FINAL REPORT

EVALUATION OF THE NORTHERN KARAMOJA GROWTH, HEALTH AND GOVERNANCE PROJECT

IN

KARAMOJA REGION, UGANDA

prepared for

MERCY CORPS

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prepared by

ADVANCED MARKETING SYSTEMS

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ACRONYMS

AEW	Agricultural Extension Worker
ALC	Area Land Committee
AMA	Adaptive Management Approach
ANC	Ante-Natal Clinic
AWOTID	Abim Women Together in Development
BCC	Behavioral Change Campaign
BDS	Business Development Support
CAHW	Community Animal Health Worker
CBO	Community Based Organization
CHA	Clean Household Approach
CHW	Community Health Worker
CHEW	Community Health Extension Work
CLA	Collaborate, Learn and Adapt
CLTS	Community-Led Total Sanitation
CMM	Conflict Mitigation and Management
COP	Chief of Party
CRC	Citizen Report Card
CSO	Civil Society Organization
CU2	Children Under Two
CU5	Children Under Five
DPC	District Peace Committee
DFAP	Development Food Assistance Program
DHMIS	District Health Management Information System
DHO	District Health Officer
DHT	District Health Team
DSO	District Sanitation Officer
DSU	District Sanitation Unit
EWS	Early Warning System
FFP	Food For Peace
FFS	Farmer Field School
FGD	Focus Group Discussion
FSNA	Food Security and Nutrition Assessment
GHG	Growth, Health and Governance
GOU	Government of Uganda
HC	Health Center
HF	Health Facility
HMIS	Health Management Information System
HNS	Household Nutrition Survey
HPMA	Hand Pump Mechanic Association
HUMC	Health Unit Management Committee
iCBM	Improved Community Based Management
IGA	Income Generating Activities
IPTT	Indicator Performance Tracking Table
IT	Information Technology
IYCF	Infant and Young Child Feeding
KAPDA	Karamoja Peace and Development Agency
KII	Key Informant Interview
KLDA	Karamoja Livestock Development Forum
LC1	Local Council 1

LC3	Local Council 3
LC5	Local Council 5
LDU	Local Defense Unit
LGA	Local Government Administration
LM	Leader Mother
LOA	Life of Activity
LOP	Life of Project
M4P	Market Facilitation for the Poor
M&E	Monitoring and Evaluation
MC	Mercy Corps
MCA	Male Change Agents
MCG	Mother Care Groups
MCG+	Mother Care Groups Plus (access to VSLA or SACCO)
MCHN	Mother Child Health and Nutrition
NW	Neighbor Women
ODF	Open Defecation Free
OM	Outcome Mapping
OPS	Out-patient Services
PG	Peace Group
PLW	Pregnant and Lactating Women
PM2A	Prevention of Malnutrition Among Children Under Two Approach
POP	Power of the Purse
PPP	Public Private Partnership
SACCO	Savings and Credit Cooperative
SBCC	Social and Behavioral Change Communication
SGBV	Sexual and Gender Based Violence
SWA	Sanitation Workers Association
SWAP	Savings With a Purpose
TOC	Theory of Change
UNICEF	United Nations' Children Fund
UPDF	Uganda Peoples' Defense Force
USAID	United States Agency for International Development
VHT	Village Health Team
VSLA	Village Savings and Loan Association
WSP	Water Service Provider
WUC	Water User Committee
WV	World Vision
Y5	Year 5
YCBO	Youth-Led Community Based Organization
YLF	Youth Livelihood Fund
YPG	Youth and Peace Groups

1. EXECUTIVE SUMMARY

1.1 Overview and methods

This report is an evaluation of the USAID supported five-year Growth, Health and Governance (GHG) Program implemented by a consortium of partners in northern Karamoja, Uganda. GHG utilized a multi-sectoral approach to reach its goals of improved peace and food security by addressing three objectives:

1. Economic growth - agriculture, livestock and other income generating activities (IGAs) through market systems and entrepreneurship;
2. Improved nutrition - nutritional well-being of mothers and their children under five years of age and safe water, sanitation and hygiene; and
3. Good governance – strengthening group formation and local governance to address governance issues, build capacity for conflict mitigation and improve youth capacity to engage productively with government.

The GHG program applied a gender and youth sensitive approach across all sectors. In the final year of GHG, consortium lead Mercy Corps commissioned this final evaluation to assess the relevance of implemented strategies and their relationship to Development Food Assistance Program (DFAP) goals, capture program impacts, collect best practices for dissemination, and determine sustainability of program interventions. Data was collected through a mixed method approach with quantitative data collection among program participants and qualitative data collection led by the team of consultants from Advance Marketing Systems.

1.2 Key findings

The overarching finding from this evaluation is that activities that increase household food production, income, and sanitation, *when coupled with* behavior change programming that leads to equity within the household, along with sustained peace, do indeed result in improved food security and nutritional outcomes.

- **GHG engagement improved nutrition outcomes of children under two**: Households that had higher engagement with GHG's livelihood, health, and behavior change programming activities were more likely to have well-nourished children (children under five years – CU5) in comparison to households with lower GHG engagement. This finding was based on a weighted index of GHG activities that revealed that children are significantly less likely to be stunted or underweight in households with higher GHG engagement and are also less likely to be wasted (although wasting was not statistically significant). The GHG activities in the index included: member of MCG+ group, use of a seed voucher, receive agricultural training, belong to a SACCO, have market access, purchase goods from an agro-dealer, receive advice from an agricultural extension agent, purchase animal drugs, receive advice from a community animal health worker, and trade goods.

- **The evaluation identified non-traditional factors as contributors to undernutrition in Karamoja**. During the five years of implementation, there was an overall decrease in food aid to the region and several communities experienced drought; holding all else constant, this would normally precipitate a jump in undernutrition. However, nutrition scores remained relatively stable (instead of backsliding) while self-reported food security increased from 18% to 50% in northern Karamoja.[1] This indicates an overall positive trend but also reveals that having enough food is only part of the nutrition security problem (and solution). GHG's final evaluation found that additional factors are contributing

[1] The GHG baseline (2013 – FIC) indicated that 82% of households were food insecure while the endline (2017 – FIC) indicated that 50% of households report that they are food insecure. GHG's endline target was to reduce moderate to severe hunger to 66%.

significantly to improving nutrition of children, among them: exposure to behavior change messages for women's empowerment (Male Change Agents and MCG+ activities), access to a clean environment (as represented by diarrheal disease prevalence) as well as access to key extension services in livestock and agriculture.

- **GHG's new Care Group Model was more effective at improving nutrition outcomes in Karamoja.** GHG found that a Mother Care Group Plus (MCG+) model is more effective at improving nutrition outcomes in comparison to a standard Mother Care Group (MCG) approach. Women who participated in the MCG+ received additional economic empowerment activities (savings, financial and life skills, and income generating activities) while women in the standard MCG received only health and nutrition education.

