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

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## 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 Savannah (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".

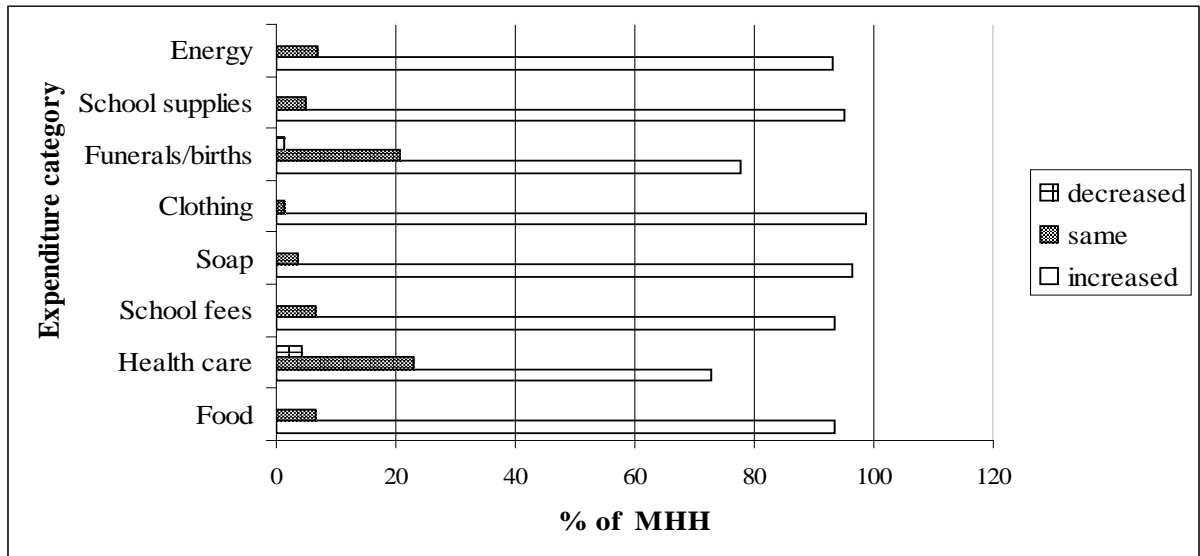
Other ways in which MHH were involved in the caregivers' enterprises included assisting caregivers in the preparation of their products for sale. For example, some MHH said they helped with cracking Shea nuts in preparation for processing. Other MHH said they helped with feed preparation for the caregivers' 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***

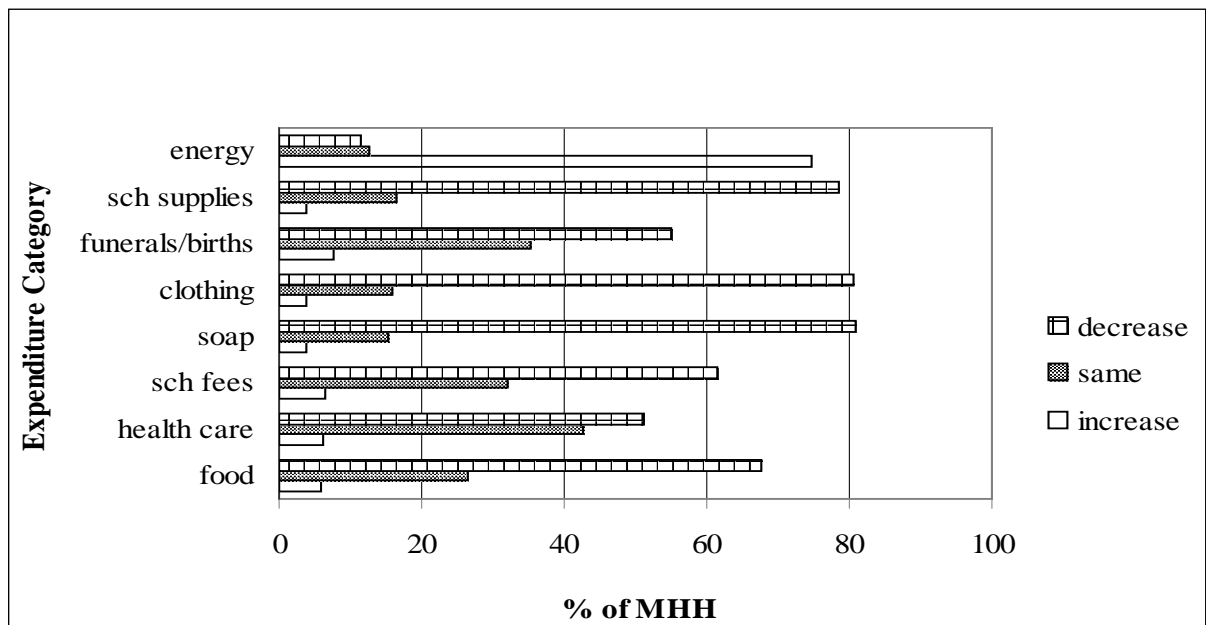
Almost all (98.8%) MHH indicated that since participating in the ENAM project, caregivers' contribution to all categories of household expenditures increased, while their own contributions remained either unchanged or decreased during the same period (Figure 1, 2). In all communities, most MHH reported 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

