

## **Gender Dynamics in Community Participation: Implications for Sustainable Food Security Interventions in Northern Uganda**

**Olorunnisola Abiola Olubukola**

Department of Business Administration, Kampala International University, Uganda  
Email: [abiol2k2@kiu.ac.ug](mailto:abiol2k2@kiu.ac.ug)

**Omweri Fred Siambe**

Department of Social Sciences, Machakos University, Kenya  
Email: [fredsiambe@mksu.ac.ke](mailto:fredsiambe@mksu.ac.ke)

**ORCID ID: <https://orcid.org/0000-0001-9721-4205>**

**Brian Besigye,**

Department of Business Administration, Kampala International University, Uganda  
Email: [brianasiimwe10@gmail.com](mailto:brianasiimwe10@gmail.com)

### ***Abstract***

*This study examines the relationship between gender dynamics and community participation in food security initiatives in Northern Uganda, a region recovering from conflict and facing persistent food insecurity. Using a mixed-methods approach—quantitative surveys (n=384) and qualitative data from four districts—the research reveals significant gender disparities in engagement. Women contribute substantial labor but have limited decision-making power, restricted access to resources, and few leadership opportunities. Despite these constraints, the study identifies models of gender-transformative participation that improve household food security, nutritional diversity, and program sustainability. Approaches that support women's meaningful involvement through collective action, technical training, and leadership pathways demonstrate stronger outcomes than those relying on conventional inclusion. The findings highlight the need to move beyond token participation toward strategies that address structural barriers and empower women as agents of change. The study contributes to both theory and practice by showing how gendered power relations shape development outcomes and by offering actionable insights for designing equitable food security interventions. It concludes that sustainable food security in post-conflict Northern Uganda requires a shift from inclusion to transformation ensuring that participation is not only widespread but also empowering across genders.*

**Keywords:** *gender dynamics, food security, post-conflict recovery, women's empowerment, agricultural interventions, participatory development.*

### **Introduction**

Food insecurity remains a significant challenge for development in Northern Uganda, a region still healing from more than two decades of armed conflict involving the Lord's Resistance Army (LRA) and government forces (Alinyo & Leahy, 2022). Although the end of active conflict in 2006 allowed for considerable recovery, underlying vulnerabilities continue to weaken the resilience of food systems, with around 46% of households experiencing some degree of food insecurity (Uganda Bureau of Statistics [UBOS], 2021). Issues such as climate variability, market instability, limited

agricultural support services, and disrupted social structures exacerbate these difficulties, creating a complex environment for food security initiatives (Opiyo et al., 2020). Community involvement has become a crucial focus in tackling food insecurity, based on the understanding that initiatives driven by local communities are more adept at addressing contextual needs and fostering greater sustainability (Chambers, 2017; Hickey & Mohan, 2018). As a result, international organizations, government bodies, and civil society groups have prioritized participatory methods in the food security programming of Northern Uganda, including community-based agricultural extension, farmer field schools, village savings and loan associations, and producer cooperatives (Food and Agriculture Organization [FAO], 2020).

However, community participation is influenced by gender and is not a neutral process. It unfolds within social contexts that embody established power dynamics, unequal access to resources, and gendered divisions of labor and decision-making authority (Cornwall, 2016; Guijt & Shah, 2019). In Northern Uganda, particularly, gender dynamics are notably complicated due to the transformative impacts of conflict, displacement, and the post-conflict reconstruction process on traditional gender roles and relationships (Ahikire et al., 2021). Despite women representing approximately 70% of the agricultural workforce and holding primary responsibility for household food security, their capacity for meaningful participation in community-level food security efforts is impeded by various structural and cultural obstacles (Ministry of Agriculture, Animal Industry and Fisheries [MAAIF], 2021).

Despite the increasing acknowledgment of these gendered aspects, there is a lack of comprehensive empirical research that systematically explores how gender dynamics shape the nature, quality, and outcomes of community participation in food security interventions within the unique post-conflict context of Northern Uganda. This gap in knowledge hampers the creation of more gender-responsive and effective participation strategies that could promote both equity and sustainability in food security programs.

This research aims to fill the existing knowledge gap by exploring three related questions; In what ways do gender dynamics influence the nature, scope, and quality of community engagement in food security initiatives across Northern Uganda?, Which structural, institutional, and cultural elements either promote or hinder meaningful participation across gender divides in these programs? and How do varying forms of gendered participation impact the effectiveness and sustainability of food security results at both household and community levels? By tackling these questions, this study enhances both theoretical perspectives on gendered participation and practical strategies for creating more successful food security programs. It moves past simplistic ideas of female inclusion to investigate the depth and impact of participation across genders, providing insights into how participation can evolve into a transformative process that addresses not only immediate food security issues but also underlying power dynamics. The results are intended to guide policy and programmatic efforts that can more effectively leverage the full productive and leadership capabilities of all community members to foster more resilient and equitable food systems in Northern Uganda's challenging post-conflict context.

