

Turkana pastoralists at risk: Impact evaluation report

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Background

Turkana is a large and sparsely populated semi-arid area in northwest Kenya of about 1m people living in an area of about 70,000 km². Turkana people are predominantly pastoralists who depend on their livestock, mainly goats, and secondarily sheep and camels. Turkana pastoralists are among the poorest and more vulnerable people in the world. They have basic accommodation in small villages, although male family members spend long periods away from their village tending to their livestock. Their livelihood is strongly dependent on rainfall, with frequent (and often severe) droughts posing the biggest threat. Turkana are typically polygamous and marrying a woman requires paying dowry. Basic infrastructure (e.g. roads, buildings for schools, opportunity for healthcare, electricity) is very limited. Many adults are illiterate or have very little schooling, although school enrolment has been improving in recent years. Schools are few, based in bigger villages and cover large geographical areas.

The extent of poverty and risk exposure is life threatening, and thus the Kenyan national government, international organisations and NGOs, and local grassroots organisations intervene to offer a combination of critical support in life-threatening situations (typically natural disasters) and to promote structural improvement that will empower Turkana pastoralists and improve their livelihoods. In terms of the latter, promoting education is one of the themes commonly believed to be essential.

Research and knowledge exchange activities

The project team is comprised of Konstantinos Angelopoulos (KA, University of Glasgow), Rebecca Mancy (RM, University of Glasgow), Dorice Agol (DA, based in Kenya and affiliated with Friends of Lake Turkana), Spyridon Lazarakis (SL, initially University of Glasgow and subsequently Lancaster University), and Elissaios Papyrakis (EP, Erasmus University). The project has been supported the NGO *Friends of Lake Turkana* (FoLT) and local assistants have also taken part in its implementation. The team started work in Turkana in 2018 and the collaboration has been active since, thanks to the help of all local stakeholders and funding received from the Scottish Funding Council (SFC), via the Global Challenges Research Fund (GCRF), and the Adam Smith Business School.

The first part of the project was funded by a grant to KA and RM by the SFC, via GCRF, and comprised two main activities. First, we collected quantitative data to understand and quantify the extent of risk exposure and inequality via a survey of 1347 households (representing ~9000 individuals) in south Turkana. This has generated a unique dataset that allows measurement of various types of risk to which pastoralists are exposed (e.g. human and animal health risk, asset risk), of wealth inequality in a pastoralist community, and of the extent of activities beyond holding livestock that pastoralists engage with and that can generate resources and mitigate risk (e.g. education participation, market activities, housing quality). The second activity consisted of a trip by the research team to Turkana for a series of meetings with pastoralists and their representatives. In this series of knowledge exchange activities, our main aim was to further understand the issues that the communities face, and the interventions in place by NGOs and the government, but we also explained findings from the data collected. We also participated in a policymaking meeting led by the National Drought Management Authority, also involving all local stakeholders and active NGOs, to further understand aspects and priorities of intervention.

Our survey experience, data analysis and interactions during visits to Turkana with local communities, policymakers and key stakeholders from the first part of the project confirmed the urgent need for emergency interventions, but also the overarching challenge to design policies with strong potential for sustainability. In

particular, education was suggested by many sources as having strong potential to increase options for household-level risk mitigation by helping individuals make better-informed decisions and increasing employment opportunities. Motivated by these findings, KA and RM obtained further funding from the SFC, via GCRF, to: (i) further understand and evaluate the usefulness of – and obstacles to – education relative to other risk-mitigating activities in Turkana; and (ii) provide feedback to stakeholders on an assessment of challenges and options to mitigate them in Turkana. We collected qualitative data from the areas of Kangakipur, Loperot and Napsimoru (in south Turkana) via Key Informant Interviews (KIIS), as well as household interviews, and focus group discussion (KIIs N=11; household interviews N=31; and focus group discussions N=3 with 16 participants in total). We prepared a policy brief, in the form of a Briefing Note (BN), which we distributed to relevant stakeholders (policymakers, practitioners, local authorities) and held virtual knowledge exchange workshops with 20 stakeholders. The BN can be found at <http://eprints.gla.ac.uk/223899/1/223899.pdf>

Building on our qualitative research data, a key activity we undertook to promote multi-faceted impact was to prepare, print and distribute a booklet on Turkana people, drawing on their own views on their life, challenges and activities. This was designed to be used in schools and by local communities (e.g. in village meetings), with the aim to promote critical self-reflection. This was in response to an emerging theme from our interactions with Turkana people and their representatives: the need for research to collect and synthesise the views of Turkana pastoralists on important issues relating to their livelihoods in a format that they can understand and that will allow them to reflect on their practices and draw their own conclusions, and thus choose what to maintain and what to change. This approach can empower individuals and communities and lead to robust change when advantageous, or to the preservation of traditional practices when this is the more appropriate response.

