

**MID-TERM EVALUATION FOR
HEALTH, AGRICULTURE, AND
NUTRITION DEVELOPMENT
FOR SUSTAINABILITY**

NOVEMBER – DECEMBER 2012

Submitted to: OIC International

Date: January 26, 2013

Acknowledgements

This final report was prepared by Jacqueline Machangu-Motcho as the Lead Consultant.

Special thanks go to the entire OICI staff in Monrovia for making this initiative a success. Would like to extend the same to the staff in Grand Gedeh and River Gee, without whose dedicated support in facilitating and coordinating our meetings and logistical arrangements, it would not have been possible.

I would like to acknowledge and thank the Chief of Party - Benedict Anamoh for his sincere insights of the HANDS' inception, overview and possible future plans, the Deputy Chief of Party - Patrick Cheah and Program Manager - Jamila White for their overall coordination and support throughout the evaluation period. Special thanks go to OICI headquarters in Washington D.C, particularly Michelle Mwalimu who was instrumental in providing technical feedback, reviewing evaluation tools and providing comments and guidance on the draft report.

Specifically, I would like to extend my sincere gratitude to Augustine Laveleh who was my counterpart and a seasoned agricultural expert. This work has benefitted from his invaluable insight. Many thanks go to Oscar Flomo of OICI, for tirelessly providing us with program overview, technical support and interpreting our English to understandable pigeon. Thanks to Tarwoe Waylee – head of office in Grand Gedeh, for offering us all the moral support the teams needed and working tirelessly in ensuring the evaluation was successful.

Lastly, my sincere gratitude goes to the evaluation team who spent long hours on the road collecting data and ultimately making this evaluation possible. Specifically I would like to thank the M&E team, Alfred George and Anthony Vakona, who were instrumental in ensuring teams had everything they needed for data collection.

Table of Contents

Acronyms	vi
Executive Summary	1
I. Background.....	4
Program Description and Operating Context	4
II. Purpose of the Mid Term Evaluation.....	5
Evaluation Purpose.....	5
Research Questions	5
III. Methodology	6
Research Design.....	6
Study Sample.....	6
Data Collection Methods.....	6
Data Analysis Methods	7
IV. Limitations of the Mid Term Evaluation	7
Methodological limitations	8
V. Relevance of interventions.....	8
VI. Effectiveness of interventions.....	9
Service Delivery Strategies and Approaches: Successes and Challenges.....	10
Strategic Objective 1: Improved food availability and access	11
Implementation Achievements and Progress	12
• <i>Yield per hectare for cassava</i>	12
• <i>Yield per hectare for rice</i>	13
• <i>Number of hectares of swamp rehabilitated</i>	14
• <i>Number of hectares under improved technologies or management practices</i>	15
• <i>Percent of beneficiary farmers using a project defined minimum of two sustainable agricultural technologies</i>	15
• <i>Number Of rural jobs created by gender</i>	16
• <i>Number of female beneficiaries trained in food processing technologies</i>	16
• <i>Percent Change in sale of selected commodities and products</i>	18
Discussion for Strategic Objective 1	19
<i>Improved Farming System</i>	19
<i>Improving Farmer Capacity</i>	20

<i>Enhanced Entrepreneurship</i>	21
Strategic Objective 2: Reduced Malnutrition among Children under Five.....	23
Implementation Achievements and Progress	24
• <i>Number of people trained in maternal/newborn care through USG supported Program</i>	25
• <i>Number of Community Health Volunteers trained in Essential Nutrition Actions (ENAs)</i>	25
• <i>Number of targeted women and children routinely consuming Super Gari fortified food</i>	25
Discussion for Strategic Objective 2.....	26
<i>Improved quality of community level health services</i>	26
<i>Improved Healthcare, Hygiene and Nutrition Practices</i>	26
<i>Improved Access to Water and Sanitation</i>	28
VII. Program Management.....	30
Efficiency of Financial Management	30
Commodity Management.....	31
Monitoring, Evaluation, and Knowledge Management	33
Personnel management.....	34
Cross-cutting themes	35
<i>Gender integration in farmer association</i>	35
<i>Gender integration in Healthcare and Nutrition</i>	36
<i>Entrepreneurship</i>	37
<i>OICI Training</i>	38
<i>Access to Micro-finance</i>	39
IX. Sustainability.....	40
Strengthening sustainability	42
Environmental Mitigation and Monitoring	43
Local capacity building	44
Exit strategies	44
X. Lessons learned.....	45
XI. Recommendations.....	48
XII. References.....	52
XIII. Annexes.....	53
a. Evaluation Scope of Work.....	53
b. List of Key Informants.....	53

c. Composition of Evaluation Team	55
d. OICI/OICI/HANDS Results framework.....	56
e. List of Sample	57
f. Evaluation Plan and Schedule.....	58
g. Results from Analysis	60
h. Guiding questions.....	68

List of Tables

Table 1: Progress for Strategic Objective 1.....	12
Table 2: Average area planted among sampled households.....	14
Table 3: Change in sale of selected commodities.....	18
Table 4: Progress for Strategic Objective 2.....	24
Table 5: List of Key Informants.....	52
Table 6: List of Districts and Communities Sampled.....	56
Table 7: Evaluation Schedule and Work plan.....	57
Table 8: Household Headship.....	59
Table 9: Household Head Educational Attainment.....	59
Table 10: Average expenditure across households.....	60
Table 11: Household Main source of Income.....	61
Table 12: Farmers Crop Performance.....	61
Table 13: Percent of swampland utilization before HANDS program.....	62
Table 14: Percent of land planted per household.....	62
Table 15: Percent of women in decision making and gender differentiation.....	63
Table 16: Access to Micro-credit.....	63
Table 17: Percent with sustainability plans.....	64
Table 18: Increased awareness amongst caregivers.....	64
Table 19: Mechanisms for early detection of malnutrition and maternal health.....	66

List of Maps

Map of Liberia.....	78
---------------------	----

Acronyms

ACC	Agriculture Coordinating Committee
CAC	County Agriculture Coordinator
CFSNS	Comprehensive Food Security and Nutrition Survey
CHV	Community Health Volunteers
EBF	Exclusive breast feeding
ENA	Essential Nutrition Messages
FAO	Food and Agriculture Organization
FFP	Food for Peace
FFS	Farmer Field School
FGD	Focus Group Discussions
GOL	Government of Liberia
HANDS	Health, Agriculture and Nutrition Development for Sustainability
L-MEP	Liberia Monitoring and Evaluation Program
LDHS	Liberian Demographic and Health Survey
LOA	Life of Award
LGU	Local Government Units
MM	Malnutrition Matters
MOA	Ministry of Agriculture
MOHSW	Ministry of Health and Social Welfare
MTE	Mid-term Evaluation
MYAP	Multi Year Assistance Program
NGO	Non-governmental organization
OICI	Opportunities Industrialization Centers International
PLW	Pregnant and Lactating Women
PMP	Performance Monitoring Plan
SFL	Shelter for Life
SOW	Scope of Work
SPSS	Statistical Package for Social Sciences
USAID	United States Agency for International Development
WATSAN	Water and Sanitation
WISHH	World Initiative for Soy in Human Health

Executive Summary

The Health, Agriculture and Nutrition Development for Sustainability (HANDS) program commenced in June 2010. HANDS operates in seven districts in Grand Gedeh County and ten districts in River Gee County, both situated in the southeastern part of Liberia. The MTE team held extensive interviews with stakeholders at all levels using a range of tools including in-depth interviews with 859 beneficiary households. The program has three strategic objectives: (i) increased food availability and accessibility, (ii) reduced malnutrition among children under five, and (iii) increased educational attainment. For the purpose of this MTE, only strategic objectives I and II were investigated and progress documented herein.

Overall, the findings of the MTE reveal considerable progress on the components of agriculture, micro-enterprise development, nutrition, and health. Key to HANDS, and what sets OICI apart are the micro-enterprise components, particularly *Super Gari*, which has generated a lot of attention and interest among community members due to its nutritional benefits. Notwithstanding, some components such as infrastructure and WATSAN have delayed following removal of a consortium partner, the activities are due to resume immediately after approval of a new work plan.

Strategic Objective I:

- Food availability and accessibility remain as major challenges to the well-being of beneficiaries, and continue to contribute to food insecurity in Grand Gedeh and River Gee. Major causes of food insecurity reported were animal invasion, pests, lack of storage facilities/methods, changing climate, and lack of crop diversification. Owing to this, post-harvest losses are at an average of 35% among sampled households.
- Farmers are widely using new management practices and improved technologies introduced by the program. These include heap, spacing and line methods, use of improved seeds for cassava, bond technology for rice and fingerlings for aquaculture. A notable 81% of hectares allotted under the program are utilizing improved technologies. This engagement has significantly contributed to improved farming systems and boosted farmers' capacity. As a result of this acquired knowledge, there was a 20% increase from the reported baseline on those practicing improved technologies on their own farms,

giving them an opportunity for improved yields. Other technologies such as seed multiplication gardens, integrated pest management systems (IPM) and fertilizer applications and post-harvesting practices were not yet introduced to farmers at the time of the mid-term evaluation.

- Women entrepreneurs and job holders have access to increased income which is mainly used to offset school expenses, brush small farms and purchase food. Through HANDS, at least 45 rural jobs have been created.
- The program has been successful in providing market opportunities for farmers through purchase of cassava for the production of *Super Gari*. This initiative has also spurred non-beneficiaries to seriously engage in cassava knowing there is a ready-made market for their produce.

Strategic Objective II:

- Provision of training to Community Health Volunteers (CHVs) and caregivers has helped HANDS to expand its reach in remote areas. Approximately 60% of participants interviewed shared consensus that the program has led to increased awareness in addressing food security and community health and nutrition. The trainings have significantly produced the desired objectives as captured in a statement by one of the respondents: *“Let me tell you the truth, the way I used to take care of my children, HANDS showed me new way now.”*
- Access to safe water continues to challenge many beneficiaries. Of those interviewed, roughly 60% do not have continuous access to safe drinking water. Sanitation coverage on Community Led Total Sanitation (CLTS) remains a dilemma to most development programs, and as a result; goals for open defecation-free environments are far from being realized.
- Through HANDS, OICI provided support for pregnant women and mothers through health and nutrition education messages and provision of *Super Gari* as a nutritional supplement. One CHV-2 from Fish Town acknowledged improvements in the health of children in communities visited as a result of the product by saying *“ I have never seen good thing like this”* (referring to the difference they are witnessing in the way mothers are caring for their children since HANDS interventions began). At least 91% of program

beneficiaries sampled are consuming the nutritious fortified *Super Gari*. At the core of its recipients are caregivers with children under-five, CHVs, school children, and farmers.

Sustainability remains a major challenge from a number of perspectives:

- Support for collective action sits at the core of HANDS interventions; however, farmer associations and women entrepreneurs have yet to demonstrate a collective mentality. HANDS should strongly focus on capacity development while promoting a business and market-oriented culture.
- Agricultural supply chains and inputs for micro-enterprise components are not yet suited for sustainability beyond the LOA.
- Micro-enterprises and farmer associations have not established reliable linkages with markets outside of HANDS, technical support institutions, and financial services for higher profits and ensuring products reach the market.
- Micro-enterprises of soy milk production still require regular and continuous support. HANDS must decide how best to facilitate this process by establishing a graduation phase for the entrepreneurs and ensuring continuous availability of local resources.
- Exit strategies need to be meticulously revised and mainstreaming options analyzed to include local governments as they remain instrumental to the future sustainability of interventions.

Generally, it is evident that there is local willingness and gradual ownership of the OICI-HANDS program in the communities. Despite a late start, there is also willingness among consortium partners in striving to achieve results. There is, however, a need to revise the ambitious targets set at the onset of the program in 2010. In terms of effectiveness, the systems are in place to deliver planned outputs.

I. Background

Liberia just emerged from 14 years of civil war and over two decades of political instability that left the country with weak institutional structures and poor physical infrastructures. The protracted civil war resulted in neglect of the agricultural sector, which has exacerbated issues of food insecurity, inaccessibility to water and sanitation services, and chronic malnutrition, and has deprived most Liberians of sustainable livelihoods. Poverty is widespread in both urban and rural areas, with primary drivers of poverty including limited access to social services and economic opportunities. Liberia remains vulnerable to food and fuel crises as it relies heavily on food imports to meet its needs (WFP 2008). The 2010 Comprehensive Food Security and Nutrition Survey (CFSNS) rates Liberia as one of the most food-insecure countries that depend largely (two-thirds) on food importation.

In many areas, the once established trade and supply channels have been critically disrupted, resulting in inaccessibility of input markets. This challenge, coupled with lack of accessible roads, makes it difficult to use conventional delivery methods.

Program Description and Operating Context

In June 2010, the United States Agency for International Development (USAID) Office of Food for Peace (FFP) awarded Opportunities Industrialization Centers International (OICI) a five-year, Title II Multi-Year Assistance Program (MYAP) Grant in Liberia. Together with Liberia OIC (LOIC), the World Initiative in Soy and Human Health (WISHH), and Malnutrition Matters (MM), OICI is now implementing the Health, Agriculture, and Nutrition Development for Sustainability (HANDS) program. Shelter For Life (SFL), which was part of the program at its inception, was removed from the consortium, and currently OICI has taken the lead of all SFL activities through local Liberian contractors. The overall goal of HANDS is to lower the real costs of food for targeted beneficiaries through a value-chain approach that improves nutrition for pregnant and lactating women (PLW) and children under five to ultimately eliminate the current food gap and nutritional deficit among Liberia's most vulnerable rural populations in the south-eastern counties of Grand Gedeh and River Gee. An estimated 34,589 residents are expected to benefit directly from the HANDS program by 2015.

The three strategic objectives (SO) of the HANDS program are:

- SO 1: Improved food availability and access
- SO 2: Reduced malnutrition among children under five
- SO 3: Increased educational attainment

For the purpose of this MTE, SO 3 will not be included as activities corresponding to SO3 only began in June 2012.

II. Purpose of the Mid Term Evaluation

Evaluation Purpose

This Mid-term evaluation (MTE) is intended to be a formative assessment of the program's progress by November 2012. The MTE was done to assess progress during the first 30 months of program implementation. The broad goals of the MTE are to review mid-term outputs and outcome level changes, as well as the process of implementation for various program components. Specifically the MTE evaluation goals are to:

- Document successes and lessons learned to-date;
- Identify approaches to addressing and improving program challenges;
- Suggest program design modifications where necessary and possible.

Research Questions

Given the design of the MTE, the research questions centered on determining successes, challenges, risks, and mitigation strategies for HANDS implementation both at the field and national level. It also seeks to establish any lessons learned in order to inform the remaining half of the program.

III. Methodology

Research Design

The HANDS MTE adopted a qualitative study design as was set out in the MTE guide describing program progress and challenges with detail and from a variety of perspectives. The MTE collected detailed information at the beneficiary level and from stakeholders.

Study Sample

Due to the nature of the study design and given that both Grand Gedeh and River Gee counties are nested in hard-to-reach communities, a combination of purposive sampling methods were adopted for the study. Beneficiary lists disaggregated by community and county that included name and gender were provided in advance of data collection exercise. Number of farmers per community was initially selected using non proportional quota sampling, but eventually snowball sampling was employed since locating specific beneficiaries by name during data collection became increasingly difficult. A cluster approach was used to select Community Health Volunteers (CHVs) due to multiple coverage areas. Communities identified within each district were selected based on accessibility, communities with reported good outputs /results and communities with reported poor outputs/results based on a review of program records.

The HANDS MTE sampled 374 individual farmers representing 77 communities, 21 rural jobholders, 66 entrepreneurs, 304 caregivers, 94 CHVs, and 25 key informants and three stakeholders. A series of focus group discussions and semi-structured interviews with key informants were conducted to evaluate HANDS' progress on priority areas.

