son needs compensation, as he was injured by a buffalo while working in the conservancy.



Overall contribution to well-being

The survey results indicated that the majority of respondents perceived Soysambu's overall contribution to well-being as neutral, taking into account both positive and negative impacts. There were exceptions, particularly in Ol Jorai and Mbaruk locations, where a few respondents felt that Soysambu had increased their well-being.

75%

of households residing in Soysambu felt the conservancy increased their well-being.

12%

of respondents living in Ol Jorai felt Soysambu had reduced their well-being.

Governance

SAPA encompasses four key principles of effective governance of community-conserved areas: participation in decision-making, transparency and accessibility to information, mitigation of negative impacts, and an equitable benefit-sharing process.

Participation

In Mbaruk and Ol Jorai locations, the majority of people felt there is little participation in Soysambu's decision-making that impacts the community. However, in Soysambu itself, a large percentage of people feel that there is some level of participation; in particular, they know their community representative for meetings with Soysambu and communicating with them. In Kiptangwanyi, there is a mix of opinions with most people feeling that there is no participation, some agreeing that there is participation, and quite a number do not know whether there is any participation.

Transparency and access to information

There was overall dissatisfaction with transparency and access to information about decisions by Soysambu that were perceived to affect the communities, notably in Kiptangwanyi, Ol Jorai, and Mbaruk. Soysambu residents show mixed views.



Mitigation of negative impacts

Residents in Kiptangwanyi, Ol Jorai, and Mbaruk expressed scepticism about how effective measures to mitigate negative impacts like wildlife damage were, while opinions in Soysambu are more divided.

Benefit sharing process

There was widespread disagreement across Kiptangwanyi, Mbaruk, and Ol Jorai regarding perceived fairness in benefit distribution from Soysambu. A few Soysambu residents did feel like there was some benefit sharing.

Rights

Views on respect for rights by Soysambu varied, with differing perceptions across all locations about whether there was recognition and respect for the rights of local women and men.

Recommendations going forward

Based on the results of the surveys and the stakeholder workshops, there are mixed perceptions about Soysambu Conservancy. On the one hand, there were a number of positive impacts and some positive aspects to governance. On the other hand, there was also widespread dissatisfaction, particularly in the communities neighbouring Soysambu, about the perceived negative impacts of the conservancy, the lack of engagement in governance decisions impacting the community, and the fact that many people felt that Soysambu was having no effect or a negative effect on the well-being of their household.

Nevertheless, the stakeholder workshops demonstrated that there was good will, and that both community representatives and Soysambu conservancy are working to improve on these negative aspects and to engage positively going forward. The survey respondents and workshop participants provided a number of suggestions about the ways in which Soysambu conservancy could take action.

These insights and requests aimed at enhancing social impacts within and around Soysambu Conservancy, promoting sustainable practices, improving community engagement, and ensuring equitable outcomes for all stakeholders.

Although the specific key requests from the community are shown in Table 3 below in the “Recommendations” section, here we provide a summary of those.

- **Education:** There were requests to support schools and education generally. These included land allocation for new schools, the construction of primary schools, the installation of facilities like ablution blocks and libraries, and



implementation of school feeding programs. Suggestions also encompassed scholarships and ensuring fairness in scholarship provisions.

- **Agricultural outreach:** Tied to this, and requests about livestock and agriculture, there were also requests to educate farmers on improved methods. A number of communities rely on livestock as their primary or secondary livelihood. Therefore, there were also a number of livestock-focused requests, including access to grazing fields, the provision of fodder, and compensation for losses due to wildlife encounters. Stakeholders also emphasized the need for capacity building, such as courses on improved livestock management. We have provided a number of suggestions on this in the “Recommendations” section.
- **Health:** There were also a number of requests for health and hospital facilities, namely to improve healthcare infrastructure, including hospitals, medical equipment, and upgraded dispensaries. Other requests included supporting new maternity wings, staff housing, and outpatient wings.
- **Water:** There was a lot of concern expressed over access to and provision of water. Therefore, there were requests for infrastructure like dams, boreholes, and water towers. Specific locations highlighted for improvement included Kiungururia and Echareria.
- **Improved Security:** Although communities living in Soysambu conservancy expressed a strong sense of security, most communities outside did not, and therefore, there were requests for additional security measures, including the construction of police posts and administrative offices for chiefs. There were also some requests for electric fences to improve security.
- **Environmental Conservation:** There were also requests to support the community to plant trees in a number of areas (e.g., Chamuka springs), to install sanitation points, and overall, to continue raising awareness about environmental conservation.
- **Land:** Furthermore, there were requests for land, either to purchase from Soysambu, or to be provided land to cultivate, or to learn about vegetables farming.
- **Community engagement:** Finally, in seeking to improve transparency, communication between Soysambu and neighbouring communities, and involvement of communities, there were suggestions to establish regular meetings, to elect representatives specifically for relations with Soysambu, and to work together to foster a positive relationship in the future.



Introduction

Soysambu Conservancy

Soysambu Conservancy is located within the Rift Valley System. It covers 48,000 acres, encompassing the northern and western shores of Lake Elmenteita. Soysambu Conservancy is renowned for its remarkable biodiversity, including a population of 170 endangered Nubian giraffes and over 450 bird species, notably hosting 28% of the world's Lesser flamingo population. Indeed Lake Elmenteita is one of Kenya's Key Biodiversity Areas and RAMSAR sites (a wetland that is of international importance under the Ramsar Convention). Its rich wildlife habitat is home to buffalo, leopard, hippo, hyena, jackal, eland, zebra, impala, Thompson's, and Grant's Gazelle, waterbuck, reedbuck, klipspringer, warthog, steinbok, colobus monkey, vervet monkey, and baboons.

Soysambu Conservancy was established as a not-for-profit Company in 2007 and works to conserve the Soysambu Estate as a traditional wildlife area, which supports the integrity of the greater Rift Valley ecosystem, while promoting sustainable coexistence of wildlife with livestock and, at the same time, being relevant to and part of modern-day Kenya.

Soysambu Conservancy wanted to understand more about the social impact of the conservancy on communities living within and surrounding the conservancy. Furthermore, they wanted to use the opportunity of assessing the social impacts of the Conservancy to listen to what communities within and surrounding the conservancy had to say about the positive and negative impacts of the Conservancy. This community feedback will also lay the foundation for the next steps in Soysambu's community outreach and development programmes, ensuring community participation in project creation and buy-in.

This could also serve as an opportunity to establish a baseline for Soysambu Conservancy's contribution to the well-being of communities over time.

Social Assessment of Protected Areas (SAPA) approach

The Social Assessment for Protected and Conserved Areas (SAPA), launched in 2014, responded to a need for a standardised, low-cost, and relatively simple approach to assessing the social impacts of protected or conserved areas (Franks, Small, and Booker 2018).

SAPA is a multi-stakeholder assessment methodology for use by site-level stakeholders. The methodology is based on a standardised process that can be replicated across protected or conserved areas while remaining flexible enough for tailoring to local needs and contexts.

SAPA uses a set of standard assessment questions directly related to social impacts and governance quality. It also includes a process of developing site-specific questions that respond to the specific needs of actors.

SAPA can help identify positive and negative social impacts of protected or conserved areas, understand the underlying causes of problems related to governance, and identify actions that could improve the situation. The inclusion of a governance and equity assessment in the second edition of SAPA strengthens the results and action planning processes. Governance is distinct from management and pays attention to who defines objectives and how. It also looks at the allocation of responsibility and accountability for delivering on these objectives.

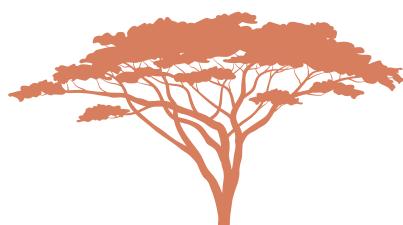
The methodology can also be used to establish a baseline for social impacts and their overall contribution to human well-being, against which changes can be tracked over time. Therefore, the SAPA approach was chosen because it meets the requirements of the Soysambu conservancy, as they seek to understand social impacts over time, and to listen to feedback from communities living within and surrounding the conservancy.

Objectives of the Social Assessment

Soysambu Conservancy aims to ensure that they provide value to Kenya, its people, and the wider international community through sustainable conservation and enjoyment as a national treasure and heritage.

The conservancy is currently expanding its engagement with communities living within and surrounding the conservancy. Conducting a SAPA will therefore help them better understand the views, needs, and opportunities of the surrounding communities.

The primary objective of this assessment was therefore to integrate conservation initiatives with community development and foster a positive relationship between



Soysambu and their neighbouring communities, principally by increasing positive impacts and reducing negative impacts on communities.



Approach and methods

SAPA overview, process, and outputs

The SAPA Assessment uses a mixed-methods approach that combines qualitative and quantitative data to gather information, assess results, and generate ideas for action in response to the findings.

Throughout the SAPA process, there is an emphasis on linking the steps to stakeholder engagement, either through discussions, feedback, or actions to improve the situation. This ensures that stakeholders, including communities through their representatives, are effectively engaged throughout the assessment.

This multi-stakeholder approach increases the accuracy and credibility of the findings, enhances transparency and ownership of the assessment process, and builds support for action and accountability for implementation. For those interested, much greater detail can be found in the SAPA manual by Franks, Small, and Booker (2018).

Preparation

Feasibility and planning

Following discussion with Soysambu Conservancy management, it was agreed that Soysambu met the feasibility requirements for a SAPA process. Soysambu began operating in 2007. It was a protected or conserved Area that was established and operated with management and governance systems for at least two years. Furthermore, Soysambu Conservancy satisfies the second feasibility criterion, as its managers and other key stakeholders can convene for face-to-face meetings at least once during the assessment process. Additionally, there is a clearly defined zone covering Soysambu and its neighbouring communities. Finally, the managers of Soysambu were willing to implement specific action plans aimed at improving social impacts and governance within the conservancy.

In order to plan the SAPA process, together with the Soysambu management, the Sustain East Africa team put together a work plan with dates for key steps in the SAPA process, and was responsible for organising the step, and, where relevant, inviting stakeholders, such as community representatives, to participate.

Community mapping

The aim of community mapping is to ensure that all stakeholders within or neighbouring the conservancy are considered during the SAPA process.

Soysambu Conservancy provided a detailed map delineating its boundaries and essential physical features such as roads, rivers, and Lake Elmenteita. This map also included the locations and boundaries of communities within and surrounding the conservancy.

Following a meeting and exploratory visit with Soysambu management and representatives from neighbouring communities in September 2023, it was decided that this SAPA would focus on key neighbouring villages within the Ol Jorai, Kiptangwanyi, and Mbaruk locations, as well as those living within Soysambu.

Furthermore, at this stage of the process, some of the questions that would be specifically tailored to the Soysambu context were formulated.

While many of these raised issues that were already aligned with standard assessment questions, some were articulated as additional queries in the household questionnaire.

Review existing information

At this stage, Soysambu Conservancy provided reports and meeting minutes from previous community engagements and projects. These were carefully reviewed to gain a comprehensive understanding of pertinent background details from which a site profile could be formed. In turn, this allowed us to ensure that the most appropriate positive and negative social impacts and measures of well-being were covered in the assessments, that a sufficient number of households would be sampled, and that the assessment would be suitable to the cultural context.

Stakeholder engagement

Finally, each location was visited, and the assessment was discussed with the administrative chief of that location. This in turn led to introductions to the heads of the village. At this stage, the survey team was able to understand the local context, ensure that community representatives were willing to participate in group discussions, and secure permission to carry out the household surveys.



Scoping

The scoping phase of SAPA is dedicated to defining the assessment's boundaries concerning space, time, and issues, prior to delving into detailed information gathering.

In terms of space, the villages and locations that had been visited and consulted were already set.

In terms of time, the SAPA primarily addresses social impacts that have occurred in the past, rather than those anticipated in the future. For this assessment, a recall period of five years was selected.

SAPA covers various social impact and governance issues. The standard aspects of assessment include:

- The impact of Soysambu and its development activities on people's well-being.
- Identification of significant negative and positive impacts resulting from Soysambu and associated conservation and development initiatives.
- Evaluation of the recognition and respect of local women's and men's rights by Soysambu.
- Assessment of timely access to pertinent information by local women and men.
- Examination of the effectiveness of measures to mitigate negative impacts on local women and men.
- Evaluation of the equitable distribution of benefits related to Soysambu within and between local communities.

However, even these aspects of the assessment might overlook important issues. To address this, as part of the scoping step, a community meeting and stakeholder workshop are conducted. Furthermore, the household survey and the second community meeting are also designed to identify other potential gaps that may exist.

First community meeting and stakeholder workshop

In November 2023, the Sustain team conducted a half-day workshop with community stakeholders, including 19 participants representing location chiefs, village representatives, and enumerators recruited from the communities.

The workshop aimed to familiarize participants with the SAPA methodology and upcoming household survey questions. It also gave representatives a chance to raise any outstanding issues that were not being asked about.

This workshop plays a vital role in ensuring the SAPA's relevance to local needs, the active participation of the key stakeholders, and fostering ownership of the process among key stakeholders.



Information gathering

The next step in the process was to gather information through a household survey. This was then followed once more by a discussion and feedback in a stakeholder workshop and community meeting. This balanced approach combines quantitative data from surveys with qualitative insights from community meetings and stakeholder workshops.

Planning the household survey

The household survey was the key step to collecting quantitative data from across the key locations in a statistically representative manner. Based on timelines, budgets, and the number of villages to cover, we agreed to interview 180 households, randomly selected from the target area's villages.

Therefore, out of 44 villages identified as important, across the 3 selected locations, 18 villages were randomly chosen for the survey. Within each of these 18 villages, a minimum of 10 households were to be randomly selected.

The sampling plan was devised based on information from the most recent national census, information from administrative chiefs, accessibility of locations, estimated survey duration, and enumerator requirements.

Table 1: Table of sample size by location

| Location | No. of Respondents | % of total |
|-------------|--------------------|------------|
| Mbaruk | 81 | 45% |
| Ol Jorai | 70 | 39% |
| Soysambu | 20 | 11% |
| Kiptangwani | 10 | 5% |

Developing the household questionnaire

The SAPA facilitation team crafted a series of questions to be piloted, then tested them with the enumerators, before being deployed in the household survey.

The survey incorporated Soysambu-specific social impacts and governance issues, informed by concerns raised during reconnaissance visits and reports from the Soysambu Conservancy team. Furthermore, custom governance questions and statements were developed based on key governance principles for conserved areas, addressing rights, participation, transparency, impact mitigation, and benefit sharing.



The survey was initially drafted in English, and then translated into Swahili. A back-translation process to English ensured accuracy and that the intended meaning was correct. Adjustments based on feedback from the pilot survey, training process, and Soysambu Conservancy management were incorporated, and the final questionnaire was uploaded to the Open Data Kit (ODK) and Kobo Toolbox for enumerator use during the survey.

Enumerator training

In order to ensure that data collection is of the highest standards, the SAPA process relies on proficiently trained enumerators, capable of conducting efficient and accurate surveys.

Therefore, 3 enumerators were recruited from within the survey locations, based on their proficiency in English and Swahili, their good standing in the community, and the fact that they had at least completed high school.

In November 2023, the SAPA facilitation team conducted two-day training sessions which included a detailed run-through of all the questions, the information the survey was to capture, and why this was important. The enumerators were trained in the use of ODK and Kobo Toolbox. The training also included a review of survey and research ethics, and appropriate behaviour before and after the survey.

The enumerators conducted practice interviews, focused on comprehension and questionnaire adjustments.

Following successful completion of the training, the enumerators were equipped with smartphones, battery banks, notebooks, and backpacks. They were clearly instructed on the sampling approach, with each enumerator allocated six villages and instructed to randomly sample 10 households from each village.

As a final step in the training, the enumerators conducted pilot interviews with acquaintances. The data from these were reviewed and analysed and the enumerators were given feedback on their performance.

Conduct household survey

As discussed above, the sample size includes 18 randomly selected villages, where a total of 10 households were surveyed. In total, 181 households were sampled over three weeks from November 20th to December 6th, 2023.

Sampling locations included the following 8 villages from Mbaruk: Kiwanja Ndege Mkulima, Leleshwa, Pema, Mbaruk, Muranga, Kiambogo, Echareria, and Mololine.

7 villages from Ol Jorai: Kapkures, Ngatta, Kelelwa, Oldubey, Kapedo, Central Utut, and Kampi Turkana.

From Kiptangwani, only Jogoo village was selected.

The Soysambu location was made up of 4 settlements at Jolai 1 & 2, Sleeping Warrior Gate, Jolai Gate, and Soysambu Area.



Each survey began with an explanation of the purpose of the survey, how data would be used, confidentiality measures, the participant's rights, and sought their consent before proceeding.

Following each survey, the respondent was given a small token of appreciation in the form of sugar.

As the survey was being conducted, the facilitation team made random calls to 11% of all respondents to verify that the survey had taken place, to ask for any comments or feedback, and to ensure that the information provided was correct.

No negative feedback or concerns regarding the data collection process were received.