We prepared a booklet, “*Voices of the Turkana People*”, in English and the local language, Kiturkana, in 2020, and made it available in electronic form and online (for a copy see <http://eprints.gla.ac.uk/223900/1/223900.pdf>). It synthesised the views of Turkana pastoralists on their activities, choices and behaviour in relation to a range of issues that our research had identified as important for their livelihoods, presented in

an approachable manner, and in a way that would encourage critical reflection and dialogue on these. For example, we complemented the narrative with figures, quotes taken directly from the people, and questions that asked the reader to reflect on current practices. We also printed 600 copies (400 in English and 200 in Kiturkana), but due to COVID-19, we were not able to distribute these copies until the summer of 2021. They were then distributed to pupils in schools in areas of Kangakipur, Loperot/Kalapata, Napsimoru, Kakuma and Lodwar, their teachers, and key local authorities (Chiefs) and representatives, NGOs, and policymakers in Turkana (see Appendix A for details on the distribution). The copies distributed to schools were available for pupils/students to borrow, so that all could access the booklet. Similarly, the copies distributed to Chiefs and representatives were used in community gatherings as a source of reference, and made available to people in the local community to read. Copies distributed to NGOs and policymakers were available to staff in the organisations as well. Our knowledge exchange activities have received attention in Turkana from relevant networks.¹

Impact evaluation project

To evaluate systematically the impact to date of our knowledge exchange activities, we designed and conducted an impact evaluation exercise in January and February 2022. Our aim was to collect feedback and testimonials from our stakeholders on how the booklet and briefing note have been used and in what ways they have led to change in their thinking or practices so far. The evaluation project was funded by the Adam Smith Business School, University of Glasgow, and the evaluation methods took the form of interviews and focus group discussions (FGD) with pupils/student, teachers and locals in Kangakipur, Loperot and Napsimoru, and interviews with representatives from NGOs and the policymaking bodies. In particular, there were six focus group discussions (three with pupils/students of different ages and both genders, and three with teachers), four interviews with teachers, two interviews with Chiefs, one interview with a local woman, two interviews with NGO staff (Caritas and Lokichar Action Network) and one interview with NDMA staff. Detailed accounts of

¹ For example, see <https://teachersupdates.co.ke/news/why-education-matters-to-turkana-pastoralists-research-by-dr-spyridon-lazarakis/> (news network for educators in Kenya) and <https://www.iga-goatworld.com/blog/ppr-watch-november-10th-2020> (in the 10 November 2020 edition of *PPR Watch*, a monthly e-newsletter provided by OIE (World Organisation for Animal Health) Documentation Cell, and available from the website of the International Goat Association).

the FGD and the interviews can be found in Appendix B and of participation in Appendix C.

Summary of impact to date

Our research and knowledge activities have impacted local communities in four areas: (i) understanding and learning; (ii) practitioners; (iii) the quality of public services; (iv) social welfare, especially via improving the welfare of less privileged groups. We summarise here the main forms that this impact has taken. Further detail of the supporting evidence collected by the impact evaluation exercise can be found in Appendix B.

(i) Firstly, our research has impacted **understanding, learning and participation** in Turkana communities in Turkana south (Kangakipur, Loperot and Napsimoru). This impact has been multi-faceted. In particular:

1. The booklet has influenced **the delivery of curriculum and syllabi in schools**. Teachers from a range of disciplines, from social studies and history to agriculture, biology and chemistry have confirmed their use of the booklet as an educational resource (Sections 2, 4, 5 and 8 in the Appendix on relevant testimonials). This is also evidenced in its reception from the students, not only in terms of material, but also because it inspires them to engage with the learning process by encouraging a culture of reading and attending school (Sections 2, 4, 5 and 8 in the Appendix for teachers' account of its reception, and 1, 6, and 7 for pupils). For example, one teacher commented that *"I have made several references from this book, especially the chapter on Turkana pastoralist and chapter 5 which talks about diseases, drought and raids which affect the livelihoods of Turkana"* (MI4, History teacher, Kalapata Secondary School).
2. The booklet has **informed awareness, attitudes and understanding** of pastoralist communities, improving their **ability to make informed decisions, and enhancing cultural understanding of issues and phenomena** (e.g. polygamy, education, marrying practices, community support in droughts, importance of livestock). This is evidenced via: (a) testimonials of pupils of different ages and gender on how they have changed their attitude (e.g. on the importance of education, polygamy vs monogamy, children, marriage; see Sections 1, 6, and 7 in the Appendix) and how they discuss and promote it with

others in their community (family and friends); (b) testimonials of teachers who confirm changes in understanding and attitude for their pupils (Sections 2, 4, 5 and 8 in the Appendix); (c) testimonials of adults who confirm changes in understanding and attitude for themselves and their children (Section 3 in the Appendix); (d) and testimonials of chiefs who confirm changes in understanding and attitude for the people in their village and for the community-level processes (Section 9 in the Appendix). For example, a student commented that *“In a polygamous marriage, you will fight all the time, but with monogamous marriage, it is only one wife and no one quarrels... when I grow up I will want to be in a monogamous marriage”* (FG5 FP1, Female student, 14 years, grade 7, Napsimoru Primary School), while a teacher explained that *“Turkana people are moving to modern culture and the book will serve as a reference. It will also help link families and improve their bond when they read about themselves”* (MI7, Swahili teacher, Napsimoru Primary School).

