Factors Shaping Women's Involvement in Community Development Projects: A Case of Mvomero Water Initiatives

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Abstract: This study investigated about factors influencing women's involvement in community development projects within the framework of development initiatives targeting women. Specifically, it focused on water initiatives in the Mvomero District. The study utilized the cross-sectional design. The findings from probit regression analysis reveal significant insights, highlighting the influential role of various factors in shaping women's decisions to participate. Education level emerges as a significant determinant emphasizing the pivotal role of educational attainment in fostering women's involvement in community development endeavors. Additionally, marital status and family size demonstrate notable impacts, illustrating the complex relationship between familial responsibilities and women's engagement in such projects. Furthermore, income level and access to credit emerged as crucial determinants, underscoring the importance of financial resources in facilitating women's active participation. Moreover, media, awareness and government policies played pivotal roles in influencing women's decisions to engage in community development initiatives. The study emphasizes the necessity of targeted policy interventions aimed at women's participation through enhancement of income-generating opportunities and awareness to foster inclusive development and growth, thereby contributing to the advancement of gender equality in community development efforts.

Keywords: Women participation; community development; water projects; gender equality;
Policy interventions.

Introduction

The global discourse on women and development gained momentum with the United Nations' organization of the first women's conference in Mexico in 1975 (Kitole & Sesabo, 2024). Despite significant progress, women continue to face obstacles that hinder their full participation in the development process, including illiteracy, denied rights, discrimination and various forms of inequality. In response, participatory development has emerged as a fundamental strategy to ensure comprehensive and appropriate global improvement, aligning with calls from governments and international community for women to be actively involved in the development processes that directly affects their lives (Kitole & Sesabo, 2022).

Communities may participate in diverse development programs such as infrastructure development, healthcare facilities, water services and educational projects. Recent trends highlight a shift in the perception of females from mere recipients to critical partners, playing essential roles in programming and delivering development initiatives. The implementation of inclusive development programs has become a significant means through which communities mobilize local and external resources to address generational development issues within their areas (Kitole et al. 2023b).

Women's participation in community development projects stands as a vital component of the global

development agenda, striving for equality, inclusion and sustainable development (Mbilinyi et al., 2018). Encouraging women's engagement in community development projects is considered a tool that will facilitates the attainment of the Sustainable Development Goal (SDG) 2030, leaving no one behind (Mlambo & Kapingura (2019). While numerous initiatives, both global and local, have been established and implemented to enhance women's participation in various community development projects and decision-making processes, the observed participation levels in Tanzania remains low (Mbilinyi et al., 2018); Kitole and Utouh, 2023; Kisimbii, 2020). The 2020 Global Gender Index ranked Tanzania at 125 out of 155, indicating a poor performance in terms of women's participation and involvement in community development. Studies (Mbogori, 2017; Welikhe, 2017; Fumbwe et al. 2021) underscored that traditional and cultural norms play a significant role in hindering women's participation by perpetuating an inferior status for women compared to their male counterparts.

Other studies in Tanzania (Kisingani, 2019) point out the factors such as education, domestic responsibilities and contextual socioeconomic characteristics as major hindrances to women's participation in community development projects. These studies emphasize the need for a more practical understanding of factors influencing women's participation to inform the development of effective policies. In light of these considerations, this study addresses factors influencing women's participation in community development projects in Mvomero District as a cases study. Mvomero District, situated within the Morogoro Region of Tanzania holds a significant importance. The Morogoro Region is strategically prioritized for development initiatives, primarily because of its geographical location. It occupies a pivotal position between Dar Es Salaam, the bustling business hub, and Dodoma, the nation's capital. This positioning indicates a heightened potential for fostering women's involvement in developmental activities. Moreover, Mvomero District, nestled within the Morogoro Region, is rural, inhabited by the Lugulu tribe, renowned for their matrilineal culture (Mnimbo, et al., 2019) . Therefore, the district was selected due to its geographical setting and due to the cultural aspects of a matrilineal society, which promote women's empowerment in inheritance, land and asset ownership.

