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The U.S. Government's Global Hunger and Food Security Initiative



Karamoja Resilience Support Unit (KRSU)

SECOND TRAINING OF TRAINERS WORKSHOP FOR ROLL-OUT OF PASTORALISM AND POLICY COURSE

June 18–22, 2018
Moroto, Uganda

Tufts
UNIVERSITY

FRIEDMAN SCHOOL OF
NUTRITION SCIENCE AND POLICY

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The views expressed in the report do not necessarily reflect the views of the United States Agency for International Development or the United States Government, UK aid or the UK government, or Irish Aid or the Government of Ireland.

The training of trainers (ToT) course was the second of a five-part series of courses called the *Pastoralism and Policy in East Africa* organized by the Karamoja Resilience Support Unit and facilitated by the International Institute for Environment and Development (IIED).

The training process is based on the *East Africa Pastoralism and Policy* course developed by IIED and Feinstein International Center, Friedman School of Nutrition Science and Policy, Tufts University. It was designed to help decision-makers and planners better understand the scientific rationale underpinning sustainable pastoralism, while simultaneously strengthening the skills of pastoralists and their advocates to articulate the economic, ecological and social benefits of their livelihood systems and argue for their inclusion in national policy.

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ACRONYMS

AT	Adaptation team
CBR	Center for Basic Research
CRS	Catholic Relief Services
CSO	Civil society organization
IIED	International Institute for Environment and Development
KDF	Karamoja Development Forum
KRSU	Karamoja Resilience Support Unit
M&E	Monitoring and evaluation
TORs	Terms of Reference
ToT	Training of trainers
USAID	United States Agency for International Development

SUMMARY

The second training of trainers (ToT) course for the adaptation and roll-out of the pastoralism course in Uganda was held in Moroto, Karamoja from June 18–22, 2018. Twenty-one participants from Gulu and Makerere Universities and the Karamoja Development Forum (KDF) attended. The International Institute for Environment and Development (IIED) facilitated the training. The workshop was a success, and the participants found ToT 2 to be more exciting than ToT 1, as they internalized the course materials and presented their arguments.

There was a modification in the dynamics of the pastoralism course, which initially assigned course work by institution. This time, the participants were grouped across institutions along the three pillars (natural resources, the herd, and the family) of pastoralism, to review the course materials, identify gaps, and suggest research or case studies to fill the gaps. Based on this research, the teams will contextualize the course materials for Uganda. The third ToT will be held September 2–8, 2018 and will be the third in a series of five ToT courses on pastoralism and policy in East Africa.

BACKGROUND

This ToT course is part of a series of five courses on pastoralism and policy in East Africa. It was conducted at the Catholic Relief Services (CRS) office in Mount Moroto, Karamoja. The training was commissioned by the Karamoja Resilience Support Unit (KRSU) in collaboration with IIED. The ToT is a five-day intensive course per session. The first ToT was held in March 2018, while this second one was held June 18–22. Twenty-one trainees from KDF, Gulu University, and Makerere University attended the second ToT. The third course will be held September 2–8, 2018. IIED facilitates the ToTs.

It was unanimously agreed that the training be adapted to the Ugandan context with two “bodies” to manage the adaptation process:

- A **multi-stakeholder reference group** to provide strategic oversight over the adaptation process;
- An **adaptation team** (AT) comprised of Center for Basic Research (CBR), Makerere University, Gulu University, and KDF.

The second ToT covered the following topics:

- Dominant narratives on pastoralism in Uganda;
- Overview, history, and key features of the training;
- Introduction to Module 1 of the training;
- Draft work plan and appointment of focal persons for each group. Focal persons appointed were: Frank Muhereza (CBR); Tebanyang Emma (KDF); Dr. Kalyango/Dr. Oketch (Makerere University); Mugonola Basil (Gulu University).

DAY ONE

SESSION 1: SETTING THE SCENE

Charles Hopkins, Senior Resilience Advisor for Feinstein International Center, Friedman School of Nutrition Science and Policy at Tufts University, welcomed the participants and advised them to make optimal use of the training period. Alais Morindat, Trainer at IIED, led the participants through introductions while David Macharia, Head of Office for CRS Moroto, welcomed the participants. Vewonyi Adjavon, Chief of Party for the Nuyok Project, gave an overview of CRS programs in Uganda and northeastern Uganda.

Synopsis of training journey

KRSU Uganda fosters mutual learning, knowledge management, and coordination, with the objective of assisting United States Agency for International Development (USAID) to strengthen its resilience programs and policy support in Karamoja. Its objectives are to:

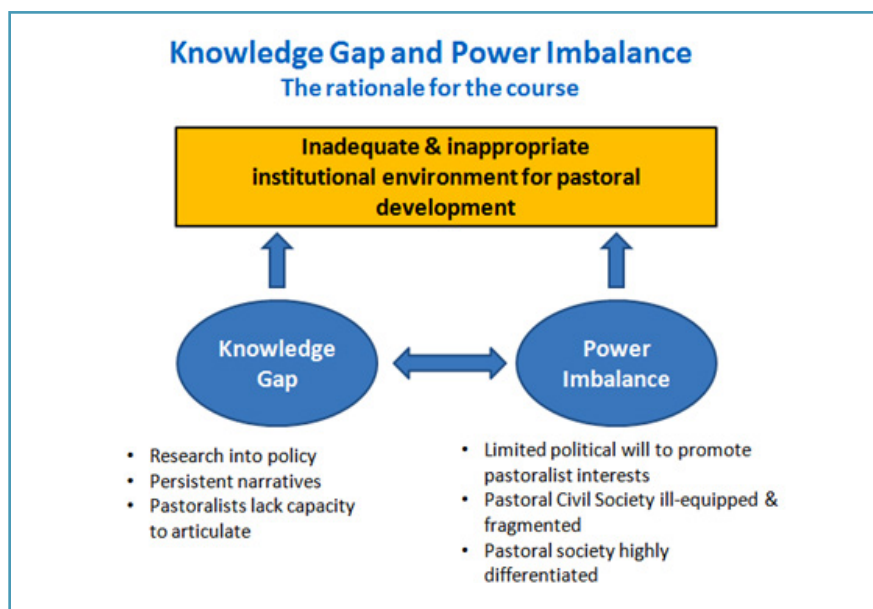
- Provide a range of strategic, programmatic support to the Karamoja Development Partners Group (KDPG);
- Provide targeted support to strengthen the Government of Uganda's policies and systems that build resilience in Karamoja;
- Provide analytic support and an evidence base.

KRSU promotes learning and capacity development for resilience planning and programming in Karamoja and in so doing supports the pastoralism and practice course. The rationale of the course was to address the knowledge gap and power imbalance among pastoralists. The conceptual framework in the figure below clearly underpins the rationale for the course.

