



LIVING WITH CLIMATE-RELATED HAZARDS

Impacts on Unpaid Household Labour in Nyumanzi Refugee Settlement – Adjumani District.

Key Messages

- Climate related hazards including extreme heat, drought, and flooding are making daily household chores harder with over 60% of households reporting challenges in completing tasks.
- Women and girls carry greater burden, facing workloads and high risks of violence during water collection and household tasks. Water scarcity and frequent flooding undermine hygiene, cooking and cleaning. These pressures reduce time for rest, schooling and income activities further straining their overall wellbeing.
- Community responses to the impact of climate related hazards on unpaid household labour include, adjusting routines, storing firewood, waking up before dawn to collect water/firewood, these however are not sustainable strategies.

Context & Rationale

Uganda, hosting over 1.9 million refugees as of November 2025, is the largest refugee hosting country in Africa. Nyumanzi settlement, established in 2014, is one of the largest of 19 individual settlements that together form the Adjumani settlement in Northern Uganda. It is home to approximately 48,181 refugees.¹ The refugee population, nearly all from South Sudan is predominantly Dinka, while the host community is mainly Madi.²

Nyumanzi settlement faces considerable climate-related challenges, particularly extreme heat, drought and flooding, compounded by a heavy reliance on climate sensitive sectors and constrained infrastructure capacity. In 2023, floods temporarily displaced over 4,000 people, and the region is projected to experience severe heat risks by the end of the century.³

Household labour, which remains unpaid when performed within one's own household, includes water collection, cooking, firewood fetching, cleaning and caregiving responsibilities. Despite being essential for household and community well-being, this work is largely invisible in economic and livelihood measures and disproportionately carried out by women and girls.⁴

Climate-related hazards have had a clear and growing impact on unpaid household labour in and around Nyumanzi settlement, making routine domestic tasks increasingly difficult to sustain. In the 12 months preceding data collection, 66% of households reported that extreme heat disrupted household chores, while 69% cited prolonged dry spells and water scarcity, and 63% reported disruptions due to flooding, underscoring the widespread burden climate shocks place on daily household responsibilities.

Assessment Overview

The assessment aims to identify and analyse community-based coping and adaptation strategies to climate-related hazards and climate variability among refugee and host communities in Nyumanzi settlement. More specifically, it aims to:

This brief focuses specifically on the livelihood sector, analysing how climate-related hazards particularly extreme heat, drought, and flooding affect markets and business activities in/around Nyumanzi settlement. It aims to:

- Examine climate impacts on vendors working conditions, seasonal price fluctuations and customer demands.
- Document market/business specific coping and adaptation strategies adopted by market vendors and small business owners.
- Provide context-specific evidence to inform humanitarian and development programming that strengthens climate-resilient livelihoods.

Methodology

The mixed-methods assessment used an Area-Based Assessment (ABA) approach, which offers a holistic picture of climate-related challenges in Nyumanzi by examining the entire geographic area and the different sectors and population groups within it. It also draws on the Community-Based Adaptation (CBA) approach, which supports communities in identifying, designing, and leading their own climate adaptation strategies. This approach emphasizes local knowledge, existing vulnerabilities, and community-driven resilience building. The study integrated both quantitative and qualitative data collection:

- Quantitative: 887 interviews comprising**
 - 446 refugees
 - 431 host community members
- Qualitative: 211 participants across**
 - 29 key informant interviews
 - 16 participatory workshops
 - 2 focus group discussions.

The study area covered Nyumanzi and its neighboring communities, focusing on the experiences of both refugee and host populations. Data analysis incorporated stratification by gender and displacement status, and remote sensing techniques were used to examine hazards such as heat, drought, and flooding. Efforts were made to include persons with disabilities and older individuals to ensure their views and experiences were adequately represented. Findings reflect the experiences of respondents in Nyumanzi/Dzaipi/Arinyapi and may provide indicative insights for similar contexts, though they are not statistically generalizable beyond the assessed population.

¹ UNHCR, *Operational Data Portal*, last consulted on 30th October 2025

² IMPACT, *UGA2406_Climate-report*, April 2025.

³ Monitor - Uganda, *Over 4,000 refugees hit by floods in Adjumani*, 2023.

⁴ UN Women, *Landscape of Care Work in Uganda*, http://africa.unwomen.org/sites/default/files/2024-06/landscape_of_care_Uganda.pdf, 2024.

KEY FINDINGS:

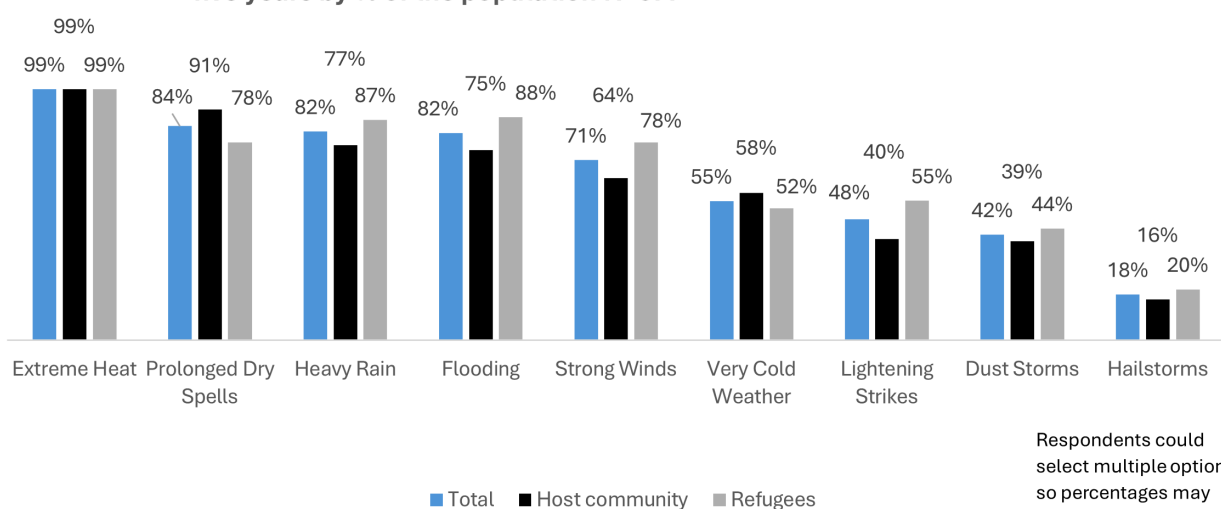
SECTION 1:



Overview of Identified Climate Hazards.

Over the past five years, the population of Nyumanzi faced important climate-related impacts, with **99%** experiencing extreme heat, **84%** enduring prolonged dry spells and **82%** affected by heavy rains and flooding. While these climate events affected both refugees and host communities, they were particularly pronounced among refugees, exacerbating their vulnerabilities.

Climate related hazards reportedly experienced in/around Nyumanzi in the past five years by % of the population N=877



SECTION 2:



Impact on Unpaid Household Labour

Household labour/chores remain unpaid, this typically includes water collection, cooking, fetching firewood, cleaning, and caregiving responsibilities disproportionately carried out by women and girls. According to UN Women, women and girls aged 15 and older in Uganda spend 14.6% of their time on unpaid care and domestic work, compared to 6.7% for men. This disparity limits women's opportunities for paid employment, often forcing them to work longer hours as they balance both paid and unpaid labour.





i) Water Collection

- Increased workload and time burden as wells and shallow water sources dry up hence women/girls walk longer distances in search for water or make multiple trips per day.
- Higher exposure to gender-based violence at water points and on long routes, especially at night or before dawn in search for water.
- Sleep deprivation from waking as early as 4am to collect water before sunrise leading to fatigue and reduced productivity throughout the day.
- Tension and violence at home when women return late or bring insufficient water due to long queues and distant water sources.
- Reduced hygiene due to prioritizing water for drinking and cooking, leaving insufficient amounts for bathing, washing clothes and cleaning increasing risks of illnesses.
- Flood-damaged sanitation facilities increase cleaning labour for women and girls.
- Unsanitary living conditions during floods create extra workload to restore hygiene. Floods bring mud, debris and waste into our homes, requiring extra labour to clean and disinfect the homes.



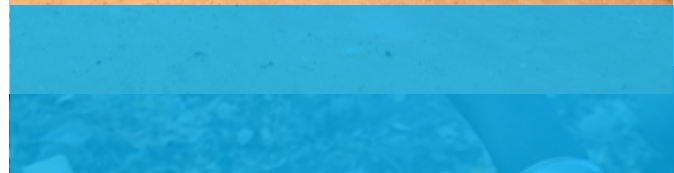
ii) Firewood Collection and Cooking

- Firewood scarcity during drought forces women to move longer distant to collect wood while heavy rains soak and rot available firewood making it hard to light and disrupt meal preparation.
- Extreme heat makes cooking physically exhausting and increases food spoilage.
- Flooded kitchens and muddy environments complicate cooking and reduce efficiency.
- Households reduce the number of meals prepared due to resource constraints.



iii) Cleaning and Caregiving Responsibilities

- More care duties arise during periods of extreme climate related conditions as households experience higher cases of heat related illnesses, respiratory infections increasing the time women spend caring for sick family members.
- Flooding creates major sanitation challenges as latrines are damaged, water is contaminated, homes are muddy which increasing cleaning time for women.
- High dependency ratio (many children, elderly, and persons with disabilities) intensifies care labour, leaving women with little rest and fewer opportunities for income earning activities.



SECTION 3:

Community Responses

- Adjusting cooking schedules to avoid extreme heat or accommodate wet conditions.
- Storing firewood in sheltered areas, though often unsuccessful during heavy rains.
- Waking before dawn to fetch water before sources dry up - a negative coping strategy leading to sleep deprivation and health risks.

Requested Support

- There is need for water tanks to store rainwater during the rainy season that can be used for dry periods.
- Distribution of chlorine tablets, portable filters and other water treatment solutions. Installation of additional boreholes and provide safe water storage containers, this will expand water access to the community and reduce long distance water collection.
- Improvement of security and safety around water points and latrines to reduce gender-based violence risks.

Recommendations

- Expand access to safe water by installing additional boreholes and providing secure water storage containers to reduce long-distance collection.
- Promote rainwater harvesting and improved water systems to ensure reliable availability during dry periods.
- Enhance water treatment options through the provision of chlorine tablets, portable filters, and household-level purification methods.
- Strengthen drainage and sanitation infrastructure to prevent floodwater contamination and reduce disease risks.
- Improve safety and protection measures at water points and sanitation facilities to reduce exposure to gender-based violence.
- Support policy development and advocacy that prioritizes water, sanitation, and protection within climate adaptation planning.



For more information: <https://ulearn-uganda.org/living-with-climate-related-hazards-impacts-and-community-responses-among-refugees-and-hosts-in-nyumanzi-settlement-adjumani-uganda/>