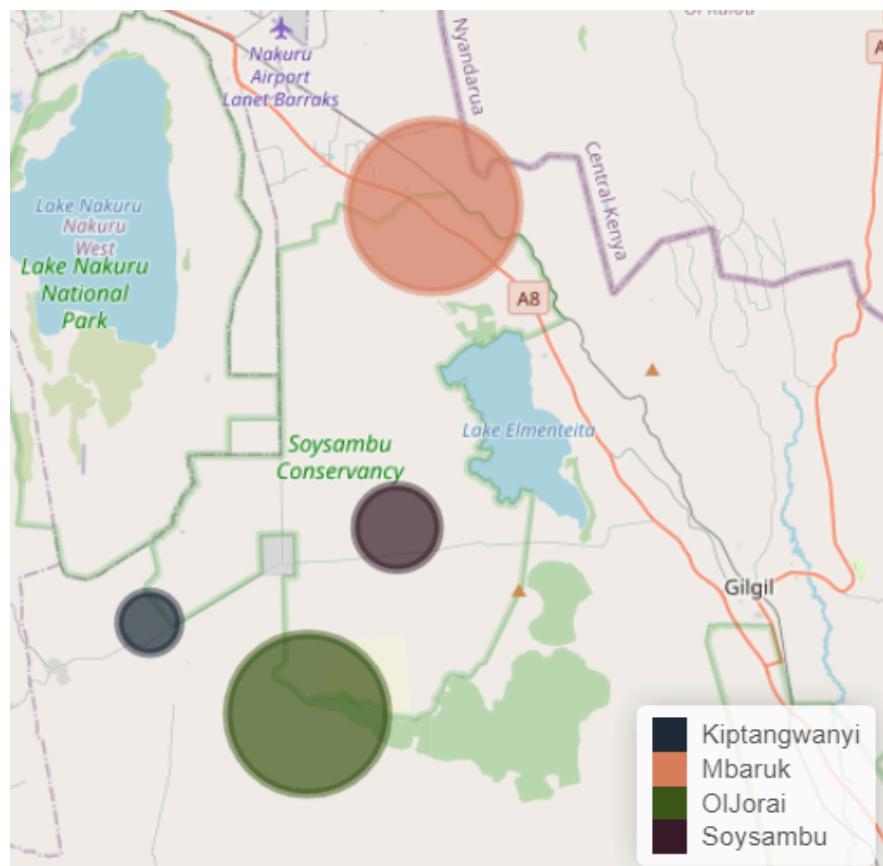


Figure 1: Map of Soysambu with sample sizes from each location



Analyse household survey

The first step in data analysis was to ensure that there was anonymity. Therefore, in adherence to the Data Protection Act, 2019, identities and numbers collected from respondents was removed. This ensured that all data collected from respondents was handled anonymously. Additionally, no individually identifiable information pertaining to race, health status, ethnic social origin, conscience, belief, genetic data, biometric data, property details, marital status, family details, sex, or sexual orientation was shared.

The next steps were to use design based inference in *R*, with the *survey* and *srvyr* packages to calculate population proportions, standard errors, and 95% confidence intervals based on the sample data collected.

The results from these are presented as tables, graphs, maps, and percentages in the following section.

Assessing

Second community meeting and stakeholder workshop

The final stages of the SAPA process involve conducting a second stakeholder workshop, where key findings from the household survey are shared with representatives of key stakeholders. Any questions raised during the workshop are addressed, and actionable ideas are presented.

This workshop serves firstly as a review and validation that the data collected are likely to reflect the realities on the ground, and secondly as a further information-gathering opportunity. The insights gathered as part of this discussion can help assist in mitigating negative social impacts, promoting equitable distribution of positive impacts, and enhancing governance within the protected area.

At the second workshop in Soysambu, the focus was on discussing additional ideas for ways in which Soysambu could provide positive social benefits to the community, that were not sufficiently captured in the survey responses.

These ideas, detailed below, encompassed community activities, initiatives by Soysambu Conservancy management, and greater collaboration with local, regional, or national government entities.

Taking action

Communicate results

Following the conclusion of Soysambu Conservancy's SAPA, it is crucial that the findings are effectively communicated to all relevant stakeholders. This includes not only the conservancy management team but also local communities, government authorities, NGOs, and other interested parties. This has been partly achieved through the second workshop discussed above.



However, beyond this, clear and transparent communication of the assessment results will help foster understanding, build trust, and encourage collective action towards addressing identified issues.

In communicating the results, it is essential to use accessible language and diverse communication channels to reach different stakeholders effectively. This may include community meetings, workshops, newsletters, social media platforms, and formal reports. As was the case for the second workshop discussed above, engaging in further dialogue sessions where stakeholders can ask questions and provide feedback on the assessment findings will improve understanding and ownership of the process.

Plan actions and monitor progress

Looking ahead, it is important to put an action plan in place to address the identified issues. This should outline specific strategies, activities, timelines, responsibilities, and resources required to implement interventions.

As was brought up in the second stakeholder workshop, community representatives called for greater collaboration with local, regional, or national government entities.

Therefore, it will be important to ensure that the conservancy management, local communities, government agencies, and potentially other relevant NGOs are involved in the action planning process. This will ensure some ownership, prioritising, and commitment to the proposed interventions.

Once an action plan is in place, it will be essential to establish mechanisms for monitoring and evaluating progress. By continuously monitoring progress, Soysambu Conservancy can adapt its strategies and interventions to meet evolving social needs and ensure the sustainable management of the protected area.



Findings

Characteristics of the respondents

Household head's gender, age, and average number of children

The SAPA household survey resulted in a sample of 181 households, with 113 men and 68 women participating. As Figure 2 below shows, across all surveyed locations, the number of male respondents exceeded the number of female respondents, with the greatest gender disparity in respondents found in the communities living within Ol Jorai (see Figure 2 below). Mbaruk, on the other hand, had a more balanced gender balance compared to other locations, with 54% male and 46% female participants.

Other household characteristics, including the mean age of the household head, and the average number of children per household, also varied across the surveyed locations, as shown in Table 2 below. Ol Jorai stood out with the highest mean number of children per household, while Mbaruk had the lowest. Mbaruk also had the highest mean age of the household head, contrasting with Kiptangwanyi, which had the lowest. Soysambu and Kiptangwanyi showed similar mean ages of the household head, but Soysambu had a slightly higher mean number of children.

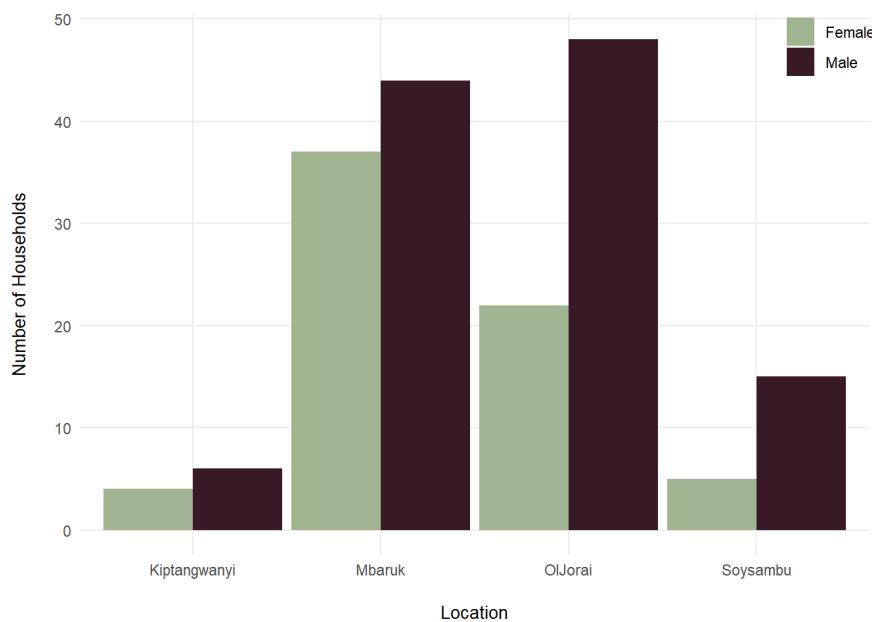


Figure 2: Gender of respondents.

Table 2: Characteristics of households

| Location | Mean no. of children | Mean age of household head |
|--------------|----------------------|----------------------------|
| Kiptangwanyi | 2.5 | 46.8 |
| Mbaruk | 1.8 | 54.1 |
| OlJorai | 3.6 | 47.0 |
| Soysambu | 3.2 | 45.3 |

Principal livelihoods of the households

Residents surrounding Soysambu Conservancy engage in various economic activities, each with distinct needs. To the south, adjacent to Soysambu, are pastoralist communities. Along the Pipeline-Elmenteita road, there exists a satellite urban settlement area where minimal agriculture is practiced. The northern region comprises a mix of satellite urban communities and pastoralists, while the area along the Nakuru road towards Gilgil is predominantly occupied by smallholder farmers.

However, as we can see in Figure 3 below, for almost all households, cultivation was the principal activity that contributed to the (paid manual labour) were stated in some locations. Finally, in some of the more urbanised areas, people shared that their own business, or a permanent salary (shown as other in Figure 3 below) was the principal livelihood. Figure 21, in the appendix, shows that the second most important livelihood shows greater variability across locations.





Figure 3: Map of principal livelihood activities in surveyed households.

How long household heads have been in the area

Part of the survey was to understand the proportion of native-born residents versus migrants in the surveyed locations, by asking the respondents, “*Was the household head born in this community?*”

The survey results show

- All respondents in the Kiptangwanyi location were not born in the community (note that the sample size in Kiptangwanyi was small, see Table 1).
- In Mbaruk (90%) and Soysambu (84%), a large percentage of respondents were also not born in the community.
- This was different in Ol Jorai where the majority of respondents were born in the area (83%), with a minority who immigrated into the area.



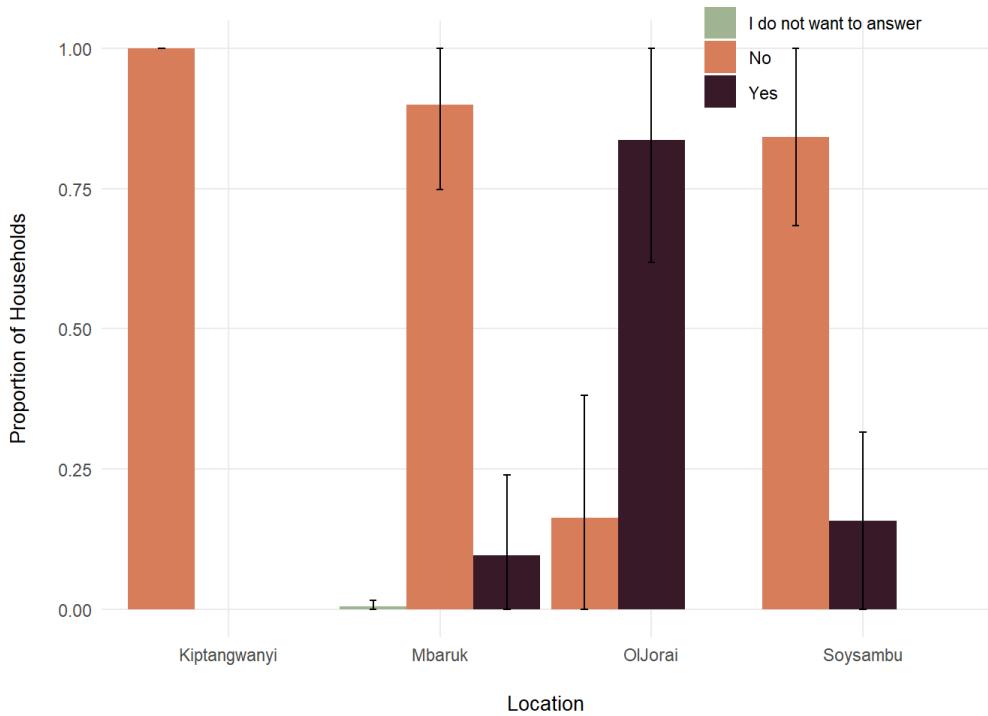


Figure 4: Was the household head born in this community?

Wealth of household

Based on a number of variables that were recorded during the survey, a wealth index was constructed. This included whether the household owned assets such as a car, motorbike, television, radio, generator, smart phone, water tank, pit latrine, and whether they used M-pesa, the construction material of their house, how often they skipped meals, how many livestock they had, and how large an area they cultivated (see Appendix Figure 34). Based on a principal component analysis, households were categorised into 5 quintiles, and a map of these is shown in Figure 5 below, followed by two key variables in understanding household-level wealth, namely how often the household were forced to skip a meal, and the construction material of the walls of their house.



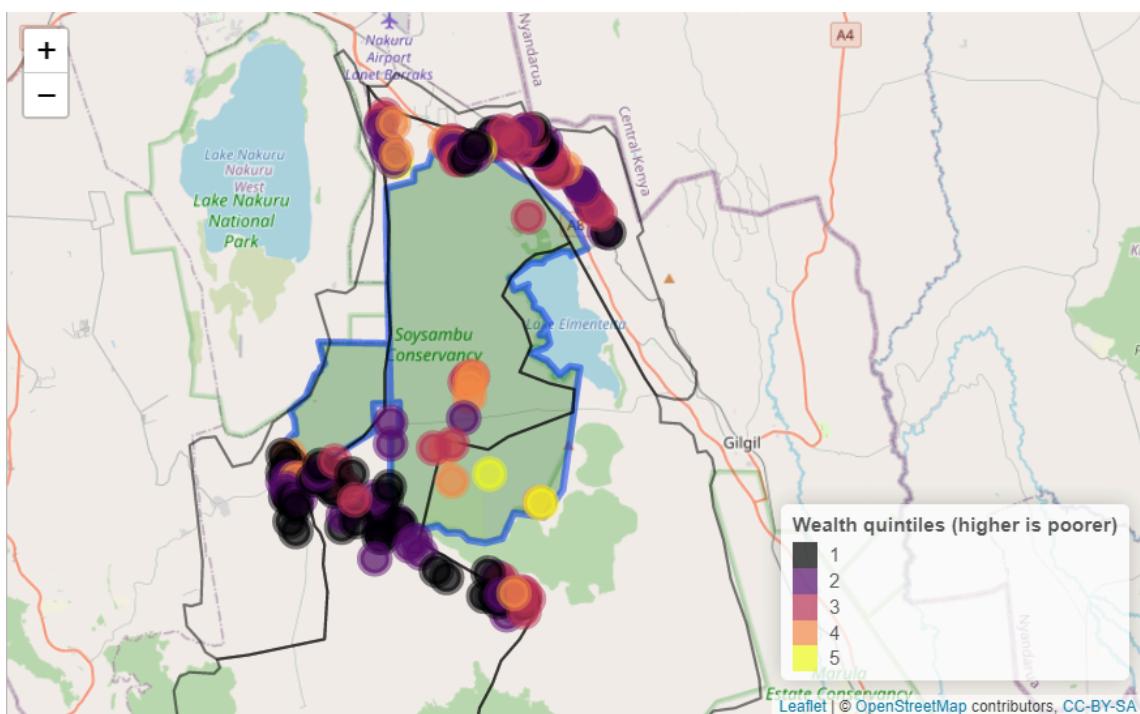
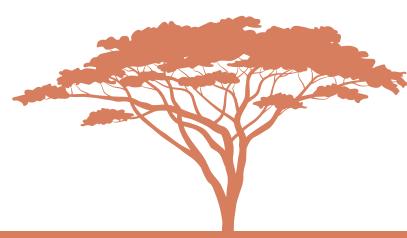


Figure 5: Map showing the distribution of wealth quintiles.



Positive social impacts

Overall, interviewed households generally felt Soysambu had few positive impacts across a number of themes, **with only 8-14% proportions of households across themes suggesting that Soysambu had a high positive impact.**

Education

- **Soysambu Conservancy's initiative to offer sponsorship opportunities for students**, enabling access to education and fostering academic achievement, **was seen as a positive social impact by some households (19.3%).**
- Additionally, **Soysambu's contributions to local schools**, such as providing school meals for students, school uniforms, desks, and sports equipment, **positively impact educational outcomes and student well-being (20.4%).**
- The Conservancy also provides **free guided educational trips to community members**, offering valuable learning experiences and fostering appreciation for conservation efforts, recognised **by some households (19.4%).**

Lady Ann Delamere Secondary School

Lady Ann Delamere Secondary School is a mixed day school in Gilgil sub-county, with 165 students. The school was named after Lady Ann Delamere because it stands on 25 acres of land that was generously donated by the Lord Delamere family.

The Soysambu/Delamere estates continue to play an important role in the school's development, and representatives are active participants in the school's board. Aside from donating land for the school, they also gifted the school with two cows, which the school can use for milk production. To help secure the school grounds, they planted a live fence of kei-apple. They also supported the construction of the school's administration block and classrooms by providing the necessary building materials.

Environmental education is another area where the estate has made a significant impact. They organize conservation talks and tree-planting activities. They also organize complimentary field trips to Soysambu Conservancy for all students. Finally, they recognize the specific needs of female students, and provide them with gender specific health talks and donated feminine napkins.



Health

- Soysambu Conservancy's support for health projects, **including the provision of equipment to clinics and cancer screening for women**, and contributed to improved healthcare access and outcomes within the community (**21.1%**).

Elmenteita Dispensary

Elmenteita Dispensary, located in Gilgil sub-county and bordering the Soysambu Conservancy, serves over 6,000 people from neighbouring villages. The dispensary was established with support from the Elmenteita Dispensary Self-Help Group (EDSHG) in 2006, it has since received significant backing from the Soysambu Conservancy and the Constituency Development Fund (C.D.F.).

Soysambu Conservancy has made a number of contributions to the dispensary, including repairing and equipping the maternity wing, as well as ensuring water supply and electricity. The conservancy provided essential medical equipment, covered utility expenses, and financially supported regular nurse visits in the outpatients wing. Additionally, they supplied apparatus for a medical lab, although the lab remains non-operational due to a lack of technicians.

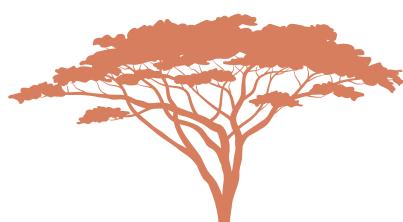
Beyond medical services, the conservancy has enhanced the facility's environment through tree and flower planting, creating a more welcoming atmosphere for the community.

- Additionally, Soysambu Conservancy **also provided anti-rabies vaccinations** for dogs and donkeys, demonstrating a commitment to community health, with several households noting the impact (**17.9%**).

Rabies Vaccination

Rabies is a fatal zoonotic disease transmitted through animal bites, but it is entirely preventable with effective vaccinations. Recognizing this, Soysambu Conservancy, in partnership with the Ministry of Livestock Gilgil office, conducted a vaccination campaign on May 6th and 7th, 2024, targeting dogs, cats, and donkeys in Mbaruk, Elmenteita, and Kiungururia villages. The aim was to vaccinate 400 animals to reduce the risk of rabies transmission to humans.

During the two-day campaign, veterinarians and community representatives not only vaccinated the animals but also raised awareness about rabies among the villagers. The campaign, funded by Soysambu Conservancy, successfully



vaccinated 131 dogs, 20 cats, and 39 donkeys in Kiungururia; 85 dogs, 12 cats, and 3 donkeys in Elmenteita; and 72 dogs, 7 cats, and 21 donkeys in Mbaruk.

The initiative was well-received by the communities, who appreciated the effort to keep rabies at bay. The campaign's success has set the stage for future vaccination efforts to cover other neighbouring communities, ensuring wider protection against rabies.