Objectives for ToT 2

1. Review progress since ToT 1 and address issues arising.
2. Review proposed revisions to East Africa training course.
3. Assess AT abilities to make arguments and use evidence to demonstrate rationale and benefits of pastoral systems—structured presentation of material from ToT1.
4. Present new material from East Africa training to be adapted to Uganda context.
5. Strengthen facilitation skills of ATs.
6. Plan next steps of ATs.

Figure 1. Conceptual framework for pastoralism and policy course.



SESSION 2: REVIEW OF PROGRESS SINCE TOT 1

Table 1. Progress since ToT 1

Progress	Positive outlooks
<ul style="list-style-type: none"> Started on process of identifying gaps in evidence/ data and naming of course How to integrate into existing curricula, e.g., research, field work, and the teaching of students at the universities or a short course targeting professionals 	<ul style="list-style-type: none"> Opportunity to contribute to positive change in pastoral areas Being authors for proposed textbook Team spirit and commitment is still high

Table 2. Challenges/issues affecting the ATs' ability to complete the agreed tasks for ToT 2

Challenges/issues
<ol style="list-style-type: none"> It was not foreseen that a lot of time is required to complete the course work. The trainer's manual is very long, and therefore, lots of time is required to read through it. Lots of time needed to find evidence; some is available on the internet, while some is not. Reconciling different views of the AT members requires time, since not everyone is prepared to the same degree. Need for the motivation of a "professional fee" given the heavy workload; this task is outside the normal mandate of trainers. Explore possibility of using Ethiopian textbooks as basis for adoption. Textbook was available in PDF format, which makes editing difficult. The need to ensure consistency in the AT members' attendance throughout the trainings (Makerere group members especially) in order to ensure steady progress. The initial team comprised civil society organizations (CSOs). Mercy Corps, Vétérinaires Sans Frontières (VSF), and KDF (Karamoja team) drafted a joint work plan during ToT 1 in Kampala. This had to be revised to suit the KDF team only, given that the rest of the CSOs are not available for ToT 2, which focused on the four institutions that would adapt and roll out the course. KDF has experienced challenges in complying with USAID funding guidelines. Tease out positive synergies for ATs considering the differing role of KDF as compared to academic institutions. Strengthen cross-institutional links/exchanges by bringing traditional and scientific knowledge together. Strengthen communication linkages between KRSU team and team leaders/focal persons.

DAY TWO

SESSION 3: SUMMARY OF TOT 1 TRAINING SESSIONS

This session was intended to boost the AT's abilities to make arguments and use evidence to demonstrate the rationale and benefits of pastoral systems.

The members of the AT formed four groups and were tasked with preparing a presentation on ToT 1 Module 1 training sessions. Table 3 below shows the nature of the tasks assigned to the four groups. The groups performed the following tasks:

- Summarized the overall message in the argument and demonstrated how it builds on or links to the preceding argument or other sessions in the training manual;
- Then for each step of the argument, presented the lines of argument and the crucial photos and case studies, including presentation of new evidence relevant to the Ugandan context.

Each presentation was followed by self-assessment by the presenter, peer review by group members, and review by all participants and facilitators.

Table 3. Summary of first task

Task	Group Name
Pastoralism is a system	Awadi 4
Natural pastures are major source of food (M1, P1, KQ1, A1)	Ana mere meta
Inter-seasonal impacts on pasture quantity and nutritional quality (M1, P1, KQ2, A1)	Eebo
Rainfall within wet season impacts pasture quantity and quality (M1, P1, KQ2, A2)	Karibu

Task 1 for Awadi 4 group: INTRODUCTION TO THE PASTORAL SYSTEM

See Appendix I for presentation.

Table 4. Presentation of Task 1 by Awadi 4

Feedback:	
<p>Facilitators:</p> <p>Good points: The presentation brought out the three pillars of the system, the holistic nature of the system, the interdependence, how if one pillar is removed it destabilizes the system. Presentation introduced new images and made good use of them (e.g., the three stones and the cooking pot). Presenter was relaxed and confident.</p> <p>To improve: Presentation could have started without showing the first three pillars slide and used that time to set the scene: how pastoralism is often seen as disorganized, etc. You didn't make much use of the first slide. By explaining how the system works internally and how it is affected by external factors, and the fundamental role of mobility in "making the system work" the participants are better prepared to</p>	<p>Presenter: I feel I did a good job; I don't think I rushed. I opted not to use some of the other evidence. I could have skipped the point about nomadism versus sedentarization; and I didn't use any evidence.</p> <p>Team: He has presented what we discussed; we didn't go the extra mile to look at policy and how this affects the functionality of pastoralism (e.g., land subsequently made and policy). He could have given some examples of what happens if one of the pillars is removed and what the possible implications of that are.</p> <p>Wider group: Overall message was clear, showing pastoralism as a system. We would have liked a bit more engagement. It was well-presented and the presenter was confident. The argument with supporting evidence</p>

Feedback (cont.):

appreciate the arguments and evidence presented. You could have spent a bit more time showing the interdependence of the pillars and what happens; session is the foundation of the training. You didn't present the inclusive important message of why it is important to see pastoralism as a system.

was lacking. He could have given more specific examples of what happens if a pillar is removed.

Task 1 for Ana mere meta group: NATURAL PASTURES AS A MAJOR SOURCE OF FEED (M1, P1, KQ1, A1)

See Appendix I for presentation.

Table 5. Presentation of Task 1 by Ana mere meta

Feedback:

Facilitators:

Good points:

- Good start: made reference to pastoralism as a system; introduced the argument; introduced the challenge of policy not understanding that pastoralism needs to be mobile to access natural pastures.
- Structured approach—started with presenting the different feeds (full list) but then explained need to see which is most important in Karamoja, but didn't go on to explain the different characteristics of the vegetation.
- Composite slide—you did bring out the different characteristics and how pastoralists need access to all of them.
- Presentation of how policy limits access to some of these areas (conservation, game parks, reserves).

To improve:

- Make the argument stronger as to why natural pastures are most important, e.g., hay and by-products not really an option.
- Showed the photos of the different environments but didn't pull out the variations in quantity and nutritional quality of pastures, etc.
- Should have brought out agro-pastoral dimension of Karamoja and crop residues.
- Also, could have stressed how some environments are very strategic, especially in the dry season or drought years, and yet many of these very areas are the ones being taken away.

Presenter: I was not too confident that I brought the messages out; I struggled to relate the message to policy. I failed to explain the pictures as I did not know the environments.

Team: I liked the way he presented the content, the argument, and the justification for mobility. He had a challenge (maybe because he was rushing) as we had agreed to simulate a real-life situation. He experienced some difficulty in explaining the evidence; he could have spent a bit more time bringing out the importance of mobility; he could have been a bit more confident.

Wider group: Presentation could have identified the need for evidence/photos for Karamoja.