## **Literature Review and Models**

### **Understanding Community Participation in Development Discourse**

Community participation has emerged as a key concept in development theory and practice over the last forty years, although its interpretation and implementation have seen substantial changes. Early advocates like Chambers (1983) and Korten (1990) criticized top-down development tactics by highlighting the importance of local knowledge, capacity, and agency. This shift in perspective recognized community members as active participants instead of passive beneficiaries of development efforts. Recent academic work has further refined these ideas, making a distinction between instrumental participation where communities provide labor or resources to externally designed projects—and transformative participation that allows communities to have a meaningful impact on development priorities and processes (Hickey & Mohan, 2018; White, 2016). Cooke and Kothari (2001) raise critical points, arguing that participation can either empower genuinely or function as a "tyranny" that legitimizes external agendas while masking deeper power dynamics. In the context of food security initiatives, Moragues-Faus and Marsden (2017) present a typology of participation methods, ranging from consultative approaches (where communities provide feedback but external parties retain decision-making power) to collaborative governance (where communities have significant control over program design and execution). Cornwall's (2016) important work further differentiates between "invited spaces" created by outside actors and "claimed spaces" that are initiated and governed by communities. This theoretical development emphasizes the necessity to analyze not just the existence but also the quality of participation, raising questions regarding who participates, in what roles, with what level of influence, and with what results (Gaventa, 2019). However, as Cleaver (2019) points out, a significant portion of participatory development literature lacks a gender perspective, overlooking how gender dynamics fundamentally affect these participatory processes and their outcomes.

### **Gender Aspects of Participation: Theoretical Insights**

Feminist academics have criticized mainstream participation narratives for overlooking the intersection of gender with participatory practices (Cornwall, 2019; Kabeer, 2015). These critiques emphasize several crucial dimensions that are particularly relevant to food security initiatives. To begin with, formal participation does not equate to meaningful engagement. As Agarwal (2010) illustrates in her pioneering studies on participatory forestry groups in South Asia, women's presence in community meetings often signifies "nominal participation" instead of active involvement or influence. Her classification of participation—ranging from nominal (basic membership) to interactive (having a voice) to transformative (exercising influence)—serves as a valuable tool for evaluating the quality of gendered participation beyond simple attendance statistics.

Additionally, the participatory environments themselves are gendered. Cornwall (2017) contends that community meetings, even when seemingly open to everyone, operate under implicit norms and practices that may favor masculine modes of communication, knowledge claims, and leadership styles. These dynamics can effectively undermine or diminish the value of women's contributions even when they are present (Guijt & Shah, 2019). Participation takes place within larger structural constraints. Chant's (2016) idea of the "feminization of responsibility" illustrates how women's growing involvement in development efforts often exacerbates existing labor burdens without a corresponding increase in decision-making power or access to resources. Genuine participation,

according to Rao and Kelleher (2016), necessitates addressing both formal barriers (policies, resources, laws) and informal barriers (norms, attitudes, household dynamics) to ensure meaningful engagement. Furthermore, women should not be seen as a homogenous group. Intersectional frameworks highlight how gender intersects with age, marital status, education, wealth, and ethnicity to create varied experiences of participation (Nightingale, 2017). This viewpoint warns against generalized approaches that may assist already-advantaged women while further marginalizing vulnerable groups.

These theoretical frameworks collectively stress the importance of examining not only women's nominal inclusion in participatory activities but also the quality of that participation, the structural and cultural factors that influence it, and its potential to transform underlying power imbalances alongside immediate food security challenges. The interplay of gender, participation, and food security becomes especially intricate in post-conflict environments like Northern Uganda. The consequences of conflict and its aftermath often reshape gender roles and relationships in ways that present both challenges and opportunities for more equitable participation in food systems (El-Bushra & Sahl, 2005; Myrntinen et al., 2020). Research in various post-conflict contexts has shown that armed conflict typically escalates women's economic responsibilities, while men's traditional roles may be disrupted due to displacement, military involvement, or incapacitation (Bouta et al., 2018). In the case of Northern Uganda, Ahikire et al. (2021) illustrate how displacement into camps during the LRA conflict led to changes in the traditional Acholi and Lango gender divisions of labor, with women taking on greater responsibilities for household provisioning.

However, these changing roles do not necessarily result in increased decision-making authority. Stites et al. (2019) reveal that resettlement efforts in post-conflict Northern Uganda frequently reinforced traditional male dominance over land and productive resources despite women's increased economic roles during displacement. In addition, Dolan (2009) notes that post-conflict reconstruction efforts often prioritized reinstating "traditional" gender hierarchies deemed essential for social stability, which inadvertently strengthened women's subordinate role in agricultural decision-making. Food security initiatives in these settings must navigate a complicated landscape. On one side, they function within established gender norms and power dynamics that can hinder meaningful involvement. Conversely, post-conflict transitions present possible "critical junctures" where new, more equitable participation patterns could emerge (O'Reilly et al., 2015). As Nakamura (2018) discusses in her work on Northern Uganda, the disruption of traditional frameworks during conflict created opportunities to rethink gender dynamics during recovery, which has implications for community organization regarding food security issues. The existing empirical literature that specifically examines gender aspects of participation in Northern Uganda's food security programs remains limited. Notable exceptions include Najjingo-Mangheni et al. (2020), who document gender-specific access to agricultural extension services in Lira District, and Ochen (2018), who investigates women's collective action groups in post-conflict Pader. These investigations emphasize ongoing obstacles to women's substantial participation, such as limited land rights, restricted mobility, significant domestic responsibilities, and cultural norms defining suitable gender roles in public settings. Nonetheless, substantial knowledge gaps still exist concerning how these dynamics unfold across various types of food security initiatives, how they differ across Northern Uganda's diverse ethno-cultural landscapes, and critically, how different models of gendered participation impact the sustainability of food security outcomes. This study seeks to fill these gaps through a thorough empirical analysis.

