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Women empowerment and food-nutrition security in Sierra Leone: The Gender Model Family approach

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Abstract

Background This research is conducted in the context of an integrated food security and nutrition project implemented by the Social Enterprise Development Foundation (SEND Sierra Leone) and Agro Forestry Farmers Association (AFFA) in rural Kenema and Pujehun Districts. This paper presents a qualitative ‘baseline’ action-learning research on the impact of the Gender Model Family (GMF) approach on women empowerment and the effects on enhanced outcomes along the agriculture-nutrition pathway. Qualitative data were collected using in-depth face-to-face interviews and focused group discussion (FGD) from the GMF beneficiaries.

Results Linking Agriculture, Natural Resource Management and Nutrition (LANN) has nutrition security as its aim, and the project objectives and indicators focus on nutrition, not gender—however, this ‘baseline’ action-learning research recognized that gender is a major underlying factor. The evidence suggests that the GMF approach fosters women empowerment and enhances outcomes in food and nutrition security as there has been a change in social rules about men taking part in domestic household work and women involvement in family decision-making.

Conclusions Given that women play crucial roles as administrators of household food and nutrition security, empowering them is intimately related to the consolidation of household food systems, improves nutrition intake and the fight against food-nutrition insecurity in rural Africa.

Keywords Gender model family, Food and nutrition security, Women empowerment, Sierra Leone

Introduction

Historically, the absence of equal power sharing between men and women intensified by the normalization of inequality in social relations, institutions and policies, regulatory weaknesses and ongoing discrimination has resulted in gender inequality [1]. The United Nations Sustainable Development Goals (SDGs) undoubtedly

highlight gender equality as imperative to inclusive development and the achievement of the SDGs. In all aspects of the SDGs, the mainstreaming of gender equality issues remains crucial to women’s economic, political, and social liberation, nutrition and food security; and sustainable development [24]. In Sub-Saharan Africa, malnutrition and food insecurity remain a major threat to socio-economic development [13]. This has further been exacerbated by the global COVID-19 pandemic. Therefore, reducing malnutrition and food insecurity is at the forefront of African Union’s nutrition strategy (2015–2025) policy dialogue. Nutrition security is an essential element of food security which underscores the need for individuals to have access to food to sufficiently meet their nutritional requirements [7]. Importantly, given

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the increasing rate of nutrition and health inequities in diet-related diseases, achieving nutrition security is considered a global priority [16]. Against this background, gender equality has been highlighted at the global level as a catalyst to eliminating malnutrition and food insecurity given that women continue to actively participate in various farm and non-farm activities [1]. Women play crucial roles as administrators of household food and nutrition security, thus empowering them provide the opportunity to consolidate household food systems, improves nutrition intake and the fight against food-nutrition insecurity in rural Africa [11].

This research is conducted in the context of the project Linking Agriculture, Natural Resource Management and Nutrition (LANN+) and Water, Sanitation and Hygiene (WASH)—a joined food security and nutrition project initiated by the Social Enterprise Development Foundation (SEND Sierra Leone) and Agro Forestry Farmers Association (AFFA) in rural Kenema and Pujehun Districts in south-east Sierra Leone with funds from The Federal Ministry for Economic Cooperation and Development (BMZ) and Karma Cola through Welthungerhilfe (WHH). The project has the following objectives: (i) increasing the diversification of agricultural production to create a more diverse diet and enhanced income opportunities; and (ii) improving health status with safe drinking water, improved sanitation, and hygiene practices. The project is implemented through various training and extension activities with the following expected outcomes: (i) The target group has improved availability and access to high quality foodstuffs through sustainable farming practices and improved management of natural resources; (ii) Extended knowledge and consumption of nutrient-rich foods, especially for women and their children; (iii) Women have opened new sources of income through the processing of foodstuffs, integration into value chains and the marketing of agricultural/forest products; (iv) Access to safe drinking water and sanitation has been improved and knowledge extended to hygiene practices; and (v) The technical and management capacities of the local partner organization are strengthened [18].

