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Refugee-Led Research Series
Working Paper 4
December 2024

ADAPTATION IN ADVERSITY

The Impact of Drought on the Livelihood Adaptive Strategies of Refugee Youth with Physical Disabilities in Kakuma Refugee Camp

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Abstract

Climate change is increasing the frequency, intensity, and severity of droughts in Kakuma refugee camp in Kenya. This has an impact on the livelihoods of refugee youth with physical disabilities (RYWPDs), who have more limited livelihood options than other refugees due to their physical disability and who face significant social and infrastructural factors. However, to date, little attention has been paid to RYWPDs and their specific needs. To address this gap, this study explored the adaptation strategies of RYWPDs and the barriers they face, using a qualitative research approach. The results show RYWPDs to be active in adapting their livelihoods to drought, rather than passive recipients of aid.

About the author



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The author would like to thank his research assistant, Bolis Amin, for his invaluable help during data collection. He would also like to thank current and former colleagues at RLRH, including Ruth Nyabuto, Andonis Marden, and Annette Riziki, for their support at various stages of this research process. Special thanks to Pauline Vidal for her support throughout the research process. Most importantly, the author would like to thank all the key informants, participants who provided data and their caregivers, and interpreters who participated in this research.

The paper can be referenced as follows: Muraya P (2024) *Adaptation in Adversity: The Impact of Drought on the Livelihood Adaptive Strategies of Refugee Youth with Physical Disabilities in Kakuma Refugee Camp*, Refugee-Led Research Series, Working Paper (4), December 2024.

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The Refugee-Led Research Series publishes primary and secondary research that has been authored by individuals who have been affected by forced displacement. The Series includes Research Reports and Working Papers. RLRH prioritises papers that apply ethical and rigorous research methods to capture the thematic priorities of displaced communities. Through the Refugee-Led Research Series, we aim to provide evidence to stakeholders to advance policies and programmes that are more responsive to displaced communities' needs.

About the RLRH

The Refugee-Led Research Hub (RLRH) is an initiative of the Refugee Studies Centre (RSC) at the University of Oxford. The RLRH is based in the UK and Kenya, with a research office located in Nairobi at the British Institute in Eastern Africa (BIEA). We create opportunities for researchers with a displacement background to lead primary and secondary research studies in the field of forced migration, from start to finish. Our main thematic interests in Refugee Studies relate to 1) livelihoods and self-reliance, and 2) leadership and participation of displaced populations in humanitarian response and policymaking. RLRH also offers a series of academic programmes which support graduate access and professional development for students with lived experiences of displacement.

About the Kenya Evidence Platform

To conduct this research, Peter Muraya received a grant from the Kenya Evidence Platform (KEP), an initiative of the Regional Durable Solutions Secretariat (ReDSS), in partnership with RLRH and Maseno University. The KEP is a three-year project (2023-2026) funded by the Kingdom of the Netherlands that aims to ensure that refugee programming and policymaking in Kenya engages with and responds to locally driven and generated research on promoting durable solutions.



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Acronyms

CBO	Community-Based Organisation
DRC	Danish Refugee Council
HI	Humanity and Inclusion
JRS	Jesuit Refugee Service
NRC	Norwegian Refugee Council
PWDs	Persons with Disabilities
RYWPD	Refugee Youth with Physical Disabilities
RLO	Refugee Led Organisation
SCI	She Can Initiative
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNHCR	United Nations High Commissioner for Refugees
VDPA	Voice for Disabled People Association
VSLA	Village Saving and Loan Associations

EXECUTIVE SUMMARY

- Emerging evidence suggests that the increasing severity of drought is having a significant impact on the livelihoods of refugees in Kakuma refugee camp in Kenya. Refugee youth with physical disabilities (RYWPDs) face multiple and complex challenges but are rarely discussed in climate change debates, and little attention is paid to their livelihoods' capacity to adapt to drought.
- Kenya's camp policy restricts refugees' freedom of movement and use of natural resources, and physical disabilities further limit RYWPDs' livelihood options beyond humanitarian assistance. RYWPDs generally run small businesses, engage in small-scale subsistence agriculture, or rely on others (for example, through begging) as sources of livelihoods.
- RYWPDs are affected by drought differently than non-disabled refugees due to physical challenges, difficulties in accessing basic needs and resources such as water and food, health effects due to extreme heat, loss of working hours to avoid heat and dust, and inability to protect themselves from insecurity due to theft and shortages.
- RYWPDs are not passive beneficiaries but active in seeking solutions. RYWPDs build financial, social, human, physical, and natural capital resources to develop adaptation strategies to reduce dependency on aid and the impact of drought. They mobilise financial resources through savings and loans, use the World Food Programme's food rations or their Bamba Chakula cash assistance as capital resources to stock their businesses, and leverage debt to buy and sell stock. They diversify their livelihood activities, the products they sell, and their customer base, and adapt their purchasing and stock strategies. They rely on informal social networks which share information about: opportunities and support programmes, savings groups, credit sources, food and cash assistance, skills development, and diversification of livelihoods into drought-resilient options.
- However, in pursuit of resilience and adaptation in the face of drought, RYWPDs face several barriers, some of which are common to all refugees (policy restrictions and cost of doing business), and some specific to them (bodily limitations, inadequate physical infrastructure, and discrimination). RYWPDs are also excluded from decision making in preparation, recovery, and response to drought.
- Solutions should aim to improve access to infrastructure, unlock barriers to adaptation, and foster the active participation of RYWPDs in programmes that target them and in decision-making regarding drought preparation, response, and adaptive capacities and strategies.

