

4.0 IMPLICATIONS OF WOMEN ENGAGEMENT IN VEGETABLES AND FRUITS VENDING ON HOUSEHOLD ASSETS OWNERSHIP IN MOSHI MUNICIPALITY

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ABSTRACT

Despite the progress made by women towards participation in vegetables and fruits vending, their contribution in improving household assets ownership is yet to be adequately recognised. The study specifically analysed assets ownership among women before and after been engaged in vegetables and fruits vending and thereafter compared assets ownership between participants and non-participants in vegetables and fruits vending. A cross-sectional research design guided the study whereby a household survey and key informant interviews were used for data collection. Accidental sampling technique was used to select participants and non-participants of vegetables and fruits vending. Data were analysed using paired sample t-test to compare the means of the two groups in terms of assets ownership and determine whether there is a significant difference among them. The findings show that participating households were better off compared to their counterparts, non-participating households. This is because the assets ownership of the former improved after participation as accounted by 51.5percent with high assets ownership, as opposed to 15.4 percent before participation. Despite that majority of the households had high assets ownership, there were few households with low assets ownership, and these accounted for 28.6 percent of the households. A comparison of household assets ownership before and after participation shows a significant difference in the scores ($t= 6.753$; $p = 0.000$). Therefore, it is concluded that participation in vegetables and fruits vending has an influence in household assets ownership though it is not spontaneous. Since participating households had more household assets as opposed to their counterparts, it is recommended that non-participating households should consider vegetables and fruits vending as an alternative income generating activity. This would eventually and gradually enable them generate more household income and increase assets ownership within their households.

Key words: Women Vendors, Household Assets, Participant, Non-participant

1.0 Introduction

Globally, there has always been a strong gender bias to poverty. Throughout world's history, women have been poorer than men have been (Khamis, 2015). It is often declared that 70 percent of the world's poor are women. In Mali, Burkina Faso, Benin, and Niger in West Africa, between 48 and 65 percent of women live in poverty (Khamis, 2015). Given the prevailing poverty conditions among women, various coping strategies have been adopted in different parts of the world. One of the main survival strategies among women is the creation of self-employment through involvement in various types of entrepreneurial activities. Among informal the entrepreneurial activities include street vending, which has grown rapidly in the recent years. In particular, vegetables and fruits vending among other activities has become a predominant livelihood strategy among poor women in most urban centres throughout the world (Matenga, 2018; Ayanwale and Amusan, 2014).

Though it is not possible to quantify the extent of women participation, it is obvious that the vending sub-sector is highly dominated by women entrepreneurs worldwide (Wang, 2012; Mudzvidzwa, 2005). In developing regions, it is estimated that 75 percent of women are in the informal entrepreneurial activities such as vegetables and fruits vending s (ILO, 2018). In South Asia, over 80 percent of women are in the informal entrepreneurial activities, whereas in Latin America and the Caribbean, women in the sector account for 54 percent of vendors (Uwitije, 2013). In a few countries where cultural norms are restrictive against women's participation in economic activities, women account for 10 percent or less of vendors of vegetables and fruits. In Africa, the majority of street vendors, specifically of vegetables and fruits are women, who account for 88 percent of vendors in Ghana, 68 percent in South Africa, and 63 percent in Kenya (Roever, 2014). According to Roever and Skinner (2016), women constitute more than two-thirds of street vendors in the main cities of Benin, Côte D'Ivoire, Ghana, Mali, and Togo, and more than half in Kenya, Madagascar, Senegal, and South Africa.

In Tanzania, vegetables and fruits vending sector is recognised as playing an important role in the urban setting by generating employment and providing income to a significant percentage of women. This in turn supports their household livelihood, particularly those with no formally approved skills to join the formal sector employment (Tillerman, 2012). Furthermore, vegetables and fruits vending provide a workable alternative for subsistence living among women. It also acts as a barrier against anti-social practices such as theft and prostitution (Uwitije, 2013). Despite the aforementioned potentials and contributions, women engagement in vegetables and fruits vending is shrouded with challenges such as gender biases surrounded by tribal and socio-cultural aspects (Lincoln, 2012). This highly limits their contribution towards improving household wellbeing and assets ownership. Among the initiatives taken by the government in addressing the challenges, include the provision of soft loans to women groups to boost their capital, the setting of special opportunities to supply their products in public entities as well as the provision of funds set aside by the local governments to support women, youth, and people with disabilities. The results of the initiatives undertaken are yet to be manifested broadly in the wellbeing of the households of women vegetables vendors.