## **Theoretical Framework: Gender-Transformative Participation**

This study utilizes a comprehensive theoretical model that incorporates three complementary viewpoints: feminist political ecology (Elmhirst, 2015), the Women's Empowerment in Agriculture Framework (Alkire et al., 2013), and transformative participation theory (Hickey & Mohan, 2018). Feminist political ecology serves as the conceptual foundation, focusing on how gender interacts with environmental governance, access to resources, and community decision-making related to food systems. This viewpoint emphasizes how gender relations not only influence who engages in food security initiatives but also determine which knowledge is prioritized, what goals are set, and how benefits are allocated. The Women's Empowerment in Agriculture Framework provides analytical aspects for exploring gender roles in agricultural settings, specifically examining women's involvement in: (1) production decisions; (2) access to and control over productive resources; (3) control over income utilization; (4) community leadership; and (5) management of time. These aspects offer structured perspectives for investigating gender inequalities in participation. Transformative participation theory differentiates between technical methods that preserve current power dynamics and transformative methods that address fundamental structural inequalities. This distinction is essential for assessing whether food security initiatives simply exploit women's labor while perpetuating traditional hierarchies, or whether they foster significant changes in gender relations within food governance.

When integrated, these perspectives create a Gender-Transformative Participation framework that directs this research. This framework views sustainable food security as necessitating not only technical solutions but also shifts in the power dynamics governing food systems. It frames participation as not just a means to implement predetermined interventions more efficiently but as a potential driver for challenging limiting gender norms and establishing more equitable food governance systems. The framework specifically investigates participation along three dimensions; Breadth of participation: Who engages across gender, age, marital status, and socioeconomic status, and what selection processes either promote or hinder inclusive involvement; Depth of participation: The quality and impact of participation, ranging from mere tokenism to substantial voice and leadership in decision-making processes and Transformative potential: The degree to which participation confronts restrictive gender norms and enhances women's agency beyond the specific intervention. This integrated framework guides both the methodological strategies and analytical emphasis of the current study, offering conceptual tools for exploring the intricate relationship among gender dynamics, community participation, and sustainable food security outcomes in Northern Uganda's post-conflict landscape.

## **Methodology**

### **Research Design**

This research utilized a sequential mixed-methods design (Creswell & Creswell, 2018) to examine gender dynamics related to community participation in food security interventions throughout Northern Uganda. This methodology integrated quantitative assessments of participation trends and food security results with a qualitative examination of the underlying factors and personal experiences. The investigation unfolded in three stages and these are; Exploratory qualitative stage, Quantitative survey stage and In-depth qualitative stage. This approach allowed for methodological triangulation while leveraging the complementary strengths of diverse methods (Teddle &

Tashakkori, 2009). The integration of methods took place at various levels: conceptualization (utilizing qualitative insights to inform the survey design), sampling (choosing qualitative case studies based on quantitative results), and interpretation (applying qualitative data to elucidate quantitative trends).

## **Research Sites and Context**

The research was carried out across four districts in Northern Uganda Gulu, Kitgum, Pader, and Amuru chosen to reflect a variety of post-conflict recovery patterns, agricultural systems, and ethno-cultural backgrounds. All districts were significantly affected by displacement during the LRA conflict, with differing resettlement and recovery patterns since peace was restored in 2006. Within each district, research sites were intentionally chosen to encompass communities with different kinds of food security interventions (agricultural extension initiatives, farmer field schools, producer cooperatives, and village savings and loan associations that included food security elements), Varying proximities to district centers (to capture the rural-urban spectrum) and varying lengths of resettlement (recently resettled versus longer-established communities). This intentional selection approach facilitated a comparative analysis across varied contexts while retaining a focus on the primary research questions concerning gender dynamics in participation.

## **Target Population and Sampling Techniques**

The target population consisted of community members who were eligible to engage in food security interventions within the selected districts. The study utilized a multi-stage sampling strategy to carry out District selection, Sub -county selection, Parish selection, Village selection and Household selection using household lists obtained from Local Council officials. The quantitative segment comprised 384 households, determined using Cochran's formula with a 95% confidence level and a 5% margin of error. This sample was proportionately allocated across the four districts, as illustrated in Table 1.

**Table 1: Distribution of Survey Respondents by District and Gender**

District	Male	Female	Total	Percentage
Gulu	46	54	100	26.0%
Kitgum	42	48	90	23.4%
Pader	43	52	95	24.8%
Amuru	47	52	99	25.8%
Total	178	206	384	100%

This sampling strategy guaranteed a representation of a variety of viewpoints while allowing for both a general overview of themes and a detailed examination of particular dynamics.

## **Research Tools**

The research employed several complementary tools which included; Household survey questionnaire, Key informant interview guide, focus group discussion guide and Case study protocol which is a structured method for recording. All tools were translated into local dialects (Acholi and

Lango), back-translated for accuracy, and pre-tested in communities similar but not identical to the study areas.

## **Data Gathering Methods**

Data collection took place from January to September 2022 and utilized various techniques i.e. Household surveys, Key informant interviews, Focus group discussions, Case study documentation and Field observations. The research followed ethical guidelines including obtaining informed consent, ensuring confidentiality, respecting cultural sensitivities, and minimizing disruption to community activities. Ethical clearance was secured from relevant authorities before the data collection process began.

## **Data Analysis and Presentation**

### **Quantitative Analysis**

Survey data were processed using SPSS (version 28), utilizing Descriptive statistics that included Frequencies, percentages, and cross-tabulations to depict participation trends across gender and other demographic characteristics, Participation indices, Food security evaluation, Bivariate analysis (Chi-square tests, t-tests, and correlation analyses to explore connections between gender, participation metrics, and food security results) and Multivariate analysis using Multiple regression and logistic regression models to determine predictors of participation quality and food security results while adjusting for relevant variables.

### **Qualitative Analysis**

Qualitative data were assessed using NVivo 12 software with a thematic approach of Systematic coding, Cross-case analysis, Narrative analysis and Quotation selection:

### **Integrated Analysis**

The integration of quantitative and qualitative findings was achieved through, Joint displays, Case comparisons, Theory building by Formulating explanatory models of how gender influences participation and outcomes. Results are presented using text, tables, figures, and illustrative quotations to offer both systematic evidence and a rich contextual understanding.

