

**Project: Linking Agriculture Natural Resource Management Nutrition + WASH
(LANN+)**

Improvement of Food and Nutrition Security in Kenema and Pujehun Districts

Midterm Evaluation Report

August 2019

**Welthungerhilfe and Karma Cola in partnership with SEND Sierra Leone and
Agro Forestry Farmers Association (AFFA)**



REPORT SUMMARY

1. INTRODUCTION

1.1 Purpose of this report

This report constitutes findings of a mid term evaluation survey which the implementing partner for Welthungerhilfe SEND Sierra Leone in collaboration withAFFA undertook in July 2019 to assess progress and possible lapses in the implementation of the project Linking Agriculture Natural Resource Management Nutrition + WASH (LANN+) in Kenema and Pujehun Districts, an intervention which is jointly funded by the German Federal Ministry of Development Cooperation (BMZ) and Karma Cola in the UK.

The survey exercise is one of the key monitoring and evaluation components for the intervention's reach and impact in the transformation of food and nutrition deficiencies observed in the target chiefdoms and communities during feasibility studies and at baseline.

Progress towards achievement of each output was measured during the survey, asking questions around the achievement of output indicators. These are detailed in appropriate sections below with some comparisons made against the situation at baseline.

1.2 Background to LANN+ Project

As at the proposal development stage of this project, Sierra Leone with a population of seven million people, was classed as one of the low-income countries with a GDP per capita of only USD 254. Seventy-three percent (73%) of the population lived below the poverty line. While 40% of the gross domestic product was contributed to by the agricultural sector. Malnutrition was widespread in the population. Severe malnutrition among the populace constituted 8.6% while 41.2% are moderately malnourished About 37.9% of the children born were undergrowth and 7.1% of the children were born with too little weight.

In Kenema District, 9.5% of the population suffered from severe malnutrition and another 45.6% suffered from moderate malnutrition (WFP Report 2015). The low growth and wasting rates in Kenema were 41.1% and 8.9%, respectively, above the national average, while the dietary diversity and frequency of food intake (meal frequency) of children under 5 years of age were alarmingly low.

With a compilation of these problems including inadequacy in protected water and household latrines, lack of adequate storage for agricultural products, communities previously declared "open defecation free" relapsing into open defaction. The LANN+ proposal was put together to help address not only the food and nutrition insecurities, but also the water, sanitation, and income generation in the target communities.

Actions proposed in the intervention are geared towards two outcome levels: a) diversified and increased agricultural production to create a more diverse diet and enhanced income opportunities; and b) achievement of improved health status is through the use of safe drinking water, improved sanitation and hygiene practices. The second outcome had only one output: improved access to safe drinking water and sanitation and knowledge extended to hygiene practices. The first outcome on the other had, had three outputs:

- i) 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, are applied; and
- iii) new sources of income opening up [for women] through the processing of foodstuffs, integration into value chains and the marketing of agricultural/forest products.

The intervention officially lasts thirty-six months (three years) – October 2017 to September 2020.

2. METHODOLOGY

2.1 Survey design

Unlike the baseline survey, the LANN+ midterm evaluation survey was designed to focus on the intervention's progress measured against the achievement of output indicators. Indicators for activities that had not been done till June 2019, were not measured.

2.2 Data collection methods and sample

Two methods of data collection were used during the survey. There were individual interviews with direct project beneficiaries which was aimed at quantifying views on the issues investigated. For this, structured questionnaires were administered to 210 respondents in randomly selected 21 of 60 intervention communities in four chiefdoms. Half of the respondents were women and the other half, men. Each of the four intervention chiefdoms (Barri, Gaura, Nomo and Tunkia) had two, seven, five and seven communities respectively, an average of 30% of each chiefdom's community total. Questionnaires for the quantitative data collection were administered through digital data gathering using the online data gathering tool, Akvoflow.

Data was also collected qualitatively using paper-based version of a similar questionnaire designed for the collection of quantitative data. Unlike the quantitative tools, the qualitative focus groups had a wider margin for elaboration on the intervention's progress. From their elaboration, felt impacts could be summarised. Enumerators' observation of the respondents and their responses also formed valid opinion about the depth of the intervention's impact from the level of achievement of its success indicators.

3. PROGRESS TOWARDS OUTPUT-SPECIFIC INDICATORS AT MID TERM

Output 1: The target group has improved availability and access to high quality foodstuffs through sustainable farming practices and improved management of natural resources

This output had the following success indicators:

- Increase in yields for 3 main crops by >10%;
- Increase in production by more than 10% due to extension of cultivation;
- Application of soil fertility measures by at least 50%;
- Nutrient rich adapted cultures (agricultural practices) identified and locally propagated;
- Target group increases the diversity of cultivation by at least 2 cultures/products; and
- At least one source of animal protein per village identified and piloted for use (e. g. snails, poultry).

Output indicator 1.1. – Increase in yield for three main crops: Second planting of two main crops (Orange Sweet Potato and Broad Beans) had been completed as at the time of the survey as was said by all respondents. 35% of all 210 respondents said broad beans, orange sweet potato, maize and benni had been provided by the project. In the table below, other combination of crops they recalled is listed. Maize and benni were only introduced in the second year (2019), but mentioned more frequently than banana and plantain which fell in the “others” option (0.9%) as part of the inputs from the previous year. This is possibly because these are perennial plants which could likely be easily referenced when they start bearing.

Table 1: Frequency of recall for all crops the project introduced.

Crop types	Frequency of recall
Orange Sweet Potato Broad Beans Maize	74
Broad Beans Maize Benni	35
Maize Benni	30
Orange Sweet Potato Broad Beans	11

While the first harvest (October to December 2018) reported 93 metric tons of Orange Sweet Potato and 8,918 kg of broad beans¹, 67% of respondents said their second planting was more than the first. Hopes remain high that with all things remaining normal till harvest (beginning from sometime around mid of September 2019), the yield would increase above the first harvest and adequately inform the project about its achievement of this output indicator. At next harvest, maize and benni would have had their baseline. For banana and plantain (being perennial crops), we can only for now, assess the target group’s recognition and prioritization of the plant as added value to household food baskets.

