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Women's Economic Rights in the Face of Climate Change in rural Uganda: An application of the Women's Economic Rights Index (WERI)

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Abstract

Background

Women's economic rights are central to achieving gender equality and resilience in the face of climate change. However, women in rural Uganda, especially in climate-vulnerable areas such as Amuria and Kabong, continue to face social, legal, and environmental barriers that limit their economic empowerment. In the northeastern region, where pastoralism and subsistence farming dominate, climate shocks like prolonged droughts, erratic rainfall, and floods have significantly impacted livelihoods. These challenges further deepen existing gender inequalities.

Objective

To assess the status of women's economic rights in Amuria and Kabong districts, identify the barriers and facilitators affecting these rights, and evaluate how climate change influences women's economic empowerment.

Methods

A cross-sectional mixed-methods design was used, combining quantitative surveys with qualitative interviews and focus group discussions. The study involved 230 grassroots women aged 18 years and above. Data was collected using structured questionnaires. Quantitative data was analyzed using STATA v15, and ethical approval was sought from Uganda Christian University Research Ethics Committee, and all participant rights were upheld.

Results

A total of 230 women participated in the study, the majority of whom were married, engaged in agriculture, and had low levels of formal education. Over half demonstrated moderate economic participation and financial autonomy, characterized by low incomes and limited savings largely directed toward basic household needs. While access to financial services and productive resources was relatively high-primarily through savings groups, legal ownership of assets, particularly land, remained limited. Despite this access, women's decision-making was low, with most exhibiting limited agency. Structural barriers, including high loan interest rates, lack of collateral, unpaid care work, and restrictive socio-cultural norms, were widely reported. Although enabling factors such as women's groups and government programs existed, their impact was moderate. Overall, only 34% of women had their economic rights upheld. Nearly all participants reported experiencing climate variability, with reduced rainfall and declining agricultural productivity as major impacts, prompting adoption of coping strategies such as income diversification and savings group participation, though uptake of more resource-intensive adaptations remained low.

INTRODUCTION AND BACKGROUND

Women's economic rights are central to the attainment of gender equality, sustainable development, and social justice. These rights include women's ability to work under fair conditions, receive equal pay for equal work, own and inherit property, access credit and financial services, participate in economic decision-making, and benefit equitably from economic growth. Globally, the realization of women's economic rights has been uneven, with women in low- and middle-income countries facing persistent barriers rooted in historical inequalities, discriminatory legal systems, restrictive socio-cultural norms, and unequal access to productive resources (UN Women, 2023; World Bank, 2024).

These structural constraints continue to limit women's economic participation and resilience, particularly in rural and climate-vulnerable settings.

In Uganda, women play a critical role in sustaining household and community livelihoods, especially in rural areas where agriculture and natural resource–based activities dominate the economy. Women constitute the majority of the agricultural labour force and are heavily involved in food production, processing, and informal trade. Despite this contribution, women's access to and control over productive assets such as land, credit, technology, and markets remain significantly constrained. These inequalities persist even in the presence of progressive legal and policy frameworks. The 1995 Constitution of the Republic of Uganda guarantees equality between men and women and affirms women's rights to equal treatment and opportunities in political, economic, and social spheres (Government of Uganda, 1995). In addition, the National Gender Policy (2007) emphasizes gender mainstreaming across all sectors and seeks to address structural barriers to women's empowerment. However, the translation of these commitments into practice has been limited, particularly at community level, where customary norms and informal institutions continue to shape access to resources (Government of Uganda, 2007).

Empirical evidence highlights the persistence of gendered economic inequalities in Uganda. Recent national statistics indicate that women hold only a small proportion of registered land titles, estimated at less than one-third, despite being primary users of agricultural land (Land Coalition, 2023). Furthermore, women earn approximately 30–40 percent less than men in comparable economic activities, reflecting gender wage gaps, occupational segregation, and unequal access to higher-value markets (UBOS, 2022; World Bank, 2024). Women's disproportionate burden of unpaid domestic and care work further constrains their time, mobility, and ability to engage in income-generating activities or climate-adaptive livelihood strategies. These economic disadvantages are particularly pronounced in rural and semi-arid regions, where livelihoods are highly dependent on natural resources and climate variability.

Climate change has emerged as a critical factor intensifying existing gender and economic inequalities in Uganda. The country is experiencing rising temperatures, increasingly erratic rainfall patterns, prolonged droughts, and recurrent flooding, all of which undermine agricultural productivity, water availability, and household income security (UNDP, 2023). These climate stresses disproportionately affect women because of their reliance on climate-sensitive livelihoods and their socially assigned roles in food production, water collection, and family care. Limited access to land, credit, and climate information further weakens women's adaptive capacity, making them more vulnerable to climate-induced economic shocks.

The impacts of climate change are particularly severe in districts such as Amuria and Kabong, which are characterized by high levels of poverty, environmental vulnerability, and dependence on rain-fed livelihoods. In Amuria District, recurrent flooding linked to river overflows and wetland degradation disrupts agricultural activities, damages infrastructure, and restricts access to local markets, thereby undermining women's small-scale farming and trading activities. In contrast, Kabong district, located in the Karamoja sub-region, experiences chronic drought cycles that have decimated livestock, reduced pasture availability, and intensified food insecurity. These conditions have significantly weakened pastoral and agro-pastoral livelihoods, with women bearing the brunt of income loss, increased unpaid labour, and reduced coping options (UNDP, 2023).

As climate change intensifies, its intersection with gender inequality presents one of the most pressing development challenges in Uganda. The erosion of women's economic rights under climate stress not only deepens poverty and vulnerability but also undermines broader community resilience and sustainable development efforts. Evidence shows that when women are economically empowered, they are more likely to invest in household welfare, adopt climate-smart practices, diversify livelihoods, and contribute to collective adaptation strategies (UN, 2023). Addressing women's

economic rights in the context of climate change is therefore not only a matter of equity and social justice but also a strategic pathway to strengthening climate resilience at household and community levels.

Against this backdrop, this study sought to examine how climate change is reshaping women's economic realities in Amuria and Kabong districts. It explored the barriers women face in accessing and exercising their economic rights under changing environmental conditions, identified emerging strategies for resilience and adaptation, and how local institutional, social, and economic systems could be strengthened to promote women's economic empowerment in the face of climate uncertainty.

Methods

Study design

A cross-sectional mixed-methods study combining quantitative household survey among women (18+) engaged in (or seeking) income-generating activities and qualitative Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) to explain mechanisms, norms, and context.

Study setting

The study was conducted in selected communities in Amuria and Kabong districts, two climatically and culturally distinct districts that represent contrasting livelihood systems in Uganda's northeastern corridor yet share acute vulnerability to climate variability and gendered economic inequality.