The overall aim of this paper is to scale up the approach by documenting and sharing lessons learned for leveraging by other development partners for implementation. Until now, there has been no systematic effort to document the strengths and weaknesses of the approach, and to understand how it works, how it is adopted by the target group, and how it may enhance the adaptation of, and sustainability of a positive behaviour change process in relation to dietary practices, agricultural practices, care practices and hygiene/sanitation practices. However, anecdotal evidence from other projects indicates a very

positive reception by the beneficiaries as well as a strong impact on behaviour change-related nutrition-sensitive indicators [20, 22]. From experience-sharing with other LANN+ projects in Sierra Leone, it is observed that projects using the GMF, or household approach tend to be more successful in overcoming gender-related barriers to improving household nutrition, as compared to projects implemented through women groups [6, 19]. For example, Padmaja et al. [15] suggest a positive correlation between increased decision-making of women in the household and improved dietary diversity, but still, more evidence—through a qualitative lens—is needed. Therefore, Welthungerhilfe and SEND Sierra Leone have embarked on a collaboration with the Royal Tropical Institute (KIT) in the Netherlands to support an action learning over the lifespan of the GMF-LANN+ intervention. The underlying contribution of the paper is to generate documented lessons learned, and adjust the approach, if needed. Second, this paper offers the opportunity to promote GMF integration into other LANN+ projects and support its adaptation to other development contexts elsewhere in Africa. Third, implication for new theoretical direction is also advanced regarding GMF approach in supporting women empowerment.

The concept of the Gender Model Family

A Gender Model Family represents a family that wants to be a model for change and transformation in society by challenging traditional notions of gender roles and responsibilities [21, 22]. It proposes that the family is the basic unit for social transformation and if communities have to be transformed culturally and traditionally, it must start from the family. It assumes that each member of the family has equal rights and thus is entitled to opportunities for empowerment. Both men and women together can take control and improve their lives and neither the man nor the woman exerts power over the other, but that they make decisions together, and share resources and their benefits [5]. Anyone in the family can help with cooking and cleaning, running a business or making financial decisions or deciding how to mobilize resources to support joint efforts. Everyone in the family should have access to and control of resources, including education, which will help them to improve how they make decisions and direct their lives [8, 9]. It has been noted that when a GMF approach is implemented successfully in a community it transforms the families and the communities for inclusive growth and development [22]. There are several expected benefits of being a GMF: (i) the burden of work for women and girls is reduced because men and boys are sharing tasks; (ii) men and women experience a greater capacity to earn money because they have pooled their resources and are sharing

the work; (iii) peaceful co-existence—family tension is reduced because of a new and positive start; (iv) women's self-esteem can increase because women and their roles are valued in the family and community; and (v) better parenting for all children; both girls and boys [18, 21]).

The GMF concept is implemented through several phases. First, community meetings are organized where the concept is introduced. In these meetings, gender education is used as the first approach for people to understand gender and its effect on family and community development. Gender analysis exercises are carried out to enable participants understand the roles and responsibilities that men and women play in the family and who does more of the activities and the effect of that on the individual. After this, men and women become aware that through the GMF it is possible to strengthen gender equality and fairness. Secondly, the families are trained on the daily activity profile, the triple roles of women (reproductive, productive and community management), access and control of resources, and the development of family action plans as GMFs to resolve family and community challenges, learning to work together, and live-in freedom to perform roles that are complementary and beneficial to each member in the family. The families are expected to attend the training session together and discuss how to share work, resources, engagement in decision-making, family planning, parenting role, care for children, agriculture and business discussions, and community management and leadership roles. Finally, follow-up meetings are organized in each family to discuss with the families and their children to track the progress made in implementing their action plans as part of the change processes.

The LANN+ approach

The LANN+ approach is a global flagship approach of WHH, which is an integrated approach to improving nutrition security for vulnerable rural households with a special focus on women and young children [23]. It centres on a participatory nutrition education approach with complementary activities in agriculture and WASH. The cross-cutting principles applied throughout all the elements are as follows: first, gender: recognizing nutrition security cannot be achieved sustainably without addressing gender inequalities both in terms of access to/control of resources, cultural norms and barriers for behaviour change. Second, community participation and empowerment: the LANN+ is implemented through a participatory learning and action cycle, where communities are empowered through awareness creation—such as nutrition education—to analyze, prioritize and act on the problems affecting their nutrition security, and involved in participatory monitoring. Third, Rights-based

approach: wherever possible, LANN+ empower communities to demand services from their governments, and support in advocacy activities addressing structural and policy issues negatively affecting nutrition security of beneficiary communities. Importantly, LANN+ is based on the following key elements:

- Nutrition Education—raising awareness of the principles and importance of nutrition, especially for women and children, as well as on improving the use of healthy food for dietary diversity, this is intending to capacitate people to make healthier choices and change their dietary patterns.
- Nutrition-sensitive Agriculture—based on nutrition awareness, supporting farmers to 'grow what they eat' to enable them to sustain healthier and more diverse diets from their own production.
- Sustainable Natural Resource Management—analyzing broadly the environment and its food sources—e.g., farmland, rivers, forests—and taking measures to use and manage them sustainably to ensure diverse and sufficient food production from the natural environment in the long term.
- Income and Market Linkages—promotion of nutrition-sensitive value chains, savings schemes and other support income generation for farmers, to enable them to sustain healthier diets and prioritize other expenditures important for family nutrition security—e.g., health visits, household hygiene and sanitation.
- WASH—newly added to the LANN+ concept, was typically not part of the earlier LANN+ projects. However, the importance of WASH for nutrition security was realized and this aspect cannot be left out, especially considering the deplorable WASH situation in many of the LANN+ implementing countries.