Introduction

Rationale

The United Nations High Commissioner for Refugees (UNHCR) and the Government of Kenya established Kakuma refugee camp in 1992 in Turkana County. Turkana County is an arid region, where major droughts have occurred in 2010, 2011, 2016, and between 2021 and 2023. The scientific community and Turkana locals agree that droughts have increased in frequency and intensity, and projections suggest a similar trend in the future.¹

Emerging evidence suggests that the increasing severity of droughts is significantly affecting the livelihoods of the more than 210,800 people registered with UNHCR in Kakuma,² and their capacity to cope or to adapt their livelihoods to respond to the impacts of drought.³ Drought affects population groups within the same locality differently depending on factors such as gender, disability, health, and external support.⁴

Due to the lack of disaggregated disability data, older estimates of 7% to 10% of refugees living with disabilities worldwide⁵ remain relevant in current literature.⁶ Persons with disabilities (PWDs) in refugee camps have been described as highly vulnerable and marginalised due to their low adaptive capacity.⁷ Challenges such as water stress, food stress, and the high cost of accessing basic needs negatively affect refugees with disabilities to a greater extent than non-disabled refugees due to their physical limitations and the fierce competition for resources.⁸ Among PWDs, refugee youth with physical

¹ Ayugi B, Shienje ZW, Babalousmai H, Lim Kam Sien KTC, Mumo R, Dike VN, yakaremnye V, Chehboun A, & Ongoma V (2022) 'Projected changes in meteorological drought over East Africa inferred from bias-adjusted CMIP6 models', *Natural Hazards*, 113(2), 1151–1176; Tan G, Ayugi B, Ngoma H & Ongoma V (2020) 'Projections of future meteorological drought events under representative concentration pathways (RCPs) of CMIP5 over Kenya, East Africa', *Atmospheric Research*, 246, 105112.

² UNHCR and the Government of Kenya (2024) *Kenya Statistics Package as of 30 April 2024*

³ Franssen S, Harris A., Jaber T & Jantz T (2024) 'Climate risks for displaced populations: A scoping review and research agenda', *Journal of Refugee Studies*, 0aac074.

⁴ Intergovernmental Panel on Climate Change (2023) *Climate Change 2022 – Impacts, Adaptation and Vulnerability: Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.

⁵ Such as: Mirza M (2011) 'Disability and Humanitarianism in Refugee Camps: The case for a travelling supranational disability praxis', *Third World Quarterly*, 32(8), 1527–1536.

⁶ For example, see: El-Lahb Y (2020) 'Social Work at the Intersection of Disability and Displacement: Rethinking Our Role', *Journal of Progressive Human Services*, 31(1), 1–20.

⁷ Gaskin C., Taylor D, Kinnear S, Mann J, Hillman W, & Moran M (2017) 'Factors Associated with the Climate Change Vulnerability and the Adaptive Capacity of People with Disability: A Systematic Review', *Weather, Climate, and Society*, 9(4), 801–814.

⁸ Kosanic A, Polzoc J, Marlin-López B & Razenašalovo M (2022) 'An inclusive future: Disabled

disabilities (RYWPDs) who have just completed their education often lack the financial capital, work experience, or social capital to build sustainable livelihoods.⁹

To advance sustainable livelihoods as outlined in the Sustainable Development Goals (2015),¹⁰ the Sendai Framework for Disaster Risk Reduction (2015–2030),¹¹ the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2007)¹² and the New York Declaration for Refugees and Migrants (2016),¹³ it is important to study the effects of drought in Kakuma from the intersection of disability, age, and livelihoods. Refugees with disabilities are rarely discussed in climate change debates and scholarly works, which leads to limited recognition of their differentiated needs in policy making. There has been little attention paid to the adaptations made by refugees with disabilities to slow onset climate change events such as drought, with more focus on rapid onset events like cyclones or floods.¹⁴ Furthermore, most publications look at refugees with disabilities as a whole, and do not differentiate between different types of disabilities.¹⁵ Finally, existing literature focuses on the exclusion of refugees with disabilities in climate change debate, rather than on the adaptive strategies they adopt.¹⁶

To my knowledge, there are no scholarly works on the intersectionality of physical disability, age, and being a refugee in adaptation to drought. This research therefore adds

populations in the context of climate and environmental change', *Current Opinion in Environmental Sustainability*, 55, 101159; Stein PJS & Stein MA (2022) 'Disability, Human Rights, and Climate Justice', *Human Rights Quarterly*, 44(1), 81–110.

⁹ Tulbaleka PO, Tumwesigye C & Nakalema C (2022) 'Protracted refugees: Understanding the challenges of refugees in protracted refugee situations in Uganda', *Journal of African Studies and Development*, 7(4(1)), 1–11.

¹⁰ See: <https://www.goa.goa.s.org/>

¹¹ See: <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>

¹² See: <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>

¹³ See: <https://www.unhcr.org/what-we-do/protect-human-rights/asylum-and-migration/new-york-declaration-refugees-and-migrants>

¹⁴ Engelman A, Craig L, & Les A (2022) 'Global Disability Justice In Climate Disasters: Mobilizing People With Disabilities As Change Agents', *Health Affairs*, 41(10), 1496–1504.

¹⁵ King MM, & Gregg MA (2022) 'Disability and climate change: A critical realist model of climate justice', *Sociology Compass*, 16(1).

¹⁶ Jodoin S, Ananthanoorthy N & Lofts K (2020) 'A Disability Rights Approach to Climate Governance', *Ecology Law Quarterly*, 47(1), 73–116; King MM, & Gregg MA (2022) 'Disability and climate change: A critical realist model of climate justice', *Sociology Compass*, 16(1); Stein PJS & Stein MA (2022) 'Disability, Human Rights, and Climate Justice', *Human Rights Quarterly*, 44(1), 81–110; Gaskin CJ, Taylor D, Kinnear S, Mann J, Hillman W, & Moran M (2017) 'Factors Associated with the Climate Change Vulnerability and the Adaptive Capacity of People with Disability: A Systematic Review', *Weather, Climate, and Society*, 9(4), 801–814.

to existing literature the discussion on the impact of drought on adaptive livelihood strategies of refugees with physical disabilities based on evidence from Kakuma.

