MICROFINANCE WITH EDUCATION IN RURAL GHANA: MEN'S PERCEPTION OF HOUSEHOLD LEVEL IMPACT

Hagan LL¹, Aryeetey R², Colecraft EK*³, Marquis GS⁴, Nti AC¹ and AO Danquah¹



Lynda Hagan

^{*}Corresponding author email:ecolecraft@ug.edu.gh

¹Department of Family and Consumer Families, College of Agriculture and Consumer Sciences. University of Ghana, Legon, Ghana

²School of Public Health, University of Ghana, Legon, Ghana

³Department of Nutrition and Food Science, University of Ghana, Legon, Ghana

⁴School of Dietetics and Human Nutrition, CINE Bldg., Macdonald Campus, McGill University, 21, 111 Lakeshore Rd., Ste. Anne-de-Bellevue, Quebec, Canada H9X 3V9

ABSTRACT

Microcredit schemes have been shown to enhance women's Income Generation Activities (IGA), household food security, and child nutrition. However, spouses or Male Household Heads (MHH) can influence how women's loans are invested and how incomes ensuing from the investments are expended. This study describes how MHH perceived and experienced the participation of female caregivers from their household in the Enhancing Child Nutrition through Animal Source Food Management (ENAM) project. The ENAM project was designed as an integrated intervention providing microcredit, entrepreneurship and nutrition education to women in rural communities in Ghana. Eighty-five MHH of ENAM project caregivers in two regions of Ghana were interviewed about their awareness of the microcredit and education intervention, their involvement in the IGA that the caregivers' loans were invested in, and their perceptions of the impact of the project on the caregivers' IGA as well as household and child nutrition. The majority of MHH indicated that they had been consulted by the caregivers about the decision to participate in the ENAM project. The most common reasons given for consenting to the caregivers' decision to participate in the program were expectations that the caregiver would receive business capital (30.6%), education on optimal child feeding (36.5%), and income to enable caregivers to contribute more to household expenses (31.8%). With respect to the project's impact, MHH perceived that the caregivers' project participation had a positive impact on their business practices, particularly with respect to improved customer relations. The MHH perceived that caregivers' incomes increased because of their participation in ENAM as evidenced by regular income savings and increased contributions to household food and non-food expenditures. However, MHH reported decreases in their own contributions to almost all household expenditure categories in response to the perceived increase in caregivers' incomes. The MHH also perceived improvements in home meal quality. In summary, MHH credited the ENAM project with improved caregiver's incomes and increased share of household expenses. However, this outcome resulted in unanticipated declines in MHH contribution to household expenses. Further studies are needed to understand the impact of empowering women through social experiments on households.

Key words: Microcredit, Men, Income, Household expenditures

INTRODUCTION

A key assumption of microcredit programmes is that it can help the poor, especially rural women, develop new or strengthen existing Income Generation Activities (IGA) [1]. These programmes seek to enhance livelihoods and household incomes leading to improvements in social and health status [2]. However, existing empirical studies on the effects of microcredit to women on household livelihoods give inconsistent results. In some studies, women's involvement in microcredit schemes resulted in increased control over household resources, with associated improvements in the quantity and quality of food available to children [3]. However, other programs, such as one in Southern India seeking to transform women from wage labourers to independent entrepreneurs, failed to achieve these outcomes [4].

The Indian study identified the neglect (the men were not consulted) of men in the household as a project limitation. This neglect contributed to women shouldering more labour, receiving minimal support from men, and experiencing occasional ridicule from their husbands when their business did not succeed. There is also evidence to suggest that husbands of women who received loans may influence how loans are invested and how income associated with loans is used [5 - 7]. For example, in Bangladesh, husbands and other male figures exercised partial or complete control of investment decisions for microfinance loans given to women [7].

The Enhancing Child Nutrition through Animal Source Food Management (ENAM) project provided an integrated microcredit intervention, which also provided entrepreneurship training and nutrition education [8, 9]. The project was, aimed at enhancing caregivers' incomes and thereby improving access to and use of Animal Source Foods (ASF) in the diets of young children in Ghana. The study hypothesized that an increase in caregivers' purchasing power and knowledge of optimal feeding choices would result in improved nutritional status of children.

