

Field report: IGAD Documentation and Farmer's Field Day at the Livestock Cafés in West Pokot County, Kenya and Napak District in Uganda



Reported by

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1. BACKGROUND INFORMATION

[Drylands Transform](#) (DT) “Pathways and challenges toward a socio-ecological transformation of landscapes, livestock and livelihoods in the East African drylands”, is a multidisciplinary research project. Drylands Transform aims to address complex challenges in the East African drylands, such as climate change, food insecurity, land- and ecosystem degradation, and weak institutions. This will be achieved by investigating the interlinkage between land health, livestock-based livelihoods, human well-being and land governance mechanisms, in order to contribute to transformative change and sustainable development of the social-ecological system in drylands of East Africa.

The overall goal of Drylands Transform is to contribute knowledge for the implementation and achievement of the global Sustainable Development Goals (SDGs), while optimizing synergies and minimizing trade-offs between the SDGs, in the East African drylands. Through strong stakeholder engagement in interdisciplinary research, they have set out to explore the challenges and pathways towards a social-ecological transformation in drylands that optimizes synergies among the sustainable development goals (SDGs) while minimizing the trade-offs.

Dryland Transform is using innovative field research approaches focusing on livelihood improvement through rangeland restoration and governance interventions in the border region between Kenya and Uganda.

In developing transformative pathways through policy and practice, Dryland Transform has partnered with the IGAD Centre for Pastoral Areas and Livestock Development (ICPALD) under Objective 5 of the project to disseminate research knowledge at cluster, national and regional level. A site visit was undertaken in September 2022 with a goal to document the achievements so far in the project sites in the Karamoja cluster.

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¹ *Cover photo:*

¹ *The Chepareria Ward Agricultural Extension Officer, Mercy Letting, explaining the technologies demonstrated in the Livestock Café kitchen garden at Chepukat Village, West Pokot County, Kenya during the Farmer’s Field Day (Photo by Lucas Tusiime)*

2. NAMES OF THE PROJECT PERSONNEL AND CONSULTANTS INVOLVED

Name(s)	Dr. Stephen Mureithi		Researcher, University of Nairobi and Project Country Coordinator - Kenya			
	Prof. Denis Mpairwe		Researcher, Makerere University and Project Country Coordinator - Uganda			
	Prof. Gert Nyberg		Researcher, Swedish University of Agricultural Sciences (SLU)			
	William Makokha		Project Liaison Officer, Kenya			
	Zachary Angella		Project Liaison Officer, Uganda			
	Margaret Nyaga		Obj 2 PhD Student, University of Nairobi			
	Ronald Ayahura		Obj 2 PhD Student, Makerere University			
	Lucas Tusiime		Communications Officer, IGAD			
	Mercy Letting		Extension Officer, Ministry of Agriculture, Livestock and Fisheries, Chepareria Ward, West Pokot County			
Dates of activity	Start Date	7/09/22	End Date	14/09/22	Duration (Days)	8
Destination Counties	West Pokot County (Kenya), Napak and Moroto District (Uganda)					
Wards /Sub County	Chepareria Ward (Kenya), Poron and Rupa Sub counties (Uganda)					

3. OBJECTIVES/AIM OF THE VISIT

To participate in site visits to capture the ongoing research work in Karamoja cluster by Dryland Transform team for purpose of dissemination.

4. ACTIVITIES

4.1 Documentation at the Livestock Café main site at Chepukat Village, Chepareria Ward in West Pokot County



Fig. 1: Gullies being rehabilitated at the Livestock Café' site at Chepukat (top and bottom-left). Dr. Stephen Mureithi and Obj 2 PhD student Margeret Nyaga showcasing seeds of the various grasses reseeded at the Livestock Café (Photos by Lucas Tusiime).

4.2 Documentation at the field experimentation plots in Tomena Village



Figure 2: Dr. Stephen Mureithi showcasing vetiver grass planted along contour line and its role in controlling soil erosion and restoring gullies.



