



Contribution of TASAF-III Program on Poverty Reduction among Female-Headed Households in Kasulu District Council, Tanzania

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Received 14/08/2025

Accepted : 17/09/2025

Published : 31/12/2025

<https://doi.org/10.52919/arebus.v6i2.93>

ABSTRACT

Tanzania has made notable progress in reducing poverty, yet challenges persist, especially among vulnerable groups like Female-Headed Households (FHH). This study investigates the impact of the Tanzania Social Action Fund (TASAF III) on poverty alleviation for FHH in Kasulu District, utilizing primary data collected from a sample of 120 mixed respondents, 117 respondents from the treatment group, and 101 respondents from the control group. The research aims to assess changes in annual income levels before and after cash transfers, determine the proportion of FHH that escaped poverty through the program, and identify barriers to accessing benefits. The novelty of this study lies in employing a mixed-methods approach, including Ordinary Least Squares (OLS), Difference-in-Difference (DiD) estimation, and descriptive statistical methods for analysis. The results indicate that all independent variables, except housing financing, significantly impact household income, with an increase of about 4.3% due to the program, enhancing consumption capabilities. However, beneficiaries reported that cash transfers received are inadequate to cater for rising living costs, particularly education expenses. Key barriers include a lack of institutional support, difficulties in accessing financial resources, long distances to registration offices, and delays in fund disbursement. Despite these challenges, about 78% of FHH reported improved living conditions post-intervention, enabling better family support. The study underscores the need for supplementary policy strategies, such as training programs and microloans, to ensure sustainable improvements of FHH. While TASAF III has positively impacted income and consumption, addressing identified barriers is essential for further empowerment of FHH in Kasulu District, Tanzania.

Keywords: TASAF III; Poverty; Female-Headed; Households; Kasulu District Tanzania

JEL Codes : I32, I38, H53, O15

How to cite this article

Tarimo, M. C., & Machibya, J. B. (2025). Contribution of TASAF III program on poverty reduction among female-headed households in Kasulu District Council, Tanzania. *Advanced Research in Economics and Business Strategy Journal*, 6(2), 72-90. <https://doi.org/10.52919/arebus.v6i2.93>

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1. INTRODUCTION

Poverty remains an escalating agenda in Africa, from the street to the national level of all countries (Brown and Van de Walle, 2020; Östberg, 2018). Poverty in this study refers to the inability of households to meet basic needs such as food, shelter, and clothes, or to finance children's education. The situation of households living below the poverty line continues to be worse, especially for the rural dwellers in Africa (Brockington, 2021). Tanzania has made significant strides in poverty reduction over the past decades, but poverty remains a persistent challenge, particularly among vulnerable groups such as female-headed households (Aikaeli *et al.*, 2021; Tao, 2019; Becker, 2019; Kerne and Cook, 2019; Lindsjö, 2018). These households are often disproportionately affected by poverty due to various socioeconomic factors, including lower access to education, employment opportunities, and social services (Lindsjö, 2018). Female-headed households in Tanzania face higher risks of poverty because they are more likely to experience income instability, limited access to land and credit, and a higher dependency ratio.

In response to these challenges, the Tanzanian government, with support from international donors, implemented the Tanzania Social Action Fund (TASAF) III, a nationwide program aimed at reducing poverty through various interventions, including cash transfers. The cash transfer component of TASAF III was designed to provide direct financial assistance to the poorest households, with a particular focus on vulnerable groups such as female-headed households. Thus, by providing regular and predictable cash transfers, the program aimed to improve the livelihoods of these household groups, enhance their access to basic needs such as food, education, and healthcare, and ultimately reduce poverty (Kinyondo and Magashi, 2019; Issa, 2023; Korebu, 2020). Elderly and most vulnerable groups are systematically identified and recruited in the program, whereby they receive a certain amount of cash every month to cater to their living needs. Many have benefited from the program countrywide in both urban and rural areas.

TASAF III was implemented in the Kasulu District Council as part of its broader nationwide efforts (that is, "TASAF") to enhance social protection and reduce poverty. This phase of the Tanzania Social Action Fund specifically targeted the most vulnerable populations, aiming to improve their living conditions through various interventions. The Tanzania Social Action Fund (TASAF) was established in 2000 as a response to the growing need for social protection and poverty alleviation among the most vulnerable populations in Tanzania (Songoma, 2023). It was designed to address socioeconomic challenges arising from the country's transition toward economic reforms. TASAF III, the third phase of the program, was launched in 2013 with the primary goal of enhancing living conditions for the poor through a multifaceted approach (Mushi *et al.*, 2019). The program focuses on providing various interventions, including cash transfers, community development projects, and capacity-building initiatives, aimed at promoting access to essential services and economic opportunities. A significant component of TASAF III is the Productive Social Safety Net (PSSN), which offers cash transfers to the poorest households, conditioned on behaviors such as school attendance for children and regular health check-ups.

Additionally, the initiative emphasizes public works to create labor-intensive jobs that not only provide income to participants but also contribute to the improvement of community

infrastructure. Therefore, the focus of this study is to assess and analyses the impact of the Tanzania Social Action Fund (TASAF) III program, particularly in terms of its contributions to poverty alleviation and social protection among vulnerable populations (female-headed households in particular) in Tanzania. The study aimed at understanding how TASAF III has uniquely influenced outcomes related to economic opportunities, education, health services, and community development compared to its predecessors, TASAF I and II.