Data Collection Methods

The MTE fieldwork took place between November 20, 2012 and December 8, 2012. Qualitative training of four supervisors and 16 enumerators was conducted from November 21-22 and

concluded with a day of questionnaire pretesting in the surrounding communities. The MTE utilized three data collection methods:

- Document review: M&E reports, quarterly, and annual reports (including HANDS Annual Results Reports (2011 and 2012) and the 2011 Pipeline Resource Estimate Proposal (PREP))
- Semi-structured interviews with beneficiaries and key informants/stakeholders
- Focus groups with different beneficiary groups

Data Analysis Methods

The MTE used SPSS to analyze data and mostly employed descriptive analyses, cross-tabulations and frequency counts. Descriptive techniques were conducted and statistical significance tests done at 95% confidence interval. Use of t-tests was employed on some variables to investigate the equality of means between two counties.

IV. Limitations of the Mid Term Evaluation

By the time of the MTE, activities, outputs, results, targets, and the program name had changed from the original MYAP (2010) proposal. Although this is common for other USAID Title II programs, the lack of a comprehensive and revised implementation plan to guide the MTE team was an obstacle to the implementation of the MTE. As a result, the MTE team relied heavily on key informants' interviews and triangulation of different sources, which took more time as different sources provided different information.

The beneficiary list provided for the MTE was the original list compiled during recruitment of beneficiaries in 2011. By the time the MTE was being conducted, several beneficiaries had either relocated, dropped off the program, or were not locatable for various reasons. This caused further delays since the teams spent a considerable amount of time locating beneficiaries in remote areas. Given the socio-economic culture in the two counties, some had relocated, but some were also found dead. Some lists bore the names of under-aged children that farmers may have

registered with the program under the incorrect category (farmer versus child under five). With the long distances between the respective communities, supervisors were tasked to recruit beneficiaries randomly by picking next on the list in order to save time and other resources (fuel, etc.). Furthermore, some communities initially planned to participate in the MTE had to be changed due to inaccessible road conditions.

Methodological limitations

Results achieved and some findings presented in this report may not be directly attributable to HANDS program due to the presence of other similar initiatives such as CRS and GAA drawn upon by the same beneficiaries.

Despite these limitations, the findings of this MTE are considered valid as a comprehensive analysis was completed on a total of 859 households, and all findings were meticulously cross-referenced and triangulated with program reports and semi-structured interviews with key informants who are knowledgeable of the program.

V. Relevance of interventions

The HANDS program is highly relevant and aligned to both USAID/Liberia's goal to promote economic growth, increase food security, and strengthen local capacity by revitalizing and expanding economic opportunities. The HANDS program also complements the Agriculture Policy and Food Security of Liberia (2005), National and Community Health Services Policy (Revised 2011) and GOL's Poverty Reduction Strategy (PRS) which emphasizes the rehabilitation of infrastructure and extensive delivery of basic services coupled with rapid, inclusive, and sustainable economic growth policies and programs. Monitoring and evaluation (M&E) are at the forefront of both USAID/Liberia and the GOL's development strategies, with established guidelines including the GOL's Institutional Framework for Monitoring Impact and the Liberia Monitoring and Evaluation Program (L-MEP) for USAID programs.

HANDS is addressing the priority needs and problems of the targeted sectors and specifically of the rural poor. An estimated 64% of the population lives below the poverty line of US\$1 a day (HANDS Baseline Survey Report, 2011). The program continues to contribute to reducing poverty and is improving the quality of life of farmers and many entrepreneurs.

The MTE team confirmed that gender is well integrated into the program, with over 50% of program beneficiaries being women (widows, elderly, vulnerable and disadvantaged women, and girls). Since the program was designed to meet the needs of these categories of women and girls, it was confirmed that the target beneficiaries were relevant to the program objectives.

VI. Effectiveness of interventions

Despite the difficult geographical coverage in which the program is being implemented, the MTE team observed satisfactory achievements of the targets by some program components. Some components stalled and some commenced recently. However, at discussions with the beneficiaries and following a comprehensive analysis of data the MTE team was convinced that the interventions are:

- Helping rural Liberians, especially women, to uplift their social status, confidence, and skills.
- Pioneering participatory processes to forge and foster farmer groups and community development actions.
- Encouraging increased household incomes through micro-enterprise development and boosting household nutrition and health levels through provision of fortified cereals and dissemination of health messages.
- Empowering communities to plan and prioritize their food security needs.

It is worth noting that the MTE team was only instructed to assess a few indicators relevant to the time (mid-term) and nature (qualitative) of the study. The assessment of effectiveness is hence based on progress to-date against targets as recorded by the MTE team through fieldwork (focus groups and in-depth discussions), updates from the IPTT, and discussions with program

management and partners. Below are documented program successes and challenges supported by evidence collected in the field.

Service Delivery Strategies and Approaches: Successes and Challenges

The program strategy has the following elements: (i) a highly targeted approach utilizing value-chain approach for food security; (ii) empowerment of local organizations including farmers associations and women's business groups to produce and manage their food security needs through access to knowledge, technical capacity building and organizational support; (iii) enabling people to assume responsibility for initiating, managing, monitoring and evaluating development interventions in order to protect and enhance community resiliency and (iv) enhancing nutrition capacity of beneficiaries using preventative approaches.

Participatory approaches and capacity building in planning and implementation were introduced by the HANDS program to ensure ownership of stakeholders and beneficiaries at all levels of implementation. This approach is an important element in sustaining gains from the program. The role of women was given importance by ensuring their involvement and participation in all aspects of implementation. Men and women interests, roles, and needs as well as involvement were considered in the phases of project cycle and relevant thematic areas of concerns.

Generally, the strategies and approaches adopted by the program were considered appropriate in fulfilling the HANDS goals and objectives. Among the key success factors in the implementation strategies were: (i) the active participation of different program beneficiaries, particularly entrepreneurs and some farmer associations; (ii) the track record of implementing partners in facilitating the implementation; and (iv) the availability of funding support for the program.

Despite well-intended strategies, the MTE team observed that commitment of the beneficiaries to take part and develop ownership in agro-processing and farming communities was not quite evident in these activities. Other shortcomings in implementation strategies were due to: (i) Long engagement of social workers with limited technical capacity that lasted beyond community entry points to training farmers in agriculture technologies, (ii) Provision of micro-grants being

too early in the implementation phase where farmers associations were not strong enough (iii) lack of self-sustaining mechanisms in the enterprises and (iv) ambitious benchmarks for most beneficiary groups which may result in implementation inefficiencies.

Summary of Findings according to Strategic Objectives

Strategic Objective 1: Improved food availability and access

i) Description of Interventions ¹

Intermediate Result 1.1 Improved Crop Productivity

- Sub Result 1.1.1 Improved Farming Systems
- Sub Result 1.1.2 Improved Farmer Capacity

Intermediate Result 1.2 Improved Livelihoods

- Sub Result 1.2.1 Enhanced Entrepreneurship
- Sub Result 1.2.2 Strengthened Market Systems

SO1 was designed to reduce vulnerabilities in food insecurity among target communities and households. Under SO1, OICI is working closely with Liberia Opportunities Industrialization Centers (LOIC), a local implementing partner that has been operating in Liberia for over 25 years. Through this partnership, LOIC's main responsibility is to train upland and lowland farmers, manage swamp rehabilitation, and impart skills training to entrepreneurs. On the other hand, OICI's responsibilities are to establish and organize farmers associations, disseminate improved agricultural technologies to farmers through the farmer field school (FFS) approach, strengthen market systems through infrastructure development and rehabilitation, and forge linkages with markets and private sector.

¹ A Comprehensive Results framework for Liberia OICI/HANDS program can be seen in Annex D

Implementation Achievements and Progress

- *Yield per hectare for cassava*

Table 1: Progress for Strategic Objective 1

Activity	Target (LOA)	Target at MTE	Achievement to-date	Percent Achieved against MTE targets	Percent Achievement against LOA targets
Yield per hectare (MT)- cassava	12.5	11	10.98	99%	88%
Yield per hectare (MT) - rice	3.0	2.85	2.75	96%	92%
Number of hectares of swamps rehabilitated	175	55	32	58%	18%
Number Of hectares under improved technologies or management practices	738	404	351.9	81%	47%
Number of beneficiaries reached, by sector	5200	5200	4796	92%	92%
Percent of beneficiary farmers using a minimum of two sustainable agriculture technologies ²	80%	50%	NIL	NIL	NIL
Number of rural jobs created by gender	60	30	45	>100%	75%
Number of female beneficiaries trained in food processing technologies	136	118	44	37%	33%
Number of beneficiaries with access to small grants	1500	850	917	>100%	61%
Number of farmers association established	100	100	114	>100%	>100%
Percentage change in sale of selected commodities (cassava/rice) and products.	20%	NIL	NIL		

Source: Data from HANDS IPTT as of November 2012

According to the progress table above, HANDS has achieved an increase in yield per hectare of 99% by mid-term. This marks a 10% increase in yield from the documented baseline of

² This indicator corresponds to FFP indicator IR 2.3

10MT/ha. However, it is worth noting that the program has not been able to collect sufficient data on this indicator.

Owing to this, the MTE used the amount of cassava purchased by OICI as a proxy to reflect the amount of cassava produced. The HANDS program has provided market opportunities for cassava growers through the purchase of approximately 65,516kg (65.5 MT) of cassava (25,819kg in Grand Gedeh; 39,697kg in River Gee) with capital investment of US\$ 13,103.20 within the various communities. Currently HANDS purchases a 50kg bag of cassava for US\$ 10 at farm gate price. Food insecurity in Liberia is largely a consequence of inability to access food, particularly in rural areas (HANDS Baseline Survey Report, 2011). Given the inability to access markets, this arrangement has benefitted farmers immensely knowing they have a ready market in which they can sell their products.

- *Yield per hectare for rice*

Rice is Liberia's number one staple food. The country's dependence on imported rice is part of a larger story, of the destruction of war and the struggle to recover (Yale Globalist, 2012). According to United Nations estimates, 85% of calories consumed in Liberia come from rice. By the time of MTE, activities on rice farming had focused on rehabilitation of swamps as well as dissemination of new technologies. Despite numerous efforts by HANDS to encourage rice farmers to farm for business, most remain reluctant to participate. In fact, through FGDs, the team discovered that farmers are often not willing to disclose the amount of rice yield, possibly because rice is regarded as a *political commodity* and still holds a bitter antagonistic nostalgia within the communities. Similar to the calculations conducted for yield per hectare of cassava, the program has not been able to collect sufficient information on this indicator.

The table below shows average percent of land planted for both crops including pepper and plantains. Of the 374 farmers interviewed, 286 (76%) mentioned rice as one of the top three crops planted in 2012 with a total number of 261.66 hectares planted. Pepper seems to get more attention, most likely because it is easily intercropped with main crops such as cassava. At least 62% of land is planted with pepper while 59% is planted with rice. Despite the large discrepancy

in percentage of land devoted to pepper between the two counties, statistical analysis shows that the difference is not significant.

Table 2: Average area planted among sampled households

Crop	Number of respondents (N = 374)	Total area planted (Ha)	Average area planted per household (Ha)	Average percentage of land planted
Rice	286	261.66	0.91	0.59
Grand Gedeh	161	164.8	1.02	0.61
River Gee	125	96.86	0.77	0.57
Cassava	271	152.85	0.56	0.37
Grand Gedeh	174	102.8	0.59	0.37
River Gee	97	50.05	0.52	0.38
Pepper	84	50.2	0.60	0.62
Grand Gedeh	53	33.2	0.63	0.84
River Gee	31	17	0.55	0.42
Plantain	67	35.82	0.53	0.35
Grand Gedeh	45	26	0.58	0.36
River Gee	22	9.82	0.45	0.33

- *Number of hectares of swamp rehabilitated*

Of the 55 hectares of swamps that were set to be rehabilitated by mid-term, HANDS was able to rehabilitate 32 hectares, indicating progress of 81% in total. Swamp farming may add diversity to household farming and risk management strategies, but it is less preferred to upland farming due to labor availability and costs. However, the majority (70%) admitted to have utilized swamplands prior to the HANDS program. Still, swamp rehabilitation continues although progress is hampered by insufficient LOIC field agents. Currently LOIC has one field agent for each county, covering nine rice communities in River Gee and eight in Grand Gedeh. This shortage inevitably adds a heavy workload on the agents and making it difficult to reach lowland farmers as needed. Due to this challenge, program reports indicate there have been delays in

implementation for at least two consecutive months of July and August. (M&E Report, July and August 2012).

- *Number of hectares under improved technologies or management practices*

HANDS has a notable 351.9 out of 404 hectares of both cassava and rice cultivated running under improved technologies and/or management practices. Out of these, 65.5% are for cassava. Dissemination of improved technologies and management practices have so far focused mainly on provision of improved varieties, heap, line, and spacing methods for cassava and bond technologies for rice. The use of improved varieties of cassava has been widely adopted by farmers. Other technologies such as seed multiplication gardens, integrated pest management systems (IPM) and fertilizer applications have yet to be transferred to farmers. However, upon discussion with the farmers, at most 20% of sampled farmers are practicing improved technologies on their own farms. The rest complained of intensive labor and exposure of tubers to animals. These results show some improvement from the baseline study where none of the household heads' farms used modern equipment or technologies to improve farming processes or production. It should be noted that the low rate of usage is typical of farmers given their generally risk-averse nature. According to IFPRI (2007), risk declines after initial successes have convinced farmers that technologies are viable.

- *Percent of beneficiary farmers using a project defined minimum of two sustainable agricultural technologies*

This indicator was not achieved by the time of MTE and is recommended by FFP to be collected at a minimum during baseline and final evaluation periods. However, given the importance of this indicator in yield improvement and control of risk management, particularly for reduction of post-harvest losses, OICI should put a tracking mechanism in place to collect this indicator quarterly in order to achieve SO1. Activities such as post-harvest technologies, use of organic manure, integration of livestock and crops, and tree crop integration have yet to be introduced to farmers. Owing to this, farmers continue to battle with pest infestation and post-harvest losses remain high at around 30 -40%. These results are consistent with the *Comprehensive Food*

Security and Nutritional Survey (CFSNS, 2010) that estimates post-harvest loss at 35-45 percent in the absence of concentrated interventions.

- *Number Of rural jobs created by gender*

A total of 45 rural jobs have been created, out of a target of 30 jobs by mid-term. The job holders are mainly those employed for *Super Gari* processing at the Zwedru plant. Out of the 45 jobholders hired, 42 are females and 3 are males, who are mostly supervisors or machine operators. This indicator (and the subsequent indicator below) was specifically targeted to allow more participation of women in the program, however targeting criteria³ remains unclear. Upon discussions with WISHH program staff who oversee this component, recruitment and targeting was through radio adverts and that there is still room to hire more women once the Fish Town plant in River Gee is completed.

- *Number of female beneficiaries trained in food processing technologies*

This indicator has overlapping beneficiary groups of soymilk processors (entrepreneurs) and *Super Gari* producers (job holders). Almost all beneficiaries in this group are women. According to the IPTT, the total number of female beneficiaries in food processing currently stands at 118 (42 for job holders and 76 for entrepreneurs). However only 44 (37%) of them have been trained in food processing technologies. More soy-milk plants are expected to be opened increasing the number of food processing beneficiaries. This group works closely with Malnutrition Matters (MM) through LOIC who trains them on food processing and equips them with some level of business management training. Currently there are five soy milk plants; three in Grand Gedeh (Ziah, Zwedru and Toe town) and two in River Gee (Fish town and Kanweakan).

The average weekly income for entrepreneurs is about 500 LD (equivalent of US\$ 7.14)⁴ per beneficiary plus a bonus of 400 LD (US\$ 5.70) per group for each 1000 LD (US\$ 14.30) worth of soy milk sold. On the other hand, income for job holders is an average of 4200 LD/month (US\$ 60), which is twice as high as the Liberian GNI per capita. According to the World Bank

³ FGDs with rural job holders revealed that targeting included: word of mouth from friends and radio adverts.