- **The evaluation found that safe water and community-led total sanitation (CLTS) activities were effective at combating undernutrition in Karamoja**. The study reinforced that diarrheal prevalence is a major factor contributing to children's poor nutrition outcomes in Karamoja, matching global data that undernourishment is associated with recurrent onsets of diarrhea.[2] WASH programs address this through water, sanitation and hygiene, but diarrheal prevalence should be directly (and regularly) measured to monitor whether programs are effective and if progress is being made. In communities where GHG focused on providing consistent access to safe water (through borehole rehabilitation and preventive maintenance) coupled with CLTS, diarrheal prevalence was recorded at 18% at endline. A GHG community-based survey conducted in July 2016 recorded 36% prevalence.[3]

- **Gender equity was identified as a key factor in children's undernutrition**. The study showed that households that experience more equality across measurements of women's empowerment also experience better food security and nutrition. Women in households from communities reached by Male Change Agents (MCA) were 34% more likely to report that women and men received equal food in the home, had more workload sharing, and had greater control over decision making.[4] The impact of gender inequality on nutrition was particularly evident when it came to sexual and gender based violence (SGBV). Households experiencing SGBV have children with poorer nutritional outcomes, pointing to the need to directly address SGBV in nutrition programming.

- **The evaluation confirmed that market facilitation delivers results, even where markets are initially lacking**. The evaluation found that GHG's market-led interventions achieved greater impact toward program indicators than what would have been possible through direct delivery programming. Karamoja lacked a developed local market for households to access, making GHG's market facilitation approach a pre-requisite for economic growth. This is particularly true regarding GHG led efforts to create a private sector livestock health model, public/private water infrastructure model, sustainable seed distribution system, and also to establish an independently functional medical intern program. Actors within the system noted that relationships fostered by the program between local actors and national actors have been continued without the support of Mercy Corps, and to the benefit of Karamojong communities, making GHG's accomplishments more sustainable than traditional development programming due to the focus on systems level change.

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[2] Guerrant, R.L., et al. (2013). "The impoverished gut – a triple burden of diarrhea, stunting and chronic disease." National Review Gastroenterol Hepatel. April 10 (4) 220 – 227.
[3] Mike Barbee. 2017. "GHG-Karamoja WASH and Nutrition Brief." Mercy Corps, Kampala, Uganda.
[4] Wasilokowska, K. Kamila (2017): GHG Gender and Behavior Change Impact Assessment; Mercy Corps with funding from USAID.

1.3 Key conclusions

The GHG project has been effective in providing peace and food security at an important time in the transformation of the Karamoja Region, once regarded as a conflict "no-go" zone for government services and private investment. The following are conclusions on the impacts of GHG over the life of the project (LOP) in the three SOs.

1.3.1. SO1. Livelihood

- Increased production and productivity of livestock, cereals, and vegetables for the diversification of local diets, which are mainly carbohydrate-based. The success in seed distribution and the adoption of orange flesh sweet potatoes (OFSP) are good indications that producers will adopt improved crops that benefit the family.
- Introduced effective models of livestock, homestead gardens and income-generating activities (IGA) which improve the availability of nutritious foods like milk and eggs
- Created access to loans for producers to invest in adoption of modern agricultural and livestock practices
- Introduced agricultural advisory services in cooperation with the district government
- Assisted in creating alternative activities for households to replace detrimental activities negative to the household and the environment
- Gave in-depth attention to gender awareness for staff, promoters, agricultural extension workers (AEWs), community animal health workers (CAHW), and business people on the importance of women as consumers of agricultural services

1.3.2. SO2. Health

- Improved the health services for communities including constructing and equipping new health facilities
- Supported institutional development of Health Unit Management Committees (HUMC), village health technicians (VHT) and the local health facilities (HF)
- Improved the quality and demand for health services for antenatal clinics (ANC) and out-patient services (OPS) including birth delivery at the health facility (HF)
- Trained health promoters to support over 25,000 lead mothers (LM) and their neighbor women (NW) in MCG and MCG+ for better health outcomes
- Improved access to safe, reliable water sources and encouraged healthy environments for communities through community-led total sanitation (CLTS) including both households and schools
- Inclusion of gender awareness for cross-cutting impacts with livelihood and governance to reinforce health of households and their communities

1.3.3. SO3. Governance

- Improvement in peace in the Karamoja Region increased the ability to govern the region which created a peace dividend for improving the investment environment and living standards of communities and mobility of household members to engage in business and social activities
- Support to community-based organizations and government departments empowered the local population to address outside negative influences through dialogue and early interventions reducing the need for police or military interventions
- Communities face new challenges; but with youth-led community-based organizations (YCBOs), issues are discussed in open forums with traditional leaders, government representatives and peace groups.

- The inclusion of women and youth in peace groups and in government departments improved the effectiveness of all parties to reach negotiated settlements.
- Though community and local government offices remain weak, GHG has built needed capacity to begin to better respond to all citizens including women and youth.

1.3.4. Cross-Cutting Issues

With climate change, agricultural systems will require technologies that will deliver improved production, higher yields from crop varieties and animal breeds, and better control of pests and diseases. Women who are engaged in GHG activities have a better probability that their livelihood, and that of their children, will improve. GHG put a top priority in delivering gender balanced programs to benefit the households and the communities. Karamoja Region is in a semi-arid zone so there are inherent production risks from climate hazards such as the frequency and intensity of droughts and floods. The GHG program recognizes the need for climate smart agriculture (CSA) and the need for early warning systems to better inform agricultural producers.

1.4. Lessons Learned

A number of lessons learned in GHG over the life of the program (LOP) offer instructive guidance in follow-on programming in the Karamoja Region.

1.4.1. SO1. Livelihoods

- Crop and livestock systems are compatible and can be effectively integrated in the semi-arid zone and in future follow-on programming in the Karamoja Region.
- The Karamojong people can, and are willing to, adopt new practices and invest in seeds and animal health drugs if they see the financial benefits.
- Women will engage in income generating activities (IGAs) with other women in savings groups that will benefit their household and improve the nutritional outcome of their children.

1.4.2. SO2. Health-Nutrition

- Karamoja's nutrition indicators have remained high for stunting, wasting, and underweight, but despite a decline in food aid and two droughts in the last five years, people have coped with these adverse conditions. Without GHG interventions, the nutritional status of households would have been worse.
- Young girls in the household should be addressed as a target group to promote education and life-skill development that improve their chances of having a more productive life as they grow into adulthood.
- The Karamojong people want to engage in positive behavior change, and they will adopt practices which are conducive to their livelihoods.
- Male Change Agents (MCAs) play an effective role in achieving behavioral change. Men serve as educators to families and as mentors to other men. MCAs effectively advocate for a husband to share household, child care and farming duties with his wife.

1.4.3. SO3. Governance

- Working through local community based organizations (CBOs) is an effective way to build inclusive governance in Karamoja. Local CBOs are readily accepted and are more credible in the eyes of local stakeholders in comparison to international actors.
- The women of a community play a significant role in the long-term success in achieving peace in the Karamoja Region. A women's group organized by the Karamoja Peace and Development Agency (KAPDA) and funded by GHG went to South Sudan and met with men raiding their village. They were successful in stopping the raiding on their village. Women can play an instrumental role in their village's governance.

1.5. Sustainability

The impacts of GHG have a good chance to be sustainable because activities were implemented using a participatory approach and adaptive management.