- Could have explained why the government preferred to keep livestock in protected kraals as opposed to allowing mobility; we are trying to adapt these materials, so we need to identify new evidence that we can easily explain.
- Some disconnect between evidence and argument; one of the arguments for curtailing mobility is the view that mobility is not economic; connection not made strongly enough that lack of mobility limited access to crucial resources.
- There is no reference to crops and the need for people to grow food, BUT this is covered under Pillar 3, and in many cases, livestock are "food for people" (milk, meat, and milk sold to buy sorghum); we should ensure that the topic of food security is addressed and how pastoralism builds food security.

DAY TWO

Feedback (cont.):

- Could have stressed “how,” because the quantity and quality of natural pastures will have implications for livestock and people. What are the factors that affect the quantity and quality of pastures?
- Need to give the training with confidence.
- We are limited by the structure of the training as we were not planning to address issues of fire, etc. as this comes later in the training.
- When policy makers talk about water, for example, they only focus on a particular sector. Ministry of Health sees water from a hygiene perspective, and Ministry of Agriculture only looks at it from the crop production perspective. These are the challenges of a sector-based approach. This may require advocacy.

Task 1 for Eebo group: INTER-SEASONAL IMPACTS ON PASTURE QUANTITY AND NUTRITIONAL QUALITY (M1, P1, KQ2, A1)

See Appendix I for presentation.

Table 6. Presentation of Task 1 by Eebo

Feedback:

Facilitators:

Good points:

- Key message: Karamoja has different seasons, and this has impacts on quantity and quality of pastures.
- Innovative use of presenting evidence in a table form.
- Excellent presentation of how the quantity and quality change from one season to the next season.
- Recognized importance of trees but didn't go into details.
- Introduced fire as a critical management tool to improve quantity and quality, and well-presented with a reasonable proposal for a case study. However, fire is one of four determinants of savannah ecology, but the presentation of the role of moisture, the first determinant, is not yet finished being discussed.

To improve:

- The notion of “rotational grazing” is not the same as mobility. If you introduce such terms, you need to ensure definitions are precise.
- No evidence presented to support argument/

Presenter: I think it was a good presentation, and I did my best; there is room for improvement in getting more information on national policies.

Team: This session is not on fire, but the process of adaptation requires us to innovate. We could have mentioned that the system is driven by rainfall, and that rains start at different times; did not mention why quantity and quality decrease in December; we could have explained more on rotational grazing.

Wider group: Presenter was very confident, particularly given that the presenter did not attend the first ToT.

- Should have tried to link to previous session as this is not a stand-alone session.
- The illustrations should be more explicit; need to explain the example. No gender analysis of seasonal impacts on men, women, and children.
- It is necessary to bring out what is meant by nutrients and how trees/shrubs compensate for the low nutritional value of pastures.
- Need to bring out that pastoralists bridge seasonal deficits in pasture quantity and quality through mobility to access strategic resources, e.g., some places with more trees and shrubs.

Feedback (cont.):

message that nutritional quality of pastures changes from one season to the next and that this is NORMAL and not due to poor pastoral management. It is imperative to show that science supports this (data on water content, protein, and digestibility in plants). It contributes to the understanding of drylands as disequilibrium environments, which comes a bit later in training and underpins the strategic value of mobility.

- Could have made better use of seasonal timeline to illustrate the notion of periods of plenty and periods of scarcity, which has origins in rainfall and impacts pastures, livestock productivity, and people. People can be differentiated by men, women, and children, and also by cultural institutions, etc.
- Could have made better use of seasonal timeline to illustrate the inter-relations between the three pillars of the system and to bring out our local knowledge—names of seasons and how pastoral calendar is different from the government planning year.
- Tree products (pods, leaves) are important natural supplementary feeds, particularly during the dry season when they have a significantly higher nutritional value than surrounding grasses. Scientific research confirms pastoralist knowledge on the value of trees—this prepares the participants for the later session from the Ekwar case study.
Access to areas with high tree density (riverine forests) is critical for limiting or maintaining livestock productivity, particularly during the dry season.

In practice, pastoralists' access to these areas is increasingly constrained, e.g., they are protected areas, converted to irrigation farming. This is a policy area for follow-up.

- The presenter is very passionate. Kobebe is like a haven for pastoralists and attracts pastoralists from all over Karamoja and Turkana; there is also conflict here, which should be revealed.

DAY TWO

Task 1 for Karibu group: TOTAL SEASONAL RAINFALL HAS AN IMPORTANT INFLUENCE ON NATURAL PASTURES (M1, P1, KQ2, A2)

See Appendix I for presentation.

Table 7. Presentation of Task 1 by Karibu

Feedback:	
<p>Facilitators:</p> <p>Good points:</p> <ul style="list-style-type: none"> • A very good effort given the complexity of this session! Also, well done on digging out the data in such a short time! Clearly, time was a limiting factor. Great effort! • A positive correlation between rainfall and biomass production was well-made. • Message about correlation between rainfall and nutritional quality was relatively well-made. • Point about how species composition changes and how this affects nutritional quality was brought out. • The issue of selective feeding of livestock was briefly made. • Rainfall data were good but will need to be tidied up and made more accessible; better to see percent deviation from the mean over the years. <p>To improve:</p> <ul style="list-style-type: none"> • Need to link to the previous session where we looked at inter-seasonal distribution, while here we look at variability in rainfall within the rainy season and what impact this has on biomass production and nutritional quality of pastures. • What is the link/relevance of quote from Abraham Lincoln to the session? It took a bit of time to get to the subject. • The relevance of using the black and white photos taken in the 1940s is not clear; what messages are they supporting? • Need to make data presented in graphs more accessible. It was a bit difficult to follow the logic and sequence of steps. Need to distinguish between ACCESSIBILITY and SIMPLIFICATION; need to maintain complexity but make it accessible. • Didn't understand the graph showing that higher rainfall leads to a greater spatial distribution of species. 	<p>Presenter:</p> <ul style="list-style-type: none"> • I was pleased to be able to find new data and quite quickly; the presentation has improved my capacities. • I was unable to address all the key messages as I could not find references to provide the evidence for Karamoja. • I think the data I presented were a bit intimidating for a layperson, and I think we can make them more accessible. <p>Team: Our topic was technical and quite tricky, and we had to dig deep into other literature; the diagrams were technical, but the explanations were clear.</p> <p>Wider group: You have to speak to your audience in a way they will understand. The data were so scientific that it was difficult to follow.</p> <ul style="list-style-type: none"> • Need to ensure the audience fully understands what the data are saying, its relevance and significance. If we do not have easily accessible data from Uganda, then let's use the data that exist in the Pastoralism and Policy in East Africa Training Manual. • The argument did not bring out issue of increasing variability due to climate change. Did not refer to fire. • If you present complicated figures, then add a key message so we can understand. • Didn't make a point of distribution of rainfall between high and lowlands and thus impact on pastures. <p>We need to find more recent data, but doing this may have budget implications.</p>

DAY TWO

SESSION 4: NEW TRAINING MATERIAL ON PASTORALISM LOOKING AT THE DYNAMICS OF WATER

Alais facilitated a discussion around the following two points.