The current study was implemented at the end of the ENAM project to provide contextual information on how the project influenced beneficiary households from the point of view of Male Household Heads (MHH). Although contribution of men to child health and nutrition has been recognized [10, 11], very little attention has been given to the male perception of child nutritional needs and fathers often are not addressed in the context of child health and nutrition programs [12]. Specific indicators of influence considered in this study included MHH consent and awareness of the project, their involvement in their household project participant's income generation activities as well as project effects on household food and non-food resource management.

MATERIALS AND METHODS

The study implemented a cross-sectional survey involving MHH of caregivers who participated in the intervention arm of the ENAM project [8, 9]. Owing to time and financial constraints, two out of the three intervention zones, Forest-Transitional

(FSTZ) and Guinea Sayannah (GSZ), with similar ethnic and occupation characteristics were purposively included in this study.

All MHH of caregivers in the ENAM intervention communities in the two selected zones were eligible to participate. Of the 105 eligible MHH, 85 were available at the time of the study and consented to be interviewed. Interviewer-administered questionnaires included open- and closed-ended questions. Variables measured included MHH's socio-demographic characteristics, awareness of the ENAM project, involvement in decision-making relative to the caregiver's participation in ENAM, perceptions of the caregiver's enterprise, and contributions to household expenditures, including household and children's diets. All households were ranked using wealth criteria generated by consensus at the community level [13]. Interviews were conducted in the homes of the MHH by trained interviewers using appropriate local language (predominantly Akan for the communities in the FSTZ and Kasim for communities in the GSZ).

The study was approved by the institutional review board of the Noguchi Memorial Institute for Medical Research, University of Ghana. All study participants provided written informed consent.

Statistical analysis

Responses from open-ended questions were grouped by emergent themes and analysed using SPSS and direct quotes were used to complement the quantitative responses and explain MHH perceptions. Quantitative data were coded and entered into SPSS version 15 for analysis. Categorical data were summarized using frequency counts and proportions and differences between MHH responses by ecological zones, educational level, ethnicity and wealth were assessed with the Chi-square statistic. Student's t-tests were used to assess similar differences for continuous variables (age of MHH and family size of the households).

RESULTS

MHH socio-demographic and household characteristics

Most MHH interviewed (93%) were spouses of ENAM caregivers and had an average household size of seven members (Table 1). The primary MHH occupation was crop farming. Households in the GSZ were of lower economic status than in the FSTZ as demonstrated by a three-fold higher percent of men with no formal education and a 75% higher percent of households categorized as low wealth rank. Whereas all of the MHH in the GSZ were born there, almost half (43%) of the MHH in the FSTZ were migrants, primarily from northern Ghana.

Male household heads' awareness of the ENAM educational components and influence on caregivers' participation decision

Prior to caregiver participation in ENAM, 75% of MHH reported being informed that the ENAM project will provide caregivers with access to loans while 59% reported awareness of the nutrition education component. In over half of the cases (58.8%), the



caregiver was the MHH's primary source of information about the program. Other sources of information included project staff (58.5%) and community program meetings (12.9%). When asked why they (MHH) consented to the caregivers' decision to join the ENAM project, over one-third (36.5%) agreed to the decision because of the expectation that the caregivers would receive education on child feeding; another 30.6% agreed because caregivers would obtain loans to invest in their microenterprises, and the remaining MHH (31.8%) agreed because caregivers would be able to contribute more to household expenditures.

The results show that MHH with education beyond primary level were more aware of caregivers receiving loans from the project as compared to those with only primary education (94.4% vs. 61.2%, p< 0.001). The lower the education level of the MHH, the more likely their source of information concerning the project was only caregivers (p < 0.027) (Table 2). Male household heads in medium/high wealth ranked households compared to MHH belonging to low ranked households reported greater awareness of loan received by caregivers (89.5% vs 63.8%, p < 0.010) (Table 2).

Involvement of MHH in caregivers' microenterprises

Almost 90% of the MHH indicated that they played some role in the management of the microenterprises in which the caregivers invested their ENAM project loans. These roles included provision of additional capital to supplement the loan provided by the project, assistance in running the business (for example serving customers) when the caregiver was unavailable or otherwise occupied, and helping with chores in the home (for example caring for children or cooking meals) to free up the caregivers' time. According to one MHH, "I carry our baby when she is busy with her business activities". Another MHH said, "I help in preparing the food for sale and always wake her up early in the morning to start work".