(ii) Secondly, it has **impacted practitioners**, helping them to **improve the quality of services** they offer. Practitioners that have benefited include:

1. Teachers, who have used the booklet to promote learning, noting not only the usefulness of the material it covers, but also that it inspires pupils to read and engage with learning (Sections 2, 4, 5 and 8 in the Appendix for teachers, and 1, 6, and 7 for pupils’ reception). For example, a teacher from a non-Turkana background commented that *“The booklet allowed me to learn about the Turkana people over a very short period. This one is a prototype, it is the original from the community so I am becoming an anthropologist so I am studying them and I am living with them and it is true what is in the booklet”* (MI4, History teacher, Kalapata Secondary School).
2. NGO practitioners, who use information from the research to formulate and support arguments, promote their work and apply for funding (Section 10 in the Appendix). A representative of Caritas commented that *“We have been fundraising a lot to support schools around Kalapata and Loperot and we have used ideas from the booklet to write proposals. We have not referenced the BN per se, but the ideas such as the need to improve infrastructure in schools have been used continuously. For example, we are trying to improve school feeding*

programmes to retain students in schools to learn. You know hunger is one of the impediments of education (FI9, Programme Director, Caritas).

3. Village Chiefs, who, via the booklet, can encourage people to engage with reading and participate in an informed manner in community debates, in addition to having a reference for their own arguments and positions (Section 9 in the Appendix). An Assistant Chief explained that *“I gave the booklet to some villagers and they were very happy, here they never have anything to read and the attitude is often that only those going to school should read, but that changed because they had no excuse” (MI8, Assistant Chief, Napsimoru).*

(iii) Thirdly, our work has impacted **public services and policy**.

1. It has improved the delivery of the teaching, local public administration and representation/NGO activity, as summarised in the testimonials and feedback already mentioned (Sections 2, 4, 5 and 8 in the Appendix for teachers, 9 for chiefs, and 10 for NGOs). Further, a representative of Lokichar Action Networks noted its use in meetings with international NGOs, explaining that *“I have used the booklet as a reference several times in meetings and I have used the ideas when bidding for projects, etc. But so far, we have not been lucky to have a breakthrough with funding but we are trying. I have a meeting next week with the UNDP [United Nations Development Programme] about a bid we submitted, and we will talk about the problems which the Turkana people face including livestock deaths, illiteracy etc. I will be using ideas from this booklet” (MI6, Representative of Lokichar Action Networks).*
2. The booklet has **informed public debate** at the community level, evidenced by its use to inform community discussions in relevant gatherings (Section 9 in the Appendix). For example, a village Chief commented that *“When I do for meetings with the county government and NGOs, and when I discuss the problems facing my community such as poverty or bad roads, or insecurity, I often refer to the booklet because it has authority, it has been produced by good researchers” (MI5, Area Chief, Loperot).*
3. Moreover, there is some evidence that it has contributed to public policy, by being cited during official and critical policy meetings (Section 10 in the Appendix, noting that the short- and long-rain assessments in Turkana are arguably the most

important policy making events, in terms of direct and life-critical impact, for pastoralists).

(iv) Fourthly, it is contributing to **improve social welfare**, both in Turkana (and especially south Turkana) overall, and with respect to **less privileged groups** within these areas.

1. Given the widespread poverty and vulnerability of Turkana pastoralists (see the Background Section), improvements in public services, public policy, community and household-level decision making, as evidenced in the previous points/areas of impact, are important steps to improve wellbeing and reduce poverty and risk-exposure.
2. Our work is encouraging greater engagement in the two-way relationship between educational engagement and awareness of local culture, key contributors to social welfare. For example, a village Chief commented that *“I can say that by reading the booklet my people are realizing that it is important to educate your children because they can help you in [the] future. It is not good to rely 100% on our livestock because things have changed so much... many people are doing businesses to support their livelihoods.... The booklet is supporting the issue that Turkanas should not rely on livestock for their livelihoods all the time”* (MI8, Area Chief, Napsimoru), while a primary teacher noted that *“The booklet is bridging the traditional Turkana culture with the modern lifestyle and our children in our school are the agents of change”* (FG2 MT1, Kangakipur Primary School).
1. Our activities have contributed to **improving equality**, by promoting **understanding of gender roles** and potential gains from change, evidenced by changes in perceptions and behaviour of girls (Sections 1, 6 and 7 in the Appendix) and their parents (Section 3 in the Appendix) on a range of themes from education, to marriage and children, and more generally influencing an increased desire for female participation in education (Sections 1, 3, 6 and 7 for girls and parents, and also 2, 4, 5 and 8 for teachers and 10 for NGOs working to promote education). For example, one student explained that *“I cannot get married until I finish my education, I need to go to school because I will bring home more livestock”* (FG1 FP7, 13 years, Grade 7), while a representative of Caritas commented that *“I attend meetings where I meet people from the*

education department and we talk about issues of educating the girlchild, because you know the girlchild is important in our society. But many Turkana girls still get married at a young age and they don't go [sic] Primary Schooling. I often try to push things at these meetings, for example to provide more support to girls so that they can finish schooling. I often used the ideas from the briefing note to drive the conversation” (FI9, Caritas). Given the less privileged position of women and girls, empowering them, via increased participation in education, and via an increased understanding of (and of potential gains from changing) gender roles in relation to marriage and household decision making, improves opportunity and promotes equity.