1) Pastoralists use different types of water sources, which has significant implications for labor demands and family health (P1, KQ3, A1).

Participants discussed the various water sources found in pastoralist communities and their characteristics, e.g., naturally existing springs creating a stream, wetlands/swampy areas, running rivers, valley dams, boreholes powered by winds.

Implications of different water points for women:

- The **physical and technical characteristics** of the water point will influence the amount of time and effort women spend drawing water as well as the quality of the water (hygiene);
- Both will have an impact on women's time, their health and that of their family, and the time they will spend looking after sick people (children, elderly);
- The **distance of the water point from the homestead** will influence the time spent fetching water. It will affect the amount of time women have for other activities;
- The **management system** of the water point: for example, if there are no provisions for separate watering points for people and livestock, women often have to wait until the livestock of their family/clan is watered before gaining access to the watering point. It will affect the amount of time women have for other activities;
- The **form of transport**, such as availability of donkeys, may determine the amount of water that can be transported back to the homestead, the frequency of visits to the water point, and the amount of water available for domestic use.

Key Points:

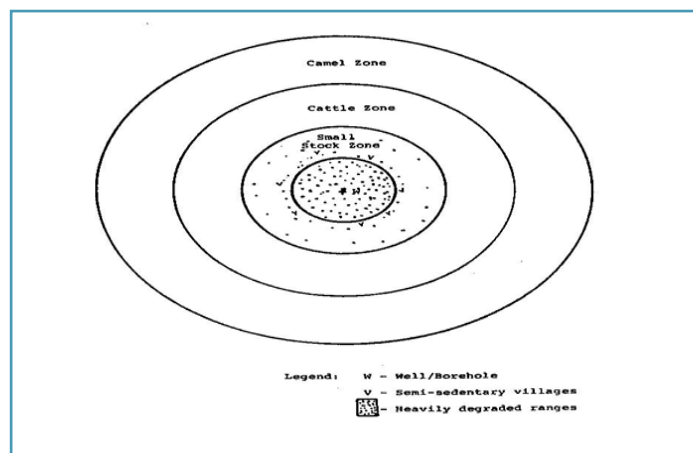
- Pastoral systems in Eastern Africa have a variety of water sources, both for livestock use and human use.
- The labor and time requirements for utilizing the water sources, particularly in the dry season, will vary depending on the technical and physical characteristics of the water point.
- The quality and hygiene of water in pastoral systems of Eastern Africa has an impact on family health. It has implications for women's labor demands.

2) The relationship between pasture and water is most critical in the dry season (P1, KQ3, A2).

Key points

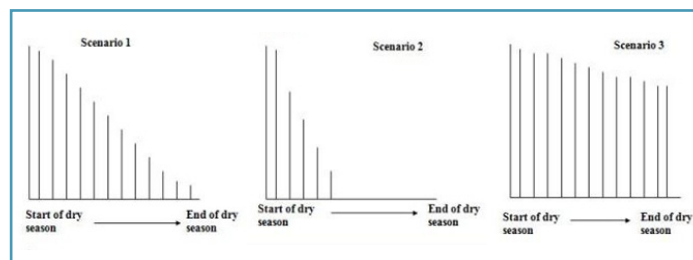
- Watering of livestock is most critical in the dry season when animals need to drink more often; yet surface water and surface water sources become scarcer as the dry season progresses.
- There is a maximum distance different livestock species can walk before needing to drink, especially in the dry season. This area is called a "grazing circumference." See Figure 2 below showing the relative distances for goats, cattle, and camels.
- The grazing circumference contains the total amount of pasture (standing biomass) that is available to livestock using that water point until the next rainy season. IT MUST BE MANAGED CAREFULLY!
- The number of livestock using a water point and the amount of time they spend there will determine how fast the pasture is eaten.
- The amount of water within the grazing circumference determines the number of animals that can graze there.

Figure 2. Grazing circumference around water source in a dry season.



Source: Pastoralism and Policy in East Africa Training Manual

Figure 3. Dry season grazing scenarios.



Source: Pastoralism and Policy in East Africa Training Manual

Figure 3 depicts management of pasture over the dry season (i.e. between two rainy seasons) in various case scenarios. Scenario 1 is ideal because it leaves enough biomass available for livestock until the next rains.

DAY THREE

After a brief recap of Day Two activities, the ATs presented the second assignment from the ToT 1 training sessions on the arguments and evidence in the East Africa pastoralism and policy course. This was followed by self-assessment by the presenter, peer review, and facilitator review.

Table 8. Summary of second task

Task	Group Name
Grazing rhythm importance and influence on pasture and livestock (M1, P1, KQ2, A4)	Ana mere meta
Herbivores are important for rangelands. (M1, P1, KQ2, A5)	Awadi 4
Total economic value of pastoralism (M2, KQ1)	Eebo
What is land? Tragedy of the commons! (M2, KQ5)	Karibu

Task 2 for Ana mere meta group: GRAZING RHYTHM IMPORTANCE AND INFLUENCE ON PASTURE AND LIVESTOCK (M1, P1, KQ2, A4)

See Appendix II for presentation.

Table 9. Presentation of Task 2 by Ana mere meta

Feedback:	
<p>Facilitators:</p> <p>Good points:</p> <ul style="list-style-type: none"> Overall very good given presenter is an economist—showing it is possible for someone from a different discipline to competently present data from another discipline. Noble introduction and reference to the previous session and the importance of managing standing. Very smooth transition to using data to show percent of biomass consumed. Introduced the two photos taken at the end of dry season and used them to sum up at the end. Recognized there was not enough time to fully prepare a case study in Karamoja. However, the materials presented introduced the role of customary institutions in managing standing biomass to avoid conflict, which is very important. 	<p>Presenter: I thought I did well but couldn't get in touch with data I wanted and was a bit nervous at the beginning being an economist.</p> <p>Team: Did a good job and was confident. General observation for those of us who were not part of ToT 1: initially I did not understand the logic of the presentations, but now I understand how each session builds on the earlier one.</p> <p><i>Need to emphasize the area of conflict in this session, maybe do a case study.</i></p> <p>The key policy issue is also investors coming to our land.</p> <p>Wider group: Need to quote the source of data. General comment: we do not see how animals also get minerals as well as pastures and water.</p> <p>NB: might be better to move section on beneficial impacts of livestock on the environment from this session to the next argument (PI, KQ2, A6).</p>

DAY THREE

Feedback (cont.):

- Would be good to develop this case study further with photos, local names of the institutions, how they manage, etc. Nairobi case study data well presented.
- Good use of photos to show the impact of restriction of grazing on the environment (bush encroachment).
- Perfect summing up and introduced the importance of mobility.
- Relevance to policy well-done as well as the role of universities in documenting traditional knowledge; plus, a reference to the law preventing burning.