Water

- Soysambu Conservancy **provides water to the community** by building water tanks, ensuring access to clean and safe water for local residents, and this was noted by some households (**21.2%**).

Infrastructure and utilities

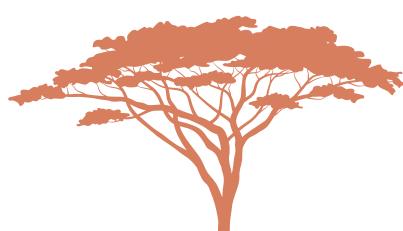
- Soysambu Conservancy's support in **building or maintaining infrastructure** including police posts, schools, and roads, was reported to enhance the overall quality of life for community members. **This was the most noted benefit across all households (25.1%).**

Outreach services

- Soysambu conservancy also offered outreach services in the form of training in improved livestock production, health, and waste management, empowering residents with valuable knowledge and skills (**19.1%**).

Environmental conservation

- Soysambu actively participates in **environmental conservation initiatives**, such as tree planting, contributing to the preservation of natural resources and biodiversity (**21.3%**).
- Moreover, (**21.9%**) of households noted they felt support when they were provided with **free firewood while bush-clearing**.



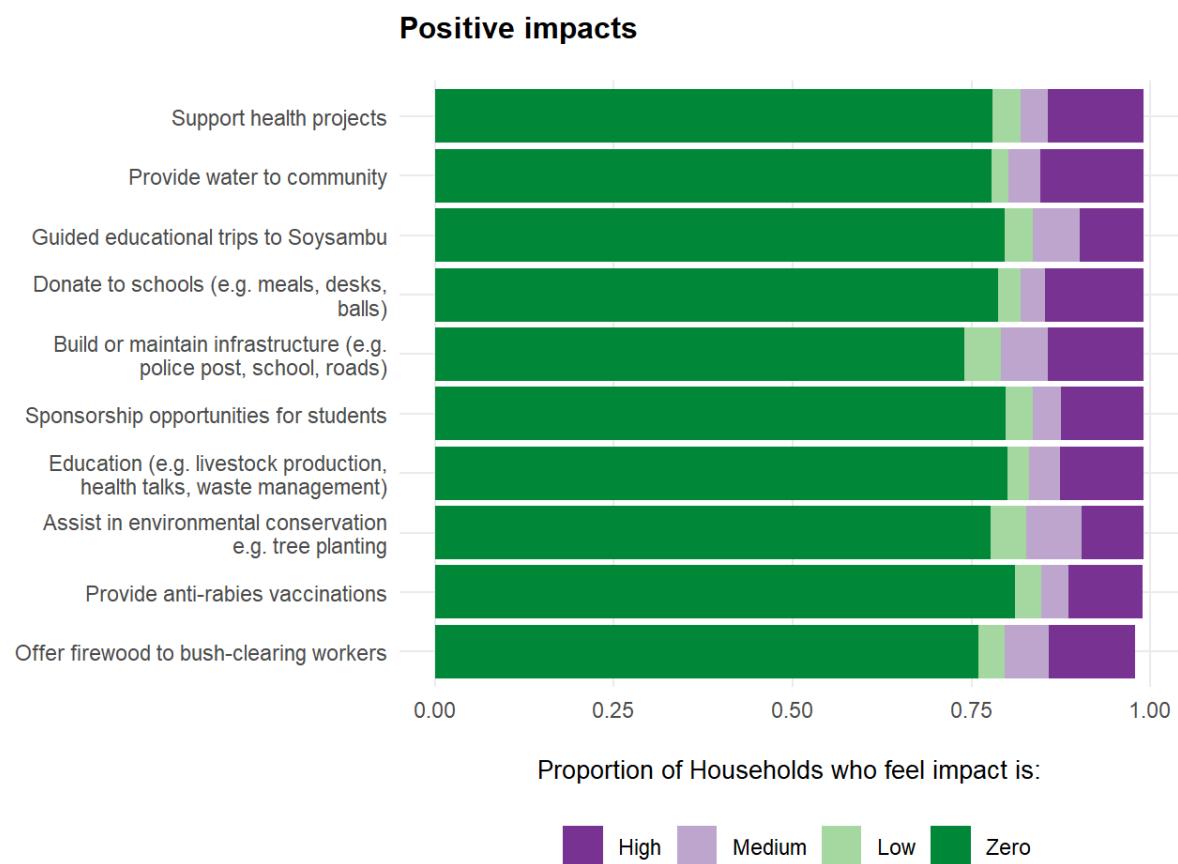
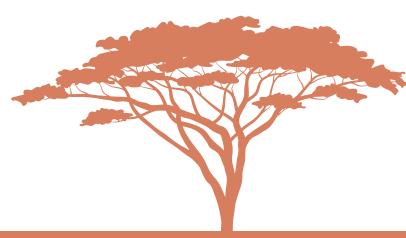


Figure 6: Overall positive impacts across all communities.



Positive impacts by location

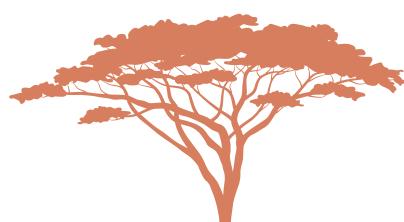
The findings of the household survey reveal diverse perspectives across the four locations. When the survey respondents were **asked about how important projects previously implemented by Soysambu were to their households.**

- **The majority of respondents from Kiptangwanyi location suggested Soysambu had a low (mean: 43%) or zero (mean: 52%) impact, indicating some impact of Soysambu, but little major impact across all categories.** A significant portion expressed low importance, while only a few acknowledged medium to high importance, particularly concerning water provision and infrastructure development.
- **In Mbaruk location, respondents indicated that the previously mentioned projects had zero impact on their households (mean: 96.9%), with very few attributing medium to high importance to any of them.**
- **In the Ol Jorai location, the influence of Soysambu Conservancy on the community appears notably positive (mean: 64%).** A majority of respondents affirmed the high importance of all the projects to their households, with a significant number rating them as of medium importance (mean: 24%). Fewer respondents indicated zero importance (mean: 0.4%), while a minimal number expressed low importance.

Flash Floods in Ol Jorai

In Ol Jorai village, flash floods triggered by heavy downpours in the Eburru hills caused extensive devastation, resulting in the loss of seven lives and numerous livestock, while 69 houses were destroyed. Two days after the disaster, affected families began receiving relief aid, including food and non-food items. Soysambu Conservancy contributed to these efforts by donating Ksh 10,000 to each of families who lost loved ones. Additionally, smaller amounts were given to families whose houses were partially damaged.

- **In Soysambu, the findings revealed mixed perceptions among residents of the significance of various projects.** While a considerable number regarded most projects as of high importance, some perceived certain initiatives e.g. sponsorship opportunities for students and community education programs, as having zero impact to their households. However, health projects, infrastructure, schools, and water were nearly all highly impactful. Consequently, the number of respondents expressing medium importance to the projects was minimal.



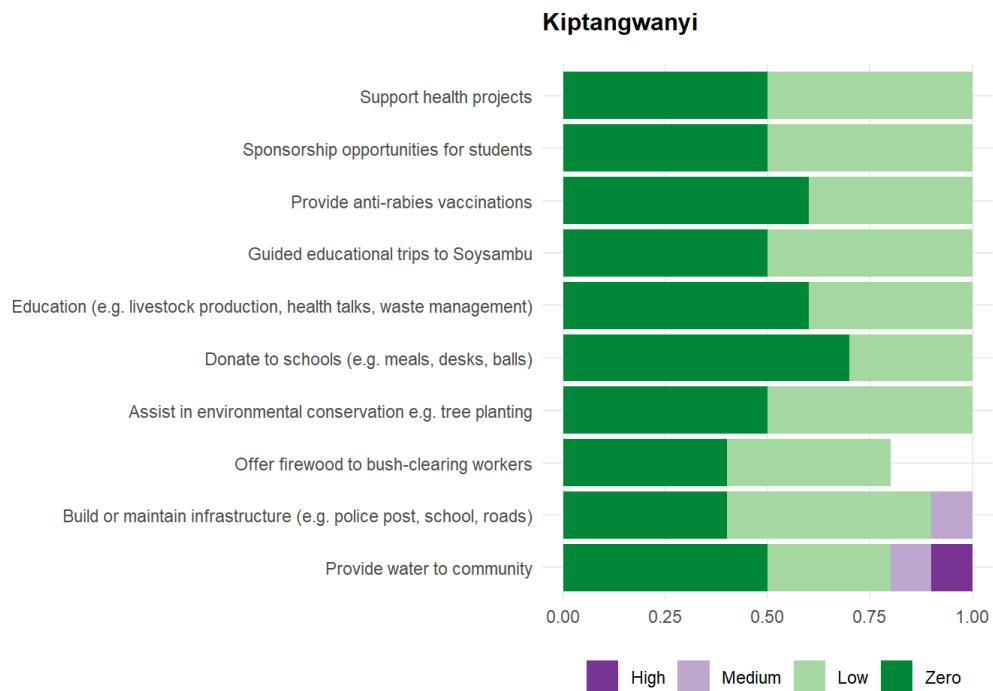


Figure 7: Positive impacts broken down into separate locations.

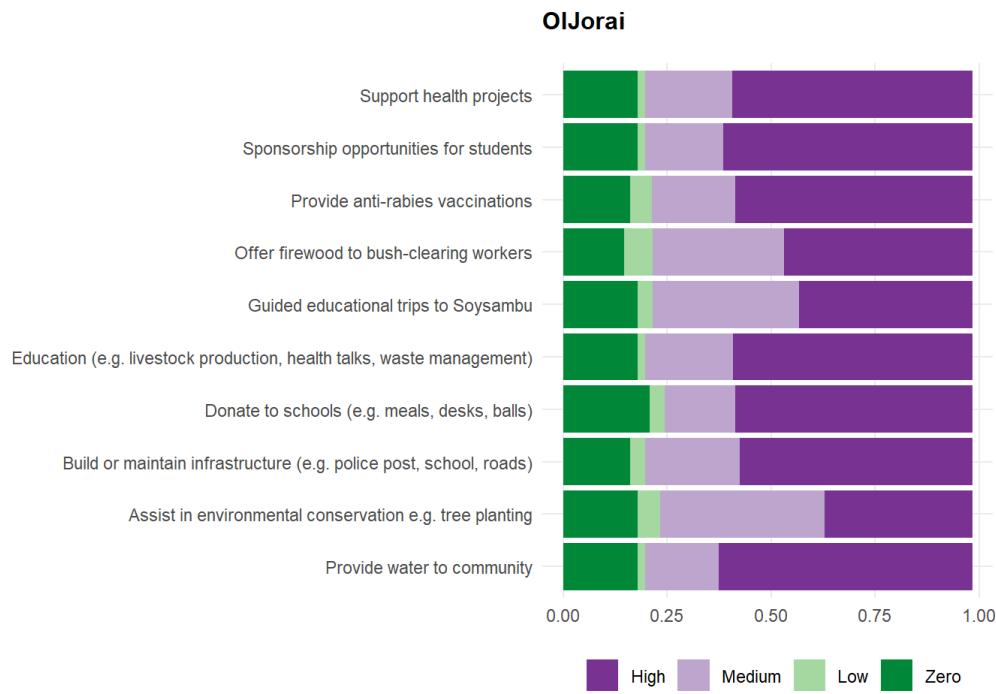


Figure 8: Positive impacts broken down into separate locations.



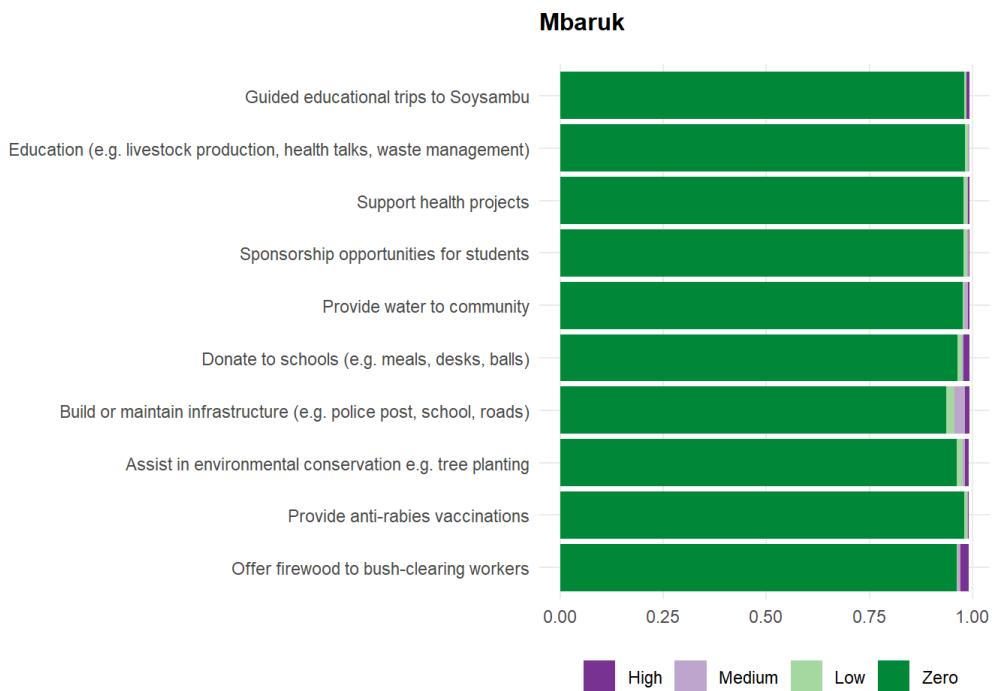


Figure 9: Positive impacts broken down into separate locations.

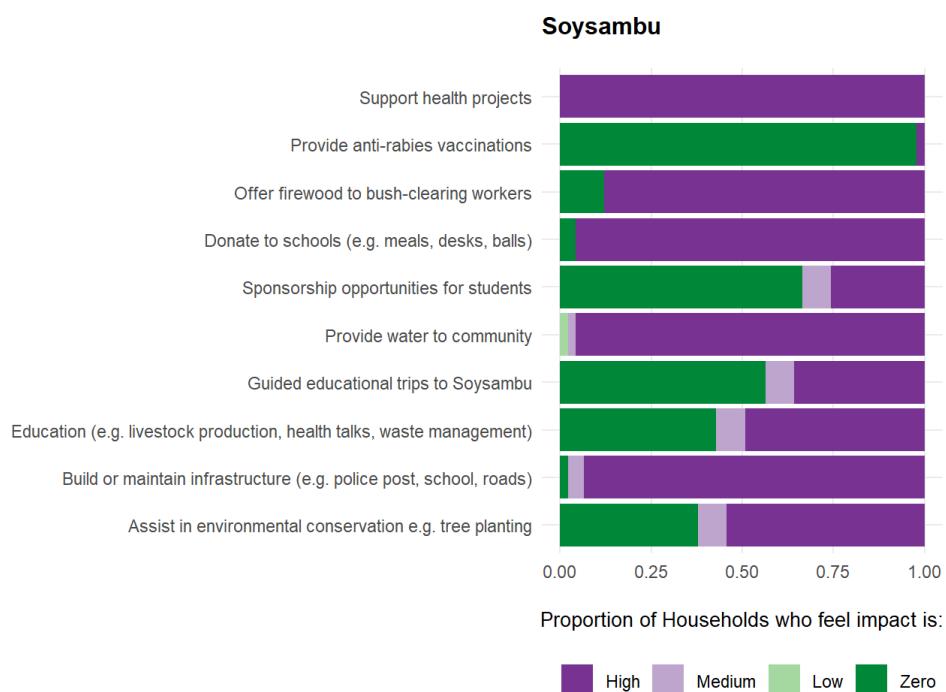


Figure 10: Positive impacts broken down into separate locations.



Feelings of security

This was not across the board, but there were clear results that communities living on **Soysambu Conservancy felt much more secure than those living outside (100%)**. Feeling secure is a crucial contributor to well-being:

- **40% of respondents in Mbaruk felt insecure or very insecure.**
- **90% of respondents in Ol Jorai felt secure or very secure**
- **70% of respondents in Kiptangwanyi felt secure or very secure**

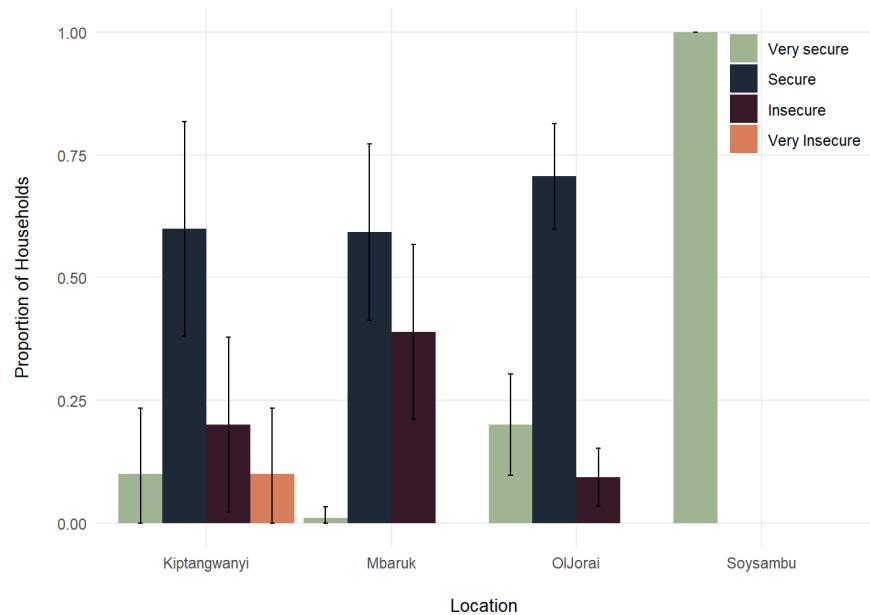
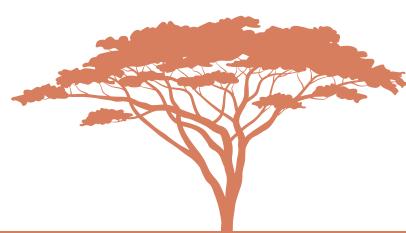


Figure 11: How secure do you feel from the risk of theft of your property?



Negative social impacts

Although Soysambu Conservancy has made recent efforts to build positive relationships with communities within and neighbouring the conservancy, there are still a number of impacts that are having negative impacts on household well-being.