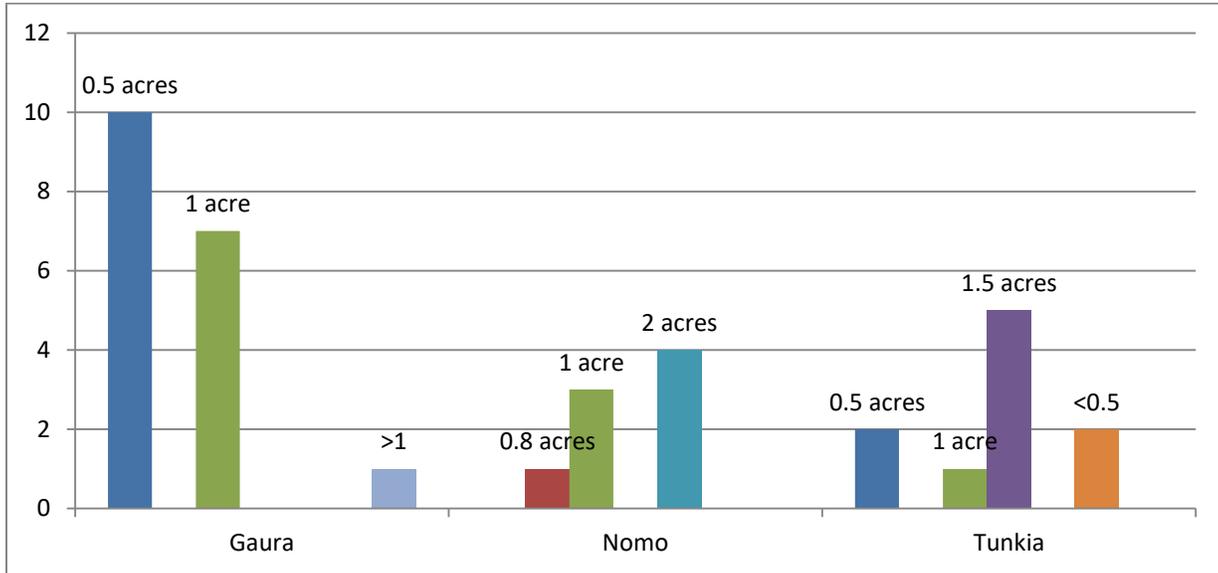
Output indicator 1.2. – 10% production increase due to extension of cultivation: The survey did not focus on assessment of farm sizes to determine the correlation between production and farm size. However, prior to the midterm survey, a separate field assessment by staff of Ministry of Agriculture, Kenema², was conducted in about 76% of the target communities in Gaura, Nomo and Tunkia. Barri was not reached. Of all the communities they assessed, “sweet potatoes and maize were mainly planted as sole crops in gardens while benni and broad beans were planted on upland rice farms as part of the mixed crops”. The sizes of upland rice farms are not known. For the crops planted solely, the sizes of the land stated varied from less than 0.5 acre to 2 acres. Furthermore, the

¹ Ref: 2018 annual donor report on SLE 1056

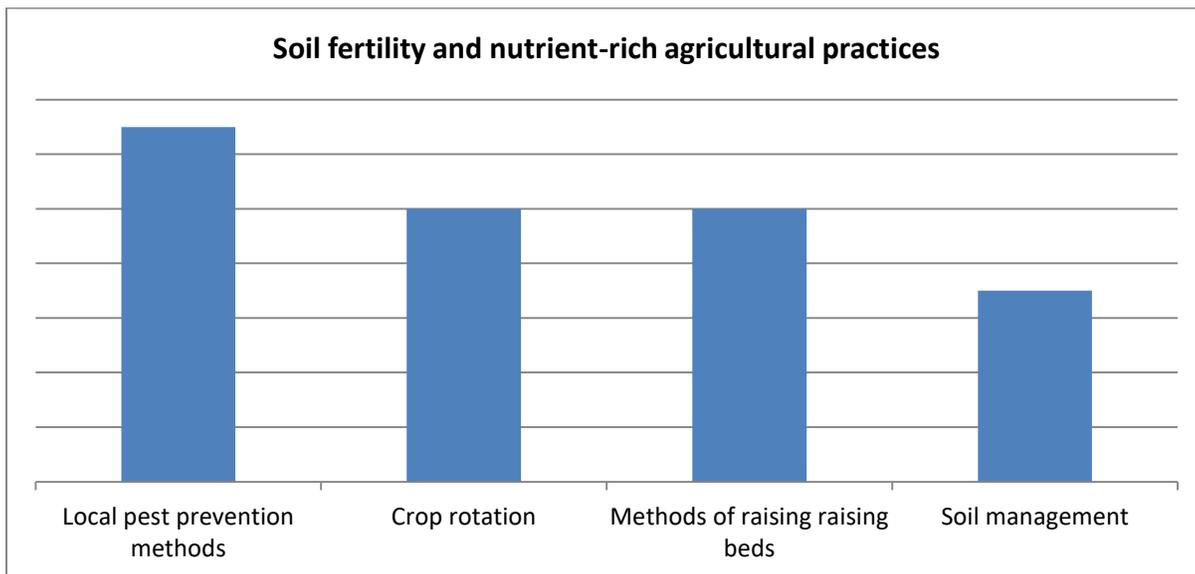
² The Deputy Agricultural Officer, Edward A.L. Musa and others

Ministry’s report about the inputs supplied shows that the beneficiaries received more than what the project actually supplied. One field staff commented that the Ministry representatives may have gotten those figures from people they interviewed on the way without going to all the farms themselves.

Figure 1: Ministry of Agriculture’s estimated sizes maize farms they visited

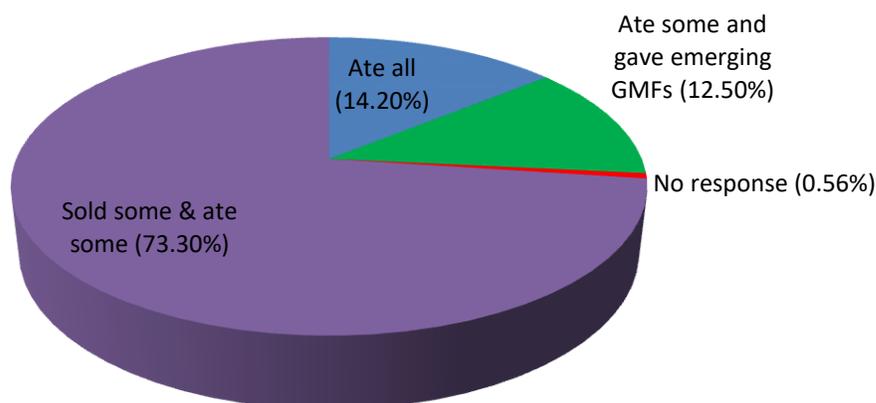


Output indicator 1.3. – Application of soil fertility and nutrient-rich agricultural practices: For these indicators also, the survey did not focus on observing the fields to form an opinion. Ninety-three percent (93%) said they had been sensitized on better agricultural methods to increase harvest yields as follows:



Additionally, the local population agrees over the economic, food and nutrition benefits of the intervention. The bulk of them (73.3%) sold some and ate some of their first year’s crop harvest while 73.86% replanted especially orange sweet potato on their own individually (52.3%) and with other families (21.6%) prior to the second cultivation. Some others could not avert the consequences of the dries: they lost the vines.