## **Findings and Observations**

### **Patterns of Gendered Participation in Food Security Initiatives**

#### **Participation Rates and Types**

The study revealed notable gender discrepancies in both the rates and forms of participation across food security initiatives. Overall, 73.6% of surveyed households indicated involvement in at least one food security initiative, with a slightly higher participation rate among women (68.9%) compared to men (64.2%). However, this overall figure conceals significant variations among

different initiative types, as illustrated in Table 2. Table 2: Gender Distribution of Participation by Initiative Type

Initiative Type	Male (%)	Participation (%)	Female (%)	Participation (%)	Gender (pp)	Gap	Statistical Significance
Agricultural extension programs	61.8		42.3		19.5		p<.001
Farmer field schools	54.3		63.7		-9.4		p<.05
Producer cooperatives	42.1		26.8		15.3		p<.001
Village savings and loan associations	31.4		79.2		-47.8		p<.001
Community seed banks	46.7		59.8		-13.1		p<.01
Food storage initiatives	39.5		52.6		-13.1		p<.01
Nutrition education programs	28.7		68.4		-39.7		p<.001
Market linkage initiatives	51.3		32.9		18.4		p<.001

Men primarily led efforts aimed at commercialization (including producer cooperatives and market linkage programs) and the transfer of technical knowledge (such as agricultural extension), whereas women participated more actively in initiatives that centered on household food management (like nutrition education and food storage), collective savings (Village Savings and Loan Associations), and practical learning opportunities (farmer field schools). These trends largely mirror the traditional roles and responsibilities assigned by gender within communities in Northern Uganda.

Qualitative data highlighted how these gender-specific patterns of participation are influenced by both formal selection processes and informal social influences. A male agricultural extension officer shared: *"When we conduct training in a community, we officially invite household heads, which typically means men are the ones who participate. Women who show up are often widows or those standing in for absent spouses. This has become our usual practice, even though we realize that women carry out the majority of the agricultural labor."*

Discussions with women further revealed how household dynamics impact their choices regarding participation: *"My husband goes to the cooperative meetings because they involve discussions about marketing and finances. He believes these topics are meant for men. However, I am the one who participates in the farmer field school because it requires consistent effort in the demonstration garden, and he claims he is too occupied to attend."*

The research also investigated how gender influences roles and responsibilities within these initiatives. As indicated in Table 3, men were more frequently found in leadership and decision-making roles, while women were mainly involved in implementation and labor-heavy tasks.



**Table 3: Gender Distribution of Roles in Food Security Initiatives**

Role Type	Male (%)	Female (%)	Gender Gap (pp)
Formal leadership positions	62.7	37.3	25.4
Committee membership	58.6	41.4	17.2
Training facilitation	71.3	28.7	42.6
Record keeping	42.1	57.9	-15.8
Labor contribution	41.8	58.2	-16.4
Regular attendance	46.3	53.7	-7.4

The segregation of roles was particularly evident in mixed-gender participation initiatives. Even in initiatives predominantly composed of women, such as village savings and loan associations (VSLAs), men often held important leadership roles. A participant in a focus group noted: "In our VSLA, women make up the majority of members, but the positions of chairperson and treasurer are held by men. It is believed that men are more capable of managing financial matters and can command more respect when it comes to conflict resolution. However, the responsibilities of recording attendance, collecting savings, and organizing meetings predominantly fall on women." (Female VSLA member, Gulu District)

Analysis of case studies indicated that these trends were shaped by both formal requirements related to capabilities (such as literacy, numeracy, and mobility) that placed women at a disadvantage, as well as informal social norms that dictated acceptable gender roles. Organizations involved often perpetuated these dynamics by directing training opportunities to existing leaders (mainly men) instead of developing pathways for emerging leadership. Depth of participation and quality significantly differed by gender. Women demonstrated notably lower scores on measures pertaining to active voice, influence over decision-making, and access to information—all essential components of meaningful participation. As shown in Figure 1, these gaps persisted across all four districts, although the extent varied.

Observational analysis of meetings shed light on these trends, indicating how gendered communication norms hindered women's meaningful involvement, even when they were physically present: "In mixed-gender meetings, women tend to cluster at the edges. When they do speak, it is often only in response to direct inquiries rather than offering their own opinions. Men dominate the conversation, interrupt more frequently, and their suggestions receive greater consideration from facilitators." (Field observation notes, Amuru District). In focus groups, women expressed both external limitations and internalized barriers that impacted the quality of their participation: *"Even when I have ideas, I hesitate to voice them because I'm afraid of using incorrect technical language. The agricultural officers mix English with Acholi, and educated men in the meeting grasp these terms more easily. If I make a mistake, people might laugh."* (Female farmer, Kitgum District)

*"As a woman, if I speak too assertively in public meetings where my husband is present, others will regard me as disrespectful. So sometimes I have the answer but choose to stay silent, or I share my thoughts privately with the female field officer after the meeting."* (Female cooperative member, Gulu District)

These results emphasize how mere attendance—often recorded in official project reports—can obscure substantial inequalities in the quality of participation, which can ultimately affect both

individual gains and program results. The research explored how implementing organizations—such as government agencies, NGOs, and community-based organizations—understood and approached gender within their participation strategies. An examination of organizational documents and key informant interviews revealed three main approaches, summarized in Table 4.

