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Abstract

Microfinance has increasingly been recognized as a mechanism for enhancing women's economic empowerment and improving household welfare outcomes, particularly food security. Women are disproportionately affected by poverty and food insecurity, and improved access to financial resources has been shown to enhance their ability to secure adequate food for their households. The Women Enterprise Fund (WEF) was established by the Government of Kenya in 2007 to improve women's access to affordable credit for enterprise development. This study sought to determine whether accessibility of the Women Enterprise Fund enhances household food security in Embu County, Kenya. Guided by the Sustainable Livelihoods Framework and Capability Theory, the study adopted a descriptive survey research design integrating quantitative and qualitative approaches. The target population comprised 1,740 active WEF beneficiaries in Mbeere South and Runyenjes Constituencies, from which a sample of 323 respondents was selected using Yamane's formula through proportionate and simple random sampling. Data were collected using questionnaires, key informant interviews, and focus group discussions and analyzed using SPSS and thematic analysis. The findings established that improved accessibility of WEF—particularly frequency of loan access, adequacy of loan amounts, and engagement in income-generating activities—enhanced women's purchasing power, improved household food access, and contributed to more stable food consumption patterns. However, the study found that increased income alone did not automatically translate into food security due to environmental factors, knowledge gaps, and household circumstances. The study concludes that while WEF plays a meaningful role in enhancing household food security, its effectiveness is moderated by social and structural factors such as education level, marital status, household composition, and the design of WEF interventions. The study recommends that WEF should implement tailored capacity-building programs, strengthen post-loan mentorship and follow-up mechanisms, establish robust monitoring and evaluation systems, and collaborate with agricultural value-chain actors, while national and county governments should support women's empowerment through policy and agricultural extension services to maximize household food security outcomes.

Keywords: *Accessibility, women enterprise fund, household food security, Embu County, Kenya*

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1.0 Background of the study

At the home level, the idea of food security has been widely applied as a welfare indicator. One of the key requirements for a person to be nutritionally secure and to sustain excellent health is food security. The Food and Agriculture Organization (FAO) of the United Nations states that there is food security when individuals have social, economic and physical access to enough and safe food to meet their nutritional needs (FAO, 2018). According to this definition, there are three main elements that make up the idea of food security: availability, access, and utilization (FAO, 2018). According to FAO figures, despite multiple initiatives, 2.37 billion people had extreme food insecurity in 2020, a situation that sharply increased during the COVID-19 pandemic (FAO, 2023). Globally, discussions aimed at promoting food security and economic growth have increasingly focused on women empowerment. Within the context of household food security, women characterize an essential human resource.

A resilient, stable, and hunger-free world depends on women's empowerment, as noted in the global food crisis report (FAO, 2018). The Food Insecurity Experience Scale (FIES) report shows that adult women experience food insecurity more often than adult men worldwide. In 2022, 27.8 percent of adult women experienced moderate or severe food insecurity compared to 25.4 percent of men, while severe food insecurity affected 10.6 percent of women and 9.5 percent of men (FAO, IFAD, UNICEF, WFP & WHO, 2023). A large body of research confirms strong links between gender inequality and food insecurity, particularly among poor and marginalized women who lack access to productive resources (Wei et al., 2021). Gender inequality restricts women's autonomy and limits their ability to secure food for their households (Aziz et al., 2020). Sinclair et al. (2019) and Alarcío (2020) assert that women in developing nations are more likely to face food insecurity due to avoidable inequality.

Women empowerment strengthens food systems by improving food availability, accessibility, utilization, and stability, thereby enhancing household food security (Galiè et al., 2019). Microfinance has been identified as a key mechanism for empowering low-income women by enabling them to engage in income-generating activities. Microcredit and microfinance originated as social programs aimed at assisting poor populations through collateral-free loans (Morduch, 1999). Since their inception, microfinance initiatives have expanded in low-income economies and have been associated with improved income and wellbeing among women (McKernan, 2002). Studies indicate that access to microcredit increases household food expenditure and women's participation in income-generating activities (DFID, 2011; Jung & Berlin, 2019; Haque, 2021).

Despite the widespread reach of microfinance, empirical findings on its contribution to household food security remain mixed. The Microcredit Summit Campaign Report revealed that by 2013, over 210 million women were served by microfinance institutions, with women accounting for more than 82 percent of the poorest clients (Zhang & Posso, 2017). FAO data further show that adult women remain more likely than men to experience acute food insecurity (FAO, 2023). These mixed findings make it difficult to draw definitive conclusions on the contribution of microfinance access to food security, creating the need for empirical investigation. In Kenya, the Government established the Women Enterprise Fund to enhance women's access to affordable credit for enterprise development and income generation (GOK, 2019). The fund provides low-cost loans through direct government lending and partnerships with financial institutions (GOK, 2018). Studies indicate that access to WEF enables women to meet basic household needs, including food (Ngelechei, 2015). However, previous studies have not adequately examined whether access to

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WEF enhances food access, dietary variety, and household food security across different ecological zones, necessitating focused analysis in Embu County.

1.1 Statement of the problem

Over the past two decades, microfinance has gained prominence in development policy and public discourse due to its perceived potential to reduce poverty and promote economic development. Microfinance institutions have expanded rapidly across developing countries and are often regarded as effective tools for supporting low-income populations. Nevertheless, concerns persist regarding their actual contribution to poverty and hunger reduction, alongside emerging discourse on risks faced by borrowers. Although women constitute a large proportion of microfinance clients, global evidence shows that women continue to experience higher levels of severe food insecurity than men. This raises critical questions about whether access to microfinance effectively enhances household food security among women, including in Kenya, necessitating empirical investigation.

Most existing studies on microfinance and food security focus on single ecological zones and emphasize general socioeconomic empowerment indicators. The Women Enterprise Fund was established to enable women to start and expand small and medium enterprises with the expectation that this would improve household welfare. While several studies in Kenya examine WEF's role in women's empowerment, limited research has evaluated its specific contribution to household food security using both quantitative and qualitative measures. Moreover, few studies assess food security outcomes across ecologically distinct zones. This study therefore examined WEF's contribution to household food security in two ecological zones of Embu County, focusing on food availability, access, and dietary diversity.