Therefore, this study was indented to highlight the increasing importance of vegetables and fruits vending as one of the informal entrepreneurial activities that provide employment and generate livelihoods and most importantly the aspect of household assets ownership. Guided by the

Sustainable Livelihood Approach (DFID, 2001), the study focused on analysing the participation of women in vegetables and fruits vending as well as its implications on household assets ownership. The SLA provided the foundation for qualifying the livelihood parameters and some of the household assets basing on the pentagon of assets that includes natural, social, human, physical, and financial capital. A number of hypotheses guided the study including “household assets before and after engaged in vegetable and fruit vending have remained the same among households of women vendors.”

2.0 Methodology

A cross-sectional research design guided the study because it allowed the collection of data once on the subject under the study for many different variables that can be analysed at once (Labaree, 2009). In addition, a counterfactual approach was used to establish the influence basing on variables pattern, level of significance (p values) and magnitude (t test and eta square statistics) of the differences between the control (non-participant) and treated (participant) groups. The study was carried out in Moshi Municipality in the Kilimanjaro Region. Moshi Municipality has a large number of businesses owned by the residents who are widely known for their entrepreneurial rigour (Olomi, 2009; Mashenene *et al.*, 2014). Moreover, in recent years there was an increase of women entrepreneurs who engage themselves in vegetables and fruits vending in Moshi Municipality.

Data were collected from participating and non-participating women in vegetables and fruits vending in order to compare the level of assets possession across their households. The aim was to establish livelihood outcomes and see what influence vegetables and fruits vending have on the possession of household assets. The sample size of both participating and non-participating women in vegetables and fruits vending was 384 respondents estimated using Fisher *et al* (1991) sampling formula. The formula was chosen because it provided room for selecting respondents with characteristics (p) and without characteristics (1-p) which was critical in this study. However, the response rate was 76.3 percent (293 respondents) which is statistically acceptable as recommended by Babbie (2010) that a response rate of 70 percent and above is statistically acceptable and significant. Among the 293 respondents, 241 were participating women and 52 were non-participating women in vegetables and fruit vending business.

The study used accidental and purposive sampling techniques. Accidental sampling technique was used to select participating and non-participating women of vegetables and fruits vending. This is because the list of all the members of the population could not be obtained and participating women were readily available. Data were analysed using descriptive statistics, eta square and paired sample t- test. Assets ownership among participating and non-participating women of vegetables and fruits vending was measured by developing an asset index. The indicators before and after engagement in vegetables and fruits vending comprised of household assets such as a house, land, motorcycle, bicycle, bed, and television. A paired sample T-test was then conducted to compare the mean differences of assets ownership before and after but also between participating and non-participating women in vegetables and fruits vending. Eta square was used to determine the magnitude of the differences. Since the study was counterfactual, the presence of differences before and after participation as well as between participating and non-

participating women in vegetable and fruits vending would indicate the influence of participation in vending towards asset ownership respectively.

3.0 Findings and Discussion

3.1 Demographic Characteristics

The respondents were profiled in order to determine the results of livelihood and clearly define the comparisons as depicted in Table 1. The findings showed that the maximum age of the respondents was 53 years for participants and 59 years for non-participants of vegetables and fruits vending. The minimum age was 27 years for participants and 30 years for non-participants. The median age was 37 for participants and 48 for non-participants of vegetables and fruits vending. With the median ages between the participating and non-participating women of vegetables and fruits vending of 37 and 48 years; the findings indicate that most of the participants were energetic and at this age, family responsibilities would be at the highest level. This is consistent with the findings in a study by Mshana (2013) who found that women between the age of 31 and 37 participate mostly in vending activities because of household responsibilities over their shoulders.

Household size was also profiled whereby the median household size for participating households was 6 people with the maximum number of 9 and the minimum number of 3. Among non-participants, the median household size was 3 people, the maximum number was 5 and the minimum number was 3. This indicates that majority of participants had 6 people in their households, which means; most of the respondents had the responsibility of taking care of at least 6. This probably influenced them into getting involved in vegetables and fruits vending since they did not have other means of generating income for taking care of their household members.