Theoretical Underpinning

This study used the Participatory Development Theory, initially developed by Paulo Freire in the 1970s, which advocates for active involvement of local communities, including both men and women, in development projects that affect their lives. While the theory does not specifically focus on women's issues, it inherently promotes inclusivity and gender equality by emphasizing the participation of all community members in decision-making processes. As Brett (2003) noted, the theory represents a shift from top-down strategies to more locally sensitive methodologies, highlighting the importance of including women in planning, implementation and evaluation of community development projects. The essence of the theory lies in engaging local communities in decision-making, aiming to reduce service costs, foster ownership, encourage additional development efforts and raise awareness of community issues. By involving individuals who directly benefit from projects, the theory seeks to empower communities to take responsibility for their decisions and actively participate in public activities.

In adopting the bottom-up approach recommended by the Participatory Development Theory, this study emphasized the importance of involving community members, including women, in decision-making processes related to development projects. This approach enhances efficiency, sustainability, commitment and communal ownership of initiatives. Achieving meaningful participation requires an understanding of factors influencing women's involvement in community-based projects (Jennings, 2000). By employing the theory, this study recognizes the significance of active community involvement, particularly that of women, in shaping and implementing development projects.

Empirical Framework

Several empirical studies provide valuable insights into factors influencing women's participation in community development projects, contributing to the establishment of the empirical framework for this study. Kicheleri (2020) highlighted the significance of education levels in determining women's participation in community projects. The study revealed that educated respondents were more likely to participate in community development activities as education enhances trainability and adoption of technologies. Education also influenced decision-making processes related

to community development projects, emphasizing the role of understanding and knowledge in influencing participation.

Olaide's (2021) study focused on the participation of married women in community development projects. The results indicate that family responsibilities played a significant role as individuals with family obligations were more likely to engage in community development activities.

Okeyo and Otieno's (2018) study highlighted the influence of socio-cultural practices on women's participation in community water projects. The study identified cultural barriers in decision-making processes dominated by men as hindrances. The study recommended overcoming these barriers by adopting a hybrid culture that encourages equal participation in leadership and decision-making roles. The study of Winther et al. (2017) emphasized the role of media in alleviating gender stereotypes and cultural norms that hinder women's engagement in politics and community development. The study identified media as an essential tool to challenge existing norms and beliefs, fostering an environment conducive to women's active participation.

Other studies, such as that of Lugendo's (2019), investigated factors influencing women's participation in community development projects in Kahama Town and revealed that income level and prior employment are key influencers. Economic considerations also played a role in determining the extent of women's participation in community projects. The study of Mumbe (2019) on community awareness and attitude revealed that lack of openness, discrimination and nepotism were significant problems influencing community involvement in constituency development projects. The study highlighted the importance of addressing these challenges to enhance community participation. Wandera et al.'s (2021) study emphasized the role of government presence and policies in encouraging community participation in projects. The study suggested that the government's involvement served as proof of the project's genuineness and aligned with the interests of the people.

These empirical studies collectively contribute to the understanding of potential factors that influence women's participation in community development projects. Education, family responsibilities, socio-cultural practices, media, economic factors, awareness and government policies emerged as critical elements in shaping women's involvement in these initiatives. The findings from these studies form a foundation for the empirical framework of the current study, guiding the exploration of factors influencing women's participation in community development projects in Mvomero District.

Methodology

Research Design
The study employed a cross-sectional design, chosen for its appropriateness in examining the prevalence of phenomena and providing a comprehensive snapshot, effectively capturing the spatial distribution of the population at a single point in time, aligning with the study's objectives. The investigation focused on women actively participating in the Mvomero water project within the Mvomero District.

Population and Sampling
The sample size, set at 100 women, was determined as the definitive size for data collection through structured questionnaire. The questionnaire, meticulously designed, aimed to extract relevant information on the determinants of women's involvement in community development projects. The exploration covered key independent variables, including education level, marital status, family size, socio-cultural practices, media influence, economic factors, awareness, attitudes and government policies.

The study used the Yamane's formula (1967) to estimating the sample size for the women to be involved in the study through the simplified computation formula below:

$$\text{Sample}, n = \frac{N}{(1+N(e)^2)}$$

Whereas n=sample size, N=the target population, which is 223,304, e=the error of 10%, equivalent to 0.1, N= 228,304, and e=10%= 0.1

$$n = \frac{228,304}{(1 + 228,304(0.1)^2)} = 99.9 \approx 100$$

Therefore, the total number of 100 women in Mvomero district constituted the study sample.