1.2 Objective of the study

To determine whether accessibility of WEF enhances household food security in Embu County.

2.0 Review of Related Literature

This chapter covers the pertinent literature in understanding the accessibility of the women enterprise fund and household food security. The review of related literature is presented in sections.

2.1 WEF accessibility and household food security

Access to microfinance has produced mixed outcomes on household food security across different contexts. Globally, food security is understood as a multidimensional concept shaped by ecological, social, political, and economic factors that determine access to sufficient and preferred food (McDonald, 2010). Evidence from Bangladesh shows positive outcomes, where participation in microcredit programs increased household calorie availability and improved the likelihood of meeting minimum dietary energy requirements (Islam, Pakrashi, Maitra & Smith, 2016). In contrast, studies in Ghana and Ethiopia reported no significant differences in household food security or meal quantity between microfinance participants and non-participants (Foote, 2004; Nanor, 2008). Similarly, research from Ivory Coast found that increased income through microfinance did not translate into improved food security outcomes (Fofana, 2016). These

findings illustrate that access to credit alone does not guarantee improved food security and that outcomes vary significantly by context.

Empirical evidence from East Africa also presents divergent findings. In Uganda, microcredit participation was associated with declining dietary diversity over time, particularly among long-term borrowers (Namayengo, Antonides & Cecchi, 2018), while a livelihoods program combining finance with training improved household food security among women participating in farm and marketing groups (Senay, Tim, Lucy & Agnes, 2012). In Kenya, studies show more favorable outcomes: women's access to microcredit in Nairobi's low-income settings improved dietary diversity (Thuita, Mwadime & Wang'ombe, 2013), WEF beneficiaries in Kisumu County achieved more stable access to food through retail enterprises (Ongai, Wambugu & Ndung'u, 2021), and repeated borrowing enabled households to afford animal-source foods more frequently (Rita, 2010). However, studies from Tanzania reported limited dietary diversity among microfinance households, especially among women and children (Ochieng et al., 2017). These conflicting findings underscore the need to examine WEF accessibility alongside participant characteristics, as guided by the Capability Theory, to better understand how financial access translates into household food security outcomes.

2.2 Theoretical framework.

A theoretical framework provides a foundation for examining the relationship between theory and the subject under investigation. This study is anchored on the Sustainable Livelihoods Framework and the Capability Theory, which together offer a basis for understanding how Women Enterprise Fund interventions influence household food security. These theories explain how access to financial resources, skills, and social arrangements shapes livelihood outcomes and wellbeing. The frameworks are particularly relevant in analyzing how WEF loans and related interventions translate into improved food access, availability, and dietary outcomes among women beneficiaries. The sustainable livelihoods framework, developed by the UK Department for International Development in 1999, emphasizes the role of financial, human, and social capital in enhancing household resilience and reducing vulnerability (DFID, 2016). The framework conceptualizes livelihood as a combination of capabilities, assets, and activities necessary for sustaining life. In this study, WEF interventions such as accessible loans and group-based lending enhance women's ability to engage in income-generating activities, diversify income sources, and improve household food security. The framework also highlights the role of social capital through group lending, which promotes collective learning and resource sharing among women

Capability Theory, popularized by Amartya Sen, evaluates wellbeing based on individuals' abilities to convert resources into meaningful outcomes rather than income alone (Sen, 1999). The theory recognizes that economic and social factors jointly influence food security. In the context of WEF, loans and income represent economic means, while education level, marital status, and household composition influence women's capacity to utilize these resources effectively. This approach is suitable for assessing whether access to WEF enhances women's actual ability to achieve household food security beyond financial gains. The Capability Theory further emphasizes human heterogeneity and contextual differences in converting resources into wellbeing outcomes. Individuals differ in needs, abilities, and social arrangements, meaning that equal access to resources does not guarantee equal outcomes. In evaluating WEF's contribution to household food security, this study considers differences in household structure, education, income, and ecological settings. By applying this theory, the study assesses whether WEF access improves women's real

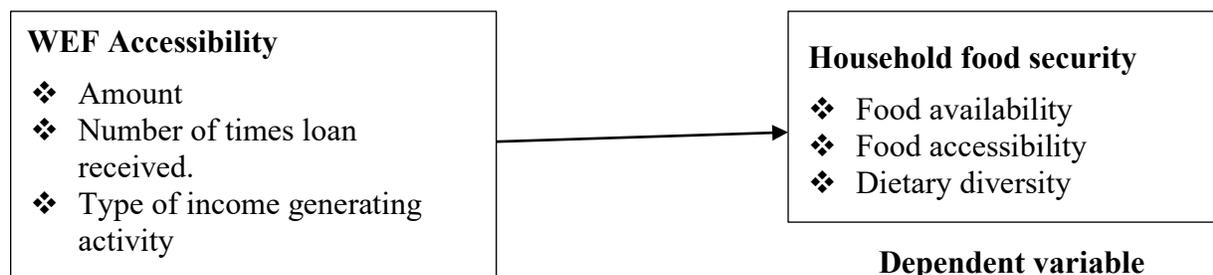
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freedoms to secure adequate food for their households across two distinct ecological zones in Embu County

2.3 Conceptual framework

Figure 1 presents the conceptual framework.

Figure 1: Conceptual framework



Independent variables

3.0 Research Methodology

This study adopted a descriptive survey research design integrating both quantitative and qualitative approaches to examine the contribution of the Women Enterprise Fund to household food security. The design was considered appropriate for collecting comprehensive data from a large population at one point in time and for drawing conclusions about WEF's contribution to food security during the study period (Kothari, 2008; Creswell & Plano Clark, 2019). Quantitative data were collected using structured questionnaires incorporating the Household Food Insecurity Access Scale, while qualitative data were obtained through key informant interviews and focus group discussions. This mixed approach enabled triangulation and deeper understanding of food availability, access, and dietary diversity among WEF beneficiaries. The study was conducted in Embu County, specifically in Runyenjes and Mbeere South Constituencies, selected due to their ecological diversity and high WEF uptake. The target population comprised 1,740 women who were active WEF beneficiaries and two constituency WEF officers. A sample size of 323 respondents was determined using Yamane's formula at a 5% significance level. Purposive, proportionate, and simple random sampling techniques were employed. Quantitative data were analyzed using SPSS version 25 through descriptive and inferential statistics, while qualitative data were thematically analyzed. Ethical approval, informed consent, confidentiality, and respondent anonymity were strictly observed throughout the study.