Basically, several studies (Kinyondo and Magashi, 2019; Issa,2023) are being conducted on the TASAF program, but not specifically for how TASAF III revamped FHH from poverty in Kasulu district; unlike other methods, such as descriptive analysis used by previous studies, our study has used mixed methods of descriptive, regression, and Diff-in-Diff analysis, underscoring the novelty of this study in the body of literature. Moreover, the study was conducted due to the following reasons, among others: First, continuous improvement-assessing the impact of an ongoing program allows for real-time feedback on its effectiveness. This feedback can inform necessary adjustments, ensuring that the program remains responsive to the needs of the target population and that it is achieving its intended outcomes. Second, Evidence-Based decision-making by evaluating the program during its implementation, decision-makers can gather evidence on what works and what doesn't. This information is crucial for designing future phases or similar programs, ensuring that resources are allocated effectively and that strategies are evidence-based. Overall, this research enriches the academic literature on poverty alleviation and social protection programs. Thus, by employing mixed methods and robust analytical techniques, it provides a comprehensive view of the TASAF III program's impact. This scholarly contribution can inspire further research, fostering a greater understanding of effective strategies for poverty reduction among vulnerable populations.

The rest of this paper is organized as follows: Section 2 provides a literature review, Section 3 provides the methodology, Section 4 provides the results and discussion, and Section 5 provides the conclusion and policy implications.

1.1 Objectives

1.1.1 General Objective

The overall objective of the study was to analyze the contribution of the cash transfer program to poverty reduction among female-headed households in Kasulu DC.

1.1.2 Specific objectives

Specifically, the study wanted to achieve the following;

- i. To analyze the changes in annual income levels of female-headed households before and after receiving cash transfers from the TASAF III program.
- ii. To determine the proportion of female-headed households that moved out of poverty following participation in the TASAF III cash transfer program.
- iii. To examine the barriers for female-headed households to access and utilize the benefits of the TASAF III cash transfer program effectively

1.2 Research Questions

1. What is the average annual income level of female-headed households before and after receiving cash transfers from the TASAF III program?

2. What percentage of female-headed households was classified as poor before and after receiving cash transfers from the TASAF III program?
3. What are the barriers that female-headed households face in accessing cash transfers from the TASAF III program in the district?

2. LITERATURE REVIEW

2.1 Theoretical framework

A theoretical framework is a structure that guides research by providing a clear set of concepts and theories to analyze a particular phenomenon (Koopmans and Statham, 2010). The theoretical framework of this study is envisaged in the Capability Approach theory, developed by economist Amartya Sen in the 1980s (Kuklys, 2005), providing a robust theoretical framework for understanding poverty and well-being. Unlike traditional economic models that focus solely on income and material wealth, the Capability Approach emphasizes what individuals can do and be, essentially their capabilities. This shift in perspective allows for a more nuanced understanding of poverty, recognizing that deprivation can arise from a lack of opportunities and choices rather than just financial scarcity; this is why this study adopted this framework. At its core, the Capability Approach posits that actual development involves expanding people's capabilities to lead lives they have reason to value; this includes not only access to resources but also the ability to utilize those resources effectively. Key assumptions of this framework include: First, functioning and capabilities-this refers to the various things a person may value doing or being, such as being healthy, educated, or having a decent standard of living. Capabilities, on the other hand, represent the range of functioning that an individual can achieve given their circumstances.

This distinction is critical as it highlights that poverty is not merely a lack of income but a lack of the means to achieve desired outcomes in life. Second, agency and empowerment are significant aspects of the Capability Approach, which focuses on agency, the ability of individuals to make choices and take actions that affect their lives. Empowering marginalized groups, such as female-headed households, is essential for poverty alleviation. By enhancing women's agency, programs can enable them to navigate economic challenges more effectively and improve their well-being. Third, the Multidimensionality of poverty-the Capability Approach recognizes that poverty is multifaceted. It encompasses various dimensions beyond income, including health, education, social inclusion, and access to services.

This perspective is particularly relevant for analyzing the impacts of TASAF III, which aims to address multiple aspects of poverty through social protection initiatives. Hence, in the context of this study, this theoretical framework provides a valuable framework for analysis of the following, which makes it suitable for the study. First, Assessment of impact: the study evaluated how TASAF III initiatives enhance the capabilities of female-headed households. For example, the program focused on cash transfers and access to education that were assessed in terms of improved health outcomes, increased educational attainment for children, and enhanced economic opportunities for women. By measuring these functions, the study provides a comprehensive picture of how TASAF III contributes to poverty reduction. Second, the empowerment of women, the framework underscores the importance of empowering women to make choices that affect their lives. The study explored how TASAF

III impacts women's agency by providing financial resources and support networks. This empowerment can lead to improved decision-making within households, greater participation in community activities, and enhanced social status. Third, Policy recommendations: By applying this framework, the study offers insights into policy improvements. It identified gaps in how TASAF III addresses the unique needs of female-headed households and suggested strategies for enhancing their capabilities further.