Appendices

Appendix A. Distribution of 600 booklets

	Name of recipient	Base / Area of operation	No. of copies		Total
			English Language	Turkana Language	
1	Kangakipur Primary School	Kangakipur	60	20	80
2	Kalapata Girls Secondary	Loperot/Kalapata	60	20	80
3	Kalapata mixed Primary School	Loperot/Kalapata	60	20	80
4	Kalapata Ward Administrator	Loperot/Kalapata	10	10	20
5	Kalapata Area Chief	Loperot/Kalapata	10	10	20
6	Napsimoru Mixed Primary School	Napsimoru	60	20	80
7	Napsimoru Area Chief	Napsimoru	10	10	20
8	St Monica Lodwar Girls Primary School	Lodwar	21	19	40
9	Pokotom Mixed Secondary School	Kakuma	20	10	30
10	Lopwarin Primary School	Kakuma	20	10	30
11	All Enumerators	Turkana	12	10	22
12	FoLT- Friends of Lake Turkana	Lodwar/Turkana	10	10	20
13	Lokichar Action Network	Lokichar	10	5	15
14	NDMA	Lodwar /Turkana	4	3	7
15	County Government of Turkana	Lodwar / Turkana	2	2	4
16	Translator (Journalist)	Lodwar	2	2	4
17	Caritas	Lodwar /Turkana	2	1	3
18	World Vision	Lodwar/Lokichar	3	0	3
19	Assistant in Turkana	Lodwar	14	8	22
20	Dorice Agol	Various	10	10	20
		Total	400	200	600

Appendix B: A record of the impact evaluation project in Turkana (February 2022)

Evidence to support this evaluation was collected in three different settings where our research had been conducted. These are Kangakipur, Loperot and Napsimoru. At Kangakipur Primary School, we conducted two focus group discussions, one with students and another with teachers. We also conducted an interview with one teacher. In Loperot, we conducted two FDGs (one with teachers and another with students) and interviews with two teachers. We conducted further two FDGs with teachers and students at Napsimoru and one interview with a teacher. Other interviews were conducted with: two local area chiefs (Loperot and Napsimoru); two NGOs (Caritas and Lokichar Action Network); and the NDMA.

1. Focus group discussion with students in Kangakipur, at Kangakipur Village Primary

We visited Kangakipur Primary School (approximately 190 pupils who were all day scholars). We started with a focus group discussion (FGD) with 7 students (4 girls and 3 boys) between 12-14 years in grade 7 and grade 8. Each student had been given booklet by a teacher to look at prior to the discussion, and all said that they had also previously read the booklet, mostly in the English version. We began the discussion by asking the students to tell us about their experiences about the booklet, and whether they found it fun, easy to read etc. All students said that they enjoyed reading the booklet and that they had read all the chapters. We then asked them if they knew about the origin of the booklet. All students said that they knew that booklet was produced from the research which was conducted in their village by a group of people.

We then asked each student to tell us specific things that they remembered from reading the booklet. The importance of education was cited by all students, especially the importance of educating children particularly girls who will help their parents when they are educated, have good jobs and acquire more wealth. These students talked about the importance of sensitizing all children in the village to attend school

and one student said that he was already sensitizing small boys to attend school. Students also compared traditional practices such as marrying off young women in the past to get livestock such as camels, goats, sheep, etc. and the fact that more girls are going to school and not getting married at a young age. The girls were asked what they thought about traditional practices and if reading the booklet changed their minds about marriage. They said that the booklet made them to think of the importance of educating the girlchild to acquire more wealth for example:

“I cannot get married until I finish my education, I need to go to school because I will bring home more livestock” (FG1 FP9, 13 years, Grade 7)

The other commonly cited theme was prolonged drought, which students said was affecting everyone. They said that the booklet made them realize the importance of community support during prolonged drought. Even more importantly, they said that going to school and getting an education was a good thing because people can have access to alternative livelihoods by getting jobs and earning a living.

2. Focus group discussion with teachers at Kangakipur Primary

We organised a FGD with three teachers, all of whom had read the booklet. We asked them to tell us anything which they found to be interesting about the booklet and each teacher talked about the different topics/chapters. All the teachers were impressed by the booklet and how well it reflected the Turkana people, their culture and practices. We then asked them to tell us the ways in which the booklet influenced their minds and school practices.

FG2 MT2, a social studies teacher, said that he uses booklet in his everyday teaching because all the topics covered by the booklet are relevant to his class/ teaching. He said the booklet made him realise how things are different in modern Turkana, including the fact that polygamous marriage was highly valued in the past compared to modern culture where more men and women are choosing to be in, monogamous relationships. FG2 MT2 said that reading the booklet also made him start to think of factors which drive such modern practices including scarcity of resources such as livestock and food. FG2 MT2 said that the ideas from the booklet have shaped and influenced the way he teaches, and that he now thinks more critically about issues

such as marriage, children, education, etc. He said that the booklet was important because it was encouraging a culture of reading amongst students, something which is uncommon in schools in resource constrained settings, where students typically only have access to core textbooks used for educational purposes.