4.0 Data Presentation and Discussion of Findings

This chapter presents the findings of the research which were obtained from the data collected from 323 WEF beneficiaries, 2 WEF officers and 40 women group leaders. A response rate of 100% was attained during the exercise of collecting the data.

4.1 WEF accessibility and household food security

Analysis of household food security was done on the indicator of the number of meals that were consumed in a day which was cross tabulated with the amount of money received, number of times WEF loan received and IGA engaged in. Further, number of meals consumed in a day was cross

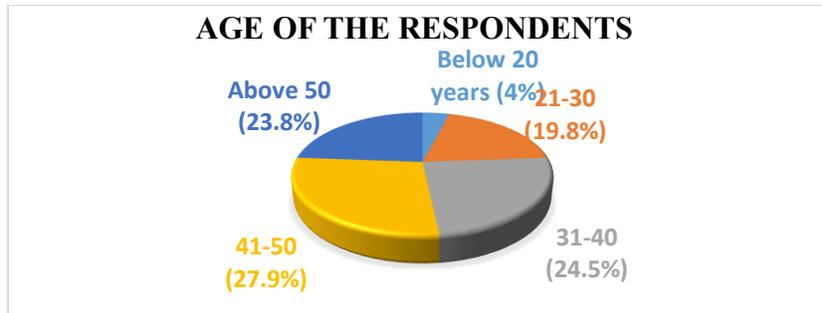
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tabulated with marital status, income, education and household composition of the respondents. These social variations were assumed to have effects on the funds utilization hence impacting the food security of the 323 respondents and that’s the reason for their consideration. The above was also validated by Focus Group Discussants and Key Informant interviews.

4.1.1 Age brackets of WEF beneficiaries

The age brackets of WEF beneficiaries was analysed because age plays a critical role in socio-development. The figure 2 below shows the analysis.

Figure 2: Age brackets of WEF beneficiaries



From the figure 2 above, most respondents (27.9%) were at the age bracket of 41-50 years, followed by those who were at the age bracket of 31-40 years. 23.8% of the respondents were above 50 years while 19.8% were between 21-30 years. Only 4% of the respondents were below 20 years. From the FGD sentiments, women between 41-50 and those above 50 years borrowed more since they had children who were in learning institutions hence the need to borrow in order to meet the different needs and responsibilities of their households. Those who were between 21-30 years and those below 20 years were less probably because some were in school or had young children who were not yet enrolled to school hence the needs and responsibilities were few. This in agreement with Bosire, M. K., Wamue-Ngare, G. & Okong’o, G. B. (2022), who found out that most WEF borrowers were above 40 years and this is because individual responsibilities and needs may increase or decrease as one grows old.

4.1.2 Amount of money received

WEF issues loans to women groups in phases. Currently, and especially in the area of study, women had received WEF loan from phase one to five. The table 1 below shows the amount of money they had received.

Table 1: Amount of money received

AMOUNT OF MONEY RECEIVED (Kshs)	FREQUENCY	PERCENTAGE
1000-20,000	38	11.8
20,000-40,000	57	17.6
40,000-60,000	61	18.9
60,000-80,000	60	18.6
80,000-100,000	59	18.3
Above 100,0000	48	14.8
Total	323	100.0

From the above table 1, 14.8% of the respondents have received more than Kshs 100,000 since they joined a group that has been receiving loans from the WEF. 18.3% had received between

80,000-100,000, 18.6% had received between 60,000-80,000, 18.9% between 40,000-60,000, 17.6% between 20,000-40,000 and only 11.8% had received less than 20,000. The 14.8% who had received more than 100,000 had applied for WEF loans 5 times which was sufficient for starting or expanding their businesses.

Table 2: Amount of money received versus number of meals in a day

	Number of meals in a day			Total	
	One	Two	Three		
Amount of money received (Kshs)	1,000-20,000	17	17	4	38
	20,000-40,000	12	19	26	57
	40,000-60,000	4	32	25	61
	60,000-80,000	0	21	39	60
	80,000-100,000	0	11	48	59
	Above 100,000	0	7	41	48
Total	33	107	183	323	

From the findings in table 2 above, majority of women (167) who had received more than Kshs 60,000 took two and three meals in a day. 17 respondents who had received less than Kshs 20,000 reported to consuming one meal a day same case to 12 respondents who had received less than Kshs 40,000. Those who took more loan from WEF were seen to have thriving enterprises which led to increased incomes and food consumption.

A discussant number 01 from FGD 02 reported and said:

“Our group has borrowed the WEF loan five times. Cumulatively, I can say that I have received around Kshs 130,000. Every time we used to take the loan, I used to add more stock since I sell maize and beans at Kiritiri town. After repaying the loans, my business has been stable, and food has been available always in my family. We don’t skip meals unless one is willing.”