Fig. 3: Reseeding plus Manure experimental plot (R+M) and grass-legume intercrop.



Fig. 4: Mr. William Makokha (Project Liaison Officer) showcasing one of the most important forage plants (*Acacia nilotica*) in the drylands (left) and comparison of the inside the Livestock Café and outside in the community grazing land (right).

4.3 Documentation on kitchen garden at the Livestock Café site in Chepareria



Fig. 5: A kitchen garden area with sunflowers and other crops. A kitchen garden trainee attending to a sunflower plant and watering of a tree seedling.

4.4 Documentation during the Farmer's Field Day at the Livestock Café site in Chepareria Ward, West Pokot County

A farmer's field day was held on 14th September 2022 to showcase on the various technologies and food crops that were planted on the kitchen garden area. Demonstration on the half-moon water harvesting structures and various grass species used in reseeding the degraded land.

In attendance were:

- Ø Director of Agriculture, West Pokot County
- Ø Sub-County Agricultural Officer (SCAO), Kipkomo Sub-county.
- Ø Ward Agricultural Extension Officers (WAEO), Chepareria Ward
- Ø Assistant County Commissioner (ACC), Kipkomo Sub-county,
- Ø Assistant Chief, Chepkopegh Location
- Ø Assistant Chief, Pserum Location

- Ø Livestock Café land owner, Mr. Amos Yaran
- Ø UoN DT Team, incl. William & Benjamin
- Ø Kitchen garden trainees (ToTs)
- Ø Community members

Approximately 200 participants toured the café and were taken through the different section in the farm starting with the kitchen garden area, the rehabilitation and fodder production sections. Explanations on the different types of crops in the farm and how they were planted were done by the Trained Trainers (ToT's). Dr. Stephen Mureithi explained of on how the land was selected during the scoping and reconnaissance phase and how it was before the interventions using a poster (Fig .6)



Fig. 6: Drylands Transform Country Coordinator – Kenya, Dr. Stephen Mureithi (top left) addressing the participants (other photos) during the Farmer's Field Day.



Figure 7: Obj 2 PhD student Margeret Nyaga giving an explanation on the various technologies used during the kitchen garden establishment.



Fig. 8: A poster used during the farmers field day to show the transformation of the site.

4.4.1 Technologies showcased at the livestock café during the Farmer's Field Day

a. Banana circle in the kitchen area



Fig. 9: Banana circle technology and one of the trained trainers explaining how the garden was established

