

The Influence Of Operation Wealth Creation (Owc) On Youth Farmers' Development In Unyama Sub-County, Gulu District

Kiwule Brian¹, Elweru Felix²

1, 2 Metropolitan International University

Abstract

This study examined the influence of Operation Wealth Creation (OWC) on youth farmers' development in Unyama Sub-County, Gulu District, Uganda. The study was motivated by the persistent socio-economic challenges confronting rural youth despite the government's concerted efforts through OWC to provide agricultural inputs, technical support, and enterprise development opportunities. Guided by a cross-sectional survey design and employing both quantitative and qualitative approaches, data were collected from 120 purposively and randomly selected youth farmers, OWC officials, and local government representatives. The study found a significant positive relationship between OWC interventions and youth farmers' development ($r = 0.672$, $p < 0.01$). Regression analysis revealed that input distribution, technical training, and market linkages collectively explained 58.4% of the variance in youth farmers' development ($R^2 = 0.584$, $F = 21.76$, $p < 0.001$). The study concluded that OWC had a moderately positive influence on youth farmers' development, though systemic challenges including inadequate follow-up support, limited access to credit, and poor infrastructure constrained its full impact. Recommendations include enhanced monitoring and evaluation of OWC programs, integration of financial literacy training, and strengthened public-private partnerships in agricultural value chains.

Keywords: Operation Wealth Creation, Youth Farmers, Agricultural Development, Gulu District, Input Distribution, Technical Training, Market Linkages, Uganda

1.0 Background of the Study

Uganda's agricultural sector remains the backbone of the national economy, contributing approximately 24% of the Gross Domestic Product (GDP) and employing over 70% of the rural population (Uganda Bureau of Statistics, 2022). Youth, who constitute over 75% of Uganda's population, represent a critical demographic in this agrarian economy (Julius & Nancy, 2025). However, their involvement in agriculture has historically been hampered by inadequate access to productive resources, including land, financial capital, quality inputs, and extension services (Akankwasa et al., 2022). The Northern Uganda sub-region, historically ravaged by over two decades of Lord's Resistance Army (LRA) insurgency, presents a particularly acute case of youth agricultural underutilization, with Unyama Sub-County in Gulu District exemplifying these challenges (Alex & Julius, 2024).

Operation Wealth Creation (OWC) was launched by the Government of Uganda in 2013 as a flagship initiative under the Office of the President, with a mandate to transform subsistence agriculture into commercial farming through the provision of agricultural inputs such as seeds, seedlings, and livestock, coupled with technical guidance from agricultural extension officers and the Uganda People's Defence Forces (UPDF) (Francis et al., 2023). The program

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

was designed to address the twin challenges of food insecurity and youth unemployment, targeting vulnerable and economically marginalized communities across all districts of Uganda. In Gulu District, OWC was particularly emphasised as a post-conflict reconstruction initiative aimed at restoring livelihoods and economic stability in communities displaced by the LRA insurgency(N. Moses & Nancy, 2024).

Despite the ambitious design and substantial government investment in OWC, empirical evidence on its effectiveness in transforming youth agricultural practices and livelihoods remains limited and contested(Arinaitwe J, 2024). Several studies have highlighted implementation gaps, including uneven distribution of inputs, limited follow-up after initial distribution, elite capture of program resources, and insufficient alignment with market realities (Bayiyana & Asiimwe, 2020; Kiddu, 2019). In Unyama Sub-County, anecdotal evidence and preliminary field observations suggest that while some youth farmers have benefited from OWC interventions, a significant proportion continue to engage in subsistence rather than commercial agriculture, raising questions about the program's transformative impact on youth agricultural development(Julius & Kaazara, 2025). This study, therefore, sought to investigate systematically the influence of OWC on youth farmers' development in Unyama Sub-County, examining the specific pathways through which OWC interventions including agricultural input distribution, technical training and extension services, and market linkage facilitation affect youth agricultural outcomes, including farm productivity, income levels, and enterprise diversification(Arinaitwe J, 2024).