The key informant from Runyenjes reported and said:

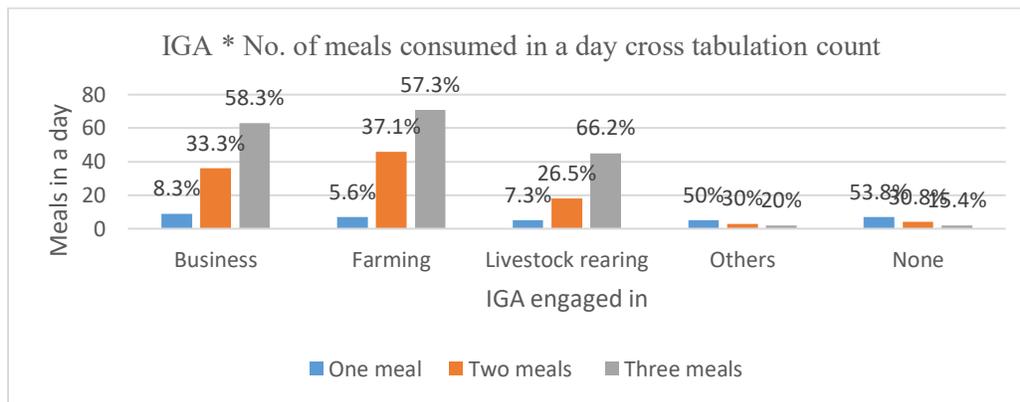
“Most women repaid their loans very well and this enabled them to apply for more loans. The money was used for business, farming and livestock rearing and it improved their food security statuses. Therefore, they had all the money from WEF used in those ventures and made more profits thus were able to purchase more food.”

This shows that the more amount of money one had received, the more they used it in their ventures and eventually, the more the number of meals they were able to consume in a day. This is supported by a research conducted in Matuga by Mutinda (2011) on the impact of WEF in the growth of women-owned business. The finding was that WEF had succeeded in its goal of providing funding to women to launch or expand their own businesses. As a result, hunger had decreased since people with thriving enterprises were able to combat home food shortages and hunger. Similarly, in order to determine the amount of money earned after enrolling in the microfinance program, Hossain (2012) selected 200 BRAC NGO clients in Bangladesh who had been members for at least three years. According to him, the borrowers had succeeded in raising their income by 250% during the time they were not members. Additionally, he discovered that, in comparison to their previous situation, the clients’ food intake accounted for approximately 89% of their overall spending.

4.1.3 Income generating activities engaged in.

The main objective of WEF is to provide accessible and affordable credit to support women to either start or expand their business in order to empower them socio-economically (WEF, 2019). According to this study’s findings, women who were running their own business before getting WEF loan, used the WEF money to expand their operations hence had better access to food. Individuals who used the WEF loan to launch small firms lacked experience and majority of their ventures failed. They ultimately found it difficult to repay the debt which had a detrimental impact on their household food security as noted in FGDs. The figure 3 below shows the activities women engaged in and a cross tabulation of the number of meals they consumed in a day.

Figure 3: IGA * No. of meals consumed in a day cross tabulation count



Findings from figure 3 above indicate that respondents who did livestock rearing consumed three meals at 66.2%. FGD sentiments indicated that those who did livestock rearing were able to consume three meals a day because to many, they would access milk for preparing breakfasts, sell the milk and get money to buy lunch and supper. 58.3% and 57.3% of the women who did business and farming respectively consumed three meals a day. This can be attributed to the fact that some women had an already existing small business before getting the WEF loan and most women had taken WEF loans for more than three times hence they could expand their ventures. Sentiments from FGDs supported this since participants reported that they could afford two or three meals even before they received the WEF loan. Upon hearing that WEF was interest free, they decided to apply for the loan and so the loan helped them expand their businesses and could continue eating three meals.

A discussant No. 05 from FGD 3 said:

“With WEF, I am an empowered woman. This is because, before I heard about WEF, I was doing poultry rearing and so I could afford 2 to 3 meals a day. After getting the loan, I expanded the venture. After some few months, the business picked and I started getting profits which enabled me to contribute to family decisions and especially what and when to eat. My business is still doing well and I eat 3 meals a day without struggle.”

However, some of the respondents said that despite taking the loans quite a number of times, their ventures did not survive because of the inadequate rains for those who engaged in farming and others argued that since COVID-19 outbreak and the subsequent consequences, their businesses had not returned to normal. As a result, many were struggling to pay back the loan at the expense of buying food for their families or skipping meals to ensure loan repayment.

A discussant number 05 in FGD 1 who had no any IGA said:

“When we receive the loan, we divide amongst ourselves and I always do farming. Most seasons the rains are not adequate and so I don’t harvest enough to sell and get any profits. Sometimes i struggle to pay the loan while using the little I have for meals that is why i took two and sometimes one meal a day.”

The researcher inquired from the Key informant of Mbeere South who said:

“The women take the loan and engages in farming and business. Some seasons the rains are not adequate and so those doing farming might be disadvantaged because they will not get the expected results. Sometimes they fail to pay back the loan disputing that there are no profits to help them pay back. Such members might have to cut down the number of meals to see whether they can pay the loans.”

Those who did not do any IGA reported a 53.8% of those who consumed one meal a day. Some argued that the money was not enough for the venture they wanted to engage in and so they used the money for other household needs. This is consistent with Sen’s Capability theory, which mentioned that an individual’s capacity to transform the same resources into worthwhile functions vary widely. It is evident that those who used the WEF loan to do any income generating activity had many of them reporting to be consuming two or three meals in a day. This might also be the reason why Sen in his capability theory argued that the most important thing when evaluating the well-being of people is to take into consideration what people are actually able to do and be. These findings are in agreement with Muhumbwa (2019), who noted that women in Siaya County Karapul Sub-location reported more access to food when they used WEF loans to pursue agribusiness, particularly in the product of crops and cattle. Similarly, Omondi (2020), reported that women in Murang'a County who used WEF loans to cultivate were suitable to produce enough food to meet ménage requirements.

4.1.4 Number of times loan received in relation to number of meals consumed in a day

The household’s access to food was affected by the number of times the WEF money was received. More loans would result to higher household earnings and purchasing power. A study by Islam et al, 2016 in Bangladeshi found out that the more one accessed microfinance loans, the more their dietary diversity increased. Income rose as a result of more loans, and household food security eventually improved.