Validity and Reliability
Validity and reliability are crucial aspects of ensuring the credibility and accuracy of research findings. The researcher carefully designed the questionnaire

based on established literature and expert inputs to ensure content validity. Pilot testing assessed the clarity and relevance of the questionnaire items, leading to necessary revisions for improvement. Additionally, the researcher implemented standardized data collection procedures. Inter-rater reliability tests ensured consistency of results.

The study employed the common method of calculating Cronbach's alpha (Vaske et.al. 2017) which measures the internal consistency or reliability of a set of variables to ensure consistency of the results. Cronbach's alpha = (k * Mean Rho) / (1 + (k - 1) * Mean Rho) where k is the number of items (variables) and Mean Rho is the mean of all pairwise correlation coefficients between the items. Mean Rho = (Sum of all pairwise correlations) / (k * (k - 1) / 2) where k is the number of items (variables). In this case, since the study had a probit regression model, the researcher could compute the reliability of the model using Cronbach's alpha based on the coefficients of the variables asper table 1. As this study employed the probit model due to the presence of the dichotomous outcome (i.e. binary) as Dimoso and Andrew (2021) recommended, Odds test ratio tested the validity and reliability and the results of the test appear in table 6.

Table 1: Cronbach's Alpha Test for Validity and Reliability

Variables	Ag.	MS	FS	Ed.	SC	In.	NN	Aw.	Md	GP
Age	1.000									
Marital Status	-0.021	1.000								
Family Size	-0.032	-0.021	1.000							
Education	0.009	0.041	0.064	1.000						
Source-Credit	-0.010	-0.012	0.032	-0.032	1.000					
Income	0.026	-0.051	0.025	0.072	0.057	1.000				
Negative norms	0.043	0.021	-0.041	0.012	-0.032	0.008	1.000			
Awareness	0.024	0.038	-0.062	0.041	0.072	0.058	0.042	1.000		
Media	0.032	0.059	-0.054	0.073	-0.081	0.032	0.062	0.081	1.000	
Gov.policies	0.003	0.023	0.042	0.082	*	*	*	*	*	1.000

Based on table 6, the researchers calculated the Cronbach's Alpha:

Cronbach's Alpha = (k * Mean Rho) / (1 + (k - 1) * Mean Rho)
Cronbach's alpha = (10 * 0.005333) / (1 + (10 - 1) * 0.005333)
Cronbach's alpha = 0.05333 / (1 + 9 * 0.005333)
Cronbach's alpha = 0.05333 / (1 + 0.048)
Cronbach's alpha = 0.05333 / 1.048.

Treatment of Data

The researcher carefully entered the data from the questionnaire into a database using the STATA 20.0 software, a widely used statistical analysis tool known for its robust data management capabilities. Data cleaning procedures took place to identify and rectify any errors or inconsistencies in the dataset, such as missing values or outliers. Subsequently, descriptive statistics summarized the main characteristics of the variables, providing insights into the distribution and central tendency of the data. Following this, regression analysis and factor analysis guided the exploration of relationships between variables, underlying factors that influence women's involvement in community development projects. Throughout these processes, strict adherence to methodological guidelines and best practices ensured the integrity and accuracy of the data analysis. The results provided meaningful insights into factors shaping women's participation in community development initiatives. Overall, the treatment of data in this study was comprehensive and rigorous, leveraging the capabilities of STATA 20.0 to enhance the quality and validity of the research findings.

Analytical Modelling

This study employed the probit model due to the presence of the dichotomous outcome (i.e. binary) as Dimoso and Andrew (2021) and Rijnhart et.al. (2019) recommend. The process described the women's decision to participate in community development projects that $y_i^* = \beta w' + \mu_i$ where $\mu_i \sim (0, \delta^2)$ y_i^* is the dependent variable, which assume unobservable status; w' represented the independent variable, β

represented the coefficient of the independent variable and μ_i is the error term with standard error normal distribution. Since y_i^* is unobservable, what we observe is y_i which takes only two values as described in the following expressions:

When $y_i^* > 0, y_i = 1$ if Women participate in community developent projects

When $y_i^* \leq 0, y_i = 0$ if Women do not partcipate in community developemnt projects