Research questions

This study asked the following questions:

- 1) What are the effects of drought on the livelihoods of RYWPDs in Kakuma?
- 2) What are the strategies that RYWPDs use to adapt their livelihoods to the effects of drought in Kakuma?
- 3) What barriers do RYWPDs face when adapting their livelihood strategies to drought in Kakuma?
- 4) What are the solutions to these barriers and how could they enhance the livelihoods adaptive strategies of RYWPDs to drought in Kakuma?

Research methods

I conducted a desktop review of journals and grey literature (published from 2017) on refugee livelihoods, drought and RYWPDs to understand the context of refugee livelihoods and adaptability to drought. Due to limitations in the literature on RYWPDs, the research looked at literature on refugees with disabilities or refugees in encampments with similar socioeconomic environments to Kakuma in developing countries.

Primary data was collected through 23 in-depth interviews and three focus group discussions with RYWPDs from all four zones at Kakuma. The study participants eligible for this research were youth with physical disabilities in Kakuma refugee camp between the ages of 18 and 30. I paid attention to the diversity of nationality and gender.

Table 1: Tools, Nationality and Gender

Nationality	Male	Female	Total IDI	Male	Female	Total FGD	Total
Somali	4	2	6	6	3	9	30
Congolese	6	0	5	2	0	2	14
Burundian	2	2	4	0	1	1	10
South Sudanese	1	4	5	0	4	4	18
Sudanese	0	1	1	1	0	1	4
Ugandan	0	1	1	0	0	0	2
Total	13	10	23	9	8	17	78

I also conducted a total of three key informant interviews: two with representatives from refugee-led organisations (RLOs), and one with a representative from an international non-governmental organisation based in Kakuma.

I analysed data collected through my desktop review and interviews using thematic analysis for major themes in livelihoods, disability, and drought.

Limitations

This study focused on refugee youth with physical disabilities. I excluded refugees over the age of 35 from the qualitative sample. While the findings apply only to the sample, refugees with physical disabilities over the age of 35 may face similar challenges and engage in similar adaptation strategies. The scope of this paper does not allow me to compare the differences between younger and older refugees.

The qualitative sample interviewed was biased towards RYWPDs involved in business, and I am not able to draw conclusions about RYWPDs as a whole. While qualitative studies do not aim to generalise, I faced challenges in identifying participants. I relied on snowball sampling to identify RYWPDs; however, many early participants were reluctant to share contacts of RYWPDs who were begging or relying solely on humanitarian aid; they attributed their reluctance to the shame of being associated with such RYWPDs. As a result, the sample is biased towards refugees involved in business and agriculture. I was able to interview one refugee who was involved in begging.

Data was collected during a rainy month. RYWPDs, especially those using wheelchairs or crutches, found it difficult to travel to interview or focus group discussion sites. While I minimised this limitation by travelling to the homes or workplaces of RYWPDs for individual interviews, this limitation was unavoidable for focus group discussions that were intended to bring RYWPDs together.

Positionality

Disability issues are often marginalised in research, policy, and practice. As a person with a disability, I have experienced first-hand the effects of this marginalisation: discriminatory physical and social infrastructure, exclusion from academia, and a sense of not belonging. My academic, professional, and lived experiences of disability and internal displacement motivated me to undertake this research to understand the experiences of refugees in the context of climate change adaptation. Throughout the data collection process, I tried to separate the research from my personal experiences to avoid biases. My hope is that more will be done to listen to and support refugees with disabilities in Kakuma and beyond.

Livelihood strategies of RYWPDs

RYWPDs in Kakuma, like the majority of refugees globally, depend on humanitarian aid as their main source of livelihood,¹⁷ having lost their assets and halted their income-generating activities following displacement.¹⁸ All research participants were receiving humanitarian aid in the form of food aid and cash for food (Bamba Chakula) as their basic source of livelihood. According to them, humanitarian aid is not sufficient to sustain their households' needs without resorting to negative coping strategies such as skipping meals, taking children out of school, or ignoring medical needs.¹⁹

As a result, all interviewed RYWPDs engage in other livelihood activities in the camps to meet their household needs. Most RYWPDs interviewed engage in small-scale business, selling farm products, soft drinks, and fast foods, among other items. RYWPDs also provide skill-based services like tailoring, computer services, bead making, barbering, and weaving. Others sell charcoal, depend on well-wishers (begging), or do casual jobs such as washing people's clothes.

Only a few of the RYWPDs interviewed are involved in agriculture, practising small-scale farming of food crops and poultry for subsistence and selling the surplus. Farming among RYWPDs in Kakuma is limited not only by the severe drought but also by their physical inability to engage in farming activities.

It is important to note that this distribution in livelihood activities does not necessarily reflect all RYWPDs in Kakuma, because of biases in the sample (see [Limitations](#)). There is no available quantitative data on the distribution of livelihood activities among RYWPDs in the camp to confirm this trend.

¹⁷ Few WD (2019) *Impacts of refugee camps on the rural livelihoods of the host community in Ethiopia: a case study of Tirkidi South Sudanese refugee camp, Itang district*. Master's Thesis (Norwegian University of Life Sciences).

¹⁸ Wake C & Barbolet V (2020) *Towards a Refugee Livelihoods Approach: Findings from Cameroon, Jordan, Malaysia and Turkey*. *Journal of Refugee Studies*, 33(1), 125–142.