Benefits

- Respondents also said that Soysambu-related benefits are unfairly shared, for example, there was a large concern regarding **limited employment opportunities** and a lack of prioritisation in employment within Soysambu (89.5%). This was the largest negative impact cited by communities.
- The second most cited impact was that community members are not involved in development projects (87.4%), including project design and implementation.
- There is also a perceived **lack of appreciation from Soysambu Conservancy** when they receive assistance from the community, such as when the community assists in putting out fires during dry seasons (74%).

Human-wildlife conflict

- Human-wildlife conflict also dominates in the area with perceptions (81%) that **wildlife originating from Soysambu is exacerbating tensions and creating challenges for residents**. Examples include the damage to crops from monkey, loss off livestock, and other property; and some injury of people from buffalo; this resentment is largely linked to a lack of compensation for damage and injury by wildlife from Kenya Wildlife Service (KWS) (see below for more details).

Disease

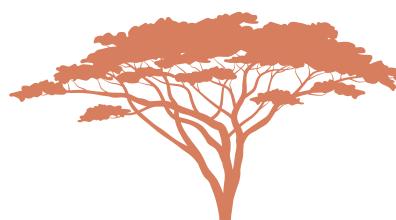
- The findings from discussions with community representatives and the household surveys indicate that **transmission of disease from wildlife and livestock in Soysambu** to local livestock poses a significant concern for community members, with **43% of households indicating it had an impact**.

Restriction on access to utilities

- **Restricted access to certain public utilities**, such as roads, creates barriers to mobility and community well-being. This was an occasionally cited issue by community members (35%).

Access to natural resources

- Limited access to grazing areas (44%) and restrictions on tree cutting (60%) within Soysambu Conservancy are more minor impacts cited by some community members.



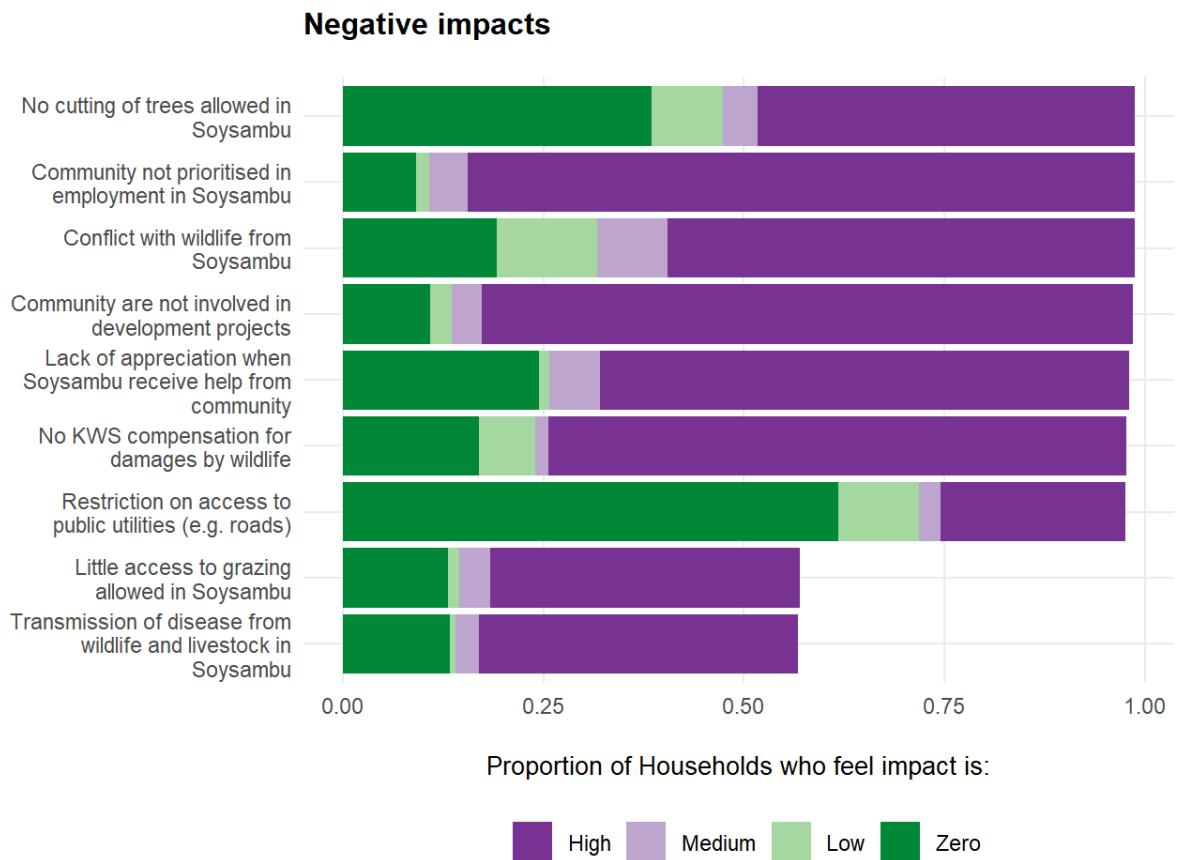
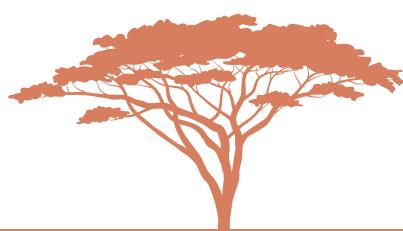


Figure 12: Overall negative impacts across all communities.

Negative impacts by location

Considerable differences in perceived impact exist between locations.

- In **Ol Jorai**, findings suggest that respondents considered nearly all of the highlighted negative impacts as of **high importance (mean: 88%)**, implying a detrimental effect on their household well-being. Fewer respondents felt that the impacts were of medium importance, while a number of them feel that some impacts were of zero importance, for example, conflict with wildlife, little grazing access to Soysambu and community not being prioritised in employment by Soysambu.
- Opinions among respondents in **Kiptangwanyi** location were varied and **slightly lower (mean: 70%)** when it came to negative impacts. A significant majority of respondents highlighted that all negative impacts were of high importance and thus were having an impact on their household well-being, except for the restriction of access to public utilities, where most respondents expressed a perception of zero importance.



- In Mbaruk, negative aspects of Soysambu were reported slightly less often (**mean: 60%**). A lack of community involvement in development projects and the community not being prioritised in employment in Soysambu were rated highest in terms of negative impacts. However, there was little negative impact reported around access to roads and access for cutting of trees.
- In Soysambu, negative aspects of the conservancy were mixed, with almost no households feeling an impact of restrictions on roads or tree cutting. However, there was considerable negative impact reported from conflict with wildlife from Soysambu, and lack of KWS compensation. They also felt they are not involved in development projects or employment opportunities.

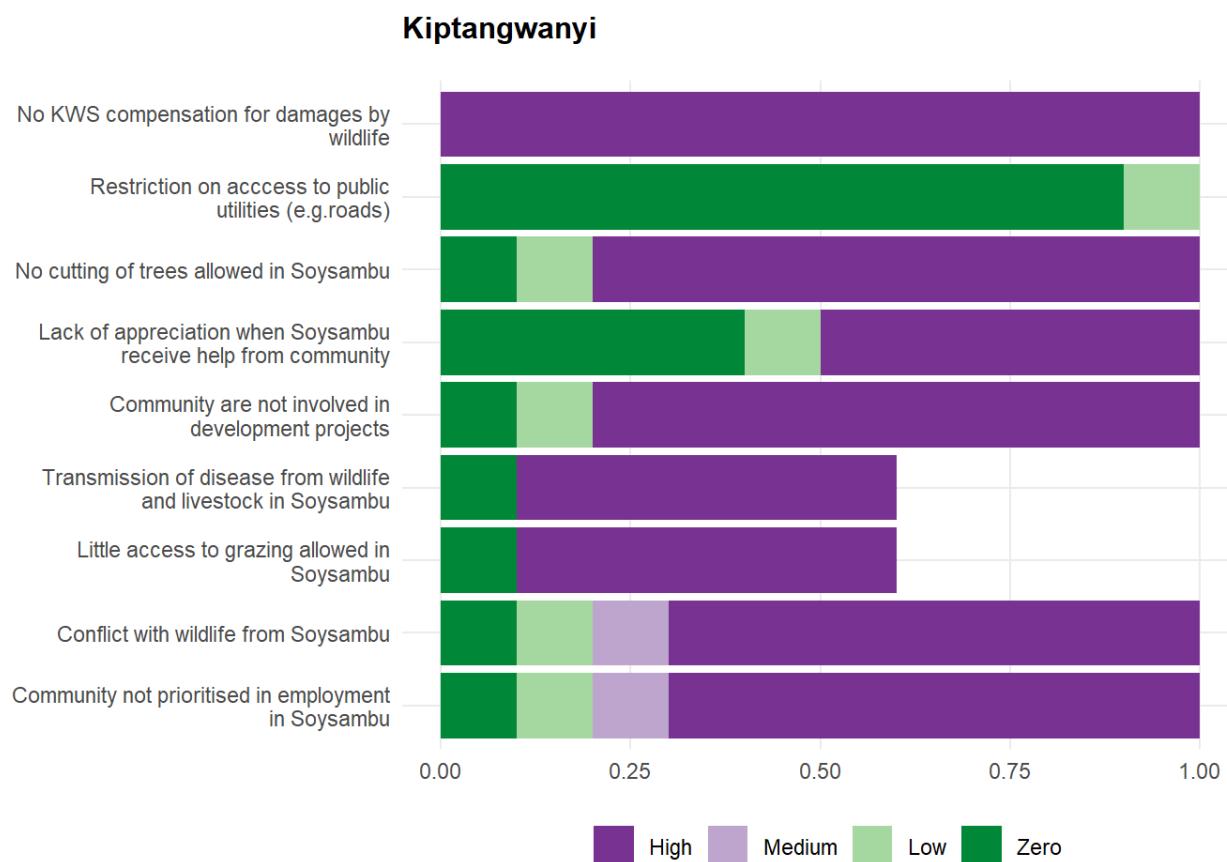
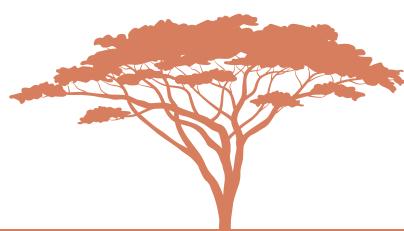


Figure 13: Negative impacts broken down into separate locations.



Ol Jorai

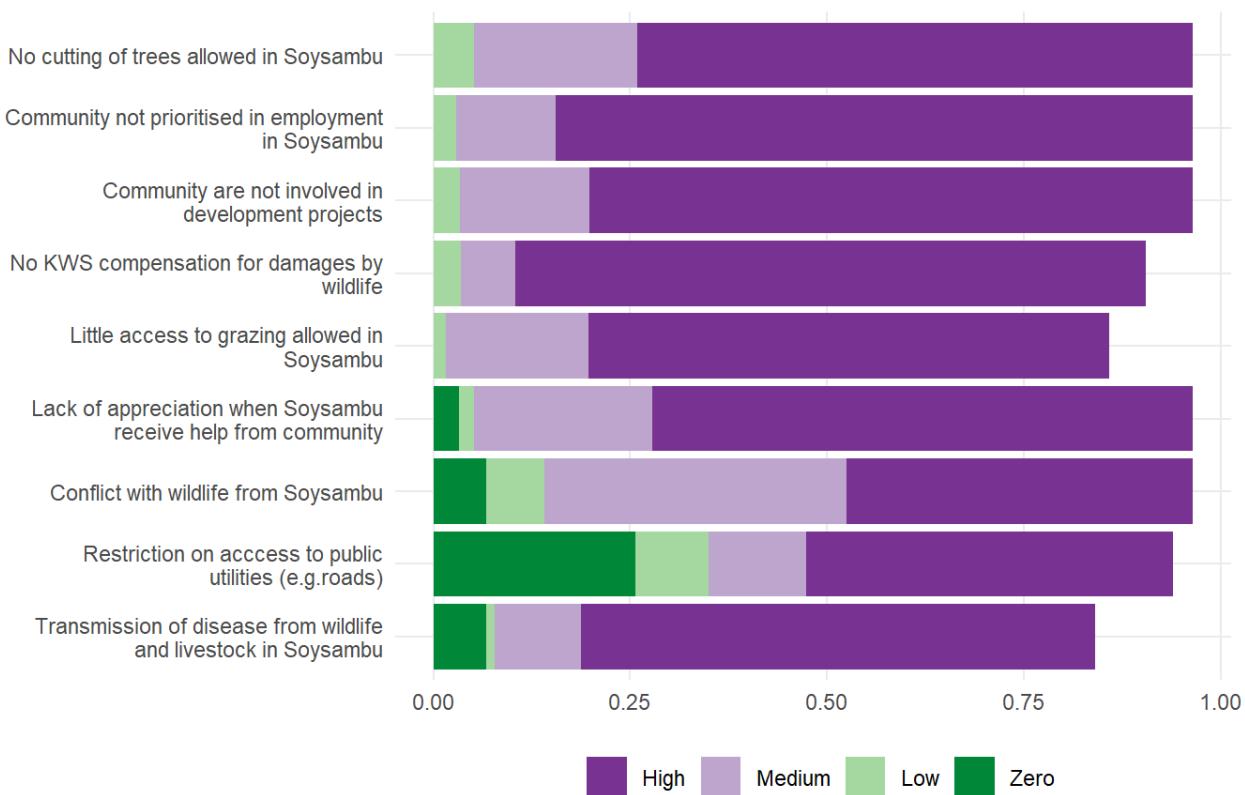


Figure 14: Negative impacts broken down into separate locations.



Mbaruk

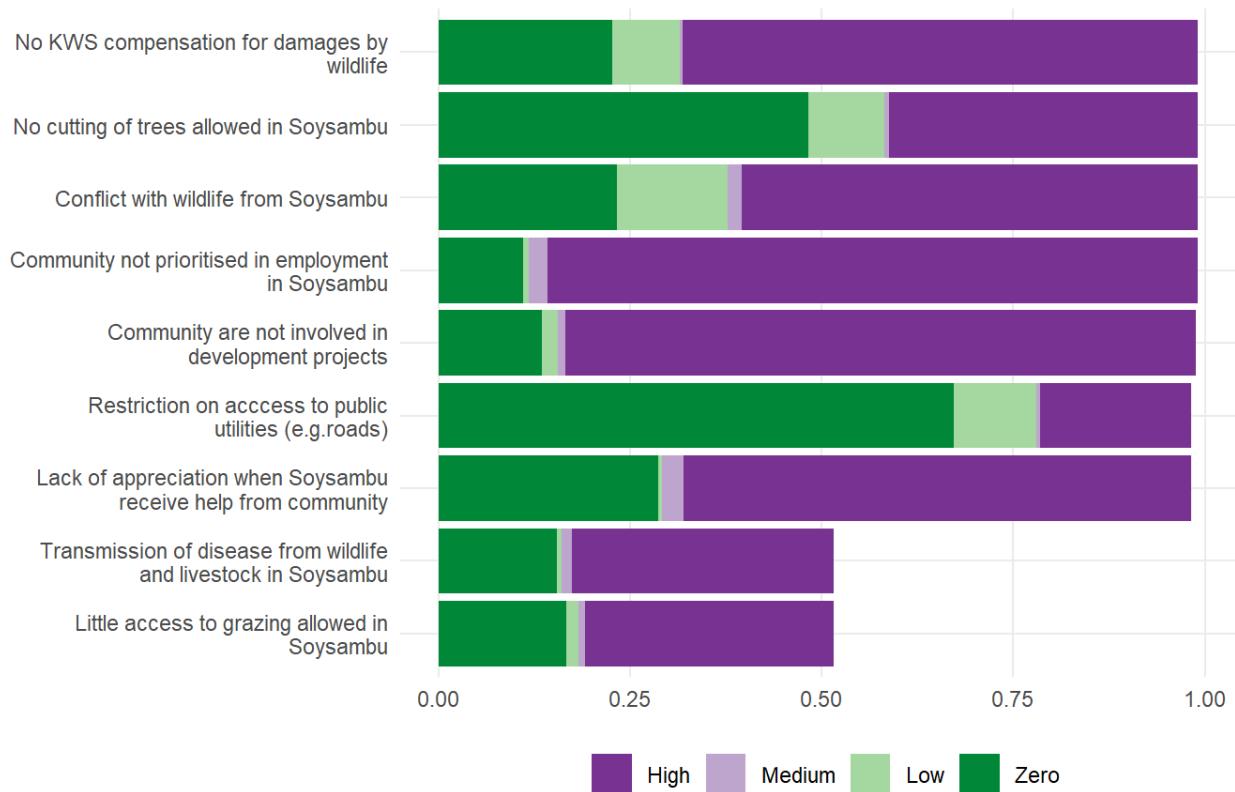
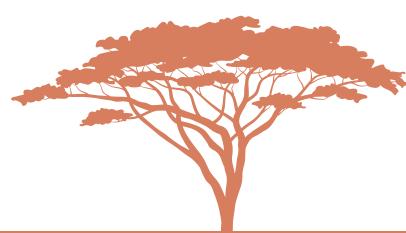


Figure 15: Negative impacts broken down into separate locations.