⁴ At the exchange rate of US\$1 to 70 Liberian Dollars, December 2012.

(2011), the GNI per capita of Liberia stands at US\$ 330, translating to an average of 1,925 LD/month (US\$ 28). The entrepreneurs are arranged in groups of four women who alternate from selling to producing. For jobholders, the women alternate from peeling and parching to blending and packaging. Those engaged in parching are paid much higher at about 4800 LD/month (US\$ 69) compared to the other two sections given the harsh conditions of intense heat and smoke they sustain. However, complaints of those involved in parching were noted as this process involves inhaling particles of smoke that seem to be unavoidable even with the use of protective wear. The MTE team was informed that this has been addressed with partner WISHH and they will be installing additional ventilation.

Most (80% in Grand Gedeh and 95% in River Gee) of the entrepreneurs and jobholders have been empowered to earn income to support their children through provision of uniforms and contributions to household food security. Some utilize income earned for brushing farms and some have even started petty businesses such as sale of used clothes. Over 90% of entrepreneurs and job holders from both counties agreed that the program provides opportunities for women to become leaders. Table 15 in Annex G reveals at least 67% of entrepreneurs in River Gee admitted that there is increased availability of economic resources and participation in household decision-making as a result of them earning income from the HANDS program. These results certainly confirm the program's strategy to empower women to assume, manage and contribute to their food security needs has been effective in achieving the desired objective. Furthermore, the results support the trend of 71% of women in rural settings participating in decision-making reported in the 2007 LDHS. On the contrary, results show that about 49% of the entrepreneurs in Grand Gedeh have access to the same. This could be due to the difference in socio-cultural nature of River Gee people who are perceived to be more hard-working compared to Grand Gedeans. This difference was also notable on the enthusiastic nature of the beneficiaries between the two counties, particularly when responding to questions about the program.

Compared to River Gee, the majority of Grand Gedeh beneficiaries are still in a euphoria stage and expressed a modicum of future plans. This excitement has been expressed in different ways: “ *I like it here because I get free money*”⁵; “ *I'm enjoying now*”⁶, and “*HANDS bring hands*”⁷

⁵ Words from an entrepreneur from Zwedru, Grand Gedeh

and another “*Nothing,.... I’m enjoying now*”⁸. Results of interviews with beneficiaries reveal only 5% of those in Grand Gedeh had future sustainability plans compared to 19% in River Gee.

- *Percent Change in sale of selected commodities and products*

HANDS buys cassava from farmers at farm gate price of 700 LD (US\$ 10) per 50kg bag, which has remained the same since the program started. Data gathered from market prices indicate a 35% increase in the sale of cassava, possibly due to high demand of cassava and/or high price of fuel. Approximately 50% of respondents agreed that there has been a positive change in the commodity price since the onset of the program. Most farmers are still not able to access the market place outside of HANDS due to poor road conditions. The MTE team confirmed that farmers are significantly benefiting from the HANDS arrangement since the cost of travelling to access markets ranges between 100 LD – 350 LD (US\$ 1.50-US\$ 5.00) depending on the distance. These prices are significantly affected by the road conditions. During the dry season when road conditions are good, prices in the counties are stable. The opposite is the case during the rainy season when road conditions worsen.

Table 3: Change in sale of selected commodities

Product	Grand Gedeh	River Gee	Average Change from Previous 12 Months
Gasoline/Gallon	550 LD	750 LD	37% increase
Diesel/Gallon	500 LD	550 LD	28 % increase
Charcoal/Bag	300 LD	250 LD	40 % increase
Rice/50kg Bag	4,000 LD	4,500 LD	20 % increase
Cassava/50kg Bag	800 LD	900 LD	35 % increase

Source: M&E report, September 2012

⁶ Words from an entrepreneur in Kanweaken, River Gee

⁷ Words from an entrepreneur producer in Fish Town, River Gee

⁸ Words from an entrepreneur from Fish Town

Discussion for Strategic Objective 1

Improved Farming System

The MTE took place immediately after the second cropping season where most activities had just started. Much of the focus on the first and second cropping season was aimed at encouraging farmers to engage in farming for business in order to earn income and increase household food security. Given the predominantly game-hunting tradition of the communities, introducing numerous technologies at first instance could have been a disincentive among farmers. The program is planning to introduce these technologies in the 2013 cropping year.

OICI needs to conduct extensive yield checks on individual farms and register farm sizes for those participating in the program, which may require additional short-term support to cover this process. M&E records indicate only the amount of cassava bought from farmers and officers have been unable to conduct yield checks on all farms due to insufficient staff and the long distances between farms in Grand Gedeh and River Gee. Following discussions with M&E team, discussions on tracking this indicator are ongoing by selecting a small sample of at least 10% of the 5,000 farms of cassava and rice registered under the program. Once presented and approved by USAID, the indicator will be measured and reported for the remaining half of the LOA.

Due to low cassava yield experienced in the preceding season, HANDS bought additional cassava from non-beneficiaries in order to fulfill the production demands of *Super Gari*. While this approach caters for the cereal's demands, it may fall short of realizing the impact of some SO 1 interventions, particularly on improved technologies and management practices, and especially if yield checks are not comprehensively conducted. The potential impact of new technologies and management practices for improved farming systems cannot be over emphasized and it is worth documenting for future lessons.

Household food security is still in peril with a larger share being contributed by unsustainable agriculture productivity. Other contributions are from livelihood activities such as soymilk

production, mining and petty businesses. Specific to River Gee, the county⁹ encourages farmers to also engage in cash crops such as rubber and cocoa. Food expenditure take the highest share of household expenditure at an average of 51% for Grand Gedeh and 54% for River Gee among households sampled. Despite this slight inter-county difference, statistical analysis reveals no significant difference between the two counties. These results echo the average proportion of food expenditure (53%) reported on the 2010 CFSNS. Similar to results found in the HANDS baseline study, causes cited for household food insecurity are animal invasion, pests, lack of storage facilities/methods, changing climate, and lack of crop diversification. Several spells of hungry seasons which would normally last about three to four months were noted by the MTE team. These results are also in line with the 2010 CFSNS that describe periods within the range of April to August as “hunger months.” Coping mechanisms include palm oil production, picking and selling of snails, palm cabbage, banana and bread fruit for local consumption and provision of casual labor. Essentially, Liberians in Grand Gedeh and River Gee do not starve.

Given the high dependency on rice in Liberia, it is likely that Liberians equate food security to availability of rice. The certainty of this statement is beyond the scope of this study and should be further investigated. According to USAID, food security exists when all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life.

Improving Farmer Capacity

HANDS provided farmers with different tools at the onset of the program to encourage them to go to the farm in efforts to reduce household food insecurity. Through trainings conducted, HANDS envisioned farmers being capacitated to plan and manage their own produce. The purchase of cassava was to promote household income, create ownership and encourage them to re-invest back in their farms by purchasing additional tools and procurement of other services such as paying for labor; since annual distribution of tools is not sustainable. This cycle was part of an integrated *farming as business* strategy as envisioned by HANDS. However, findings from the field indicate that farmers were not fully involved in the selection of tools at the onset of the

⁹ According the Country Superintendent.

program. The MTE team found that some of the tools, particularly *files, cutlasses, rain boots and rain gear* were sub-standard and did not last beyond the first farming season. All inputs are procured directly from Monrovia as most rural supply channels were seriously disrupted during the war. Almost all farmers (over 90%) indicated a preference for the locally available *crocodile or elephant cutlasses*, but the few existing input suppliers lack the capacity to supply such an enormous number of tools.

Agriculture is seasonal and timing is essential. Hence, delivery of inputs on time is of utmost importance. The MTE team noted that in addition to substandard tools, inputs delivered on the first cropping season were late due to poor road conditions. Equally farmers complained of once receiving rotten cassava cuttings and seed rice that did not germinate. This was mostly attributed to lack of seed policy document for certification from MOA. Even though vendors confirmed the viability of the seeds, MOA's certification added to the delay and was unobtainable by the time of transportation.

OICI has gone to great lengths to design the program to reflect business as a path to breaking out of subsistence agriculture by utilizing a value-chain approach, commercializing final products, establishing and capacitating micro-enterprises and agri-businesses. Nonetheless, the "*farming as business*" concept is yet to be realized by the majority. Interviews with farming households revealed that the average land area planted per household ranges from one Ha for rice and 0.6 Ha for cassava. Of the total farm area owned, only 37% is planted with cassava (see Table 2). Except for pepper which shows a large variation between the two counties, all other crops are similar in terms of average percentage of land planted. Findings show that farm areas are small, new technologies are yet to be significantly used in individual farms sampled, and sub-standard tools provided can only entail food for *subsistence*. Evidently, this is work in progress since the process requires a mentality shift and evidence of increased income among farmers.

Enhanced Entrepreneurship

The MTE team learned that the funds obtained from the sales of soy milk retained by beneficiaries were shared among group members and were significantly used to offset payments

for household feedings, school fees and supplies as well as hospital related expenses. A few of the beneficiaries (5% in Grand Gedeh and 19% in River Gee) had plans to save for possible future personal income generating activities for self-empowerment and sustenance. The MTE team gathered that the women lacked organizational capacity and had no concrete plans to utilize skills acquired, which directly impacts their ability to own and manage the process. Almost all respondents viewed themselves as only ‘workers’ as opposed to entrepreneurs, further manifesting lack of ownership of the enterprises, and remain heavily dependent on the supplies provided to the extent of shutting down in the absence of sugar. Preservation of soy milk remains a challenge due to its short life span of 10-12 hours. In the absence of refrigerators, significant losses are incurred by the enterprises. The MTE team did not investigate the actual amount of soy milk lost due to absence of preservation methods, but the unsold milk is normally used by the entrepreneurs or given away to peers. Despite some setbacks, a notable 95% of entrepreneurs in both counties admitted to keeping and maintaining sale records.

A micro-grant scheme was introduced early in the program when farmer associations were still at their infant stage. A total of 917 beneficiaries including 615 females (67%) and 302 males (33%) benefitted from the micro-grants, including training on agro-business management. The intention of the scheme was to encourage potential farmers to produce more and enhance their entrepreneurship ability by availing US\$100 per farmer on the first tranche. The second tranche of US\$50 was to follow subsequently after beneficiaries’ demonstrated promising usage of the first tranche. Selection criteria for the chosen few were not transparent which created division¹⁰ among farmer associations. The majority of those selected were from the leadership branch of farmers association. Notwithstanding, the time lapse between the first and second tranche was too wide and by the time of MTE, over 80% had not received the second tranche. Program records further indicate that at least 75% of those that received micro-grants have not been located or traced following disbursement of the first tranche, resulting in unaccountability and failure to document lessons learned for impact.

¹⁰ The division was mainly due to the fact that only a few received micro-grants and the rest did not. Of much concern is that field agents keep promising the rest of the farmer association members that each of them will receive micro-grants whereas, it is only meant for a total of 1,500 farmers for the course of LOA.

More clarity needs to be provided for the definition of beneficiaries of programs and the extent and length of participation qualifying them as such. A number of participants who benefitted from program interventions such as skill training, have left the program and are currently not counted in the actual number of beneficiaries reached.

Despite these few challenges, the benefits of the component are many and are highly valued by the beneficiaries:

- Women entrepreneurs and job holders have access to increased income;
- Household savings are promoted;
- Transportation costs and travel time are minimized;
- Social interaction is promoted;
- Farm areas are slowly increasing and yields are increased;
- Market opportunities for cassava farmers increased;
- Skills training have been imparted

Success stories from the field:

An entrepreneur started a piggery farm through the skills learned from HANDS, and after saving enough money from soy-milk production. She has a successful business now! - LOIC Training Manger, Grand Gedeh

A Farmer association in Toffoi town in Grand Gedeh is doing extremely well and has managed to open up other businesses such as 'pem-pem' (motorbike taxis) to transport people from one place to another – Report from MTE team.

Strategic Objective 2: Reduced Malnutrition among Children under Five

Description of Interventions

- Intermediate Result 2.1 Improved Healthcare, Hygiene and Nutrition Practices
- Intermediate Result 2.2. Improved Access to Water and Sanitation
- Intermediate Result 2.3 Improved Quality of Community Level Health Services

SO2 was designed to reduce malnutrition among children under five by using a preventative approach through distribution of fortified blended cereal (*Super Gari*) and training on ENA

messages to caregivers through Community Health Volunteers (CHVs). *Super Gari* is provided free to beneficiaries of maternal and child health and nutrition (MCHN), food for work (FFW) and school feeding components for a total of 8,040 beneficiaries. Under SO2, OICI is working closely with WISHH, a consortium member with vast international experience in implementing food technology and nutrition programs in 23 countries around the world. Through this partnership, WISHH formulates the cereal and supports local food processors to produce *Super Gari*.

Implementation Achievements and Progress

Table 4: Progress for Strategic Objective 2

Activity	Target (LOA)	Target at MTE	Achievement to date	% Achieved against MTE targets	% Achieved against LOA targets
No. of people trained in Maternal and Child Health and Nutrition (MCHN) through USG supported Programs ¹¹	4280 Total	635	1166	>100%	27%
	40 CHV-1s	40	40	100%	100%
	800 CHV-2s	355	355	100%	44%
3440 Caregivers	240	771	>100%	22%	
No of Community Health Volunteers (CHV-1s&CHV-2s) trained on Essential Nutrition Actions (ENAs)	840 Total	395	395	100%	47%
	40 CHV-1s	40	40	100%	100%
800 CHV-2s	355	355	100%	44%	
Percent of women and children routinely consuming <i>Super Gari</i> fortified food	80%	50%	91%	>100%	>100%

Source: HANDS IPTT, November 2012

¹¹ This indicator corresponds to USAID indicator 3.1.9-1

- *Number of people trained in maternal/newborn care through USG supported Programs*

A total of 40 CHV-1s, 355 CHV-2s and 771 caregivers have been trained in maternal and newborn care, marking over-achievement at midterm. The program PMP describes *people trained in maternal/newborn care* to include clinic staff, however clinic staffs have not been trained alongside the CHVs to date. Hence data presented on the table above is only for CHVs.

- *Number of Community Health Volunteers trained in Essential Nutrition Actions (ENAs).*

The total number of CHVs trained on ENA messages has reached 395 by mid-term. This group of CHVs is the same as those trained on maternal/newborn health. ENA messages comprise of 23 messages that aim at improving healthcare, hygiene and nutrition practices.

- *Number of targeted women and children routinely consuming Super Gari fortified food*

According to the HANDS IPTT, at least 91% of the targeted women and children are consuming the fortified cereal. The indicator clearly defines a *routine* as those consuming *Super Gari* at least three times a week. It was clear from FGDs with beneficiaries that weeks and even months go by without consumption of *Super Gari*. However, these delays are not all due to HANDS. The team learned that in general beneficiaries do not consume it regularly due to various reasons, such as inadequate knowledge of *Super Gari* preparation, sharing with friends/neighbors, and keeping it until sugar is provided by the program, as this reportedly enhances the overall taste of the product.

Discussion for Strategic Objective 2

Improved quality of community level health services

The CHV-1s who are responsible to train CHV-2s are part of the Liberian government structure, and in that aspect, the program has aligned with the existing systems in place to ensure sustainability of interventions. Naturally, this group of volunteers also works with other development partners on nutrition and health interventions. A typical CHV-1 covers at least two to four communities that are sparsely populated. Each CHV-1 commutes long distances to train CHV-2s and sometimes participates in training caregivers. The commute can be anywhere from one to three hours to reach one community. Due to the nature of volunteering, this group of beneficiaries receives very little incentives and in some instances none at all. As with other health and nutrition programs in developing countries, retaining this category of volunteer has been challenging for development workers in Grand Gedeh and River Gee.