This includes targeted training programs, access to productive resources, and initiatives to foster community support. Overall, the Capability Approach framework not only broadens the understanding of poverty but also aligns closely with the objectives of the study and the TASAF III program. By focusing on enhancing capabilities and empowering female-headed households, the study can contribute valuable insights into effective poverty reduction strategies in Tanzania.

2.2 Empirical review

2.2.1 Poverty alleviation initiatives in Tanzania since independence in 1961

Since independence in 1961, several poverty initiatives have been implemented to support marginalized populations, particularly female-headed households (FHH). One notable initiative is the Tanzania Social Action Fund (TASAF), launched in 2000, which aims to reduce poverty through cash transfers and community-based projects specifically targeting vulnerable groups, including FHH (Kinyondo and Magashi, 2019). Another significant program (Palermo, 2020) is the Productive Social Safety Net (PSSN), part of TASAF, which provides cash transfers and support for income-generating activities, enabling FHH to invest in small businesses and agricultural initiatives. Besides, Village Savings and Loan Associations (VSLAs) empower women by offering access to financial services, allowing them to save, borrow, and invest in their enterprises (William, 2023). The Women's Development Fund promotes gender equality and women's empowerment by providing financial assistance for women's entrepreneurial ventures, thereby helping FHH improve their economic status (William, 2023). Furthermore, the National Strategy for Growth and Reduction of Poverty (MKUKUTA) outlines various interventions aimed at reducing poverty with specific attention to gender issues (URT, 2005).

Additionally, microfinance initiatives have also emerged, providing small loans to women, including FHH, which facilitates their participation in economic activities. Lastly, community empowerment projects focus on training women in skills like entrepreneurship and agriculture to enhance their income-generating capabilities. Collectively, these initiatives aim to improve the socioeconomic status of female-headed households, enabling them to overcome barriers to poverty and achieve greater economic stability.

2.2.2 Income effect of TASAF III program to Female-Headed Households (FHH)

Previous studies indicate that cash transfer programs significantly impact household consumption patterns. For instance, Handa *et al.* (2018) found that households receiving cash transfers experienced a 20 per cent increase in expenditures on food, which is essential for improving nutritional outcomes. Female-headed households particularly benefited from these transfers, allowing them to allocate resources toward crucial goods. The World Bank (2020) reported that increased cash amounts enabled these households to afford healthcare services and enhance dietary diversity, leading to improved health outcomes for both mothers and

children. Additionally, Molyneux (2006) highlighted that cash transfers contributed to better nutritional status among FHH, particularly benefiting children.

2.2.3 Proportion of Female-Headed Households (FHH) moved out of poverty

While several studies have not quantified the exact percentage of FHH moving out of poverty due to TASAF interventions, they affirm that cash transfer programs can significantly reduce poverty. Handa *et al.* (2018) indicated that cash transfers led to improved household consumption and increased school attendance among children in female-headed households. Similarly, the World Bank (2020) noted that TASAF III positively impacted women's livelihoods by enhancing food security and access to health services. Manda *et al.* (2021) reported a 15% increase in school enrollment rates for children, especially girls, among FHH receiving cash transfers. Furthermore, these households utilized cash transfers to invest in small businesses and agricultural activities, boosting income-generating opportunities. Kihanda and Manda (2023) found that sustained cash transfers positively influenced educational attainment, resulting in higher rates of secondary school completion among children in FHH compared to those not receiving assistance.

2.2.4 Barriers to accessing benefits from the TASAF program

Despite these benefits, barriers persist in accessing cash transfers. Manda *et al.* (2021) noted that complicated registration processes and bureaucratic delays often deter FHH from participating. Many women lack the necessary documentation or literacy skills to navigate these systems effectively. Rural female-headed households face long distances to payment points, increasing transportation costs and time, as highlighted by Khan *et al.* (2022). Poor infrastructure exacerbates this challenge, making it difficult for women to reach financial institutions. Moreover, cultural norms and gender roles also significantly impact access to cash transfers. Molyneux (2006) pointed out that patriarchal structures may prevent women from claiming their rights to social benefits, often leaving decision-making power in the hands of male household members. This dynamic can lead to exclusion from receiving transfers or limited control over the funds. Furthermore, stigma associated with accepting cash transfers can discourage women from applying for or utilizing these benefits. Khan *et al.* (2022) found that societal perceptions create a sense of shame, isolating these households and limiting their social networks.