Table 4: Typology of Institutional Approaches to Gendered Participation

Approach	Key Characteristics	Prevalence (% of initiatives)	Example Strategy
Gender-neutral	Assumes equal access to participation opportunities; no specific gender mechanisms	37.5%	Open invitation to community meetings; selection based on land ownership or household head status
Gender-inclusive	Recognizes barriers; employs quotas or targeted outreach to ensure female presence	42.3%	Requiring 30% female participation; creating separate women's groups; scheduling to accommodate women's time constraints
Gender-transformative	Addresses underlying power relations; combines participation with structural changes	20.2%	Coupling participation with land rights initiatives; building women's leadership capacity; engaging men as allies; addressing household dynamics

Most initiatives (79.8%) utilized either gender-neutral or gender-inclusive strategies that concentrated on women's visible presence without genuinely tackling underlying power dynamics or structural limitations. The few that used gender-transformative strategies exhibited unique traits: a clear theory of change concerning gender relations, consideration of informal norms along with formal systems, involvement of men in discussions about gender attitudes, and the combination of leadership development alongside technical training. Key informants recognized shortcomings in the prevalent methods: "Numerous projects set gender targets—counting women participants, establishing women's groups, etc. However, they seldom confront the core issues of power, voice, and control over resources. Women participate in training sessions but may struggle to apply what they learn if they lack control over land or decision-making in farming." (NGO Gender Specialist, Gulu District)

*"Organizations are pressured to prove gender inclusion through basic metrics, such as '50% female participants.' As a result, we tend to concentrate on simply getting women involved rather than tackling the more challenging task of changing the conditions of their involvement." (Project Manager, International NGO)*

Case studies highlighting gender-transformative strategies uncovered significant features of implementation, including: (1) long-term engagement instead of short-term projects; (2) gender dialogues at the community level that clarified power relations; (3) the combining of technical agricultural education with leadership skill development; and (4) the establishment of independent women's spaces alongside co-ed forums. A notable initiative in Pader District merged traditional farmer field schools with a "household mentoring" approach that engaged couples in collaborative planning for food security. A program officer noted: "We discovered that instructing women in enhanced agricultural techniques was insufficient when their husbands made decisions about planting and income. We now collaborate with households as units, encouraging discussions about shared food security objectives and how gender roles might be renegotiated to realize them. This acknowledges that participation continues at home after training is completed." (Program Officer, Pader District). This initiative showed significantly higher adoption rates of practices (68% in

contrast to 41% in traditional approaches) and improved sustainability of outcomes, indicating the effectiveness of methods that consider participation within broader gender power dynamics.

### Enabling Factors and Barriers to Equitable

**Participation** The study identified multiple elements that either supported or hindered equitable participation across gender lines. A multivariate analysis of survey data pointed out important predictors of quality participation for women, as illustrated in Table 5.

**Table 5: Factors Associated with Women's Substantive Participation (Multiple Regression)**

Factor	Standardized Beta	p-value
Educational attainment	0.37	<0.001
Land ownership/secure tenure	0.34	<0.001
Spousal support for participation	0.29	<0.001
Prior leadership experience	0.28	<0.001
Participation in women-only groups	0.26	<0.01
Distance to meeting venue (negative)	-0.25	<0.01
Childcare responsibilities (negative)	-0.23	<0.01
Age	0.21	<0.01
Household wealth	0.19	<0.05
Literacy in local language	0.18	<0.05

Educational achievement was identified as the most significant factor influencing women's meaningful participation ( $\beta=0.37$ ,  $p<.001$ ), closely followed by land ownership or secure tenure ( $\beta=0.34$ ,  $p<.001$ ), and support from spouses ( $\beta=0.29$ ,  $p<.001$ ). These quantitative results were consistent with qualitative data that highlighted various barriers and facilitators operating at the individual, household, community, and institutional levels. At the individual level, factors such as literacy, self-confidence, and time limitations notably impacted women's capacity for substantive participation. Women frequently expressed that their roles in domestic duties and caregiving restricted their engagement, with 78.3% identifying these as major obstacles. Younger women with young children encountered particularly daunting challenges:

“When you have young kids, it’s tough to attend meetings regularly. If the child is unwell or crying, focusing is impossible. Sometimes I miss key information because I’m caring for my baby at the back of the meeting. Men don’t experience this issue.” (Female farmer, Amuru District)

At the household level, family dynamics and the attitudes of spouses were crucial determinants. Women who had encouraging partners noted significantly better participation quality ( $t=4.76$ ,  $p<.001$ ). Focus group discussions revealed intricate negotiations within families:

“My husband allows me to join the cooperative now because he’s seen other families benefit from wives’ involvement. But there are strings attached—I must finish all household chores first, can’t socialize after meetings, and need to run any new farming ideas by him before acting.” (Female cooperative member, Kitgum District)

At the community level, existing gender norms greatly shaped participation opportunities. Communities that exhibited more progressive gender views (as assessed through a standardized scale) showed reduced gender disparities in participation quality ( $r=0.42$ ,  $p<.001$ ). Local leaders played a particularly significant role:

*“When the LCI [Local Council chairperson] began to actively promote women in leadership, attitudes started shifting. He began to call on women first in community meetings and publicly acknowledged their contributions. Now, more women feel empowered to participate.” (Male community elder, Gulu District)*

At the institutional level, particular design features of programs had a major impact on equitable participation. Multivariate analysis highlighted initiative characteristics that forecasted more equitable involvement, such as; Scheduling that catered to women’s time restrictions, Provision of childcare during events, Gender-segregated settings for initial discussions and Capacity-building that took place before substantive decision-making

At the institutional level, certain design aspects of initiatives played a pivotal role in determining participation equity. Multivariate analysis pinpointed program characteristics that led to more balanced engagement, including: Scheduling that considered women’s time constraints, Availability of childcare during activities, Gender-segregated environments for preliminary dialogue, and Pre-decision capacity building, alongside Transparent information dissemination via various channels, as well as Graduated leadership chances that gradually bolstered confidence.