To improve:

- Consumption of dry season biomass is not necessarily a cause of degradation.
- Referring to right and left of photo; we need to put Scenario A and B on the slide!
- Introduction of the case study from Karamoja was a bit rushed and didn't quite connect as it focused more on conflict.
- Nairobi case study not sufficiently introduced—could have taken a bit more time, and use the reference provided.
- Could refer to the seed bank when describing regeneration of pastures and the photo of the new seedling.

Task 2 for Awadi 4: HERBIVORES ARE IMPORTANT FOR RANGELAN (M1, P1, KQ2, A5)

See Appendix II for presentation.

Table 10. Presentation of Task 2 by Awadi 4

Feedback:

Facilitators:

Good points:

- Excellent presentation. This is clearly because you have mastered the subject, but also because you presented both sides, which is essential for universities.
- Good introduction showing debate/controversy around keeping livestock on the rangelands—those who are proponents and those who are opponents.
- Good slide showing conditions under which livestock degrade the environment. Slide A2 with different photos: good facilitation. On

Presenter:

To the best of my knowledge, I think I did a good job (80%); would have liked to access specific data (effect of livestock of raising biomass yield). The relevance to policy was a bit light and was a bit hypothetical as don't have data to support the recommendation to have different approaches to rangeland management depending on context.

Team: Presented over and above what we agreed and drew on his rich experience. Regarding links to policy, there is now a draft rangeland policy for Uganda,

Feedback (cont.):

the introduction of the case study, however, see comment below (second bullet point in “to improve” the section).

- Slide A6 showing why degradation unlikely is evident—refers back to earlier session.
- Good that you showed the positive impacts of livestock, e.g., can promote healthy rangeland, could simplify some of the terms (climax community, zoophilous pasture species).
 - Proper conclusion; recognition that different policies may be needed for managing rangelands depending on context.

To improve:

- Refer to earlier sessions, especially the specific context of the drylands, disequilibrium environments, how rainfall is the primary determinant.
- Slide A2: wasn't clear if site A was the actual cattle corridor or the wider rangeland; if the former, then one would expect it to be bare (just like a tarmac road is bare!); also, not clear if site A is a wet or dry season site.
- Worth mentioning that bare ground around water points is normal, but represents a tiny percentage of the rangelands; yet is also often the only place policy makers visit, and so they get a false impression.
- Data showing that we have lost 10–20% of rangelands in cattle corridor compared to 1994 are not convincing. It implies that all rangelands will be degraded in 5–10 years after 1994, i.e., by 1999–2004, yet we are now in 2018 (24 years later), and the cattle corridor is still there.

and this should include marketing outlets to enable pastoralists to sell and relieve pressure on the rangelands; also different species use different resources in the rangelands, and this could also be emphasized. Need to see both positive and negative impact of termites in the rangelands. Soil profile in rangelands is very shallow as can be seen with the exposure of rock, and so this makes them more at risk of soil loss (degradation).

Wider group: Limited efforts were made to support your arguments with evidence from the literature. It would have been good to show the situation of degradation in Karamoja. The case study on slide A2 could have been more precise. The photo of Turkana is lovely, but in the wrong place as the Turkana do not rear cattle, only camels and goats. The photo also might make people think the mobile livestock cause degradation. When you take/use photos, it is important to have people in the picture to have a reference point. General comment—we are presenting more on the negative than on the positive effects of livestock. Most people think termites are few, and a significant problem, but the termites are like the livestock above the ground—termites are producing nutrient hotspots in the rangelands due to the vegetation that grows on the mounds.

DAY THREE

Task 2 for Eebo: TOTAL ECONOMIC VALUE OF PASTORALISM (M2, KQ1)

See Appendix II for presentation.

Table 11. Presentation of Task 2 by Eebo

Feedback:	
<p>Facilitators:</p> <p>Good points:</p> <ul style="list-style-type: none"> • Calm and confident. • Did provide some explanation of data on the first slide on Darfur. • Fourth slide on contribution to national economy better presented and introduced data from Karamoja. • Ninth slide on why pastoralism is undermined by policy makers—made a point about lack of knowledge and understanding. <p>To improve:</p> <ul style="list-style-type: none"> • Need to explain overall message: why TEV (total economic value) is important—many people think pastoralism is unproductive or less productive than other livelihood systems like ranching and other land uses like crop farming; and link to previous sessions. • Introduce the first slide on Darfur before showing the data—explaining it is between two types of pastoral systems, one very mobile and one less mobile, using a case study of the Bagara. • Introduce the second slide on ranching before showing; need to go through the arguments why data show pastoralism is more productive than ranching when measured on per hectare basis; need to explain the significance of this data to policy. • Introduce third slide on cross-border trade—why significant (e.g., much of this trade is invisible). • Fifth slide on tourism and culture—need to make reference to the fact that these are “indirect values” and thus often not captured in national statistics. • Sixth slide on informal meat business and draft power—the photo only showed meat business and not draft power. • Seventh composite slide—need to make the point that drylands are often seen as “wastelands,” “low potential,” etc. Data show the opposite, so why is this the case? • Eighth slide—link to charcoal burning and crop production was not very clear. 	<p>Presenter:</p> <p>I feel I have tried; I have provided evidence of the economic importance of livestock to the national and local economy; I also highlighted the knowledge gap among policy makers; also showed data that more sedentary livestock are less productive, which challenges government perceptions and policy makers.</p> <p>Team: I think he has done his best. Numbers should speak for themselves. We could find additional data like employment levels in pastoral areas.</p> <p>Wider group: We need to draw out the contribution of pastoralism to the household as the best social-economic unit. Appreciate when you say most of the sheep come from Karamoja, but you could make the point that Karamoja is contributing a disproportionately high proportion of livestock/livestock products to the country, but they may not receive an equivalent contribution in the budget. Could also look at how many local governments invest in livestock/pastoralism. There was a study that showed Karamoja produced the best meat in the country, so why don't we focus on this and make the economic argument about the added value of Karamoja as a meat producer?</p>

DAY THREE

Task 2 for Karibu group: WHAT IS LAND? TRAGEDY OF THE COMMONS! (M2, KQ5)

See Appendix II for presentation.

Table 12. Presentation of Task 2 by Karibu

Feedback:

Facilitators:

Good points:

- Nice photo at the start.
- Good to see an overview of land policy in Uganda and relevance of land policy and pastoral livelihoods, but could be a brighter and more focused bringing out of the fact that communal land is essential for mobility, for responding to environmental variability, etc.
- Good introduction to Hardin's Theory of Change and good presentation of the counter-arguments regarding key types/sources of data, e.g., the number of animals being sold by Karamojong and drought as factors that limit exponential growth; reference to pasture dynamics; social organization, etc.
- Good use of photos for Hardin but one or two could be tweaked slightly to capture the argument being made.