¹⁹ Al Zoubi S (2023) *When coping strategies become a way of life: A gendered analysis of Syrian refugees in Lebanon*. *Oxford Development Studies*, 51(2), 126–144; Kruff, C, Sieverding M, Salemi C, & Keo C (2019) *Syrian Refugees in Jordan: Demographics, Livelihoods, Education, and Health*. In Kruff, C, Sieverding M, Salemi C, & Keo C (2019) *The Jordanian Labor Market* (pp. 141–172). Oxford University Press; Nabulsi D, Ismail H, Abou Hassan F, Sacca L, Horcin-Abou-Haider G, Jomaa L (2020) *Voices of the vulnerable: Exploring the livelihood strategies, coping mechanisms and their impact on food insecurity, health and access to health care among Syrian refugees in the Beqaa region of Lebanon*. *PLoS ONE*, 15(12): e0242421.

Barriers to livelihood strategies of RYWPDs

Overall, the diversity and sustainability of livelihood activities is limited by policy restrictions. Kenyan government policy limits refugees' movement; and their freedom to utilise natural resources, and restricts livelihood activities to within the camps only.²⁰ Encampment restrictions are also barriers to access to external markets and raw materials for business purposes,²¹ or better employment terms.²² As a result of restrictions to freedom of movement, RYWPDs who engage in businesses have to rely on third parties for external transactions to buy or sell goods, a process which might be unreliable. For instance, one participant explained how she waited for a long time to get stock from Nairobi for her business since her contact person had other engagements, which eventually resulted in lost sales.

Doing business is expensive in the camp, especially during droughts. In the camp, RYWPDs engaged in business only have a few suppliers to choose from, limiting their negotiating power. Coupled with low financial capital in RYWPD-owned small businesses, high prices of stock make it difficult to maintain and scale up businesses. In addition, drought increases retail prices because of the increase in costs such as for purchasing and transportation, leading to lower customer turnout and profits, as one participant explained: "*[During the last (2022-2023) drought], I had one or two or no customers in a day. I almost gave up on my business.*"

Physical disability adds bodily limitations to livelihood options, limiting RYWPDs to small businesses that do not require heavy work, according to respondents. Livelihood activities such as selling water across the camp by bicycle or motorbike, although profitable during droughts, are out of reach for RYWPDs.

Physical infrastructure, while critical to enabling sustainable livelihoods, is lacking in Kakuma, and often inaccessible to RYWPDs.

- **Poor road infrastructure** hampers the ability of RYWPDs to move around the camp, which in turn limits their ability to access services and humanitarian assistance. For example, one participant said that he could not attend a training and funding programme provided by business development service Inkomoko that took place in Kakuma Town, which is located about five kilometres from their place of residence, and inaccessible due to poor road infrastructure. The state of the physical infrastructure in the camp is also not conducive to the transport of

²⁰ Omata V (2021) 'Refugee Livelihoods: A comparative analysis of Nairobi and Kakuma Camp in Kenya', *Disasters*, 45(4), 865–886.

²¹ Merij F, De Berry J. (2019) *Desk Review on Livelihoods and Self-Reliance for Refugees and Host Communities in Kenya*, World Bank.

²² Robinson H. (2019) *Uncertain Futures: Youth and their self-reliance within a protracted refugee situation. A case study of Dzaleka in Malawi*. Master's Thesis (Ulster University).

livelihood assets. One participant pointed out that products spoil while being transported due to the poor road network. RYWPDs often rely on the support of others, sending relatives to fetch water on their behalf, or use *boda-boda* (motorcycle taxis) which incurs additional costs. As a result, RYWPDs struggle to save and accumulate capital that could be used to build sustainable livelihoods and respond to the challenges posed by drought.

- **Building infrastructure** is generally inadequate for RYWPDs and prevents them from accessing services and support. Participants highlighted stairs and slippery floors as the main barriers to accessing buildings. They also highlighted the lack of physical disability-friendly sanitation provision in private and public spaces. Overall, the social infrastructure for accessing basic needs such as food and water is designed for physically fit refugees (see [Access to Water](#) and [Food Insecurity](#)).

Finally, RYWPDs report facing discrimination in all aspects of their lives: at work, in hospitals, by organisations, at water points, at food distribution points, and so on. One participant illustrated this by saying that “*discrimination happens everywhere and all the time*”. Participants also said that they are often mistreated by other members of the community, citing having been beaten and verbally abused, including being called derogatory names such as ‘JRS’ (referring to the Jesuit Refugee Service NGO that provides support to refugees with disabilities) or ‘crippled’. Discrimination prevents refugees from accessing opportunities and services, but can also lead to self-disqualification, where RYWPDs stop pursuing opportunities and assistance. For example, one participant reported that he was shown a lack of respect at a food distribution centre and had to return home without a food ration. Discrimination can also have a psychosocial impact, with participants reporting feelings of demotivation and stress, and a sense of not belonging.

Differentiated effects of drought on RYWPDs

Exposure to drought in itself does not necessarily impact the livelihoods of RYWPDs. Rather, the negative impacts of drought are primarily caused by the fact that RYWPDs’ livelihoods are already vulnerable.²³ All refugees are affected by drought but the effects on livelihoods differ between RYWPDs and refugees without disabilities, especially in terms of access to water, food insecurity, health, and insecurity.

Access to water

Water systems struggle to meet the basic household and livelihood needs of the

²³ Ten KT, Gaillard JC, Adamson C, Akçungor C & Ho HT (2021) ‘A critical realist explanation for the capabilities of people with disabilities in dealing with disasters’, *International Journal of Social Research Methodology*, 26, 15.

refugee population in camps.²⁴ Droughts exacerbate water scarcity in refugee camps, with water sources such as boreholes drying up and high demand for water at functioning water points. Participants reported that there is often intense competition for water at water points, leading to interpersonal conflict between refugees.