Figure 2: Respondents' use of crop harvest



Output indicator 1.4. – Target group increases the diversity of cultivation by at least two products: Diversification of food crops is generally inclusive of Orange Sweet Potato. This is solely attributed to the LANN+ intervention which introduced cultivation of Orange Sweet Potato on a large scale and advocated its nutrient value. At baseline, baseline rice was “the most important crop in the region followed by cassava, different yams and maize”.³ At midterm, a twist was discovered in the order of these food crops. Responses to the types of crops target group cultivated in their farms, project gardens or any other garden came back strong with broad beans in the lead, followed by maize and then rice. Potato which was mentioned as the second to last crop at baseline, now closely follows rice and benni.

Table 2: Types of crops currently cultivated and at baseline

Crop type cultivated	Number of respondents at midterm = 210	% at midterm	Number of respondents at baseline = 400	% at baseline
Beans	194	92.4	238	60
Maize	185	88.1	218	54
Rice	175	83.3	380	95
Benni seed	175	83.3	226	57
Potato	158	75.2	59	15
Yams	147	70.0	230	57
Cassava	144	68.6	264	66
Pepper	142	67.6	214	54
Cocoa yam	113	53.8	155	39
Plantain	27	12.9	23	6

³ Project Baseline Report, P23, Table 9: Agricultural production in target and control group

Output indicator 1.5. – At least one source of animal protein per village identified and piloted for use: As at the time of interviews, chicken and duck (which were widely chosen to pilot domesticated animal source proteins) had not been provided yet. However, the project had earlier on constructed chicken pens in fifty-two communities which awaited stocking with improved breed of cockerel when they were mature enough to be let out of their breeding farms. Seven other communities were awaiting ducks while five communities which selected snail piloting already had newly hatched snails about June 2019. Five other communities inspired by the pilot of snail rearing initiative, supported themselves with guidance of field staff to construct and stock their own snail pens in Gaura Chiefdom.

Overall for improved access to food availability, 59.7% respondents recalled July and August 2018 as lean seasons, with August accounting for 38.8% of that total response. Baseline (April/May 2018) recorded more than 90% food insecure respondents between May and October one prior to that survey. Except for the yield size which needs to be compared with pending harvest of the second cultivations, there is a strong indication that all output indicators of output one are being met.

Output 2: Extended knowledge and consumption of nutrient-rich foods, especially for women and their children, are applied

This output had the following success indicators:

- 900 families are trained in the application of improved nutrition and hygiene practices (LANN approach)
- 120 multipliers from rural communities trained to pass on their knowledge to 3,000 families
- At least 50 of women have increased food diversity by at least 2 food groups.
- At least 20 of children under 2 years of age receive a "Minimum Acceptable Diet" (MAD)

Output indicator 2.1. – 900 Families trained in the application of improved nutrition and hygiene practices: Target population had undergone several trainings prior to the midterm survey. Mostly, they recalled food and nutrition, hygiene and sanitation followed by GMF training and others as follows.

Table 3: Trainings target group participated in

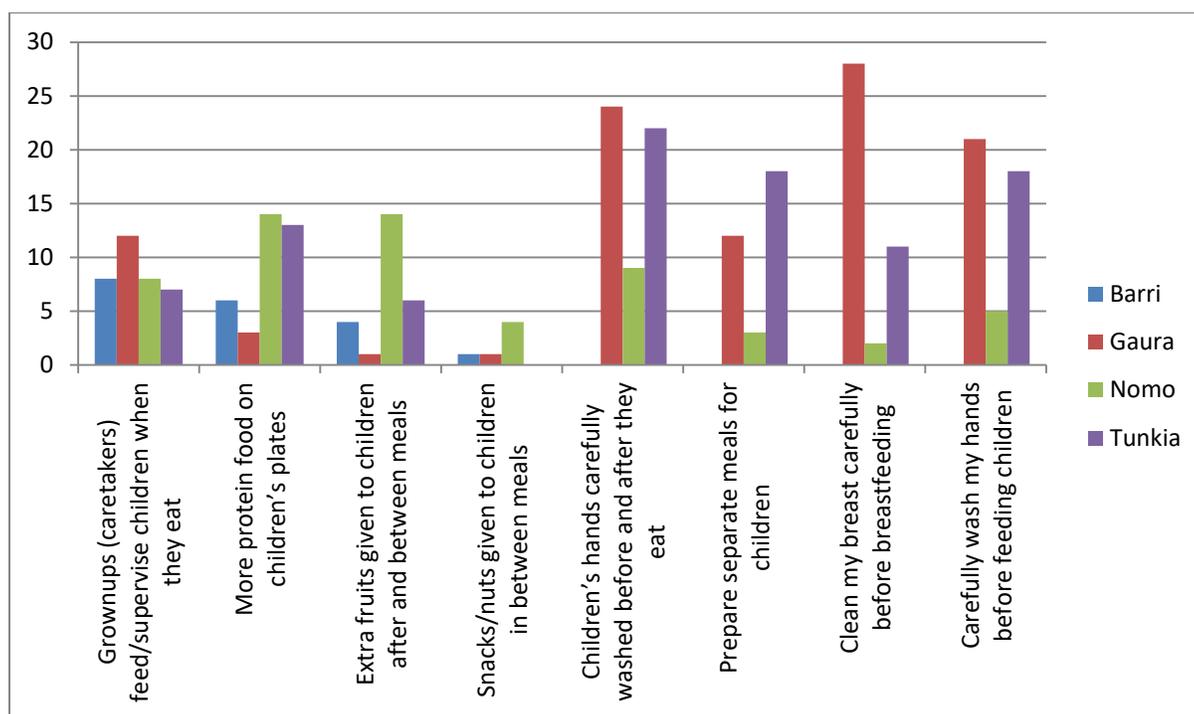
Trainings target group participated in	Number of respondents	%
Food and nutrition	197	94
Hygiene and Sanitation	201	96
GMF Training	192	91
Business training	77	37
Breast feeding	27	13
Cooking demonstration	135	64
No response	1	0

However, the hygiene and sanitation was not delivered as a separate training package on its own. Rather, there were community sensitizations on the project content and approach at different times, throughout the entire intervention communities, using locally based dramatists and Community Multipliers. Additionally, the Food and Nutrition Training Manual which was used to roll out the food and nutrition training dedicated two chapters to hygiene.

Module 11: Food hygiene for healthy meals; and **Module 12: Community WASH mapping and planning.** Both these chapters detail out basic, and must-know hygiene education for improved health and sanitation at household and communal level.