Amuria district lies in the Teso sub-region of eastern Uganda and is predominantly agrarian. Its terrain is characterized by gently undulating plains interspersed with wetlands and seasonal streams that feed into the Awoja and Akokoro catchments. The district experiences a bimodal rainfall pattern (approximately 1,000–1,200 mm annually), but rainfall variability has increased sharply over the past decade, resulting in recurrent flash floods and extended dry spells. Such climatic instability frequently destroys crops, isolates markets through impassable feeder roads, and contributes to periodic food insecurity. The majority of households depend on rain-fed subsistence agriculture, growing cassava, millet, sorghum, maize, and ground nuts, supplemented by small livestock keeping (goats, pigs, poultry). In recent years, women-led Village Savings and Loan Associations (VSLAs) and small petty trade around local markets have emerged as crucial coping and income-diversification mechanisms, particularly as formal financial services remain limited. Education levels are moderate, but gender disparities persist, with women shouldering heavy domestic workloads that constrain their participation in more lucrative enterprises.

Kabong District, in contrast, lies in the Karamoja sub-region and is semi-arid, receiving only about 500-700mm of erratic rainfall annually and experiencing prolonged dry seasons of up to seven months. Livelihoods revolve around pastoralism and agro-pastoralism, heavily dependent on mobility in search of pasture and water. The district's fragile ecosystem faces chronic droughts, sporadic flash floods, and frequent livestock disease outbreaks that erode household assets and deepen poverty. Access to markets, water points, and health or financial services is constrained by long distances and poor infrastructure. The population is culturally distinct, with strong customary institutions and clan structures that play decisive roles in land allocation, livestock ownership, and conflict resolution. While these institutions are vital for social cohesion, they often reinforce patriarchal norms that limit women's rights to own livestock, inherit land, or control income from animal sales. In response, humanitarian and development actors have promoted alternative livelihoods such as beekeeping, craft production, and dry-season kitchen gardening, though women's access to inputs, training, and capital remains limited.

Across both districts, the combined pressures of climate change, poverty, and entrenched gender norms continue to undermine women's economic rights. Floods in Amuria and droughts in Kabong directly affect women's productive time, mobility, and capacity to generate income, while increasing their unpaid care burden. At the same time, emerging community innovations, VSLAs in Amuria and group-based livelihood diversification in Kabong, demonstrate local resilience and provide useful entry points for gender-responsive, climate-smart programming. These diverse ecological and cultural settings therefore offer a valuable comparative lens through which to examine how environmental shocks intersect with social structures to shape women's economic rights and empowerment in rural Uganda.

Study population and eligibility criteria

The study population comprised women aged 18 years and above living in selected sub-counties, parishes, and villages of Amuria and Kabong districts. These women represent diverse livelihood systems that are typical of the two regions, ranging from smallholder crop farmers and pastoralists to petty traders, service providers, and participants in emerging climate-adaptive enterprises such as tree nurseries, kitchen gardening, apiculture (beekeeping), and small livestock rearing. The study included both women who are members of organized groups, such as Village Savings and Loan Associations (VSLAs), women's cooperatives, and self-help groups, as well as those who operate independently. This diversity ensured that the sample captures a comprehensive picture of women's economic participation and rights across different socioeconomic and institutional contexts.

To be eligible for inclusion, a participant must have been a resident of the community for at least six months, to ensure adequate familiarity with local environmental and economic dynamics. In addition, the participant must have possessed the capacity to provide informed consent, understand and had the ability to comprehend the study purpose, procedures, and voluntary nature of participation in her preferred language. Exclusion criteria included visitors, seasonal or temporary workers, and individuals who have resided in the study community for less than six months, as their transient status may limit their understanding of local economic systems and climate impacts.

Sample size determination

The primary endpoint of the study was the proportion of women whose economic rights were considered "upheld," based on the composite Women's Economic Rights Index (WERI). The sample size was calculated using the Kish-Leslie formula (1965) for estimating a single population proportion. Given the absence of prior estimates for this specific context, a conservative prevalence (p) of 0.50 was used to maximize precision, with a corresponding z-score of 1.96 at a 95% confidence level and a desired precision (d) of 0.10. Substituting these values into the formula yielded an estimated sample size of approximately 97 participants per district. Considering the two districts would yield 194 respondents. A non-response rate of 15% was then incorporated to bring the total sample size to 223 respondents. This sample was sufficient to provide meaningful descriptive estimates and comparative insights between the two contrasting ecological and livelihood contexts.

The qualitative component of the study complemented and deepened insights from the quantitative findings by exploring the contextual, social, and institutional dynamics that influence women's economic rights in the face of climate change. A total of six focus group discussions (FGDs) and six key informant interviews (KIIs) and 8 in-depth interviews were conducted across the two study districts.

In each district, Amuria and Kabong, three FGDs were organized, each consisting of six to ten participants. The discussions were stratified by participants' livelihood types and socioeconomic characteristics to capture diverse perspectives. In Amuria, one group was composed primarily of smallholder crop farmers, another of women engaged in small trade or VSLAs, and a third of younger women or single mothers entering economic activities. In Kabong, one

group included pastoralist women, another consisted agro-pastoralists engaged in emerging alternative livelihoods such as beekeeping or kitchen gardening, and the third brought together women leaders or cooperative members actively participating in local decision-making forums. This diversity ensured that the FGDs capture both shared and context-specific experiences of how climate shocks, gender norms, and livelihood patterns intersect to affect women's economic empowerment.

Each discussion was moderated by an experienced qualitative researcher fluent in the local language and supported by a trained note-taker. The FGD guide focused on topics such as local perceptions of economic rights, decision-making within households, access to productive resources, cultural constraints, coping mechanisms to climate shocks, and collective forms of resilience. Sessions were audio-recorded with participants' consent, conducted in neutral community spaces to ensure comfort and confidentiality, and lasted approximately 60 to 90 minutes.

Sampling strategy

A multistage stratified sampling approach was used to select study participants for the quantitative component, to ensure equitable representation of women across different ecological, social, and livelihood settings in both Amuria and Kabong districts. In each district, the initial stage involved stratification of sub-counties according to their dominant livelihood and ecological characteristics. For instance, in Amuria, strata were defined based on exposure to flooding or waterlogging (flood-prone versus non-flood-prone sub-counties), while in Kabong, sub-counties were categorized by predominant livelihood systems (purely pastoral versus agro-pastoral). From each district, two to three sub-counties were then randomly selected from the respective strata to ensure that both ecological and economic diversity are captured. Within each selected sub-county, two parishes were randomly chosen, followed by a probability-proportional-to-size (PPS) selection of villages within those parishes. This approach helped maintain proportional representation of more populous and economically active areas while preserving randomization at every stage.

Once the villages had been selected, the research team collaborated with local leaders, community-based facilitators, and women's group representatives to develop a household listing that identified eligible women in each selected village. From these lists, a systematic random sampling technique was employed to select participants, to ensure that every eligible woman in the sampling frame has an equal chance of inclusion. The number of participants per village was determined according to the required district totals.

For the qualitative component, a purposive sampling approach was adopted to capture the diversity of experiences, perspectives, and institutional roles relevant to women's economic rights and climate adaptation. Selection of participants was guided by key characteristics such as livelihood type (agrarian, pastoralist, or mixed), membership in savings or cooperative groups (e.g., VSLAs), and age category (youth, middle-aged, and older women). Additionally, key informants included district leaders, community development officers (CDOs), representatives from women-focused NGOs or community-based organizations, and influential cultural or local council leaders who play significant roles in shaping economic opportunities and social norms.