RYWPDs have difficulties accessing critical scarce resources such as water due to their physical disabilities compared with those without disabilities. RYWPDs often miss out on water due to long queues that they cannot cope with. RYWPDs may not have the physical strength to dig or fetch water from a well themselves, or to cope with fighting at water points. To cope with the lack of water, RYWPDs in the camp buy water from others at a high price or get water from relatives and community members. In comparison, people without disabilities access resources on their own, with minimal additional costs.

Water stress has negative effects on livelihoods, because RYWPDs lose working time and income while searching for water. During droughts, water may not be available at water points, so refugees have to go to the *laga* (local term for a seasonal river). One participant noted that it took her more than six hours to fetch water from the *laga*, because it was far away and she could only walk slowly because of her disability. Another participant reported that she often closed her business to search for water. Some respondents abandoned farming during droughts due to crop failure as they were unable to fetch water for irrigation, leading to loss of income and food insecurity.

Food insecurity

Food insecurity among RYWPDs can drain financial capital and human resources. Participants identified three sources of food in the camp: food rations, food grown in the camp, and food brought in from Kitale, a town some 418 km south of Kakuma. Participants agreed that food stress is raised during drought due to reduced food rations, high food prices, lack of money to buy food, and failed crops.

Food insecurity is further exacerbated by long queues at food distribution centres, and physical competition for food rations in these queues, which RYWPDs are ill-equipped to deal with. Food insecurity increases the amount of financial aid and wages that have to be spent on food, diverting money that could otherwise be used to cope with the effects of drought. One key informant said that during droughts, RYWPDs use money meant for sustaining their businesses for their food needs.

Health

Having a physical disability often increases vulnerability to health hazards. High

²⁴ Bose P (2024) [Nexus dynamics: The impact of environmental vulnerabilities and climate change on refugee camps](#). *Oxford Open: Climate Change*, 4(1), kcae001.

temperatures during the drought season pose mild to severe health risks, particularly for people with thermally dysfunctional disabilities such as cerebral palsy, schizophrenia, and spinal cord injury.²⁵ Houses in Kakuma are built from materials such as iron sheeting, which are vulnerable to extreme heat. Participants mentioned that houses with iron sheeting walls are extremely hot during droughts, making them uninhabitable without mitigation measures. One participant with a thermally dysfunctional disability explained that the intense heat and poor building structures in the camp make her health worse.

Insecurity

RYWPDs face insecurity in their homes and businesses, and this situation escalates during droughts. As the majority of refugees in the camp face challenges such as low food rations, lack of water, and low income, some refugees resort to robbery and theft, and may target youths with physical disabilities who are less able to defend themselves, as one participant illustrates by saying: *“There are those who steal from me because I can’t chase them. Even a few days ago they stole my chairs and the blanket I use to provide shade for my customers.”*

In addition, clan and tribal conflicts can escalate into fighting, leading refugees, including RYWPDs, to close their businesses to avoid the fighting, attacks on their businesses, or injuries. These instances of insecurity sometimes force refugees to stay at home for safety, resulting in losses from theft, spoiled goods, and lost time. One participant explained: *“If there is war [referring to the conflict between host communities and refugees in 2011], customers won’t come. I won’t open this shop, either because I’m afraid or [because the customers are] afraid. After three to four days, my tomatoes overripen and the bananas spoil, so the business starts to go backwards.”*

Adaptive capacities and strategies to respond to drought

Existing literature has portrayed refugees, including those with physical disabilities, as lacking adaptive capacity and as people with high levels of poverty, financial dependency and legal and institutional constraints, and lacking resources.²⁶

²⁵ Gaskin CJ, Taylor D, Kinneer S, Mann J, Hillman W, & Moran M (2017) ‘Factors Associated with the Climate Change Vulnerability and the Adaptive Capacity of People with Disability: A Systematic Review’, *Weather, Climate, and Society*, 9(4), 807–814.

²⁶ Freew WD (2019) *Impacts of refugee camps on the rural livelihoods of the host community in Ethiopia: a case study of Tirkidi South Sudanese refugee camp, Itang district*, Master’s Thesis (Norwegian University of Life Sciences); Murangi J, Aina nani F & Opolo F (2022) ‘Contribution of Agriculture in the Enhancement of Refugees Livelihoods in Nakvato Settlement’, *Open Journal of Applied Sciences*, 12(9); Orjala N (2021) ‘Refugee livelihoods: A comparative analysis of Nairobi and Kakuma Camp in Kenya’.

Interviews with RYWPDs confirm that refugees may use negative, short-term coping strategies in response to drought. Adverse coping strategies among some participants include staying at home, temporarily closing businesses, and abandoning livelihood activities. A participant explained: *“I had to temporarily close my business to find water. I was gone for a few hours, and during that time, I lost customers.”* When livelihood activities are at a standstill, RYWPDs have to rely on humanitarian aid and emergency assistance, yet these are insufficient to meet their basic household needs. The difficulty of meeting household needs during times of drought, especially from less profit, losses incurred, crop failure or stealing, lead to a complete shutdown of livelihoods. One participant explained that he halted his poultry farming in 2022 because of large-scale stealing as a result of drought. Some sell their small businesses in order to meet their daily household needs that the business could not meet. For instance, a participant said, *“I sold my barbershop because of a hard life [that could not meet basic needs]”*. Disposing of businesses can meet immediate household needs but is done at the cost of forgoing meeting long-term needs. Likewise, some refugees may borrow money, not to invest but for survival.