To improve:

- Didn't link the burden of proof cartoon and the core message, which was a bit distracting.
- You need to present the key message better and in this session the fact that communal land is essential to maximizing productivity under dryland contexts, reducing conflict, and reducing degradation in pastoral areas. However, historically communal land was seen as a constraint to productivity and peace. Public policy in colonial times, during independence, and up to today has been to promote private or state ownership, believing this to be better. Moreover, this is largely informed by Hardin's Theory of Change.
- Could have shown historical views on communal land ownership, as this is core to the "tragedy of the commons," and how this is linked to land policy in Uganda.
- Policy sum-up at end needs to link back to the start and the issue of communal land.

Presenter:

I feel I covered the issue about 80%.

Team: We liked how he presented the historical perspective of land, but he could have given more details. One of the policy issues raised is regarding the economic contribution of pastoralism that is not recognized by the government, which affects the budgetary allocations being made. One of the most significant concerns of governments is the sustainable use of land, and they see privatization as the way to ensure this, but this is not compatible with pastoralism.

Wider group: We commend the presenter as issue is sensitive, but we shouldn't rush through as there are issues of borders raising tensions for livestock mobility; we need evidence. The presenter could have raised issues of where land will be for livestock and what the future holds for pastoralist land. We should have had a different presenter in the interests of this exercise. Expected to hear something about livelihoods and natural resources. The issue of land is complex and needs much time. The presenter had a slide showing the four tenure systems, and I expected to hear how each of these affects pastoralism. Oil exists in Karamoja; we cannot run away from this and that, in the so-called national interest, its exploitation is likely to impact negatively on pastoralists.

DAY THREE

SESSION 5: NEW TRAINING MATERIAL ON PASTORALISM: TECHNICAL AND LEGAL STATUS OF WATER

The technical characteristics and legal status of water points are crucial for sustainable rangeland management (P1, KQ3, and A3).

The borehole is more rooted to the water table, so it gives more water per day and for a more extended period. Thus, it sustains more animals.

Striking aspects of the table include:

- The higher the potential of a source to provide water, the higher the potential to be depleted;

- The more water a water point produces, the higher the number of animals that can drink from it and therefore the higher the risk of depletion.

Key Points:

- In the dry season, water is the KEY to sustainable pasture management.
- Two critical factors:
 - **Technical characteristics** determining water discharge rates and thus the number of animals that can be watered;
 - **Legal status** of the water point and who has authority to control access.

Table 13. Average water requirements of livestock in the semi-arid tropics during the dry season (Source: Pastoralism and Policy in East Africa Training Manual)

Well type	Water discharge			Number of animals	
	Litres / hour	Max. hours per day	Total litres per day	Cattle (AC = 25 L/d)	Sheep, Goats (AC= 5 L/d)
Hand-dug well	1,000	7 hours	7,000 L	280	1,400
Cement-lined well	5,000	15 hours	75,000 L	3,000	15,000
Bore-hole	> 20,000	20 hours	400,000 L	16,000	80,000

AC = average consumption

P1.KQ3.A3/54

DAY FOUR

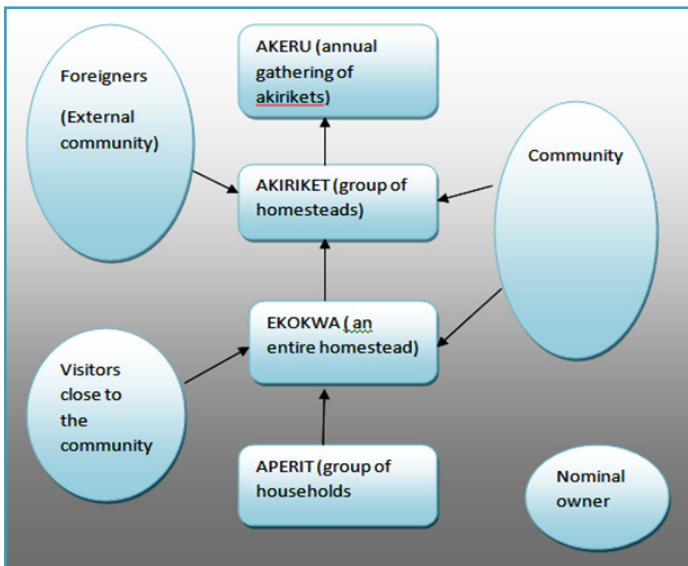
SESSION 6: GROUP DISCUSSION ON POLICY OPTIONS FOR WATER DEVELOPMENT IN KARAMOJA

The common policy practice in Uganda promotes dams for pastoralist environments, e.g., Kobebe Dam attracts many animals from Uganda and Kenya.

A case study of water management systems in Karamoja

Water sources are managed communally. Every borehole/water source has an owner who manages the water source on behalf of the community. A borehole/water source owner can also scout for areas with good pasture. The following figure illustrates how the water management structure operates.

Figure 3. Water and pasture management structure among Karamojong.



The “*aperit*” is a resting place where elderly men sit at the fireplace in the evening to discuss issues about pasture and water; women are also consulted. Nominal owners of watering points/boreholes are more prominent here. Clusters of homesteads and visitors report to the *aperit*.

Every established homestead has “*ekokwa*,” a court found under a tree. Meetings take place in the early mornings up to one o’clock in the afternoon. Decisions such as

identifying scouts for new rangelands and shepherds for taking the animals for grazing are made here.

Each larger community has a supreme court or “*akiriket*” where decisions are proclaimed and sealed. The *akiriket* resolves any conflicts.

Many *akirikets* gather annually, and this gathering is known as “*akeru*.” It is where decisions regarding migration are made. When foreigners want to use a grazing area or watering point for some time, they consult this level. Nominal owners are consulted to see whether to provide access. Visitors from afar/foreigners outside the territory come with a bull.

The bull is slaughtered for the elders in order to access a place, by both internal and foreign visitors. Places are allocated depending on the level of aggressiveness of the group, and visitors are given water sources that get depleted very quickly. Deeper sources are kept for the use of the community.

Karamojong ensure that water sources are on one side of the area of influence; the rest of the area is managed for pasture. They utilize grass and water sources; as the dry season intensifies, they graze towards the well and proceed past it. At this point, declarations are made in the community to go beyond the area of influence. The nominal owners (“*kipolu*”) disguise themselves as hunters to scout for water and grass.

Some systems exist to regulate access to water points: sanctions, punishments, and payments in the form of livestock.