GMF in LANN+

To improve nutrition security for vulnerable rural households, SEND Sierra Leone uses the GMF approach to mobilize and organize the target group for the LANN+ approach. The GMF approach thus mobilizes households around the principles of gender equality and thematizes (more equal) sharing of roles, responsibilities, household decision-making, and leverages the cooperation between husband and wife towards behaviour change process to improve nutrition and hygiene/sanitation in the LANN+ approach. One observable key feature is the unity of the approach for enhancing rural households towards households' joint decision-making and, eventually, community decision-making

for development. The approach is reported to be a useful tool in promoting gender transformation in many communities where SEND Sierra Leone has intervened, especially in the eastern province of Sierra Leone. In the LANN+ project, two of four chiefdoms (Barri and Gaura Chiefdoms) are entirely new to the approach while the other two (Nomo and Tunkia Chiefdoms), have been exposed to the approach before. Only two communities in Tunkia are experiencing the approach for the first time. As gender is one of the cross-cutting principles of the LANN+ approach, the GMF approach is a useful tool to ensure that gender is systematically addressed throughout the implementation as a fundamental underlying factor for malnutrition challenges in the region.

Methods and materials

This paper is based on qualitative data collected using interview and focused group discussion (FGD) protocols designed by the Royal Tropical Institute (KIT) in the Netherlands in consultation with Welthungerhilfe and SEND Sierra Leone on how the GMF approach impacts women empowerment through food and nutrition security pathways. The interview protocols were designed to capture different gender dimensions of agriculture to nutrition pathways with an emphasis on understanding how the GMF approach may be contributing to food and nutrition security outcomes and linked outcomes related to women's empowerment. They have also been designed in a way to complement existing monitoring and evaluation protocols so that data can be collected throughout the project implementation to ensure ongoing learning and facilitate project adaptation. The team from KIT worked with the Welthungerhilfe and SEND Sierra Leone's team to pretest and refine the interview protocols to the intervention area context.

The project is implemented in 60 communities targeting 1,800 direct beneficiaries and 900 families. It was practically impossible to include all beneficiaries in this study, we therefore applied the convenience sampling technique to reach out to a total of 243 participants for both original and emerging GMF beneficiaries. We conducted a total of twenty-eight FGD in all the targeted communities in the four chiefdoms in two districts. Eight FGD were held in Tunkia, Gaura and Nomo, respectively, in Kenema District while four were conducted in Barri chiefdom. For gender diversity, we conducted fourteen FGD for GMF-Husbands and fourteen FGD for GMF-wives. This brings a total of 168 original gender model families that participated in the FGD. For the individual interviews, a total of 16 key informant interviews were conducted in all four chiefdoms in the two districts. For each chiefdom four

individual key informant interviews were conducted in Tunkia, Gaura and Nomo in Kenema District and Barri Chiefdom in Pujehun District.

For the emerging groups, a total of twenty-two FGD were conducted. For some communities where we conducted male and female FGDs for original GMFs beneficiaries, we also conducted FGD for each emerging GMFs male and female groups. We conducted eight FGD for emerging husbands and fourteen FGD for emerging wives. Overall, ninety-eight emerging-GMFs participated in the FGD. For individual interviews, eight key informant interviews were also conducted for emerging GMFs husbands and wives in the four chiefdoms in the two districts. Five individual key informant interviews were conducted for emerging female and three for emerging male. The data were collected mainly by SEND Sierra Leone's Monitoring & Evaluation (M&E) team, the head of project and field officers for purposes of data triangulation.

Thematic data analysis technique involves reading through a set of qualitative data to identify patterns to aid in finding themes. The data were analyzed in phases using the thematic analysis technique. During the coding process, a large volume of textual interview transcripts was reduced to capture only critical information. After reducing to the large volume text to capture only critical information, the transcripts were shared among the three researchers to familiarize ourselves with the data. Each research team member carried out the coding separately and highlighted various phrases matching to different codes to provide a condensed general idea of the main points that persist in the data. This process allowed each researcher to identify patterns and generate our initial themes. In the final step, we met as a team and compared our themes against each other to generate the final themes. The main themes that emerged from the comparison process were categorized and then aggregated into six primary dimensions. The findings are presented based on the six key themes.