Table 3: No. of times loan received * No. of meals consumed in a day

	No. of meals consumed in a day				Total
		One	Two	Three	
No. of times loan received	One	17	17	4	38
	Two	12	19	26	57
	Three	4	32	25	61
	Four	0	24	44	68
	Five	0	15	84	99
Total		33	107	183	323

From the table 3 above, majority of the respondents (99) had taken WEF loans for five times which enabled them to have three or four meals a day. Those who had received the loan for the first time had 17 respondents having one, some other 17 respondents had two meals and a few (4) having three meals. It was noted that those who had applied for the first time and had three meals a day

had already existing businesses which was boosted by the loan and so they could get profits which resulted to them consuming three meals a day. The difference between those who had received the loan for three, four and five times was not much but it was a positive indication that the women were able to pay back the loan and subsequently apply for more loans. This could possibly mean increased incomes eventually resulting to improvement in household food security.

A discussant number 05 from FGD 2 said:

“WEF imetusaidia sana kwa sababu tulipochukua loan mara ya kwanza, tuliweza kulipa vizuri na tukaapply mara ya pili, na ya tatu na ya nne. Kwa hivyo pesa ikaendelea kuongezeka na nilipochuka mara ya nne, nilichukua pesa zenye nilikuwa nimesave bank, nikaongezea nikanunua pikipiki. Sasa kila siku napata pesa kutoka kwa biashara yangu ya kuuza nguo na pia kwa bodaboda na ninaweza kula mara tatu na wakati mwingine hata zaidi ya tatu.” (WEF has greatly helped us because when we took the loan the first time, we were able to pay well and then we applied for the second, third and fourth times. So, the money increased and when I received the loan the fourth time, I took the money I had saved in my bank and bought a motorbike. So, every day I get money from the business I ran- selling clothes and from the motorbike and so I can afford three meals and sometimes more than three).

The researcher inquired more from the Key Informant from Runyenjes who responded and said:

“The women in many groups are very united and want each and every one to benefit and improve their living standards. So, in case a member is unable to pay, they come together and help her repay the loan so that they can apply for the next phase. Thus, they have been able to repay the loans well and apply for more hence boosting their ventures for increased incomes and their food security status enhanced.”

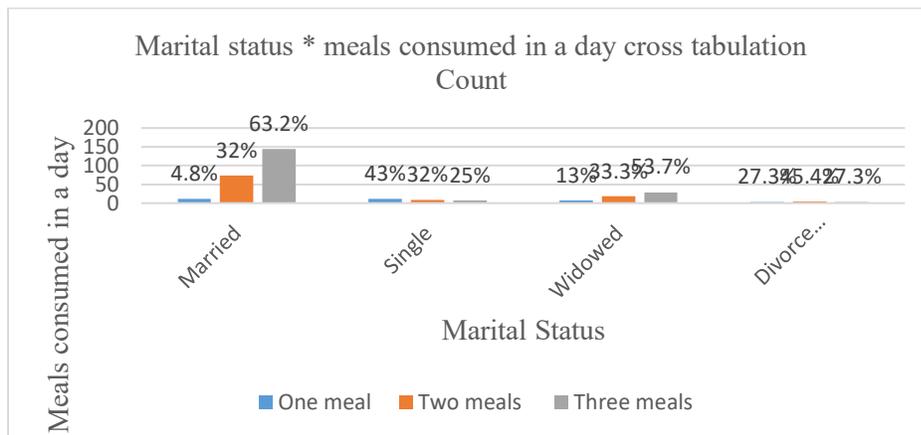
The SLF which guides this study talks about the importance of social capital, including interpersonal relationships and participatory groups, in accessing resources. The group-based loan facility developed by WEF fosters social cohesion among women, creating an enabling environment for unity, collective learning and resource sharing.

The finding here is that the more the number of times one accessed the loan, the more likelihood a household improved on their food security. These findings are supported by a research by Mutua and Njoroge (2017), which indicated that women who accessed multiple loans from WEF were able to expand their businesses, resulting in consistent earnings that allowed them to provide diverse food options for their families. Women involved in agriculture or small-scale trade particularly benefited from these loans, significantly improving their living standards. Similarly, Rita (2010) analyzed the effects of programs on new and existing loan clients of a microfinance institution that targets women only (Kenya Women Finance Trust) in rural and urban areas. According to the findings, compared to 42% of the new clients, 60% of households that had obtained more than four loans were able to eat beef or chicken three to four more times each week (Rita, 2010).

4.1.5 Marital status in relation to number of meals consumed in a day

The participants in the study reported that they were either single, married, widowed or divorced. It was necessary to look at the marital status and analyze it so as to find out its influence on food security of the participants.

Figure 4: Marital status * meals consumed in a day cross tabulation Count



Evidence from the figure 4 above indicates that married women had the highest number of those who reported that they consumed three meals in a day at 63.2% compared to the rest. These findings were supported by FGD sentiments where it was noted that women who had their spouses engaged in some other sources of income were seen to be food secure as they would use the WEF loan to expand their business hence increased incomes. Also, participants who had a certain occupation and they were married, were found to be more food secure compared to others.

A discussant number 03 from FGD 3 narrated and said:

“I am a social worker by profession and my husband is a retired civil servant. My family has been eating three meals a day from my salary and also from the profits I get from a restaurant we run. WEF loan helped me to expand the restaurant as my husbands’ money was used to feed our family.”

Another discussant number 01 from FGD 1 said:

“After receiving the WEF loan for the fourth time, I opened a butchery where my husband now sells meat while i engage in a cereal selling business. We have children and we manage to pay the school fees and we have since been enjoying three meals and diverse food categories.”

Some single women were found to be overwhelmed by responsibilities and especially those who had more than 3 children and who lived in rented houses. A discussant number 03 from FGD 2 said

“...I am a single woman who stays in a rented house where managing bills like rent, paying school fees and feeding the family are quite difficult so i sometimes survive with one or two meals a day.”