Data collection procedures

Data collection employed a combination of quantitative and qualitative approaches to ensure comprehensive coverage of women's economic experiences and the influence of climate change on their livelihoods. The study used structured electronic questionnaires, KII and FGD guides. All data was collected by trained field researchers familiar with the local context and fluent in the local languages of each district.

The structured questionnaire, administered on tablets using the KOBO Collect platform, included sections on socio-demographic characteristics, livelihoods and income sources, access to and control over assets and land, financial inclusion (including ownership of accounts, savings, and access to credit), decision-making power within the household, and participation in market activities. It also covered time use (including unpaid care work), exposure to climate events, adaptation strategies, group membership, and perceptions of rights, gender norms, and economic participation.

The KII guide was used to collect information from district-level officials, program implementers, and other stakeholders on policies and interventions addressing women's economic empowerment, customary and institutional barriers, market and financial systems, and the effects of climatic events on service delivery and livelihoods. It also explored opportunities for strengthening gender-responsive climate adaptation at district level. The FGD guide focused on women's collective experiences and perceptions. Discussions explored the barriers and facilitators of economic empowerment, decision-making patterns, coping mechanisms for climate shocks, time allocation between productive and unpaid labor, and aspirations for more equitable participation in local economies. FGDs also encouraged participants to propose locally relevant strategies to enhance women's access to resources and resilience against environmental shocks. All data collection tools were translated into local dialects to ensure clarity and cultural relevance. Prior to data collection, the instruments underwent cognitive pretesting with a small number of respondents in each district to assess comprehension, flow, and sensitivity of questions.

Enumerators received two days of intensive training covering research ethics, informed consent procedures in local languages, gender-sensitive interviewing techniques, administration of both the quantitative and qualitative tools, and procedures for handling distress and referrals. Practical sessions, including mock interviews and field simulations, were held to ensure competence and consistency.

During fieldwork, data quality was safeguarded through close supervision by field coordinators. Supervisors conducted daily spot checks; review completed interviews for accuracy and completeness and verify key responses. Interviews geotagged using the KOBO system to confirm that data collection occurred within the selected villages. The electronic forms included built-in validation rules, such as range and consistency checks, compulsory fields, and automatic skips, to minimize data entry errors. At the end of each day, teams reviewed submissions via dashboards to identify and correct inconsistencies or missing information. Meetings were held to address emerging challenges and maintain uniform standards across both districts. Data were synchronized to a secure, encrypted server, accessible only to authorized members of the research team through password-protected accounts.

Variables and operational definitions

The main outcome variable was the Women's Economic Rights Index (WERI), a composite measure capturing multiple dimensions of women's economic empowerment and rights realization. These dimensions included economic participation & financial autonomy, access to resources & financial inclusion, decision-making power (Agency), structural barriers & constraints, and enabling environment (facilitators of economic rights). A composite economic participation and financial autonomy index was constructed using standardized scores for income, savings, and expenditure patterns. Income and savings categories were converted into normalized scores ranging from 0 to 1 based on ordered categories. Expenditure patterns were weighted according to their economic function (productive, protective, and consumptive) and normalized to generate a score between 0 and 1. The overall index was computed as the mean of the three components, with higher values indicating greater economic participation and financial autonomy. A composite Access to Resources and Financial inclusion Index was constructed using three domains: financial access, ownership of productive resources, and property rights. Binary variables were generated for each indicator and aggregated into sub-indices, which were then averaged to produce a composite score ranging from 0 to 1, with higher scores indicating greater access and inclusion.

Decision-making power (agency) was assessed across four domains: control over household income, purchase of major assets, children's education, and agricultural decisions. Responses were measured on a four-point Likert scale (Always, Often, Sometimes, Rarely/Never) and recoded into a standardized score ranging from 0 to 1. A composite agency index was computed as the mean of the four domain-specific scores, with higher values indicating greater decision-making power. A composite index of structural constraints to women's economic rights was constructed using four domains: economic barriers, access barriers, care burden, and perceived normative limitations. Multi-response variables were converted into binary indicators and aggregated into normalized scores. Care burden was assessed using unpaid work status and perceived impact on economic participation. The composite index was computed as the mean of the four components, with higher scores indicating greater structural constraints. An enabling environment index was constructed using four domains: support systems, institutional inclusion, perceived government support, and perceived status of economic rights. Multi-response variables were converted into binary indicators and aggregated into normalized scores. The composite index was calculated as the mean of the four domains, with higher scores indicating a more supportive environment for women's economic rights.

To generate an overall measure, a composite Women's Economic Rights Index (WERI) was calculated as the arithmetic mean of the five domain indices. The structural constraints index was reverse-coded prior to aggregation to ensure consistent directionality, such that higher values across all domains reflected stronger economic rights. The resulting WERI ranged from 0 to 1.

For analytical purposes, the continuous WERI was dichotomized into a binary variable representing low versus high economic rights. Scores equal to or above the mean were classified as "economic rights upheld," while those below the mean were categorized as rights not upheld. This cut-off was selected to reflect a midpoint threshold indicating whether, on average, women experienced favorable conditions across the assessed domains.

Key explanatory variables included climate exposure indicators (frequency and severity of droughts or floods over the past five years, institutional and resource variables (type of land tenure or documentation, access to training, access to markets or financial institutions, and use of mobile or digital finance); and socio-demographic variables such as age, education level, marital status, household size, dependency ratio, and primary livelihood type.

Data management

Data were captured electronically through KOBO collect, ensuring encryption both at rest and during transmission. Upon synchronization, all datasets were automatically stored on a secure cloud server with restricted access. Data cleaning was conducted using reproducible scripts in Stata to standardize variable labels, check for outliers, and ensure internal consistency. Every modification to the dataset was documented to maintain a transparent audit trail. De-identified datasets were then stored in password-protected folders on the research team's secure drive.

Data analysis plan

Quantitative analysis began with descriptive statistics to summarize the characteristics of the study population by district, including weighted proportions and means. Bivariate analyses explored associations between women's economic rights and potential predictors using chi-square tests. To assess independent relationships, multivariable logistic regression models were fitted for the binary WERI outcome, using cluster-robust standard errors. Key covariates included education level, marital status, VSLA membership, land control, financial access, climate exposure, and time use. Effect modification was explored by including interaction terms between district and key exposures to test contextual differences. For the qualitative data, audio recordings were transcribed verbatim, translated into English, and de-identified. Thematic analyses were conducted using Atlas.ti software. A combination of deductive codes derived

from the study objectives and inductive codes emerging from the data were applied. Coding was cross-checked by two analysts on at 4 transcripts to ensure reliability. Themes were synthesized into matrices highlighting barriers, facilitators, adaptation practices, and institutional opportunities related to women's economic rights. Credibility and trustworthiness were enhanced through analyst triangulation, thick description, and the integration of diverse perspectives from KIIs and FGDs.

Ethical considerations

Ethical approval was obtained from the Uganda Christian University Research Ethics Committee (REC) prior to fieldwork. Informed consent was obtained from every participant in either English, Ateso, or Ngakarimojong. Both verbal and written consent were documented, with thumbprints used for participants who couldn't sign. The consent process emphasized voluntariness, confidentiality, and the right to withdraw at any time without penalty. Interviews were conducted in private settings to protect privacy, and participants were identified only by numeric codes. No personal identifiers appeared in transcripts or datasets. All digital data were stored in encrypted form, with access restricted to the research team.