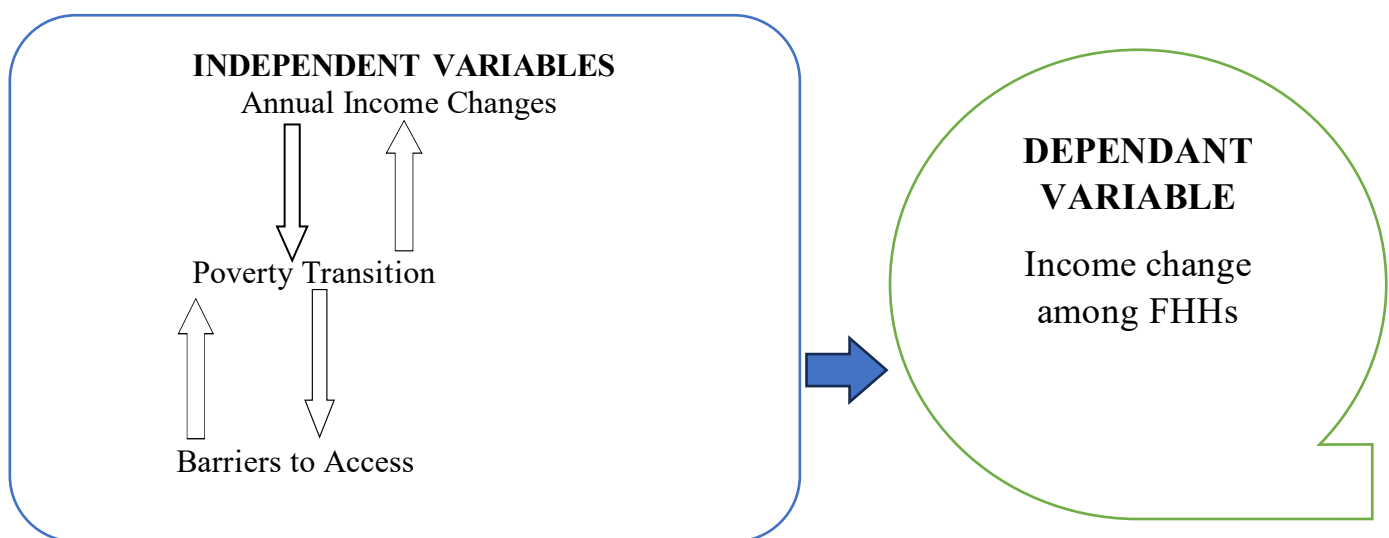
Furthermore, the amounts provided through TASAF III are often insufficient to meet basic needs. Manda *et al.* (2021) noted that many FHH reported that the monthly transfers, ranging from TZS 30,000 to TZS 50,000, were inadequate to cover essential expenses, leading to frustration and disillusionment with the program. Additionally, a study by Kihanda and Manda (2023) revealed that misinformation and a lack of outreach efforts meant that many potential beneficiaries were unaware of their eligibility or the application process, exacerbating inequality in access to resources. Overall, while cash transfer programs like TASAF III have shown promise in alleviating poverty among female-headed households, significant barriers remain that must be addressed to enhance their effectiveness and accessibility.

Overall, the above review shows a lack of studies on TASAF III and its general impact on poverty reduction for FHH specific to Kasulu District and Tanzania at large. Hence, there remains a significant gap in understanding its effects on female-headed households in Kasulu District Council. Most studies focused broadly on poverty alleviation without addressing the

unique challenges and experiences of these households, such as how income changes and affects consumption patterns, cultural barriers, access to resources, and social support systems. Furthermore, there is a lack of cross-sectional studies that track the long-term outcomes of TASAF III interventions for female-headed households, as well as a deficiency in qualitative and quantitative research that captures their lived experiences and narratives by using mixed methods of Ordinary Least Squares (OLS) model, Descriptive, and Difference in Differences methods. This gap limits the understanding of how effectively TASAF III addresses the complexities of poverty among female-headed households and hinders the development of more targeted and effective poverty alleviation strategies. This study fills a research gap and has led to significant contributions to both academic knowledge and practical applications for improving poverty reduction efforts targeted at female-headed households in Kasulu and Tanzania at large.

2.4 Conceptual framework

The conceptual framework for this study was structured around three main components, which are: Income Changes, Poverty Transition, and Barriers to Access. Each element corresponds to the research objectives and illustrates the relationships between key variables as indicated by arrows in Figure 1. In this conceptual framework, the relationships between annual income changes, poverty transition, and barriers to access are interdependent and cyclical. Annual income changes can significantly impact poverty transition, as income increases often facilitate movement out of poverty, while declines can exacerbate poverty conditions. Conversely, individuals experiencing poverty may face barriers to access, such as limited access to finance, educational opportunities, and inadequate healthcare, which can hinder their ability to improve their income. These barriers can create a feedback loop, where low income perpetuates poverty, making it more challenging for individuals to overcome obstacles and achieve economic stability. Ultimately, addressing these interrelated factors is crucial for income change among FHHs, thus fostering sustainable poverty alleviation in the community.



Source: Author's design, 2025
Figure 1: Conceptual Framework
Source: Author's design (2025)

3. METHODOLOGY AND MATERIALS

3.1 Design and methods

The study adopted a descriptive research design, integrating qualitative and quantitative methodologies to ensure comprehensive data analysis. Secondary data were gathered through a review of existing literature related to TASAF, providing empirical context to the study. Whereas, Primary data collection involved extensive field surveys over one month, targeting five wards in Kasulu District. Furthermore, the researchers conducted semi-structured interviews with FHH beneficiaries and non-beneficiaries, local leaders, and TASAF officials, employing a People-Centred Approach (PCA) to encourage broad engagement. Tools used include questionnaires, interview guides, and notebooks. A total of 120 respondents participated, allowing for comparative analysis between beneficiaries and non-beneficiaries. This comprehensive methodology aims to provide valuable insights into the impacts of TASAF III on the lives of female-headed households in Kasulu District.