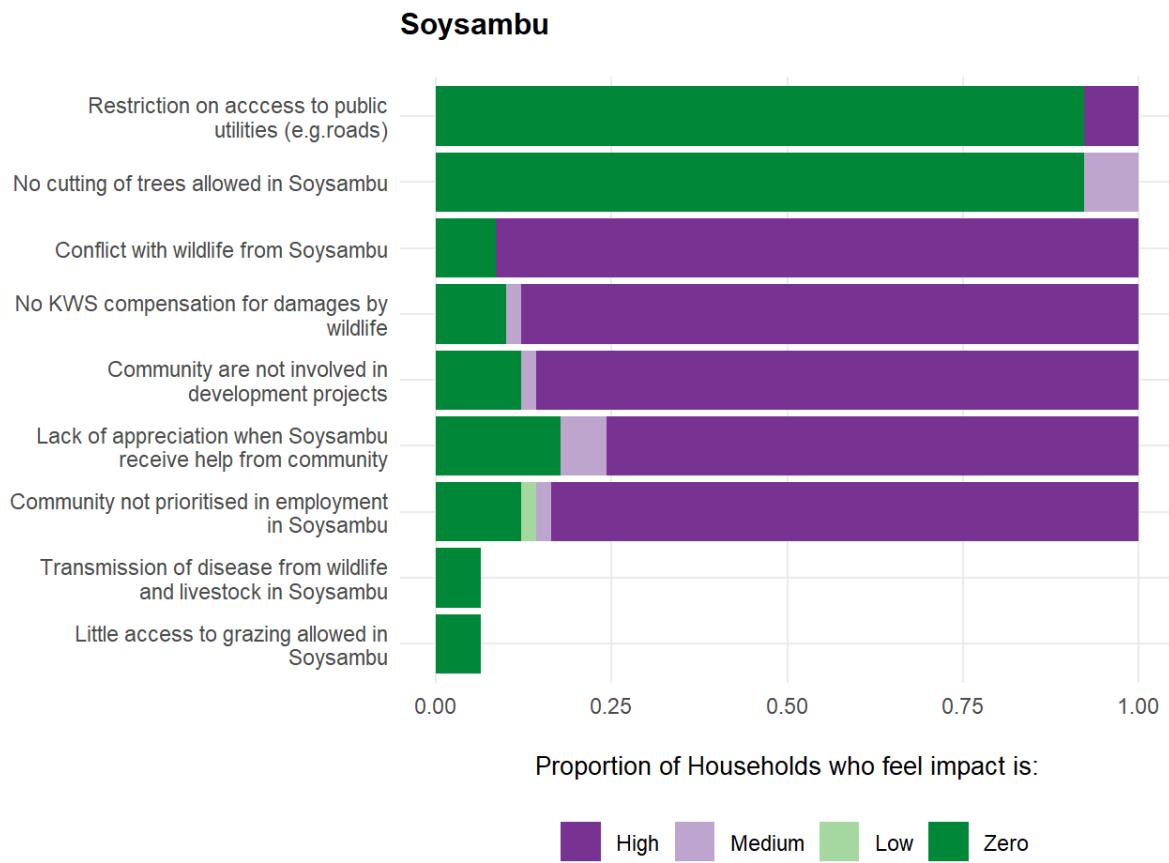


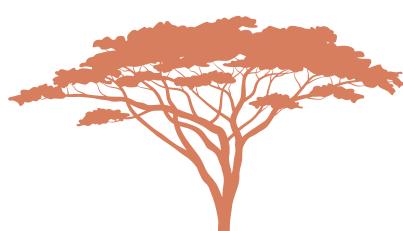
Figure 16: Negative impacts broken down into separate locations.

Conflict with wildlife

Conflict with wildlife was investigated separately to the above questions. It was reiterated that the majority of Soysambu is now fenced, and hence large herbivores are confined inside Soysambu. More mobile species can still cross the fence. Many conflict cases are not caused by wildlife resident in Soysambu, although people often attribute this to be the case.

Conflict

Based on the results of the household survey, the majority of conflict with wildlife comes from baboons and velvet monkeys, as well as a few others, including porcupines and buffalo. For households who have livestock, hyaenas (not defined which species) were the most frequently cited. Furthermore, across all areas, thankfully less than 1% (0.9%) of households reported that a member of their household was injured or killed by wildlife in the last year.



Households reporting that livestock 🐑 were damaged by wild animals in the last year.



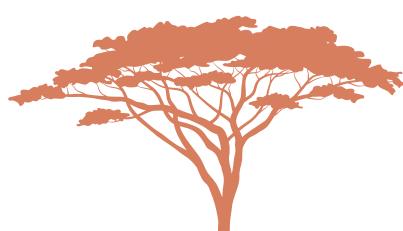
Households reporting that crops 🌾 were damaged by wild animals in the last year.



Overall contribution to well-being

In terms of well-being, the survey looked at this from a number of perspectives. Firstly, the respondents were asked about their own overall self-assessed well-being. This was achieved by asking the household head, “How’s life?” and explaining that 1 means everything is very bad and 10 means everything is very good.

- On average, **life was reported as being very bad** in most locations (**mean: 72.4%**).
- **Soysambu** had the highest number of people reporting **poor well-being (very bad: 98%)**.
- **Ol Jorai** had the most people reporting a **good or very good life (42%)**.



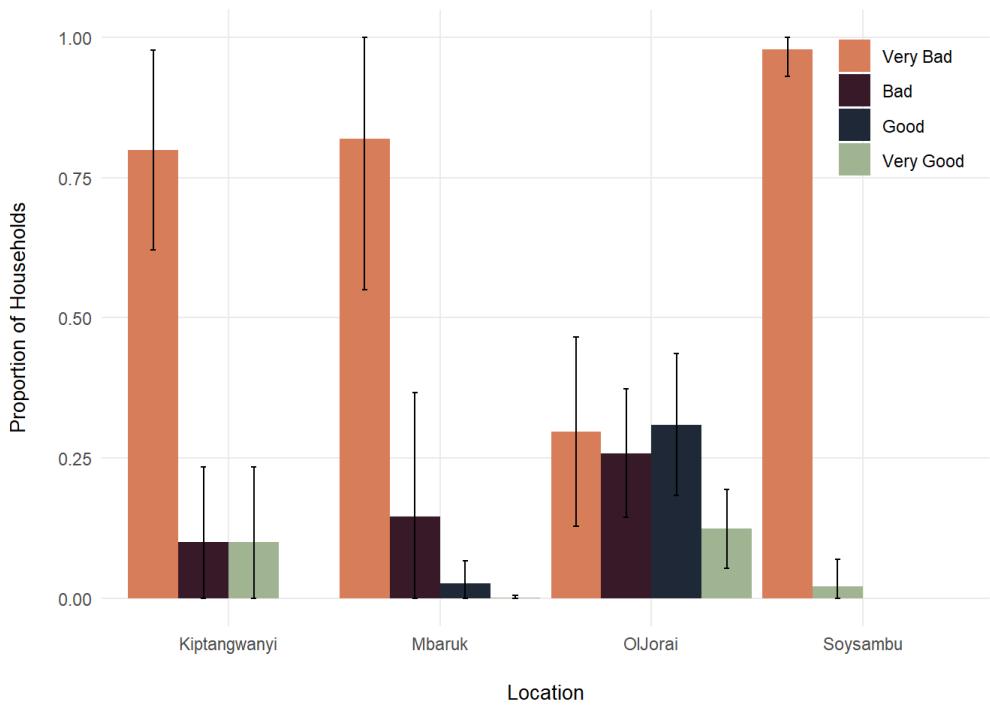


Figure 17: Responses when asked: How is your life at the moment?

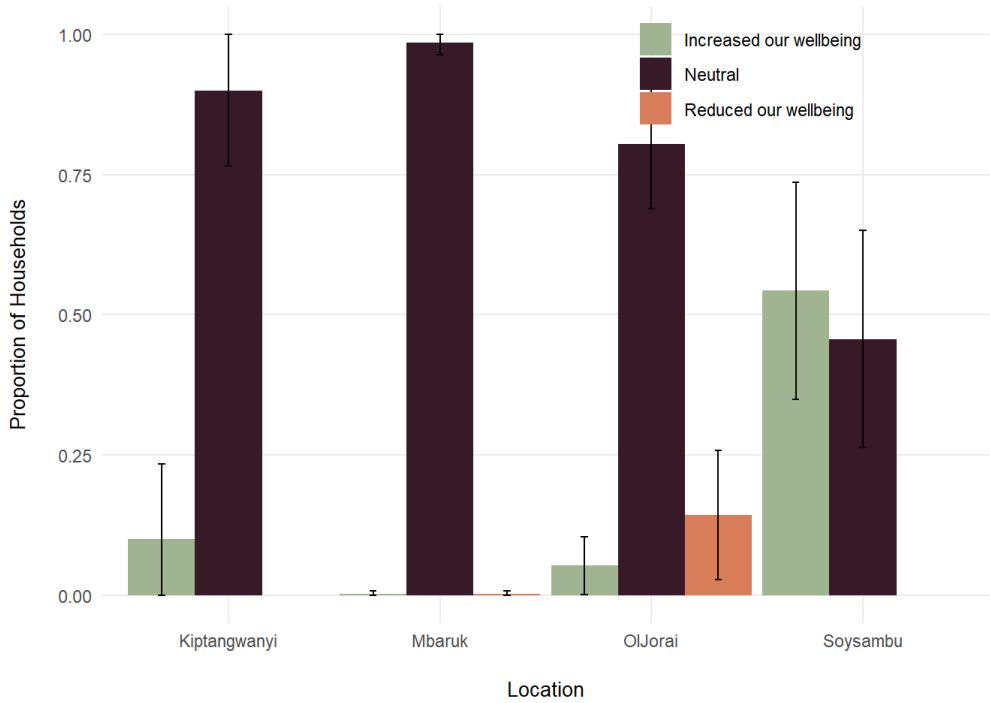


Figure 18: How has the general well-being of your household changed over the last 5 years?



- However, despite the lowest reporting well-being, **Soysambu residents reported they had the greatest increase in well-being in the last 5 years (54%)**.
- Most other areas reported little change to well-being.
- Then, once the respondent was asked about the positive and negative impacts of Soysambu Conservancy, they were asked if they could take into account all of these impacts discussed, and summarise the overall impact of Soysambu on the well-being of their household. **This confirms that Soysambu Conservancy has improved their own residents well-being in the last 5 years.**

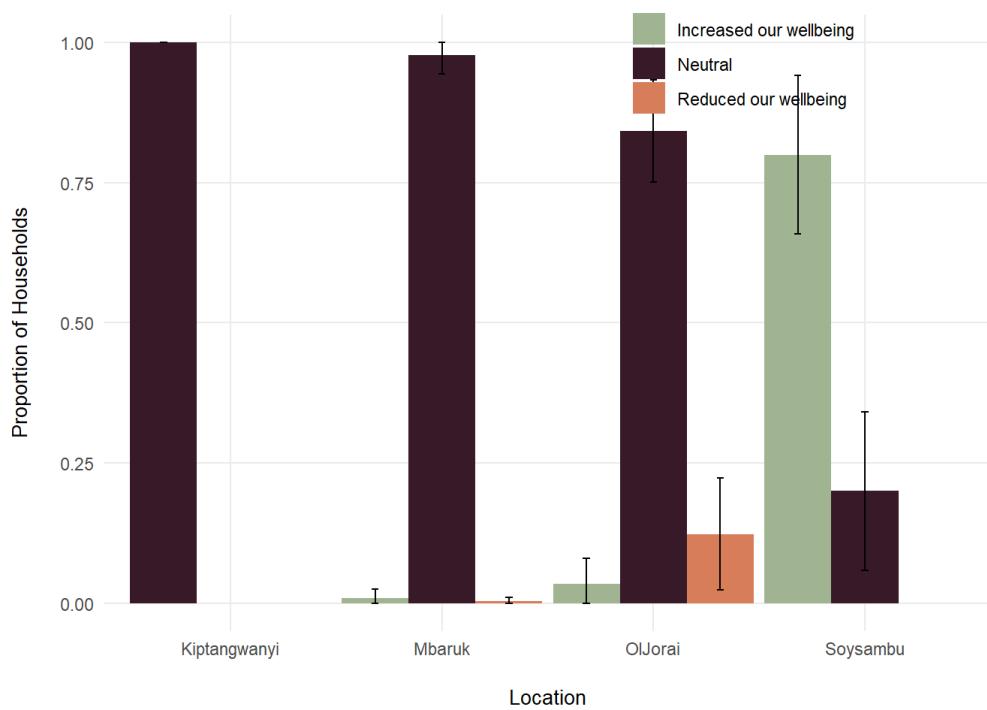
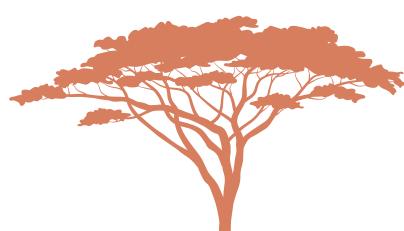


Figure 19: The impact of Soysambu Conservancy on the well-being of their household

Finally, in order to understand how the impact of Soysambu Conservancy on household well-being is changing over time, the respondents were asked, “How has the contribution of Soysambu to your household’s well-being changed over the past 5 years?”.



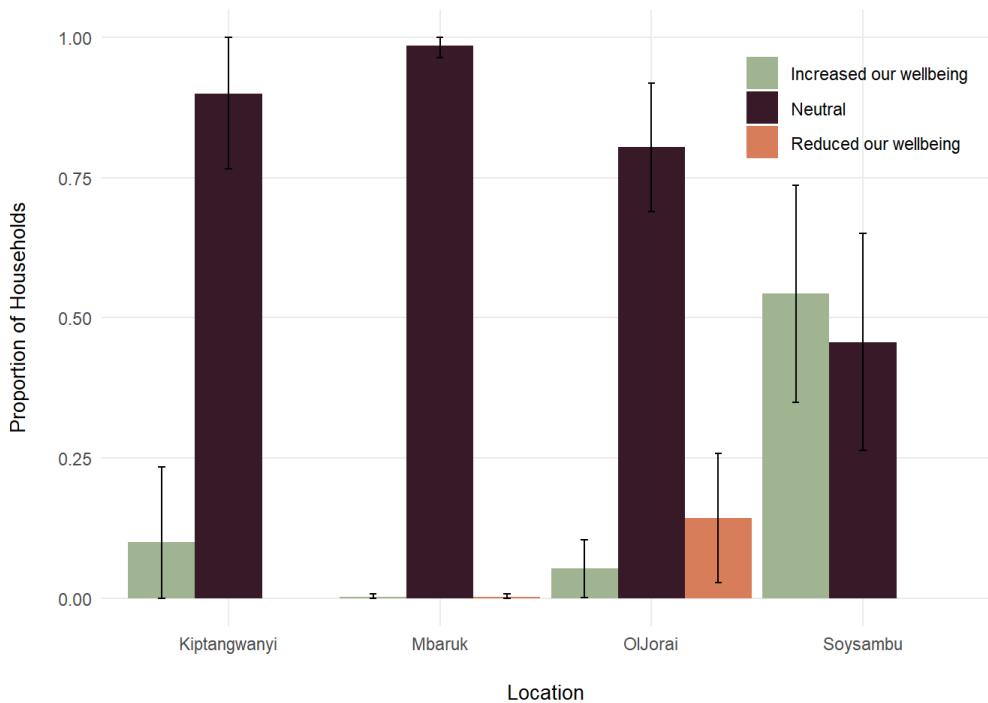


Figure 20: How has the contribution of Soysambu to your households well-being changed over the past 5 years?

The survey results indicated that the majority of respondents perceived Soysambu's overall contribution to well-being as neutral, taking into account both positive and negative impacts. There were exceptions, particularly in Kiptangwanyi and Soysambu locations, where a few respondents felt that Soysambu had increased their well-being.

75%

of those residing in Soysambu felt the conservancy increased their well-being.

12%

of respondents living in Ol Jorai agreed that Soysambu had reduced their overall well-being.



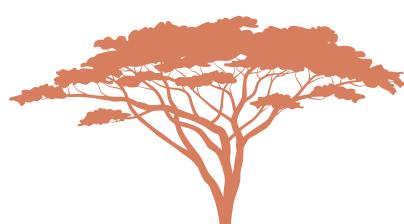
Governance

In the context of the Social Assessment of Protected Areas (SAPA), governance plays a pivotal role, encompassing various aspects such as power dynamics, relational structures, and mechanisms for accountability. Unlike management, governance within SAPA is concerned with decision-making processes, resource allocation, and ensuring the inclusion of all relevant stakeholders in the conservation framework. In this case, it refers to how Soysambu interacts with its surrounding community members. So-called “good governance” within SAPA is characterized by: Recognition and Respect for Rights; Full and Effective Participation; Transparency and Access to Information; Mitigation of Negative Impacts. As part of the SAPA process, we asked questions about each of these.

Participation in decision-making

Full and effective participation in decision-making ensures that all relevant stakeholders are actively involved in the decision-making processes which foster a sense of ownership and inclusivity.

- In the communities of Mbaruk and Ol Jorai, a significant portion of residents express that they disagreed that they were involved in decision-making processes that affect their communities.
- Conversely, within Soysambu itself, a notable proportion of individuals perceive a degree of participation, particularly in terms of awareness about their community representatives for engagements with Soysambu and the channels available for communication with them.
- In Kiptangwanyi, opinions vary, with some residents indicating a lack of participation, others acknowledging its existence, and a considerable number choosing to answer “*Don’t know*” when asked about the extent of their involvement in decision-making processes.



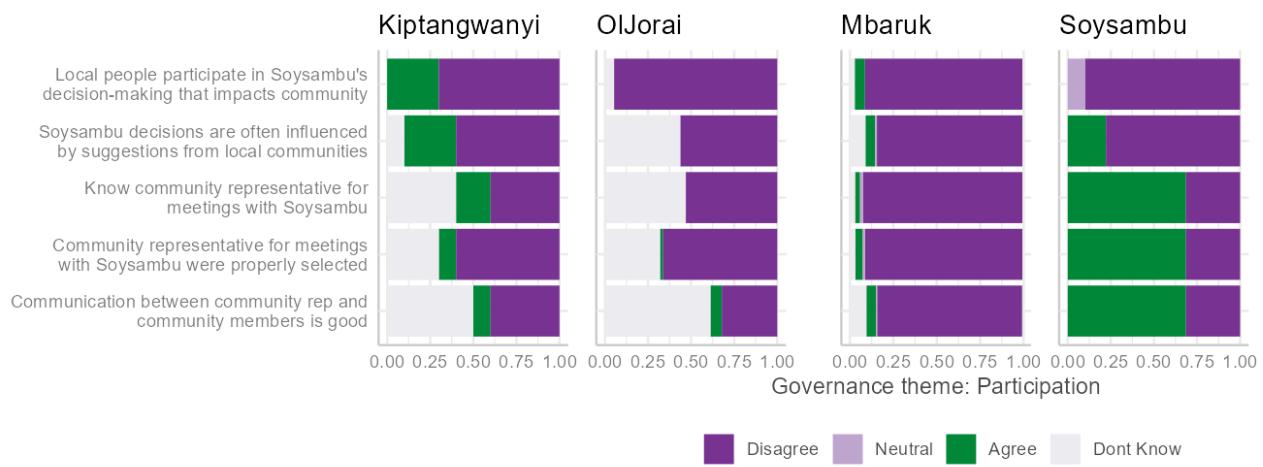


Figure 21: Participation in decision-making

Level of influence

One key positive result that did emerge from the survey was that most household heads felt that they had medium or high levels of influence on decision-making in their communities. The percentage of households that said they had medium or high levels of influence in their communities:

100% 98% 96% 100%
Kiptangwanyi Mbaruk Ol Jorai Soysambu

Transparency and access to information

Facilitating transparency through timely access to relevant information in suitable formats, thereby promoting openness and trust among stakeholders. To assess this aspect, respondents were given three statements to react to (see Figure below).