A study by Ndombo (2013) concluded that Single women headed households were four times most likely to experience food insecurity than married women. Findings by Kassie et al.. (2012) also concluded the same noting that 53% of male headed households were food secure compared to 42% of the female headed households. From the figure above, 53.7% of those who were widowed consumed three meals a day while 27.3% of those who were divorced/separated could afford three meals a day. 45.4% of those who were divorced/separated could afford two meals a day. A widowed discussant number 6 from FGD 2 narrated and said that her late husband had a stable

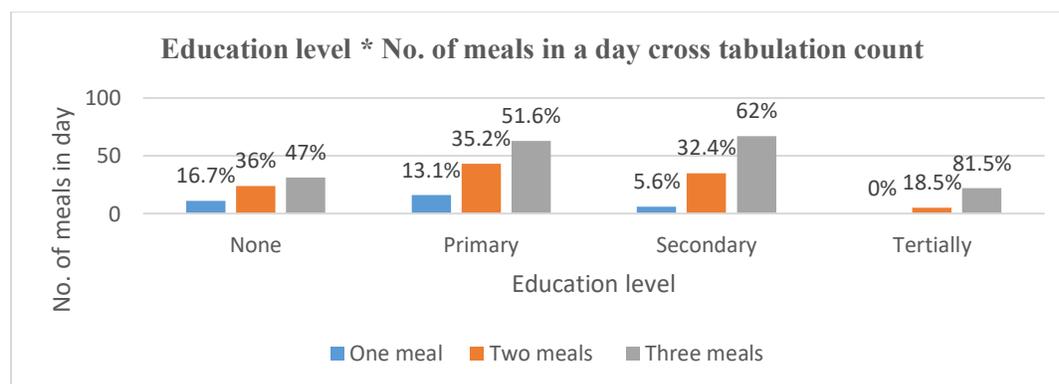
source of income which he left for them as a family, and now that their children are all grown and working, she can afford three meals a day without any struggle.

Findings from this study show that marital status affected the women’s household food security. These findings agree with the research conducted by Njoki and Kariuki (2018) which indicated that married women were more adept at utilizing WEF loans, largely due to the financial support provided by their spouses. Conversely, single or widowed women faced greater challenges, primarily due to the absence of supportive networks. The Capability theory by Sen argues that In order to avoid taking a shortcut and discounting a variety of information beforehand, evaluations should take into account the complexity of reality. For instance, while happiness is clearly important when determining an individual's level of well-being, this does not mean that happiness is the only factor that counts and that other factors should be ignored. So, even though the women’s marital statuses are varied, individual differences will also affect how these women translate the WEF loan into enhanced food security.

4.1.6 Education level and no. of meals in a day

Education level is an important indicator in this study because educated women are expected to be more innovative and easy to learn and practice large scale food production. Education is a very important factor in facilitating women empowerment since it enhances performance. A population of women who are diverse by education shows a number of different values, preferences, and experiences making it possible for their activities to create scope for different opinions to be expressed and different approaches to problems. This diversity improves the flexibility and creativity of the ventures, eventually leading to more innovation, quicker and flexible problem-solving processes with better results and improved household welfare (Agidew & Singh, 2018). The level of education affects one’s ability to acquire relevant information and their productivity in any empowerment undertaking. It is highly assumed that women with high level of education acquire training with ease and access the relevant information required in their entrepreneurial ventures. The education categories looked at here were none, primary, secondary and tertiary as demonstrated in the figure 5 below.

Figure 5: Education level * No. of meals in a day cross tabulation count



From the above figure 5, 81.5% of the women who were educated up to tertiary level consumed 3 meals in a day. 62% of those who had secondary education consumed three meals a day compared to 51.6% and 47% of those with primary education and no education respectively.

A Focus Group Discussant number 05 from FGD 2 said:

<https://doi.org/10.53819/81018102t5413>

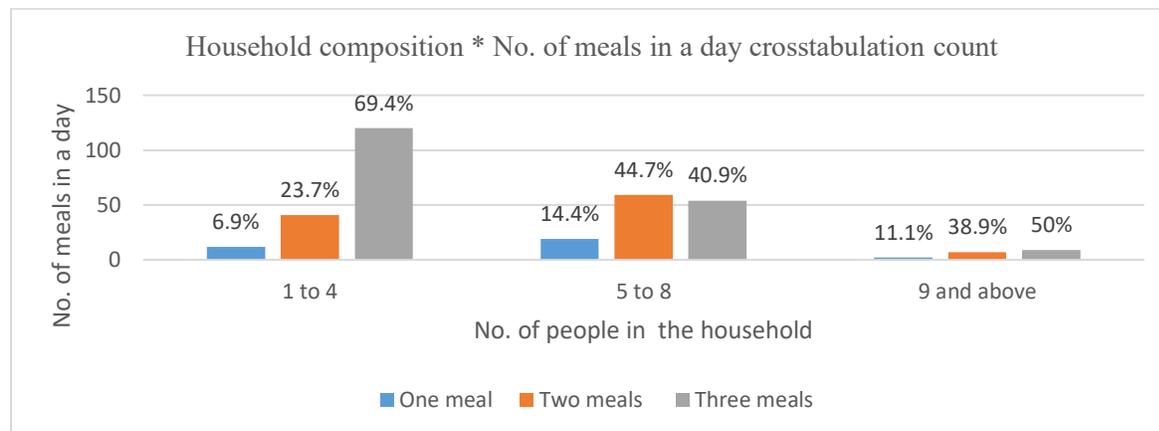
“I hold a diploma in Catering and I ran a grocery shop. Before we applied for the WEF loan, I could eat two meals a day. From the first and second loan I increased my stock and my business continued doing well. From the little profits I got, I managed to repay the WEF loan and borrowed up to five times. I have been able to greatly expand my business and opened a branch in a different area. I can afford three meals a day. I am planning to open a hotel where I can continue practicing what I learnt in college. ”

As evidenced in this study, one’s level of education influenced the kind of a IGA one engaged in and the subsequent results from those ventures. Also, women’s productivity is influenced by their educational attainment. These results concur with the study by Agidew and Singh (2018) which concluded that in rural areas, education attainment led to an improvement in agricultural production resulting to food secure households. Additionally, according to Heathfield (2007), higher education helps people expand their knowledge and experience. Furthermore, Munyua and Ochieng (2021) noted that educated women bettered ménage nutritive issues by espousing healthier eating habits. Singh, Sharma & Gupta (2020) discovered similar issues in India, where enhanced household food security was a result of educated women being able to translate their incomes into profitable benefits. But in Kenya, Chirwa (2021) observed that a lack of contextualized training and poor knowledge situations made it delicate for certain pastoral women to use these capacities. This was further supported by Njenga & Mugo (2020), who discovered that although the WEF loans enhanced household food security, it had lower of an impact on women with lower formal education.