3.2 Sample size and sampling techniques/procedures

To come up with a sample that represents the whole population in the study, it is essential to apply a statistical formula. Determining a final population for a large population is assumed to be normally distributed at a confidence interval of 95% or a significance level of 10%. Based on the Fisher formula below, the minimum target sample size for a large population was 96 people for this study, drawn from an unknown population in five wards. The researchers adopted Fisher's formula 1998 which was used to calculate the sample size for an unknown population as follows;

$$n = Z^2 * p * (1-p) / d^2$$

Where:

n = Sample size from a large population

Z = Normal distribution Z value score, (1.96)

p = proportion of units in the sample size possessing the variables under study, where, for this study, it is set at 50% (0.5)

d = Precision level desired or the significance level of 10% which is 0.1 for this study due to budget constraints. This precision level makes an affordable sample size; also, assurance of getting reliable data from respondents. Choosing a marginal error of 10% in research strikes a balance between achieving reasonable accuracy and managing practical constraints such as time and resources. It is particularly suitable for exploratory studies, allowing researchers to gather meaningful insights without requiring huge sample sizes.

The substituted values in determining the sample size for a large population are as follows;

$$n = \frac{(1.96)^2 * (0.5)(0.5)}{(0.10)^2} = 96$$

Therefore, the plan was to reach out to about 96 female-headed households benefitting from the TASAF cash transfer program in the district. However, the researchers reached out to 120 respondents (Female-headed Households), which is equal to a 20 percent increase for improving the accuracy and reliability of results by reducing sampling error and enhancing statistical power; conducted 3 FGDs and personal consultations with local leaders and officials, including village executive officers/chairpersons comprising about 17 percent of the total sample size attained. Besides, for DiD estimation, a researcher reached out to 117

respondents from the Treatment group (beneficiaries) and 101 respondents from the Control group (non-beneficiaries) to capture only quantitative data on income changes brought by the program. The DiD does not necessarily require the same sample size in both groups (Zhou *et al.*, 2016). It was crucial to have a comparative result at the end that would help to come up with a reasonable conclusion and recommendations.

3.2.1 Sampling techniques/procedures

The study employed a stratified random sampling technique because Kasulu district is divided into different wards of different characteristics. The stratified random sampling technique was more appropriate for the study as it involved classifying the population into strata to increase the chances of the objects being selected. The respondents were classified in various strata with regard to their geographical location/ward location. Furthermore, the purposeful sampling technique was used to select respondents for a specific purpose, especially during personal consultation and interviews.

3.3 Data analysis methods and presentation

The collected data from this study were coded, cleaned, and analyzed using the Statistical Package of Social Science (SPSS) and STATA. On the other hand, the mathematical formula was used to calculate the changes brought by the program using the DiD estimation equation. The analyzed data output is presented in descriptive numbers and tables to provide the reader with an understanding of the research findings.

3.3.1 Ordinary Least Squares (OLS) Regression Model

The Ordinary Least Squares (OLS) regression model was used to estimate and provide an understanding of the changes in Consumption capabilities due to several independent variables; this was considered as an indicator of changes in life conditions after the intervention. The assigned independent variables on Consumption capabilities were income for FHH, Household size, capability to finance education, and housing needs. These analyses looked at the comparison in the rural population. This study employed an Ordinary Least Squares (OLS) regression model. After all, it is a popular statistical method due to its simplicity and interpretability. Second, it effectively models the linear relationship between independent and dependent variables, providing coefficients that indicate the average effect of each predictor. Third, OLS is efficient under the Gauss-Markov theorem, ensuring that it yields the Best Linear Unbiased Estimator (BLUE) when its assumptions are met, which means it has the smallest variance among linear estimators. Fourth, this method is versatile, applicable across various fields such as economics, social sciences, and natural sciences for both predictive modelling and causal analysis. Lastly, OLS facilitates statistical inference, allowing researchers to test hypotheses and construct confidence intervals; its widespread support in statistical software further enhances its accessibility, making OLS a foundational tool in data analysis (Wooditch *et al.*, 2021).

Besides, the analysis considered the key assumptions for the OLS to obtain robust and valid results for the study. The Ordinary Least Squares (OLS) regression model relies on several key assumptions, such as Linearity and Homoscedasticity (Burton, 2021), to ensure that the estimates are unbiased, efficient, and consistent.

3.3.2 Empirical estimation model

The empirical estimation model used for objective one’s analysis is based on the Multiple Linear Regression model as follows;

$$Consumption(c) = \alpha + \beta_1 INC + \beta_2 HHS + \beta_3 Fed + \beta_4 Fhs + \mu$$

Where;

α -constant

INC-income of the household

HHS-household size

Fed-financing capacity for education

Fhs-Financing capacity on housing

$\beta_1, \dots, \beta_4$ are estimation coefficients in the equation

μ - error term

NB: The unit of measure for all variables is indicated in Table 1.

Table 1. Variables and unit of measurement

Variable name	Unit measure
Consumption	Spending capacity of FHH in TZ shillings
Income	Amount of income (in TZ shillings) earned from TASAF and other sources.
Household Size	Number of members in the FHH family
Financing for education	%age of FHH with or without the capacity to finance their children's educational needs
Financing for Housing	%age of FHH with or without the capacity to furnish their houses

Source: Field Survey, Kasulu DC, April 2025

3.3.3The Difference-in-Differences (DiD) estimation

The study employed the Difference-in-Differences (DiD) method to track the changes in FHH’s income brought by the program in the population. The DiD is a statistical technique used in econometrics and social sciences to estimate the causal effect of a treatment or intervention (Callaway and Sant’Anna, 2021). It compares the changes in outcomes over time between a treatment group (which receives the intervention) and a control group (which does not). Further analysis and description are presented in the next section of this paper.