Techniques for gender-responsive facilitation were especially significant in promoting more equitable participation dynamics. As one key informant noted:

*“Simply having women in the room isn’t sufficient. Our facilitators now employ structured methods like small group discussions before plenary sessions, systematic rotation of speaking opportunities, and anonymous suggestion techniques. These strategies help dismantle the cultural barriers that prevent women from speaking confidently in mixed-gender settings.” (NGO Program Director, Amuru District)*

Case studies of successful initiatives uncovered additional factors contributing to success, including collaboration with traditional cultural institutions. In Acholi communities, initiatives that involved clan leaders in conversations about changing gender roles exhibited improved legitimacy and sustainability:

*“Collaborating with rwodi [traditional chiefs] was vital. When esteemed cultural leaders openly advocated for women’s participation in food security decisions, framing it as aligned with Acholi values of family welfare, community resistance significantly lessened.” (Program Manager, Gulu District)*

### **Participation Quality and Food Security Outcomes**

A key research inquiry focused on how gendered participation patterns relate to food security results. The investigation uncovered notable connections between the meaningful involvement of women and enhanced indicators of household food security, even after accounting for variables like socioeconomic status, land access, and other possible confounding factors. Evaluating data with the Household Food Insecurity Access Scale (HFIAS) demonstrated that households receiving high scores for women's participation quality experienced significantly reduced food insecurity (mean score 6.3 vs. 9.7,  $p<.001$ ) in comparison to those with lower scores. Likewise, a positive correlation

was found between dietary diversity (assessed via the Household Dietary Diversity Score, HDDS) and women's substantive participation ( $r=0.39$ ,  $p<.001$ ). These associations remained significant in multivariate regression analyses that adjusted for pertinent variables. The evidence suggests that women's meaningful engagement had the most significant positive correlation with food security outcomes in middle and lower-wealth households, highlighting its crucial importance for at-risk populations. Qualitative data provided insights into the mechanisms behind these statistical connections:

*"When women engage meaningfully in agricultural programs, they can more effectively synchronize production choices with the food necessities of the household. Men typically focus on cash crops, but women ensure that diverse food crops are cultivated alongside income generation."*  
(Agricultural Officer, Kitgum District)

Additionally, the study revealed that the sustainability of food security enhancements varied widely depending on the methods of participation used. Programs utilizing gender-transformative strategies demonstrated more lasting impacts, with advantages lasting an average of 17 months following program conclusion, compared to only 9 months for gender-neutral approaches ( $t=3.84$ ,  $p<.01$ ).

Longitudinal analysis of case study communities illustrated that interventions fostering women's substantive participation generated secondary benefits for broader food system resilience, such as; Improved sharing of knowledge within community networks, Greater adaptation of methods to address household-specific challenges, Better integration of nutritional considerations in production decisions, More effective passing of agricultural knowledge to younger generations and Increased reinvestment of agricultural earnings into food security requirements. These results imply that the connection between gender-equitable participation and food security outcomes goes beyond immediate production advancements, influencing systemic resilience factors that support sustained food security in difficult post-conflict scenarios.

### Transformative Changes in Gender Relations

Beyond the measurable outcomes of food security, the study explored how involvement in food security programs affected broader gender relations within families and communities. A mixed-methods analysis uncovered intricate patterns of both change and stability in gender dynamics related to participation experiences. Survey results revealed that 63.7% of women participants felt they had more influence in household decision-making after engaging in food security initiatives, with 41.5% reporting a "significant improvement" in their overall standing within the household. However, these changes varied across different areas, with more substantial advancements noted in decisions related to food production and preparation (76.8% reported increased influence) compared to financial control from agricultural sales (48.3%) or decisions regarding land allocation (39.1%). Qualitative insights offered a deeper understanding of these changes. Many women recounted gradual negotiations rather than sudden alterations in gender relations: "Before I joined the cooperative, I had no say in the crops we would cultivate. Now my husband consults me because he realizes I have gained knowledge from the farmer field school. He still makes the final call, but at least my expertise is acknowledged and sometimes my advice is considered." (Female farmer, Gulu District)

*"Taking part in the market linkage program has allowed me to manage the income from the vegetables I grow in my kitchen garden. My husband still manages the income from the main field crops, but having even this small independent income has altered how he treats me—there is now more respect."* (Female farmer, Kitgum District)

Programs that intentionally included gender-transformative elements led to more significant shifts in gender relations. Specifically, strategies that merged women's economic empowerment with household dialogue techniques showed encouraging outcomes. A male participant remarked: "The household mentoring approach opened my eyes to the benefits our family gains when my wife has a greater say in farming decisions. Initially, I resisted, thinking these ideas were foreign concepts undermining our culture. But when we discussed our common aspirations for our children's future, I realized some of our traditions needed to evolve to meet present challenges." (Male farmer, Pader District). Community leaders observed noticeable changes in gender dynamics during public discussions following ongoing engagement in initiatives: "Five years ago, women rarely spoke in community planning meetings unless prompted. Now, many women confidently share their opinions, challenge proposals, and some even confront male leaders if they feel that community needs are not being addressed. This transformation has gradually occurred through their involvement in food security groups, where they practiced speaking and had their knowledge recognized." (Local Council Chairperson, Amuru District)

Nonetheless, the research highlighted considerable obstacles to transformative change, including backlash effects in certain settings. About 22% of women participants reported facing negative reactions from partners or community members as a result of their increased visibility and participation, such as heightened domestic tensions, gossip, social sanctions, or added workloads as a form of discouragement. The longevity of gender-related changes seemed closely tied to whether initiatives included men as allies instead of solely focusing on women. Programs that featured male champions, couple-centered strategies, or community-wide gender discussions exhibited stronger resilience against backlash and more lasting transformations in gender relations.