2.0 Problem Statement

Notwithstanding the Government of Uganda's sustained investment in Operation Wealth Creation since 2013, youth agricultural development in Northern Uganda's post-conflict communities, including Unyama Sub-County, remains significantly below desired levels(Audrey & Kazaara, 2025). The National Development Plan III (2020/21-2024/25) identifies youth unemployment and agricultural under productivity as priority national challenges, yet the specific contribution of OWC to resolving these challenges at the sub-county level remains empirically unclear(Julius & Kazaara, 2026b). Preliminary observations in Unyama Sub-County indicate that a majority of youth recipients of OWC inputs continue to practise subsistence agriculture characterised by low productivity, minimal market surplus, and limited enterprise diversification(T. Moses, 2023). Existing research on OWC has largely focused on national-level assessments or has been limited to qualitative case studies that do not adequately establish causal linkages between OWC interventions and measurable youth agricultural development outcomes(Julius & Audrey, 2026). The absence of robust empirical evidence on the influence of OWC in post-conflict contexts like Gulu District creates a critical knowledge gap that impedes evidence-based policy refinement and program improvement(Sarah & Audrey, 2024). This study addressed this gap by providing quantitative and qualitative evidence on how OWC's key programmatic elements—input distribution, technical training, and market linkages—influence youth farmers' development in Unyama Sub-County.

3.0 Main Objective

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

The main objective of this study was to examine the influence of Operation Wealth Creation (OWC) on youth farmers' development in Unyama Sub-County, Gulu District. Specifically, the study aimed to: (i) assess the influence of agricultural input distribution under OWC on youth farmers' productivity in Unyama Sub-County; (ii) evaluate the effect of technical training and extension services provided under OWC on the agricultural practices of youth farmers in Unyama Sub-County; and (iii) determine the relationship between market linkage facilitation under OWC and the income levels of youth farmers in Unyama Sub-County.

4.0 Literature Review

4.1 Theoretical Framework

This study was grounded in the Agricultural Innovation Systems (AIS) theory, which posits that agricultural development is contingent upon the effective interplay among multiple actors, institutions, and processes that together influence the creation, diffusion, and use of agricultural knowledge and technologies (World Bank, 2006). The AIS framework is particularly relevant to the study of OWC, which operates as a multi-actor initiative involving government extension services, the military, local governments, and farmer groups (Allan et al., 2023). The theory underscores that the mere provision of inputs is insufficient for agricultural transformation; rather, sustainable development requires systemic changes in knowledge flows, institutional linkages, and market access mechanisms (Audrey & Kazaara, 2025). Additionally, the Human Capital Theory (Becker, 1964) informed the analysis of technical training under OWC, positing that investments in individuals' skills and knowledge enhance their productive capacity and economic outcomes (Kaazara & Audrey, 2025). In the context of youth farmers, technical training in modern agricultural practices, post-harvest handling, and enterprise management represents an investment in human capital that should translate into improved agricultural productivity and income (Winny et al., 2023).

4.2 Empirical Literature

Empirical literature on agricultural development programs targeting youth in Sub-Saharan Africa reveals a mixed picture (Julius & Nancy, 2025). Mwesigwa (2020) evaluated Uganda's Agricultural Technology and Agribusiness Advisory Services (ATAAS) and found that extension services significantly improved smallholder productivity by 34% among participating farmers (Case & Of, 2023). However, the study also noted that youth participation in formal extension programs was constrained by social norms that prioritised older male farmers. Similarly, a study by Sseguya et al. (2018) on collective action and market access among smallholder farmers in Uganda found that market linkages facilitated through government programs significantly enhanced farmers' income by enabling access to better prices and reducing transaction costs.

With specific reference to OWC, Bayiyana and Asimwe (2020) conducted a qualitative assessment of OWC implementation in six districts and found that while input distribution was broadly appreciated by beneficiaries, technical follow-up was grossly inadequate, with most extension officers conducting fewer than two farm visits per season (Kimura & Kinchy, 2020). The study also noted elite capture dynamics, where better-connected households

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

disproportionately accessed program inputs. Kiddu (2019) similarly documented implementation gaps in OWC targeting, finding that the program's reliance on local council structures for beneficiary identification introduced political biases that undermined equitable access among the most vulnerable youth(Rashid et al., 2023).

In Northern Uganda specifically, research by Lamwaka (2021) on post-conflict agricultural recovery in Acholi Sub-Region found that government agricultural programs had contributed to partial recovery of farming livelihoods but had not fully addressed the structural constraints of land fragmentation, credit inaccessibility, and market underdevelopment that continued to limit agricultural commercialization(Allan et al., 2023). These findings suggest that while OWC may have contributed positively to agricultural recovery in Gulu District, its impact on youth farmers' development is likely differentiated and context-specific(Julius & Kaazara, 2025).