The deputy headteacher, FG2 MT1, said that the booklet was encouraging debates on different topics which are covered in the booklet, such as whether: monogamous marriage is better than polygamous marriage; having less children is better than having more; having more livestock is better than having fewer. FG2 MT1 said that formal debates on these issues took place in the school in 2021. FG2 MT1 also said that the booklet was bridging the traditional Turkana culture and practices with modern way of life. For example, he told us that

The booklet is bridging the traditional Turkana culture with the modern lifestyle and our children in our school are the agents of change (FG2 MT1, Kangakipur Primary School)

FG2 MT1 commented that the booklet was a reminder that they must not forget their Turkana traditions and culture. Asked if there are any future plans on the use of the booklet, FG2 MT1 said that they would like to establish a reading club in the school so that the students can read more and find ways of challenging the book, i.e. being critical and analytical about certain issues in the booklet. We said that we would follow up with them in the future to see if a reading club had been formed. The teachers also said that they would try to document future debates.

3. Interview with a female villager in Kangakipur

We toured Kangakipur village and came across a group of villagers consisting of men, women and children. There were about 8 adults and 10 children. We showed them the booklet and asked them if they had seen it before. A few women nodded but the men were not responsive. One particular woman, FI2, who was attending adult education was very excited to see the booklet and started telling us about all the chapters in the booklet. She said that her daughter in grade 2 had read for her the whole book in Kiturkana. FI2 was about 38 years old, and in a monogamous relationship with 6 children. She said that she also had read the booklet by herself in

Kiturkana and we gave it to her to read a chapter and she read it as other villagers listened. We asked her if anything had changed since reading the booklet. Firstly, she said that the booklet strengthened her reading skills because she managed to read it and practised. Secondly, she said that the booklet helped her realise the value of education, especially for her children. She said that reading the booklet encouraged her to take her children to school and that she was so glad that her daughter brought the booklet home. Lastly, the booklet exposed her to a culture of reading because she had never read such a booklet before.

4. Interview with the Headteacher FI3, Kalapata Girls Secondary School

We visited Kalapata Girls High school, with approximately 50 girls between 15-19 years old, all boarding. The headteacher said that she had read the whole booklet and that she liked the book very much and was impressed by the way it reflected the true Turkana people, their culture and practices and their way of life. For example, she commented that

The book is a true reflection of Turkana people, their culture, practices and way of live. True Turkanas are polygamous and they would like to marry many wives and have many children so that they children can help in the future. (Headteacher, Kalapata Girls Primary School)

She said that the booklet shows that there is a linkage between the traditional and modern Turkana lifestyle and that the booklet shows that there are modern educated Turkana people who are taking their children to school. Asked if the booklet has influenced her/the school, she said that the booklet changed her attitude about certain issues including marriage, children, education. By reading the booklet on the importance of education, she said that she was trying to encourage students to go to school. She said that she encouraged parents to take their children to school and that whenever there are events such as parents' day, she acted as a role model because she went to school, got educated and found a good job. She said that she tried to tell the girls that she was once in their situation and now she was a headteacher and that one day they would be just like her. Asked whether the booklet would be used in future, she said that it could be used during the school debate – e.g. on polygamous vs monogamous relationships. Most school debates are formal, and are organised as part

of a special day for debating, typically on Sunday afternoons. She said that the booklet would be act as a useful resource for a reading club which would be facilitated with an English teacher.

5. Focus group: other teachers of Kalapata Girls Secondary School.

We had a discussion with two teachers, FG4 MT2, a history teacher and FG4 MT1, who taught agriculture, biology and chemistry. Both the teachers are from other tribes and so it was interesting to get their perspective about the book. DD, the history teacher, said that the booklet was helping him to understand the culture of Turkana people their way of life. He said that the booklet was also useful because it covered the challenges facing Turkana communities and offered possible solutions to these challenges. The booklet helped him to understand the different things that the Turkana people valued, including having many children, and, for example, the way they use children as a form of security and that educating the children means that they will give back to the community. He also learned about the value of livestock for the Turkana people. FG4 MT2. enjoyed the booklet and thought it was very useful to learn about another culture. For example, he commented that

The booklet allowed me to learn about the Turkana people over a very short period. This one is a prototype, it is the original from the community so I am becoming an anthropologist so I am studying them and I am living with them and it is true what is in the booklet. (History teacher, Kalapata Secondary School).

He said that the booklet helped him with teaching history lesson:

I have made several references from this book, especially the chapter on Turkana pastoralist and chapter 5 which talks about diseases, drought and raids. which affect the livelihoods of Turkana.

FG4 MT2 said he made reference to the booklet on pastoralism and migration, especially the way the Nilotes (such as the Turkana people) migrated from one place to the other for reasons such as drought. He used the book in 2021 to teach form one students and used real examples from booklet “to make it factual and realistic”. He

also talked about why it was important for Turkana pastoralists to keep livestock. He said that the lessons were enjoyable and became real as most of the students are Turkanas and the students understood the lessons very well.