3.4 Ethical Considerations

Ethical consideration of social research ethics was ensured according to the regulations of research. Researchers ensured that all information provided by the institution remains confidential and is used for this study only. The interview was conducted with the consent of the researcher and the respondents.

3.5 Limitations of the study

There were some limitations that the researcher encountered during the field survey, these include financial constraints, time, and availability of respondents in the areas visited. However, a researcher used his financial resources and mobile phone calls to ensure that the exercise was successful by getting a reasonable number of respondents from different wards

in the study area. Besides, interviews with rural people, especially the elderly, who have a low level of education, require knowledge of rural settings to interpret some of the ideas given by respondents during conversation, because in most cases, their responses are based on their recall capacity and not on specific records documented in the house.

4. RESULTS AND DISCUSSION

4.1 Basic characteristics of Respondents

4.1.1 Age

The study assessed people's characteristics such as sex, age, occupation status and education as presented in Table 2 which indicates that the leading age group reached out is between 45-54 years, which occupies about 32 percent of the population under study, followed by that of 65 and above years with about 28 percent, and 25percent for 35-44 years.

Table 2. Age of respondents

Response recorded from FHH	Frequency	Percentage
Age of household (years)		
35-44	30	25.0
25-34	4	3.3
55-64	15	12.5
65 and above	33	27.5

Source: Field Survey, Kasulu DC, April 2025

4.1.2. Gender

The study reached only Female households in the interview because that was the focus of the study (Table 3).

Table 3. Gender of Household Head

Response recorded from FHH	Frequency	Percentage
Female	120	100

Source: Field Survey, Kasulu DC, April 2025

4.1.3 Occupation

The results further indicate that (Table 4), about 96 per cent of the respondents are engaging in informal work/business such as selling vegetables, cereal crops, farming, keeping livestock, cooking food "*mama ntilie*", and other small businesses that earn their income apart from cash transfer.

Table 4. Employment status of Household head

Response recorded from FHH	Frequency	Percentage
Unemployed	5	4.2
Engaging in informal work/business	115	95.8

Source: Field Survey, Kasulu DC, April 2025

4.1.4 Education

Besides, it was found that (Table 5), the majority of female-headed households have no formal education, which is 63 per cent of the population. In comparison, only about 36 per

cent have a formal education. This implies that poverty is real, given the situation of lacking a good weapon, “education” to fight against poverty, which is why their life depends mainly on help from the program, government, and other community well-wishers. This population needs an education support program like that of an adult learning program.

Table 5. Education of respondents

Response recorded from FHH	Frequency	Percentage
No formal education	76	63.3
Primary-secondary education	43	35.8
Higher education (college/university)	1	0.8

Source: Field Survey, Kasulu DC, April 2025

4.2 Impact of the program on the livelihoods of Female-Headed Households

4.2.1 Changes in income levels of female-headed households before and after receiving cash transfers

4.2.1.1 Regression analysis results

The result in Table 6 indicates that all independent variables except the “Financing on Housing variable” are statistically significant. The results show that the unit change in income of female households increased consumption capabilities by 104.32 per cent (which is equal to a 4.3 per cent increment) during the program intervention, and it is statistically significant at the 0.05 level, having a positive and strong relationship with the consumption power of the household head. It implies that the program has contributed to positive income change among female-headed households in the district, making them better off in terms of family management. This is justified as well in (Al Fara, 2024; Buvinic and Furst-Nichols, 2016). However, they said, the amount should be adjusted as it is not enough, indeed, given the rising cost of living. “.....we are given 30 000 to 50,000/= but this amount cannot even sustain our needs at home as we have so many responsibilities to care” said one of the females during focus group discussion in Asante Nyerere ward (Personal Communication, April 2025). Also, as the costs of education rise, it reduces the consumption capabilities by 19 per cent among the FHH, which is statistically significant; this implies that education financing takes a higher portion of their income. The costs of house construction also affect consumption negatively, although not statistically significantly, suggesting that funding for housing may not have a meaningful impact on consumption. The majority of the FHH beneficiaries have standard houses as they use part of their income for house construction and refurbishment. The size of the household (family members) has a positive impact on consumption capabilities. The results indicate that an increase in the household’s size can result in an increase in the consumption burden by 6.1 per cent, which is statistically significant. The implication of this is that the more the FHH has children/family members, the more the burden of expenditure is faced in the house, including education, food, clothing, and other needs for daily life (Canton, 2021). The study found that there are families with more than 10 members living at home, with the mother as the head of the family (see also Mokhtari and Dehghani, 2021).