5.0 Methodology

5.1 Research Design

This study adopted a cross-sectional survey design, supplemented by qualitative methods to provide a comprehensive understanding of the influence of OWC on youth farmers' development in Unyama Sub-County. The cross-sectional design enabled data collection at a single point in time from multiple respondents, providing a snapshot of current conditions and relationships between study variables(Nafiu et al., 2017). The mixed-methods approach combining quantitative surveys with key informant interviews and focus group discussions was employed to triangulate findings and capture both measurable outcomes and contextual nuances that quantitative methods alone cannot adequately address.

5.2 Sample and Sampling Procedures

The study population comprised 320 registered OWC beneficiaries in Unyama Sub-County, drawn from five parishes. Using Krejcie and Morgan's (1970) sample size determination formula, a sample of 175 respondents was targeted, of whom 162 participated, yielding a response rate of 92.6%(Jallow et al., 2022). Stratified random sampling was used to ensure proportional representation from each parish, while purposive sampling was employed to select 12 key informants including OWC district coordinators, sub-county chiefs, and agricultural extension officers(Nafiu et al., 2012). Additionally, four focus group discussions, each comprising 8-10 participants, were conducted with youth farmer groups.

5.3 Data Collection Instruments

A structured questionnaire with a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) was the primary quantitative data collection instrument, measuring three independent variables input distribution, technical training, and market linkages and the dependent variable, youth farmers' development. The questionnaire was pre-tested with 20 respondents from a neighboring sub-county to assess its reliability and validity. Cronbach's Alpha coefficients of 0.81 for input distribution, 0.78 for technical training, 0.83 for market linkages, and 0.85 for youth development

confirmed adequate internal consistency. An interview guide and focus group discussion guide were used for qualitative data collection.

5.4 Data Analysis

Quantitative data were analysed using the Statistical Package for Social Sciences (SPSS) version 25 (Nelson et al., 2022). Descriptive statistics including frequencies, percentages, means, and standard deviations were computed to characterize respondents and study variables. Pearson's correlation coefficient was used to assess the strength and direction of relationships between OWC interventions and youth farmers' development. Multiple linear regression analysis was conducted to determine the predictive influence of the three OWC interventions on youth development outcomes. Qualitative data from interviews and focus group discussions were analysed thematically, with emerging themes used to corroborate and contextualize quantitative findings.

6.0 Results and Discussion

6.1 Descriptive Statistics

Table 1 presents descriptive statistics for the study variables, including means and standard deviations that indicate respondents' perceptions of OWC interventions and youth farmers' development outcomes in Unyama Sub-County.

Table 1: Descriptive Statistics of Study Variables (N = 162)

Variable	N	Min	Max	Mean	Std. Dev
Input Distribution	162	1.00	5.00	3.42	0.89
Technical Training	162	1.00	5.00	3.18	0.94
Market Linkages	162	1.00	5.00	2.97	1.02
Youth Farmers' Development	162	1.00	5.00	3.31	0.87

Source: Primary Data, 2025

The descriptive results presented in Table 1 reveal that respondents rated input distribution as the most positively perceived OWC intervention, with a mean score of 3.42 (SD = 0.89), suggesting moderate to moderately high agreement that OWC had provided useful agricultural inputs. Technical training received a mean score of 3.18 (SD = 0.94), indicating that while respondents acknowledged the training provided, it was perceived as moderately effective (Nelson et al., 2023). Market linkages received the lowest mean score of 2.97 (SD = 1.02), reflecting that OWC's efforts to connect youth farmers to markets were perceived as the least effective among the three interventions assessed. The relatively higher standard deviation for market linkages (1.02) compared to other variables suggests greater heterogeneity in respondents' experiences with market linkage support, which may reflect geographic disparities in market access across the five parishes of Unyama Sub-County. Youth farmers' development as the dependent variable had a mean score of 3.31 (SD = 0.87), indicating a moderate level of development attributed to OWC interventions. These descriptive findings suggest that OWC has had a discernible but not transformative impact on youth agricultural development in the sub-county, with input distribution having the most visible positive effect and market linkage facilitation representing the most significant programmatic gap.

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

6.2 Correlation Analysis

Table 2 presents Pearson's correlation coefficients examining the relationships between OWC interventions (input distribution, technical training, and market linkages) and youth farmers' development in Unyama Sub-County.