As a result of these trainings, respondents mentioned 173 times “Wash food before cooking and eating” and 167 times “Prepare food on clean cooking areas and with clean utensils”, etc., as changes they have adopted for hygienic food preparation. For changes in child feeding practices, 62.5 said they ensure that “Children’s hands [are] carefully washed before and after they eat”, while another 40.9 said they now add “more protein food on children’s plates”. Twenty-three (95.83) of twenty-four 11 year+ children interviewed to confirm some of these changes attested to being given pieces of meat on their share of food.

Figure 3: Child feeding behaviours



Output indicator 2.2. – 120 multipliers from rural communities trained to pass on their knowledge to 3,000 families: All 120 multipliers had been selected and trained since the inception meetings in 2018. They have also benefited from other trainings and participated in cascading messages.

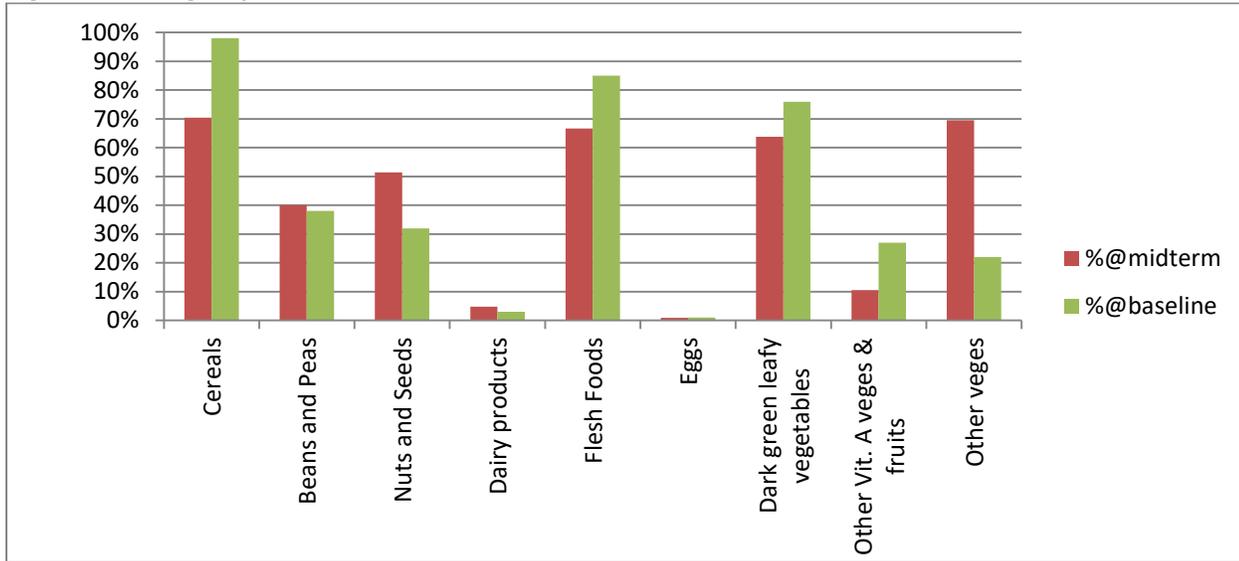
In addition to their initial inception trainings about project content and approach, thirty more active and literate ones were identified⁴ as Core Multipliers to lead on the cascading of further project-based trainings and monitoring of target beneficiaries in their localities.

Output indicator 2.3. – At least 50% of women increase food diversity by at least two food groups: Minimum Dietary Diversity for Women (MDD-W) has increased among all women interviewed: only 31 (29.5%) of 105 women respondents said they did not eat up to five out of ten food groups the previous day prior to their interview as against 61% at baseline, which that report recommended needed considerable improvement. However, whereas rice, which is the traditional staple food was “complemented with green leafy vegetables such

⁴ First annual project report, 2018.

as potato leaves, cassava leaves, krain krain and greens”, the findings at midterm show that rice still maintains its place in family meals but it is now complimented in the same strength with other vegetables (tomatoes, egg plants, onions, etc.). This is followed by flesh foods (meat and fish) and then dark green leafy vegetables now in the fourth place. Consumption of other animal-based protein, such as eggs, is still the lowest of food groups consumed across all the chiefdoms.

Figure 4: Food groups consumed at baseline and midterm



Minimum Acceptable Diets for children was also assessed. Out of the 105 female respondents, 53 (50.47%) of female respondents had non-breastfed children under two years in their households. Only six of them (11.3%) could not mention up to half (four of eight) of the categories of food to indicate their children receiving Minimum Acceptable Diet as against 0.0 in the baseline. This was further confirmed with female FGD participants who had children under two years of age. They recounted foods that were appropriate for children in those age groups and gave reasons why such foods they mentioned (e.g., locally prepared benni mix baby food, breast milk, orange sweet potato porridge, etc.) were stated as good for children of that age. In Tanima Gaura, a female respondent prepared her over two year old daughter’s food and watched over her as the discussions progressed while in about 24 hours prior to the female discussion, one male respondent insisted eating with the child so as to observe the eating habit as part of the good nutrition habits adopted over the period of intervention.

At midterm, much could be said about known food groups. Sixty-nine percent (69%) recalled all three main groupings of all classes of food (energy giving, body building and body protective foods). However, the second most frequent response was those who did not respond (9.5%). A close look at the data shows that the population still strongly knows foods in the body building group and foods in the protective group. But no one mentioned protective food group solely. However, there is a very high knowledge of foods that can be used to substitute protein if they **“do not have meat or fish”**. See charts below.