Coordination amongst development partners at the field level in several Title II programs remains weak as partners provide different incentives to lure clients, farmers and CHVs alike. Some partners provide cash incentives while others provide in-kind incentives. HANDS provide 4kgs of *Super Gari* to CHV-1s and only 1kg to CHV-2s, while caregivers receive 8 kgs of the cereal on each distribution round. Despite these incentives, the MTE team noted concerns from CHV1-s that they be provided more incentives, particularly cash, to facilitate the travel from one community to another.

Improved Healthcare, Hygiene and Nutrition Practices

The MTE team also noted that distribution of *Super Gari* has been inconsistent due to low production, logistical challenges, inadequate machines (pressers and patchers) for processing *Super Gari*, as well as poor road conditions during the rainy season. Current capacity of the existing *Super Gari* plant stands at 0.25 MT/day. To date, the plant has only produced circa 62 MT against a target of 258 MT at the time of the MTE. With a noted decreasing trend since May 2012, it is questionable if all 8,040 beneficiaries will be reached.

In other instances, the MTE team noted a potential overlap for *Super Gari* on a few households leaving others more vulnerable. Groups that are earmarked to receive *Super Gari* are CHVs, farmers through FFW, caregivers and children through school feeding. Where FFW recipients are supposed to receive a kilogram each time they go to the farm, CHV-1s receive 4kgs, CHV-2s receive a kilogram, caregivers receive 8kgs/month and school feeding recipients receive 0.1kg/daily. In what appears to be a probable oversight amongst program components, which may lead to some households benefitting more if they have members that are under all three beneficiary categories.

Selection criteria for *Super Gari* recipients at the caregiver level by OICI's consortium partner require greater consistency in both counties. According to WISHH, criteria set are for pregnant women and mothers with two children from 0-60 months who are malnourished. To determine malnourished children, the CHVs are required to use mid-upper arm circumference (MUAC) measurements. The MTE team confirms that the criteria were not widely used as CHVs had considerable influence in selecting the 8 mothers per community enrolled in the programme. This was primarily due to the initial low willingness of caregivers to participate in the programme. Equally, this group of beneficiaries remained on the program with no apparent graduation date despite having children that manifest signs of improvement, leaving no chance for other vulnerable women and children to benefit.

Discussions with CHVs and data from county hospitals ascertained the validity of ongoing malnutrition cases in both counties. There could be several reasons attributing to these cases, but most notably those residing in close proximity to the clinics had lower cases of malnutrition reported compared to those residing in more remote areas. The MTE team found that, despite being trained on exclusive breastfeeding (EBF) for up to 6 months and introducing

Super Gari Production (October 2011 – November 2012). Source: HANDS 2012 Annual Report

Month	Super Gari Produced (Kg)	Super Gari Produced (MT)
Oct-December, 2011	10794	10.794
Jan-March, 2012	9446	9.446
April	9060	9.06
May	5230	5.23
June	6590	6.59
July	5740	5.74
August	4540	4.54
September	5901	5.901
October	1300	1.3
November	3298	3.298
Total		61.9

complementary feeding beyond the first 6 months, most mothers (65%) do not continuously practice exclusive breastfeeding as they are busy with other social-economic activities such as farming, and engaging in other petty businesses. According to CFSNS (2010), a majority (60%) of the children in Liberia do not continue breastfeeding up to two years old. HANDS, through CHVs is making efforts to address child malnutrition through ENA messages delivered at least once a week to caregivers with children 0-60 months old.

The MTE team observed that no initiatives for home gardening have been introduced to beneficiaries. Home gardens have been known to offer great potential for improving household food security and alleviating micronutrient deficiencies at the household level (FAO 1996). In tandem with the latter, presence of small ruminants and poultry has been observed on both counties, but integration of them with crops as well as a source of protein has yet to be addressed by the program. Upon discussion with program management, these activities have been scheduled to start in 2013.

Aquaculture and poultry are essentially a part of agriculture. It was observed that these activities were placed in SO2 as admittedly as a source of nutrition. But to receive the attention and technical expertise they deserve, they should be placed under SO1.

Improved Access to Water and Sanitation

Hand washing behavior remains one of the biggest challenges to measure and results more often than not, take a long time to measure. Attributing behavior change to the intervention is usually a long diagnosis. Currently, it is designated by FFP as an indicator to be assessed only through population-based surveys for baseline and final evaluations. Following observation and data collected at the field level, the MTE team concluded that this intervention, which directly impacts health and nutrition, needs more awareness efforts and construction of more water points. A total of 771 of the caregivers have been reached through promotion of ENA messages. When asked whether she washes her hands after using the latrine, one caregiver from Glepay said “ *Wash hands?.....I even forget to wash my hands.*”

Open defecation is widely practiced by majority of the people in the communities. Of the communities visited, only 20% had latrines. These results are in line with CFSNS (2010) that confirms that only 19% of rural Liberian households have access to improved sanitation. Some towns such as Geeblo town and Tweh town in Grand Gedeh, and Tienpo in River Gee didn't have access to latrines at all. For those with access to latrines, the ratio of users to latrines remains high. Community Led Total Sanitation (CLTS) efforts as an approach to improve hygiene and sanitation have not been comprehensively introduced or accepted by the communities. Of much broader concern is the inconsistency amongst development partners in various organizations on whether to provide subsidy and to what extent. Despite the fact that CLTS advocates for zero subsidy, development partners interviewed admitted to provide minimal subsidy such as slab and iron sheets.

WATSAN committees were not evident during the MTE. The removal of SFL from the consortium caused delays and had major implications (financially and physically) in the implementation of all infrastructure development activities such as rehabilitation of roads and market places, construction of water points and establishment of WATSAN committees. Without the committees to ensure sustained operation of water schemes and monitor sanitation conditions of their localities, sustainability of future WASH interventions will be at stake. According to the HANDS program manager, OICI is currently working to resume activities through direct implementation of some activities, while other activities will be subcontracted.

Interviews with beneficiaries revealed that at least 30% of those in Grand Gedeh have access to improved and safe drinking water, whereas results indicate a slightly higher percent (39%) in River Gee. The results come close to the 40% reported in CFSNS (2010). A notable 70% in Grand Gedeh and 46% in River Gee admitted that there is increased awareness of health and nutrition as a result of the program (Table 18, Annex G).

VII. Program Management

All stakeholders involved with program management played a vital and relevant role in steering, consolidating and ensuring synergy among program components while ensuring they are all working towards achieving the overall objectives.

Efficiency of Financial Management

The determination of efficiency is a more complex exercise than the assessment of the other performance factors. In the absence of program expenditure and other assessment indicators, the MTE team has used the following to assess the efficiency of the HANDS program:

The average **time lapse** between award approval (June 2010) and commencement of implementation was roughly 12 months. Subsequently after commencement, a majority of the staff were not officially hired until early 2012. These delays were reportedly, attributed mainly to lack of offices in the two counties and time taken for community mobilization and recruitment of qualified staff. LOIC had to re-open and rehabilitate its office in Zwedru following destructions from the war. Community sensitization and mobilization took much longer time as most beneficiaries are still scarred from the ramifications of war, so caution and patience had to be carefully exercised. Additionally, impassable roads during rainy seasons played a role and they have in years leading to the mid-term.

Discussions with stakeholders and staff also revealed that the time taken to download funds and get approval from Headquarters is too long, exacerbated further by long channels of communication. According to stakeholders, information flow from other consortium partners has to pass through OICI Liberia office to OICI Headquarters and back again through the same process which causes delays and sometimes response from Headquarters arrives rather late.

Of much concern however was the lack of transparency of the HANDS **program budget** to respective program managers and specialists who plan *blindly* on the assumption that there is an adequate budget to cover various program activities. From this approach, it is not clear if the program is following a budget-based or a target-based implementation. Particularly since the

implementers have no knowledge of the budget and targets are not entirely followed. In order to improve its effectiveness, OICI should clearly define to what extent the program aims to implement interventions and allocate the budget based on demands.

Overall, the initial MYAP budget was unrealistic and had underestimated the scope of activities, magnitude of program and quality of human resources intended for the program. For instance the initial budget had only envisioned to hire 8 field agents for both counties but ended up doubling that to reach 15 field agents by September 2012. Findings from MTE indicate that field agents are still spread too thin given the geographically-challenging distances they travel in.

The challenges of retaining farmers and keeping them interested has resulted in **unrealistic targets** and some poorly-designed strategies set by the program particularly for farmer associations and *Super Gari* recipients. A typical farmer association was to have at most 30 members, but of those interviewed, at least 60% had more than 30 members per community. In fact, some associations had up to 60 members. There should be a cut off line in adding more communities otherwise it will result in inefficiency in the distribution of resources, implementation and ultimately less impact.

Commodity Management

To support program costs, the HANDS program monetizes food commodities (wheat and rice) annually. As common practice for all USAID Title II programs, at least 80% of the HANDS budget is through monetization requests of these commodities. Globally, monetization of food aid remains controversial, especially with the risk of disrupting local markets, displacing imports and leading to dependency on aid in recipient countries¹². The FAO (2006) also alleged food aid monetization represents over 30% of project food aid globally and is "often a dangerous way of destroying local farm prices." On the positive side, monetization of food aid has the potential to: i) increase the quality and quantity of food available in the recipient country, ii) generate income for development projects and food distribution and iii) develop markets and stabilize local food

¹² Simmons, E. (2009), *Monetization of Food Aid: Reconsidering U.S. Policy and Practice*, Washington, D.C.: The Partnership to Cut Hunger and Poverty in Africa

prices. According to the USAID Food for Peace Manual, “Above and beyond the generation of funds for food security activities, monetization is one more tool among the set of programming options available to enhance the food security of vulnerable households through the use of U.S. food commodities.”

It is on this background that OICI employed the Bellmon analysis to examine and mitigate any negative impact on local production or commercial imports that may have resulted from the process of monetization.

Currently there is a commodity manager in Monrovia and a technical advisor at headquarters employed on a need basis to support the country office. The program has employed one field logistics officer for each county who oversees all commodity and logistical activities in their respective county. All procurement is done at the national level by the commodity manager. It was observed that field logistics officers had no knowledge of program needs as program sections prepare procurement plans on an ad hoc basis as needs arise. Some program sections specialists communicate directly to the national office, often by passing the logistics officers.

Some of the input/fixed cost challenges noted were processing machines for *Super Gari*, as there is only one plant in Zwedru that supplies *Super Gari* for its 8,040 beneficiaries. The capacity of the plant is only 0.25 MT per day. To date, only 61.9 MT of *Super Gari* have been produced by the plant out of a target of 258 MT.

Inadequate communication and logistical challenges were noted as the program currently has only two trucks for transporting cassava to the processing plant, and reportedly, the trucks often park in Monrovia despite ongoing procurement of cassava in the field. With communities sparsely populated and poor road conditions, this creates unnecessary delays, increases post-harvest losses due to long distances and heavy load carried by the small pickups, and at times, leads to failure in procuring cassava from program beneficiaries.

Monitoring, Evaluation, and Knowledge Management

The M&E unit is one of the most essential arms in any program. Data from the field is collected by M&E officers and sent to Monrovia for further processing and consolidation before it is submitted to Washington for reporting. Assessment of tools and procedures used by the M&E team were found to be adequate and address program needs. However, the M&E structure needs revision and further strengthening as consortium partners remain unknowledgeable with some even reluctant to furnish data at the appropriate time for their respective program components. As a result, reports from the field offices are often late and some lack technical capacity.

Data is centrally managed by OICI through different databases. Currently both WISHH and LOIC have separate databases and storage mechanisms different from OICI. Efforts to strengthen M&E systems for all consortium partners should be put in place and systems should be integrated. For the most part, data has been available and collection is systematic. Data constraints were experienced for some of the important assessments such as the yield assessments, which need to be improved. Despite efforts to add more staff on M&E, there may be a need for additional staff, especially when some are assuming double functions.

Indicator Performance Tracking Table (IPTT)

The consultant noted that the IPTT has little or no reference on gender sensitive indicators, beyond looking at the *number of participants disaggregated by gender* in different components. As in all Title II programs, incorporating a gender perspective in the program should go beyond sex-disaggregated data to interpreting the differences in relations between men's and women's needs and priorities. HANDS will benefit to include some gender-sensitive indicators to address gender empowerment especially given the empowerment aspect of the program. According to USAID¹³, some indicators to address gender equality and empowerment and more importantly track any unintended outcomes are:

- Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment)

¹³ USAID Gender Equality & Women's Empowerment: Draft Performance Indicator Reference Sheet

- Proportion of females who report increased self-efficacy at the conclusion of USG supported training/programming
- Proportion of target population reporting increased agreement with the concept that males and females should have equal access to social, economic, and political opportunities
- Percentage of target population that views Gender-Based Violence (GBV) as less acceptable after participating in or being exposed to USG programming
- Percent of men who think that women should be involved in five key household decisions

Some contradictions were also noted in the PMP and IPTT. With reference to the FFP indicator “*Percent of beneficiary farmers using a project defined minimum of two sustainable agricultural technologies*”, the PMP indicates that this indicator should be collected quarterly and annually. On the other hand, there seems to be a contradiction or less emphasis from the FFP indicator guideline, which advises that it should be collected at a 'minimum' during baseline and final evaluations. HANDS program has yet to start collecting this indicator. However this indicator is critical in tracking and reporting yield improvement and post-harvest losses. Reporting on this indicator should be done as is written on the PMP otherwise the program will miss out on achieving SO1.

The MTE team also noted some missing indicators worth adding to the IPTT such as indicators for tracking poultry and aquaculture outputs.

Equally, the IPTT targets were found to be ambitious, and it will benefit the program to revise the targets guided by the budget, revise and reconsider definition of indicators and frequency of collection to reflect what the program can achieve for the next half of the LOA.

Personnel management

As stated in the financial management section, the sheer scale of the program puts considerable pressure on HANDS staff to provide appropriate levels of support over wide and challenging geographic areas. These factors are important inhibitors to HANDS providing training, supervision and monitoring, and subsequently realization of impact. Despite efforts to increase

human resources, staff members are spread too thin and in some instances, even performing double functions that result to job inefficiencies. Double functions were observed in both counties with M&E officer as the head of office in River Gee and agriculture training officer as the head of office in Grand Gedeh. Both of these functions require considerable amount of time to reach out to beneficiaries given the enormity of the HANDS program.

To address staff concerns and administrative issues, HANDS staff meet once a month led by the Deputy Chief of Party at the national level and the head of office in the field offices. The MTE team noted that the minutes emanating from the field offices are not discussed, neither are they shared with the national office. This leaves the two offices disconnected on addressing staff welfare.

The MTE team observed repeated concerns of a stalemate on staff insurance policy and medical benefits referencing the current decision to allow staffs to pay for their treatment and submit receipts for claims. Concerns of staff submitting inflated receipts in attempts to claim yearly medical allowance ceiling were noted. On the other side, there were various opinions among staff, with at least 75% of the 9 staff interviewed suggesting that OICI pay medical benefits through salaries in the absence of insurance company. A careful revision of this process should be undertaken to create a win-win situation for both OICI and staff.

Cross-cutting themes

Gender Integration: USAID defines gender integration to entail the identification and subsequent treatment of gender differences and inequalities during program/project design, implementation, monitoring, and evaluation.

Gender integration in farmer association

In the course of implementation, a total of 9,890 people have benefited from the HANDS interventions, 60% of which are women. The participation of men and women was given utmost priority in all aspects of facilitating the program implementation. Particularly within the farmer

associations where all members have access to improved agricultural inputs such as seeds and improved technologies, irrespective of gender.

The gender-oriented approach used by HANDS has also resulted in increased access of women to leadership positions. About 20% of the farmer associations interviewed in Grand Gedeh were led by women. In some of the communities visited, (Sennewhen and Gboleken in Grand Gedeh), women not only have a higher participation but they also occupy top hierarchy positions as chair aside from the usual positions of secretaries or treasurers in the management of farmers associations. Having realized the importance of gender identities and inequalities, all farmer associations visited in River Gee had both chairman and chairlady. This was mainly to address the gender differences that exist in their communities. Comparatively, it was considered easier when a lady chairperson goes to talk to another female farmer or calls for meetings at her house. These results are in line with USAID's fostering women's leadership advocated in the Gender equality and female empowerment policy.