b. Raised and sunken beds

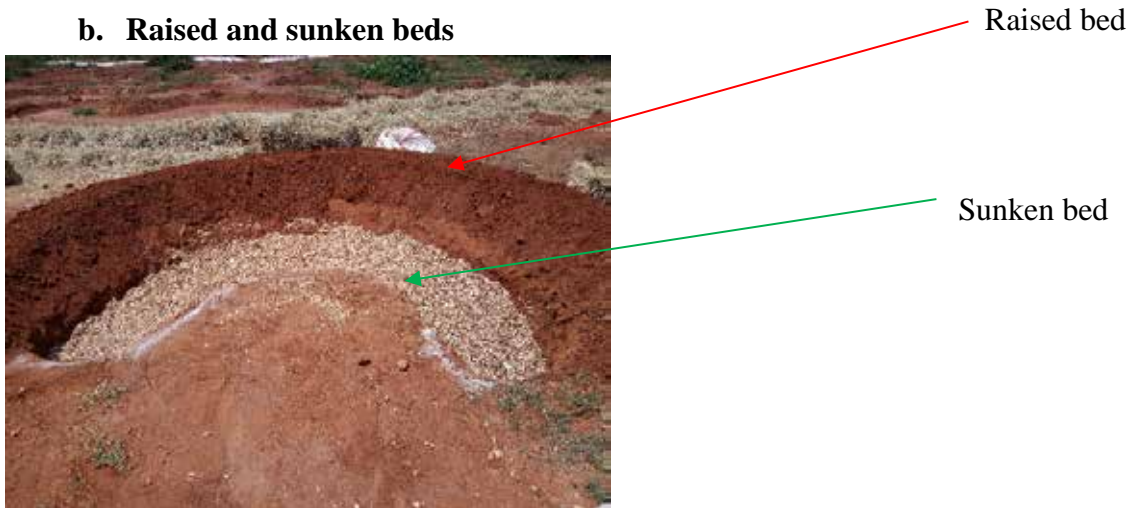


Fig. 10: Illustration on the raised and sunken beds on an enlarged half-moon water harvesting structure before establishment and one of the ToTs explaining on how the beds were made and the crops planted

c. Gully rehabilitation using vetiver grass

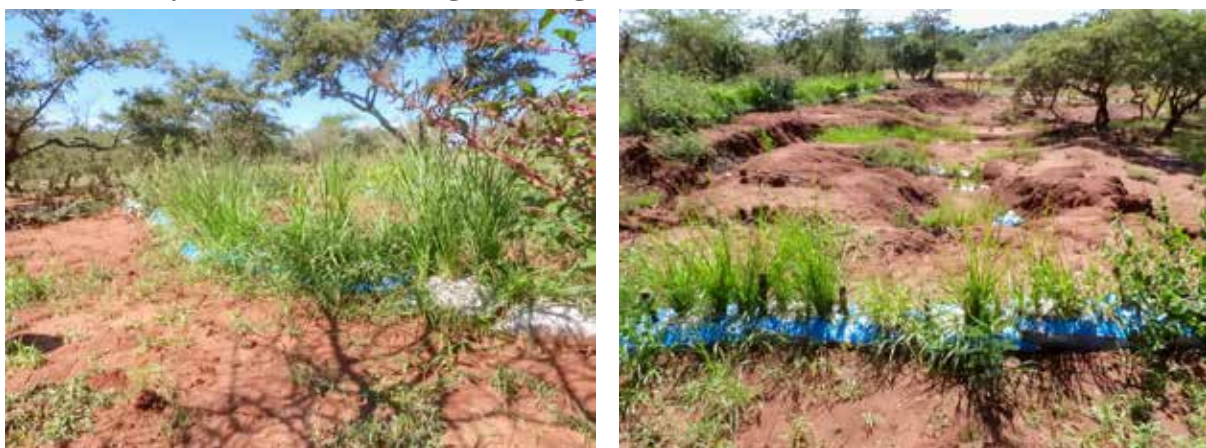


Fig. 11: Vetiver grass contour lines laid at the gully heads to control soil erosion and to stop formations of the gullies.

d. Fodder production using rangeland grasses



Fig. 12: Dr. Stephen Mureithi showcasing some of the planted grass species at the fodder production area and some of the community members observing some of the grasses

e. Soil erosion control





Fig. 13: Rock check dams and lines of vetiver grass planted to reduce the speed of surface run off. Vetiver grass planted along a contour line to make a permanent biological barrier.