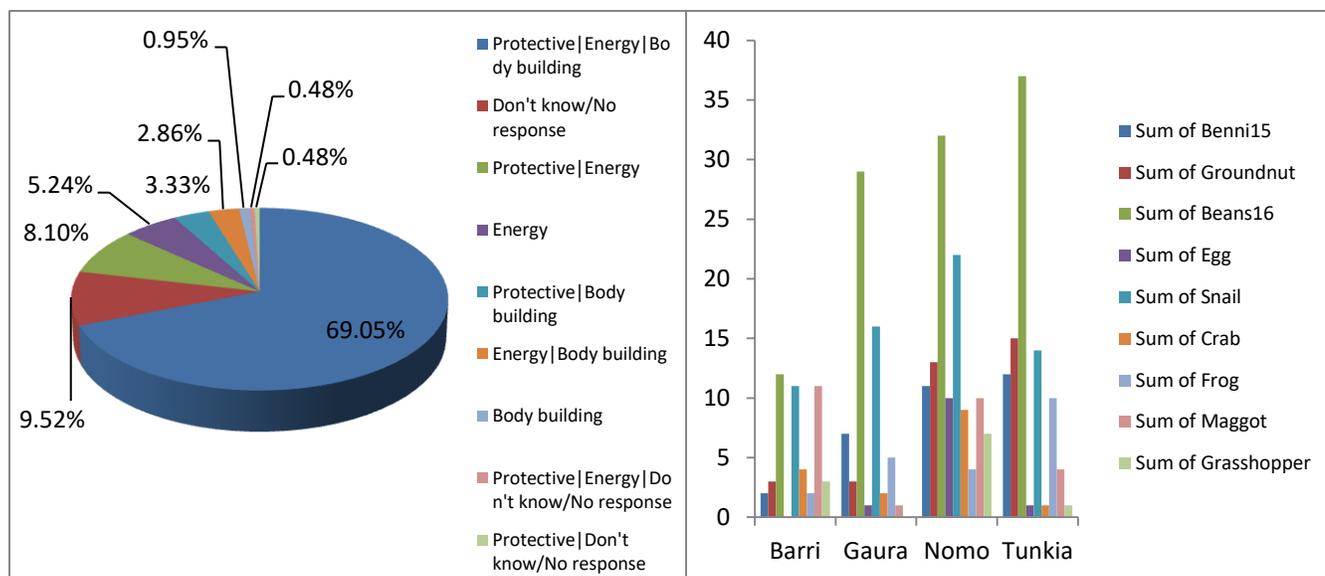


Figure 5: known food groups among target group

Figure 6: Substitutes for meat or fish in meals

Output 3: Women have opened up new sources of income through the processing of foodstuffs, integration into value chains and the marketing of agricultural/forest products.

This output had the following success indicators:

- At least one processing option including value chain identified and implemented in 20 municipalities
- 20 communities are supported in setting up a processing unit
- At least one savings and credit group per community established with more than 50% women's share each;
- Savings and Credit Groups are trained in the development of business plans and basic economic knowledge;
- Identification of income-generating measures for women and successful implementation of at least 30% of the groups in implementing their business plans.

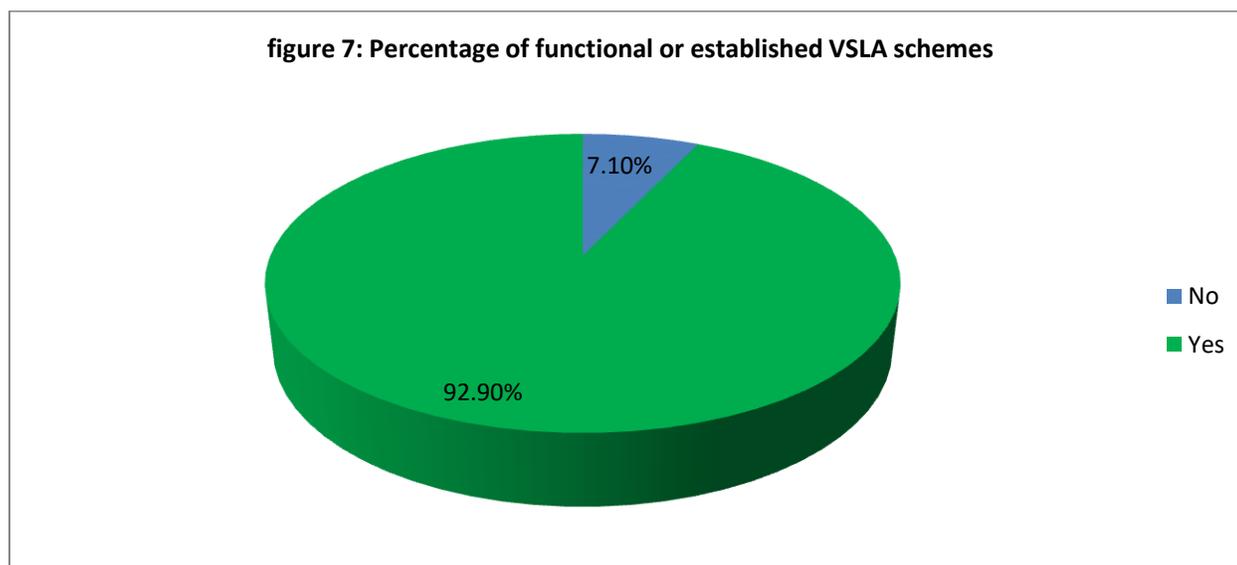
Output indicators 3.1 and and 3.2. – At least one processing option including value chain identified and implemented in 20 municipalities: As at midterm, there had been no establishment of agricultural processing centers or schemes. Therefore, the survey did not particularly focus on investigating activities relating to that. However, there had been other income generation activities such as giving out small business loans, establishing VSLA schemes, which are geared towards women’s economic empowerment. These, the survey enquired about their existence and functionality.

Output indicator 3.3. – At least one savings and credit group per community established with more than 50% women's share each: Eighty (80%) of respondents said their communities had been supported with the establishment of Village Savings and Loans schemes and or small business loans to women. Existing membership databases in the M&E system show that there are 49.6% of women in these savings groups in Gaura, Nomo and Tunkia Chiefdoms as at last quarter of 2018 when the scheme was just introduced. By the first quarter of 2019, that figure slightly increased to 49.7% when other communities started theirs in those same chiefdoms. There has been no record on Barri Chiefdom since. For the small business loans, all its beneficiaries in the aforementioned

chiefdoms are women. Again, target communities in Barri Chiefdom already had a similar scheme ongoing. Therefore, there was no need to duplicate resources.

Output indicator 3.4. – Savings and Credit Groups are trained in the development of business plans and basic economic knowledge:

Almost thirty-six percent (35.7%) mentioned VSLA methodology and business training as key trainings they have been given. Views from FGDs conducted place high emphasis on the economic self-realisation from the established savings groups. 82.9% admits that their household income has increased and the sources of their earnings are mainly unspecified “other agricultural products” as was agreed by 16.4% (22 of 134) respondents. At baseline, similarly, 16.1% (of 400) stated “agricultural subsistence” after “sale of agricultural products (crops/livestock)” which had 72.2% of the total responses.