In Kiptangwanyi, Ol Jorai, and Mbaruk locations, results suggest that a substantial proportion of respondents expressed dissatisfaction with the transparency of information. They felt that there were no meetings with Soysambu, and that they did not have timely access to information about decisions affecting the community made by Soysambu. The results were slightly different in the communities living in Soysambu, where although a significant number of respondents disagreed that there was sufficient transparency, a greater proportion agreed with the statements.



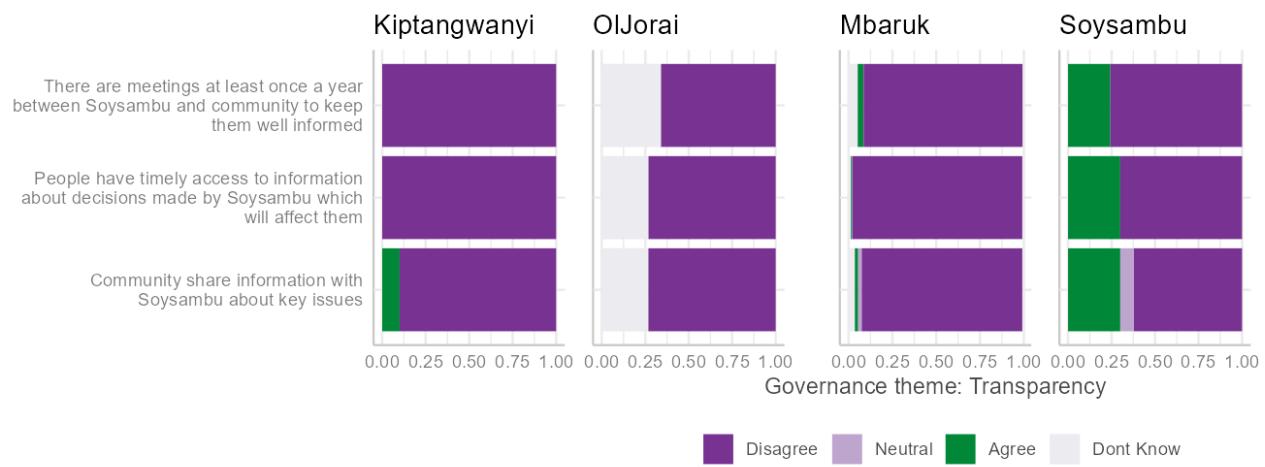


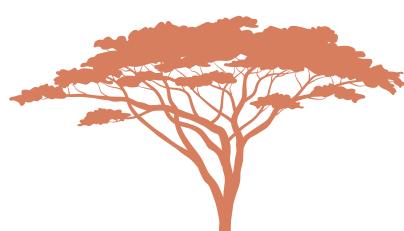
Figure 22: Agree/Disagree on statements about transparency and access to information.

Mitigation of negative impacts

Mitigation of negative impacts involves implementing effective measures to address any adverse effects on local communities, safeguarding their well-being and interests. This aspect of good governance was assessed through specific statements related to Soysambu and its associated negative impacts, shown in the Figure below.

The household survey results show diverse perspectives across locations. In Kiptangwanyi, Ol Jorai and Mbaruk, most respondents disagreed that an effective system for collecting information on damage caused by wild animals existed, as well as a lack of help when serious issues of damage by wild animals did occur. On the contrary, in communities living in Soysambu, the majority agreed with the two statements. This suggests that some strategies do exist, but they are implemented in different ways across the different locations.

There was less consensus across Mbaruk, Kiptangwanyi, and Soysambu regarding Soysambu's use of effective measures to mitigate the negative impacts of the conservancy, with more respondents feeling like there were measures to mitigate negative impacts and crop damage. The exception here was Ol Jorai where the majority still disagreed that there were any measures in place.



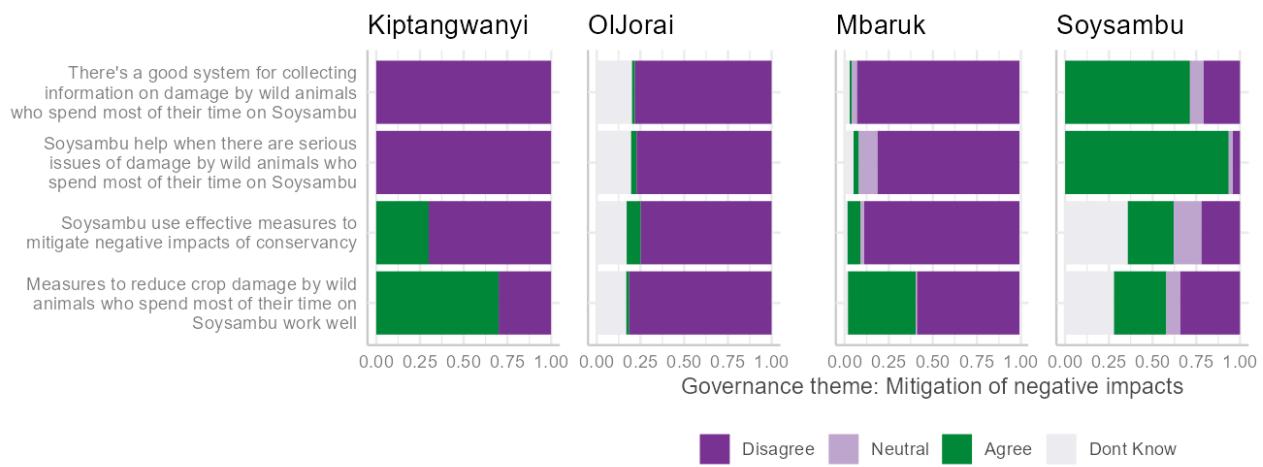


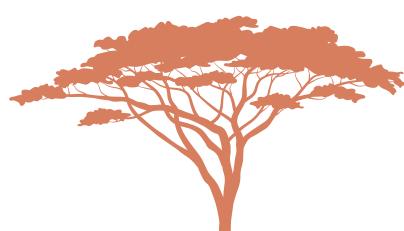
Figure 23: Agree/Disagree on statements about mitigation of negative impacts.

Equitable benefit-sharing process

Equitable benefit sharing in SAPA refers to ensuring that benefits derived from the conserved or protected area are equitably distributed among relevant stakeholders based on agreed-upon targeting options, thus promoting fairness and social justice. This can be slightly tricky in the case of private, conserved land. Therefore, the statements given to respondents sought to gauge the extent to which there was any perceived benefit sharing, and whether the allocation of benefits was gender-balanced (see Figure below).

Across Kiptangwanyi, Mbaruk, and Ol Jorai locations, almost all respondents disagreed with all statements. A minority of respondents in Soysambu agreed with the statements, which suggests that communities living in Soysambu do receive some benefits that other communities do not.

In addition, nearly all respondents believed that women had little influence compared to men in determining the allocation of any benefits from Soysambu.



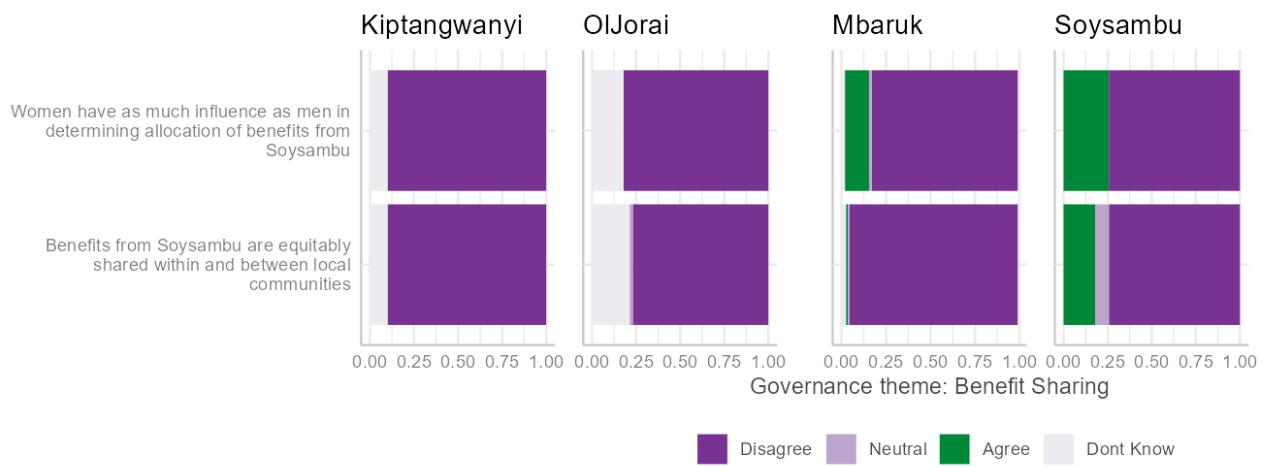


Figure 24: Agree/Disagree on statements about equitable benefit-sharing processes.

Rights

In SAPA, prioritizing recognition and respect for the rights of all relevant stakeholders engaged in protected area management is fundamental to good governance. Once more, it is tricky to study this in the context of private conserved land.

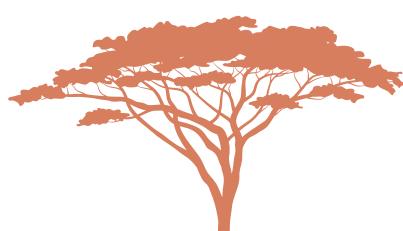
In the survey, respondents were asked whether Soysambu recognizes and respects the rights of local women and men.

In response to the overall statement, in Ol Jorai and Soysambu, the majority disagreed with this statement, with a few in Mbaruk and Kiptangwanyi expressing similar views.

Conversely, a few respondents in Kiptangwanyi and Mbaruk, as well as most in Ol Jorai and Soysambu, agreed with the statement. When it came to the community's perceived right to harvest firewood, respondents in Soysambu felt that they had the right to harvest firewood.

There were mixed responses in all other locations regarding law enforcement staff potentially violating the law or local people's rights. The majority of respondents from Kiptangwanyi, Ol Jorai, and Soysambu disagreed. This result is slightly different to claims that were made in the open ended questions (see the section in "From assessment to action" below).

Nevertheless, in Mbaruk, the perception was different, as most respondents agreed that there were some violations of their rights.



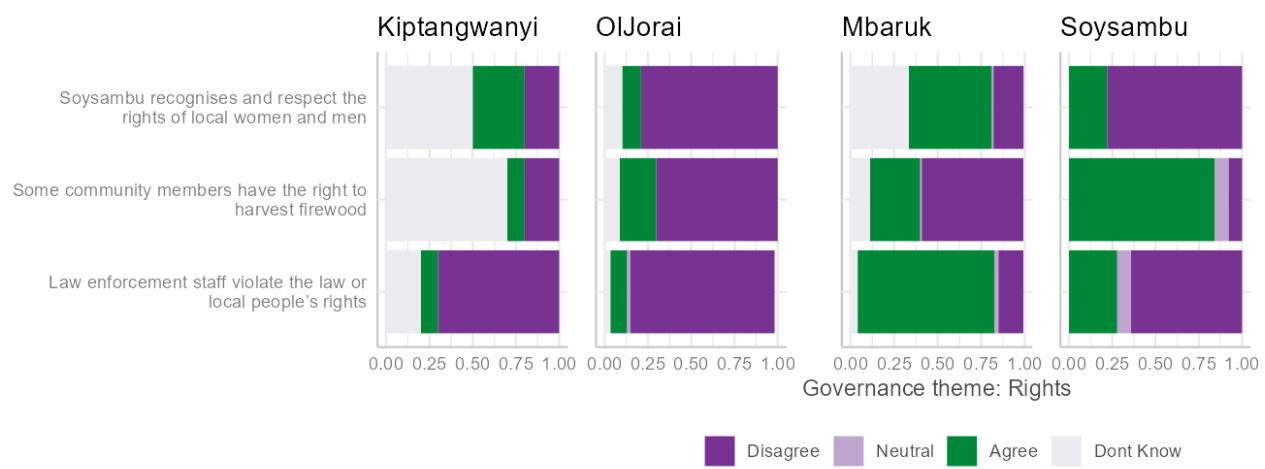


Figure 25: Agree/Disagree on statements about rights.



From assessment to action

To capture suggestions from stakeholders, during the survey, respondents were asked a simple open-ended question: “*Are there any other ways, not mentioned, that you think Soysambu could help your community?*”. Furthermore, during the second stakeholder workshop, the 33 participants were divided into groups that represented their communities and were given an opportunity to brainstorm and add further suggestions based on results from the survey tool.

In the following section, we outline the main categories under which these suggestions fall. Here, we outline actionable steps and strategies aimed at enhancing the conservation efforts and social impact management within and around Soysambu Conservancy. Drawing upon the identified challenges and opportunities, these recommendations are drawn from the community members and seek to foster sustainable practices, improve community engagement, and promote equitable outcomes for all stakeholders involved.

Support for schools and education

Soysambu Conservancy has provided land for the construction of Lady Ann Secondary School. One household participant expressed gratitude to Soysambu for this initiative. However, there is a recurring call for greater support for schools and education, as highlighted in both the open-ended survey questions and the stakeholder workshops.

Specifically, participants made several requests for investments from Soysambu, including:

- i. Allocation of land between Baraka and Soysambu for the construction of a primary school and other public utilities, as well as the relocation of Kiboko Primary School to this land.
- ii. Construction of a primary school in Royal Estate.
- iii. Installation of ablution blocks in primary schools such as Kapkures, Kampi Turkana, Oldubei, Olesirwa, Kelelwa, and Olepolos.
- iv. Establishment of an Early Childhood Development Education (ECDE) center in Jogoo village, addressing a recognized need from community engagement sessions.
- v. Development of a nursery school in Kiwanja Ndege and Ngatta areas, along with polytechnics and secondary schools.
- vi. Implementation of school feeding programs in Ol Jorai Primary School.
- vii. Creation of a library in the Mololine area to engage the youth.
- viii. Provision of transportation for children commuting to Kiboko Primary.

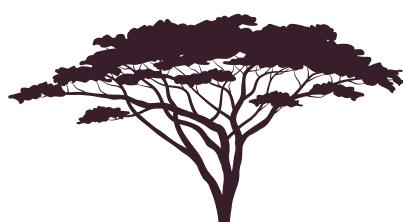
Furthermore, workshop participants suggested that Soysambu could offer scholarships to the brightest students from primary schools across all areas. Some respondents expressed concerns about the fairness of scholarship provisions, emphasizing the importance of ensuring a fair and transparent process and creating a representative and elected committee from all locations to help screen candidates. A similar process has been established successfully in Ol Pejeta Conservancy.

Action: Develop a clear strategy for engaging with schools, including infrastructure development, educational content, support for teachers, and bursaries. Lessons can be learned from Lewa, Ol Pejeta, Enonkishu Conservancy, and Big Life Foundation.

Health and hospital facilities

Perhaps unsurprisingly, support for health initiatives within the communities was another form of support that was regularly mentioned. During the survey, respondents expressed a collective desire for improved health facilities, including the construction of hospitals, provision of medical equipment, and upgrades to existing dispensaries.

- In the Mbaruk area, one in five respondents echoed the need for expanded healthcare infrastructure, including a hospital and a better-equipped



dispensary in Echareria. The sentiment was further reinforced during the stakeholder workshops, with participants emphasizing the importance of constructing essential facilities such as a maternity wing, staff houses for health workers, and an outpatient wing in various locations, including Kiungururia.

- Similarly, in Ol Jorai, some respondents stressed the need for improved health facilities in Kampi Turkana and Kapkures: “*We need a hospital in Kapkures as women are losing children because a hospital is lacking*”. The sentiment was echoed during the stakeholder workshops, where requests for dispensaries at Kampi Turkana and Kapkures, along with staff housing at the Ol Jorai health center, were highlighted.
- While there were no specific requests from respondents in Kiptangwanyi during the survey, during the stakeholder workshops, participants emphasized the importance of equipping the maternity wing at the Elmenteita dispensary in Elmenteita village.

Action: Develop a clear strategy for engaging with health clinics, dispensaries, and schools, including infrastructure development and support for health workers. CHASE Africa is one of the leading NGOs in the region, working with conservation practitioners to improve the outcomes of health care in conservation landscapes.

Water provision services

The need for reliable access to water was a recurring theme among the communities surveyed. Respondents highlighted the necessity for water infrastructure such as dams and boreholes to address water scarcity, especially during dry seasons.

- In the Mbaruk area, a significant portion of respondents emphasized the importance of water infrastructure, including the revival of existing boreholes and the construction of new ones. Participants specifically called for a water tower at Kiungururia and a borehole in Echareria during the stakeholder workshops, indicating the critical need for improved water access: “*Allow access to the water passing through Kiambogo to [Soysambu]*.”
- Similarly, in Kasambara, participants echoed the sentiment for enhanced water infrastructure, with requests for boreholes at Wamagwathi’s farm and a pipe extension at Kianyenji village to address water scarcity in the region. In particular, participants called for the existing boreholes near African Forest to be revived.
- In Ol Jorai, a third of those surveyed underscored the necessity for dams or water pans to mitigate water scarcity, particularly during dry weather.
- Respondents from Kiptangwanyi also expressed a pressing need for community water provision, with 50% of survey respondents advocating for improved water access. Stakeholder workshops reiterated the importance of constructing water



points and providing water pipes in key areas to address water challenges effectively.

- Overall, the stakeholder workshops served to emphasize the requests for water distribution infrastructure (e.g., water points at Mwariki C, water pipes in Jogoo village), a mega-dam at Soysambu to help harvest water heading to Elmenteita around Maisha Poa area, a water pan in Kampi Turkana, and a borehole in Ngatta.

Action: Develop a clear strategy for water provision, accounting for the supply of water, the trade-offs for livestock and wildlife management, and the roles of WRUA. A consultant, such as Sean Avery, would provide concrete steps forward.

Livestock management

Livestock management also emerged as a significant concern among the communities surveyed, particularly among those for whom livestock are one of their most important livelihoods. The map below shows that the second most important livelihood for most households is livestock, especially in places like Ol Jorai.