Findings

GMF experiences of the training programmes

Generally, everyone involved had been exposed to the same training programme. All participants noted that they have taken part in theatre performances. The women took part in theatre performances while the men were observers. Most of the participants alluded that they had attended training on GMF, Village Savings and Loans Associations, nutrition and agricultural practices.

A GMF husband stated: *"I attended all their training programmes and have learnt a lot from the training specifically about empowerment towards supporting the family"*.

A GMF wife stated: *“I learnt that men should be helpful to their wives, I learnt about nutrition, agricultural practices and large-scale farming”*.

Participants argued that they appreciated most of the training programmes. At the time of the data collection, the nutrition and hygiene/sanitation training based on the participatory LANN+ modules were not fully rolled out to the target groups, although basic messages on nutrition had been disseminated by both GMFs and field staff. It has been observed as well in other projects that the family cohesion which GMF approach aims to enhance is a major concern of the households—as domestic disputes are a very common source of frustration in their daily lives—hence, addressing gender relations in the household is addressing a major felt need of the target groups. On the other hand, nutrition and hygiene/sanitation training typically starts with a more abstract problem analysis for the target groups to be able to understand, identify and recognize the problems (causes and effects) of malnutrition. This may be the basis for these participants appreciating the GMF training. However, the least appreciated programme was training on improved agricultural practices, especially for men in Wayeihun, Nomo Chiefdom, since they already knew most of the agricultural practices, although some farm management practices such as methods of planting potato vines and constructing the ridges/beds—were recognized as new to them. A participant from the community stated that he appreciated the VSLA training the least because he had experience of community group savings model.

A GMF husband stated: *“I appreciate the other training programmes, but for the community group savings training, some of us used to create savings groups among ourselves”*.

Key messages understood by participants from the training programmes

The evidence from the male participants’ emphasis on the importance of good and healthy nutrition for the beneficiaries like women and children. It is worth noting here that while organized nutrition training had not yet begun at this time [of the interviews], theatre activities had already been going on, sensitizing communities about the project’s focus on agriculture, nutrition and WASH. On one hand, for the women participants, key messages that were understood centred around decision-making in the household. For example, they cited the need for their husbands to support them in caring for their households and jointly taking household decisions with them. From the point of view of the participants, working together in the family and division of labour among themselves prevented conflicts among the household members.

A GMF husband stated: *“Though I initially had problems with the programme on joint decision-making, but now I realized that joint decisions in everything in our households reduce conflict and fosters social cohesion ever since I started practicing it”*.

It is worth highlighting that some of the key lessons from these training programmes were surprising to the participants. Most women participants seemed to be surprised by the GMF approach not because it is new to them, but because of the changes they experience and the support their husbands gave them in their households. Even though the men’s perspective was different, as they indicated that they were surprised of the fact that they had to share tasks in the home, that is cooking and caring for the children as it is uncommon and directly contradict the traditional gender roles. This can be attributed to the newness of the approach in the Chiefdom. It seemed that there were more surprises amongst the male GMF household members on the programme emphasis on equality of tasks in the household. They expressed shock with the responses of their non-GMF male counterparts in their communities who saw their fellow men “doing women’s jobs”. There were reportedly just not expecting such transformation and commended the community for not teasing the “transformed men”. For the women it was the least surprising, possibly because these were changes that they desired for long ago. It was all joy to finally achieve such a positive outcome from the programme.

A GMF wife said: *“When we work together, the workload reduces, I really like the programme and I am happy my husband agreed to practice what they taught us”*.

GMF cascading learnings: within households and to non-GMF households

The GMF approach has been designed to promote spillover to other community members. The selected GMFs were expected to reach out to between one and three other families (known as emerging GMFs). At the time of this study, less emphasis was placed on investigating spillover as the project was only in the first year of implementation. Nevertheless, there were useful responses to further understand how the cascading happens and how GMFs can be supported to reach out to emerging GMFs (E-GMFs). Sharing of learnings happened during visits to E-GMFs’ homes and informally through discussions wherever and whenever the need arises. Also, the women noted that when the “new” families show interest, they share their ideas with other interested families. Some of the husbands noted that by proudly practicing the GMF principles, other families naturally copy and expressed interest in wanting to know more about the programme.

A GMF husband stated: *“By explaining to them the key messages and helping my wife so that they can see*

and learn from me, a lot of my friends approach me and wanted to learn more about the programme”.