4.1.7 Household composition and number of meals consumed in day.

Household composition was put into consideration in this study since it was deemed to have an effect on the incomes of women. Larger households are predicted to have large food consumption than smaller ones, according to Jacobs (2009).

Figure 6: Household composition * No. of meals in a day cross tabulation count



As evidenced in the figure 6 above, those who had small family sizes consumed three and above meals in a day compared to those with large family sizes. Majority of the women are also seen to have their family sizes between 1 to 4 members. 69.4% of those who had their family sizes between 1 to 4 members were seen to consume three meals a day compared to 40.9% of those with the family sizes of 5 to 8 members. Those with 9 children and above were few but at least 50% reported to consume three meals a day. The finding here is that the smaller the family size, the more food secure a household is. These findings are in agreement with Tantu (2017) who found out that

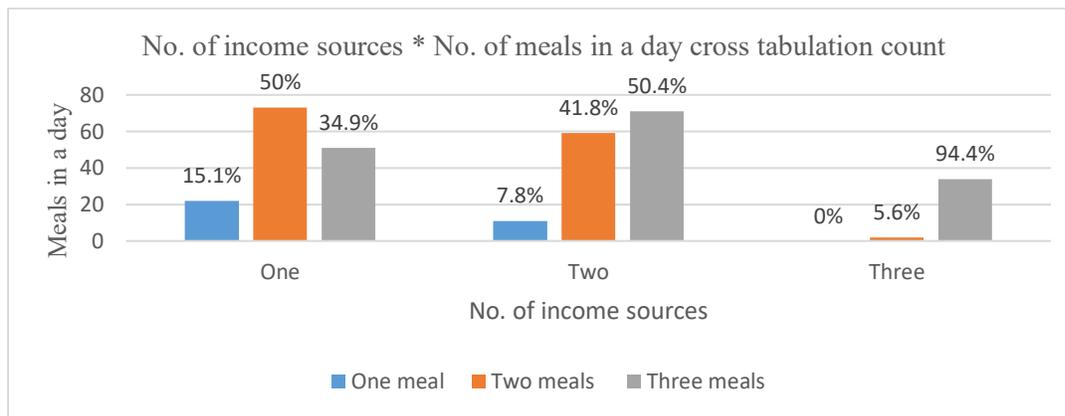
<https://doi.org/10.53819/81018102t5413>

households with more than two dependents were three times more likely to experience food insecurity than households with fewer than two dependents, and that the income generated to purchase food items to meet all family needs decreased with the number of dependents in the household. Accordingly, household food insecurity tends to deteriorate with a larger family and a lower household income (Tantu 2017).

4.1.8 Sources of Income and number of meals consumed in a day

Figure 7 below shows the number of income sources cross tabulated with the number of meals consumed per day.

Figure 7: No. of income sources * No. of meals in a day cross tabulation count



Findings from figure 7 above reveal that 94.4% of those women who had three sources of income could afford three meals a day. 50.4% of those who had two sources of income could afford three meals a day while only 34.9% of those who had one source of income could afford three meals a day. Although those who had three sources of income were few compared to those with one or two sources of income, no one consumed one meal a day. These results show those with more than two sources of income experienced improvement in their food security.

A discussant number 04 from FGD 1 said:

“I am a teacher by profession. I also have a hardware business at Runyenjes town. I am also a speaker so I get invites to go and speak to various young people. The profits I get from my business, my salary and the stipend I get from various trainings I do, allow me to afford three or more meals a day. Of course I use the WEF money to boost and expand my hardware business which is doing well.”

The researcher inquired more from the key informant from Runyenjes who said:

“Women from my constituency are very active in farming and also in business. One is likely to do farming while at the same time running a small business which enables them to afford two or three meals a day.”

Households with multiple income streams were found to achieve food security more efficiently than those reliant on a single source. These findings are supported by a Pakistan study by Bashir & Schilizzi (2013), who reported and said that the number of sources of income of a household had a favorable effect on the food security of the household. Additionally, according to Kamau et al. (2022), women who worked in both on-agricultural and agrarian enterprises were more flexible

to profitable shocks, guaranteeing ongoing access to food. Adams and Murtaza (2018) handed substantiation for this, noting that in Tanzania, homes were suitable to sustain food security throughout times of fiscal difficulty by having a variety of income aqueducts. However, Gimugu and Wambugu (2020) contended that the long- term advantages of income diversification were limited since exogenous variables like request insecurity and climate change continued to impact food stability. According to Sustainable Livelihoods Framework that guides this study, one of the characteristics of a sustainable livelihood is its ability to withstand external shocks, enhance the quality of life and reduce vulnerability.

4.1.9 Profits made in a month and the food categories consumed in a week.

The ability of a WEF beneficiary being able to consume a variety of meals that they wished is an indication of improved incomes and profits. The profit a WEF beneficiary made in a month was seen to have an effect on the varieties of food one consumed as highlighted in the table 4 below.