Table 1: Age and Household Size (n=293)

Variable	Respondents	Maximum	Median	Minimum	The level of education is critical in the
Age	Participants	53	37	27	
	Non-participants	59	48	30	
Household Size	Participants	9	6	3	
	Non-participants	5	3	3	

business perspective as it provides the ability to comprehend business operations. The findings indicate the majority of participants had primary education while the non-participants had college education ranging from vocational to business. The findings in Table 2 show that 78.4 percent of participants and 11.5 percent of non-participants had primary education, 13.7 percent of participants and 17.3 percent of non-participants had ordinary-level education, 7.9 percent and 48.8 percent of participants and non-participants respectively had completed advanced-level

education, while 42.4 percent of non-participants had completed college education. This suggests that majority of the respondents engaged in vegetables and fruits vending had completed primary

education, and this limited them from engaging in more demanding business ventures. These results are consistent with those reported in a study by Nzyoki (2014) and Saha (2011) who found that majority of women entrepreneurs attained primary education or had no formal education at all, something that limited their business education exposure.

Table 2: Education Level (n=293)

Education Level	Participants (n=241)		Non-participants (n=52)	
	Frequency	Percent	Frequency	Percent
Primary	189	78.4	6	11.5
Ordinary	33	13.7	9	17.3
Advanced	19	7.9	15	28.8
College	00	00	22	42.4

The study looked at marital status of the respondents in terms of married, single, widow or divorced. The study results that show that 34.9 percent of participating respondents were single followed by 24.5 percent who were divorced. Others were married (23.2%), and widowed 17.4 percent of the sample studied as indicated in Table 3. Thus, the majority of participants were either single or divorced which implies that most of the women who were engaged in vegetables and fruits vending were the heads of their households. This implies they were engaged in vegetables and fruits vending in order to earn income to meet and meet their household basic needs. These findings are similar to those reported by Uwitije (2016) who found that 50 percent of the surveyed respondents engaged in vegetables vending were either single or divorced. However, majority (57.7%) of non-participants were married, 23.1 percent were single, and the remaining 13.4 and 5.8 percent were either widowed or divorced respectively. This suggests that majority of the non-participants were married unlike the participants of vegetables and fruits vending activities that were found single and divorced. Married women have limited powers of making decisions since they are not the head of their households unlike the single women. These married women were more likely to be affected by an unequal division of family labour, spending a greater amount of time on household and family related activities that limits their ability to engage in other productive activities such as fruit vending.

Table 3: Marital status (n=293)

Marital status	Participants (n=241)		Non-participants (n=52)	
	Frequency	Percent	Frequency	Percent
Married	56	23.2	30	57.7
Single	84	34.9	12	23.1
Widow	42	17.4	7	13.4
Divorced	59	24.5	3	5.8
Total	241	100.0	52	100.0

3.2 Household ownership of assets between participants and non-participants

The study compared household assets ownership between participants and non-participants of vegetables and fruits vending. The findings indicate that households of participants scored higher index unlike those of the non-participants. The findings indicate that households of participants had a minimum score of 5 a mean of 7.01 with a maximum of 9 compared to the households of

non-participants who had a score of 5.41 and 5.41 for minimum and mean respectively with a minimum of 3. This implies that households of participants were better off as compared to their counterparts, non-participants, but most importantly, they provided an indication that they possessed more assets compared to the non-participants over the years of vegetables and fruit vending. Further, participation in vegetables and fruits vending enabled women to increase ownership of assets including beds, radio, bicycles, sofa sets, motor cycles, television sets, land, houses, and motor vehicles.

3.3 Levels of household assets ownership among participants

Levels of household assets ownership were computed in scores before and after participation into vegetables and fruits vending activities in order to determine the household assets ownership for each household. Assets ownership scores before engagement in vegetables and fruits vending were computed as a starting point, the findings showed that respondents had low household assets ownership before participating in vegetables and fruits vending as indicated in Table 4 whereby 58.5 percent of the households had lower assets ownership. This implies that lower assets ownership among households was a result of not being able to generate more income. Thus, the observations show that not participating in entrepreneurial activities affect women assets ownership negatively. However, to some extent some of the households managed to achieve higher assets ownership as evidenced by 15.4 percent of the households who had high assets ownership before they were engaged in vegetables and fruits vending.