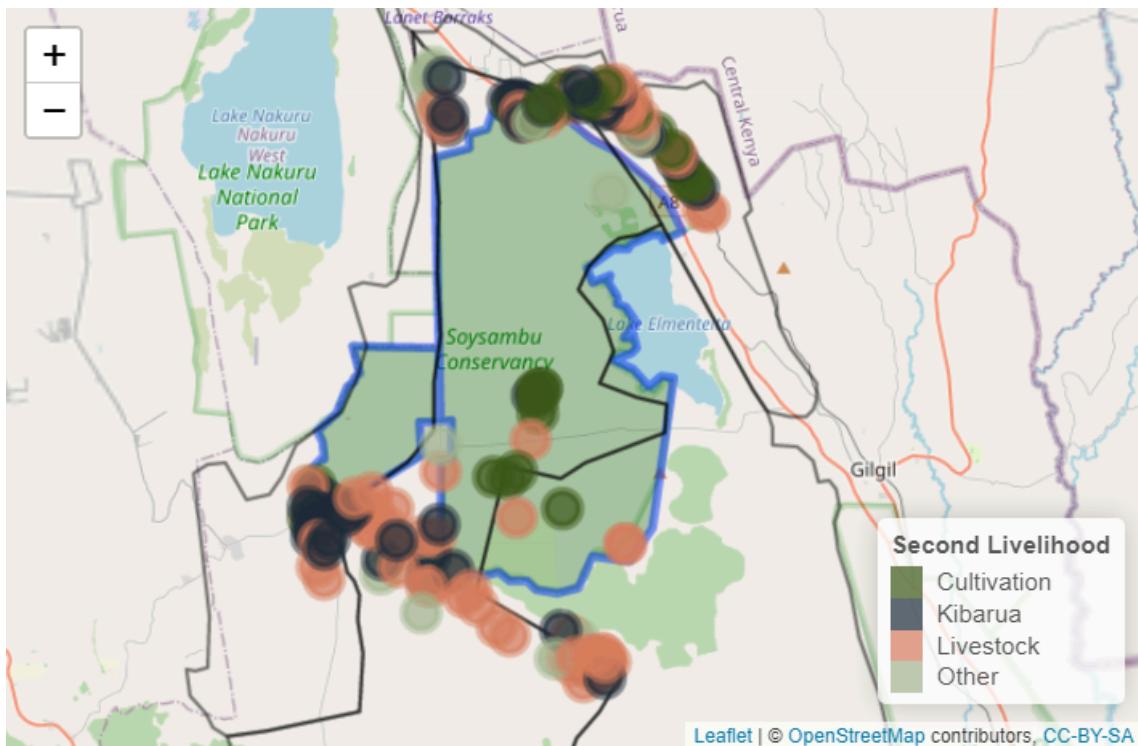


Figure 26: Map of the second most important livelihood in surveyed households.

Therefore, unsurprisingly, requests and suggestions came primarily from Ol Jorai, where most of those surveyed sought assistance in multiple aspects of livestock management, including:

- Access to grazing fields during dry seasons.



- Provision of grass for livestock.
- Livestock management education programs.
- Compensation for losses due to wildlife encounters.
- Cessation of harassment by security personnel on herders.

The stakeholder workshops further elucidated the community's requests, with a majority emphasizing the need for capacity building on improved livestock management, access to grazing areas, hay production (some suggested at Nderit Primary School), livestock vaccination, and infrastructure development such as cattle dips (e.g., at Kampi Shule). Participants also highlighted the need for measures to mitigate wildlife-livestock conflict, particularly from hyenas, with some people suggesting the use of traps.

A number of respondents in the Mbaruk area also highlighted the need for support in sustainable livestock management, grazing access (they mentioned on “unused land”), education on livestock management, and access to animal vaccination services and artificial insemination. Additionally, participants in Kasambara emphasized the long-standing request for the provision of dairy goats and dairy cattle, underscoring the community's desire for diversified livestock options.

Action: Engage with rangeland management trainers and implementers such as TruRange, Mara Training Centre, Ol Pejeta, and others to develop a livestock engagement plan and training the surrounding communities.

Environment and sanitation

The preservation of the environment and promotion of sanitation also emerged as key priorities. Survey respondents and workshop participants emphasized the importance of addressing environmental issues and implementing sanitation measures to improve community well-being.

- Respondents from Mbaruk and Ol Jorai in particular, suggested that Soysambu could address environmental challenges by: installing sanitation points near highways; providing tree seedlings (also mentioned in Ol Jorai); and raising awareness about environmental conservation.
- Additionally, workshop participants emphasized the importance of fencing and tree planting at Chamuka Springs to safeguard natural resources and promote environmental sustainability.

Action: Select key activities from the list provided and begin implementation.



Security

Ensuring the safety and security of residents and their property is important for community well-being. While many respondents from communities within Soysambu expressed satisfaction with the prevailing sense of security (see Figure above), it is evident that this is not the case in other areas.

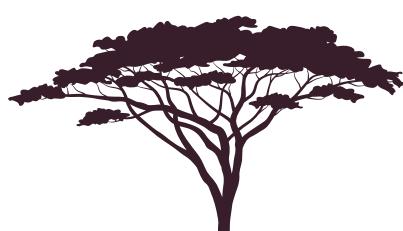
- In Mbaruk, 22% of survey respondents identified the need for additional security measures, specifically requesting assistance from Soysambu in constructing a police post in Murang'a Echereria, Mbaruk, and Mololine villages. This sentiment was further emphasized during the stakeholder workshops, with participants additionally advocating for the establishment of a police post in Royal Estate.
- These calls were echoed by respondents from Kiptangwanyi, who also highlighted the need for administrative offices for the chief and assistant chiefs at the Kiptangwanyi chief's camp.

Action: Work with local administration to prioritise security projects.

Land and fencing

Land usage and fencing emerged as significant concerns among respondents.

- During the survey and stakeholder workshops, a number of people expressed appreciation for Soysambu's past initiatives, such as selling land to their fathers in Kiambogo.
- In Mbaruk, 16% of respondents expressed various preferences regarding land usage within Soysambu. These included desires to purchase land from Soysambu if it were to become available, allocate portions of land for community purposes such as markets, graveyards, and waste disposal sites, and provide land to squatters at affordable rates.
- In Soysambu, 35% of respondents suggested initiatives to optimize land usage, which included requests for subsidized land allocations for cultivation purposes, setting aside land for vegetable farming, and advocating for the installation of electric fences around residential areas to bolster security measures.



Community representation

Based on the governance section, most people across all locations disagreed that there was sufficient transparency and access to information or equitable benefit-sharing . In fact, across all locations, most people felt they were not well-informed, didn't have access to timely information about decisions made by Soysambu that would affect them, nor that their communities were sharing information with Soysambu. Unsurprisingly, improved community representation emerged as a key recommendation, with survey respondents and stakeholder workshop participants expressing a desire for greater involvement and communication with Soysambu.

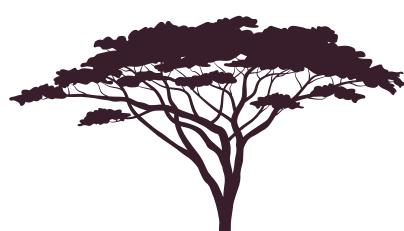
For instance, in Mbaruk, a number of respondents emphasized the importance of clear communication from Soysambu regarding community rules and regulations. Additionally, they advocated for the establishment of quarterly general meetings to facilitate open dialogue and transparency. One respondent requested the election of a community representative to enhance community voice and representation.

Similarly, in Ol Jorai, respondents underscored the importance of fostering positive relationships between Soysambu and local communities. They emphasized the need for community inclusion in decision-making processes and likewise they suggested holding regular meetings to facilitate ongoing dialogue and collaboration between Soysambu and the community.

Action: Creation of a community committee, with fair representation of all communities and their membership, including youth and women, and participation in community project and program development could be an important next step.

Harassment and compensation

In Ol Jorai, some respondents highlighted instances where individuals gathering firewood experienced perceived harassment. Additionally, there were reports of individuals feeling harassed during law enforcement activities. Concerns were also expressed regarding perceived delays or lack of compensation from the Kenya Wildlife Service (KWS) for damage caused by wildlife to crops and livestock. These issues were not reported in other surveyed areas. After these issues were raised, Soysambu conducted a review, re-fresher training in law enforcement, and updated their internal policies.



Further suggestions

Less frequently mentioned suggestions, or those posing potential implementation challenges, include:

- Prioritizing employment opportunities for community members within the conservancy, which could be advertised and selected through a community committee.
- Facilitating community participation in game drives to observe wild animals within the Soysambu and better understand the conservation work Soysambu Conservancy is conducting.

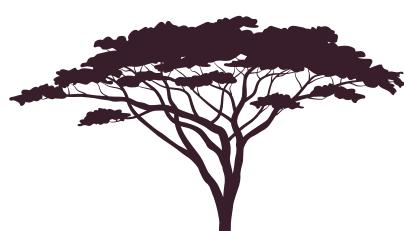


Full list of requests from communities

Here we have included all the suggestions that were made by survey respondents, or in the stakeholder workshops, in a table format.

Table 3: Community suggestions for other ways Soysambu could help the community.

| Category | Suggestion |
|--|--|
| Support for Schools and Education | Allocation of land between Baraka and Soysambu for the construction of a primary school and other public utilities, as well as the relocation of Kiboko Primary School to this land. |
| | Construction of a primary school in Royal Estate. |
| | Installation of ablution blocks in primary schools such as Kapkures, Kampi Turkana, Oldubei, Olesirwa, Kelelwa, and Olepolos. |
| | Establishment of an Early Childhood Development Education (ECDE) center in Jogoo village, addressing a recognized need from community engagement sessions. |
| | Development of a nursery school in Kiwanja Ndege and Ngatta areas, along with polytechnics and secondary schools. |
| | Implementation of school feeding programs in Ol Jorai Primary School. |
| Support for Health and hospital facilities | Creation of a library in the Mololine area to engage the youth. |
| | Provision of transportation for children commuting to Kiboko Primary. |
| | Offering scholarships to the brightest students from primary schools across all areas. |
| | Construction of hospitals and dispensaries, provision of medical equipment, and upgrades to existing healthcare facilities. |
| | Establishment of a maternity wing, staff houses for health workers, and outpatient wings. |
| | Improvement of health facilities in various locations such as Kampi Turkana and Kapkures. |
| | Equipping the maternity wing at the Elmenteita dispensary. |



| Category | Suggestion |
|-----------------------------|---|
| Water Provision Services | Installation of water infrastructure including boreholes and water towers. |
| | Construction of dams, boreholes, and water towers. |
| | Revival of existing boreholes and extension of water infrastructure. |
| Livestock Management | Mitigation of water scarcity through the construction of water pans and pipes. |
| | Access to grazing fields during dry seasons and provision of grass for livestock. |
| Environment and Sanitation | Education programs on improved livestock management and capacity building. |
| | Compensation for losses due to wildlife encounters and cessation of harassment by security personnel on herders. |
| | Installation of sanitation points near highways and provision of tree seedlings. |
| Security | Fencing and tree planting at Chamuka Springs. |
| | Raising awareness about environmental preservation. |
| Land and Fencing | Construction of police posts in various locations. |
| | Establishment of administrative offices for local authorities. |
| Community Representation | Purchase and allocation of land for community use. |
| | Provision of land for cultivation and installation of electric fences. |
| Harassment and Compensation | Clear communication of rules and regulations, and establishment of quarterly general meetings. |
| | Fostering positive relationships and inclusion of the community in decision-making processes. |
| Further Suggestions | Investigation of reported harassment incidents and compensation for wildlife-related damages. |
| | Prioritizing employment opportunities for community members within the conservancy and facilitating community participation in game drives. |



Agricultural extension services

In the requests and suggestions from those surveyed and workshop participants, there were a number of calls for education programs to improve livelihoods. For most households, the principal livelihoods are still agriculture based (with *kibarua* or livestock for some). Soysambu has already carried out some form of agricultural extension activity through the farmer's seminar on livestock production. This could be an area that is expanded on to support those in the community who are engaged in smallholder activities.

An extension programme could be designed to promote new methods and solutions to inform smallholders on how to increase production (and income) and become more food secure.

A needs-based assessment would be required for the target community and tracking impact would be a crucial consideration. Changing farming practices and behaviours is a particularly challenging objective in the short term as behaviours tend to change over longer periods of time and often proof of success of new practices needs to be demonstrated for changes in traditional farming practice to be adopted. As such, this would be a longer-term programme allowing for shifts in both the knowledge and attitudes of the target community with regards to the practices being promoted and actually being implemented. Funding of certain inputs should also be considered for the success of this programme and for the farmers to be able to adopt some of the practices being promoted.

An agricultural extension programme could be rolled out in a number of ways, from inviting interested members of the community to watch videos promoting new and improved farming methods – through to creating demonstration farms to impart knowledge in a more practical manner and allowing for participants to see changes over time.

The tables below set out some examples of how climate smart agriculture could be promoted to the smallholder community. These suggestions aim to increase farmer's knowledge on farming practices that can improve productivity in crop or livestock agriculture, and how farmers can adapt their practices to accommodate an ever-changing climate.

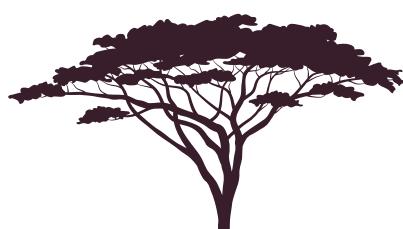


Table 4: Agricultural extension - Soil Management

| Theme | Content | Disbursement of information |
|--------------------------|--|--|
| Soil health | <p>Information sharing on what a soil test is and why it is important to do one e.g., can tell the health of the soil, pH levels, which crops can be grown in your soil and which fertilizer to use.</p> <p>How to carry out a soil test. Should do a soil test every 3-5 years.</p> | <p>Practical demonstration - how to carry out a crop test.</p> <p>Potential to fund soil tests for participants. Cost circa 1000 KSH per test.</p> |
| Conservation agriculture | A way of farming to keep nutrients and moisture in the soil. Helps control pests and diseases. Involves minimum tillage, mulching, crop rotation | Practical demonstration of all three activities. |
| Soil management | <p>Emphasizes the importance of fertilizer to return nutrients to the soil.</p> <p>Different types of fertilizer and nutrients at various stages of growth.</p> <p>Manure - enhances soil fertility and improves soil health over time – reducing the need for fertilizer.</p> | <p>Practical demonstration of fertilizer and manure application.</p> <p>Possible provision of inputs for one season for participants.</p> |



Table 5: Agricultural extension - Maize.

| Theme | Content | Disbursement of information |
|--------------------|---|--|
| Planting | Informing participants that maize does not grow well in acidic soils. A soil test can determine suggestions for remedying acidic soil, such as adding lime. | |
| | Selecting the best maize variety for the area and using certified seeds (disease-free and guaranteed to germinate). | |
| | Consider planting drought-resistant crops like maize and sorghum. | Practical demonstration of planting techniques and an educational session on importance of certified seeds and contingency crops. |
| | Preparation of land for planting including minimum tillage, marking planting lines, digging planting holes and applying manure and fertilizer. | |
| | Plant beans between maize rows to boost soil health. | |
| Management | Importance of weeding, fertiliser and when to apply, soil testing (to gauge best fertilizer). | Practical demonstration. |
| Pests and diseases | Plant certified seeds, keep farm weed free and rotate crops each season. Scout for pests and diseases regularly and treat them as you see them. How to deal with plants once diseased. | Educational sessions e.g. videos. |
| Storage | The importance of harvesting and storing appropriately e.g., dry maize thoroughly for 2-3 weeks on a tarpaulin in the sun. If storing in a sisal sack – treat maize first with pesticide (can not be eaten for 6 months after treating). | Practical demonstration and education on alternative storage methods e.g., hermetic bags. Possible funding of hermetic bags for participants. |



Table 6: Agricultural extension - Livestock

| Theme | Content | Disbursement of information |
|-----------------------|---|---|
| Cows – housing | <p>Importance of good housing and what a cow shed should consist of e.g., sleeping area, walking area, feeding area, milking place and calf pen.</p> <p>Use concrete flooring.</p> <p>Clean daily and use disinfectant.</p> | Practical demonstration. |
| Cows – feeding | <p>Ensure good yields with provision of fodder crops, protein supplements (dairy meal, legume plants), along with vitamins and minerals.</p> <p>What the average healthy cow needs to produce optimally.</p> | Education session e.g., talks from experts or videos. |
| Cows (dairy) - fodder | What grasses can be planted directly into the field and creating a nursery for other fodder grasses. | Practical demonstration. |
| Cows (dairy) – hay | <p>Good for adapting to the changing climate.</p> <p>How to grow and harvest it.</p> | Practical demonstration on how and when to cut grass, dry it, and store it. |
| Cows (dairy) – silage | Planning for the dry season. How to make it and how long it can be stored for. | Practical demonstration on how to make and store silage. |

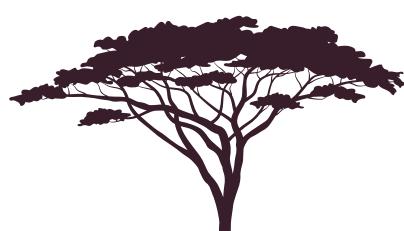


Table 7: Water Management

| Theme | Content | Disbursement of information |
|----------------------|---|--|
| Rainwater harvesting | <p>How to build a rainwater harvesting system by fixing gutters on roofs and connecting to a tank.</p> <p>Building a water pan that collects and stores surface runoff water for crops.</p> | <p>Demonstration on how to create gutters on roofs.</p> <p>Demonstration of creating a water pan.</p> <p>Possible funding of materials e.g., water storage tanks, gutters.</p> |
| Water management | <p>Installing a drip irrigation system to save time and money.</p> <p>How solar power can also be used e.g., with solar panels and solar pumps.</p> | <p>Demonstration of a drip irrigation system.</p> <p>Possible funding of tanks and irrigation materials.</p> |