However, this Working Paper finds that all interviewed RYWPDs build financial, social, human, and natural capital resources to modify their livelihood strategies, despite the significant barriers they face.²⁷

Financial capital

Adaptive strategies are enabled by the capacity to mobilise financial resources. When RYWPDs do not have access to money, they cannot use their preferred, or most appropriate, adaptation strategy. For example, one participant with a phone accessories business explained how he devised a cooling system using a wet blanket to protect the phones’ screen protectors he sells from extreme heating during seasons of drought. However, he acknowledged that a fridge, which he could not afford, would be more effective.

Refugees in Kakuma have limited capacity to mobilise financial resources due to the lack of formal financial systems. They also need a third party to access mobile money banking (MPesa) as they are not allowed to open accounts using their refugee identity document; instead, they need a Kenyan to do this for them, which requires having social

Disasters, 43(4), 865–886; Robinson H. (2019) *Uncertain Futures: Youth and their self-reliance within a protracted refugee situation. A case study of Dzaleka in Malawi*. Master’s Thesis (Utrecht University).

²⁷ This is similar to findings from the Norwegian Refugee Council & REACH (2017) and Shumba et al. (2018). See: Norwegian Refugee Council & REACH (2017) *Youth Assessment, Zaatari and Azraq Camps*; Shumba, C., Storn, T., Pranyk, J., & Beuche, N. (2018). *Improving Livelihoods and Economic Opportunities for Syrian Refugees and Host Countries*. UNHCR-UNDP.

networks, and building trust, with the host community.

Despite these challenges, RYWPDs manage to save money through MPesa, informal saving groups, Village Saving and Loan Associations (VSLAs), and stock. The method of saving varies depending on the objective. Participants save money through MPesa to secure money from being stolen. Participants save in informal saving groups and VSLAs to eventually acquire funds to adapt their livelihoods to the challenges posed by the effects of drought. Even though these arrangements are limited to few people and a capped amount of money, they can contribute significantly to the capacity of small businesses with limited financial needs to adapt. Saving through stock is to help ensure availability of stock during droughts, with a focus on brands of products which are likely to become less available, as a participant explained: *“If you have saved enough and you have a lot of savings and have a lot of stock, it is good because during periods of droughts, some brands of soda will be missing in the market and that is what I sell.”*

Some RYWPDs take out loans to start or sustain their businesses during drought. Loans are sourced from a variety of sources, including family, friends, and organisations, to be repaid when livelihoods are profitable. One participant explained: *“I borrow from family, neighbours, and friends, and pay [them back] in instalments. I also borrow when my business is bad and I pay little by little.”* Humanity and Inclusion (HI) and the Danish Refugee Council (DRC) were frequently mentioned as sources of funding for RYWPDs’ small businesses, either to start or improve their business during, before, and after drought. Humanitarian Inclusion (HI) and the Voice of Disabled Person Association (VDPA), through VSLAs, provided accessible low-interest loan schemes for RYWPDs to start or improve livelihood activities. Some participants noted that low interest rates help them to take risks with their livelihoods during the drought. One beneficiary explained: *“I joined a VSLA programme offered by VDPA. I think it will help me next time there is a drought and I will not close my shop for fear of making losses and not being able to resume business when the drought is over.”* However, some participants avoid loans, for fear that their businesses will not be able to repay them. For example, one participant noted that her business was not profitable, and she could not take out a loan that she could not pay back.

Some RYWPDs perceive humanitarian aid such as the World Food Programme’s Bamba Chakula programme or food rations as capital resources to restock after losses from drought. RYWPDs receive social assistance in the form of cash such as Bamba Chakula or in-kind assistance such as food aid to meet basic household needs. Some business owners use aid partially to fund their small businesses and improve profits, and in turn to meet household needs. A participant explained that *“Bamba Chakula helped me in adding more stock into the shop.”*

Some RYWPDs buy stock and sell on credit to retain businesses and customers and to overcome low customer turnout during periods of drought. This is closely tied to social

capital: previous research suggests that trading on debt in the camp helps to build social networks in the camps.²⁸ Buying on credit is based on a long relationship of trust with suppliers, with the assurance of repayment. One participant said: *"I buy stock on credit from the wholesaler to maintain my business income during droughts. Then I pay with Bamba Chakula when I receive it."* Buying stock on credit ensures the survival of RYWPD-owned small businesses despite the effects of drought, such as high stock prices, spoiled stock due to low sales, and selling on credit. Bamba Chakula is used as collateral for debts in order to minimise defaults and still retain customers. The business owner uses money from Bamba Chakula to pay the debt. Selling on credit is also based on trust with customers who have the potential to repay, although it is a risky strategy that can see RYWPDs lose money from defaulted debts.

Social capital

RYWPDs in Kakuma have social networks that they use to adapt to drought-related livelihood challenges. Social capital is demonstrated by participants as embedded in family, community, and local organisations, or within the PWD community. Social networks help RYWPDs to access resources. One participant recounted how he lost his job as a barber during the COVID-19 pandemic, only to be supported by his former employer during the 2022 drought to start his barbershop in Kakuma camp. Another participant said: *"I was given money by my brother for me to start the business"*, while another participant said: *"There is one person who helped me when I joined the camp and gave me a small amount of money which I used to start the business."*

Social capital is also central in enabling RYWPDs to access information about livelihood opportunities and support. Participants leverage social networks to learn about organisational programmes that support small businesses, and to be referred to potential customers and traders. For example, one male participant said: *"My friend told me about Inkomoko, I searched them online and found out that they provide training in Kakuma town."* One key informant noted the role her organisation plays in linking RYWPDs with each other or with clients to expand their networks.