Other ways in which MHH were involved in the caregivers' enterprises included assisting caregivers in the preparation of their products for sale. For example, some MHH said they helped with cracking Shea nuts in preparation for processing. Other MHH said they helped with feed preparation for the caregivers' poultry enterprise. In the fishing communities, MHH who were fishermen supplied the caregivers with fish for sale.

MHH perceptions of changes in contributions to household expenditures

Almost all (98.8%) MHH indicated that since participating in the ENAM project, caregivers' contribution to all categories of household expenditures increased, while their own contributions remained either unchanged or decreased during the same period (Figure 1, 2). In all communities, most MHH reported increased caregiver contributions to both food (91%) and non-food household expenditures, including fuel for lighting and cooking (93%), school fees (93%), school supplies (95%), and health care (73%). Three-quarters (75%) of the MHH reported decreases in their own contributions to all household expenditures except for household fuel.

When asked about their contribution to household meal preparation, only 43% of MHH indicated that they provided money for preparing household meals. Male



Household Heads (MHH) reported that caregivers, on the other hand, increased their contributions to the purchase or provision of vegetables (79.8 %) and ASF (71.4%) for household meals.

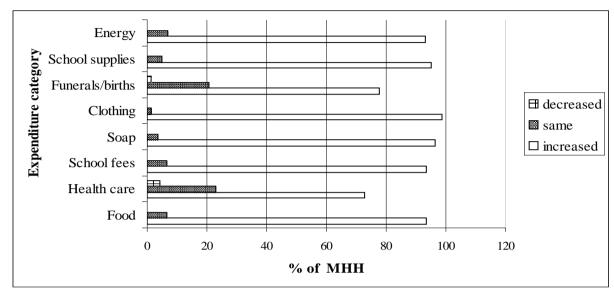


Figure 1: Proportion of MHH reporting changes in caregivers' contribution to household expenditures with ENAM participation in Ghana

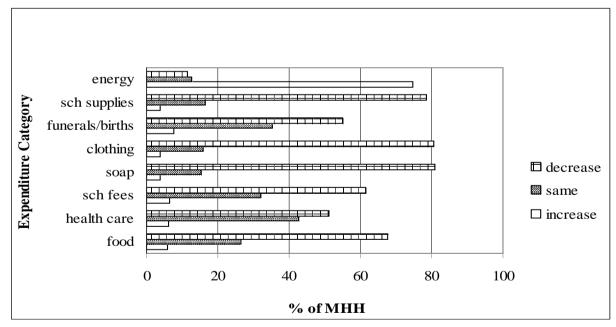


Figure 2: Proportion of MHH reporting changes in MHH contribution to household expenditures with ENAM participation in Ghana

Perceived benefits of participation in ENAM project

There was consensus among the MHH that the ENAM project improved caregivers' business practices, increased caregivers' income and resulted in changes in family meals and child food quality (Table 3). In addition, MHH reported positive changes in

business practices including improved customer relations, improved hygiene practices in the work environment, improved record keeping and a cultivated saving practice. The MHH also reported that the caregivers' made less demand for money and were contributing more to household expenditures.

Most of the MHH (67%) also reported improvement in the quality of family meals. They reported that there had been more variety in the content of family meals since caregivers joined the ENAM project and that their children were fed more animal source foods (78%) and given priority when there were small portions in the family pot. Household consumption of fruits and green leafy vegetables was also reported to have increased.

DISCUSSION

The current study described how MHH perceived and experienced the involvement of caregivers in the ENAM project and examined their influence on the intervention. The majority of MHH had been consulted about and consented to the caregivers' participation in the microcredit and education intervention. While this may be interpreted as the MHH being supportive of the caregivers' participation, it may also reflect selection bias as spousal consent was strongly encouraged by the ENAM project. Promotion of spousal consent for women's participation in microfinance initiatives was not unique to the ENAM project and may be important for women's effective participation in these programs [14]. In Bangladesh, women who did not obtain approval from their spouses and wanted to participate in microcredit activities sometimes had to do so secretly [14]. The *a priori* spousal consent may explain the high level of MHH support for implementing the ENAM caregivers' businesses.