Table 4: Profits made in a month * food category consumed in a week

		Categories of food consumed in a week						Total
		Vegetables	Dairy products	Fruits	Animal foods	Cereals	Legumes	
Profits made in a month (Kshs)	Less than 1,000	3	1	2	1	2	2	11
	1,000-2,000	4	2	4	2	3	3	18
	2,000-3,000	13	7	6	8	6	9	49
	3,000-4,000	10	11	10	12	14	11	68
	4,000-5,000	12	15	9	17	13	10	76
	Above 5,000	12	20	12	23	10	11	88
	Total	54	56	43	63	48	46	310

Table 4 above shows that 23 women who were earning above Kshs 5,000 in a month were able to eat more animal foods compared to 17 and 12 women who were earning between Kshs 4,000-5,000 and 3,000 - 4,000 respectively. The results show that women focused more on eating dairy products and foods derived from animals than on fruits and vegetables, which are also necessary for a healthy, balanced diet. This demonstrated the significance of looking at dietary diversity since, even if the women were able to buy or grow their own food, they would still be considered food insecure if they did not have access to a variety of food types. According to most of the respondents, having access to WEF allowed them to diversify their household’s dietary needs. This finding is consistent with a study by Thuita et al., (2013) that found households of microfinance clients had more varied and nutrient-dense diets. Discussants indicated during FGDs that they were aware of the variety of foods that compose a balanced and nutritious diet and WEF had contributed greatly to them being able to eat a balanced diet.

A discussant number 04 in FGD 4 narrated and said:

“... I used some of the money I got from WEF to do a poultry project and the remaining funds I bought food. I started eating foods like meat, fish and eggs that I previously could not. So, in case I feel like eating any type of food, I can do so because I use the profits I get to acquire foods I don’t have, and in case I want eggs or chicken meat, I have them at home.”

Another discussant number 01 from the same group said:

“I sell clothes at Embu town and my business is doing well. I use the profits I get to buy meat, milk and even fruits or any other food I need for a balanced diet. Additionally, my husband is a secondary school teacher and so he also helps us a lot on matters food. Whenever we apply for WEF loan, I use it to boost my business and so I can say that WEF has really helped us on matters food security.”

These sentiments were supported by the Key informant from Mbeere South who said:

“Most women are able to purchase cows, goat, and chicken and do farming which helps them access various types of food from the profits they get. Additionally, i have been receiving positive reports from these women about how their ventures are doing and that most ventures are doing well except for those affected by inadequate rains or those that had failed due to lack of knowledge and experience required to run them.”

According to this study, WEF had increased most of the women’s access to the food types they wanted to eat. These findings concur with Nanoor’s (2008) findings which indicated that participation in microcredit institutions was associated with a significant improvement in meal quality where participants were able to consume meat and fish oftenly. Similary, according to Chirwa (2019), women who attained WEF loans had further purchasing power, which allowed them to buy a more variety of nutrient- thick foods. Chikwira, Vengesai and Mandude (2022) support this by pointing out that microfinance programs like WEF helped beneficiaries become more financially independent and diversify their food purchases. The capability theory holds that a policy is deemed successful if it increases people’s freedom to be or do what they have reason to value and does not interfere with their ability to exert control over their own lives.

4.2 Association between WEF accessibility (no. of times loan accessed) and household food security.

The table below has data that shows the number of times a WEF beneficiary took the loan against the number of meals consumed in a day.

Table 5: No. of times and Meals Cross tabulation and Chi-square Test

No. of times * Meals cross tabulation		No. of Meals				
		One meal	Two meals	Three meals	Total	
No. of times loan taken	One	Count	17	17	4	38
		% within No. of times	44.7%	44.7%	10.5%	100.0%
	Two	Count	12	19	26	57
		% within No. of times	21.1%	33.3%	45.6%	100.0%
	Three	Count	4	32	25	61
		% within No. of times	6.6%	52.5%	41.0%	100.0%
	Four	Count	0	24	44	68
		% within No. of times	0.0%	35.3%	64.7%	100.0%
	Five	Count	0	15	88	103
		% within No. of times	0.0%	14.6%	85.4%	100.0%
Total		Count	33	107	187	327
		% within No. of times	10.1%	32.7%	57.2%	100.0%

Notes: chi-square at 8 df=123.105, p=0.000

Table 5 above shows an association between the number of times one took the WEF loan and the meals consumed in a day which had a chi-square of 123.1(table 5) which was considered statistically significant. Notably, 85.4% of those who took the loan 5 times had three meals in a day compared to other who had taken the loan for less than 5 times. A study by Osabohien, Afolabi

and Godwin (2018) confirms the findings of this study where they found that increased agricultural credit accessibility had a positive and significant impact on household food security. Additionally, Bidisha, Khan, Imram, Khonder & Suhrawardy (2017) findings concur with these findings in that they found that credit accessibility was positively associated with improvement in food security. This suggests that Embu County's food security would be enhanced by WEF initiative to increase women's access to credit.

5.0 Conclusion

The study concludes that the Women Enterprise Fund has played a meaningful role in enhancing household food security among women beneficiaries in Embu County. Through access to affordable credit and capacity-building initiatives, many women were able to engage in income-generating activities that strengthened their livelihoods and improved their ability to provide food for their households. The findings indicate that when women invest WEF loans productively, they experience improved food access, more stable consumption patterns, and enhanced household wellbeing. Nonetheless, the study also shows that increased income alone does not automatically translate into food security, as environmental conditions, knowledge gaps, and household circumstances influence how financial resources are utilized. The study further concludes that the effectiveness of WEF in improving household food security is shaped by social and structural factors, including education level, marital status, household composition, and the design of WEF interventions. While the fund has contributed positively, its impact is constrained by generalized training approaches and limited post-training support. Addressing these challenges through more context-specific capacity building and sustained follow-up could strengthen beneficiaries' ability to convert financial access into lasting food security outcomes.

6.0 Recommendations

The study recommends that the Women Enterprise Fund should strengthen its contribution to household food security in Embu County by implementing tailored capacity-building programs that respond to the specific needs of women across different ecological zones, while ensuring continuous mentorship and structured follow-up after loan disbursement. WEF should adopt a robust monitoring and evaluation system with regular feedback mechanisms to track how loans and training translate into food security outcomes and to refine program strategies accordingly. The fund should also pursue partnerships with agricultural value-chain organizations to enhance income diversification and market access for rural women. In addition, national and county governments should formulate and implement policies that promote women's economic empowerment and deploy agricultural extension officers to support value addition initiatives. Women groups should actively advocate for additional training, mentorship, and engagement with WEF officers to maximize the benefits of loans and capacity-building efforts.

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