Because the probability that the women participation in community development projects is greater than zero $(y^* > 0)$

$$prob(y = 1) = prob(y_i^* > 0)$$

Or less than or equal to zero $(y^* \leq 0)$

$$prob(y = 0) = prob(y_i^* \leq 0)$$

The likelihood of women participation in community development project appear by unobservable factors through the dependent variable as follows:

$$Women\ participation = \begin{array}{l} 1\ if\ women\ participate\ in\ community\ development\ projects^* > 0 \\ 0\ if women\ do\ not\ participate\ in\ community\ development\ projcts^* < 0 \end{array}$$

If $y_i^* = 0$ then $y = 1$ implying that women participate in community development projects. Therefore, the probability that women participate in community development projects is based on the assumption that the probability density function of e_i assumed being $f(\mu_i)$ which results in the creation of new parameter

$$Prob(y_i = 1|x|) = \int_{-\infty}^{x'\beta} f(\mu_i)du = F(x_i'\beta)$$

$$Prob(y_i = 1|x|) = 2\pi^{-\frac{1}{2}} \exp\left((-\beta x_i)^{\frac{2}{2}}\right)$$

Now, based on the variables used in this study, the Probit model is therefore presented as;

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 D_i + \mu_i$$

Of which the β_0 is the constant term while β_1 and β_2 are the parameters estimated in the probit equation. On the other hand, X_i indicates the covariates while D_i represents group of all dummy variables used in this study. Since the Probit model is well addressed under the marginal effects, which help to explain the determinants of women participation in community development projects. The marginal of variations are such that:

$$\frac{dy}{dx_i} = \beta_i \emptyset(\beta_1 + \beta_n)$$

Table 2: Description of Variables

SN	Variable	Variable Prefix	Description	Measurement	Expected outcome (sign)
1	Women participation	Y_1	Status of women participation in community development projects 1 = Participate 0 = Don't participate	Category	
2	Age	X_1	Age of women interviewed in years	Continuous	+/-
3	Marital status	X_2	Marital status of the women interviewed 1 = Married 0=otherwise (single, divorced, widowed)	Category	+
4	Level of education	X_3	Level of education of women 1=Above tertiary education 0=below tertiary education	Category	+
5	Source of credit	X_4	Women access to credit 1= have access to credit 0= have no access to credit	Category	+/-
6	Negative social cultural norms.	X_5	If negative culture and tradition affect participation 1 = Yes 0= No	Category	+
7	Awareness	X_6	Awareness influences participation 1 = Yes 0= No	Category	+/-
8	Family size	X_7	Family size was obtained as the number of household members	Continuous	+/-
9	Government policy	X_8	If government policy influence women participation 1 = Yes 0= No	Category	+/-
10	Media and information	X_9	If media and information influence women participation 1 = Yes 0= No	Category	+/-
11	Income	X_{11}	The average monthly amount of income earned by women	Continuous	+/-

On the other hand, this study used a multiple linear regression model to look at how the women participation in community development projects can be determined. The decision to use such model based on the linearity relationship between explanatory and explained variables as the explained variable contains continuous data (table 2).

Ethical Considerations

In accordance with ethical guidelines, the study obtained informed consent from all participants involved in the research process. Prior to data collection, participants received comprehensive briefings on the study's objectives, procedures, potential risks and benefits. The researcher furnished the respondents with detailed information concerning their voluntary involvement, confidentiality measures and their prerogative to withdraw from the study at any point without facing repercussions. Each of the participants signed the consent form to indicate willing ness to participate in the study.

Results and Discussion

The Results section appears into two key sections. Firstly, descriptive statistics, which provide an overview of the general characteristics of women and their participation in community development projects. This section delves into demographic data,

educational background, family size, income levels, access to credit, and other relevant factors that may shape women's involvement. Secondly, probit regression results focused on identifying determinants of women's participation in community development projects. Through a rigorous analysis, the section explores the impact of various factors on women's engagement in community initiatives.

Descriptive Results
The descriptive results offer a demographic summary of the respondents, utilizing key criteria such as age, marital status, level of education and family size to characterize the participants in the study. These demographic characteristics play a crucial role in providing a comprehensive and meaningful overview of women's participation in community development projects within the Mvomero District. The findings contribute to a clearer understanding of potential factors.