- MCGs and VHTs are now rooted in the district and sub-county activity plans.
- Youth- led CBOs will continue to provide important services to communities and have a voice with local administration.
- Whave's fee-for-service payment scheme for WASH services is a model of a public service with local administration.
- Business linkages established between actors in the agricultural and livestock supply chains improve market efficiencies and will be sustained on profit incentives that drive exchanges between input dealers, producers, traders, and market sellers throughout the supply chain. A level of trust has been established between actors which results in on-time product delivery and payments.
- Business forums provide a platform for business development services (BDS) with support of trainings, mentoring, and market linkages to create a new class of entrepreneurs (both male and female).
- Traditional leaders and government officials (both male and female), at district and sub-county levels, are engaged in development of management plans to counter environmental shocks and stresses.

1.6. Recommendations

The following recommendations will build upon the success of GHG for future programming in Karamoja, including GHG's follow-on project, Apolou, as it moves into its next five-year phase.

1.6.1. SO1. Growth

- Roll-out proven research findings (e.g. sourced in USAID's Africa Rising program) for agriculture and livestock practices suitable in a semi-arid ecosystem and transfer them to agricultural extension workers (AEWs) and community animal health workers (CAHWs) via on-farm demonstration plots, farmer field schools (FFS), among other methods.
- Promote the cultivation and crop protection (pests and disease) of bio-fortified food crops that are adapted to farming systems in the Karamoja Region which can provide needed protein and micronutrients to households.
- Strengthen the CAHWs with improved and updated knowledge about preventive care and treatment of livestock and facilitate access to mobile money transfers by livestock producers to pay for services.
- Continue the introduction of modern, cost-effective, labor-saving technologies delivered through the Markets for the Poor (M4P) approach to increase production and productivity for smallholder income. These inputs include seeds, post-harvest equipment, and small-scale machinery/equipment (e.g. irrigation) supplied through local agro-dealers and their agents.
- Promote livestock production and marketing of milk, meat and eggs - first for home consumption and if surpluses then to trade or sell for cash. Undertake a feasibility study of establishing cooperatives for the marketing of producers' milk, poultry and eggs to achieve economies of scale.
- Strengthen the existing savings and credit cooperatives (SACCOs) and village savings and loans associations (VSLAs) to be the first-line source for financial service for smallholders to save and access credit for agricultural inputs and for funds to cope with food and emergency needs. Scale-up the latest technologies which can use mobile money to assist adoption of technologies.
- Introduce a program that increases access to inexpensive cell phones for households for knowledge and information sharing. This recommendation can also benefit health delivery services.
- Support infrastructure improvements to the agriculture and livestock value chains to reduce transaction costs with new roads, cold storage for vaccines and animal drugs, irrigation equipment and market facilities.
- Pivot to include adolescents in training on life skills and business management to create employment and entrepreneurship opportunities for girls and boys as alternatives to early marriage and pregnancy.

- Promote tree nurseries and seedling production for fruit, woodlots and fodder to offset the environmental damage caused by firewood collection and charcoal production.
- Implement land management approaches (LMA) that include grazing plans and livestock corridors which are compatible with cropland and forestry to improve environmental conditions, create new business opportunities and protect livelihoods.

1.6.2. SO2. Health and Nutrition

- Continue partnerships with the District Health Office (DHO) to assist with planning and budgeting of health facilities and services with a five-year health plan for the districts.
- Continue to strengthen the districts' capacity to collect, analyze and disseminate data in the DHMIS program transmitting data from the health facilities (HFs) to the district and then using it as a management tool at the HUMC level.
- Continue to support health unit management committees (HUMC) with training, educational materials, and exchange visits to bolster their capacity to represent their communities and work with the HF. This includes supporting women to assume leadership positions in HUMCs.
- Encourage the DHO to carry out public health messages on a regular basis on topics such as: vaccinations, exclusive breast feeding, alcohol abuse, family planning and birth spacing, HIV prevention and testing, and child care, etc. Examine ways to use information technology (IT) to expand access to messages.
- Upgrade the capacity of the village health team (VHT)/community health workers (CHW) with appropriate IT tools for better delivery of information and services to the households and connect them to the health facility to improve treatment and tracking of patients that require health care or preventive services, such as reminders of ANC visits. Several software portals are available for testing.
- Integrate the activities of the VHT with AEWs and CAHWs for better nutrition sensitive food production and livestock production.
- Conduct a longitudinal study of women and young women members of the household in all activities dealing with food utilization for nutrition outcomes. As part of the longitudinal study, use VHTs to visit a set number of households to track what improvements are occurring in the household from the agriculture, livestock and nutrition interventions. The visits should be with the same set of households over an extended period and the information should be analyzed and shared with the households.
- Pivot to an adolescent focus of young girls in the household as a special target group for health and livelihood objectives. These young girls, ages 13 to 18, represent the next generation of mothers and a well-placed intervention could help ensure a positive development trajectory e.g. increased education, reduced early marriage, delayed pregnancy, and increased life skills.
- Continue the WASH activities employing the improved community based management (iCBM) approach and engage both public and private stakeholders in delivery of services. A redoubling of efforts, especially in Kotido, is necessary with new tactics used for addressing reluctant communities.
- Improve the capacity of the District Health Office (DHO) which is crucial for sustainability of WASH interventions after assistance programs stop. Monitoring, reporting and capacity building of water user committee (WUC) members is necessary to maintain functionality of water points year-after-year.
- Address urban sanitation challenges in the area, exploring market based solutions such as a public - private partnership (PPP) to facilitate the construction and maintenance of latrines in urban areas, rural communities and schools and engagement with sanitation workers associations (SWA).

1.6.3. SO3. Governance

- Continue to reduce the number of conflicts with continued support to peace groups, youth-led community based organizations (YCOB) and government agencies.
- Support training in conflict mitigation and management (CMM) tools and use interventions including drama plays, community dialogue, exchange visits, and provide grants to address specific problems (on a cost share basis) for community-led resolution.

- Continue to support youth groups dedicated to addressing social issues in their communities with skill development in the areas of Outcome Mapping (OM), accounting, monitoring, mobilization techniques and gender inclusion.
- Support gender awareness and empowerment in peace groups, youth-led community based organizations (YCBOs) and government agencies to address the vestiges of discrimination. It is necessary to elevate women and youth into roles of active leadership in community organizations.
- Conduct regular forums to address adverse impacts of climate change on food security and livestock assets which can precipitate conflict and create an environment for youth to raid and steal livestock.
- Give special attention to natural resource management issues (land and water rights, grazing areas and seasonal access, stock routes, etc.) that require community leaders and government department officials to engage in dialogue and collaborate in planning sessions.
- Support women's involvement in decision-making in mitigating the impacts of climate change because women are mainly responsible for food production and are more vulnerable to the effects of climate change.

2. GHG PROGRAM OVERVIEW AND THEORY OF CHANGE

2.1 Relationship to Development Food Assistant Program Vision

USAID's vision for projects funded through the Development Food Assistance Program (DFAP) is to achieve a world free from hunger and poverty, where all people live in dignity, peace and security.[5] The GHG program embodies this vision to assist marginalized households and communities in the northern Karamoja Region. The DFAP further states its strategic goal is to strengthen food and nutrition security for these vulnerable populations which matches that of the GHG program. The DFAP strategy has two objectives: to institutionalize the concept of resilience and to work with vulnerable groups. The GHG program addresses these challenges by strengthening household's ability to produce, access and utilize nutritious foods, quality maternal and child health care, safe water and sanitation, as well as, promoting institutions for good governance that include conflict-sensitive programs. GHG has embedded a strong gender component into its activities to address challenges women face in equity, empowerment and opportunity (Box 2.1.)