The study found that husbands are more used to being outspoken (than women)—both in the domestic sphere and in the community (although, of course, with individual differences)—which may affect how they engage in cascading of messages. Interestingly, for the men, leading a campaign on behalf of their wives—e.g., by convincing other men to help their wives in domestic chores—is new. As for the women, being outspoken and sharing new ideas in the community is new to them. For many, it was an eye-opener as they never knew what they were missing, especially with regards to their husbands supporting them with household chores.

The messages conveyed by GMFs were about the benefits of joint household work. Other messages converged were the need for men to treat their [boy and girl] children equally and helping their wives. For some, key messages they shared were on the importance of being a GMF and all the good things they have learned from the programme.

A GMF husband stated: *“One would assume the good things being, for instance, family cohesion I now enjoy as a result of the GMF approach”.*

It appears that the cascading happens informally. For example, when they are visiting or talking to another household, they share some key messages. GMFs are also taking on roles in mediating conflicts in other households. The evidence suggests that transferring learning from original GMFs to emerging families is taking place with little constraints. However, there are some instances of tensions with some families. For example, one female participant, retorted that she faces difficulties because people find it strange when her husband help her with domestic chores. This suggests that it is important to continue to strengthen male role models and solidarity between GMF men, [possibly] set up mentoring schemes between strong GMF (confident, not bothered by ‘strangeness’ or shyness) and e-GMFs. For women, there may also need more support to strengthen their confidence in sharing ideas in the community as being outspoken is problematic to them.

A GMF wife said: *“Yes, I was even asked to resolve a family dispute because of my association with the programme. One of us (women) even represented the community recently in a chieftom meeting and this has not happened before. We have voice and our voices are recognized now than before.”*

Perceived changes in food and nutrition security and sanitation outcomes

Among all the participants, there was a noticeable improvement in the production of various crops other

than rice. Crops such as orange, sweet potato and banana, which usually did not attract much attention are now grown and consumed on a large scale. Production and consumption of adequate and diversified locally available foods can be attributed to the fact that the LANN+ intervention is nutrition focused. The sensitization offered to target groups about the nutritional value and the provision of agricultural inputs of the listed food crops helped improve their interest in such food crops production. The women participants even highlighted that they did not have to depend solely on rice anymore. The evidence of inclusivity of family members in meal planning and consumption was also noteworthy.

A GMF wife stated: *“My children can now eat their father’s meat and fish and he (the father) would have no problem sharing the food, it is all because of this programme if not he would never do that in this house”.*

A GMF husband noted that *“Thanks to this programme, I now encourage my children to eat enough fruits, meat and vegetables at home”.*

These messages about joint meal planning and intra-household sharing of food are included in the LANN+ modules—it is expected that with the GMF approach the adoption of these behaviours may even be stronger. The participants were supportive of their joint decisions in expanding existing farmlands for additional vegetable crops or even establishing separate vegetable gardens to support household food needs. The GMF wives noted that their husbands prepare special backyard gardens for them to get fresh vegetables for cooking. The men were seen to be leading in doing the physical labour on the expansion work.

On one hand, it was observed that hygiene knowledge and practices were part of the project and that these were new behaviours been advocated for in the communities. Although sustaining behavioral change tends to be a major challenge, they appeared to be practicing what they have learnt and can afford with their immediate resources. For example, plate racks and cloth lines constructions were easier and less expensive to do than construction of household latrines or protected water facilities. The construction and cleaning of household hygiene facilities (dish racks) are common and encouraged by the GMF.

A GMF husband said, *“Though things are difficult for us with resources to construct modern facilities, but at least we are currently constructing plate racks and cloth lines to improve hygiene in our homes.”*

Perceived changes in gender relations

The gender division of labour traditionally drawn between men and women seems to be changing after the introduction of the GMF principles. The

target participants were happy to engage in the division of labour for reproductive and productive tasks around domestic chores including food gathering, cooking, fetching water, taking care of their sanitation facilities, and taking care of children. The men stated that they assist their wives by equally sharing the household activities. The women confirmed this by stating that their men support them in the daily house chores, especially when they are away. The husbands stated that the workload is shared and collectively done among the family members to reduce the burden on their wives. Both participants groups argued that there is a more equal share of work in the household now than before.

With regards to food preparation tasks, they indicated that there is help from both sides in gathering and preparation of food. There was evidence that special nutritional attention is given to vulnerable groups in the household that is pregnant women and children. This is important to enable the growth of children, especially under five years and pregnant women who need more nutrients for the growth of the unborn child.