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

| MHH Characteristics              | Ecological zone             |                         | Total       |        | p-value |
|----------------------------------|-----------------------------|-------------------------|-------------|--------|---------|
|                                  | FSTZ <sup>¥</sup><br>(N=44) | GSZ <sup>§</sup> (N=41) | (N=85)      |        |         |
| <b>Relationship to caregiver</b> |                             |                         |             |        |         |
| Spouse                           | 88.6 (39) <sup>1</sup>      | 97.6 (40)               | 92.9 (79)   | 0.204  |         |
| Relative                         | 11.4 (5)                    | 2.4 (1)                 | 7.1 (6)     |        |         |
| Age (y)                          | 43.7 ± 10.0 <sup>2</sup>    | 55.1 ± 27.2             | 49.2 ± 20.9 | 0.011  |         |
| <b>Education</b>                 |                             |                         |             |        |         |
| 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 <sup>3</sup>  | 59.1 (26)                   | 24.4 (10)               | 42.4 (36)   |        |         |
| <b>Occupation</b>                |                             |                         |             |        |         |
| Crop farming                     | 74.4 (32)                   | 85.4 (35)               | 79.8 (67)   | 0.280  |         |
| Other                            | 25.6 (11)                   | 14.6 (6)                | 20.2 (17)   |        |         |
| <b>Residential status</b>        |                             |                         |             |        |         |
| Native                           | 56.8 (25)                   | 100.0 (41)              | 77.6 (66)   | <0.001 |         |
| Migrant                          | 43.2 (19)                   | -                       | 22.4 (19)   |        |         |
| <i>Household characteristics</i> |                             |                         |             |        |         |
| Household Size (#)               | 7.2 ± 3.2                   | 6.4 ± 2.0               | 6.8 ± 2.7   | 0.151  |         |
| <b>Household wealth rank</b>     |                             |                         |             |        |         |
| Low                              | 40.9 (18)                   | 70.7 (29)               | 55.3 (47)   | 0.005  |         |
| Medium/High                      | 59.1 (26)                   | 29.3 (12)               | 44.7 (38)   |        |         |

<sup>1</sup>% (n); <sup>2</sup>mean ± standard deviation; <sup>3</sup>Junior Secondary School level; <sup>4</sup>Community 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]

<sup>¥</sup>FSTZ: Forest-transitional zone; <sup>§</sup>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 5year old children) varied by education level, household wealth rank and location**

|  | Educational level      |                    |                          | Household wealth rank  |               |                          | Location       |               |                          | Total     |
|--|------------------------|--------------------|--------------------------|------------------------|---------------|--------------------------|----------------|---------------|--------------------------|-----------|
|  | >Primary<br>(N=36)     | ≤Primary<br>(N=49) | <sup>1</sup> P-<br>value | Medium/High<br>(N=38)  | Low<br>(N=47) | <sup>1</sup> P-<br>value | FSTZ<br>(N=25) | GSZ<br>(N=60) | <sup>1</sup> P-<br>value |           |
| Awareness of ENAM project education                  |                        |                    |                          |                        |               |                          |                |               |                          |           |
| Loan   | 94.4 (34) <sup>2</sup> | 61.2 (30)          | 0.000                    | 89.5 (34) <sup>2</sup> | 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) |

<sup>1</sup>Significance associated with Pearson Chi-Square Statistics for categorical variables; \*\* Significance associated with Fisher's Exact Test for categorical variables;

<sup>2</sup>% (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   |
|--|--|
| <ul style="list-style-type: none"> <li>▪ <b>Caregivers' business practices improved</b></li> <br/> <li>▪ <b>Increase in caregivers' income</b></li> <br/> <li>▪ <b>Changes in family meals</b></li> <br/> <li>▪ <b>Changes in child feeding practices</b></li> </ul> | <p><i>“ My wife now keeps where she sells her food very clean and now wakes up early to start work”</i></p> <p><i>“She is now very patient with her customers, now can buy more products to sell”</i></p> <p><i>“Even her customers inquire about her whereabouts when she is absent because of her excellent customer care”</i></p> <p><i>“She now keeps good records of whatever she sells”</i></p> <p><i>“She has now stopped crediting as compared to the previous days and also saves”</i></p> <p><i>“She is able to buy more goods and does not complain to me about money”</i></p> <p><i>“She was not used to saving but now she saves and even gives me some money when needed”</i></p> <p><i>“We currently enjoy a variety of meals compared to eating only fufu in the past”</i></p> <p><i>“There is now a lot of meat and vegetables in our meals”</i></p> <p><i>“Before joining ENAM she thought that giving children meat and fish will spoil them but now she knows that the children need them more.....”</i></p> <p><i>“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”</i></p> |

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