The MHH in both ecological zones reported improvement in caregivers' incomes as a result of their participation in the ENAM project. This perception was based on caregivers' ability to maintain savings accounts and to increase their contribution to household expenditures. Caregivers' savings capacity may reflect their increased capacity to exercise control over their income earnings, consistent with findings in Sri Lanka where a microcredit intervention contributed to women's ability to earn independent income and control their resources [15].

Although the current study did not directly measure caregiver incomes, MHH provided evidence that women's incomes increased as indicated by the following examples: caregiver saved money in the bank, met household needs without complaint, stopped obtaining food items for the home by credit, purchased more goods to sell, gave MHH money when in need, able to pay back loans, bought fruits and biscuits for children when coming from the market. Similar changes were reported among women who participated in a Credit with Education intervention implemented by a Freedom from Hunger project in Ghana [3]. In Bangladesh, Rahman *et al.* [16] reported that microcredit intervention given to women was effective in increasing income of beneficiary households, although this improvement was found to be greater among high-income households, and particularly when the household head was older and more educated.

In general, MHH reported increased caregiver contributions to all household expenditure categories including food, medical bills and school-related expenses for children while their own contributions decreased for almost all the expenditure categories. The increase in caregiver contributions to household expenditures may exemplify the notion that women's incomes impact household well-being with respect to food, education and health [17]. However, Mayoux [18] argued that increased women's contributions to expenditures may reflect substitutions for male household contributions with men retaining more of their own incomes for their own personal uses; this may motivate men to be supportive of women's economic ventures.

In this study, we found that MHH support of the caregiver's microcredit participation went beyond just consenting to the caregivers' participation. Most MHH reported active involvement in caregiver's micro-enterprise ranging from assistance with child care to free up the caregiver's time for her economic activities to helping with preparation and sale of the caregiver's wares. A Freedom from Hunger intervention similarly reported that the MHH of participating women were happy to share household chores with caregivers in order for them to focus on their micro-enterprises [19]. Another supportive action by MHH in the study was the provision of funds to supplement caregiver loans received from the ENAM project microcredit program. Some MHH felt responsible for the provision of business capital to the caregivers. Financial contribution by spouses for caregivers' enterprises has been reported by other women-based microcredit programs in Bangladesh [20].

CONCLUSION

The current study described MHH's favorable perception of the ENAM project as improved caregiver incomes, translating into increased caregiver contribution to household expenditures and dietary quality for entire household and for children. The study also showed that MHH were actively involved in and even provided time and financial support for caregivers' economic activities. Encouraging male involvement in women's microcredit ventures may enhance the impact of these activities in similar communities. However, because the microfinance intervention resulted in unanticipated decreases in MHH contributions to household expenses, it may lead to long-term substitution rather than complementing resources, ultimately increasing the burden placed on women for meeting household needs. Further research is thus needed to explore the role of social interventions to help households manage incomes optimally.

ACKNOWLEDGEMENTS

Financial support provided by the Global Livestock Collaborative Research Support Program by the Office of Agriculture, Bureau for Economic Growth, Agriculture and Trade, United States Agency for International Development under terms of Grant No. PCE-G-00-98-00036-00 is highly appreciated. Research funds provided by the Jim Ellis Mentorship Program for Graduate Students to Lynda Larmkie Hagan are also acknowledged. All MHH and their households are very much appreciated.

Table 1: Socio-demographic and household characteristics of male household heads (MHH) of caregivers who participated in the ENAM project interventions in Ghana