Limitations and mitigation

The cross-sectional nature of this study limits the ability to infer causality between climate exposure and women's economic outcomes. However, the use of mixed methods, triangulation, and multivariable modeling strengthened interpretation of associations. Potential self-report bias on income and assets were minimized by collecting data in ranges, anchoring questions to agricultural seasons, and triangulating with qualitative narratives. Recall bias on climate exposure were mitigated by referencing named local events and seasons familiar to respondents. To address possible access and security challenges in remote or hard-to-reach areas, the research team coordinated closely with local leaders, planned flexible field schedules, and engaged local guides to facilitate safe and efficient movement.

Results

Socio-demographic characteristics of the study participants

Overall, 230 women were engaged in the study, of which 53.5% (123/230) were from Amuria district, the mean age was 35.09 (+ 12.23) with majority of the participants 38.3% (88/230) being between 25 to 34 years. More than three quarters, 79.1% (182/230) were married, 47.8% (110/230) had attained primary level education and 53.1% (122/230) practiced agriculture as their primary source of income. The average household size was 7.40 (± 2.90), with the majority of the households 67.0% (154/230) reporting between five to 9 members, Table 1.

Table 1
Socio-demographic characteristics of the study participants in Amuria and Kabong districts, Uganda

Variable	Category	Frequency (n = 230)	Percentage (%)
District	Amuria	123	53.5
	Kaabong	107	46.5
Age	< 24	45	19.6
Mean (SD) = 35.09 (12.23)	25–34	88	38.3
	35–44	44	19.1
	45+	53	23.0
Marital status	Single	16	7.00
	Married	182	79.1
	Widowed	24	10.4
	Divorced/Separated	8	3.50
Education Level	No formal education	73	31.7
	Primary education	110	47.8
	Secondary education	37	16.1
	Tertiary (Vocational)	7	3.00
	University degree or higher	3	1.30
Household Size	1–4	30	13.0
Mean (SD) = 7.40(2.90)	5–9	154	67.0
	10+	46	20.0
Primary Source of Income	Agriculture	122	53.1
	Local brew	35	15.2
	Small business	54	23.5
	Others	19	8.30

Economic participation & financial autonomy

Over 53.5% (123/230) of the women had a monthly income of less than UGX200,000, and 48.3% saved between UGX10,000 to UGX49,999 every month. The items women spend their income on most included food (77.7% (178/230)), school fees (73.4% (168/230)) and medication/health (57.2% (131/230)). Overall, more than half of the respondents 55.2% (127/230) scored moderate for economic participation and financial autonomy. Table 2.

Table 2
Economic participation & financial autonomy of the women study participants in Amuria and Kabong districts

Variable	Category	Frequency (n = 230)	Percentage (%)
Monthly income	< 100,000	65	28.3
	100,000–199,999	58	25.2
	200,000–299,999	44	19.1
	300,000–399,999	25	10.9
	400,000+	38tab	16.5
Monthly savings	< 10,000	51	22.2
	10,000–49,999	111	48.3
	50,000–99,999	40	17.4
	100,000+	28	12.2
Income expenditure patterns	Food	178	77.7
	School fees	168	73.4
	Medication/health	131	57.2
	Investment	57	24.9
	Fashion	25	10.9
	Leisure	15	6.5
	Rent	10	4.4
	Buying assets	19	8.3
	Extended family	8	3.5
Economic participation and financial autonomy score	Low	50	21.7
	Moderate	127	55.2
	High	53	23.0

The qualitative findings provide deeper insight into how women engage in economic activities, the nature and sustainability of their livelihoods, and the constraints that shape their ability to translate participation into meaningful economic empowerment. Specifically, the narratives reveal that women's economic engagement is predominantly survival-driven, highly vulnerable to shocks, and constrained in ways that limit accumulation, investment, and long-term financial autonomy.

Predominance of small-scale and survival-based livelihoods

Women's economic participation is predominantly concentrated in low-capital, informal micro-enterprises and subsistence agriculture, which reflects both structural constraints and limited access to productive resources. These activities are typically characterized by low entry barriers but also low returns, restricting opportunities for scaling or transitioning into more profitable ventures. The findings suggest that women's livelihoods are not designed for growth but for day-to-day survival, with minimal diversification into higher-value economic activities.

"So, most of the livelihoods struggle on a small scale. It's not like those engaged in Grow that work in supermarkets… women have not reached that level; they're still at the micro level of small business." (KII, District Leadership, Male)

"Many women here are engaged in small businesses selling foodstuffs like silver fish, tomatoes, green vegetables… Some of the women here also engage in selling clothes. (KII, Community School Teacher, Female)

"They do these small businesses like selling tomatoes, silver fish… they go and buy from Soroti, then they come and sell them here." (KII, Parish Chief, Female)

Income instability and vulnerability to shocks

The qualitative findings reveal that women's livelihoods are highly exposed to a range of shocks, including market failures, perishability of goods, transportation disruptions, and broader environmental risks. These shocks often result in substantial financial losses, eroding already limited capital and discouraging reinvestment. This instability constrains women's ability to accumulate savings or invest in more resilient livelihood strategies and thereby reinforce cycles of economic insecurity. Even when women engage in entrepreneurial activities, the absence of risk mitigation mechanisms, such as storage facilities, insurance, or reliable market access, means that a single adverse event can wipe out their investment.

"She went and bought about two sacks of sukuma wiki (collard greens) … about 1.5 bags then it all got rotten and she said that her money has gone just like that. (KII, Community School Teacher, Female)

"Once again, I have one of the group members, when we got money from our coordinator they went to Busia with lemon. I think the vehicle got spoiled on the way and by the time they reached Busia, the lemon was all yellowish and those people don't want the yellowish ones because they also transport them for some time and they ended up pouring lemon from there, and even that money perished there." (KII, Community School Teacher, Female)

Competing household demands limit capital accumulation

The qualitative findings indicate that women's earnings are rarely retained within the enterprise but are instead continuously redirected toward immediate household expenditures, including food, school fees, and healthcare. While this reflects women's central role in sustaining household welfare, it simultaneously constrains their ability to reinvest in income-generating activities or expand their businesses.

"Part of this money is what is supporting the household, so you may not accelerate business when you're also spending on education, food and other demands." (KII, District Leadership, Male)

"Part of this money is supporting the household… you cannot accelerate business. That money supports them in buying school needs and feeding their families." (KII, District Leadership, Male)

"They can buy a few tomatoes, sell them then again use the money for school fees. Then that business collapses and they start afresh." (KII, Parish Chief, Female)

Access to resources & financial inclusion

The majority of the study participants, 78.8% (179/230) had access to financial services including credit, savings, and loans. Of those with no access to financial services, the majority 42.9% (n = 15) mentioned that they did not meet requirements while 22.9% (n = 8) did not have services available in their areas. Additionally, participants expressed ownership or access to productive resources including land 68.2% (150/230), livestock 49.1% (108/230), credit facilities 46.4% (102/230), 45.5% (100/230). Of those with property rights, 47.4% (93/196) had legal land ownership, and 64.5% (60/93) inherited it. Over 86.4% (171/230) of the participants mentioned savings groups as their financial service points,

78.6% (180/230) had ever applied for a loan, and 95.6% (172/180) had got the loans. About half of the respondents 50.4% (116/230) scored high for access to resources & financial inclusion. Table 3.