## **Discussion and Implications**

### **Theorizing Gendered Participation in Post-Conflict Contexts**

The outcomes of this research enhance theoretical insights on gendered participation in several significant ways. First, they reveal the limitations of understanding participation merely in terms of physical presence or numerical representation. The notable discrepancies identified between women's surface participation rates and their actual influence underscore the necessity for more refined theoretical frameworks that differentiate between various qualities or depths of participation. Agarwal's (2010) typology of participation, which ranges from nominal to transformative, serves as a valuable foundation; however, this research indicates additional dimensions that are particularly significant in post-conflict situations. In Northern Uganda, the quality of participation was influenced not only by formal rules and available resources but also by psychosocial factors related to the aftermath of conflict, such as trauma effects, shifts in household structures, and communities' aspirations to reclaim cultural identity, often emphasizing "traditional" gender roles as a means of restoring stability following displacement.

Furthermore, the findings contest simplistic narratives that portray conflict as either universally liberating or oppressive for women's involvement. The research uncovers more intricate patterns in which disruptions caused by conflict created conditional opportunities for rethinking gender relations, though these opportunities only materialized when intentional processes fostered their growth. As one key informant noted: "The conflict era necessitated changes in gender roles—women took on the roles of household heads and primary providers during the period of displacement. However, once communities resettled, there was a strong inclination towards pre-conflict gender norms as a means of cultural reclamation. Programs that specifically addressed this tension—acknowledging both the importance of cultural identity and the necessity for adapted gender

relations in the post-conflict context—proved to be the most effective.” (NGO Director, Gulu District) This indicates a need for theoretical frameworks that view post-conflict transitions as crucial moments where gender relations are actively renegotiated instead of being merely transformed or restored. Additionally, the research enhances the understanding of the interplay between participation and empowerment within food security frameworks. While previous literature often portrays participation as a pathway towards empowerment, this study reveals a more cyclical relationship in which a certain level of empowerment (notably regarding mobility, confidence, and intra-household bargaining power) is frequently needed for genuine participation to take place. This circular dynamic presents both challenges and opportunities for intervention strategies, highlighting the importance of multilevel approaches that simultaneously address factors at the individual, household, and community levels rather than solely concentrating on the creation of participatory environments.

### **Policy Suggestions**

From these insights, several policy suggestions have been developed for government agencies, development partners, and civil society organizations focused on food security in Northern Uganda.

For Government Bodies, there is need to adjust extension service delivery models to rectify gender biases in existing methods, especially the emphasis on household heads as primary clients, enhance the enforcement of Uganda's Land Policy regulations supporting women's land rights, particularly regarding customary tenure arrangements common in Northern Uganda, embed gender-responsive participation approaches within formal agricultural development frameworks, such as the Agricultural Sector Strategic Plan and District Development Plans and Invest in developing women's agricultural leadership through targeted capacity-building initiatives and formal representation in agricultural planning at the parish, sub-county, and district levels.

For Development Partners and NGOs, there is need to Transition from mere participation quotas to comprehensive strategies that focus on the quality of participation, including preparatory capacity building, cultural adaptation, and sustainability planning, Establish and use more nuanced criteria for assessing the gender aspects of participation that reflect influence and decision-making power rather than simple attendance, Lengthen program durations to align with the gradual process of changing gender norms, aiming for a minimum three-year commitment for initiatives targeting transformative results, Emphasize locally-led adjustments to participation methodologies over standardized global practices and acknowledging the unique dynamics of Northern Uganda in a post-conflict setting.

Additionally, Community-Based Organizations, it is important to reinforce women's collective action groups as platforms for boosting confidence, solidarity, and leadership skills ahead of participating in mixed-gender discussions, encourage intergenerational conversations between older and younger women to navigate evolving gender norms while preserving cultural ties and establish community-level accountability systems to monitor gender equity in participation and leadership throughout food security initiatives.

Finally, Research Institutions need to invest in long-term studies that examine the sustainability of changes in gender relationships beyond the immediate timeframe of projects and Devise methodological advancements for evaluating the quality and impact of participation beyond mere numerical inclusion metrics and Conduct comparative research across post-conflict areas to identify transferable strategies for gender-transformative participation methods.

## **Conclusion**

This research has explored the intricate relationship between gender dynamics and community involvement in food security initiatives in post-conflict Northern Uganda. The results reveal that although there has been a notable increase in the nominal inclusion of women in food security programs, significant gender inequalities remain concerning the quality, depth, and impact of that participation. These inequalities are produced and sustained by multiple barriers operating at individual, household, community, and institutional levels. Nonetheless, the study also highlights effective strategies for promoting more equitable and impactful participation. Interventions that address practical barriers to participation while also tackling fundamental power dynamics have shown particular promise for enhancing food security outcomes and fostering more equitable gender relationships.

The situation in Northern Uganda illustrates both the difficulties and opportunities of advancing gender-equitable participation in post-conflict environments. The disruptions to traditional gender roles caused by conflict created potential avenues for reshaping participation patterns; however, these opportunities were only realized when intentional strategies were employed to support their development against opposing pressures to revert to pre-conflict norms.

Achieving sustainable food security in this challenging environment ultimately necessitates a shift away from mere token inclusion towards methods that acknowledge women's expertise, enhance their access to resources, and generate substantial opportunities for leadership and influence. Such gender-transformative participation not only fosters equity goals but also significantly enhances the effectiveness and sustainability of food security results for households and communities. As Northern Uganda progresses on its path to recovery and development, establishing more gender-equitable food governance structures is a crucial investment in both immediate food security and long-term societal resilience. This demands coordinated efforts among government agencies, development organizations, and local communities to dismantle obstacles to participation and create more inclusive opportunities for shaping the region's food future.