Box 2.1. Gender Inequality and Inequity

Women in Karamoja have traditionally been prohibited from participation in household decision making. Gender inequality undermines the ability of women to contribute to a food secure family.

Women have less control over household assets once the husband has paid the bride price. The husband and her in-laws have significant control over her nutrition, attendance at the health facility, and ability to earn and use income.

Women have increased workloads in the household with chores, food production and meal preparation. She is usually the last one to eat after the men, boys and children have eaten.

Sexual and gender based violence (SGBV) has increased as men are more idle without livestock, not willing to take on agricultural activities and have resorted to increased consumption of alcohol.

The GHG project focused on overcoming this inequality and inequity faced by women.

2.2 GHG Program Strategy and Theory of Change (TOC)

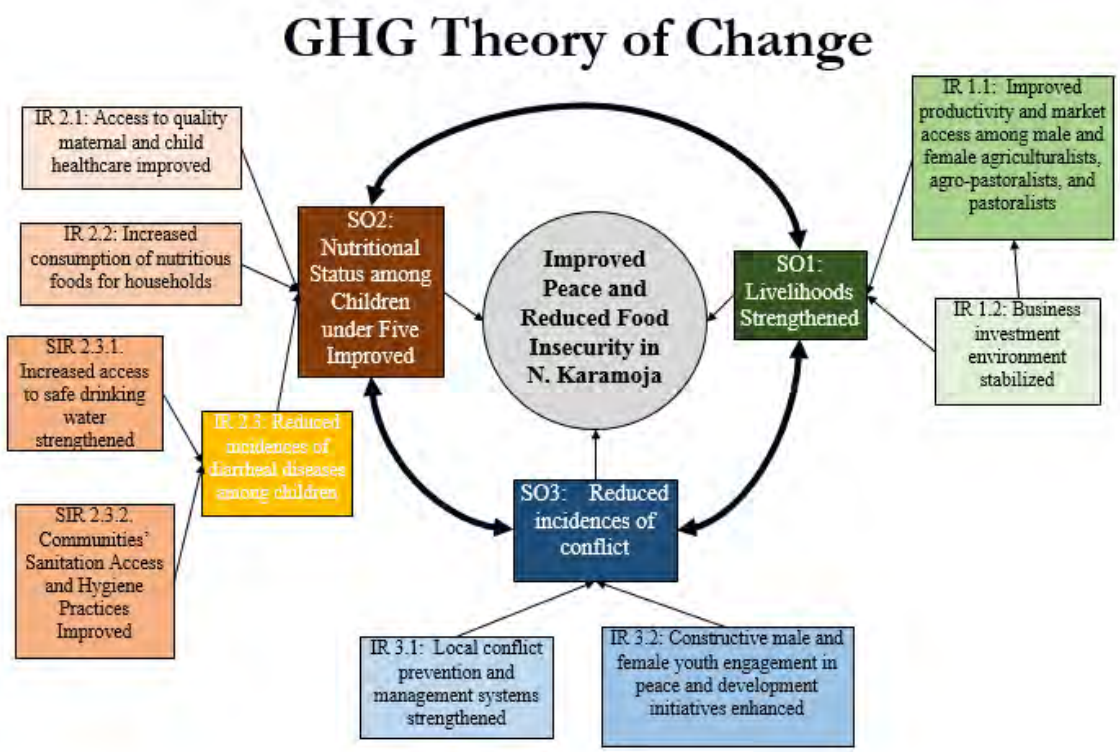
The GHG program goal is to improve peace and reduce food insecurity in northern Karamoja. A return to peace (less conflict both from internal and external forces) is a necessary condition to reduce food insecurity but by itself is not sufficient. To achieve the long-term goal of food security, other factors must also be addressed, such as increased food production and purchasing power, a healthy population and good governance. The TOC assumes that interventions in livelihoods, nutrition and conflict mitigation are relevant, and households and communities can take progressive steps toward their own food security and development if supported to overcome barriers to adoption (e.g. economic, social, political). It assumes peace is a pre-requisite for sustainable development, and that to sustain peace, long term investments need to be made to ensure that government institutions are inclusive and effective, representing the needs of Karamojong communities. With peace, there can be accelerated growth of inclusive markets, helping people access the goods and services they need to prosper, from agriculture inputs to animal health services, water supply services and financial services, such as savings and credit. The household must have increased wealth and necessary behavior change to ensure that profits are directed to improved nutrition security. Because this is most critical during the first 1,000 day period of a child's life, GHG focuses nutrition interventions on pregnant and lactating women (PLW) and CU2, and the household environment around them. Behavior change activities support mothers and fathers to invest in nutrition and practice healthy behaviors, such as complementary feeding and handwashing. Given the high exposure to sanitation related disease pathogens in the 1,000 day window in Karamoja, GHG also assumes that disease incidence must be reduced to further

[5] USAID. "Technical Reference for Development Food Security Activities." Office of Food for Peace. Washington.

improve nutrition, integrating WASH initiatives from behavior change and market based approaches. Across all activities, MC's vision is that food security and peace for all people is possible.

Within the GHG program, gender was not considered just a "nice to have" program add on, but a critical part of the program's ability to reach its goals. As such, the program worked to directly address the gender related inequalities and socio-cultural norms that also limited food security for all, regardless of sex. The TOC is represented in Figure 2.1.

Figure 2.1. Illustration of the GHG Theory of Change



The program's implementation relied on a Making Markets Work for the Poor (M4P) approach that linked households to markets. Karamoja's elevated level of poverty and poor institutional capacity initially stymied the project, leading to a change in course to a hybrid approach that blended market facilitation with smart subsidies and training to jumpstart development. The program strengthened the livelihoods of men and women by introducing improved technologies and business development services. Aspiring entrepreneurs received grants and training, while community leaders were trained, and community organizations strengthened. Activities in each of these areas generated outputs attained over the life of the program (LOP). With peace has come improved food security, and dividends are being realized in livelihoods and to a lesser degree nutrition.

GHG also employed an adaptive management approach which prioritizes collaborating, learning and adapting (CLA) in reaching the program goal and objectives. GHG's management style relies on open dialogue inclusive of both staff and beneficiaries to design activities. This open feedback approach, combined with structured opportunities for reflection and learning, ensured that GHG strategies remain

relevant to the overarching goal and responsive to the changing dynamics in Karamoja. Impacts of the Adaptive Management Approach (AMA) are detailed in Section 4.6.

2.3 Targets and Intended Outcomes

GHG's activities for economic growth address improving productivity and market access for pastoralists, agriculturalists, and agro-pastoralists for both men and women. Women's empowerment is important to realizing these outcomes so that the whole household prospers as husbands and wives share responsibilities and decision-making. GHG also worked to improve the enabling environment for business growth through the development of financial services for individuals and businesses, as well as business forum growth. As household income increase, GHG emphasized that these funds should be spent on food, clean water, hygiene, preventive and curative medicine, a more diversified diet and better child care. GHG's economic activities were linked to nutrition and food security outcomes, so that more income leads to better health care, diversified diets, improved water and sanitation, and better access to information. At the same time, strengthened markets provide sustainable access to goods and services that are necessary for development. Together, the improved purchasing power at the household level and strengthened markets at the community level, strengthens the resilience of individuals, helping them to overcome recurring shocks and stresses, such as rain variability.