Table 8: Financial literacy

| Theme | Content | Disbursement of information |
|-----------|---|---|
| Budgeting | What is it? Why it's important. | Educational session – talk given by an expert or video. |
| Loans | Why take a loan e.g., for farm inputs. Type of loan e.g., bank/SACCO/Chama. Paying it back, interest and collateral. | Educational session – talk given by an expert or video. |
| Savings | Why save e.g., gets you through poor yields, buying inputs etc. Work out how much you can afford to save, where to put your money e.g., a bank. | Educational session – talk given by an expert or video. |
| Insurance | Why is it important? Changing weather and unexpected losses. How insurance works etc. | Educational session – talk given by an expert or video. |



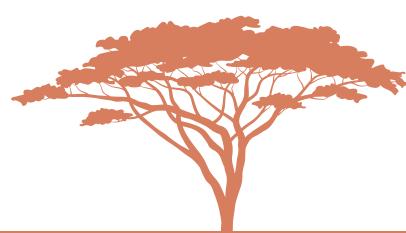
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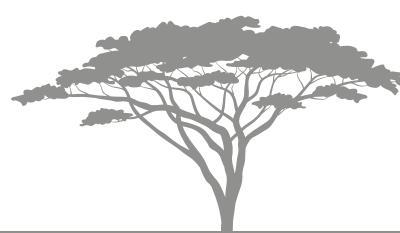
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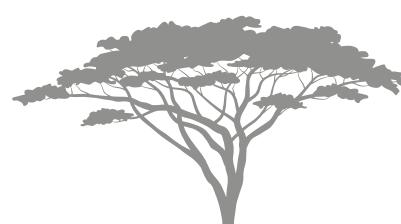
Appendix

Appendix 1 - Sampling of households

| Location | Village | Estimated No. of HHs | Selected |
|--------------|-----------------------|----------------------|----------|
| Gilgil | Kikopey | | |
| Gilgil | Karura | | |
| Gilgil | Kasarani | | |
| Kiptangwanyi | Jogoo | 600 | yes |
| Kiptangwanyi | Mwariki C | | |
| Kiptangwanyi | Elmenteita | 200 | |
| Kiptangwanyi | Bombo | 250 | |
| Kiptangwanyi | Dam | 150 | |
| Kiptangwanyi | Old game | | |
| Kiptangwanyi | Miti Mingi | | |
| Mbaruk | Muranga | 90 | yes |
| Mbaruk | Mbaruk Marura | 100 | |
| Mbaruk | Pema | 200 | yes |
| Mbaruk | Kiwanja Ndege Mkulima | 5000 | yes |
| Mbaruk | Kiambogo | 70 | yes |
| Mbaruk | Kahuho | 200 | |
| Mbaruk | Mololine | 80 | yes |
| Mbaruk | Kasambara | 100 | |



| Location | Village | Estimated No. of HHs | Selected |
|----------|---|----------------------|----------|
| Mbaruk | Leleshwa | 80 | yes |
| Mbaruk | Echareria | 300 | yes |
| Mbaruk | Mbaruk | 500 | yes |
| Ol Jorai | Oldubey | 260 | yes |
| Ol Jorai | Kelelwa | 282 | yes |
| Ol Jorai | Central Utut | 178 | yes |
| Ol Jorai | Kapkures | 274 | yes |
| Ol Jorai | Elmenteita Munyaka | 600 | |
| Ol Jorai | Lokichogio | 400 | |
| Ol Jorai | Kapedo | 189 | yes |
| Ol Jorai | Central hall | 700 | |
| Ol Jorai | Kongasis | | |
| Ol Jorai | Block D | 500 | |
| Ol Jorai | Gema | 400 | |
| Ol Jorai | Kampi shule | 400 | |
| Ol Jorai | Kongasis A | 800 | |
| Ol Jorai | Kongasis B | 1300 | |
| Ol Jorai | Kongasis Centre | 1200 | |
| Ol Jorai | Ngatta | 250 | yes |
| Ol Jorai | Kampi Turkana | 117 | yes |
| Soysambu | Head office | 92 | |
| Soysambu | Soysambu area | 183 | yes |
| Soysambu | Melia Nyeupe/borehole/nginegii | 28 | |
| Soysambu | Jolai 1, 2, sleeping warrior, jolai gate | 50 | yes |
| Soysambu | Congreve area | 11 | |



Appendix 2 - Additional data

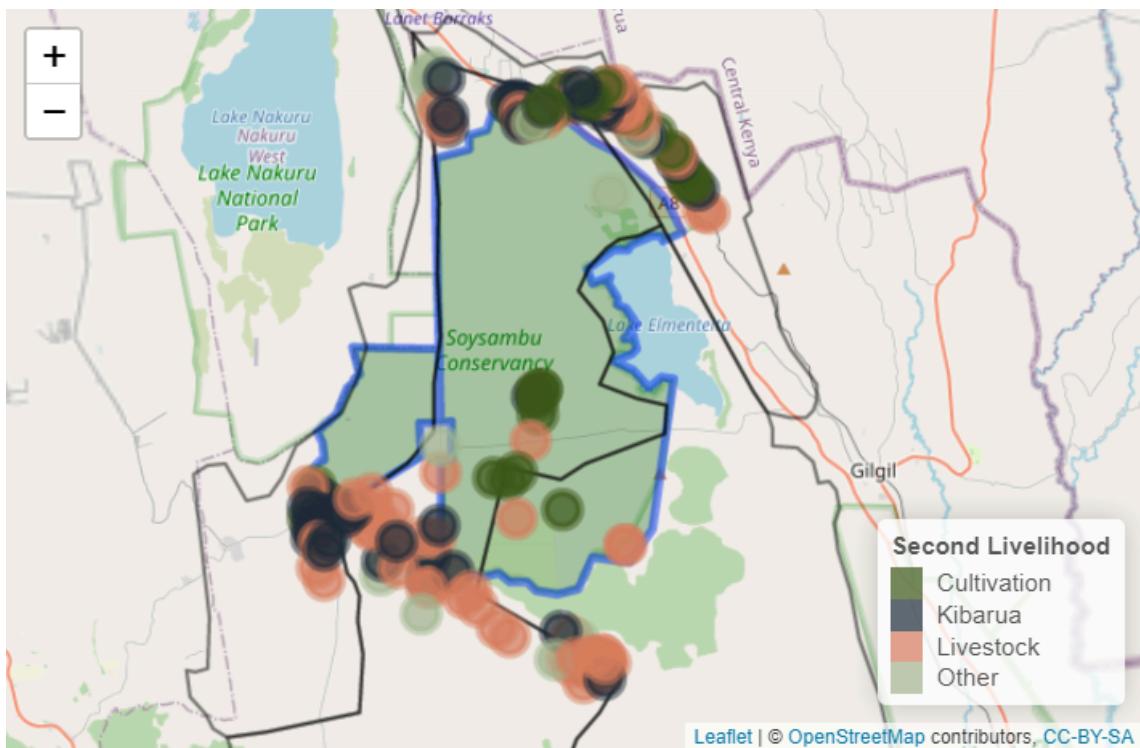


Figure 27: Map of the second most important household livelihood.

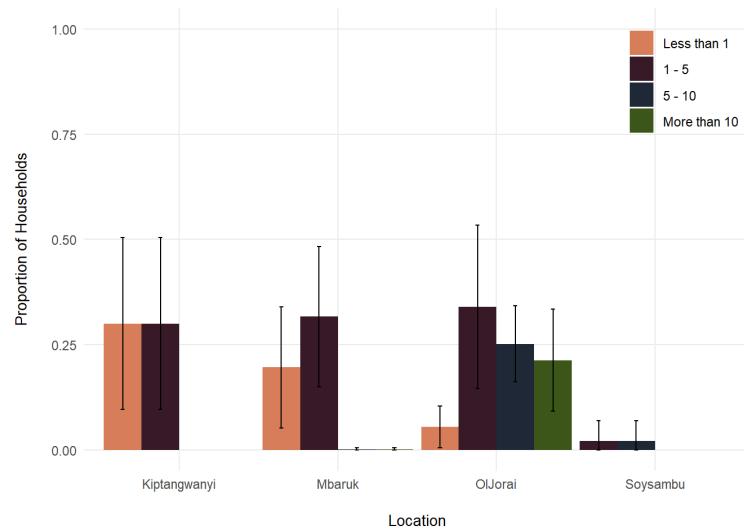


Figure 28: Livestock as tropical livestock units per household.



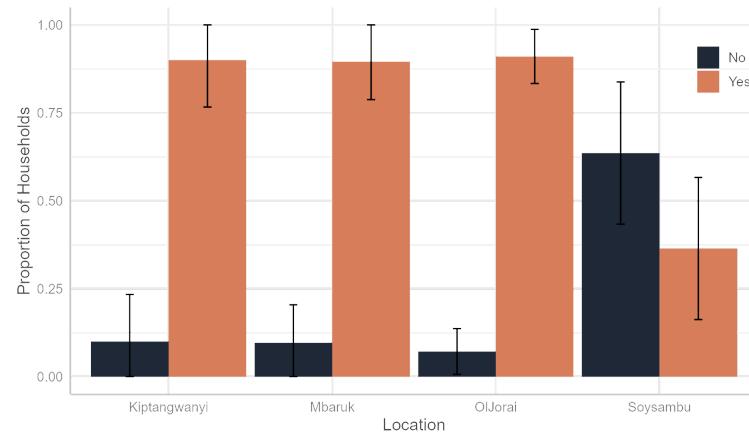


Figure 29: Did the household cultivate crops in the last year?

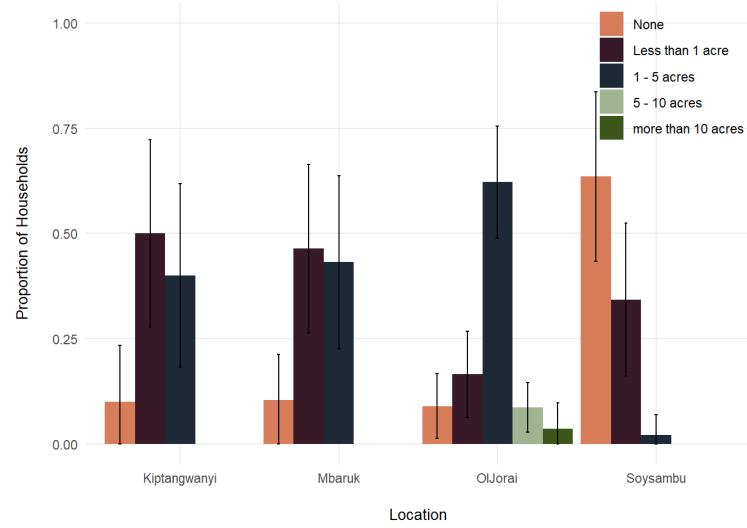
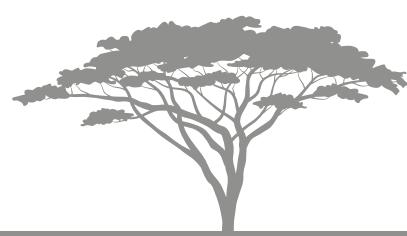


Figure 30: Number of acres cultivated by the household in their location in the last year.



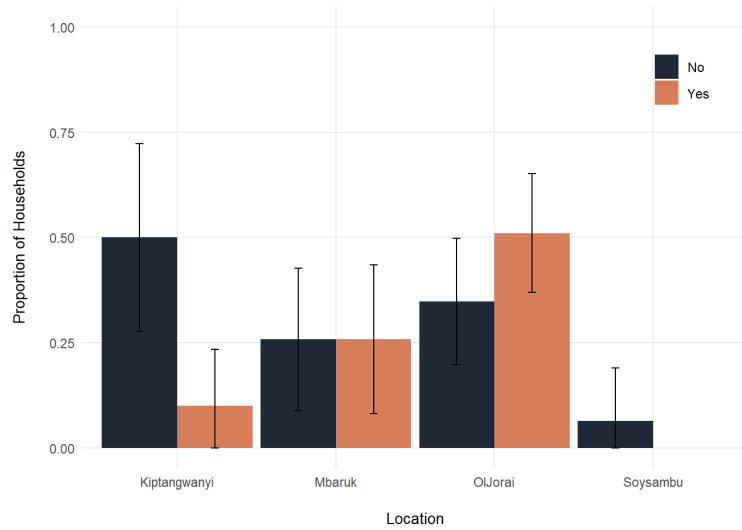


Figure 31: Livestock damaged by wildlife in the last year.

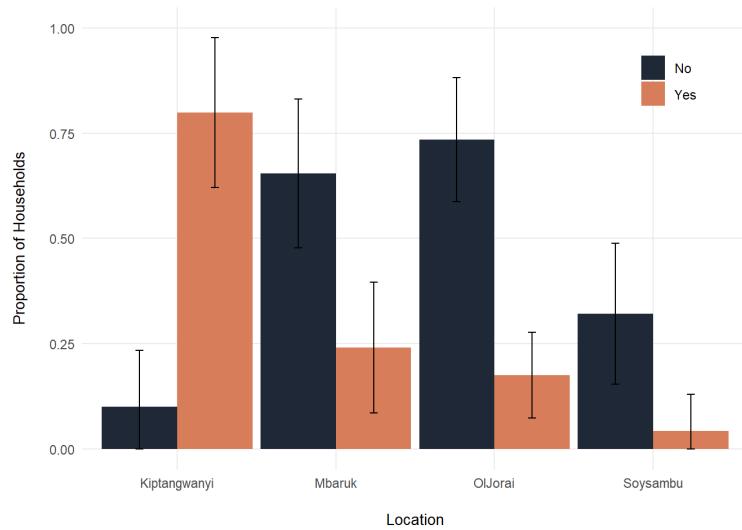
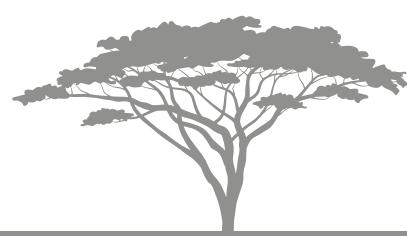


Figure 32: Cultivated crops damaged by wildlife in the last year.



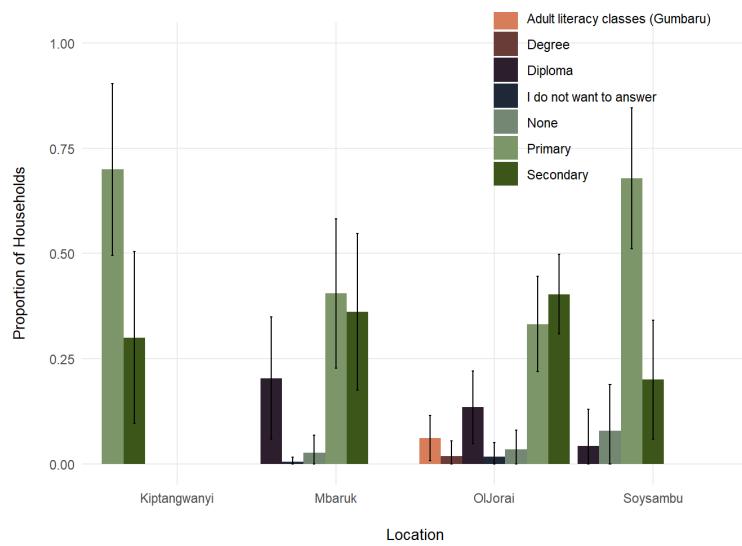


Figure 33: Level of education completed by respondents.

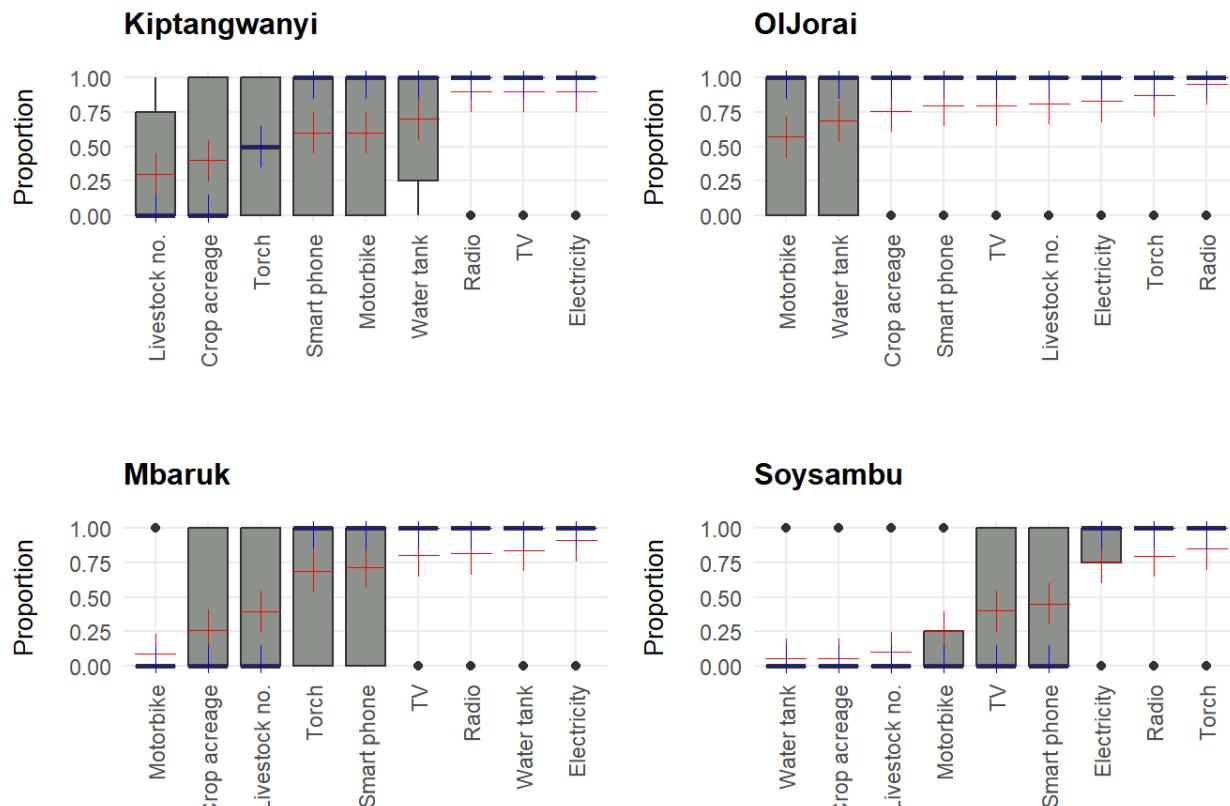


Figure 34: Box plots to show the proportion of ownership for a subset of assets, by location. Red crosses represent the mean value and blue crosses represent the median.