RYWPDs rely on other people's assets to compensate for their age and disability limitations. RYWPDs often worked with relatives and partners without disabilities, through employment or mutual agreement, to overcome the barriers they face. One participant asked her employers to help with physically demanding tasks such as hanging clothes after washing. Another participant noted his ambition to employ a non-disabled person in the barbershop, both for shaving and for physically demanding tasks such as fetching water. Another participant highlighted the importance of family members

²⁸ Al Zoubi S (2023) *When coping strategies become a way of life: A gendered analysis of Syrian refugees in Lebanon*, *Oxford Development Studies*, 51 (2), 126–144; Alcrich DP, Kolade C, McMarion K, & Smith R (2021) *Social Capital's Role in Humanitarian Crises*, *Journal of Refugee Studies*, 34(2), 1787–1809.

without disabilities to help with physically demanding tasks such as fetching water and helping him while he manages his business.

Human capital

Education is rarely adapted to the needs of RYWPDs, and this hinders them from expending their social and human capital. There is a shortage of specially trained teachers and RYWPDs have difficulty accessing school facilities, which can lead to them dropping out of school. As a result, they are unable to complete their schooling, which limits their ability to adapt. For example, one participant said that what prevents him from adapting to drought is that he lacks information and is illiterate.

Nevertheless, RYWPDs obtain human capital through training and skills development. Training can be provided by NGOs or informally through direct mentoring. For example, one participant highlighted learning from experienced tailors to improve her work. Refugees with higher levels of human capital are better able to adapt their livelihoods, guided by information and science, to cope with or take advantage of drought.²⁹ Skills acquired through training and skills development, such as in business management or poultry or crop farming, provide the ability to productively engage in livelihood activities to optimise profits and reduce losses during droughts. As one participant explained: *“I have also attended DRC’s entrepreneurship training on record keeping, credit registration, and financial accountability. This has helped me a lot to avoid losses and to avoid misusing my income on things that are of no value to me or my family.”* Refugees also credit the language courses with improving communication in their livelihood-related transactions with refugees of different nationalities and in their ability to work with refugees from communities that do not speak the same language.

RWYPDs also said they gain life skills and confidence through non-technical courses. For example, participants discussed the importance of JRS and VDPA in providing life skills that help them overcome the disability label and perceive themselves as equal to those without disabilities. One key informant added that psychosocial support helps RYWPDs to stop discriminating against themselves. However, training is generally provided by non-profit organisations that struggle with sustainable funding. Organisations are often unable to reach the majority of RYWPDs and there is no universal coverage in terms of provision of training and skills, or financial and psychosocial support. One key informant noted that donors are reluctant to fund programmes that address the needs of disabled people in the camp community. A representative from an organisation noted that due to insufficient funding they only refer RYWPDs to organisations that have adequate funding.

²⁹ Rastogi S (2019) *Refugees’ Self-Reliance and Livelihood Strategies: A Comparative Study of Uganda and Germany*, Master’s Thesis (University of Stavanger, Norway).

Natural capital

In Kakuma, refugees are restricted from using natural resources (for example, extracting forest products), and can only purchase these resources from the host community.³⁰ Host communities may perceive refugees as competitors for natural resources who deplete benefits meant for the host community. The hostility at times escalates to violent attempts to stop refugees from accessing resources.³¹

Despite these restrictions, RYWPDs manage to engage in adaptive environmental strategies to reduce the effects of drought. One key effort has been planting trees to provide shade, reduce heat, and reduce dust, supported by organisations like the UN Food and Agriculture Organization (FAO), Humanity and Inclusion (HI), and UNHCR. During the 2010–11 drought, the lack of vegetation caused business closures and immobilised daily life due to hazardous conditions. However, by 2021–23, tree planting had improved the environment, making it more habitable and enabling livelihood activities even during droughts compared to 2010 and 2011.

Livelihood adaptation and diversification

RYWPDs actively diversify their livelihoods to spread the risk of failure from the impacts of drought. Several RYWPDs engage in several livelihood activities to diversify their sources of income. One participant said, “I usually have different sources of income in order to help solve problems during droughts. I also keep chickens as an additional source of income [...] and have a shop which I run with my brother.” Diversification into more drought-resilient, non-farming livelihoods minimises the risk of business failure from the impacts of droughts. Small business owners also diversified their products to attract new customers.

Business owners adapt their purchasing and stock strategies. They purchase stock for sale, especially agricultural produce, in small quantities in order to avoid products spoiling in the high temperatures before they can be sold, as one participant explained: “In droughts, when you buy these commodities in bulk, like tomatoes, sometimes most of them go bad. But when you buy them in smaller quantities, customers buy them in good time.” This way, small businesses can remain afloat and profitable at a time of drought.

RYWPDs improvise cooling methods to retain the quality of the products that they sell and to improve customer service. The lack of cooling equipment like refrigeration

³⁰ Manji F, De Berry J (2019) *Desk Review on Livelihoods and Self-Reliance for Refugees and Host Communities in Kenya*. World Bank; Omatia N (2021) *Refugee Livelihoods: A comparative analysis of Nairobi and Kakuma Camp in Kenya*. *Disasters*, 43(4), 865–886.

³¹ Devonale M, Jones N, & Yacole W (2020) *“The first thing that I fear for my future is lack of rain and drought”*. *Climate change and its impacts on adolescent capabilities in low-and middle-income countries*. Gender and Adolescence: Global Evidence.

leads business owners to improvise. Improvised cooling methods include regularly taking the product in and out of the house to reduce exposure to heat, covering products with wet clothing or a blanket, or constructing a shade for the products. RYWPDs also provide temporary shade for customers. Without shade, customer turnout may worsen; one participant speculated that perhaps her customers, who were *boda-boda* riders, prefer to stay at home in the shade rather than come to buy her products.