		Ecolo	gical zon	Total				
MHH Characteristics	FSTZ	¥	GSZ [§]	(N=41)	(N=85)		p-value	
	(N=44	4)						
Relationship to caregiver								
Spouse	88.6	$(39)^1$	97.6	(40)	92.9	(79)	0.204	
Relative	11.4	(5)	2.4 (1)		7.1 (6)			
Age (y)	43.7 =	$\pm 10.0^2$	55.1 ±	27.2	49.2 ±	20.9	0.011	
Education								
None	20.5	(9)	61.0	(25)	40.0	(34)	0.001	
Primary	20.5	(9)	14.6	(6)	17.6	(15)		
≥Middle School/JSS ³	59.1	(26)	24.4	(10)	42.4	(36)		
Occupation								
Crop farming	74.4	(32)	85.4	(35)	79.8	(67)	0.280	
Other	25.6	(11)	14.6	(6)	20.2	(17)		
Residential status								
Native	56.8	(25)	100.0	(41)	77.6	(66)	< 0.001	
Migrant	43.2	(19)	-	-	22.4	(19)		
Household characteristics								
Household Size (#)	7.2 ± 3.2		6.4 ± 2.0		6.8 ± 2.7		0.151	
Household wealth rank								
Low	40.9	(18)	70.7	(29)	55.3	(47)	0.005	
Medium/High	59.1	(26)	29.3	(12)	44.7	(38)		

¹% (n);²mean ± standard deviation; ³Junior Secondary School level; ⁴Community key informants provided household wealth ranks (low, medium, high) for the caregivers' households based on their own assessment of the household's wealth status [11]

^{*}FSTZ: Forest-transitional zone; *GSZ: Guinea savannah zone

Table 2: MHH awareness of the various components of the ENAM project package (microcredit, and nutrition education intervention with caregivers of 2- to 5 year old children) varied by education level, household wealth rank and location

	Educa	ational l	evel			Household wealth rank				Location							
MHH Knowledge	>Prin	nary	≤Prin	nary	¹ <i>P</i> -	Medi	um/High	Low		¹ <i>P</i> -	FSTZ		GSZ		¹ <i>P</i> -	Total	
Characteristics	(N=30	5)	(N=4	9)	value	(N=38)		(N=47)		value	(N=25)		(N=60)		value	(N=85)	
Awareness of ENAM project education Loan	94.4	$(34)^2$	61.2	(30)	0.000	89.5	(34) ²	63.8	(30)	0.010	96.0	(24)	66.7	(40)	0.005	75.3	(64)
Nutrition education	63.9	(23)	55.1	(27)	0.287	60.5	(23)	57.4	(27)	0.827	72.0	(18)	53.3	(32)	0.111	58.8	(50)
Source of information																	
Through caregiver	44.4	(16)	69.4	(34)	0.027	55.3	(21)	61.7	(29)	0.658	44.0	(11)	65.0	(39)	0.093	58.8	(50)
Attended meetings	5.6	(2)	18.4	(9)	0.108	7.9	(3)	17.0	(8)	0.331	0.0	(0.0)	18.3	(11)**		12.9	(11)
ENAM staff	33.3	(12)	10.2	(5)	0.013	26.3	(10)	14.9	(7)	0.276	44.0	(11)	10.0	(6)	0.001	20.0	(17)
Caregiver consulted MHH before participating in ENAM	86.1	(31)	95.9	(47)	0.128	86.8	(33)	95.7	(45)	0.234	88.0	(22)	93.3	(56)	0.414	91.8	(78)
MHH discussed type of IGA with caregiver	94.4	(34)	91.8	(45)	1.000	92.1	(35)	93.6	(44)	1.000	92.0	(23)	93.3	(56)	1.000	92.9	(79)

¹Significance associated with Pearson Chi-Square Statistics for categorical variables; ** Significance associated with Fisher's Exact Test for categorical variables;

²% (n) MHH: Male-headed household member; FSTZ: Forest-transitional zone; GSZ: Guinea savannah zone



Table 3: Male Household Heads' (MHH) perceptions of the benefits of caregivers' participation in a microcredit and entrepreneurial/nutrition education intervention

Perceived benefits/changes	Quote examples						
 Caregivers' business practices improved 	" My wife now keeps where she sells her food very clean and now wakes up early to start work"						
	"She is now very patient with her customers, now can buy more products to sell"						
	"Even her customers inquire about her whereabouts when she is absent because of her excellent customer care"						
	"She now keeps good records of whatever she sells"						
Increase in caregivers' income	"She has now stopped crediting as compared to the previous days and also saves"						
	"She is able to buy more goods and does not complain to me about money"						
	"She was not used to saving but now she saves and even gives me some money when needed"						
Changes in family meals	"We currently enjoy a variety of meals compared to eating only fufu in the past"						
	"There is now a lot of meat and vegetables in our meals"						
 Changes in child feeding practices 	"Before joining ENAM she thought that giving children meat and fish will spoil them but now she knows that the children need them more"						
	"Initially when she cooks and the meat / fish is small in the soup she gives it to me but since joining the ENAM project she has been giving the children more meat and fish"						