Table 3
Access to resources & financial inclusion of the women study participants in Amuria and Kabong, Uganda

Variable	Category	Frequency	Percentage (%)
Access to financial services (credit/ savings/ loans)	Yes	179	78.8
	No	51	22.2
Barriers to financial access	Do not meet requirements	15	42.9
	No services available	8	22.9
	Services far	5	14.3
	Lack of trust	3	8.6
Ownership/access to productive resources	Land	150	68.2
	Livestock	108	49.1
	Farming tools	95	43.2
	Financial services (bank/ mobile money)	93	42.3
	Credit facilities	102	46.4
	Market access	100	45.5
Property rights (own /inherit/ manage)	Yes	196	85.2
	No	34	14.8
Legal land ownership	Yes	93	47.4
	No	103	52.6
Land acquisition	Inheritance	60	64.5
	Purchase	33	35.5
Financial service points	Savings groups	171	86.4
	Mobile money	63	31.8
	Commercial banks	17	8.6
	Microfinance	12	6.1
Loan application	Yes	180	78.6
	No	49	21.4
Loan success rate	Yes	172	95.6
	No	8	4.4
Loan purpose	Business	127	72.2
	Agriculture	67	38.1
	School fees	63	35.8
	Healthcare	22	12.5

Variable	Category	Frequency	Percentage (%)
Loan denial reasons	Lack of collateral	14	82.4
	Criteria unmet	7	41.2
Access to resources & financial inclusion score	Low	25	10.9
	Moderate	89	38.7
	High	116	50.4

Although the quantitative findings suggest relatively high levels of access to financial services and productive resources, with over half of the women scoring high on the access to resources and financial inclusion index, these aggregate indicators do not fully capture the depth, quality, and equity of that access. The qualitative findings provide important nuance, revealing that women's access is often conditional, insecure, and mediated by structural and socio-cultural constraints, particularly around land ownership, collateral requirements, and the nature of financial systems available to them.

Limited access to land and productive assets

Findings show that women's access to land and productive assets is highly gendered, conditional, and insecure. Land, which is the most critical productive resource in these rural settings, remains largely under male ownership and control, with women's access often mediated through husbands or male relatives. This form of access does not equate to ownership or control, limiting women's ability to make independent decisions, invest in land-based production, or use land as collateral for financial services.

"For us as women, we may say we have enough land but it's for men. Women are not supposed to own land… even when the husband dies, they put the land under their son's name." (KII, CDO, Male)

"Women are not allowed to own any land at all, it is for the men, and the women use it on condition, when they see that they have good harvest, they then interfere."." (Executive director, Local NGO, Female)

Financial exclusion due to lack of collateral and formal requirements

Data shows that access is selective and structurally exclusionary, particularly within formal financial systems. Requirements such as land titles, formal employment, and perceived repayment capacity disproportionately disadvantage women, many of whom lack legally recognized assets or stable income streams.

"With loans, sometimes they ask for a Land title, as security, which the women cannot access. That limits them from accessing long-term loans. We want them to know how to get a land title because some of them have plots of land. Some time back we used to use documents from the Local Councils to show land ownership, but the bank cannot recognize that anymore." (Executive Director, Local NGO, Female)

"They sometimes tend to ignore you when they see the situation you are in, like you cannot manage to pay back. People can look at the way you are and assume that when they give you money, you cannot pay. So, those are the challenges these women face, they leave the poor women to suffer." (KII, Parish Chief, Male)

"Access to financial services is really limited for women because most women are not working and yet most loans are work-based. And then there are business-based loans, yet most women are not that much in the business world, they are

not in the employment world either, so you find that their access to financial services is limited." (Senior Natural Resources Officer, Male)

Reliance on informal group-based financial systems

Data shows that women rely heavily on informal, group-based financial mechanisms, particularly savings groups, as their primary means of accessing financial resources. These systems are more accessible and socially embedded, allowing women to pool resources, access small loans, and build social capital. However, while these groups play a critical role in facilitating financial inclusion, they are typically characterized by limited capital, short-term cycles, and low investment capacity, which constrain their ability to support significant economic transformation.

"If they get the money, they come and sit down as group members and they see the amount of the money, then they divide that money equally in the group. And after dividing the money, I think they bring interest together. They select one day in a week on which they save their money as group members." (Chairman LCI, Amuria)

"Most women are involved in groups to improve income. Sometimes they borrow as a group and divide the money." (LC1 Chairman)

Decision-making power (Agency)

More than half of the respondents, 59% (135/2230) always took part in making decisions regarding use of household income, 49.1% (111/230) on purchase of major assets, 66.4% (152/230) on children's education decisions and 60.1% (137/230) on agricultural decisions. Slightly more than two-thirds of the participants scored moderate for decision-making power (agency). Table 4.

Table 4
Decision-making power (Agency) among the women study participants in Amuria and Kabong, Uganda

Decision Domain	Category	Frequency	Percentage (%)
Use of household income	Always	135	59.0
	Often	63	27.5
	Sometimes	22	9.6
	Rarely/Never	9	3.9
Purchase of major assets	Always	111	49.1
	Often	76	33.6
	Sometimes	18	8.0
	Rarely/Never	21	9.3
Children's education decisions	Always	152	66.4
	Often	48	21.0
	Sometimes	18	7.9
	Rarely/Never	11	4.9
Agricultural decisions	Always	137	60.1
	Often	68	29.8
	Sometimes	17	7.5
	Rarely/Never	6	2.6
Decision-making power score	Low	60	26.1
	Moderate	154	67.8
	High	14	6.1

The qualitative findings provide deeper insight into these contradictions, revealing that women's participation in decision-making is often partial, negotiated, and constrained by entrenched gender norms, particularly in relation to control over income and productive assets. As such, reported involvement does not necessarily translate into actual authority or control, highlighting the distinction between participation and decision-making power.

Male control over income and resources

The qualitative findings reveal that control over income and productive resources remains predominantly male-dominated. Patriarchal norms that position men as heads of households continue to legitimize men's authority over financial decisions, often overriding women's contributions. This results in a situation where women may participate in generating income but lack control over its use, allocation, or investment. Such dynamics undermine women's economic autonomy and limit their ability to translate participation into meaningful empowerment.

"Like now, at home, men still believe they're the heads of the family. So, when you grow things, the man goes and sells them. When they come back with the money sometimes, they cannot show women, they say; after all I'm the head of the family." (KII, Parish Chief, Female)

“Even when they get this money and buy goats or cows, sometimes the men sell off the animals without the women knowing, saying ‘I am the head of the family’.” (Senior Gender and Cultural Officer)

Emerging but uneven empowerment and participation

The findings further point to gradual but uneven shifts in women’s agency, driven by increased exposure, education, and participation in leadership and economic activities. In some cases, women are increasingly asserting their autonomy and engaging in income-generating activities despite resistance, reflecting changing aspirations and adaptive responses to economic pressures. However, these gains are not uniform and often occur within a context of continued negotiation and resistance, indicating that empowerment is incremental rather than transformative. The persistence of structural and cultural barriers means that while some women are able to exercise agency, many others remain constrained, resulting in uneven patterns of empowerment across communities.