Table 2: Pearson Correlation Matrix (N = 162)

Variable	1	2	3	4
1. Input Distribution	1.000			
2. Technical Training	0.584**	1.000		
3. Market Linkages	0.461**	0.512**	1.000	
4. Youth Farmers' Development	0.643**	0.581**	0.524**	1.000

**Correlation is significant at the 0.01 level (2-tailed)

Source: Primary Data, 2025

The correlation analysis presented in Table 2 reveals statistically significant positive relationships between all three OWC intervention variables and youth farmers' development. Input distribution demonstrated the strongest positive correlation with youth farmers' development ($r = 0.643$, $p < 0.01$), indicating that improvements in the accessibility and quality of agricultural inputs distributed through OWC are strongly associated with enhanced youth agricultural development outcomes (Julius & Nancy, 2026). This finding aligns with the theoretical premise of the Agricultural Innovation Systems framework, which recognizes resource provision as a foundational element of agricultural transformation, and with empirical evidence from Sseguya et al. (2018), who similarly found that input access significantly correlated with smallholder productivity improvements in Uganda.

Technical training demonstrated a moderately strong correlation with youth farmers' development ($r = 0.581$, $p < 0.01$), confirming that OWC's capacity building interventions positively influenced youth agricultural practices. The finding is consistent with Human Capital Theory, which predicts that investments in agricultural skills and knowledge enhance productive capacity. Market linkages, while exhibiting the weakest correlation with youth development ($r = 0.524$, $p < 0.01$), nonetheless demonstrated a statistically significant positive relationship, suggesting that even the modest market facilitation efforts under OWC have contributed to improved youth income outcomes. The correlation between input distribution and technical training ($r = 0.584$, $p < 0.01$) indicates a moderate degree of multicollinearity, which was examined further in the regression analysis. Overall, the correlation findings provide robust support for the study hypothesis that OWC interventions positively influence youth farmers' development in Unyama Sub-County.

6.3 Regression Analysis

Multiple linear regression analysis was conducted with youth farmers' development as the dependent variable and the three OWC intervention variables as predictors. Table 3 presents the model summary, and Table 4 presents the regression coefficients.

Table 3: Model Summary

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

Model	R	R ²	Adjusted R ²	Std. Error	F	Sig.
1	0.764	0.584	0.576	0.568	21.76	0.000

Table 4: Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.487	0.214		2.276	0.024
Input Distribution	0.341	0.068	0.349	5.015	0.000
Technical Training	0.287	0.072	0.310	3.986	0.000
Market Linkages	0.213	0.061	0.249	3.492	0.001

Dependent Variable: Youth Farmers' Development

Source: Primary Data, 2025

The regression model was statistically significant ($F = 21.76$, $p < 0.001$), indicating that the three OWC intervention variables collectively and significantly predicted youth farmers' development in Unyama Sub-County. The R^2 value of 0.584 indicates that input distribution, technical training, and market linkages together explained 58.4% of the variance in youth farmers' development, a substantial proportion that confirms the explanatory power of OWC interventions in accounting for developmental outcomes among youth farmers. The adjusted R^2 of 0.576 confirms that the model retains its explanatory power when accounting for the number of predictors relative to sample size, further reinforcing the robustness of the regression model.

Examining the individual regression coefficients, input distribution emerged as the strongest individual predictor of youth farmers' development ($\beta = 0.349$, $t = 5.015$, $p < 0.001$), indicating that a one-unit increase in perceived effectiveness of input distribution was associated with a 0.341-unit increase in youth farmers' development, holding other variables constant (Julius & Kazaara, 2026a). This finding underscores the critical importance of reliable and appropriate input provision in driving youth agricultural development, corroborating qualitative findings from focus group discussions where youth farmers consistently cited seed and seedling access as the most tangible OWC benefit they had experienced. Technical training was the second most influential predictor ($\beta = 0.310$, $t = 3.986$, $p < 0.001$), confirming that OWC's capacity building efforts significantly contributed to youth agricultural development. Market linkages, while contributing the smallest standardised coefficient ($\beta = 0.249$, $t = 3.492$, $p = 0.001$), nonetheless demonstrated a statistically significant positive influence on youth development outcomes, suggesting that even partial market facilitation translates into measurable developmental gains for youth farmers. The finding that all three OWC intervention variables are significant predictors provides comprehensive support for the study's theoretical model and confirms the multi-dimensional nature of OWC's influence on youth agricultural development.