Even though the number of women in leadership positions may look low particularly for Grand Gedeh, women still play a key role in shaping the governance of the farmer associations. In fact much of the inaccessibility to services as well as mismanagement of funds was more observed where the chair, secretary and treasurer, or nominated decision makers were all male. During focus group discussions, the MTE team observed that women are mostly at the forefront when it comes to meeting attendance and providing contributions.

Gender integration in Healthcare and Nutrition

In the area of healthcare service provision, HANDS has provided several training programs geared towards enhancing health and nutritional status of households, especially for women and children. These trainings are conducted by CHVs using ENA messages in several program areas, e.g, hygiene and sanitation, nutrition, and child feeding. The MTE team observed that majority of the CHVs interviewed were men. This could be because of wide coverage areas and long travels they are involved in. When asked what challenges they face when training mothers particularly on issues central to female hygiene or breastfeeding, the following were some of the responses:

“Some husbands are too jealous and do not understand why we come to teach the same thing to their wives every week, so involving husbands in discussions help alleviate that.”¹⁴

“They ask us since we have not given birth, how do we know more than them?”¹⁵

Entrepreneurship

The program interventions have been very effective in addressing women’s special needs and economic growth by raising women’s access to economic gains through involvement in value chain approaches of micro-enterprises of soy milk and *Super Gari*. HANDS is also planning to involve more women for subsequent interventions such as small livestock production and promotion of home vegetable gardens. On the other hand, more men are expected to be engaged in infrastructure interventions. This is a clear manifestation of the programs strategy to address and acknowledge existence of gender differences and roles in different program components and phases.

Through these economic activities, women reportedly have been able to make small purchases independently and contribute to basic household expenditures such as food and education. There was a notable deeper involvement in decision making for women both at household level, community and in other economic activities such as those working in the HANDS enterprises. This has addressed issues on gender bias against women and resulted to productive gender integration. According to results from the field, gender differentiation exists in both communities. Table 15 in annex G, shows that about 47% of entrepreneurs interviewed in Grand Gedeh and 68% in River Gee admitted to existence of gender differentiation in their households. It was reported that gender differentiation is more dominant in farming activities where men take charge of brushing, felling, and clearing the farms; while women concentrate on planting, weeding, and harvesting.

Evidently women have been empowered through HANDS interventions. However HANDS need to now focus on building womens’ organizational capacity to ensure that interventions produce

¹⁴ Words from a CHV1 from Gboleken in Grand Gedeh

¹⁵ Words from a CHV2 from Sennewhen in Grand Gedeh

sustainable results. According to USAID, women empowerment programs should also be cognizant of societal expectations where men are to be the sole providers in their families, so as not to cause unintended consequences such as domestic violence. This aspect is beyond the scope of MTE and HANDS should investigate this further.

It is important to note that despite the challenge in attaining a balance between the traditional role and development, majority of the women are taking their household roles very seriously and most of the respondents' means of livelihood are situated near their residences. For those far off, most were seen taking their young ones to the farm.

OICI Training

One of the most effective strategies HANDS implemented was promoting gender-balance representation in trainings for all components of the program. These provided opportunities for men and women to build on their skills so they can equally participate in the development process. The following shows the number of beneficiaries that benefitted from OICI trainings:

- Out of 118 women who benefitted from HANDS interventions, at least 44 women have benefitted through entrepreneurship skills training. The training modules include: business mindset, development of business plan, managing finance of small businesses, record keeping, and small grants management.
- A total of 917 persons including 302 males and 615 females have benefitted from the training provided by HANDS to date. The training modules include: business mindset, development of business plan, managing finance of small businesses, record keeping, and small grants management.
- A total of 40 CHV-1s, 355 CHV-2s and 771 caregivers were trained in ENA. The training focused on health and nutrition care for PLW, and mothers with children under five.

Access to Micro-finance

Interviews with entrepreneurs and job holders revealed that less than 30% (Table 16, annex G) have access to some form of micro-credit. The study did not investigate the types of micro-credit available in the area however it was visible that the only financial bank in the two counties was ECOBANK which is shared between the counties. Lack of access to capital is a major factor hindering agricultural development in many developing countries and Liberia is no exception. IBEX, a USAID-funded program which was recently launched in August 2012, have plans to address the lack of credit to HANDS beneficiaries, particularly for women entrepreneurs and farmer associations.

IBEX - Investing for Business Expansion is a program implemented by International Executive Service Corps (IESC) as the lead organization under the Volunteers for Economic Growth Alliance (VEGA). Its main focus is to improve access to finance and business development for small and medium-sized enterprises in Liberia's agricultural sector through improved risk management and outreach. The IBEX program will be implemented through different partners including OICI, with activities concentrated in three components:

- Providing technical assistance and capacity building support to SMEs,
- Providing technical assistance and capacity building support to banks, and
- Fostering sustainability of program activities by strengthening local business support organizations.

Women entrepreneurs and farmers need access to banking services to contribute to social and economic opportunities and IBEX will be a great opportunity and a reasonable step to take them to the next level.

Partnerships: Communication and Collaboration

Besides consortium partners, OICI collaborates with L-MEP, USAID, NGOs, and the GoL. As a development partner, OICI attends monthly Agriculture Coordination Committee meetings (ACC) together with other development partners at national and field level. At the field level, the ACC meeting is chaired by the Country Agriculture Coordinator (CAC), however,

coordination remains weak amongst partners. Despite regular updates presented at the meeting, coordination with local government is weak and the county agriculture office lacks capacity to enforce actions and conduct regular monitoring. There was a general sense amongst development partners interviewed that there is wide duplication of efforts and even misunderstandings over domain control mostly caused by weak coordination.

Otherwise, the relationship and communication of OICI with all partners interviewed have been rated as cordial. Concerns of scarceness of OICI staff were noted. These were reportedly associated to the shortage of staff in the program, as a result they are not always available in meetings or when needed.

IX. Sustainability

The exit strategy of the program and discussions the MTE team had with the beneficiaries identified the following to assess the potential for sustainability of the project and of its impact.

Well performing institutions

The program successfully established and provided capacity building to women entrepreneurs and farmers associations. Of the farmer associations visited, the MTE team identified at least 60% with potential for future economic growth particularly those associations with the presence and practice of internal financial savings schemes in their communities, such as financial saving clubs and *susu*. With appropriate leadership and organizational capacity building, the program could tap into this as an entry point for strengthening financial capacities and entrepreneur development.

The operational and leadership problems encountered by few farmer associations need continuous strengthening by providing serious leadership, organizational and management training as well as technical support.

In terms of institutional sustainability, the HANDS program is yet to capacitate (human and technical) LOIC and respective local government partners to mainstream interventions in their

regular work. The presence of WATSAN committees responsible to provide long-term mechanisms to address water, sanitation and hygiene need to be addressed urgently.

Continuation of the county service providers (CHVs, caregivers and CAPs)

The presence of CHVs and trained caregivers has brought about a complete change in the community health care system. As mentioned by caregivers interviewed (70% in Grand Gedeh and 49% in River Gee), ENA messages have created more awareness and knowledge of key health and nutrition issues in the communities. CHVs have brought about a positive change in the dignity of their services, and with better coordination with partners and local government authorities, the preventive health care, nutrition and child care programs would continue through sustenance of the CHVs.

Community Agriculture Promoters (CAPs) have been instrumental in mentoring, training and transferring knowledge to farmers in their communities particularly in the absence of field agents. Additional trainings and possible exchange visits amongst farmers associations will strengthen the CAPs.

Availability of cost-effective and community operated micro-processing machines

The program's intention to introduce cost-effective machines of VitaGoat for the production of soy-milk was commendable and by large, is reported to have helped boost community nutrition and household income. However, current preservation methods require the very same thing the program avoided, i.e. costly preservation methods of refrigerators, generators and fuel as production exceeds demand.

Continuing support from the Government institutions

The overall impression is that the Governments at national and county levels were very appreciative of the program and its contribution to revamp cassava as an alternative crop to rice. The MTE team concluded that HANDS has to do more to engage, liaise and capacitate respective LGUs in order to sustain the results of interventions.

Strengthening sustainability

Community ownership and empowerment

The participation of the beneficiaries in *all the phases of project cycle* is a key ingredient in successfully ensuring ownership, commitment and long-term impact. The involvement of the community must start with the genuine expressed demand for interventions and their willingness for participation in planning, managing and contributing (cash and in-kind) through all stages of the project cycle. Sustainability of HANDS interventions is very much dependant on community ownership, control and management of interventions for long-term impact.

Engagement of local raw materials and micro nutrients

HANDS recognizes the importance of engaging farmers into growing locally grown soy beans for sustainability of soy milk production. In fact there are on-going efforts by the program to look into the viability of soy bean production in the target areas. It is worth noting that HANDS experimented with locally grown flavors such as lemon grass but the ingredient was not strong enough to reduce the soy smell.

Ability of micro-enterprises and farmer associations to establish reliable linkages with markets, technical support institutions, and financial services

The MTE team observed that micro-enterprises are still weak in establishing marketing linkages for the products. Efforts to forge commercial linkages with private enterprises such as Arjay Farms and Agro Inc, have yielded futile results. The *Super Gari* enterprise is yet to increase the scale of production, quality and value addition for which continued assistance would be required. HANDS continued dependence on imported raw materials is detrimental to the future of their sustainability.

Financial institutions are limited in the communities and only exist in Grand Gedeh. These institutions have yet to recognize the potential of the enterprises as clients though they might respond more quickly if HANDS guarantees the loans or subsidizes the interest. On-going efforts by IBEX to provide a financial platform to farmers will be beneficial if they lend to organized groups instead of individuals in order to reduce transaction costs and risks.

Linkages with technical institutions such as Central Agricultural Research Institute (CARI) for technology transfer and learning new farming methods have not taken place adequately. Similarly, coordinating with other implementing partners such as FAO, WFP and other INGOs in the areas will enhance synergies and performance of HANDS program.

Environmental Mitigation and Monitoring

The HANDS Environmental Mitigation and Monitoring Plan (EMMP) developed provides a basis for implementation around environmental impacts. It also recommends approaches to environmental mitigation and management as laid out in the Initial Environmental Examination (IEE). The program EMMP covers various activities including possible IEE conditions and mitigation measures. Only a few of these, i.e, rice processing, promotion of cassava production and processing, soybean processing, and construction of water systems and swamps for rice production were in operation by the time of MTE. Other activities were either scheduled to resume in 2013 or have yet to start.

Of primary concern in what may result to unhealthy working conditions, are the *Super Gari* workers who were kept inhaling hazardous smoke during parching due to poor ventilation. Despite availability of protective gear, some did not wear eye protective gears. Re-enforcement of safety and health precaution need to be addressed.

Food safety and hygiene are compromised particularly in the soy-milk enterprises, as flies keep hopping from one bowl to the other due to the presence of sugar. Despite presence of screened windows, doors are left open for more ventilation resulting in flies and possible disease-causing insects to encroach in the building. Majority of the women lacked uniforms, gloves and were not provided with any hair caps, posing serious health problems to consumers. To the contrary, *Super Gari* producers all had uniforms and protective wear.

The MTE team noted high volumes of organic waste from *Super Gari* production which may be beneficial for animal feed. According to the Country Representative, WISHH has recognized the

importance of this and is currently putting sustainable initiatives in place to use *Super Gari* by-product as feed for the fish in the aquaculture component.

Local capacity building

Support for collective action is at the core of the HANDS interventions. The HANDS program has done considerably well in capacitating CHVs, farmer associations, women entrepreneurs and agri-businesses by imparting requisite skills amenable to the implementation of respective program components. However, more technical support is needed particularly for women entrepreneurs and farmer associations to act collectively while promoting a business and market-oriented culture.

The program also needs to create synergies with other partners to strengthen the capacity of local government agencies as they remain weak with myriad of problems related to weak financial, human and technical capacity. However, where possible, it will benefit the sustenance of the program to capacitate government partners on new technologies to implement agriculture recommendations, though this may require serious capacity building and funding. Likewise, LOIC's capacity need continuous strengthening, to assume its role in managing swamp rehabilitation and skills training as agreed by consortium partners.

Local capacity building involving local suppliers, service providers, buyers and local NGOs should be explored more aggressively. To achieve lasting results, HANDS must work to strengthen systems and build linkages between communities, local suppliers and buyers, and government and include training components that enable communities to manage and maintain the program interventions.

Exit strategies

Exit strategies are essential to ensure program benefits are sustained beyond the life of the program. Current exit strategies contain gaps and oversight that need thorough review and strengthening. Areas of vital importance are: (i) focus on seriously capacitating farmers in

organizational and leadership capacities by properly using FFS as an approach, (ii) Introduce sustainable and affordable yield-increasing technologies such as IPM and post-harvest technologies (iii) Link farmers with local input suppliers, service providers and more markets with subsequent plans to open-up larger farming areas and (iv) Empower women agri-businesses to manage, control and procure commodities and inputs.

Most importantly, the idea to mainstream program activities/institutions to respective local entities needs to be critically examined to address current capacity gaps and future availability of funds.

X. Lessons learned

This section provides an opportunity for HANDS to consider and document lessons learned and was guided by the following key questions:

Which interventions had the most significant and positive impact on beneficiaries? What activities demonstrated the highest relevance, effectiveness, and sustainability?

- Provision of *Super Gari* to beneficiaries has been highly relevant. Demand for *Super Gari* is shooting up and beneficiaries are slowly becoming aware of the nutritional product. Given the current production capacity, the concern is whether HANDS can meet demand with *Super Gari* for a target of 8,040 beneficiaries.
- Availability of ready-made market for farmers (beneficiaries and non-beneficiaries) to sell cassava. Some farmers are already thinking ahead to becoming cooperatives. HANDS should tap into this opportunity and link them to CDA.
- Micro-enterprises of soymilk have been extremely beneficial to the beneficiaries providing them with increased income. However self-sustenance should be strongly promoted. Targeted provision of inputs to be used for demonstration should be used in the short-term to encourage and ensure ownership and positive response are generated from the enterprises.

What could have been done better?

- The participation of the beneficiaries in *all the phases of project cycle* should be emphasized in the next half of the LOA.
- Benchmarking should be carefully revised to enhance effectiveness of interventions and to avoid implications for cost and time.
- The rationale for provision of micro-grants was well-intentioned but the implementation strategy was weak, as the grants were provided too early in the program and the criteria for selection were unclear.
- Awareness of the nutritional benefits of *Super Gari* and soymilk among the consumption population should be intensified, specifically for soy milk, in hopes of boosting demand. Equally various approaches to preparation of *Super Gari* should be communicated to the beneficiaries.
- FFS as an approach was appropriate for delivering program results. However, current approach used by HANDS do not fully comply with the FFS curricula, hence myriad of issues compound farmers associations in the two counties. Some characteristics of FFS include:
 - i. A typical FFS should have a maximum number of 30 members and no less than 20.
 - ii. Demonstration of improved technologies should be alongside traditional technologies in order to visibly convince farmers of the differences in the two technologies.
 - iii. Training needs to go beyond new technologies to include communication, skills building, problem solving, leadership and discussion methods.

According to FAO, the knowledge gained from these activities will enable participants to make their own locally specific decisions about crop management practices.

What additional support would have been/would be useful?

- Linking farmers to more buyers.
- All groups interviewed had some membership in a financial club or *susu*. This is a great step towards saving and investing which HANDS can tap into and expand it to be reflected in farmer associations and women's processing groups. Current IBEX efforts of

micro-financing that are underway can take advantage of this. In fact IBEX can learn from some of the success stories.

What was overlooked in the design?