“But again, I will say that there’s a shift, at least some mindset change has been realized now. You can now find women who are counselors, those who are LCs, those who are employed have all created an impact now to bring other women on table. That’s why there’s now continuous advocacy and a high number of women involved in all activities,” (KII, District leadership, Male)

“There are very few women whose husbands deny them engagement in business but most of them have paid a deaf ear to the husbands, they want to do something. Because somebody can come back home after their man has stopped them from doing business, and they find that life is very hard, so they end up going back to the market. Most of them move from market to market.” (KII, Community School Teacher, Female)

Structural barriers & constraints

Regarding economic barriers, more than a third of the respondents, 34.9% (n = 68) mentioned high loan interest rates, 28.2% (n = 55) mentioned limited financial resources and lack of collateral, and 20% (n = 39) mentioned lack of land access. Over 80.4% (n = 184) mentioned unpaid work as a barrier, with over 46.2% (n = 85) expressing that it is a significant limitation to economic rights. Socio-cultural norms existed in the communities according to the women and 72.1% (n = 165) perceived limitation from these norms. Less than half, 47% (108/230) of the respondents scored high for structural barriers & constraints. Table 5.

Table 5
Structural barriers & constraints to economic rights among women participants in Amuria and Kabong districts, Uganda

Variable	Category	Frequency (n = 230)	Percentage (%)
Economic barriers	High loan interest rates	68	34.9
	Limited financial resources	55	28.2
	Lack of collateral	55	28.2
	Lack of land access	39	20.0
	Lack of education	36	18.5
	Legal restrictions	26	13.3
	Gender-based violence	22	11.3
Access barriers (land/resources)	High cost	83	46.1
	Gender discrimination	66	36.7
	Community opposition	56	31.1
	Family opposition	45	25.0
	Lack of information	32	17.8
Unpaid care work	Not paid	184	80.4
Impact of unpaid care work	Significant limitation	85	46.2
	Moderate limitation	76	41.3
	No effect	23	12.5
Restrictive socio-cultural norms	Women stay home	202	88.2
	Women don't own land	148	64.6
	Women cannot lead households	126	55.0
	Loan access requires partner approval	133	58.1
Perceived limitation from norms	Yes	165	72.1
	No	64	28.0
Structural barriers & constraints score	Low	91	39.6
	Moderate	31	13.5
	High	108	47.0

While the quantitative findings indicate that nearly half of the women experience high levels of structural barriers and constraints, these figures only partially capture the depth and complexity of the challenges faced. The qualitative findings reveal that these barriers are not isolated but are deeply embedded within socio-cultural systems, gendered labor structures, and environmental realities, which collectively reinforce women's economic marginalization. These constraints operate simultaneously at household, community, and institutional levels, shaping not only women's access to opportunities but also their capacity to benefit from them.

Deep rooted socio-cultural norms and gender inequality

The qualitative findings indicate that structural constraints are strongly underpinned by deeply entrenched socio-cultural norms that systematically position women in subordinate roles within households and communities. These norms define women's identities in relation to men, often limiting their access to education, ownership of assets, and participation in economic and public life. Practices such as bride price reinforce perceptions of women as dependents or property, further legitimizing unequal power relations. As a result, women's economic rights are constrained not only by material limitations but also by socially constructed expectations that restrict their autonomy, mobility, and access to opportunities.

"*You are married off in exchange for a lot of cows, so you're also considered a property because men are polygamous, they marry many women. So, when they are at home, they use these women as workers in the home and they [women] can't own anything, they don't own land, they don't go to school. Only boys are sometimes allowed to go to school when they're already grown." (Executive Director, Local NGO, Female)*

Heavy unpaid care burden and gendered labour roles

A significant structural constraint identified in the findings is the disproportionate burden of unpaid care and domestic labor placed on women, which limits their ability to engage in productive economic activities. Women are primarily responsible for household sustenance, including caregiving, food provision, water collection, and other labor-intensive tasks. These responsibilities are not only unpaid but also time-consuming and physically demanding, particularly in resource-constrained and climate-affected settings. This reduces the time and energy available for income generation, business development, or participation in decision-making spaces, thereby constraining women's economic autonomy and reinforcing gender inequality.

"The youth are there, the men are there, girls are there, elderly are there, vulnerable people are there, but the people who are fending for them are women. And here in Karamoja you know, women move a long distance to look for firewood, water, to build houses, and so on but our men are just there relaxing under the trees." (KII, District Leadership, Male)

Economic and environmental shocks (climate, wildlife, poverty)

The findings further highlight that women's economic rights are significantly constrained by intersecting economic and environmental shocks, including climate variability, poverty, and ecosystem-related challenges such as wildlife destruction. These shocks undermine women's livelihoods, particularly in agriculture, which is highly dependent on environmental conditions. The unpredictability of climate and the loss of crops due to factors such as drought or wildlife intrusion not only reduce income but also discourage continued investment in economic activities.

"You know these people really invest a lot of their money in gardens and all that, trying to catch up with the rain, but at the time when their crops are coming up, elephants destroy them. And that is an obstacle because they really lose hope in anything to do with farming even in the next year. So it really affects them, it discourages them so much." (KII, CDO, Male)

Gender-based violence and social vulnerability

GBV emerged as a critical constraint that directly undermines women's economic rights and agency. The findings indicate that women's attempts to achieve economic independence or accumulate assets can trigger conflict within households, particularly in contexts where traditional gender roles are strongly enforced. This creates an environment where empowerment is not only constrained but also potentially risky, as women may face backlash when they

challenge established power dynamics. GBV therefore functions both as a consequence of inequality and as a mechanism that reinforces it.

“We have a lot of GBV in this place. You find that when this woman starts owning things, it brings about GBV between her and her husband. The man feels that this woman has grown wings more than him because she has started owning things, and yet everything is supposed to be from them.” (KII, CDO, Male)

Enabling environment (facilitators of economic rights)

Regarding facilitators of economic rights, more than half of the women participants, 58.8% (134/230) had women groups/ cooperatives as support systems while 42.5% (97/230) mentioned financial access and 41.7% (95/230) mentioned family support. About 84% (150/230) mentioned the Parish Development Model (PDM) as the government program that they have benefited from, while 70.4% (162/230) perceived the government program to be supportive of economic rights. Less than half of the participants, 47.8% (110/230) rated the women economic rights in their communities as good. About half of the participants, 51%, (118/230) scored moderately for enabling environments (facilitators of economic rights) Table 6.