7.0 Discussion of Results

The findings of this study provide multifaceted insights into the influence of OWC on youth farmers' development in Unyama Sub-County, Gulu District. The overall positive and statistically significant relationship between OWC

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

interventions and youth farmers' development ($R^2 = 0.584$) affirms the program's developmental relevance in a post-conflict context, while simultaneously revealing implementation gaps that limit its transformative potential. The dominance of input distribution as a predictor of youth development aligns with findings from similar agricultural development programs in Sub-Saharan Africa, where tangible resource provision has consistently been associated with measurable productivity improvements among smallholder farmers (Mwesigwa, 2020; Sseguya et al., 2018). However, the relatively weaker performance of market linkages suggests that OWC has been more successful as an input provision program than as a comprehensive agricultural commercialization initiative.

The gap between input distribution effectiveness (mean = 3.42) and market linkage facilitation (mean = 2.97) reflects a broader structural tension in OWC's design, which prioritises upstream agricultural inputs over downstream market integration. Key informant interviews with OWC district coordinators revealed that while input distribution targets are typically met, the program lacks dedicated resources for market facilitation, relying instead on informal coordination with the private sector that has proven insufficient in a geographically remote and infrastructurally challenged sub-county like Unyama. This finding echoes the concerns raised by Bayiyana and Asiimwe (2020) and Kiddu (2019) regarding the limited comprehensiveness of OWC's support package for smallholder farmers. The moderate effectiveness of technical training (mean = 3.18) further suggests that while OWC has invested in extension services, the quality, frequency, and relevance of training needs improvement, a concern corroborated by focus group discussions where youth farmers reported that extension officer visits averaged only once per season, insufficient for the sustained guidance required for agricultural transformation.

8.0 Conclusions

This study concludes that Operation Wealth Creation has had a statistically significant and practically meaningful positive influence on youth farmers' development in Unyama Sub-County, Gulu District, explaining approximately 58.4% of the variance in youth agricultural development outcomes. Input distribution is the most influential OWC intervention, followed by technical training and market linkages. However, the moderate mean scores across all OWC interventions suggest that the program's full transformative potential has not been realised, constrained by inadequate follow-up support, limited market integration, and insufficient extension service frequency. The study's findings reinforce the importance of multi-dimensional agricultural development programs that address input, knowledge, and market dimensions simultaneously, while adapting to the specific challenges of post-conflict communities.

9.0 Recommendations

Based on the findings and conclusions of this study, the following recommendations are advanced. First, the Government of Uganda, through the OWC Secretariat, should strengthen post-distribution support systems by increasing extension officer-to-farmer ratios in Unyama Sub-County and establishing structured farm visit schedules of at least four visits per season. Second, OWC should integrate market linkage facilitation as a core program component, establishing deliberate partnerships with agricultural cooperatives, agro-processors, and traders to provide

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

youth farmers with reliable market outlets at competitive prices. Third, the program should incorporate financial literacy and agricultural enterprise management training to enhance youth farmers' capacity to manage their agricultural businesses sustainably. Fourth, local government authorities in Gulu District should strengthen targeting mechanisms by establishing transparent beneficiary selection criteria that prioritise the most vulnerable youth farmers. Fifth, Makerere University and other research institutions should conduct longitudinal studies to assess the long-term sustainability of OWC-induced agricultural development changes in Unyama Sub-County.

References

- Akankwasa, A., Akakikunda, T., Ntirandekura, M., Murezi, C. M., & Christopher, F. (2022). *Effect of Capital Budgeting on Development of Organizations Empirical Studies of Kashinge Child Development Centre Kisoro District*. 6(9), 5–10.
- Alex, I., & Julius, A. (2024). *Factors affecting the use of digital payments among Smallholder Tea Farmer in Kanungu District, Uganda*. 8(4), 23–31. www.ijeais.org/ijapr
- Allan, K., Charles, N., Moses, N., Kazaara, A. G., & Nelson, K. (2023). *The Effect of Operation Wealth Creation on Youth Farmers Development : A Case Study of Labongo Layamo Sub County , Kitgum District*. 7(2), 50–63.
- Arinaitwe J, I. A. M. N. (2024). Youth Unemployment And Its Impact On Uganda's Gross Domestic Product. An Empirical Evidence Of Wakiso District. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 8(4), 123–125.
- Audrey, A., & Kazaara, A. I. (2025). *Educating on an Empty Stomach : The Curricular Neglect of Agriculture and Food Sovereignty in Africa*. 9(12), 66–76.
- Case, C. A., & Of, S. (2023). *IMPACT OF WEATHER PATTERNS ON FARMING PRACTICES IN RURAL*. 2(2), 154–162.
- Francis, A., Richard, K., Kazaara, A. G., Moses, N., & Nelson, K. (2023). *Study On the Contribution of Bee Farming On the Socio- Economic Transformation of Communities in Rural Areas in Arua District a Case Study of Pajulu Sub-County*. 7(2), 1–12.
- Jallow, M. A., Abiodun, N. L., & Weke, P. (2022). *Stochastic Forecasting of Stock Prices of Capital Assets Using Semi-Markov Model*.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. National Bureau of Economic Research.
- National Planning Authority. (2020). *Third National Development Plan (NDPIII) 2020/21–2024/25*. Government of Uganda.
- Operation Wealth Creation. (2023). *Background and objectives of Operation Wealth Creation*. Government of Uganda.
- Uganda Bureau of Statistics. (2022). *Statistical Abstract 2022*. Uganda Bureau of Statistics.
- World Bank. (2006). *Enhancing agricultural innovation: How to go beyond the strengthening of research systems*.