Table 3: Demographic Information for Marital Status and Education Level

Variable	Attributes	Frequency	Percentage (%)
Marital status	1=married	62	62.00
	0=otherwise	38	38.00
Level of education	1=Tertiary and above	29	29.00
	0=otherwise	71	71.00

Table 4: Demographic Information for Family Size and Age

Variable	Observation	Mean	Std. Dev.	Min	Max
Age	100	41.26	10.0198	25	70
Family size	100	4.16	2.381409	1	9

Table 5: Participation in Community Development Projects

Participation	Freq.	Percent	Cum.
Do not participate	35	35%	35
Participate	65	65%	100
Total	100	100%	100.00

Table 3 indicates the marital status of respondents, showing that 62% of respondents were married while 38% were under other categories, encompassing single, widowed and separated individuals. In terms of educational attainment, respondents appear into two groups: those with tertiary education and above, constituting 29% and the other group encompassing those with education levels below tertiary, representing the remaining 71%.

Table 4 offers insights into the age distribution of respondents, revealing an average age of 41 years. This indicates that the majority of women in the study area belonged to the middle-aged category, suggesting their potential and capability for active participation in community development projects. The observed age range spans from a minimum of 25 years to a maximum of 70 years, confirming that a diverse age group participated in the study.

Research Question 1: What is the level of women participation in Community Development Projects?

In the assessment of women's involvement in community development projects, the researcher directed a particular attention toward their participation in water projects. Table 4 presents data on the total number of respondents, comprising 100 women in the sample population, who actively participated in the data collection process and who provided their responses.

The study surveyed these women regarding their participation in Mvomero District Water Projects. The primary objective was to ascertain the proportion of women engaged in community development projects. The findings in table 5 indicate that 35% of the respondents reported non-participation in community development projects while a significant majority of 65% actively participated in such projects, shedding light on the level of women's involvement in community development initiatives.

Research Question 2: What are factors that influence women participation in community developments projects in Mvomero district?

The examination of factors influencing women's participation in community development projects encompassed various aspects, including age, marital status, education level, family size, income level, sources of credit, awareness, negative social cultural norms, government policies and media. These factors underwent the regression analysis utilizing the STATA software, employing a probit econometric model. The outcomes appear in Table 6. The application of marginal effect coefficients gives further information in the table.

The results in Table 6 spotlighted nine noteworthy explanatory variables that significantly influenced women's participation. These include marital status, education level, income level, negative social cultural norms awareness, media, and government policies. Notably, age emerged as an insignificant explanatory variable. This nuanced understanding of influencing factors provides valuable insights for formulating targeted strategies to enhance women's engagement in such initiatives in Mvomero district.

Table 6: Probit and Marginal Effect Regressions.

Variable	Probit regression	Standard error	Marginal effects(dy/dx)	Standard error
Age	-0.0003566	0.0176745	0.000089	0.00441
Marital status	0.9529518**	0.4435297	0.261143**	0.02047
Family size	0.3373126***	0.1044523	0.084174***	0.02422
Level education	1.174971***	0.4460117	0.229319***	0.07813
Source credit	-1.125349**	0.4535779	-0.232672**	0.08415
Income	0.360006***	0.373206	0.086707***	0.00000
Neg_norms	-0.8969484**	0.4093337	-0.230478**	0.10757
Awareness	0.8894059**	0.3899477	0.219587**	0.09294
Media	0.7818681**	0.3626447	0.203124**	0.09293
Gov_policies	0.9226579**	0.3916992	0.223850**	0.09182
Number of obs	100			
LR chi2(10)	60.91			
Prob > chi2	0.0000			
Log likelihood	-34.291244			
Pseudo R2	0.4704			

***p<0.01   **p<0.05   p< *0.1

Findings in Table 6 present several factors that influence women's participation in community development projects. Marriage emerged as a significant predictor, increasing the likelihood of women's participation by 0.261143 percent compared to those who are not married. This positive association is to the support structure provided by spouses, aligning with the findings of Olaide (2021), who suggested that family responsibilities motivate women to participate in community development activities. The potential for wealth accumulation within a family, particularly when both partners are involved, may provide the necessary resources for women to invest and actively participate in community development projects (Kitole et al., 2023d; Olaide, 2021).