- CHVs reach out to a wide number of caregivers and PLW with nutritional and health messages. However, only eight of the caregivers receive *Super Gari* creating an unhealthy balance amongst the caregivers. HANDS can consider two options: i) gradually weaning beneficiaries from program after a period of time or 2) stepping up production to reach more women.
- Program design did not take into account possibility of overlaps in different beneficiary groups for the provision of *Super Gari*. The three SOs should coordinate to ensure this is addressed.
- Intention for *cost-effective machines* for the production of soy-milk was commendable. However, current preservation requires costly methods such as cooling systems, fuel and generators. More awareness on the product will most likely boost demand and minimize production losses.
- There is no clear strategy and/or accountability mechanism for managing (expending and safe-keeping) the funds realized from the sale of soy milk products. Self-sustaining mechanisms should be put in place to boost ownership and entrepreneurial capacity of the beneficiaries.
- Introduction of local raw materials to replace imported soy beans and micro-nutrient materials should continue to be explored to ensure sustainability of enterprises.
- If the HANDS program is to achieve its objectives, there is a need for more frequent visitations by field agents to group/demonstration farms so they can reach out to farmers weekly or at a reasonable agreed frequency.

XI. Recommendations

Critical Recommendations

- The MYAP document was developed to guide the program to achieve its goals and objectives. Through the years the MYAP document has undergone major changes including its main objectives. The HANDS program now needs to be revised critically including setting reasonable targets and implementation strategies and plans which have been missing in the original MYAP. The revised document should also map out clear lines of responsibilities including any prospective capacities for a better understanding of the program to all parties involved.
- Field agents sit at the core of HANDS implementation; essentially they are the managers of program outputs and immediate outcomes. The program has done well to increase the number of field agents. However they are still few considering the wide coverage areas they operate in. Field agents also lack capacity to train and conduct monitoring. Hence it will benefit the HANDS program to capacitate field agents, particularly on farmer field school curricula and maximize their role to properly sensitize and train farmers, conduct frequent visitations, and routinely update beneficiary lists. Additionally, it is imperative that they all communicate the same message to farmer associations.
- Farmer associations are the nucleus of HANDS productivity, ensuring production of cassava meets the Super Gari requirement for all components in the HANDS program. Noting the numerous problems surrounding the farmer associations, it will benefit the program to seriously strengthen the capacity of farmers associations through farmer field school approach, and organized trainings in farmer organizational and leadership development, business and financial management systems; as well as all aspects of value chain development, and linking the successful ones to financial institutions. To achieve this, the latter recommendation is paramount.

Other Recommendations

Strengthen interdepartmental coordination for greater efficiency and effectiveness

- Oversight administrative functions and coordination among departments of the HANDS program both at the Monrovia office and local field offices, need careful revision to ensure efficiency and effectiveness. There is a need to involve the technical expertise of staff to provide technical specifications and work along with logistics to promote the procurement of timely and quality inputs.
- Empower program managers responsible in planning and implementation with available budget for a greater transparency of budgetary allocation and utilization against program activities.
- Improve internal control and communication regarding commodity to properly address logistical support and arrangements.

Strengthen organizational capacity of farmers associations and women entrepreneurs

- Strengthen capacity of CAPs to provide technical support to the associations as a backup for field agents.
- In order to ensure effective implementation of the FFS requirement within the program, particularly the agriculture sector, provide technical support in the development of farmer field school curricula based on crops specifics and the establishment of a farmer field school system.
- Strengthen women agro-processor groups into viable organizations and equip them with business/financial management skills, processing machines, operations and maintenance services, and marketing skills for business promotion. Explore the possibility of linking successful organized groups to financial institutions or micro-financing.

Revisit program design, implementation plans and benchmarking

- Redesign current micro-grant strategy to reflect clarity and support successful farmers associations who meet some basic criteria, such as association with strong organization and leadership structure, presence of large group farms and/or those demonstrating capacity to increase production.

- OICI could establish satellite processing facilities in those areas of organized farmer groups that show progress in achieving their own plan of action. This will also empower respective communities by instilling technical skills and knowledge and subsequently improving ownership of program activities.
- Empower M&E to go beyond conventional boundaries of reporting to document indirect outcomes and other factors that could positively or negatively affect program implementation or that have contributed to achievement of results.
- M&E should start from the program's *planning stage* and continue moving along the project cycle to ensure intended targets reached and results are realized.
- Revise IPTT targets to reflect realism. Targeting for subsequent activities need to be done with clarity guided by the budget, with the aim of promoting cohesiveness among beneficiaries.
- M&E reports submitted with appropriate findings and recommendations for improving programs implementation should be reviewed and discussed immediately among program managers for appropriate mitigation measures in order to avoid continuity of errors.
- Address important data constraints such as yield checks to determine impact of new methods and technologies transferred to farmers.
- Conduct annual reviews with *all implementing partners* to assess progress and address prevailing issues together in order to promote cohesiveness.

Intensify efforts to forge linkages with markets, private suppliers and service providers; and promote institutional coordination and partnership

- HANDS should start thinking of ways to facilitate market linkages and ensure products get to the market by bringing farmers, buyers and service providers together to understand the dynamics of production, processing and marketing.
- Start forging coordination with research institutions such as CARI for trainings, new methods and technologies.
- Intensify efforts to forge linkages with food processors and start linking processors with retailers (stores, local markets) to ensure sustainability and profit maximization.
- Continue to focus on sustainable, cost-effective, high impact approaches pushing for convergent interventions within the program and with other development partners.

- Contract, work and where possible capacitate local government authorities, NGOs, and private input suppliers/service providers from the program area for continuity of services and technical support.

Review, strengthen and document roles and responsibilities of consortium partners to fully take ownership of their responsibilities

- Consortium partners should be strengthened and provided the appropriate support to enhance program implementation. Confusion lines should be properly addressed.
- Promote cohesiveness among consortium partners from national to field level to work towards achieving HANDS greater goal of reducing food insecurity.

XII. References

- USAID/OICI Program Annual Reports (2012)
- USAID/OICI Program Quarterly Status Reports (2011, 2012)
- HANDS Program M&E Reports
- USAID/OICI Performance Monitoring Plan (2012)
- Comprehensive Food Security and Nutrition Survey (CFSNS, 2010)
- HANDS Baseline Study (2011)
- Liberia Demographic and Health Survey (2007)
- HANDS Indicator Performance Tracking Table (IPTT) December 2012
- Improving Nutrition through Home Gardening - A training package for preparing field workers in Southeast Asia (FAO, 1996).
- Risk Aversion in Low Income Countries. Experimental evidence from Ethiopia (IFPRI 2007)
- Farmer field schools on land and water management in Africa (FAO, 2006)
- USAID Indicator Handbook-Economic Growth, Objective Four
- Liberia's Rough Road to Rice Production. Yale Globalist, 3 May 2012
- FFP Standard Indicators Handbook (Baseline-Final Indicators), December 2011
- Food Security Indicators and Framework for Use in the Monitoring and Evaluation of Food Aid Programs (USAID, 1999)
- USAID's "Gender Policy on Gender Equality and Female Empowerment

XIII. Annexes

a. Evaluation Scope of Work

Goals and Objectives of the Mid-Term Evaluation:

Overall goals of the MTE are to review mid-term outputs and outcome level changes, as well as the process of implementation for various program components. Specific objectives are:

- Document successes and lessons learned to-date;
- Identify approaches to addressing and improving program challenges;
- Suggest program design modifications where necessary and possible

b. List of Key Informants

Table 5: List of Key Informants

Name	Designation	Organization
Benedict Anamoh	Chief of Party	OICI Liberia
Noli Jocson	Country Representative	WISHH Liberia
Princess Wesseh	Health and Nutrition Program Assistant Manager	WISHH Liberia - Grand Gedeh
Joe-Hoover Gbadyu	FFP Specialist and AMDRO	USAID Liberia
James M. Cole	Agro-processing Coordinator/Supergari Manager	WISHH Liberia - Grand Gedeh
Sam De Greve	Health & Nutrition Programme Manager	WISHH Liberia
James Whawhen	Deputy Chief of Party/M&E Specialist-Economic Growth	L-MEP
Shawna Hirsh	Environmental Officer	USAID Liberia
Francis W. Mwah	Assistant Director/Coordination-Department of Planning and Coordination	Government of Liberia Ministry of Agriculture
Michael D. Titoe	Director of Coordination Department of Planning and Development	Government of Liberia Ministry of Agriculture
Kou T. Baawo	Director Nutrition Division	Government of Liberia Ministry of Health and Social Welfare
Daniel G. Johnson	Superintendent/Governor	Government of Liberia Ministry of Internal Affairs River Gee County
Solomon King	Executive Director	LOIC
Jamila White	Program Manager	OICI Liberia
Harold Neufville	Director of Finance &	OICI Liberia

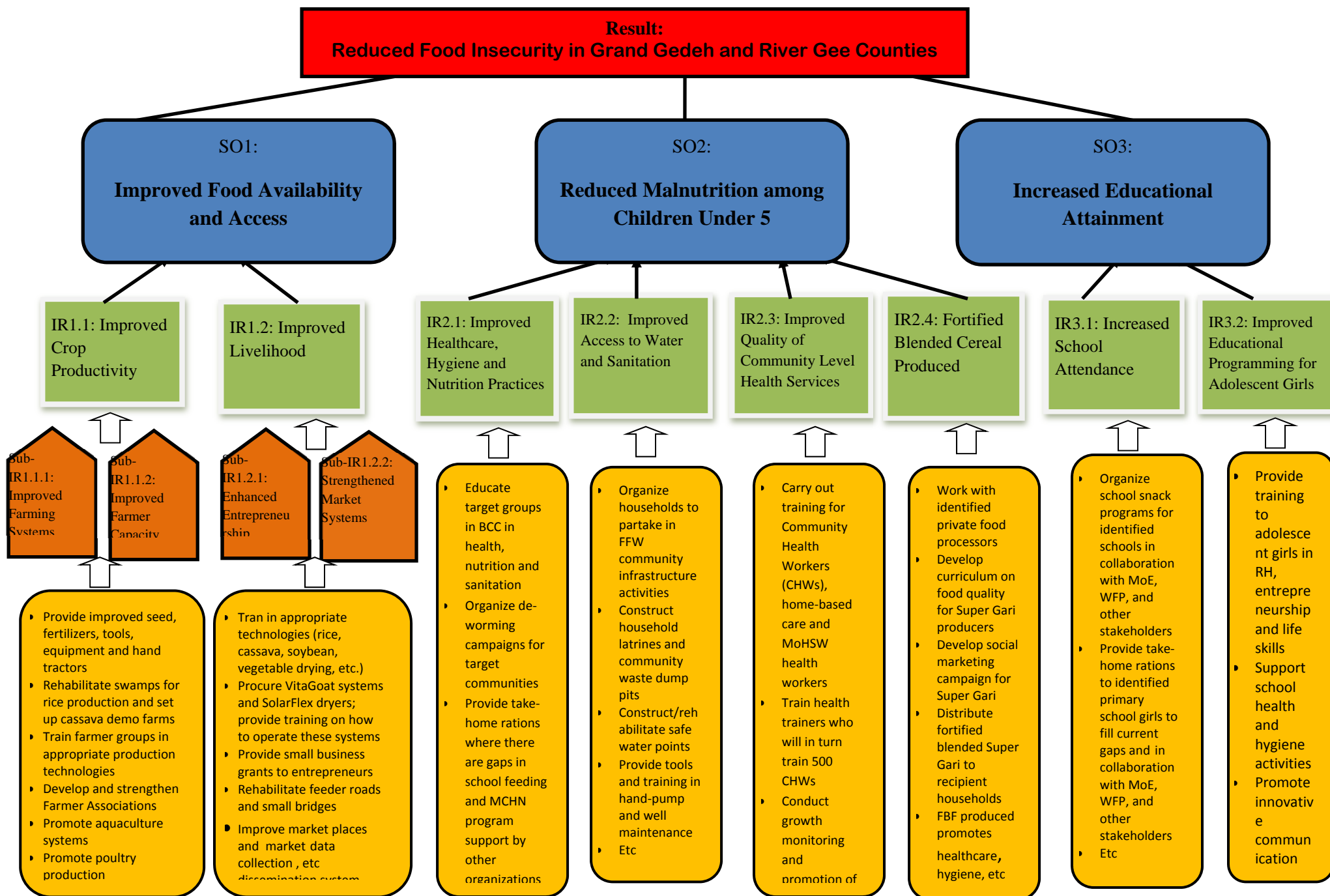
	Administration	
George Bonnie	Commodities & Logistics Manager	OICI Liberia
Oscar Flomo	M&E Manager	OICI Liberia
Beatrice Forpoh	Health and Nutrition Officer	OICI Liberia
Moses Yekeh	Infrastructure Specialist	OICI Liberia
Emmert Freeman	Agriculture Specialist	OICI Liberia
Samuel Zweh	Finance Officer	OICI Liberia - Grand Gedeh
Tarwoe Waylee	Head of Office/Agriculture Training Officer	OICI Liberia - Grand Gedeh
Olaska Barh	Acting Superintendent	Government of Liberia Ministry of Agriculture Grand Gedeh
E. Rufus Monroe	Training Manager	LOIC - Grand Gedeh
Ben Fredericks Sr.	Training Manager	LOIC - River Gee
Deble Howe	Agri business officer	LOIC - River Gee
Netus Noweine	County Health Officer	Government of Liberia Ministry of Health & Social Welfare Grand Gedeh
Otis Joio	Executive Director	Amu-wulu
Laurence Barbu	Field Agent	OICI Liberia - Grand Gedeh
Matthew Dilean	Field Agent	OICI Liberia - Grand Gedeh
Anna Doesolo	Field Agent	OICI Liberia - Grand Gedeh
Cheick D. Syllah	Project Agriculture Officer	Catholic Relief Services-CRS
Philip Cooper		Welthungerhilfe/German Agro Action (WHH/GAA)
Teamat Williams	Agriculture Coordinator	WHH/GAA
Wilson Solobert	County Agriculture Coordinator	Government of Liberia Ministry of Agriculture - River Gee
A. Fayah Leebor	Field Agent	OICI Liberia - Grand Gedeh
Anthony Vakona	M&E Officer/ Head of Office	OICI Liberia - River Gee
Alfred George	M&E Officer	OICI Liberia - Grand Gedeh
Joseph Sieka	County Health Officer	Government of Liberia Ministry of Health & Social Welfare - River Gee
Faryombo	County WASH Coordinator	Government of Liberia Ministry of Public Works
David Kekula	Admin and Finance Officer	OICI Liberia - River Gee
Steve	WASH Program Manager WASH	Samaritan Purse
Matsina	Nutrition Officer	Samaritan Purse
Abdul Sesay	Logistics Officer	OICI Liberia - River Gee
Augustine Tamba	Logistics Officer	OICI Liberia
Brima Kamara	Driver	OICI Liberia

c. Composition of Evaluation Team

Evaluation team was composed of Team Leader, National Consultant, OICI M&E Manager, four supervisors each supervising four enumerators.

Team A	Designation
Jacqueline Machangu-Motcho	Team Leader
Augustine Laveleh	National Consultant
Oscar Flomo	OICI M&E Manager
Alfred George	OICI M&E Officer, Grand Gedeh
Anthony Vakona	OICI M&E Officer, River Gee
Team B	
Dominique Gildersleeves	Lead
Sukowah Subah	Enumerator
Amelia Sloboh	Enumerator
Edward K. Verdier	Enumerator
Chris T. Wah	Enumerator
Team C	
Amos Tamba	Lead
Robina Anderson	Enumerator
Randall Zulu	Enumerator
George Y. Sharpe	Enumerator
Lewis Chea	Enumerator
Team D	
Dominic D. Narmah	Lead
Alex P. Dent	Enumerator
William B. Moore	Enumerator
Rosecelia Keh	Enumerator
Jerome Teah	Enumerator
Team E	
Gus Freeman	Lead
Nimene Myers	Enumerator
Tarlue Yorke	Enumerator
Alice Wesseh	Enumerator
Eric Daydeh	Enumerator

d. OICI/OICI/HANDS Results framework



e. List of Sample

Total sample size for in-depth interviews was 859 out of which 374 were farmers, 304 caregivers, 94 CHVs, 66 entrepreneurs and 21 jobholders. Out of the sampled beneficiaries 52.7% were from Grand Gedeh and 47.3% from River Gee.