A GMF wife said: *“Household duties are not fixed on one individual as before; my husband does the cooking once in a while. The male children too”*.

A GMF husband noted: *“After joining this programme, I help my wife in the kitchen once a while and she has been happy with me these days”*.

Other domestic chores such as fetching firewood and water for domestic consumption, which used to be predominantly championed by women has been altered. Traditionally, the husband collects firewood from the bush and brings it to the farmhouse—from there, the woman will carry it to town—also children are typically involved in fetching firewood. According to many participants, husbands are now increasingly helping to carry the firewood to town. Some women noted that their husbands help them fetch water and firewood while others stated that they all do it together.

A GMF wife noted: *“Even though my husband is old, he still helps me to take care of the younger children when I am busy with other household work”*.

Another GMF wife said: *“We all do these chores together these days, compared to those days where they will not even help us”*.

With regards to sanitation tasks, few participants indicated that they clean the house together, while other husbands stated that they do their laundering by themselves during the absence of their wives, which is not generally unusual in these types of communities. One male participant, however, claimed to be laundering his own and the children's clothes even when the wife is around—which he had never done before in his life. This is seen as an important behavioral change.

As a result of professed more joint responsibilities now in households, the men noted that they have more work to do compared to the women who now have a reduced workload. This was evident as women's workload had reduced relative to the men. The men reported to have been doing much in the past, concluding that they “have more work now.” Interestingly, the men indicated that their wives are happier and less sick, which has also contributed to more unity in the household. The women also stated that they become ill less frequently because of the decrease in their workload and that there is more unity among them.

A man GMF said: *“These days our wives do not get exhausted and ill easily”*.

A GMF wife noted: *“I am happy with my husband now; I can now concentrate on my small business because my husband helps sometimes with domestic chores”*.

It is important to note that the improved health of women could also be influenced by improved diets and better hygiene/sanitation practices, in addition to less exhaustion from domestic and farm workload. Nevertheless, the fact that this is a perception of both male and female participants is noteworthy—and overall, a great impact.

From the perspective of productive work, there is a different gender division of tasks for cash crop and food crop farming respectively, at the different stages of the entire process from land preparation to selling of harvest. For cash crop farming, men are typically handling separate tasks—brushing of cash crop farms, harvesting, and selling, while women lead in the areas of preparing nurseries, watering, processing [palm oil], etc.). Hence, it was not surprising to see different views on changes in cash crop production and farming varied among GMF husbands and wives. Men maintained that they took the lead in cash crop production while their wives served in supportive roles related to cooking, field clearing, transplanting, watering the nursery, etc. Other participants noted that they work jointly with their wives and husbands. This may be more related to the shared decision-making as one key informant wife noted that their *“farming activities are always debatable, and we do agree on what to do and how to do it.”*

The physical work (most likely) remains divided, with the men doing the most part—brushing, felling, burning, sowing, harvesting, etc., and women contributing to transplanting, supporting harvesting and transportation. It is observed that men mostly do the tasks ‘back in the town’ related to drying and fermenting. On the other hand, traditionally, the work around food crop farming is much divided. Men are typically responsible for land clearing and initial seeding/ploughing, while women do harrow, weeding and planting. For rice farming, the

system of ploughing (planting) has changed since the war and is now less time consuming, but this system leads to higher seed loss. This new system gives more work to women in the harrowing. A general perception is still that men do heavier farm work, although the women's role is more persistently intensive around the year.

As for changes observed by the project participants—there is still a perception between both men and women, indicating that men lead, and the woman support. Men may take more decisions about issues like labour hire; however, the women may oversee the hiring of labour for the tasks that they are responsible for. The men reported that they prepare gardens for their wives and support them to do 'petty things'. Tasks related to business activities are jointly done by both women and men and in some places, children are directly involved in household businesses (hawking, minding shop). In some homes, however, the pattern is women leading in trade, while husbands providing supervisory roles over their wives.

A GMF wife said: *"My husband is working with the action plans developed from the GMF training. He is always willing and happy to support us at home."*

A GMF wife stated: *"In fact, these days we go to the farm together and return together."*

Access to resources and decision-making within households and at the community level

The GMF support shared decision-making in business and in family-related issues was noticeable as the evidence points to significant improvement in household decision-making. Most women are given some opportunity to participate and, in some circumstances, take decisions for the family. Family decisions about growing nutritious crops are taken mostly by both husbands and wives. In few cases, even the children are allowed to take part in the decision-making. Several participants pointed out that their wives lead in deciding which nutritious crops to grow. This may not reflect much of a change, as traditionally men oversee rice and cash crops production, whereas women oversee groundnuts, benni (sesame), beans, and vegetables production. However, decisions about the sales of cash crops were mainly with both couples. There appears to be a general move towards more joint decision-making as many participants jointly decide before sales.