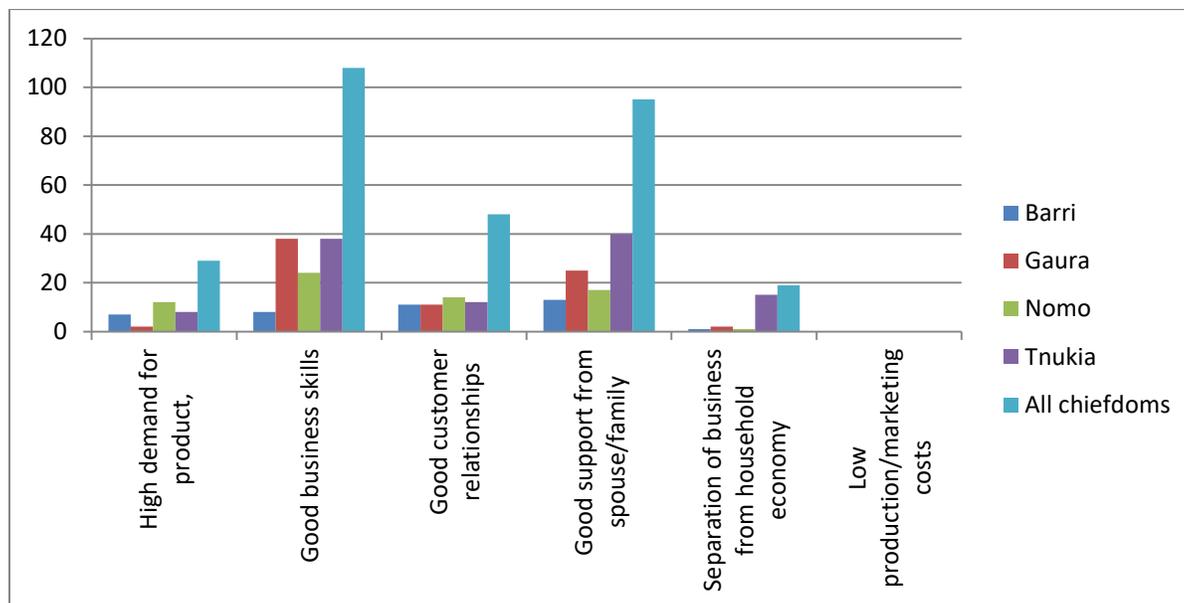
It should be noted that LANN+ was able to provide VSLA schemes to 65% of all 60 communities but conducted the trainings to all 60 project communities. The responses at midterm evaluation showing almost 93% of established and functional VSLA groups could be attributed to other community-led and NGO VSLA schemes that are building up over time.

Output indicator 3.5. – Identification of income-generating measures for women and successful implementation of at least 30 of the groups in implementing their business plans: The mid term survey did not particularly focus on beneficiaries of the small business loans for fear that they are mostly moving around hawking their goods. But since February 2019, 8% (72 of 900 targeted female beneficiaries) have been identified as community based petty traders and given business management trainings. With hardly any defaults, as at July 2019, an average of Le 4,000,000 is repaid every month by three batches of registered beneficiaries. The intervention continues looking out for and assessing potential business women among enlisted beneficiaries to whom the funds revolve.

In the meantime, increase in household income was observed among many respondents (81.9%), followed by “no change [in income]” (12.86%) as against very “many households” who reported of “massive” or “slight” decrease in especially household incomes from agriculture at baseline. Reasons for the increase was generally good business skills. Tunkia and Gaura agreed the same but for Barri, it is as a result of good support from spouse/family. Field staff observed that high demand for product is considered the least reason for increase in household incomes because of existing trade fairs in Gaura and Tunkia Chiefdoms. In Nomo where there is no

trade fair, that reason for increase in household stands stronger than every other chiefdom. Same can be observed in Barri Chiefdom comparatively with Gaura. (see chart below)

Figure 8: Reasons for household income increase



Output 4: Access to safe drinking water and sanitation has been improved and knowledge extended to hygiene practices

This output had the following success indicators:

- At least 50% of the target communities have access to safe drinking water
- Dissemination of the self-supply approach and sanitation marketing in at least 50 of intervention villages
- No open defecation in target communities
- 8 WaSH demonstration facilities built and managed
- WaSH committees in all municipalities with water abstraction points functional
- 60 villages (approximately 7000 persons) trained in basic sanitation and hygiene
- 120 LANN multipliers empowered to disseminate sanitation and hygiene practices
- At least 50% of the participants have better hygiene and sanitation knowledge and apply improved hygiene and sanitation practices (base and final line study with KAP survey)

Output indicator 4.1. – At least 50% of the target communities have access to safe drinking water: The project planned for provision of protected water sources to one-third of the targeted communities who are in strong need of them. The provisioning would come by way of new constructions or rehabilitation of existing but broken water systems. Water works and the midterm survey were concurrently ongoing. Reports from the WASH supervision and monitoring show that eleven LANN+ intervention communities had been reached with protected water sources (mostly Indian Mark II hand dug wells) in July 2019. Three of those communities were linked to two gravity water systems, which served a tota of five communities. Work was still ongoing on one hand dug well in Ngelehun, Gaura Chiefdom.

From the midterm survey, only 37 (17.6%) of all respondents consumed water from unsafe sources in six communities across three chiefdoms. Three of those communities were in Gaura, two in Nomo and one in Tunkia. Not all of the remaining 54 communities which have functional safe water systems are attributable to LANN+ intervention. Other development actors, e.g., GOAL Ireland have WASH infrastructural investments ongoing in Gaura and Nomo Chiefdoms.

The survey could not find any correlation between the lack of protected water sources and water-borne diseases. For instance, 19 of 210 respondents attested to their children (0-5 years) experiencing diarrhea two to three months (x4) and four to six months (x2) and over six months (13) prior to the survey. Only one of those respondents said he fetched their drinking water from an unprotected water source and “yes”, treats it by “boiling” and “filtering”.

For 83.4% who said they fetched their drinking water from protected water sources, enumerators followed up on the care they give the water at household level. Even though majority kept their drinking water above the floor and that the drinking water containers have covers, only 35% of those drinking water containers had their lids in place at the time of the enumerators’ visit.

Table 4: Care for drinking water at household level

Enumerators’ observation points	No	%
Drinking water is kept in separate containers	135	64
Drinking water container has lid/cover	110	52
Drinking water container kept above floor level away from contamination	99	47
The inside of the drinking water container is clean	87	41
The outside of the drinking water container is clean	82	39
Water is taken safely from/out of drinking water container	75	36
Lid or cover in place at time of visit	74	35
The utensil used to draw water from the drinking water container is clean and stored in a hygienic manner	63	30
Drinking water container have a narrow or opening	21	10

Output indicator 4.2. – Dissemination of the self-supply approach and sanitation marketing in at least 50 of intervention villages: No activity had been done about WASH self-supply concept. Sensitisation on the self-supply approach is planned to go along with the construction of self-supply demonstration facilities.

Output indicator 4.3. – No open defecation in target communities: Open defecation was still eminent in some communities. 69 (32%) of respondents said they did not have household latrines while 17 more (8.0%) confessed using the bush, stream, society bush, etc., to ease themselves. Those who had access to latrines (141), only 76 was accessed by the enumerators. Furthermore, only 41 were properly clean while a little over one-third (38) had cover over the pit. With health and hygiene trainings pending, it is hoped that behaviour change in open defecation and household latrine ownership will be influenced consequently.