Improved crop and livestock production were GHG's primary livelihood areas. Crop and livestock interventions were based on introducing improved technologies and practices via agricultural extension workers (AEW), demonstration sites, lead farmers, and market linkages (see Box 2.2.). GHG aimed to increase the productivity of existing hectares in production by introducing best practices, e.g. improved seeds, etc. so as not to encourage converting virgin land into production, while also giving attention to reducing soil erosion, especially in higher rainfall areas. In more semi-arid areas, emphasis was on improving outputs from grazing systems, while improved animal health practices were applied throughout.

Box 2.2. Nutrition outcomes improve for mothers receiving agricultural extension for crops and livestock

The findings of the nutrition household survey found that children of mothers who reported receiving training from an agricultural extension workers (AEW) had an association with lower stunting, underweight and wasting compared to children of mothers who had not attended the ag trainings. The association was significant in predicting underweight and wasting of children when including all variables associated with underweight and wasting.

The program's second livelihood area focused on developing market access that further enhanced the household's ability to adopt improved technologies and benefit from the increased production. These interventions included storing crops in super grain bags (PIK) (double bags), supporting the commercial supply chain for seed, chemicals, drugs for livestock, and energy efficient stoves. GHG supported the supply chain by building the business capacity of producers, suppliers, and distributors and easing financial constraints through a credit guarantee program. The program also assisted livestock traders to find new buyers and effectively use market information, while food commodity retailers were assisted to stock and sell food when local supply was scarce.

The third target area for GHG's economic growth activities was business development services (BDS) and improved access to finance to advance new business ventures that expand opportunities for households and community development. GHG strengthened the capacity of business forums and SACCOs to provide new services and represent their members' needs. The enabling environment for business also needed to be improved to attract new investments. These business services and linkages have a high probability to

continue after the project ends based on the successful use of market facilitation programming with local actors.

GHG activities for improved nutrition adopted a Prevention of Malnutrition among Children Under Two Approach (PM2A). This USAID-endorsed approach acknowledges that prevention of malnutrition is more ethical and cost effective than treatment approaches. As such, the program focused on the mother-child dyad as the primary beneficiary, aiming to ensure adequate consumption and minimal exposure to disease during the 1,000 day window of growth opportunity. To do this, GHG improved access to quality maternal and child health care, improved consumption of nutritious food among the mother-child dyad through behavior change and food transfers, and reduced exposure to disease through water, sanitation and hygiene (WASH) programing.

To improve access to quality maternal and child health care, GHG used a facilitation approach focused on improved health governance through local government actors. At the beginning of the program, GHG and local government health teams identified shared goals and GHG supported the government to lead on improvements in support supervision of health facilities, strengthening of health unit management committees, and strengthening the information networks required to accurately measure facility performance. Following improvements, GHG invested in health access through improved infrastructure, increasing access to maternity wards, outpatient clinics and health staffing. Through GHG, Makerere University established a sustainable medical student placement process in the region, further bolstering access of improved human resources for health. Concurrent initiatives to encourage social accountability for health ensured that community members, particularly women and youth, had a voice in the governance of community health centers. Throughout all health and nutrition activities, GHG worked in effective partnership with the government health system, strengthening the government Village Health Team (VHT) capacities and placing them at the forefront of the link between communities and their health centers.

Behavior change initiatives aimed to improve maternal and child care practices, particularly complementary feeding and hygiene. GHG also worked to address the underlying issue of gender inequality which limited nutrition security at the household level. These activities were primarily implemented through peer learning behavior change platforms, often led by the VHTs. This included the Mother Care Group (MCG) approach targeting primarily caregivers (26,507 pregnant and lactating women and caregivers of children under two) and the Male Change Agent approach targeting fathers (4,190 men). Additional empowerment modules (business development, life skills, financial inclusion) were added on to a sub-set of MCGs. This empowerment module (MCG+ approach) reached more than 1,600 women. Behavior change and communication activities led to improvements in key behaviors such as antenatal and postnatal attendance, delivery at a health facility, immunization rates, exclusive breastfeeding, and complementary feeding. Similar gains were seen in gender inequality related behaviors, including workload sharing, shared decision-making, and gender based violence.

Box 2.3. Mother Care Groups Plus (+)

Children under 5 (CU5) whose mother was part of a MCG+ were less likely to be stunted and underweight compared to CU5 whose mothers who were in the standard MCGs. The association was significant for only underweight when including all the variables associated with stunting and underweight in the analysis. Mothers in MCG+ received business skills training, mentoring and small grants.

GHG also addresses diarrheal disease as a leading contributor to undernutrition within the region by improving WASH practices. With its partners, Whave and World Vision (WV), GHG promotes sustainable, clean water supply by engaging communities, local and district government departments and the private sector to install or rehabilitate and maintain boreholes. The GHG water program, as a public-private partnership business model, engages households, their water users committee (WUC), water service

providers (WSP), and the local government authorities. Communities learned to address their hygiene challenges through a community-led total sanitation (CLTS) approach with a goal of "open defecation free" (ODF) status. The expected impact is lower incidences of diarrheal diseases. The outcome is for a healthy environment which benefits both the households and the community.

In SO3, GHG actively supports youth-led community based organizations (YCBO) to improve their ability to effectively interface with government and their community to reduce the impact of harmful cultural practices and other issues that have traditionally marginalized youth in Karamoja. Youth groups and local government administrations (LGA) work together to identify conflicts before they fester out of control and mediate with all involved parties. These groups are also a model for demonstrating the benefits of gender equity. GHG supports youth groups to be leaders in behavior change. For Karamojong youth, being in a group is more enabling than facing challenges alone.

GHG supports the training of formal and informal governance structures: local councils (LCs), police, district peace committees (DPC) and area land committees (ALC). GHG works with its partner, Karamoja Peace and Development Agency (KAPDA), to strengthen formal and informal governance structures in conflict prevention and management, as well as, peace committees. MC's partner in Abim, AWOTID, supports land focal point volunteers, area land committees, and traditional structures to promote women's land rights and ownership. The expected outcome is that communities become more resilient to shocks from conflict, weather or other forces. Communities address issues through participation in open and secure dialogue to avert serious conflicts before they escalate out of control.

3. METHODOLOGY

The evaluation team collaborated closely with GHG in all phases of the evaluation to ensure that the findings would be actionable and useful to future programing in Karamoja and elsewhere. The evaluation approach was based on the principles of "Utilization-Focused Evaluation" developed by Michael Patton.[6] To build this collaborative relationship, the GHG Chief of Party (COP) formed a steering committee of key program staff who were available for one-on-one discussions with team members before, during and after the completion of the field work. The evaluation team engaged in a participatory approach with the steering committee. Initial discussions focused on key questions to be addressed to staff, partners and beneficiaries. From these early conversations, the team developed field guides (see Chapter 10). Team members reviewed program documents provided by Mercy Corps (see list in Chapter 8). Key research objectives for the evaluation team were defined by the steering committee as follows.