A GMF husband noted: *"For sales of food crops, my wife took the lead in deciding, though my wife also decide and sell vegetables, I support her in the end."*

Participants noted that they make decisions together to avoid confusion while others endorsed their wives' leadership in decision-making as most husbands shifted the decision over sales of food crops to their wives. Traditionally, man manages and decides over the rice harvest,

and the woman over other food crops though some men may still influence what happens with the crops grown by women.

A GMF husband said *"They still regard us as their husbands. We take decisions together, we work together but they still give us respect and so, there is no negative effect."*

In relation to food consumption decisions, GMF husbands agreed that their wives took the lead in deciding what food (and in what quantity) to prepare for their households' consumption. Participants noted that their children are having nutritious foods that make them healthy. The women are especially happy that their husbands now pay more attention to the health and welfare of their children. Most male GMF agreed that they take responsibility of providing nutritious food for their children by ensuring adequate and diverse food crop cultivation for their households since the LANN+ project started. Participants now have full knowledge of food and nutrition, and most husbands agree that they eat nutritious foods together with their children. Although the project promotes livestock rearing, it must be noted that regular consumption of livestock is not very common—even chicken is mainly consumed for special occasions. In homes where there were livestock, husbands and wives made joint decisions about their consumption and sale.

A GMF husband noted that *"In our home now, we discuss and agree in terms of decisions on food consumption and many things than before."*

On the issue of family planning, some participants noted that they have not started family planning yet. However, if they were to have a discussion on family planning, it would be based upon joint decisions. GMF wives noted that they learn more about it from the nurses in the clinics and provided feedback of what they learnt to their husbands and then they decide together if the need arises. On the contrary, some GMF wives did state that even if their husband did not agree, they would still opt to go for family planning as some women do go for family planning without their husbands' knowledge. So, it marks a positive change if GMF women feel they would be able to freely have the discussion with their husbands and make decisions together.

A GMF husband stated: *"in the case of family joint decisions not all the time, but it is sometimes based on a joint decision"*

Traditionally, a woman as a primary caregiver would be responsible to take the child to the clinic but could, however, not do so without her husband's permission. Interestingly, husbands are taking greater interest in childcare including observing their health and food consumption. Some male participants expressed their experiences regarding the respectful nature of some nurses when they accompanied their wives to the health centre which

contradicts prior perception that some rural health staff are rude and abusive, which is a deterrent for regular health seeking behaviours. It is extremely exciting that nurses are encouraging husbands to continue accompanying their wives to the clinic.

A GMF wife noted: *“My husband feed the children when I am busy with other domestic chores and even accompany me to the hospital these days.”*

On the issue of children's education, husbands take the lead irrespective of the gender of the child. The reasons for men's leadership on their children's education emerged to be that the children fear their fathers and would listen to them more than the women. Around homework, it is mostly constrained by limited literacy among families, while the education bills of the kids remained the responsibility of both husbands and wives. It should be noted that taking the lead in education issues does not refer to deciding whether or not the child should go to school—but rather to ensuring that they do follow-up on the children's homework and to make sure they go to school.

A GMF husband said: *“I support my wife to take [walk] the younger child to school, sometimes when I am less busy, I take them with my bicycle to school.”*

Household decisions about sanitation facilities (especially latrine) were said to be taken jointly. Even though, emphasis was placed on women's request for latrines, because they feel shy to engage in open defecation. Other participants noted that the decision to have household latrines was dependent on their husbands as they have to provide the money and labour for the construction of household latrines.

A GMF husband noted: *“We the men also see the need for latrines and support such request from our wives to have them constructed at home and to avoid engaging in open defecation which is sometimes difficult for women to do around here.”*

Households were much more enthusiastic in constructing and maintaining local latrines because they have seen the need for a proper latrine for privacy and convenience. In general, a pattern of joint decision-making seems to have emerged in families since the GMF training. Women even boasted of keeping their earnings and not having to handover to their husbands. This indicates a positive move towards increased influence and in the longer-term self-sufficiency of women. Many of the participants mentioned consultative planning being advanced since signing up to the programme.