Table 6
Enabling environment (facilitators of economic rights) of the women participants in Amuria and Kabong districts, Uganda

Variable	Category	Frequency n = 230	Percentage (%)
Support systems	Women's groups/cooperatives	134	58.8
	Financial services access	97	42.5
	Family support	95	41.7
	Government support	87	38.2
	Community support	68	29.8
	Education/training	40	17.5
Group membership	Yes	181	91.4
	No	17	8.6
Government programs benefitted from	PDM	150	83.8
	GROW	17	9.5
	UWEP	13	7.3
	NAADS	4	2.2
	YELP	2	1.1
Perception of government support	Yes	162	70.4
	No	68	29.6
Rating of economic rights by the women	Very good	21	9.1
	Good	110	47.8
	Fair	75	32.6
	Poor	24	10.4
Enabling environment score	Low	12	5.2
	Moderate	118	51.3
	High	100	43.5

While the quantitative findings suggest a moderately supportive enabling environment, with widespread group membership, high engagement with government programs such as the Parish Development Model, and a substantial proportion of women reporting access to support systems, these figures do not fully capture the effectiveness, depth, and transformative potential of these facilitators. The qualitative findings provide further insight into how these enabling structures function in practice, revealing that while they play a critical role in supporting women's economic participation, their impact is often mediated by capacity gaps, uneven implementation, and persistent socio-cultural constraints. As such, the enabling environment is better understood as emerging and supportive, but not yet fully transformative.

Importance of women groups and collective action

The women's groups and collective action mechanisms emerge as central pillars of the enabling environment, providing platforms for financial access, social support, and economic coordination. These groups facilitate savings, access to small loans, and collective entrepreneurship, enabling women to participate in economic activities that might otherwise be inaccessible individually. Beyond financial functions, they also serve as spaces for knowledge sharing, mutual support, and collective problem-solving.

"You see, even in government programs…, the money that goes to good use is the one that we give to women groups and women entrepreneurs. …So, we value a lot, the interventions and partners that work with women organizations, particularly interventions that target livelihood for women because these are providers of households and all of us are part of those households. (KII, District Leadership, Male)

"…Most women are now involved in groups, and they have formed their groups to improve their household incomes, mainly based on entrepreneurship." (KII, District Councilor, Female)

"We have a farmer group for women there and it's doing very well and they're supplying World Food Programme with huge amounts of food. So, what is important is collaboration and partnerships because then, there are things that cause capacity gaps, for example they need some skilling, some bit of training, you need to expose them to some places where they can see a difference." (KII, District Leadership, Male)

Role of government and NGO programs

Programs such as the Women Entrepreneurship Program and community-based savings initiatives contribute to expanding women's access to financial resources and economic opportunities. Similarly, NGO interventions support women through livelihood training, financial inclusion initiatives, and protection services, particularly in addressing vulnerabilities such as GBV. However, the findings suggest that while these programs are widely recognized and valued, their impact is often constrained by issues of scale, sustainability, and uneven reach.

"As a district, we have been trying so much on how to help women in their entrepreneurship, mainly through a government program called WEP, that is the Women Entrepreneurship Program. And besides that, we have been having savings and credit associations at a lower level, that is in the villages." (KII, District Councilor, Female)

"We empower grassroots women and their families economically, socially and we transform their lives through small-scale farming, small saving where they save money and lend to each other to progress their livelihoods." (KII, Executive Director, Local NGO, Female)

"We also protect women who are violated under gender-based violence, we have a women's shelter here for the women survivors of gender-based violence or sexual harassment. We keep them here, counsel them, and we transform their lives through teaching them how to live when they go back." (KII, Executive Director, Local NGO, Female)

Capacity building and skills gaps

Despite the presence of support systems and programs, a critical limitation within the enabling environment is the lack of adequate business skills, financial literacy, and technical capacity among women. The findings indicate that many women engage in economic activities without the necessary skills to sustain or scale their enterprises, leading to high rates of business failure and limited economic progression. Without complementary investments in skills development and capacity building, women's economic activities remain vulnerable and short-lived.

"The women need business skills because even the little that women are doing, there are a lot of gaps, an enterprise cannot last even for a year. You find that it has died, so basically, the starting point would be financial literacy and business skills

for entrepreneurship." (KII, Gender and Cultural Officer, Female)

Emerging shifts in norms and empowerment

The enabling environment is further shaped by gradual shifts in socio-cultural norms, driven by education, exposure, and targeted interventions. These shifts are contributing to increased recognition of women's roles in economic and household decision-making, as well as greater acceptance of women's participation in leadership and economic activities. However, these changes are uneven and coexist with persistent traditional attitudes, indicating that transformation is ongoing and contested.

"At least now with education, there's some change. People are realizing that women can play the same roles like men, especially in households where women and children have gone to school. There's a difference." (KII, District Leadership, Male)

"There has been a lot of change because we now involve the elders and traditional leaders in all our meetings and training. Few have taken it well but others still have that mind of seeing women as inferior. (KII, Executive Director, Local NGO, Female)

Overall women economic rights index score

Slightly less than half of the women 34% (79/229) had their economic rights upheld.

Climate change patterns, impacts and adaptation

Regarding perceptions of climate variability and its implications for livelihoods, nearly all participants, 95.6% (217/230), reported having noticed changes in weather patterns over the past few years. The most commonly observed changes were decreased rainfall, 69.1% (150/217), and more frequent droughts, 59.0% (128/217), while 46.5% (101/217) noted increased temperatures. A majority of participants, 84.7% (182/230), reported reduced crop yields, while 64.7% (139/230) reported increased crop damage as the major impacts. The most common strategies included diversification of income sources, reported by 41.4% (94/230), and engagement in eco-friendly entrepreneurship, 30.8% (70/230). Other strategies included tree planting, 26.4% (60/230), diversification of livelihoods, 22.9% (52/230), and formation of savings groups, 22.9% (52/230). Fewer participants reported adopting drought-resistant crops, 16.7% (38/230), irrigation, 11.9% (27/230), or migration to other areas, 5.7% (13/230). About 10.1% (23/230) reported not adopting any coping strategies. Table 7.

Table 7
Perceived Climate change patterns, impacts on livelihoods, and adaptive strategies among women in Amuria and Kabong districts, Uganda

Variable	Category	Frequency (n = 230)	Percentage (%)
Noticed any changes in weather patterns (e.g., rainfall, temperature) over the past few years	No	10	4.41
	Yes	217	95.6
If yes, what changes have you observed?	Decreased rainfall	150	69.1
	Increased rainfall	18	8.29
	More frequent droughts	128	59.0
	More frequent floods	9	4.20
	Increased temperatures	101	46.5
	Other	1	0.50
Effect of changes in weather patterns on income-generating activities	Reduced crop yields	182	84.7
	Increased crop damage	139	64.7
	Loss of livestock	45	20.9
	Increased cost of agricultural inputs	26	12.1
	Difficulty accessing markets	19	8.84
	Increased difficulty in accessing water resources	42	19.5
	Limited participation in the activities due to heat etc	36	16.7
	Limited ability to access and control resources such as land	37	17.2
	Destroyed gardens	19	8.84
	None	53	24.7
Strategies have you or your community adopted to cope with the impacts of these changes?	Diversification	52	22.9
	Adoption of drought-resistant crops	38	16.7
	Irrigation	27	11.9
	Migration to other areas	13	5.73
	Formation of savings groups	52	22.9
	Diversification of income sources	94	41.4
	Eco-friendly entrepreneurship	70	30.8
	Planting trees	60	26.4
	None	23	10.1
	Other	14	7.10

Discussions

The study set out to assess the economic rights of women in Amuria and Kabong districts, Uganda. Overall, only about one-third of women had their economic rights upheld. Economic participation was generally moderate, characterized by low incomes, limited savings, and expenditure primarily on basic needs such as food, school fees, and healthcare. Access to financial services and productive resources was relatively high, particularly through savings groups, and legal ownership of assets, especially land, remained limited. Women exhibited low decision-making power, with over two-thirds scoring low on agency. Structural barriers were widespread, including high loan interest rates, lack of collateral, unpaid care work, and restrictive socio-cultural norms that limit women's economic autonomy. Enabling factors such as women's groups, government programs (notably the Parish Development Model), and financial services were present but only moderately effective. Climate change was widely perceived, with reduced rainfall, droughts, and declining agricultural productivity reported as major challenges.