REFERENCES

- 1. **Mummidi** T Women and Income Generating Activities: Understanding Motivations by Prioritizing Skill, Knowledge and Capabilities. *RuMe* 2009, Working Paper, 6.
- 2. **Ahmed SM** Capability development among the ultra-poor in Bangladesh: a case study. *J. Health. Popul. Nutr.* 2009;**27**(**4**):528-534.
- 3. **MkNelly B and C Dunford** Impact of Credit with Education on Mothers and their Young Children's Nutrition: Lower Pra Rural Bank Credit with Education Program in Ghana. Freedom from Hunger, 1998; Research Paper Number 4.
- 4. **Leach F and S Sitaram** Micro finance and Women's Empowerment: A Lesson from India. *Development and Practice*. 2002;**12**(**5**): 575-588.
- 5. **Samarasinghe V** Puppets on a string: women's wage work and empowerment among female tea plantation workers of Sri Lanka. *J. Dev. Areas.* 1993; **27**:329-339.
- 6. UNICEF Situation Analysis of Children and Women in Ghana 2000. *UNICEF* 2002; **2**: 42-5.
- 7. **Goetz AM and RS Gupta** Who takes the Credit? Gender, Power and Control of Loan Use in Rural Credit Programs in Bangladesh. *World Dev.* 1996;**24**(1):45-63.
- 8. Global Livestock –CRSP. Enhancing Child Nutrition through Animal Source Food Management- ENAM Annual Report. University of California, Davis. 2007.
- 9. **Marquis SG** Role of Animal Source Foods: ENAM experience in Ghana. University of California, Davis. 2011.
- 10. **Williams CD, Baumslag N and DB Jelliffe** Mother and Child Health, Delivering the Services. 2nd edition, Oxford University Press, Oxford. 1985.
- 11. **McCarthy N and S Yan** Participation by Men and Women in off-Farm Activities, an Empirical Analysis in Rural Northern Ghana. IFPRI 2009, Discussion Paper 00852, 1.
- 12. **Jahna A and A Aslamb** Father's perception of child health: a Case study in a squatter settlement of Karachi, Pakistan. *Health Transition Review*. 1995;**5:** 191-206.

- 13. Colecraft E, Marquis GS, Aryeetey R, Sakyi-Dawson O, Lartey A, Ahunu B and E Canacoo Constraints on the use of animal source foods for young children in Ghana: a participatory rapid appraisal approach. *Eco. of Food. Nutr.* 2006;45:351-377.
- 14. **Ware N** Impact of NGO Credit Programs on the Empowerment of Rural Women in Bangladesh: a case of UTTARAN. Paper presented at the conference "The third sector: for what and for whom?" organized by the international society for third sector research in Dublin, Ireland 2000.
- 15. **Hulme D and P Mosley** Finance against Poverty, vol. 2. London, Routledge Int., 1996.
- 16. **Rahman S, Fafiq RB and MA Momen** Impact of microcredit programs on higher income borrowers: Evidence from Bangladesh. *Int. Bus. Econs. Res. J.* 2009;8(2):199-124.
- 17. **Pitt MM and SR Khandker** Household and Intra-household Impacts of the Grameen Bank and similar Targeted Credit Programs in Bangladesh. World Bank, 1996, Washington DC.
- 18. **Mayoux L** Microfinance and the empowerment of women: A review of the key issues, ILO 2000, Social Finance Unit Working Paper, 23, Geneva
- 19. **MkNelly B and M McCord** Women's Empowerment; Credit with Education Impact. Review No.1 2001 Freedom from Hunger, Davis.
- 20. **Webb P, Coates J and R Houser** Does Microcredit Meet the Needs of all Poor Women? Constraints to Participation among Destitute Women in Bangladesh. Tufts Nutrition 2002; Discussion paper No 3.