Discussion

Overall, our findings show that there has been a change in social rules about men engaging more in domestic housework and women participating in taking family

decisions which is promoting women empowerment and enhancing outcomes along household food-nutrition and sanitation pathways. When it comes to childcare, it is becoming more acceptable for men to be involved. Men are becoming more involved in bathing and clothing the children and attending to children while their wives are busy. This appears to be something new coming from the GMF principles which contradict traditional gender role expectations [3, 6, 10]. One major observable difference was in changed norms about women speaking up as their voice has positively increased at both family and community level. They feel more confident in voicing their concerns and are able to attend public meetings and it seems there is no hesitation to speak up on issues of their households and community. Although most women did not explicitly label it as confidence, but they felt more comfortable being able to share opinions in their households since becoming GMFs. This could be likened to the continuous reference to joint household decisions in which women's contributions (in terms of their ideas, recommendations, etc.) are being recognized [14, 20, 22]. Their participation at public forums and being consulted by non-GMF community members to settle conflicts in their households was an important step in their lives. Women were inspired by the GMF training, which encourage the needed space to be given to women in their households to voice out their concerns. Consequently, upholding such values for over a year at the household level also inspires women's boldness in some other forums [14]. Their representation in the public space is even recognized at chieftom authority level. One female participant added that “we are not as strong as men, but our voices are now heard to certain extent, and they do listen to us”.

For women, there were noticeable and appreciated benefits such as reduced workload as men take on more tasks. It was observed that a lot of women do not have to wait any more until their husbands come home before they take responsibility of certain actions in their households. Male participants attested to better household decisions now with women's involvement and added respect to the outspokenness of women in their communities [4, 6, 20]. There were marked improvements in children's wellbeing. The indication is that children are happily responding to the closeness they now feel with their fathers since the introduction of the GMF principles. There were also marked improvements in social cohesion in the household. Overall, positive impacts resulting from changes in decision-making range from peace, respect, love, unity, etc., to resource mobilization and spending. Another positive impact was the involvement of GMF families in community leadership roles [2, 10, 22]. People generally perceived themselves to be

more active than before in ‘community leadership’ roles, although in some instances it may be the case that the GMF were already in those roles before—but here it is about their own perception—either way it is part of their motivation, and it gives them confidence for sharing messages as a further boost [4, 6].

Both men and women assume responsibilities on key community needs such as cleaning and control of their VSLA schemes. Since hygiene awareness and resource mobilization schemes are components of the LANN+ interventions using the GMF approach, one can conclude that it is as well the project in its broader sense that is giving certain people ‘special knowledge’ to share which has been a key contribution for GMFs’ taking responsible roles within the family and at the community level [12, 15, 17]. For community leadership, the evidence shows that men and women now hold community leadership positions (chairpersons, secretaries, and work committee heads)—although it is not clear if these people would have held positions in any case also without participating in the project. For women, the change in role seems to be more on the personal/inter-household level—being invited to advise on household matters—is a positive development for gender inclusivity.

Conclusion

The evidence suggests that gender dynamics is a major underlying factor for malnutrition and as well as outcomes in food and nutrition security. The findings hardly revealed any negative impacts of the GMF approach, nor much in terms of challenges. Though GMF men points to issues of not having the freedom any more to spend money secretly on their personal desires. Even in households where there are tensions, they would find ways to handle them quietly than previously where their conflicts were very loud and often requiring mediation by the town chief or other family members. The GMF approach generally improved cooperation, harmony and controlled the high incidence of domestic and family conflicts. This paper highlights important lessons on the entire GMF principle and observation of households’ changes. There is a significant level of enthusiasm of the project target groups in terms of how readily people are embracing the concept and that the approach has such a promising spill-over effect in the communities. The effect on women’s confidence and voice (outspokenness) was notable. The GMF approach is tackling the very basic forms of gender inequality which directly impact on women empowerment, household nutrition and sanitation behaviours. The GMF approach is promoting more of joint decision-making and joint management of household income and other resources, rather than promoting women’s exclusive decision-making over certain domains and

independently controlled income for women. The beneficiaries remain highly impressed with the GMF principles and the impact on their lifestyles. The target group highly appreciates the peace and unity it brings to their homes, and the increased cooperation also motivates them to make changes in food consumption, childcare, and other family responsibilities. Given that this paper is based on a qualitative dataset, we acknowledge some limitations of the study. First, the use of qualitative study protocols and instruments limits the capacity to generalise the study findings. Second, we also recognize that gathering and interpreting qualitative data are more challenging to maintain rigor as the interviewers’ presence during the interview can influence some participants responses. Despite these limitations, this paper generates documented lessons and valuable insight to advance the GMF approach in promoting women empowerment towards the consolidation of household food systems and the fight against household food-nutrition insecurity in rural communities.

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Consent for publication

SEND Sierra Leone consent for the paper to be published as the lead author is the Country Director of the NGO.

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There is no competing interests.

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