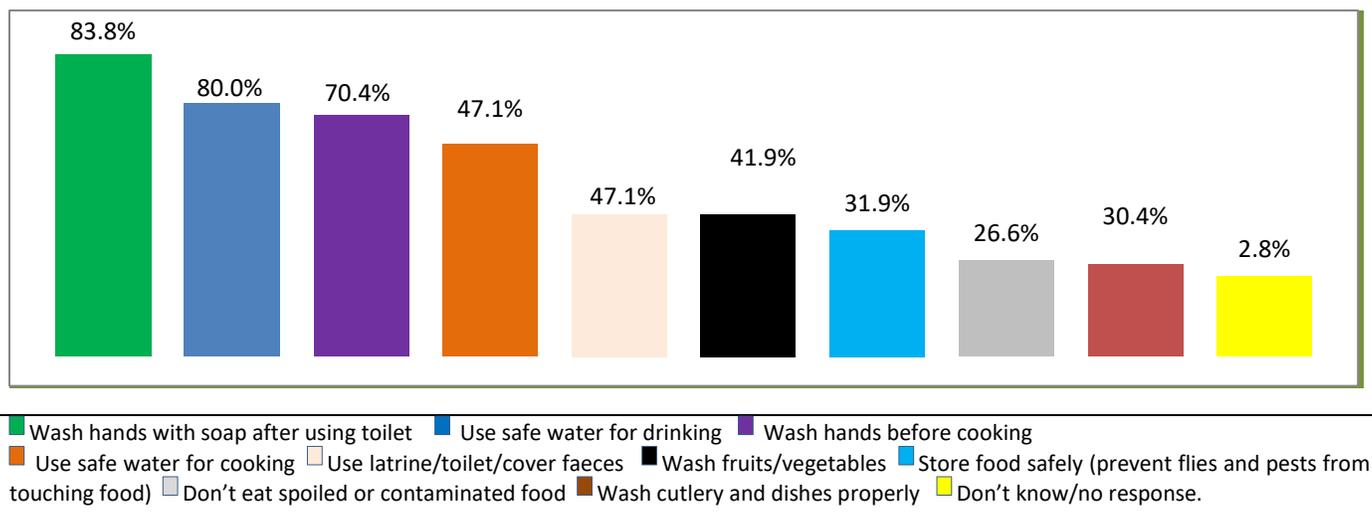
Output indicator 4.4. – Eight WaSH demonstration facilities built and managed: No WASH demonstration facilities constructed yet.

Output indicator 4.5. – 60 villages (approximately 7000 persons) trained in basic sanitation and hygiene: See Output indicator 2.1. above. As a result of extensive hygiene and sanitation messaging partly through food and nutrition trainings and theatre performances, the following sanitation facilities were observed by enumerators to

be seen at respondents' households: clothlines (207 of 210 households), plate racks (150 of 210 households), garbage pit (85 of 210 households) and handwashing facilities (23 of 210 households).

Even with the very low presence of handwashing facilities, "wash hands with soap after using the toilets" was a leading response for ways of preventing diarrhea. (see chart below)

Figure 9: How to prevent diarrhea



Output indicator 4.6. – 120 LANN multipliers empowered to disseminate sanitation and hygiene practices: See Output indicator 2.2. above. Formal hygiene and sanitation trainings are still pending.

Output indicator 4.7. – At least 50% of the participants have better hygiene and sanitation knowledge and apply improved hygiene and sanitation practices (base and final line study with KAP survey): Almost all respondents across all chiefdoms had a high knowledge of applying improved hygiene and sanitation practices. Responding to the question on how to prevent diarrhea, for example, only 2.8% of them had no answer or could not respond. 83% said "Wash hands with soap after using the toilets", followed by 80% who said "Use safe water for drinking" and another 70.4% who said "Wash hands before cooking and eating". Formal hygiene and sanitation trainings are still pending, though, but previous sensitisations could be referenced for current knowledge.

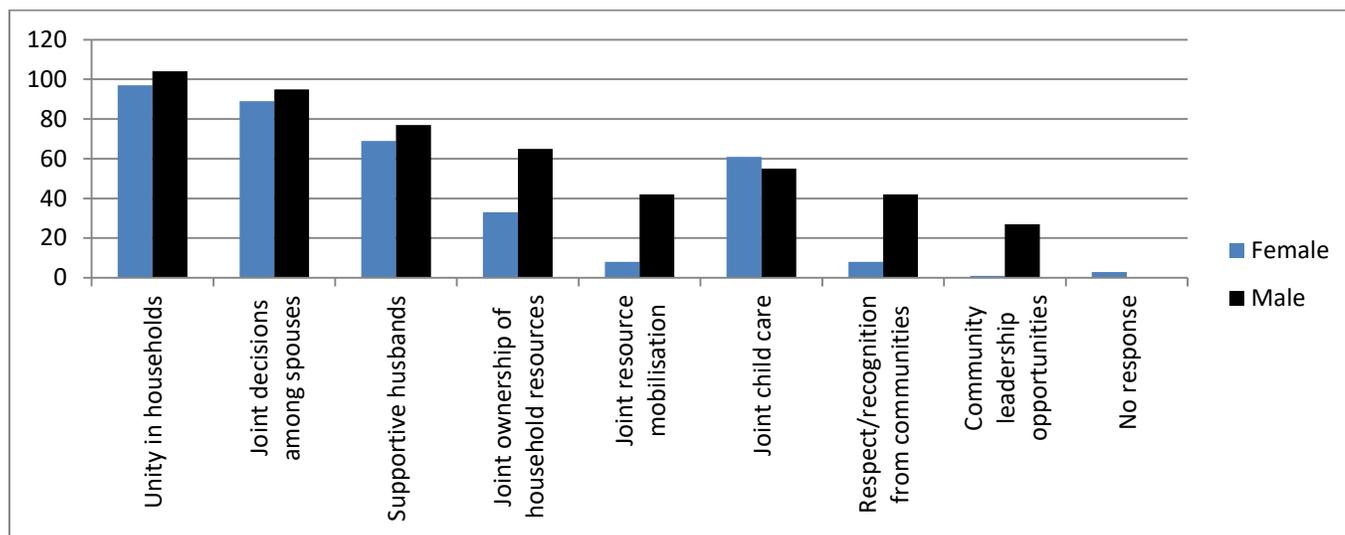
Impact of the GMF approach

The GMF Approach used in the implementation of the LANN+ project is not in itself a project deliverable or success indicator. But given the impact this gender transformative approach had been seen to add to other previous SEND interventions, it was deemed necessary to shed light on the impact of the approach on the LANN+ intervention at this stage.