- Evaluate the appropriateness of the program objectives and theory of change (TOC), given the context of northern Karamoja, with attention to how interventions strengthened, or failed to strengthen, the capacities of Karamojong to respond to shocks and stresses
- Evaluate the impacts of program interventions in relation to the stated goals and objectives
- Collect best practices of the GHG Program to use for internal organizational learning and dissemination outside of Mercy Corps
- Identify how the GHG program supported the USAID DFAP overall objective
- Evaluate the application and utility of GHG's adaptive management approach
- Assess program sustainability based on four criteria: Capacity, Motivation, Linkages and Resources

The evaluation approach used mixed methods, both qualitative and quantitative, for data collection in the project areas of Karamoja.

3.1. Qualitative protocols

Survey guides (see Chapter 10) were prepared for interviews with GHG staff, partners, key stakeholders (government departments and associations), and beneficiaries for each of the three program components. For SO1, the team conducted focus group discussions (FGDs) with livestock keepers, butchers, and hide and skin traders, crop producers, village savings and loan associations (VSLAs), and key informant interviews (KIIs) with retailers of stoves, livestock producers of cattle and poultry. For SO2, women in Mother Care Groups (MCGs) and members of water, health and peace groups were interviewed. The interviews were conducted using an interview guide for either key informant interviews (KIIs) or focus group discussions (FGDs). For SO3, FGDs with representatives of youth-led community based organizations (YCBOs) and peace groups (PGs) were interviewed. KIIs with government officials in the local council (LC) offices were conducted on level of conflict and security.

3.2. Quantitative survey

The evaluation team, with MC's guidance and assistance, conducted a survey to better understand the relationship between GHG program interventions and the nutrition status of children under five (See Chapter 11). The initial plan was to have three groups of interviewees: women in MCG, women in MCG+ and a control group not in the program. However, because of limited time and the nearly full coverage of program activities within the focus districts, the control group was eliminated from the survey. The evaluation was conducted in the three GHG focal districts of Kaabong, Kotido and Abim and used a sample

[6] Patton, Michael. (2008). "Utilization-Focused Evaluation." 4th Edition. Sage Publishing.

size that allowed for comparison among the three districts but not within a district at the sub-county level because a larger sample size would have been required. The questionnaire was developed with the assistance of GHG's monitoring and evaluation (M&E) and health teams before the start of the field interviews.

The sample frame for the collection of quantitative data was a multi-level random sampling frame of mothers in two clusters: MCG and MCG+. From the total population of mothers in the 1000-day program in the three districts, a total of 1,373 mothers were selected. The proportion of mothers assigned to each group in each district was based on percent of the population of participating mothers to the total population for the three districts: In Abim there were 337 mothers in the standard MCGs as there are no MCG+ in the district. In Kaabong there were 326 mothers in MCGs and 135 mothers in MCG+. In Kotido there were 402 mothers in MCGs and 173 mothers in MCG+.

The evaluation team administered the survey from August 15th to September 9th in Kotido, Kaabong and Abim. Professional supervisors trained groups of enumerators in each district on the questionnaire, anthropometric measurements, and the use of hand-held tablets and phones for recording the information. Each training took two days and included a field pre-test of the survey by the enumerators to practice interviewing techniques and measuring children. The enumerators had prior experience conducting surveys and were paired with VHTs who knew the mothers and measuring methods. Children under five were measured for weight, height and mid–upper arm circumference (MUAC). The mother's health was not evaluated during the interviews. The village health team (VHT) technicians notified randomly chosen mothers to come to a central spot near their homes on a scheduled day and time. Mothers brought their children and the health cards for each child. The interview took approximately 30 minutes per mother with one child.

At the end of each day, the survey supervisor, upon the team's return to the Mercy Corps (MC) offices, reviewed the data and then uploaded the information to the ODK website. The nutritionist and biostatistician on the team analyzed the raw data using STATA version 14 statistical software. The key nutritional measures taken of the child were height, weight and MUAC scores as indicators of stunting, wasting and undernutrition. Each mother provided the child's health card to determine the child's age. The analysis focused on those variables found to have an association to the nutrition outcomes of wasting, stunting and undernutrition.

3.3. Limitations of methodology in conducting the evaluation

The evaluation was a rapid assessment of GHG activities. The evaluation team met a cross-section of stakeholders and beneficiaries, but had limited time to cover three districts (Abim, Kaabong, and Kotido). The household nutrition survey (HNS) was not a randomized control treatment (RCT) but rather included women in the Mother Care Groups (MCG) and Mother Care Groups Plus (MCG+) receiving GHG interventions and did not include women outside the GHG sphere of influence. The survey results are correlations and not causation with general development.

4. RESULTS

4.1. Project Objectives

The GHG program has made progress towards improved food security, with 50% of households now self-reporting that they are food secure, versus only 18% in GHG's baseline. GHG is producing positive results in project performance with 36 out of 40 indicator performance management tracking table (IPTT) indicators met or exceeded (90%) over the life of the program. At the end of year 5, GHG provided assistance to 375,815 people. [7]

The survey questions for undernutrition included anthropometric measurements of the child's height, weight, mid-arm circumference (MUAC), and age based on health center chart. The undernutrition figures for the region remain stubbornly high, yet stable. Prevalence of stunting (43%), underweight (33%) and wasting (13%) are captured in the household nutrition survey (HNS), these results align with the bi-annual WFP conducted Food Security Nutrition Assessment reports from the sub-region. However, during the five years of implementation, there was an overall decrease in food aid to the region and several communities experienced drought; holding all else constant, this would normally precipitate a jump in undernutrition, not the experienced stable outcomes, suggesting that the community is becoming less reliant on food aid and more resilient to shocks and stresses. Survey analysis indicates that **children in households with greater engagement with GHG interventions are less likely to be stunted or underweight** as compared to their peers. This suggests that GHG has contributed to the stabilization, and not backsliding, of nutrition in the region; the counterfactual being that **undernutrition would be worse in the region if not for the impact of the GHG program**. To test this hypothesis, evaluators created an engagement index, measuring intensity of program interventions by grouping respondents by high to low exposure to GHG supported interventions (see Box 4.1).

Box 4.1. Variables included in the engagement index

1. MCG+ membership
2. Redeemed a seed voucher
3. Received agriculture training
4. Membership with SACCO or VSLA
5. Market Access – based on number of markets in proximity
6. Purchased goods from an agrodealer
7. Received advice from an ag. extension worker
8. Purchased animal health drugs
9. Received advice from a CAHW
10. Engaged in IGAs

The distribution of engagement scores shows that the majority of the mothers surveyed were engaged with some, but not all GHG interventions. (Figure 4.1.) The highest level of engagement was a score of 80, and few mothers were in the top range of engagement scores of 70 to 80 percent (less than 20 mothers). Results show that the more engaged a mother is in GHG activities then the lower the level of stunting, wasting and underweight her children experienced. The findings are statistically significant for explaining stunting and underweight (Table 4.1). The p-values for the engagement score indicate that it is significantly associated with the stunting (p=.007) and underweight (p=.007) status of a child. Children from high engagement families are overall <u>less likely</u> to be stunted and underweight and as compared to those from the low engagement group. For the wasting indicator of the children, there was not a statistical difference between women's engagement in GHG activities and the wasting of the child (p=.116).