FG4 MT1 said that the booklet was important because it revealed how much Turkana people rely on their children for protection. The booklet was also making him think seriously about the importance of creating a small kitchen garden to secure food. He also saw the booklet as a possible source of material for fundraising, example for water projects (e.g. boreholes).

6. Focus group with students at Kalapata Girls Secondary School.

We held a discussion with four girls between the age of 16 and 18 years; each represented their class (i.e. form 1 - form 4). All the girls said that they enjoyed reading the booklet, mostly in the English version. We asked them if reading the book changed their thinking or mind. One student, FG3 FP3 (16-year old in form two) said that the book was “friendly” [easy to read and fun with the images] to her, because she enjoyed reading about culture and she came across many issues in the book including the values of Turkana, marriage etc. For example, she referred to the fact that Turkana have large numbers of livestock which allows them to marry many wives, resulting in many children. FG3 FP2 (17 years old in form one) also learned about the importance of marriage, including its role in prestige. The importance of children was a common theme. One student had read the booklet to their parents in Kiturkana language.

Students were asked about the impacts on the booklet and one student said that the booklet helped her to be courageous because she learned that a Turkana girl can be supported with her education. This student said that having such knowledge helped her not to worry too much about her fees arrears.

7. Focus group with students at Napsimoru Primary School

We visited Napsimoru Primary School (approximately 350 students) and had a focus group discussion with four students (two girls and two boys) in grades 6, 7, and 8, aged 14-15 years. We had learned in Kangakipur that most students and pupils had read the English version because they found it easier to do this, so we were impressed

that one student in grade 8 had read the booklet in Kiturkana language. All the students said that the booklet helped them to gain more knowledge about different things. For example, one student said that they did not know that Turkana was in the north-west and another said that they learned about Turkana's climatic conditions, that it was much hotter than other parts of Kenya and was categorized as an arid land. Another student said that they learned new words such as "polygamy" and "monogamy" and their differences. A female student said that reading the booklet made her realise the challenges of polygamous marriage, for example:

"In a polygamous marriage, you will fight all the time, but with monogamous marriage, it is only one wife and no one quarrels... when I grow up I will want to be in a monogamous marriage" (FG5 FP1, female student, 14 years, grade 7, Napsimoru Primary School)

In contrast, one boy had a different opinion about polygamous marriage and said that it is good to have many wives because they can help each other, and they can do different tasks including some looking after livestock. Students also said that they learned about the value of having many children and educating them so that they can become doctors, teachers, nurses etc. They also said children were important in supporting their parents for example:

"It is important to support our parents... when we close [sic] school [meaning during the school holidays], I can go and help with the livestock" (FG5 MP2, Grade 8 male student aged 15 who had read the booklet in Kiturkana)

Students were asked if the booklet talked about their everyday lives and experiences and they all said that it did, because it covered the practices of Turkana people including marriage, children, family support and the challenges they faced such as lack of water and pasture during the dry season. One student said that learning about their culture was important because they would one day tell their children about Turkana people.

8. Focus group with teachers at Napsimoru Primary School

We had a short discussion with the Headteacher who had read the booklet, but was too busy to have a full interview. He said that he was impressed by the booklet because it reflected the true picture of Turkana people and that it was an excellent resource for teaching, particularly the English language. The Headteacher said that Turkana culture was being eroded and that the booklet was a good way of restoring it because students were learning about their culture. We conducted a focus group discussion with two teachers FG6 MT1 (Non-Turkana English teacher) and FG6 MT2 (Turkana, teaching Swahili and Christian Religious Education). The teachers said that the booklet was a true reflection of the reality of the Turkana people for example:

“I read the booklet and I like it because it’s a culture of the Turkana people not to take children to school and they prefer livestock keeping” (FG6 MT1, English teacher, Napsimoru Primary School).

As pointed out in the booklet, the teachers appreciated that the cost of education also was a key barrier because many parents were not willing to sell their livestock to buy uniforms and preferred getting their children to the fields to look after livestock. They also said that the booklet was a good way to highlight the many challenges that many schools and learning institutions face in Turkana. For example, many schools are in remote areas and are far, which makes it hard for children to attend school since they can’t walk for these long distances by themselves. They said that even education officers did not fully understand these challenges for example:

“The region is large and education officers don’t get to the interior to get the exact situation of the school (FG6 MT1, English teacher, Napsimoru Primary School).

Asked if the booklet had changed anything in the school, they said that it helped them to promote education amongst the Turkana people and that it made them realize that they have the authority and the drive to enroll more pupils in their schools. The teachers said that reading the booklet encouraged them to encourage parents to take their children to school. They, as teachers, had a responsibility to recruit more Turkana children in schools. For example:

“Teachers have the upper hand to increase the numbers, the evidence that education is important though distance remains a barrier” (MI7, Swahili teacher, Napsimoru Primary School).

The teachers said that the book was being used during English storytelling lessons to pass information about the Turkana community. The local version was already helping improve the reading capacity of the local language, which they said remained a challenge to the students. The book was also helping in the transfer of knowledge from the current generation to the future generations for example:

“Turkana people are moving to modern culture and the book will serve as a reference. It will also help link families and improve their bond when they read about themselves” (MI7, Swahili teacher, Napsimoru Primary School).