After participating in vegetables and fruits vending assets ownership among households improved significantly. The findings in Table 4 show that the levels of assets ownership among respondents' households improved. About 28.6 percent had low level while 19.9 and 51.5 percent had moderate and high levels of assets ownership respectively. The levels indicate that households were endowed differently depending on how they were granted access to and use of livelihood assets. Hence, generally, assets ownership of the respondents improved after participating in vegetables and fruits vending; and this accounted for 51.5 percent with high assets ownership level compared to 15.4 percent who had high assets ownership level before participating in vegetables and fruits vending.

However, despite that, the majority of households had high assets ownership, there were few households with low assets ownership and these accounted for 28.6 percent as indicated in Table 4. It was revealed that these households were facing some challenges including lack of credit and loans for their business expansion. Hence, they were not able to generate enough income for their household assets. Thus, despite participation in vegetables and fruits vending, some of the respondents were not able to achieve high assets ownership levels as it is not an automatic endeavour.

Table 4: Levels of assets ownership among participants (n=241)

Levels of Assets ownership	Before vending		After vending	
	Frequency	Percent	Frequency	Percent
Low	141	58.5	69	28.6
Moderate	63	26.1	48	19.9
High	37	15.4	124	51.5

A comparison of household assets ownership before and after engagement in vegetables and fruits vending showed that there was a significant difference in the scores before and after engagement in vegetables and fruits vending ($t= 6.753$; $p = 0.000$) as shown in Table 5. This implies that, through participating into vegetables and fruits vending respondents were able to gain more assets than was the case before. Thus, the null hypothesis that assets ownership among households of vegetables and fruits vendors do not vary was rejected since the assets ownership before and after engaging in vegetables and fruits vending differed significantly. The sustainable livelihoods approach is built on the belief that people need assets to achieve a positive livelihood outcome. This is similar to Tshuma and Selome (2014) who found that women vendors made a difference by facilitating ownership of assets in the households. It was also reported that households that owned land were more likely to invest in natural capital through operations such as soil conservation (Bekele and Mekonnen 2010, Pender and Kerr 2012) as they may use such assets as collateral for accessing to financial resources (Petracco and Pender 2009). They may also be more likely to invest in education for their children, thereby increasing human capital for their households (Katz and Chamorro 2012).

Table 5: Comparison of assets ownership before and after (n=241)

Household assets ownership	Paired Differences				T	Df	Sig.	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence of the Difference				
				Lower				Upper
Levels After-Levels Before	0.660	1.517	0.098	0.852	0.467	6.753	240	0.000

After the t-test results, Eta squared test was computed in order to determine the magnitude of differences of assets ownership before and after women participation in vegetables and fruits vending activities. Eta squared analysis yielded a statistic of 0.063 as shown in Table 6, which indicates a moderate effect size (magnitude) obtained before and after participation in vegetables and fruits vending activities. A moderate effect size (magnitude) indicates that possession of assets among respondents was not the same before and after participation in vegetables and fruits vending activities. Basing on significant levels as shown in Table 6, the study therefore failed to accept the null hypothesis. Women engagement in vegetables and fruits vending was found to have contributed to household assets ownership. The Sustainable Livelihood Approach (DFID, 2001) suggests that practical intervention should make households' efforts of building their livelihood assets easier. Examples of practical measures include programme counselling, education, financial literacy and savings programmes, and support for the growth of informal businesses.

Table 6: Eta square results on assets ownership comparison among participant households (n=241)

Source	SS	Df	MS	F	Sig.	Eta Squared
Model	2.683 ^a	2	1.341	9.704	0.000	0.063
Intercept	171.513	1	171.513	1240.723	0.000	0.811
OCAFTER	2.683	2	1.341	9.704	0.000	0.063
Error	40.089	290	0.138			
Total	241.000	293				
Corrected Total	42.771	292				

a. R Squared = 0.063 (Adjusted R Squared = 0.056)

4.0 Conclusion and Recommendations

The study concluded that women's involvement in the sale of vegetables and fruits promote household ownership of assets since most of them got income from selling vegetables and fruits that enhance the ownership of household assets. This indicates that they were able to increase more wealth in their households. Since assets ownership among household members appeared to have been influenced by women participation in vegetables and fruits vending activities, more women should be self-motivated to join vegetables and fruits vending as an alternative income generating activity. This would eventually enable them generate income and increase assets ownership within their households. This can be done through District Trade Officers, Women Vendors Associations and other interested parties through sensitisation as well as providing entrepreneurial and marketing training among women on vegetables and fruit vending.

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