Government legal institutions and civil institutions conflict with these traditional systems, yet the systems work perfectly. To what extent do district, government, and national policies recognize these systems? For example, water user committees for dams have not been functional. In Karamoja, some pastoralist rangelands are under the management of National Forestry Authority (NFA) and National Environment Management Authority (NEMA), thus resulting in conflicting/multiple policies.

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The 1999 Water Act gives provision for those local management groups to enforce sanctions and levy funds for the use of water points. Except when punitive measures are taken, the law catches up on them. Although the Water Act provides for local institutions to manage water points, it has not been actualized, probably due to the narrative/perception that pastoralists are disorganized.

The more water a water source produces, the more livestock it attracts. Therefore, a robust management system is needed. **Pastoralists have strong management systems to regulate the use of resources such as water and pasture, but the legal systems undermine their execution. This is an area for stakeholders in advocacy to take on.**

SESSION 7: NEW TRAINING MATERIAL ON PASTORALISM: THE PASTORAL HERD

This session tackled the second pillar of the course—the herd. Alais engaged the participants in discussions around the following:

A) The definition of a herd and its composition (P2, KQ1, A1, A2). The herd is made up of different species and age/sex ratios. It comprises those animals upon which a pastoralist family depends and which they look after.

Key messages

- Pastoralists in East Africa and Ethiopia keep several species and breeds of livestock. This diversification of species and breed has advantages regarding herd economics, productivity and resilience, complementarity in resource use, and spreading of risk.
- Pastoralists raise indigenous species and breeds that have preferred merits over cross-bred and exotic breeds.

B) Names are given to livestock based on age and sex in various pastoralist communities within Africa.

C) The best herd scenario for productivity is based on age, as evidenced in Table 15.

D) Comparison of herd structures of Borana and Barabaig

E) Traditional terms are given to livestock based on purpose and terms of trade. Explore the possibility of availing these terms for all pastoralist communities in Uganda where possible.

Key messages

- Pastoralists carefully manage the age and sex ratios of their herds to balance the number and category of the animal to meet family needs TODAY while planning for the FUTURE.
- Generally, pastoralists keep more female than male animals to get enough milk for the family TODAY while ensuring the birth of future animals for TOMORROW.
- In some pastoral areas, herd structures are changing as pastoralists move into a monetized economy. These changes may have different impacts on men, women, and children within society.

F) Rights of livestock ownership and use, with examples from Borana and Maasai

Key points

- The rights of use and ownership of livestock in a herd are complex. Most herds are composed of animals belonging to several people, and to which different people have different rights of use and ownership categories.
- In East Africa and Ethiopia today, some livestock are owned by people who do not herd them on a daily basis, but use them as an investment. This situation limits the power of the herder to make decisions.
- The above scenarios have often led “outsiders” and casual observers to conclude that pastoralists keep too many animals, and therefore they need to destock, e.g., through sale.

Advocacy area/policy intervention: explore possibility of obtaining supporting statistics on ownership and rights to use livestock to influence negative narrative about pastoralism and promote policy in support of it.

G) Dynamics of a pastoral family herd; time taken to replace pastoral herds if destocked.

Based on typical average annual growth rates of pastoral livestock herds over 20-year period. Data and estimates are from arid northern Kenya. See Dahl and Hjort, 1976, Having herds: Pastoral herd growth and household economy, Department of Social Anthropology, Stockholm

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Table 15. Three herd scenarios for a family of eight people

	Herd One		Herd Two		Herd Three	
	Male	Female	Male	Female	Male	Female
Calves (0–1 year)	12	16	13	17	7	6
Young adults (bullocks/heifers, 1–3 years)	10	21	2	10	29	10
Reproductive adults (bulls/cows, 4–10+ years)	2	39	1	41	1	24
Non-reproductive adults (steers, 4–10 years)	11	n/a	14	n/a	33	n/a
Old, non-reproductive adults (10+ years)	0	1	5	9	0	2
Total	35	77	35	77	70	42

Herd One	Herd Two	Herd Three
Overall ratio biased to female stock	Overall ratio biased to female stock	Overall ratio biased to males
Sufficient steers and cows for today's needs	Sufficient steers and cows for today's needs	Sufficient steers and cows for today's needs
Sufficient bullocks and male calves for future sales; and sufficient heifers and female calves for future reproduction needs	Very few bullocks and insufficient heifers for future needs; might end up selling today's cows or the heifers when they become cows or male calves when they become bullocks	Although plenty of bullocks, there are very few heifers and female calves for future reproductive needs. Might end up depleting bullocks when they become steers or selling heifers and cows

Studies in Social Anthropology, Stockholm. There is rich indigenous knowledge in pastoralist communities that contributes to sustainability and stability of the pastoralist ecosystems. For example, pastoralists know:

- Rains are unpredictable from one year to the next;
- Livestock prices are very low during the drought BUT very high after the drought, especially prices of female stock;
- Livestock on the market are often of poor quality for breeding, milk production, etc.;
- It takes a long time to rebuild their herds;
- Complex ownership rights mean it is not easy to sell livestock.

SESSION 8: DEVELOPING FACILITATION SKILLS

This session highlighted the “key principles of adult learning” as well as the characteristics of good facilitation, to be explored further in ToT 3. The presentation was centered on the need for a trainer to polish skills in:

- Understanding the content of the training;
- Managing group dynamics;
- Delivering the training (pedagogic skills).

DAY FIVE

SESSION 9: PLANNING NEXT STEPS OF ADAPTATION PROCESS

There was general consensus for the participants to form groups (across institutions) along the three pillars of pastoralism. The teams reviewed the course materials, identified gaps, and suggested research or case studies to fill the gaps.

The team leaders for Makerere and Gulu Universities, CBR, and KDF are: Dr. Ronald Sebba, Dr. Mugonola Basil, and Tebanyang Emma respectively. The sub-team team leaders facilitated the discussion.

Activity Plans

Pillar 1: Natural resources

Activity	Timeline
Submission of activity plan with draft budget to KRSU	By June 29, 2018
Group members joint meeting	August 9–10, 2018, proposed to take place in Lira.

Communication: Photos will be shared through WhatsApp group and email (progress of work, literature that is relevant); leaders of the groups will share information across groups to avoid confusion.

Gaps in knowledge that could be collected:

- How pastoralist rank the pastures and the reasons for the rank chosen, how they choose their diet, and what

strategies pastoralists use to ensure livestock get a nutritious diet;

- Profile pastures by local name and what they contribute to the animal;
- Also profile medicinal plants that are used to treat certain ailments;
- Water management, water sources in this area, and management regimes, how the local management regimes intersect with the formal/existing ones.

Pillar 2: The herd

Activity	Timeline
Submission of activity plan to group leader	By June 29, 2018
Group members joint meeting	Group will have a virtual meeting to explore further discussions.