They also said that booklet was giving information on alternative sources of income other than livestock and highlighting the importance of investing in education.

9. Discussion/ interview with local chiefs about the booklet by telephone

(a) Our first contact was MI5, an Area Chief in Lokichar, who had been given copies of the booklet. The Chief is the administrative authority who is a government employee and is charged keeping law and order at the local level.

We asked him about decision-making processes in his constituency and he explained that he mainly uses the barazas (community level gathering where issues are discussed and debated) as platforms for discussions and decision making. The Chief said that they take a bottom-up approach to problem solving whereby an issue/problem is usually reported to the village elder first, who communicates with the Assistant Chief. The Chief gets involved when the matter cannot be solved by the Assistant Chief. If the problem is big and serious (e.g. livestock raids, death, etc.), then his Assistant reports the matter to him. On issues of development, for example if there is a planned intervention, the Chief is the first contact person to be informed about it. The Chief then communicates with his Assistant and the village elder about the intervention. The chief is responsible for making important announcements during his barazas.

The Chief said that he read the whole booklet in Kiturkana and that he was very happy about it because no one has done anything like that before, that most researchers come and go without giving them any feedback. He was pleasantly surprised at how the booklet was well written in Kiturkana language. He gave a quick overview of the booklet including cultural practices such as polygamous marriage, children, livestock, communal support, etc. He was pleased that the booklet talked about the value of having many wives and children and gave an example of his own experience for example:

You see, I am one of the people who are still carrying forward our Turkana culture: I have many many wives and children. My wives are spread in different villages and it is good because when I visit any village as a leader, I have somewhere to rest. You know my wives help each other and support each other when there is a lot of work, or just emotional support. All my children are important because they help with different tasks... I support my Turkana culture.” (MI5, Area Chief, Lokichar)

We asked the Chief how he used the booklet and he said that he took the booklet to his barazas several times to show villagers and that they were very proud to see that someone had written about them and their culture. The first time he took the booklet to the baraza, everyone was curious to know what was written about Turkana people because they had never come across such a booklet written in their language. He said that some people began to read the booklet very loud with excitement, and that the direct quotes were the most attractive for example:

“The villagers liked the quotes... some even claimed that they owned the quotes...” (MI5, Area Chief, Lokichar)

When we asked the Chief to tell us how he had used the booklet i.e. any ideas about the research findings, he said that during his barazas, they had used it when they discussed issues which affect villages in Kangakipur and Loperot, especially when focusing on poverty, bad roads and insecurity. During the barazas, he referred to the booklet as a source of evidence for communicating problems facing his people. He

said that the booklet gave him some confidence when discussing challenges which his people are facing, for example:

When I do for meetings with the county government and NGOs, and when I discuss the problems facing my community such as poverty or bad roads, or insecurity, I often refer to the booklet because it has authority, it has been produced by good researchers” (MI5, Area Chief, Lokichar)

The Chief said that he has used the booklet several times to encourage his villagers to live in harmony and support each other during hard times such as drought. He has encouraged them to continue with the culture of giving, for example, when one loses goats or sheep, others should support them through contribution. The chief was asked if he had made any decisions based on the booklet and he said not explicitly, however, he referred to the booklet several times when asking for support from the national and county governments. For example, he requested from these governments to provide them with more security in the villages to protect them from harm.

(b) We had a conversation with the MI8, Assistant Chief at Napsimoru who had received the booklet. He too said that he read the booklet in the Kiturkana language and was pleased that it was written in his language. He said that he shared the booklet with a few of the villagers who were very pleased to receive it. For example, he commented that:

“I gave the booklet to some villagers and they were very happy, here they never have anything to read and the attitude is often that only those going to school should read, but that changed because they had no excuse” (MI8, Assistant Chief, Napsimoru)

Asked whether the booklet had impacts on decision-making, the Chief said that the booklet was an important reference during discussions in barazas and other meetings. He mentioned that in 2021, during one of his barazas, villagers discussed about the value of taking children to school as a kind of insurance against risks such as drought. He could not remember when exactly they discussed this. However, he said that

during the discussion, villagers identified homes where children were educated and that they were better off because they had better lives. For example:

“I can say that by reading the booklet my people are realizing that it is important to educate your children because they can help you in [the] future. It is not good to rely 100% on our livestock because things have changed so much... many people are doing businesses to support their livelihoods.... The booklet is supporting the issue that Turkana should not rely on livestock for their livelihoods all the time. (MI8, Assistant Chief, Napsimoru)

10. Discussion/ interview with NGOs/Government representatives

(a) Our first contact was with the National Drought Management Authority. We had a conversation with MI10, the Assistant Director who had read the booklet and the Briefing Note. MI10 said that the booklet was unique due to its simplicity and that everyone could read and understand it. He said that compared to the Briefing Note (BN), the booklet was much more impactful because it was easier to reach out to people at all levels using the booklet for example:

“When I compare both, I see that the booklet will impact more people because you can reach out to a wide range of audience from the chiefs, village elders, religious leaders, students, teachers, men and women. The Briefing Note is good but is limited to professionals like us and NGOs (MI10, Assistant Director, NDMA)