[7] GHG (2017) "Indicator, Performance Tracking Table." Mercy Corps, January 2018

Figure 4.1. Mothers' level of engagement with GHG's interventions

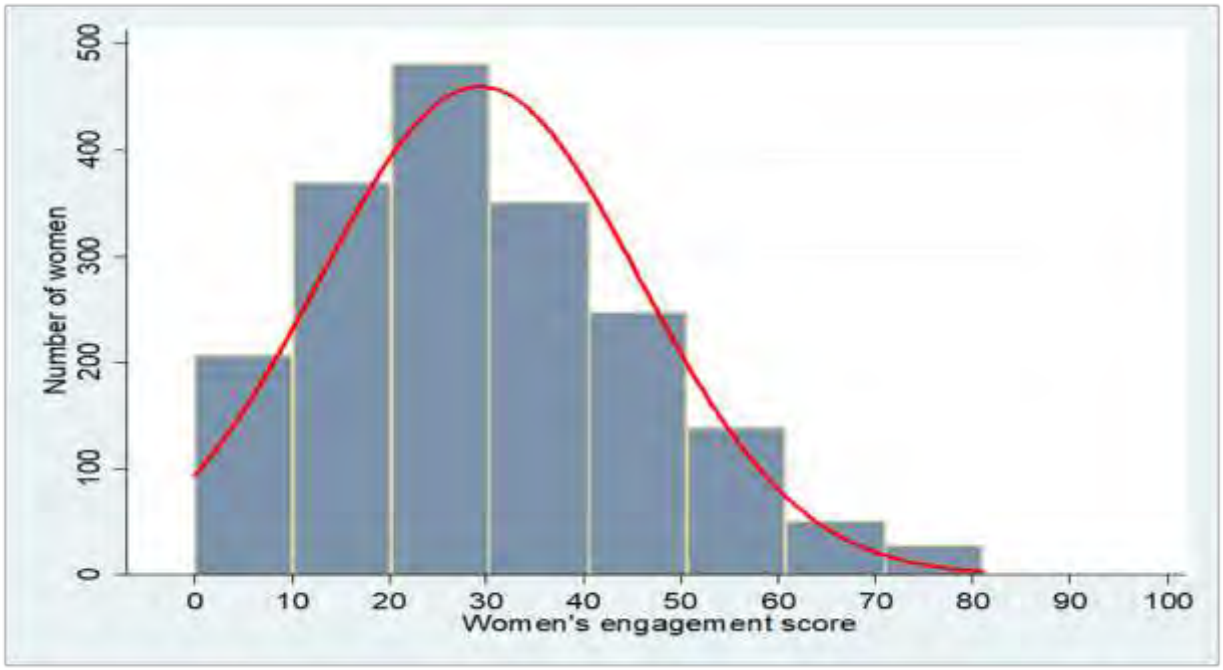


Table 4.1. Association between engagement index and nutrition outcomes.

	Engagement score	N	Stunted n (%)	Unadjusted PR (95%CI)	p-value
Stunted	Very low	1,408	629 (44.5)	1	0.007*
	Low	385	160 (41.6)	0.88 (0.70-1.11)	
	Medium	68	22 (32.4)	0.59 (0.35-0.99)	
	High	13	1 (7.7)	0.10 (0.01-0.80)	
	Total	1874	812 (43.3)		
		N	**Underweight n (%)**		
Underweight	Very low	1,408	494 (35.1)	1	0.007*
	Low	385	111 (28.8)	0.75 (0.58-0.96)	
	Medium	68	13 (19.1)	0.44 (0.24-0.81)	
	High	13	4 (30.8)	0.82 (0.25-2.69)	
	Total	1,874	622 (33.2)		
		N	**Wasted n (%)**		
Wasted	Very low	1,408	195 (13.9)	1	0.116
	Low	385	52 (13.5)	0.97 (0.69-1.35)	
	Medium	68	3 (4.4)	0.29 (0.09-0.92)	
	High	13	2 (15.4)	1.13 (0.25-5.14)	
	Total	1,874	252 (13.4)		

Combined qualitative and quantitative evidence indicates beneficiaries are better off than at the start of the project and have increased economic activities (agriculture and livestock inputs and services, economic empowerment), improved health and WASH facilities, and improved peace and security in the Karamoja region. The overall level of poverty and undernutrition are still high; however, with continued peace, nutrition and economic growth programming, the prospects are good for further development.

4.2. SO1. Livelihoods Strengthened

GHG was able to successfully improve vulnerable families' ability to produce their own food (crops, vegetables, milk and eggs) and to increase their incomes from livestock and crop sales, which they use to purchase food when home-production is not enough. GHG helped farmers apply improved production technologies to 12,674 hectare (HA) over the life of the program, with double and triple food production per HA, depending on the specific technologies adopted. Families also adopted improved animal health practices that enabled them to expand their herds and begin to engage in commercial livestock activities.

Box 4.2. Agricultural Seed Sales Soar

Producers place a high value on the inputs supplied through GHG's assistance. Purchases of improved quality seed (maize, sorghum, bean and legumes) are expected to increase food production for Karamoja farmers. Farmers see the benefits in demonstration plots and then plant improved seeds to their fields. In 2015, there was only 3 MT of improved seed sold in northern Karamoja. Now in 2017, farmers purchased with e-vouchers 591 MT of seed which was used to plant 27,526 acres of improved seed. Demand is growing for improved seed supplied by private agrodealers and their agents. The trust in the agrodealer network is increasing as producers and dealers are satisfied with the arrangements.

Data from the quantitative evaluation revealed that exposure to GHG's livelihood interventions significantly reduced the odds of undernutrition among children under five. Specifically, exposure to agriculture training reduced the odds of wasting and underweight status, likely due to improved agriculture productivity that increased crop sales and the availability of home food stores. Similarly, exposure to Community Animal Health Workers (CAHW) reduced the odds of child underweight status. Research from the Karamoja STRESS Analysis indicates that livestock health can play a significant role in household and individual resilience. Qualitative data among program participants indicated that the presence of healthy livestock increased opportunities for home consumption of nutrient dense animal source foods, as well as helped mitigate shocks, such as health emergencies, through the availability of animals to sell, ultimately reducing negative impacts on food security.

The survey results found the strongest link between financial services and nutrition status. Children from households with a parent engaged in a SACCO or VSLA were less likely to be stunted, underweight, or wasted than their peers. There were several pathways in which many of the caregivers linked savings and credit to food security. Access to savings and credit groups allowed these households to have a higher level of economic activity, with participants using credit to engage in income generating activities, such as livestock fattening or small-scale trade. Beneficiaries noted that the profits of these enterprises are reinvested in the household, not only for food purchase, but for other long-term nutrition-sensitive assets, such as ox-ploughs and school fees for children. Agness Alany, a savings participant through the MCG+ approach summed it up by saying:

> "Before I joined the group, I did not know the benefits of savings. I tried business in the past but failed because I sold on credit. I was not able to feed my family and had issues with my husband. My life changed when I joined the VSLA. I borrowed 300,000 shillings from the group savings. I

used it to start selling cooking oil and sim-sim (sesame). In one month, I was able to get profit of 60,000 UGX (~US$17) which I used for saving, feeding my family, and buying school supplies and a uniform for my son. My husband also joined a saving group in Kotido Town after realizing the benefits of savings to our family."