Pillar 3: Family and wider institutions

Activity	Timeline
Submission of activity plan to group leader	By June 29, 2018
Hold a joint face-to-face meeting during the first week of August to harmonize the input for submission in ToT 3 in September	Group will have a virtual meeting to explore further discussions.

Table 16. Sub-team leaders and contact information

Sub-team leaders	Pillars	Contact
Dr. Paul Okullo	Pillar 1: Natural Resources	Mobile no.: +256 772 368 667 Email: paul.okullo@gmail.com
Dr. Paul Boma	Pillar 2: The herd	Mobile no.: +256 781 558 819 Email: boma.paul@gmail.com
Dr. Kalyango, Dr. Ronald Sebba	Pillar 3: Family and wider institutions	Mobile no.: +256 772 458 022 Email: ronaldkalyango@gmail.com

DAY FIVE

There was also a general consensus on:

A) Recruiting a consultant to guide the monitoring and evaluation (M&E) process for the course and its products

Proposed Terms of Reference (TORs) for design of M&E system:

1. Participatory review of existing M&E systems to identify entry points and criteria for integrating additional information to track the effectiveness of the pastoralism courses and products. This will require face-to-face meetings with each institution's M&E departments and relevant staff to better understand their M&E systems and gain access to any relevant documentation.
2. Based on 1. above, prepare a draft M&E plan identifying criteria, relevant indicators, sources of data, methods of data collection, analysis, dissemination and storage, and budget to track the effectiveness of the pastoralism courses and products, disaggregated by gender where appropriate, that are aligned with and/or complementary to the existing M&E systems of the participating organizations, including roles and responsibilities.
3. Facilitate a two-day workshop with relevant staff of the participating organizations to review and amend the M&E plan. Ideally, this workshop will coincide with, and be integrated into, the third or fourth ToT workshop.
4. Finalize the M&E plan, integrating the findings and outcomes of the workshop.

Deliverables:

- A report summarizing the participating organizations' M&E systems and appropriate entry points for integrating information to track the effectiveness of the pastoralism courses and products;
- A final M&E plan.

B) Library: AT members should make use of KDF and KRSU websites for resource information in soft copy.

Hard copies of resources will be available to group leaders where necessary.

C) Proposed location and date for ToT 3 is September 2–8, 2018 in Jinja.

APPENDICES

APPENDIX I. PRESENTATIONS FOR TASK 1

Awadi 4: Pastoralism is a system

Ana mere meta: Nature pastures are a major source of food

Eebo: Inter-seasonal impacts on pasture quantity and nutritional quality

Karibu: Rainfall within wet season impacts pasture quantity and quality

APPENDIX II. PRESENTATIONS FOR TASK 2

Ana mere meta: Grazing rhythm importance and influence on pasture and livestock

Awadi 4: Herbivores are important for rangelands.

Eebo: Total economic value of pastoralism

Karibu: What is land? Tragedy of the commons!

APPENDIX III. AGENDA

Day 1: Monday, June 18

Time	Training Sessions
9.00–11.00	Session 1: Setting the scene Welcome address Participants introduce themselves—identify new members of the ATs Welcome by CRS and overview of CRS program “Why are we here today?” with history of training, support to KRSU, ToT 1, preparations by ATs for ToT 2, objectives of ToT 2, and workshop timings/social contract
11.00–11.30	Tea break
11.30–13.30	Session 2: Review of progress since ToT 1 Report back by ATs (Gulu, KDF, CBR, Makerere) and KRSU on progress since ToT 1 and issues arising Session 3: Summary of ToT 1 training sessions Overview of material covered in ToT 1; introduction of Task 2 and allocation of 8 presentations to 4 ATs
13.30–14.30	Lunch break
14.30–16.30	ATs prepare presentations

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Day 2: Tuesday, June 19

Time	Training Sessions
8.30–10.30	AT 1 presents first task, followed by self-assessment, peer review, and facilitator review AT 2 presents first task, followed by self-assessment, peer review, and facilitator review
10.30–11.00	Tea break
11.00–13.00	AT 3 presents first task, followed by self-assessment, peer review, and facilitator review AT 4 presents first task, followed by self-assessment, peer review, and facilitator review
13.00–14.00	Lunch break
14.00–16.30	Session 4: New training material on pastoralism P1, KQ3, A1: Pastoralists use different types of water sources, which has important implications on labor demands and family health. P1, KQ3, A2: The relationship between pasture and water is most critical in the dry season.

Day 3: Wednesday, June 20

Time	Training Sessions
8.30–10.30	RECAP Day 2 Session 3: Summary of ToT 1 training sessions AT 1 presents Task 2, followed by self-assessment, peer review, and facilitator review AT 2 presents Task 2, followed by self-assessment, peer review, and facilitator review
10.30–11.00	Tea break
11.00–13.00	AT 3 presents Task 2, followed by self-assessment, peer review, and facilitator review AT 4 presents Task 2, followed by self-assessment, peer review, and facilitator review
13.00–14.00	Lunch break
14.00–16.30	Session 5: New training material on pastoralism P1, KQ3, A3: The technical characteristics and legal status of water points are crucial for sustainable rangeland management

APPENDICES

Day 4: Thursday, June 21

Time	Training Sessions
8.30–10.30	RECAP Day 3 Session 6: Group discussion on policy options for water development in Karamoja
10.30–11.00	Tea break
11.00–13.00	Session 7: New training material on pastoralism P2, KQ1, A1, A2: Herd is made up of different species and age/sex ratios.
13.00–14.00	Lunch break
14.00–16.30	P2, KQ1, A3: Herd is composed of animals over which members have different rights. Session 8: Developing facilitation skills The principles and key characteristics of good facilitation

Day 5: Friday, June 22

Time	Training Sessions
8.30–10.30	Session 9: Planning next steps of adaptation process TORs for participatory review of university curriculum TORs for M&E Constituting a library of materials on pastoralism
10.30–11.00	Tea break
11.00–13.00	Coordination between ATs for developing and reviewing new evidence AT work plans and deliverables Agenda, venue, and dates for ToT 3 CLOSE OF WORKSHOP

APPENDIX IV. ATTENDANCE

No.	Name	Designation	Org.	Email	Tel.
1	Boma Paul	Research Officer	Naro-Nabuin	bomapaul@gmail.com	0781 558 819
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3	Ced Hesse	Researcher	Iied	ced.hesse@iied.org	44 7981 366 165
4	Flavia Amayo	Lecturer	Makerere University	flavofamba@gmail.com	0774 133 397
5	Elly K. Ndyomugenyi	Senior Lecturer	Gulu University	ellyndyomugenyi@gmail.com	0772 886 613

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22	Dr. Tushabomwe	Lecturer	Makerere University		0772 368 667
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24	Charles Hopkins	Senior Resilience Advisor	Feinstein		
25	Mesfin Ayele	Chief Of Party	Feinstein		
26	Judith Apio	Project Administrator	Krsu		