Table 6: List of Districts and Communities Sampled

County	District	Population*	Number of communities
Grand Gedeh	B'Hai	10,369	9
	Cavalla	14,159	4
	Gbao	12,324	3
	Putu	16,426	10
	Tchien	31,976	12
River Gee	Chedepo	10,518	8
	Gbeapo	10,934	3
	Karford	5,956	2
	Nyeneurliken	5,159	4
	Nyenebo	5,703	4
	Potupo	7,337	7
	Sarbo	5,320	3
	Tuobo	4,868	8
	Total	141,049	77

*Source: HANDS Baseline study (2011)

For Focus Group discussions, the following communities were visited:

County	Community	Beneficiary Group
Grand Gedeh	Bargblor	Farmers
	Gboleken	CHVs
	Gboleken	Farmers
	ELRZ	Farmers
	Zwedru	Entrepreneurs
	Zwedru	Jobholders
	Sennewhen	Farmers
	Sennewhen	CHVs
	Tian	Farmers
	River Gee	New Kownroken
Kownroken		Farmers
Kor Town		Farmers
Kanweaken		CHVs
Woffiken		Farmers
Fish town		Entrepreneurs
Clustered from different towns		CHVs
Getroken		Farmers
Kilipo Kanweaken		CHVs

f. Evaluation Plan and Schedule

Table 7: Evaluation Schedule and Work plan

Date	Time	Activity	Participant	Location	Other details
November 17, 2012 Saturday	Morning	Supervisors' training	Supervisors, MTE Team members	Monrovia	Lead consultant as the lead trainer
November 18, 2012 Sunday	Travel time	Movement of rented vehicles carrying Supervisors and Enumerators to the field	MTE Team members	Grand Gedeh County	Vehicles travel from Monrovia to Ganta and onward to Zwedru in Grand Gedeh County
November 19, 2012 Monday	Morning	Evaluation Team travel to the field by car	MTE Team members	Grand Gedeh County	
November 20, 2012 Tuesday		Enumerators' training	MTE Team members, enumerators	Zwedru, Grand Gedeh County	Enumerators taken through MTE data collection training modules; contracts signed with enumerators
November 21, 2012 Wednesday	Morning	Enumerators' training continued	MTE Team members, enumerators	Zwedru, Grand Gedeh County	Review of training modules
November 21, 2012 Wednesday	Afternoon	Pre-test of questionnaires	Enumerators, program beneficiaries in Gleplay Town	Tchien District, Grand Gedeh County	Data collection tools on farmers, caregivers, CHVs and Rural Job Holders/Entrepreneurs tested on field
November 22, 2012 Thursday	All day	Interview with Program beneficiaries	MTE Team members, program beneficiaries	Grand Gedeh County	Each team with their respective groups
November 22, 2012 Friday	All day	Kick-Off meeting with County Officials & Field Program Office and Interviews with Program Partners - at local level	PFO staff, local leaders at county level, MTE team	Grand Gedeh County	Meeting with UNMIL Civil Affairs, staffers of Superintendent's office, CAC, etc.OICI, LOIC, MM and WISHH
November 23-28, 2012	Morning	FGD/PRA/Site visit	Community members	Grand Gedeh County	Team A meets select beneficiary group and stakeholders
November 23 – 28, 2012 Friday	All day	Interview with Project beneficiaries,	Mission Team members, program beneficiaries	Grand Gedeh County	Teams B, C, D and E meet respective beneficiary groups. MTE team debriefing every night to review data collection exercise.

November 29, 2012 Thursday	Morning	Travel time	MTE members & PFO staff	River Gee County	All team members travel from Zwedru to Fish Town
November 29, 2012 Thursday	Afternoon	Meeting with County Officials & Field Project Office	PFO staff, local leaders at county level	River Gee County	Meeting with staffers of Superintendent's office, CAC, County Health Officer, etc.
November 30- December 7, 2012 Friday	All day	Interview with Project beneficiaries	MTE Team members, program beneficiaries	River Gee County	Teams B, C, D and E meet respective beneficiary groups
November 30 – December 6, 2012 Thursday	Morning	FGD/PRA/Site visit	Community members	River Gee County	Team A meets select beneficiary groups and stakeholders
December 7, 2012 Saturday	All day	Travel time	MTE members & PFO staff	Grand Gedeh County	MTE team members travel from Fish Town to Zwedru
December 8, 2012 Sunday	All day	Travel time	Team members	Monrovia	MTE team members travel from Zwedru to Monrovia
December 9, 2012 Monday	All day	Report writing	MTE members	Monrovia	
December 10, 2012 Monday	Morning	De-briefing meeting	Stakeholders	Monrovia	End of field works of the mission

g. Results from Analysis

i. Household Characteristics

Of the total sampled, 73% were females and 27% were males most likely given the high number of females in some beneficiary groups such as caregivers, entrepreneurs and jobholders. Out of the household heads, 66% were males. This figure is consistent with LDHS (2007) where most household heads are males.

Table 8: Household Headship

Indicator	Household Heads (N=859)
Percent Male	66
Percent Female	34
Percent Married	75.9

ii. Educational Attainment

Of the household head population, at least 34% had no education while 37% had some level of primary education. Higher level of education was a mere 7%. These results echo those of HANDS baseline however for the purpose of this study, no distinction was made on levels or years of primary or secondary education.

Table 9: Household Head Educational Attainment

Education Level	Household Head (N = 859)	Confidence Interval (95%)	
		Lower	Upper
None	34%	32.4	35.7
Primary	37%	35.5	38.6
Secondary	21%	19.7	22.5
College/University/Vocational	7%	5.5	8.7
Total	99		

iii. Average Household Expenditure

Average food expenditure across counties stands at 1,927.44382 LD per week, bringing it to an average of 100,227.08 LD annually. Evidently, households spend more on food stuff at an average of 50%, followed by school expenses and transport. Using a confidence interval of 95%, results on independent sample using t-test reveal that food expenditures between the two counties is not significant. However, there is a significant difference in annual school fees between the two counties.

Table 10: Average expenditure across households

	County	Mean (N= 859)	t-test for equality of means Sig. (2-tailed)
School Fee (%)	Grand Gedeh	4.6182	.085
	River Gee	3.4789	.067
School Supplies (%)	Grand Gedeh	5.5777	.332
	River Gee	4.9455	.291
Medical Expenses (%)	Grand Gedeh	3.3388	.164
	River Gee	4.5592	.251
Transport Expenses (%)	Grand Gedeh	25.4388	.237
	River Gee	40.3325	.367
Other Expenses (%)	Grand Gedeh	10.5215	.764
	River Gee	10.2326	.752
Food item/ wk	Grand Gedeh	1802.74	.100
	River Gee	2052.15	.147
Annual School Fees	Grand Gedeh	12474.67	.083
	River Gee	7112.24	.037
Annual School Supplies	Grand Gedeh	13463.43	.280
	River Gee	10203.61	.199
Medical expenditures /month	Grand Gedeh	569.45	.826
	River Gee	546.40	.817
Transport expenditures/wk	Grand Gedeh	1051.78	.256
	River Gee	1829.97	.383
Other expenditures/mo	Grand Gedeh	1754.17	.698
	River Gee	1858.38	.689
Total Annual Expenditures	Grand Gedeh	202062.77	.945
	River Gee	201138.27	.945
Food Expenditure by county (%)	Grand Gedeh	51.2345	.101
	River Gee	54.2205	.092

iv. Main Source of Income

Majority (73%) of those interviewed admitted to crop production as the main source of household income, followed by petty trade. Despite wide presence of small ruminants in the two counties, a negligible 0.2% are livestock keepers. Others category included activities such as hunting, fishing and preaching.

Table 11: Household Main source of Income

	Crop	Livestock	Wages	Formal trade	Petty trade	Others
Percentages	73	0.2	4.6	3.0	14.4	14

Farmers group

v. Crop Performance

An average of 40% of farmers sampled agreed that they had a bountiful harvest the previous season. The difference between the two counties was not significant. Less than 10% of the farmers admitted that they did not harvest at all.

Table 12: Farmers Crop Performance

County		Frequency	Percent
Grand Gedeh	Bountiful Harvest	102	43.8%
	Good Harvest	65	27.9%
	Average Harvest	20	8.6%
	Little Harvest	33	14.2%
	No Harvest	13	5.6%
	Total	233	100%
River Gee	Bountiful Harvest	54	38.3%
	Good Harvest	39	27.7%
	Average Harvest	23	16.3%
	Little Harvest	16	11.3%
	No Harvest	9	6.4%
	Total	141	100.0%

vi. Utilization of swamplands

Majority of the farmers (70%) from both counties admitted to have utilized swampland before HANDS arrival.

Table 13: Percent of swampland utilization before HANDS program

County	Response	Frequency	Percent
Grand Gedeh	No	69	30%
	Yes	164	70%
	Total	233	100%
River Gee	No	44	31%
	Yes	97	69%
	Total	141	100%

vii. Percent of land planted

Of the 374 farmers interviewed, 286 mentioned rice as one of the top 3 crops that they planted in 2012 with a total number of 261.66 hectares planted. At least 62% of land is planted with pepper while 59% is planted with rice. There is no significant difference between the two counties. Despite the large discrepancy in percentage of land devoted to pepper between the two counties the statistical analysis shows that the difference is not significant. The Table below shows average percent of land planted.

Table 14: Percent of land planted per household

Crop	Number of respondents	Total area planted (Ha)	Average area planted per household (Ha)	Average percentage of land planted
Rice	286	261.66	0.91	0.59
Grand Gedeh	161	164.8	1.02	0.61
River Gee	125	96.86	0.77	0.57
Cassava	271	152.85	0.56	0.37
Grand Gedeh	174	102.8	0.59	0.37
River Gee	97	50.05	0.52	0.38
Pepper	84	50.2	0.60	0.62
Grand Gedeh	53	33.2	0.63	0.84
River Gee	31	17	0.55	0.42
Plantain	67	35.82	0.53	0.35
Grand Gedeh	45	26	0.58	0.36
River Gee	22	9.82	0.45	0.33

p-value<0.05

Entrepreneurs and Job holders

viii. Women empowerment

Majority of the entrepreneurs and job holders confirm that HANDS has empowered them through increased income and some visibility. Over 90% of them agreed that the program provides opportunities for women to become leaders. About 67% of women in River Gee admitted that there is increased availability of economic resources and participation in household decision making as a result of them earning income from the HANDS program. These results echo the 71% of women in rural setting participating in decision making reported in the 2007 LDHS. To the contrary, results attest to only about 49% of the entrepreneurs in Grand Gedeh who have access to the same.

In tandem with the latter, 47% of those from Grand Gedeh admitted to having gender differentiation in household chores and other economic activities, compared to 68% in River Gee.

Table 15: Percent of women in decision making and gender differentiation

	Response	Control of Resources Percent	Gender differentiation Percent
Grand Gedeh	No	30.3	37.9
	Yes	48.5	47.0
	Not quite	21.2	15.2
River Gee	No	19.0	31.6
	Yes	66.7	68.4
	Not quite	14.3	9.5

ix. Access to Micro-credit and financial institutions

Table 16: Access to Micro-credit

County	Response	Percent
Grand Gedeh	No	70.5
	Yes	29.6
	Total	100.1*
River Gee	No	73.8
	Yes	26.2
	Total	100

Interviews with entrepreneurs and job holders revealed that less than 30% have access to some form of micro credit. The study did not investigate the types of micro credit available in the area however it was visible that the only financial bank in the two counties was ECOBANK which is shared between the counties. Lack of access to capital is a major factor hindering agricultural development in many developing countries and Liberia is no exception. Women who are the majority of entrepreneurs need access to banking services to contribute to social and economic opportunities.

x. Sustainability plans

From the table below, only 5% of those in Grand Gedeh had future sustainability plans compared to 19% in River Gee. Majority did not have anything to contribute.

Table 17: Percent with sustainability plans

County	Response	Percentage
Grand Gedeh	Yes	4.5
	No	22.7
	I don't know	72.7
River Gee	Yes	19
	No	47.6
	I don't know	33.3

Caregivers

xi. Increased awareness amongst caregivers

Table 18: Increased awareness amongst caregivers

County		Increased awareness on food security (N=304)	Increased awareness on health and nutrition (N=304)	Access to improved safe drinking water at all times (N=304)
		Percent	Percent	Percent
Grand Gedeh	No	7	9.3	71
	Yes	63.4	70.2	28.2
	Somewhat	29.6	20.5	11.0
	Total	100	100.0	100.2
River Gee	No	1.1	2.2	59
	Yes	36.3	46.2	38.6
	Somewhat	62.9	51.6	2.4
	Total	100	100.0	100.0

Roughly 60% of the caregivers interviewed agreed that there is increased awareness on food security and health and nutrition as a result of the program. However only a small percentage (28% in Grand Gedeh and 39% in River Gee) have access to improved drinking water at all times.

CHVs

xii. Mechanisms for detection of malnutrition and maternal health

Majority (70%) of the CHVs interviewed in Grand Gedeh attested that there are mechanisms in place for early detection of malnutrition. This was slightly lower in River Gee where only 30% confirmed the same. Over 65% of CHVs in both counties have observed new practices among caregivers based on information shared in ENA trainings. The results echo the results of caregivers with increased awareness on food security, health and nutrition presented above.

Asked whether there are mechanisms in place for pre-natal and post-natal care, majority of them (66%) agreed that mechanisms are in place though facilities are absent in most localities and distant to health facilities remain a challenge as they are mostly situated in major towns. According to the LDHS, at least 71% of rural women receive pre-natal care from skilled providers¹⁶. The distinction between different providers is beyond the scope of this MTE.

¹⁶ LDHS defines skilled providers to include doctor, nurse, midwife, and physician's assistant.

Table 19: Mechanisms for early detection of malnutrition and maternal health

County		New practices among caregivers based on information shared in ENA trainings? (N = 94)	Mechanisms for early detection of malnutrition (N = 94)	Mechanisms for pre-natal and post-natal care (N = 94)
		Percent	Percent	Percent
Grand Gedeh	No	3.2	6.5	6.5
	Yes	77.4	71.0	67.7
	Don't know/missing	19.4	22.5	25.8
	Total	100.0	100.0	100.0
River Gee	No	1.6	14.3	4.8
	Yes	63.5	30.2	66.7
	Don't know/missing	34.9	55.6	28.6
	Total	100.0	100.0	100.0

h. Guiding Questions

Guiding Questions for Farmers and Farmers Associations

Questionnaire No: _____
 Date (dd/mm/yy) _____/_____/2012
 Time Start _____ : Time End _____

Good morning/afternoon. I am _____ contracted by OICI. We are conducting a study to assess the progress of the HANDS program as well as the process of implementation in order to better inform future implementation for the benefit of program beneficiaries. Would you like to take part in the interview? The information that you provide will be kept strictly confidential so that none of it can be attributed to you personally. ****For FGDs skip to section 4(plus additional)**

1.0 BACKGROUND INFORMATION *(This section is the same for all groups)*

- 1.1 Name of the enumerator.....
- 1.2 Name of the respondent (optional)
- 1.3 County _____ District _____ Community/Town _____
- 1.4 Sex of respondent: Female _____ Male _____
- 1.5 Age of the respondent? _____ years old
- 1.6 Marital status of the respondent: Single _ Married __ Divorced __, Widow __, Widower ____
- 1.7 Is the respondent the head of household? Yes _____ No _____
- 1.8 What is the highest level of education completed by the respondent (primary, secondary, college or university, none)?