Moreover, to ensure that the results are valid and robust, and that the model complies with the assumptions, the researcher tested for heteroskedasticity problems using the Breusch-Pagan test. The test involved the two hypotheses, namely: H_0 : there is constant variance

(homoskedasticity) and H1: there is no continuous variance (heteroskedasticity). Hence, the results indicates that, $\text{Prob} > \chi^2 = 0.7970$ which means that, since the P-value (χ^2) is greater than critical value at 0.05 level, it is statistically insignificant and therefore, there is no problem of heteroskedasticity across all levels of the independent variables under study; instead, there is homoscedasticity meaning that, the variance of the residuals (errors) is constant across all levels of the independent variables which gives robust and valid results for conclusion. Additionally, R-squared is 0.7713, meaning that approximately 77.13 per cent of the variability in the dependent variable can be explained by the independent variables in the model. This suggests a strong relationship between the predictors and the outcome, as a significant proportion of the data's variance is accounted for, and the remaining 22.87 per cent represents unobservable error in the model.

Table 6: OLS-Weighted Least Squares Regression analysis results

Consumption	Coefficient	Standard Error	T-statistic	P-value
Income of Female Head of Household.	1.043214	.2089988	4.99	0.000**
Financing for Housing	-.053183	.0629984	-0.84	0.406
Financing for Education	-.1899129	.0860963	-2.21	0.036**
Household Size	.0606431	.0180258	3.36	0.002**
Constant	-.4523771	2.644448	-0.17	0.865

Breusch-Pagan test for heteroskedasticity

$\chi^2(1) = 0.07$

$\text{Prob} > \chi^2 = 0.7970$

R-squared = 0.7713

Note: **p<0.05 significant

Source: Field Survey, Kasulu DC, April 2025

4.2.1.2 Difference-in-Differences (DiD) results on the impact of the TASAF III program in Kasulu district

To estimate the income changes brought by the program, the following mathematical formula was used;

$$\text{DiD Estimate} = (\text{PostT} - \text{PreT}) - (\text{PostC} - \text{PreC})$$

Where:

PostT = aggregate outcome for the treatment group after the intervention.

PreT = aggregate outcome for the treatment group before the intervention.

PostC = aggregate outcome for the control group after the intervention.

PreC = aggregate outcome for the control group before the intervention.

Now, from the data captured for two groups (treatment and Control group);

$$\text{PostT} = 40368000/=$$

$$\text{PreT} = 48240000/=$$

$$\text{PostC} = 30196000/=$$

$$\text{PreC} = 40732000 /=$$

Hence;

DiD Estimate = aggregate change in treatment group minus aggregate change in control group

$$\text{DiD Estimate} = (40368000 - 48240000) - (30196000 - 40732000)$$

$$\begin{aligned}
 &= -7872000 - (-10536000) \\
 &= -7872000 + 10536000 \\
 &= 2,664,000 / 117 = 22,769/=
 \end{aligned}$$

So, this answer suggests that the program contributed to the increased average annual income earnings by Tz22, 769/= per Female-Headed household of Kasulu DC.

Overall, the above results provide a strong conclusion that, despite its incompleteness in satisfaction, the program has helped the FHH population in the district. Thus, Female-headed households have experienced a significant increase in income levels after receiving cash transfers, leading to improved economic stability at a significant level. The findings from the FGDs with program beneficiaries depicted that the majority of Female-headed households used to have an average annual income of Tz360,000 before intervention. Now the intervention increased their average income by Tz 22,769/=, making it Tz 382,769/= average yearly income per FHH, thus helping to reduce the income poverty in their families slightly (see also Molyneux,2006; Mujahiddin and Mahardika, 2019).

4.2.2 Proportion of female-headed households that moved out of poverty

The baseline economic situation indicates that all FHH were living in extreme poverty, as shown in Table 7, before the intervention started. After intervention, the results suggest that about 78 per cent of FHH were better off due to economic support from the TASAF III program through cash transfer (see table 8). The findings further found that, after the intervention, the FHH could afford to finance their children's education, buy food for home consumption, purchase clothes, construct houses, and start small businesses such as vegetable selling. The majority of FHH are now living in better life conditions compared to the previous period without intervention (Manda *et al.*, 2021). One of the Female heads said during the interview that "*.....we were very poor, having no income even to buy some food and cloth for our children, but after this support from TASAF III, we can now afford to do so, we are happy a little bit life is good*" (Personal communication, April 2025). Although the results indicate a better life for FHH, they still need more economic support (Östberg *et al.*, 2018; Panampitiya, 2020; Tao,2019) through other development strategies apart from the cash transfer program; such support may be in terms of training, mobilising them to get access to microloans from the government, and providing them with agri-subsidies for farming.

Table 7. Poverty status before intervention

Response recorded on status from FHH	Frequency	Percentage
Poor	120	100
Total	120	100

Source: Field Survey, Kasulu DC, April 2025

Table 8: Female-headed households that moved out of poverty

Response recorded from FHH	Frequency	Percentage
Significantly worse before	1	0.8
Worse before intervention	3	2.5
Above the same	21	17.5
Better after intervention	94	78.3
Significantly better after intervention	1	0.8
Total	120	100.0