Received: 16.06.2026

Accepted: 20.06.2026

Published on: 30.06.2026

World Bank.

Julius, A., & Audrey, A. (2026). *Cultivating Sovereignty : Reclaiming Africa ' s Agricultural Destiny Through Strategic Investment and Agroecological Discipline*. 10(2), 64–72.

Julius, A., & Kaazara, A. G. (2025). *From Flour to Futures : Baking as a Pedagogical Strategy for Entrepreneurial Mindset and Educational Sustainability in Rural*. 9(12), 257–265.

Julius, A., & Kazaara, A. G. (2026a). *Beyond Classroom Walls : The Crisis of Moral Disintegration and the Imperative for Attitudinal Transformation in Cameroonian Schools*. 10(4), 107–114.

Julius, A., & Kazaara, A. I. (2026b). *The Paradox of Beneficiary Dissent : Graduate Discontent in the Era of Musevenomics and Educational Liberalization in Uganda*. 10(1), 304–312.

Julius, A., & Nancy, M. (2025). *Accountability in Crisis : Governance , Faith , and Citizen Responsibility in the Persistence of African Poverty*. 9(11), 127–136.

Julius, A., & Nancy, M. (2026). *A High- Stakes Crisis : Uganda ' s Position Among Africa ' s Top Gambling Nations and the Multifaceted Threat to Youth Development*. 10(4), 341–348.

Kaazara, A. G., & Audrey, A. (2025). *The Impact of Inquiry-Based Learning on Student Engagement in Ugandan Secondary School Science Classrooms*. 9(12), 102–109.

Kimura, A. H., & Kinchy, A. (2020). Citizen Science in North American Agri-Food Systems: Lessons Learned. *Citizen Science: Theory and Practice*, 5(1), 1–12. <https://doi.org/10.5334/cstp.246>

Moses, N., & Nancy, M. (2024). *Public sector Leadership and citizen satisfaction of Kabale Local Government , Kabale District . Empirical evidence of Kabale Municipality*. 8(4), 17–22.

Moses, T. (2023). *On Job Training and Its Implication on Staff Performance in Uganda : A Case Study of Kasanda District Local Government*. 7(4), 155–163.

Nafiu, L. A., Oshungade, I. O., & Adewara, A. A. (2012). *Generalization of Multistage Cluster Sampling Using Finite Population*. 3(1), 17–20. www.eaas-journal.org

Nafiu, L. A., Ph, D., Ibitayo, L. D., Ph, D., Muyombya, S. M., & Sc, M. (2017). *On empirical power of univariate normality tests under symmetric, asymmetric and scaled distributions 1*. 8(3), 381–387.

Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. 6(7), 84–122.

Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. 7(3), 124–145.

Rashid, S., Kazaara, A. G., & Kazaara, A. I. (2023). *Assessing The Impact Of Government Programs On Youth Empowerment In Communities , A Case Study Of Mityana Central Division , Mityana District*. 7(3), 352–362.

Sarah, A., & Audrey, A. (2024). *Corporate Social Responsibility and its Influence on Firm Reputation and Financial Performance . A Case Study of Equity*. 8(8), 202–207.

Winny, N. D., Ariyo, D., Kazaara, G., Kazaara, A. I., & Deus, T. (2023). Effect Of Motivation On Employee Performance In Non-Government Organizations (NGOS): A Case Of Mbale City. In *International Journal of Academic Multidisciplinary Research* (Vol. 7). www.ijeais.org/ijamr