4.4.2 Community voices

1. “Our area is not dry, it is our minds which are dry” Reuben Chumang’ole, ToT
2. “It is very amazing to learn that a dryland can be a highland since we have learnt how to produce many crops in the Kitchen garden area” Mercyline Cheyech, West Pokot, Livestock café Caretaker.
3. “We used to see a red spot from Lelan (Highland) sometimes back but we no longer see it now” Community elder from Lelan highlands.
4. “The land owner Mr. Amos Yaran will be recognized during Mashujaa day celebrations. He is our hero since he has contributed his piece of land to be used as a community school by the project” ACC, Kipkomo Sub-county.
5. “Today I attended a field day on Dryland Transformation technologies in Chepukat Village Chepareria at Mr Amos Yaran's farm. I recommend that every technical staff try to visit this farm to learn this Dryland farming technologies that can transform our ASAL areas into surplus food producing areas. My sincere thanks to SCAO Kipkomo and team for excellent coordination and work. Much thanks to the researchers from the University of Nairobi and particularly the team leader Dr Stephen Mureithi” Philip Tingáa, Director of Agriculture, West Pokot County.
6. “I established my own kitchen garden, by digging 9 sunken and raised beds. I planted sweet potatoes on the raised bed and vegetables on the sunken bed. I got some for my family and sold some for KES 300. We didn't believe that crops can grow here, but now after seeing how the crops grew and produced yield well, I am going to establish my garden and plant diverse vegetables for my family and selling. I have learnt planting in diversity and the crops do not compromise the productivity of each other. When Dr. Mureithi told us that he wants us to establish a kitchen garden for vegetables, we thought he was not serious because we have a challenge with water. On soil management, I used leaves because I didn't have saw dust, then used local soil, and manure from my own cow shed to spread on top before planting.” Josephine

7. “We were practically taught how to establish a banana circle, half moons and contour garden. The banana circle collects runoff to grow the crops. At first, I couldn’t believe that crops can grow in a hard-bare denuded ground. I’ll establish my own kitchen garden and I have seen with my own eyes that there are crops that can do well in a dry area like pigeon peas, Dolichos and others” Pauline Kataros
8. “We were trained about kitchen gardens, I have made 4 half moons and a small contour garden and planted sweet potatoes. When the rain comes I will plant more crops like sunflower, green grams and pigeon peas. I also plan to add another 6 half moons” Roseline.

4.5 Documentation at the Livestock Cafés at Poron, Napak District and Rupa, Moroto District in Uganda



Fig. 14: Prof. Denis Mpairwe showcasing the integration of legumes for improving the nutrition quality of pastures at the Livestock Café site in Poron, Napak District, Uganda (S. Mureithi).



Fig. 15: Intercropped legumes planted from seed for improving the nutrition quality of the pastures (S. Mureithi).



Figure 16: The Livestock Café site in Rupa, Moroto District in Uganda (S. Mureithi).



Fig. 17. IGAD's Communication Officer, Lucas Tusiime interviewing Chepareria Ward Agricultural Extension Officer, Mercy Leting at the Livestock Café kitchen garden site in West Pokot County, Kenya (S. Mureithi).

5 OUTPUTS

Information captured was disseminated as short videos and photos through the twitter platform. The first video was on the ongoing experimentation on fodder production by Dryland Transform Obj 2 PhD student Ms. Margeret Nyaga and the second one was on a kitchen garden trainee Josephine Chebet.

Links to the videos:

<https://twitter.com/igadsecretariat/status/1569204199396868096?s=20&t=eDsFva5w8oxoIqu3UtCqiA>

<https://twitter.com/igadsecretariat/status/1569999549355425792?t=nWFgnWejHruZ04gNdH5NIw&s=08>

Link to photos tweeted:

<https://twitter.com/ICPALD/status/1569261473917984768?t=PcAfVXyINpE4vhDVoYhUUA&s=08>

https://twitter.com/ICPALD/status/1570141188719804416?t=2YOylooVDJ_XYV8Yv7XfoQ&s=08

<https://twitter.com/ICPALD/status/1569222488348934144?t=gdVyD2K8pl21DTtodpjURQ&s=08>

The tweets attracted high impact from various stakeholders, and remain to showcase the ongoing work of @Drylandstranf1

6 ACKNOWLEDGEMENTS

This field activity was made possible through the financial support of the Swedish Research Council (FORMAS) to the Drylands Transform Project [2020-00478] 2020-2024. We heartily acknowledge the warm reception, cooperation and teamwork we received from the stakeholders of West Pokot County in Kenya, and Napak District in Uganda.

7 LIST OF PARTICIPANTS

To be scanned and attached