Source: Field Survey, Kasulu DC, April 2025

4.2.3 Barriers faced by female-headed households in accessing and utilizing the benefits of the TASAF III

The results indicate that the only barrier identified is the lack of institutional support and accessibility from other CBOs and NGOs that can help these FHHs access additional financial and educational support for their development. The problem weighs about 73 per cent, as indicated in Table 9 depicting the serious demand from the FHH in the district. The issue of distance to the registration office was also identified as a concern for some FHH who walk on foot to the office, which poses health problems such as nervousness and fatigue due to the long distance of about 5 kilometres. Furthermore, another burning challenge/barrier observed from the focus group discussion is that the money they receive is not enough to cater for their basic needs. Therefore, the majority of them (World Bank, 2020) live their entire lives depending on debts from savings from women's savings groups (VICOBA), personal business, and help from relatives and mature children who are employed/self-employed. This is also evidenced in (Becker, 2019) as rural people experience poor lives due to a lack of financial capacity to finance their basic needs, including food. Also, sometimes there is a delay in receiving the funds from the program, leading to a harder life. Additionally, given their low level of education sometimes they get deceived by their children and lose the money from the mobile phones as the program pay them through mobile phone cash transfer such as M-Pesa, etc. moreover, from the focus group discussion, the study found that, Poor infrastructure and fears of social stigma associated with seeking help also contribute to the difficulties female-headed households face in accessing vital resources from the program. Thus, addressing these barriers is essential for empowering these female-headed households and enhancing their socioeconomic status.

Table 9. Barriers faced by female-headed households in accessing and utilizing the benefits of the TASAF III

Response recorded from FHH	Frequency	Percentage
Education Awareness about the program		
High	116	96.7
Low	04	3.3
Administrative challenges (registration process)		
Complex	19	15.8
Neutral	7	5.8
Somewhat simple	41	34.2
Very simple	53	44.2
Distance to the registration office		
Less than 5KM	10	8.3
1-5KM	110	91.7
Cultural barriers		
Presence	4	3.3
None	116	96.7
Institutional support and accessibility from other CBOs, NGOs		
Available support	32	26.7
Not available	88	73.3

Source: Field Survey, Kasulu DC, April 2025

5. CONCLUSION AND POLICY IMPLICATIONS

This study investigated the contribution of the TASAF III program to poverty reduction among FHH in Kasulu district using primary data collected from beneficiaries and non-beneficiaries of the intervention. The findings from the OLS regression model indicate that income has a positive correlation with the consumption capability of FHH, which is statistically significant at the 0.05 level. This suggests that the intervention has helped to reduce income poverty among FHH in the district by 104.3 per cent (which is equal to a 4.3 per cent increment from a 100 per cent base). Besides, the results from DiD estimation show that the TASAF III program has made a significant positive impact on the income levels of female-headed households (FHH) in the Kasulu District, with an aggregate average annual income increase of Tz 2,664,000, equivalent to Tz 22,769/=per FHH following the intervention (*ceteris paribus*). Furthermore, the study found that approximately 78 per cent of these households reported improved economic conditions, enabling them to finance education, food, clothing, housing, and small businesses. Despite the aforementioned positive outcomes, challenges remain, particularly regarding the adequacy of financial support and the rising cost of living. Many beneficiaries expressed that the cash transfers are insufficient to meet their basic needs, highlighting the necessity for additional support mechanisms beyond direct cash assistance. Furthermore, barriers such as a lack of institutional support, poor infrastructure, and delays in fund disbursement hinder the full realization of the program's benefits. Overall, this study effectively highlights the impact of the TASAF III cash transfer program on female-headed households in Kasulu District, revealing both the challenges and opportunities faced by this vulnerable population. Through a comprehensive methodology that combined qualitative and quantitative approaches, the study provided valuable insights into how cash transfers can alleviate poverty and enhance economic stability for female-headed households. The findings underscore the importance of tailored social protection programs that address the unique needs of marginalized groups. Furthermore, the study contributes to ongoing discussions about improving the design and implementation of social protection initiatives, ultimately aiming to foster sustainable development and empower women in challenging socioeconomic contexts. Thus, by focusing on Kasulu District, the research not only informs local policy but also offers lessons applicable to similar settings across Tanzania and beyond.

To enhance the effectiveness of the TASAF III program for female-headed households, it is crucial to implement several policy strategies as follows: First, increasing the cash transfer amounts would help better align support with the rising cost of living and the diverse needs of these households. Second, integrating training programs that focus on financial literacy and entrepreneurship can equip beneficiaries with skills to engage in income-generating activities. Third, establishing partnerships with local NGOs and community-based organizations can improve access to microloans and agricultural subsidies, providing a more comprehensive support network. Fourth, addressing logistical challenges, such as the distance to registration offices, and improving infrastructure, will facilitate easier access to program benefits. Finally, ongoing community engagement and awareness campaigns can help reduce the stigma associated with seeking assistance, encouraging more women to utilize available resources effectively. Thus, by addressing these barriers and enhancing support mechanisms,

the program can significantly empower female-headed households and improve their overall socioeconomic status for sustainable development.

Acknowledgement: We are thankful for the cordial cooperation during data collection from the TASAF program beneficiaries and non-beneficiaries in Kasulu District, in the selected wards visited, local leaders, and the community at large.

Funding - The author declares that no funds, grants, or other support were received during the preparation of this manuscript; the authors used their source funds.

Competing/Conflict of Interests- The authors have no relevant financial or non-financial interests to disclose.

Authors' Contributions statement-1st Author: Conceptualisation, Data collection, introduction, literature review; 2nd Author: Data analysis, Methodology, Results presentation, and final review.

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APPENDIX. A MAP OF KASULU DISTRICT, TANZANIA



Source: Google Map: [Kasulu district map - Search Images](#)