The findings of this study demonstrate that while women in Amuria and Kaabong are economically active, their participation remains largely constrained within low-income, subsistence-oriented livelihoods. This reflects broader global patterns where women are disproportionately concentrated in informal and low-return economic activities, particularly in low-income settings, limiting their capacity for asset accumulation and economic advancement (Breitkreuz & Baird, 2025). The predominance of expenditure on basic needs such as food, school fees, and healthcare further highlights the limited scope for wealth accumulation, reinforcing cycles of economic vulnerability.

Despite relatively high access to financial services, particularly through savings groups, this study reveals a persistent gap between financial inclusion and actual economic empowerment. Evidence suggests that while access to financial tools is important, it is insufficient without corresponding control over productive assets, particularly land, which remains a key determinant of economic security and bargaining power (FAO, 2013; Meinzen-Dick et al., 2019). Globally, women account for a small proportion of landholders, and unequal property rights continue to constrain their economic opportunities and resilience.

A critical finding is the low level of agency among women, despite their economic participation. This aligns with longstanding gender and development scholarship emphasizing that empowerment is multidimensional, requiring not only access to resources but also the ability to make strategic life choices (Kabeer, 1999). Evidence shows that enhancing women's decision-making power is essential for translating economic participation into meaningful empowerment outcomes (FAO, 2013; Meinzen-Dick et al., 2019). The observed disconnect between participation and agency highlights persistent intra-household and societal power imbalances.

Structural and socio-cultural barriers emerged as significant constraints to women's economic rights. The burden of unpaid care work, reported by over 80% of participants, is particularly critical, as it reduces women's time for productive engagement and limits access to economic opportunities. This is consistent with global evidence showing that unpaid care responsibilities disproportionately fall on women and contribute to "time poverty," thereby constraining economic empowerment (ActionAid, 2017; UN Women, 2023). Additionally, restrictive gender norms, such as limitations on land ownership and financial autonomy, continue to shape women's economic outcomes, reinforcing inequality across generations.

The presence of enabling factors such as women's groups, government programs (e.g., PDM), and financial services indicates progress toward creating a supportive environment. However, the moderate effectiveness of these mechanisms suggests that current interventions may not adequately address the structural and normative barriers that underpin gender inequality. Evidence from gender-transformative approaches indicates that integrated interventions addressing both economic and social constraints are more effective in achieving sustainable empowerment outcomes (Marcus & Somji, 2024).

Climate change further compounds these challenges, with the majority of women reporting declining agricultural productivity due to droughts, reduced rainfall, and increased temperatures. This finding aligns with global evidence showing that women, particularly in agrarian economies, are disproportionately vulnerable to climate shocks due to limited access to resources, finance, and decision-making power (UKaid, 2021). At the same time, women's adoption of coping strategies such as income diversification and participation in savings groups reflects adaptive resilience. However, the limited uptake of more capital-intensive strategies such as irrigation highlights persistent resource constraints.

The study reveals a critical paradox: while women demonstrate moderate levels of economic participation and access to resources, these do not translate into full economic empowerment due to low agency, structural barriers, and socio-cultural constraints. This reinforces the understanding that women's economic rights are shaped by interconnected systems of inequality, requiring comprehensive and multi-dimensional policy responses.

Conclusions

Women in Amuria and Kaabong districts are actively engaged in economic activities and exhibit moderate access to financial services and enabling structures. However, their economic rights remain constrained by limited asset ownership, low decision-making power, and persistent structural and socio-cultural barriers. Climate change further exacerbates these vulnerabilities by undermining agricultural livelihoods. The findings highlight a significant gap between economic participation and genuine empowerment, emphasizing the need for integrated interventions that address both structural inequalities and environmental risks.

Declarations

Conflict of interest

The authors declare no conflict of interest

Authors' contributions

All authors conceptualized the study. CHM, AT and GB participated in data collection, and drafted the manuscript, CHM, GB, AT, RA, RWN, EM, and SD reviewed and revised the draft manuscript. All authors read and approved the final copy of the manuscript for publication.

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Figures

Overall women economic rights index score

Slightly less than half of the women 34% (79/229) had their economic rights upheld.

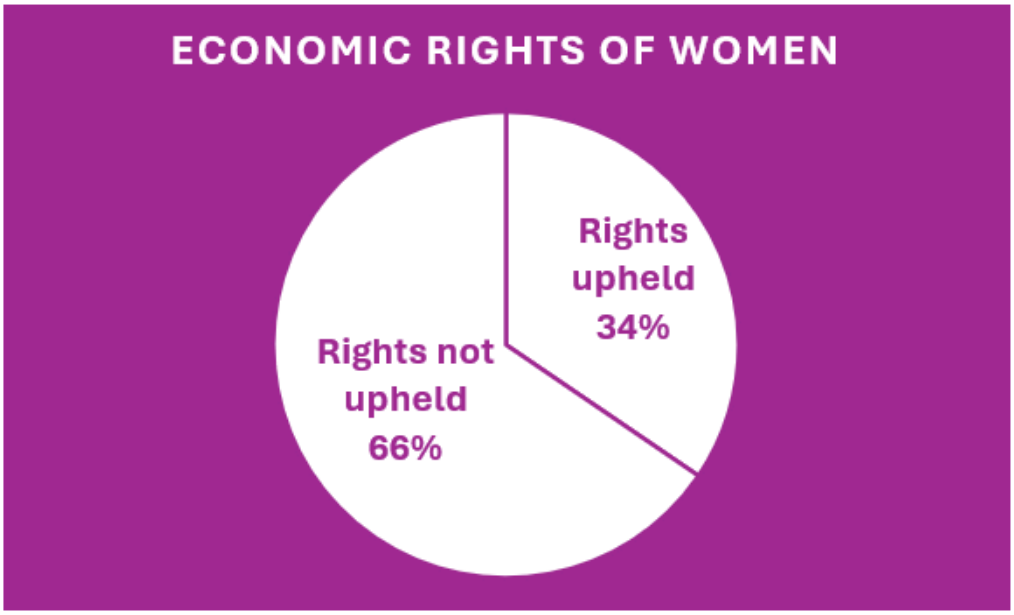


Figure 1. Women economic rights index score of women in Amuria and Kaabong districts, Uganda

Figure 1

Women economic rights index score of women in Amuria and Kaabong districts, Uganda