Selling beyond Kakuma allows business owners to increase their customer base and overcome low customer turnout. Two participants sell their products outside Kakuma (weaving and beading). Entrepreneurs find markets for their products outside the camp through organisational networks or social media platforms. One participant noted that she sells her beadwork outside the camp through Facebook. VDMA and the She Can Initiative (SCI) highlight the use of their social networks to market RYWPD products inside and outside the camp. The strategy of selling outside the camp helps ensure the productivity of such businesses when people in the camp do not have enough money during droughts. However, selling outside the camp is complicated and only suitable for certain items, and not all participants are able to do it; one participant noted how difficult it is to sell through Facebook because it relies on trust.

Recommendations

RYWPDs in Kakuma are not meaningfully involved in preparedness, response, recovery, and transformation activities before, during, and after droughts. Despite the presence of organisations working on drought in Kakuma, none of the participants have participated in drought-specific training or are meaningfully involved in decision-making processes around programmes. One key informant said that although such decisions are relevant to them, RYWPDs are often treated as merely passive recipient rather than being active participants in decision making. This may be attributed to perceptions among organisations that RYWPDs suffer from ‘dependency syndrome’ and are not active in searching for solutions for themselves (this perception was shared by some RYWPD business owners when talking about RYWPDs who engage in begging). As a result, the livelihoods of RYWPDs and their potential vulnerability to drought remain invisible in decision making, and in programme and policy processes. One consequence of exclusion from participatory activities is the reduced effectiveness of policies and programmes in averting the worst impacts of drought on livelihoods, as noted by one participant who said: *“Sometimes organisations miss what we need.”*

Participants, and the existing literature, agree that solutions should aim at improving infrastructure, unlocking barriers to adaptation, and fostering the active participation of RYWPDs.

- **Improve access to education.** Educational facilities, especially secondary schools, are not disability friendly. Organisations in Kakuma are working to

overcome barriers for RYWPDs to improve their academic education. JRS, for example, explained their attempts to overcome the academic barriers facing RYWPDs through capacity-building training for teachers to be able to better teach students with physical disabilities. SCI and VDPA described their efforts to identify persons with disabilities and link them to capacity-building opportunities. However, there are still gaps in the physical infrastructure to accommodate the needs of persons with disabilities. Creating an enabling environment for education would improve people's ability to use knowledge, skills, and scientific information to adapt their livelihood strategies for drought.

- **Facilitate capacity building for drought adaptation.** RYWPDs need training on drought, its impacts, and adaptation strategies to build resilience. None of the RYWPDs interviewed reported having received training on drought impacts, adaptation, or resilience. This knowledge and information gap hinders participation in relevant, science-based interventions. Capacity building on drought impacts, adaptation, and livelihood resilience is critical to empower RYWPDs to develop transformative adaptation strategies. International organisations such as DRC, HI, JRS and NRC and refugee-led organisations such as VDPA and SCI should embed drought education and capacity building in their programmes to support proactive planning for livelihood adaptation and resilience.
- **Adopt a universal building code to facilitate accessibility.** Universal building codes are essential in refugee camps to ensure easy access to buildings, accommodation, and amenities. Buildings in Kakuma do not take into account the needs of people with physical disabilities, such as heat regulation or physical accessibility. The semi-structured houses without cooling facilities expose RYWPDs to extreme heat, which could be fatal, especially for RYWPDs with thermal disorders. Provision of appropriate building infrastructure reduces exposure to the health risks of drought. Public access buildings, such as indoor sanitation facilities, are not built to be accessible to all. The adoption of a permanent and universal building code would reduce vulnerability to discrimination in the provision of health-safe shelter. UNHCR should adopt the recommendations of the UNCRPD and Kenya's Persons With Disabilities (amendment) Bill (2023)³² on universal building codes, including social facilities.
- **Make social protection and programmes inclusive to RYWPDs.** Social protection should take into account the costs associated with disability. The model used in the implementation of social protection frameworks such as

³² See: <http://www.parliament.go.ke/sites/default/files/2024-02/THES%20PERSONS%20WITH%20DISABILITIES%20%28AMENDMENT%29%20BILL%2C%202023%20%282%29.pc>

Bamba Chakula (cash transfer) and food aid (in-kind transfer) is designed to meet basic needs. RYWPDs said that the inadequacy of the food ration and Bamba Chakula was directly attributable to the additional costs of disability. Disability consumes Bamba Chakula and food aid directly in terms of medical costs, the indirect additional costs of accessing scarce resources, and the opportunity costs in terms of lost livelihood opportunities. Including disability costs in social protection would enable people to meet their basic needs without jeopardising their livelihoods, especially during droughts (which exacerbate disability costs). To be disability inclusive, the social protection framework led by UNHCR and other development partners should increase the financial value of social assistance, humanitarian aid, and safety nets targeting RYWPDs.

- **Facilitate the meaningful participation of RYWPDs in influencing programmes.** Refugees are rarely involved in the design and implementation of programmes in the camp in a way that allows them to influence decisions and outcomes. For RYWPDs, accessibility issues make participation even more difficult. Organisations supporting RYWPDs should organise appropriate forums to gather feedback from RYWPDs on their needs, and remove barriers to participation by providing transport assistance and financial compensation for their time. Participation should not be a one-off event: organisations should involve RYWPDs at different stages of the programme, as beneficiaries, partners (through RLOs), and staff.³³

³³ For more information on engaging refugees in programme design and implementation, see: Global Refugee Network and Asylum Access (2019) [Meaningful Refugee Participation as Transformative Leadership: Guidelines for Concrete Action](#)

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Designed by: Habesha Media

Published by: Refugee Studies Centre, December 2024

Citation: Muraya P (2024) *Adaptation in Adversity: The Impact of Drought on the Livelihood Adaptive Strategies of Refugee Youth with Physical Disabilities in Kakuma Refugee Camp*, Refugee-Led Research Series, Working Paper (4), December 2024.