## **References**

- Agarwal, B. (2010). *Gender and green governance: The political economy of women's presence within and beyond community forestry*. Oxford University Press.
- Ahikire, J., Madanda, A., & Ampaire, C. (2021). Post-war economic opportunities in northern Uganda: Implications for women's empowerment and political participation. *International Alert*.
- Alkire, S., Meinzen-Dick, R., Peterman, A., Quisumbing, A., Seymour, G., & Vaz, A. (2013). The Women's Empowerment in Agriculture Index. *World Development*, 52, 71-91.
- Alinyo, F., & Leahy, T. (2022). The lingering impact of the Lord's Resistance Army conflict on households in Northern Uganda. *Journal of Refugee Studies*, 35(1), 214-237.
- Bouta, T., Frerks, G., & Bannon, I. (2018). *Gender, conflict, and development*. World Bank Publications.
- Chambers, R. (1983). *Rural development: Putting the last first*. Longman.
- Chambers, R. (2017). *Can we know better?: Reflections for development*. Practical Action Publishing.
- Chant, S. (2016). Women, girls and world poverty: Empowerment, equality or essentialism? *International Development Planning Review*, 38(1), 1-24.
- Cleaver, F. (2019). *Development through Bricolage: Rethinking institutions for natural resource management*. Routledge.



- Coates, J., Swindale, A., & Bilinsky, P. (2007). Household Food Insecurity Access Scale (HFIAS) for measurement of food access: Indicator guide. Food and Nutrition Technical Assistance Project, Academy for Educational Development.
- Cooke, B., & Kothari, U. (Eds.). (2001). *Participation: The new tyranny?* Zed Books.
- Cornwall, A. (2016). Women's empowerment: What works? *Journal of International Development*, 28(3), 342-359.
- Cornwall, A. (2017). The making and unmaking of a new democratic space. In S. Hickey & G. Mohan (Eds.), *Participation: From tyranny to transformation?* (pp. 88-110). Zed Books.
- Cornwall, A. (2019). Whose voices? Whose choices? Reflections on gender and participatory development. In K. Biekart, L. Harcourt, & P. Knorringa (Eds.), *Exploring civic innovation for social and economic transformation* (pp. 197-217). Routledge.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Dolan, C. (2009). *Social torture: The case of northern Uganda, 1986-2006*. Berghahn Books.
- El-Bushra, J., & Sahl, I. M. G. (2005). *Cycles of violence: Gender relations and armed conflict*. ACORD.
- Elmhirst, R. (2015). Feminist political ecology. In T. Perreault, G. Bridge, & J. McCarthy (Eds.), *The Routledge handbook of political ecology* (pp. 519-530). Routledge.
- Food and Agriculture Organization. (2020). *Country programming framework for Uganda 2020-2024*. FAO.
- Gaventa, J. (2019). *Power and powerlessness: Quiescence and rebellion in an Appalachian valley*. University of Illinois Press.
- Guijt, I., & Shah, M. K. (Eds.). (2019). *The myth of community: Gender issues in participatory development*. Practical Action Publishing.
- Hickey, S., & Mohan, G. (Eds.). (2018). *Participation: From tyranny to transformation?: Exploring new approaches to participation in development*. Zed Books.
- Kabeer, N. (2015). Gender, poverty, and inequality: A brief history of feminist contributions in the field of international development. *Gender & Development*, 23(2), 189-205.
- Kennedy, G., Ballard, T., & Dop, M. C. (2011). *Guidelines for measuring household and individual dietary diversity*. Food and Agriculture Organization.
- Korten, D. C. (1990). *Getting to the 21st century: Voluntary action and the global agenda*. Kumarian Press.
- Ministry of Agriculture, Animal Industry and Fisheries. (2021). *National food security assessment report*. Government of Uganda.
- Moragues-Faus, A., & Marsden, T. (2017). The political ecology of food: Carving 'spaces of possibility' in a new research agenda. *Journal of Rural Studies*, 55, 275-288.
- Myrtilinen, H., Naujoks, J., & El-Bushra, J. (2020). *Re-thinking gender in peacebuilding*. International Alert.
- Najjingo-Mangheni, M., Karuhanga, M., & Nkonya, E. (2020). Gender-responsive agricultural extension in Uganda: Barriers and opportunities. *Journal of Gender, Agriculture and Food Security*, 5(1), 54-72.
- Nakamura, F. (2018). Gender and land in post-conflict northern Uganda: Consolidating gains for women's land access. *Journal of Peacebuilding & Development*, 13(2), 116-129.
- Nightingale, A. J. (2017). Environment and gender in Uganda: A case study from Mbale. *Journal of International Development*, 29(8), 1160-1172.
- O'Reilly, M., Súilleabháin, A. Ó., & Paffenholz, T. (2015). *Reimagining peacemaking: Women's roles in peace processes*. International Peace Institute.

- Ochen, E. A. (2018). Responses of women-led civil society organizations to post-conflict rebuilding in Northern Uganda. *Peace and Conflict Studies*, 25(2), 1-32.
- Opiyo, F., Wasonga, O., Nyangito, M., Schilling, J., & Munang, R. (2020). Farmers' perception of climate change and adaptation strategies in Northern Uganda. *Climate and Development*, 12(8), 785-798.
- Rao, A., & Kelleher, D. (2016). Unravelling institutionalized gender inequality. *Association for Women's Rights in Development*.
- Stites, E., Howe, K., & Redda, T. (2019). "Change the gender rules, but not too much": The influence of gender norms on livelihoods in humanitarian settings. *Mercy Corps*.