Similarly, each additional family member contributed to a probability increase of 0.084174 percent for women's involvement in community development initiatives. Moreover, educational attainment plays a crucial role, with those achieving tertiary education and above exhibiting a 0.229319 percent higher likelihood of participating compared to those with education below the tertiary level. Educational attainment stands out as a significant influencer, with women who have attained tertiary education and above showing a higher likelihood of participation. This finding resonates with Kicheleri's (2020) research that emphasized the empowering potential of education. Educated women are more likely to adopt technologies, engage in community projects more effectively and participate in decision-making processes underlying these initiatives (Kitole et al. 2023a; Kicheleri, 2020).

Conversely, having access to credit is associated with a 1.12 percent reduction in the likelihood of women participating, contrasting with those without any credit sources. Conversely, having

access to credit negatively impacts participation, suggesting a reluctance to invest in community development projects due to concerns about loan repayment. Women with sources of credit may prioritize other economic activities over community development projects, possibly perceiving them as having insufficient returns to cover both loan repayment and living expenses (Kitole, 2023; Okeyo & Otieno, 2018).

Income levels demonstrate a nuanced relationship, where a unit increase in income corresponds to a minute but positive 0.086707 percent increase in the probability of women's participation. Income appears to be a positive influencer, empowering women to participate in projects financially. This finding is consistent with Lugendo's (2019) observation that income fosters the participation of women in community development projects, enabling them to contribute financially to initiatives that involve private donations.

Negative social cultural norms within a society decreased the likelihood of women participating by 0.230478 percent compared to societies devoid of such negative norms. Negative social cultural norms emerge as a significant barrier, reflecting the pervasive influence of cultural practices that underestimate women's contributions in the community. This observation aligns with Okeyo and Otieno's (2018) findings, which highlight the impact of socio-cultural practices on women's participation in community projects, where negative norms restrict women's views, opinions, and decision-making capabilities.

Furthermore, awareness of community development projects positively influenced participation, with women aware of initiatives having the 0.219587 percent higher likelihood of engagement compared to those unaware. The awareness of community development projects appear as a vital factor influencing women's participation. Women who are aware of ongoing projects are more likely to engage actively, displaying their potentials and abilities. This finding is consistent with Mumbe's (2019) findings, emphasizing the role of awareness and attitude in providing women the opportunity to contribute meaningfully to projects, particularly when transparency is maintained throughout each project stage.

Government policies designed to favor women's participation and media influence played significant roles, increasing the probability of participation by 92.3% and 22.4% respectively. Thus, these results provide a nuanced understanding of the multifaceted influences on women's participation in community development projects, offering valuable insights for constructing targeted strategies and policies to enhance women's engagement in Mvomero District. Government policies and media influence appear as positive drivers of women's participation. Government support, especially through policies favoring women's participation in community development projects, increases the likelihood of their engagement. Similarly, media exposure to ongoing projects and government interventions enhances women's awareness and interest in participating in community development initiatives (Wandera et al., 2021; Diar, 2017).

Conclusion and Recommendations
Conclusions
Based on the results obtained from the odds ratio test presented in Table 7, the study draws several conclusions regarding the factors influencing women's participation in development activities. Firstly, the variable 'Age' did not exhibit a significant effect on motivating women to engage in development projects. This suggests that age alone may not be a determining factor in women's participation rates. Conversely, variables such as 'Government Policies', 'Media Exposure', 'Income', 'Education', 'Family Size', and 'Marital Status' demonstrated significant positive associations with increased women's participation in development initiatives. These findings emphasize the multifaceted nature of factors influencing women's involvement, spanning from socio-economic status to media influence and policy support. Moreover, there is a significant impact of negative societal norms, such as ostracism on women's participation in development projects. In conclusion, the study underscores the complex interplay of various factors influencing women's participation in development projects. By identifying both enabling and inhibiting factors, policymakers and practitioners can develop more targeted and effective strategies to promote women's empowerment and enhance their meaningful engagement in development initiatives.

Recommendations
Based on conclusions derived from the findings, the study proposes the following policy recommendations to foster greater gender inclusivity and to promote women's empowerment

in development initiatives in Mvomero District. The policy need to focus on promoting education among women, income generating activities and awareness through media. The government policy needs to address issues pertaining to prevention of negative cultural norms.

More research is needed to unpack challenges embedded in credit sources and other demographic issues such as family size and marital status as having sources of credit surprisingly was negatively related to participation, which was not expected. Furthermore, family size increased participation, which calls for more studies.

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