2.0 HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS *(This section is the same for all groups)*

- 2.2 For how long have you continuously lived in your current location? _____ months
- 2.3 What is the total number of people currently living in your household

Category	Male	Female
2.3a Number of adults aged >61 years		
2.3b Number of adults aged 16-60 years		
2.3c Number of children aged 6-15 year		
2.3d Number of children aged < 5 years		
Total		

3.0 HOUSEHOLD LIVELIHOODS CHARACTERISTICS *(This section is the same for all groups)*

- 3.1 Type of Livelihood (tick ✓)
- 3.1a Crop producer alone _____

- 3.1b Agro pastoralist _____
- 3.1c Pastoralist _____. Please mention what type of livestock do you keep. _____
- 3.1d Entrepreneur _____. What business/s are you engaged in? _____
- 3.1e Other (mention) -----

3.2 What is your MAIN source of income this year (Single response (tick \checkmark only one)

Crop ____ Livestock _____, Fish _____, Salary ____ Wages ____ Formal trade (store, shops) ____ Petty trade (table market) _____ Others (specify).....

3.2a) What is your expenditure on the following items:

Item		Total Annual Expenditure *
Food Item	Per week	
School fees for all children	Per year (normally paid at beginning of school year)	
School supplies (books, uniforms)	Per year (normally at beginning of school year)	
Medicines and Hospital related procedures	Per month	
Transport	Per week	
Others (mention)	Per month	
Total		

*calculate annual expenditure by adding (Food items x 52)+School fees+school supplies+ (medicinesx12)+(Transportx52)+(Othersx12)

3.3 What is the TOTAL SIZE of your farm land? _____hectares (1ha = 2.5 acres)

3.5 What is the total area of the fields planted with crops this year (2012)? _____ hectares

3.6. What are the THREE major crops that you have planted on your farm this year (2012)?

Crops planted in 2012	Seed sources (use number choices below)	Area planted (hectares)
1.		
2.		
3.		

Seed source: 1=Own production; 2=Market; 3=Relatives, friends/neighbor; 4=Seed aid (OICI/NGO)

3.7 How did you access the land where you planted your crops this year ? (tick \checkmark one or more)

1. Owned/acquired _____
2. Borrowed _____
3. Rented _____

3.7 Are there gender-based differentiations within land ownership? ___ If so, how can they be described? _____

A. FARMERS

4. FOOD AVAILABILITY AND ACCESS

I. Percent change in Yield per Hectare (Cassava and Rice)

How to collect the data: Figures for yield per hectare of rice will be calculated with the support of the M&E Manager from existing program records. Both semi-structured interviews with individual farmers and focus groups with available members of select farmers associations (10-12 members per group) will be conducted to investigate the following questions in more depth:

4.1 What crop are you producing under the HANDS program? (tick \checkmark one or more)

Rice _____ Cassava _____

4.2 As a HANDS farmer, what do you do with your harvests? for consumption or business? or seeds? _____

4.3 What would you say as stated above is the proportion of the crop that is retained for consumption? _____ Business (sale)? _____ seeds? _____ (use piling proportionality method (10 stones to calculate percentage))

4.4 Has the HANDS program helped farmers to improve their approach to (rice/cassava) farming? _____ If so, how? _____

4.5 If NOT, please explain _____

4.6 What challenges have you encountered while participating in the HANDS program with regards to interacting with field agents, accessing tools and services etc.? _____

4.7 How often do you see and interact with HANDS agricultural field agents? _____

4.8 Do field agents appear knowledgeable in rice/cassava farming? Please explain. _____

4.9 What suggestions or plans can be devised to improve rice/cassava farming on your farms? _____

4.10 What kind of trainings have you received from HANDS on farming practices? _____

4.11 How can you rate the trainings and teachings you have received from HANDS on farming practices? (tick \checkmark only one). A) Very useful _____ b) Somewhat useful _____ c) Not useful _____

4.12. What other suggestions can you offer on how to improve teaching and training related to rice/cassava farming on HANDS demonstration farms? _____

4.13. Has the HANDS program provided any inputs (seeds/tools/fertilizer) this year? _____ if so, what agricultural input or services did you receive from HANDS this year? _____, _____

4.14. If not, how do you procure your own inputs (seeds/tools/services) for your farms? _____

4.14a) What types of tools is HANDS distributing to farmers? _____

- 4.14b) What would you say about the quality of these tools? _____
- 4.15 What percentage of income are you able to save to buy seeds/tools/services for the next planting season? _____
- 4.16 If no savings, do you have access to credit to buy seeds/fertilizers/services for the next planting season? _____ If not, how do you normally get these inputs? Are there other existing schemes that farmers are aware of or are interested in? Please mention _____
- 4.17 How would you rate crop performance this year? (tick \surd only one)
- a) Bountiful (enough for consumption, sale and save)____; b) Good harvest (enough for family consumption and save) ____; c) average harvest (for consumption only) ____; d) Little harvest (not enough for consumption)____; e) No harvest at all_____
- If a,b,c,d, then skip to question 4.20*
- 4.19 If you didn't harvest at all, what do you think were the reasons? _____
- 4.20 Will you be able to sustain the yield improving activities beyond the life of the project? _____ What can HANDS do to help ensure sustainability?_____

II. Number Of Hectares of Swamp Rehabilitated

Figures for the number of hectares of swamp rehabilitated will be calculated with the support of the M&E Manager from program records.

- 4.21 As a farmer, have you utilized swamplands prior to the HANDS program?____ If so, how?__
- 4.21b If not, do HANDS proposed interventions seem helpful in your farming activity based on your knowledge of existing local circumstances, climate, etc.?
- 4.22) Has the HANDS program helped you to rehabilitate swamps in your community? Are these approaches new? _____ What suggestions can you offer on how to improve swamp clearing based on your own experiences? _____

III. Number Of Hectares under Improved Technologies or Management Practices

How to collect the data: Data for the number of hectares under improved technologies or management practices will be calculated with the support of the M&E manager from program records.

- 4.23) Which technologies/improved farming practices have been promoted in the farming of rice and cassava by the HANDS program? _____ Are these technologies new to you? _____
- 4.24) Which approaches are more or less effective in your opinion?
- 4.25) Will you be able to continue project-recommended practices following the completion of the HANDS program in 2015? If no, why?

4.26) What suggestions can you offer on how to utilize new or existing technologies or management practices?

FARMERS and FARMERS ASSOCIATION

IV. Percentage change in sale of selected commodities and products

4.27) Are there differences in sale of selected commodities and products since the onset of the HANDS program? _____ How can you measure the differences? (A) A year ago what was the price of a 50kg bag of rice/cassava? At that time how many bags/kg of rice/cassava did you sell? B) Currently what is the price of a 50kg bag of rice /cassava? This farming season how many bags/kg of rice/cassava did you produce?

4.28) Have any value chain improvement activities (processing of cassava and soybean) been initiated since the introduction of the HANDS program? _____ How do these activities respond to market demands? _____

4.29) What are farmer associations' capacities in linking with the private sector and other stakeholders? How can the HANDS program improve this process?

4.30) What is the role of farmers association in ensuring that farm produce is not sold at farm-gate prices?

4.31) What challenges have farmers encountered selling their products in terms of quality, prices, access to markets, etc.?

4.32) How far do you have to travel (to market) to sell your produce? _____ minutes.

4.33) Are there mechanisms in place to ensure that farmers have access to updated market information? _____ Please explain.

4.34) How can the HANDS program help to provide access to information or new markets? What systems, if any, can be devised to ensure the continuation of new approaches or systems beyond the program?

4.35) What is the role of farmers association in negotiating for better prices for farmers?

Guiding Questions for Entrepreneurs and Job Holders

4. FOOD AVAILABILITY AND ACCESS

I. Number Of Rural Jobs Created by Gender AND Number of Female Beneficiaries Trained in Food Processing Technologies

How to collect the data: Figures for the number of rural jobs created by gender and the number of female beneficiaries trained in food processing technologies (overlapping beneficiary groups) will be calculated with the support of the M&E Manager from program records. Both semi-structured interviews with beneficiaries and focus groups will be conducted with HANDS beneficiaries included in these categories (6-8 participants per group) to investigate the following questions:

- 4.1) What are the reasons women joined this program? _____
- 4.2) How did they learn about the Vitagoat/ Super Gari production? _____ and what did they hope to gain from it? _____
- 4.3) Do you talk about it with families/neighbors? _____
- 4.4) What sort of support do you receive from the program? _____
- 4.5) What Food processing technologies (from HANDS) have you been trained on? _____
- 4.5a) What results did you see (increased skills (how much), additional household income (how much),)? ___If others explain_____
- 4.6) Are these jobs enabling and/or empowering participants to earn income and support their families? _____What is the average weekly or monthly income earned from each job?
- 4.7) How do you utilize income earned from jobs created by the HANDS program? _____
- 4.8) Are there gender-based differences in utilization of income in the household as a result of HANDS? _____Please explain_____
- 4.9) How do you rate the opportunity in competing at the job market before HANDS program and after HANDS program? _____
- 4.10) What challenges have you faced, if any, in the employment market? How can the HANDS program help to mitigate these challenges?
- 4.11) Does HANDS have systems in place to promote job creation for women beyond the program? What kinds of constraints, if any, may impede these processes? What may be some of the possible solutions?
- 4.12) As a result of the HANDS program, is there increased availability of economic resources (property, land) for women, higher visibility and bargaining power for women's (both semiformal and informal).

4.13) Are women encouraged to participate differently from men? _____Are there opportunities for women to be project leaders? _____

II. Percent change in Sale of Selected Commodities and Products

How to collect the data: Both semi-structured interviews with individual farmers and focus groups with available members of select farmers associations (10 to 12 members per group) moderated by the HANDS M&E Manager and respective Community Agriculture Promoter (CAP) will be conducted to investigate the following questions in more depth:

4.14) Are there differences in sale of selected commodities and products since the onset of the HANDS program? _____(Yes/No). Are these differences measured by price or by quality/quantity/volume? Please explain_____

4.15) What is the current demand of these products and commodities since the onset of the HANDS program_____. If the demand is high, are there enough products to meet the demand? _____. If not what plans do agro processors have in mind to ensure that demand is met? ____

4.16) What are farmer associations' capacities in linking with the private sector and other stakeholders? _____ How can the HANDS program improve this process?

4.17.) What challenges have farmers encountered selling their products in terms of quality, prices, access to markets, etc.? How can HANDS program improve on this?

4.18) Are there mechanisms in place for farmers to access updated market information?

4.19) How can the HANDS program help to provide access to information or new markets?_____

4.20) What systems, if any, can be devised to ensure the continuation of new approaches or systems beyond the program?

4.21) As an entrepreneur, do you have access to micro credit? If not what are the reasons and issues surrounding inaccessibility to rural credit?_____

4.21a)If YES, what sources of credit do you have access to?_____

4.22) Are agro-processors exploring soy crop agriculture? _____What have been the success and challenges in that regard? _____

4.23) Are there indigenous crops that processors prefer to manufacture that do not rely on soy?

4.24) What is the average soy milk quantity (in liters) produced by women's group in a typical week?

4.25) What is the price per liter of soy milk?_____

- 4.26) Please explain what happens to the money that you get from sale of soy milk?_____. Is there central place (bank) where this money is safely kept?_____. If not, where do you keep the money?_____
- 4.27) What is the authorization procedure around using the money? _____
- 4.28) Do you have sale record of the sales of soy milk?_____

Guiding Questions for Community Health Volunteers

4.0 REDUCED MALNUTRITION AMONG CHILDREN UNDER FIVE

I. Number Of Community Health Volunteers (CHVs) Trained in Essential Nutrition Actions (ENAs)

How to collect the data: Data for the number of CHVs trained in Essential Nutrition Actions (ENAs) will be collected through collaboration with the HANDS M&E Manager from a review of program records. In addition, a series of semi-structured interviews and focus groups with HANDS CHV-1s and 2s (4-8 participants per group) will be conducted to investigate the following questions:

- 4.7) Please explain and describe the CHV-1 training process? Have training modules been revised or adopted since the inception of HANDS?
- 4.8) How do CHV-1s train CHV-2s (how often, where, when, etc.)?
- 4.9) What are the successes and/or challenges do you- as a CHV-1s find in the training of CHV-2s?
- 4.10) What goals and objectives do CHV-2s aim to achieve with the caregivers they work with?
- 4.11) What are some of the most common issues and concerns among caregivers in target areas according to CHV-2s?
- 4.12) How often do you reconnect with CHV-2s for additional support, meetings, etc.?
- 4.13) Have CHV-2s observed new practices among caregivers based on information shared in ENA trainings? How do CHV-2s compare these practices with those commonly observed before the HANDS program?
- 4.14) What are some of the common issues and challenges caregivers face in providing proper care for children at this point in the program? How do you suggest that the HANDS program addresses these challenges?
- 4.15) How do you keep track of maternal health and child care? _____

- 4.16) How many incidences of Malaria cases of children aged 0-5 yrs have been reported at the community health center? _____ how many of those were treated? _____
- 4.17) What are the number of reported incidence of diarrhoea that were reported at the community health center ? _____ and how many of those were treated?
- 4.18) What campaigns/advocacy does the center use in fighting child malnutrition? _____
- 4.19) Does the center have mechanisms in place to ensure early detection of malnutrition? Please mention them _____ How effective are they? _____
- 4.20) Does the center have mechanisms in place for pre-natal and post-natal care? Please explain_____.

Guiding Questions for Caregivers

4.0 REDUCED MALNUTRITION AMONG CHILDREN UNDER FIVE

I. Number Of Targeted Women and Children Routinely Consuming Super Gari Fortified Food

How to collect the data: Data for the number of targeted women and children routinely consuming Super Gari fortified food will be collected through collaboration with the HANDS M&E Manager on a review of program records. In addition, a series of semi-structured interviews and focus groups with HANDS women beneficiaries (4-8 participants per group) led by the Team Leader, HANDS M&E manager and community health specialist will be conducted to investigate the following questions:

- 4.1) How often do you and your children consume Super Gari each week? _____
- 4.2) How do you access and prepare Super Gari? How does preparation differ from preparation of other foods consumed?
- 4.3) What time of the year does your household experience hunger? Is Super Gari distributed in a timely fashion to address food needs?
- 4.4) Has Super Gari production and consumption been able to reduce hunger particularly during hunger season?
- 4.5.) What alternative foods are available during hunger season and how do you and your family consume these foods?

II. Number of caregivers trained in Maternal and Child Health and Nutrition (MCHN)

- 4.6) What kind of trainings have you received from HANDS in MCHN this year? _____
- 4.7) What is your role as a caregiver in ensuring Mothers exclusively breastfeed their infants of ages 0-6 months? _____ what are the challenges in that? _____

4.8) How have HANDS program assisted caregivers in providing improved healthcare and nutrition to mother and child? Is the support from HANDS enough to address maternal and child health and nutrition? What else would you recommend?

4.9) As a result of the project, is there an increased awareness amongst women on food security _____ and community health issues _____. Please explain.

4.10) How do caregivers plan to continue the trainings and services offered to mother and child beyond HANDS?

4.11) Are there any gender differentiation in the caregiving work? If so, please explain the reasons. _____

III. Number of people with Access to Water and Sanitation

How to collect the data: Data for the number of people with access to safe drinking water and sanitation facilities will be collected through collaboration with the HANDS M&E Manager from a review of program records. In addition, a series of semi-structured interviews and focus groups with HANDS CHV-1s and 2s (4-8 participants per group) will be conducted to investigate the following questions:

4.12) Does your household have latrines? If yes, what kinds do you have? Open pit/squat/ bush _____. If not, where do you relieve yourself? _____

4.18) Does your latrine have a hand washing facility? _____

4.19) Does your household have access to improved and safe/treated drinking water all the time? Please explain _____ If NOT, explain what are the major challenges in obtaining safe drinking water. _____

4.20) Has HANDS constructed any safe/treated water points in your community? If so, how many _____

4.21) How far do you have to travel to safe/treated water points? _____ minutes

4.22) What do you suggest HANDS can do to improve access to safe drinking water?

h. Map of Liberia