MI10 was asked if he used the ideas from the booklet or BN at all during his work. He explained that the NDMA is structured in such a way that decisions are made at the top. For example, all fundraising activities are done at the top (national level) and all the projects and programmes which they implement are designed at the national level, and their work is to implement them. Therefore, he was unable to confirm that he used the booklet or the BN explicitly to make decisions. He said that he shared the booklet and BN with his colleagues at work. Asked whether he thought that the booklet or briefing note had been used by his colleagues to influence any policy or practice, MI10 said that he couldn't confirm this. However, during one of the

meetings about the short-rain and long-rain assessments in 2022, our research was mentioned. For example, he explained that

“During one of short-rains or long rains assessments last year... I cannot remember when exactly, there was a mention of your research and the Briefing note by someone... I think from one of our partners. We were talking about the hot spots areas [i.e. Areas with harsh conditions and the majority people are poor and vulnerable due to harsh climatic conditions] in Kangikipur... (MI10, NDMA)

(b) We talked to FI9, one of the directors at Caritas (an NGO which is concerned with education) about the booklet and BN. FI9 said she shared the BN with one of the programme officers. She read the booklet and thought it was perfect for schools since Caritas deals with promoting education. When asked whether she has used ideas from the booklet or BN to make decisions, she said that she has used ideas from the BN for fundraising purposes for example:

“We have been fundraising a lot to support schools around Kalapata and Loperot and we have used ideas from the booklet to write proposals. We have not referenced the BN per se, but the ideas such as the need to improve infrastructure in schools have been used continuously. For example, we are trying to improve school feeding programmes to retain students in schools to learn. You know hunger is one of the impediments of education.” (FI9, Caritas)

FI9 also said that the BN helped her to think of how to lobby for access to better education in remote schools across Turkana, noting that

“I attend meetings where I meet people from the education department and we talk about issues of educating the girlchild, because you know the girlchild is important in our society. But many Turkana girls still get married at a young age and they don't go [sic] Primary Schooling. I often try to push things at these meetings, for example to provide more support to girls so that they can

finish schooling. I often used the ideas from the briefing note to drive the conversation (FI9, Caritas)

(c) We also had a conversation with MI6, a representative of the Lokichar Action Network, a local CBO which is concerned with supporting local communities in issues of education, livelihoods, human rights, environmental protection, etc. MI6 is one of the directors who had read the booklet. MI6 said that the booklet has been a key reference for fundraising. For example, he told us that

“I have used the booklet as a reference several times in meetings and I have used the ideas when bidding for projects, etc. But so far, we have not been lucky to have a breakthrough with funding but we are trying. I have a meeting next week with the UNDP [United Nations Development Programme] about a bid we submitted, and we will talk about the problems which the Turkana people face including livestock deaths, illiteracy etc. I will be using ideas from this booklet” (MI6, Lokichar Action Networks)

Appendix C: List of participants for impact evaluation

Focus Group discussions

Focus group discussion 1: Students at Kangakipur Primary School		
NAME	AGE	CLASS
1. FG1 MP1	14 years	Eight
2. FG1 MP2	14 years	Eight
3. FG1 MP3	13 years	Seven
4. FG1 FP4	12 years	Seven
5. FG1 FP5	13 years	Seven
6. FG1 FP6	13 years	Seven
7. FG1 FP7	13 years	Seven
Focus group discussion 2: Teachers at Kangakipur Primary School		
NAME	Position	
1. FG2 MT1	Deputy Principal	
2. FG2 MT2	Teacher	
3. FG2 MT3	Teacher	

Focus group discussion 3: Students at Kalapata Girls High		
NAME	AGE	FORM
1. FG3 FP1	17 years	4
2. FG3 FP2	17 years	1
3. FG3 FP3	16 years	2
4. FG3 FP4	18 years	3
Focus group discussion 4: With teachers Kalapata Girls High		
NAME	Position	
1. FG4 MT1	Teacher	
2. FG4 MT2	Teacher	

Focus group discussion 5: Students at Napsimoru Primary School		
NAME	AGE	CLASS
1. FG5 FP1	14 years	Seven
2. FG5 MP2	15 years	Eight
3. FG5 FP3	14 years	Six
4. FG5 MP1	14 years	Seven

Focus group discussion 6: With teachers, Napsimoru Primary School	
NAME	Position
1. FG6 MT1	Teacher
2. FG6 MT2	Teacher

Interviews

	Name of Interviewee	Position, and Institution	Area of operation
1	MI1	Deputy Principal Kangakipur Primary School	Kangakipur
2	FI2	Housewife	Kangakipur
3	FI3	Principal, Kalapata Girls	Loperot
4	MI4	Teacher, Kalapata Girls	Loperot
5	MI5	Area Chief	Loperot
6	MI6	Lokichar Action Network	Lokichar
7	MI7	Teacher, Napsimoru Primary School	Napsimoru
8	MI8	Area Chief (Assistant Chief)	Napsimoru
9	FI9	Programme Director, Caritas	Turkana, based in Lodwar
10	MI10	Assistant Director, NDMA	Turkana, based in Lodwar