The first of responses received from all target respondents on the benefit of being Gender Model Families is "unity in households". This was followed by "joint decisions among spouses" and then supportive husbands. But there is little joint resource mobilisation as stated by very few male respondents.

Women's voice is consequently recognised as more women than men said they had had community leadership opportunities as a result of their joining the GMF approach. Consequently, wives are able to influence decisions "a lot" in their households (76) and "somewhat/moderately" (19).

Figure 10: Impact of GMF approach



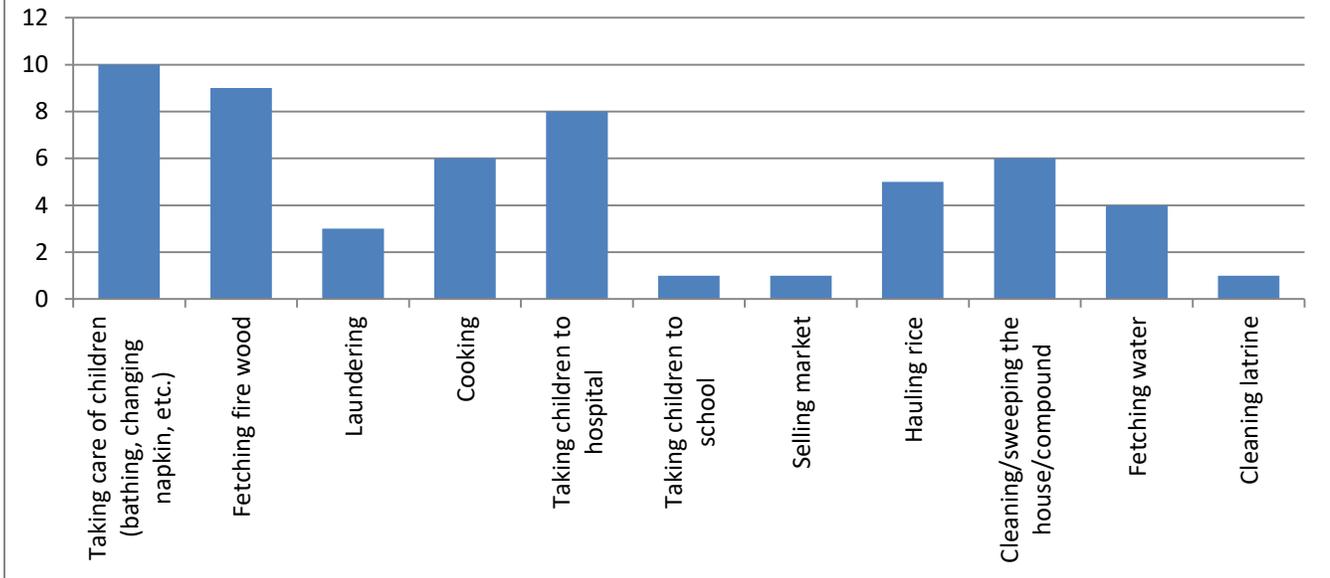
Spill over effect of the approach to other families was confirmed by 73.8% of the total respondents. Those who have not reached out to any other family said they could not for the undermentioned reasons.

Table 5: Reasons for not recruiting other families into GMF

Reasons why no Emerging GMFs have been recruited	No. of response	%
I don't have time to cascade messages to other families	8	19.05
People are not interested	6	14.29
People are not ready to change from old ways	1	2.38
People don't have time for GMF approach	17	40.48
The community population is too small to recruit others	10	23.81

Twenty-four children of about eleven years old responded to questions geared towards confirming the existing peace and unity in GMF households. 91.67% confirmed that their fathers are very helpful to their mothers od late wit regards doing household chores. However, selling market, cleaning latrines, taking children to school and laundering, are still low on the scale of support the children confirmed their fathers give their mothers.

Figure 11: Things papa helps mama with in the household



4. KEY CONCLUSIONS

Conclusively:

- Access to improved availability and high quality foodstuffs (output one) has only so far had a baseline against which further works will be measured. Cultivated land sizes (as observed by Ministry of Agriculture), are small and may not influence significant increase in yield. However, crop and meal diversification is achieved and there is strong indication of target population continuing the best agricultural practices they have acquired from the intervention.
- There is extended knowledge and consumption of nutrient-rich foods among local population with formal and systematic trainings in food and nutrition modules. Minimum Dietary Diversity for women and Minimum Acceptable Diets for children have increased. FGDs confirm their detailed understanding of food preparation methods in the best nutritious manner and under conscious hygienic practices that will retain the nutrient of locally available foods and the health of the families consuming them.
- For output three, income generation drives for especially women has been established with several women leading on small scale household food stuff businesses. The significance of women's contributions to especially VSLA schemes, however, remain a subject of a separate investigation. Adequate business management skills have as well been formally passed out to all project beneficiaries. Using the microfinance approach instead of community-managed business fund, the target for small business loans, on the other hand, has changed and 100% beneficiaries are females.
- For output four, communities in dire need of protected water sources have been identified and supported. Although the project planned for one-third of the intervention communities, rehabilitation of gravity systems will lead to overachievement in that regard by the time pending construction is completed. Sanitation, however, remains an uneasy behaviour change issue in the communities. The knowledge about and the

essence for handwashing and household latrine construction is deep. But both still pose a difficulty for easy adoption. Hence, open defecation exists and practical handwashing practices could be looked at with doubts.

- Target beneficiaries have realised the essence of gender inclusive reflection and action for food, nutrition, WASH and economic empowerment. Successful business beneficiaries attributed the support they received from the spouses as the second most recalled reason for increase in their household incomes. Children of about eleven years confirmed that their fathers are now very supportive of their mothers in their household chores, child care, etc.

5. RECOMMENDATIONS

1. Except for crops cultivated in upland rice farms, the project staff should encourage unanimous planting methods for orange sweet potato and maize so that land sizes cultivated can be easily measured;
2. Sensitisation is needed to emphasise preservation of plant source proteins to go year round. Intake of other animal proteins such as eggs could as well be embedded in the sensitisation;
3. Future food and nutrition security interventions to consider complementing physical labour with some form of mechanisation to ease expansion of farm sizes for project crop focus;
4. If more money is released to the communities for fear of current low reach with business support funds to targeted number of women beneficiaries, there will be high risk of defaults in repayment as increase in supply will reduce demand, expose perishable goods to easy decay and consequently undermine the growth of a businesses;
5. Originating GMFs with future projects should show emerging GMFs from the onset of registration so that the intervention, in its lifespan, will follow up on their cascading of knowledge and inputs to already established families.