4.2.1. IR.1.1. Increase production, productivity and market access

GHG has played the role of market facilitator by linking together private sector actors along various value chains, and building their capacity to be effective market participants. In the crop value chain, GHG linked farmers to village agents and agrodealers, who were in turn linked to input supply companies. The private sector supply of quality seed has boosted crop yields and increased overall production (see box 4.2.). New varieties of traditionally grown crops (sorghum, bean, groundnut and some maize) reduce risks from climate change and variations in rainfall by maturing faster. Farmers liked the new crops, such as the orange flesh sweet potatoes (OFSP), which GHG introduced and are highly preferred for their taste (See Box 4.3.). Children like the color and taste, too. In visits to manyattas, the assessment team observed household gardens planted with sweet potatoes and sunflowers, which are traditionally not widely grown. Both crops can be preserved to provide food for the family into the long dry season. Overall, 50,169 farmers (52% women), adopted improved agricultural and management practices (IPTT #9) during the life of the project (LOP).

Box 4.3. Lead Farmers (LFs) and demo plots for new crop varieties

GHG established 120 demo plots with LFs (76 males, 44 females). Plots are for testing seed varieties (such as OFSP) and demonstrating improved agronomic practices. GHG trained 21,767 farmers (65% women) who then cultivated 11,097 HA using improved technologies or management practices. Women managed 58% of the crop area.

GHG supported the supplier-to-buyer network of agricultural inputs by reducing agrodealers' need for working capital (through supplier credit), while also reducing the suppliers' risk by guaranteeing 60% of the account value so the wholesale suppliers will not suffer complete losses from any defaults. This arrangement built trust along the supply chain and enabled the agrodealers to stock larger quantities, so they experienced fewer stock outs. In its final year of operation, GHG guaranteed over $150,000 of credit accounts and experienced no defaults. The value chain for agricultural and livestock inputs has improved benefiting producers and improving the availability of food, with women as the major buyers of agricultural inputs.

With an absence of government-sponsored extension services in Karamoja, GHG sponsored agricultural extension agents (AEWs) in each sub-county to provide monthly training to farmers. This training has had a positive impact on households, increasing the volume and variety of their production of cereals, tubers, legumes and vegetables using improved practices. Demonstration plots (Box 4.3.) contributed to the increasing demand for improved seed varieties and plant materials, having positive direct and indirect impacts on agricultural production. Producers are increasing their demand for improved seeds. The outreach program is meeting a demand for free agricultural services. These demonstration plots on farmers' land are extremely effective for the dissemination of new crop varieties and improved practices. The extension agents trained over 13,000 farmers (68% women) who then share information with and influence their neighbors who are not direct GHG beneficiaries. Training by AEWs in post-harvest preservation of legumes, cereals and vegetables provides food for the long dry season. As noted, receiving training from a GHG's AEW had a significant positive correlation with improved nutrition outcomes of children under the age of five.

Livestock health activities, particularly the use of preventive treatments, are also important for household food supply. Livestock ownership also had a significant positive correlation with the improved nutrition outcomes of children under the age of five. Improving livestock health services is key to transforming Karamoja into a major livestock production region. GHG introduced preventive treatments to herders through a gradual cost-share activity that started with acaricides (to prevent tick borne diseases) and then transitioned to introducing dewormers (to prevent parasites) to herders that were purchasing acaricides at full market price (Box 4.4.). These drugs reduce livestock mortality and improve livestock productivity. GHG and its livestock advisors introduced a whole herd health program in partnership with CAHWs who provide the fee-based services. CAHWs have struggled to grow their businesses in Karamoja due to free drugs provided by the government and some NGOs. Producers must be encouraged to pay for drugs and services. The District Veterinary Officers (DVO) support the role that CAHWs play in the livestock health system. It would be worthwhile if the DVO supports more women as CAHWs since GHG has begun training women as animal health workers.

Box 4.4. Livestock Health Improves

MC supported agro-vet shops to supply quality acaricides for control of ticks. Producers now purchase 4,200 units annually. As an incentive for paying full-price for the acaricides, a producer received a sample dewormer medicine for free.

Savings and Credit Cooperatives (SACCOs) received support to build their capacity to provide financial services to producers, local traders, and processors/wholesalers. Producers access the largest amount of loans. The number of loans provided increased from 120 in FY14 to 1,630 loans in FY17 (IPTT #14). This result is important because producers require credit to adopt new agricultural technologies. In field interviews, women in the Mother Care Groups Plus (MCG+), butchers, and hides and skins traders mentioned accessing their village savings and loan associations (VSLA) for loans. The VSLA offers opportunities for women to save money and then draw out these funds to help their family cope during the hunger season, as well as to start small business activities, such as goat slaughtering, or buy agricultural inputs.

4.2.1.1. Gender analysis

GHG recognized that female and male farmers have unique needs, priorities and constraints and that agriculture and livestock are highly gendered domains. Men in Karamoja are typically responsible for livestock rearing, and are highly mobile, while women are typically responsible for agriculture and are more sedentary. [8] With the loss of livestock during the conflict period, and increased peace allowing for greater mobility to fertile areas, the burden of food production through agriculture increased and largely fell to women.[9] GHG aimed to reduce these gender inequalities by challenging livelihood norms and working with retailers and extension workers to pilot female-friendly goods and services. This proactive initiative yielded considerable results. The number of women and men applying improved agricultural technologies as a result of GHG assistance is 25,884 women and 24,285 men, respectively. Most of the technologies were in crop genetics, livestock, and post-harvest technologies. Farmers applied these technologies on 12,674 HA, of which 66% were managed by women.

Through the work of MCAs and empowerment programs for women, GHG was also able to see a shift in gender norms around livelihoods, as captured in the GHG Gender Behavior Change Impact Assessment. The first major improvement was in shared decision-making, with a significant increase in involvement of

[8] Tufts Feinstein International Center, *Gender Assessment for Karamoja*, Mercy Corps, USAID
[9] STRESS Assessment, Mercy Corps, USAID

women in decision-making. A large percentage of women in GHG intervention areas said they influence decisions regarding purchase of farm inputs, such as which seeds to plant. Men said women have more influence over the purchase of farm inputs, and men said they are more involved in farm labor activities, such as land preparation. It is critical that this remain an area of focus for implementing partners so that improvements in livelihoods are leveraged to reduce, not exacerbate, gender inequality.

4.2.1.2. Gap analysis

The gap in food production, especially of nutrient dense foods, during the long dry season continues to be a persistent issue for households. Production needs to increase for virtually all food sources including food grains (sorghum, millet and maize), oilseed (sunflower and soybeans), legumes (beans, lentils, cowpeas and groundnuts), vegetables (assorted) and livestock (cattle, shoats and poultry). The increase in production needs to come from expanded use of cost-decreasing technologies that increase yields thereby leading to a decreased per unit cost of production. Increased food production will contribute to a net increase in regional income. A substantial part of that additional income will be spent by producers on food and nonagricultural commodities. This creates a multiplier effect of the money through local businesses which in turn will increase non-farm rural employment in the local economy.

The increase in production will require intensification, for example more production per unit of land thereby reducing the need to open virgin land that is best used for livestock. The current gap is the increased use of agricultural inputs (seed, organic and inorganic fertilizer, chemicals, natural crop treatments, veterinary medicines and vaccines, and irrigation), suitable farm machinery and equipment, and necessary post-harvest technologies. The increased demand for agricultural inputs and services will result in greater profits for local businesses.

With increased crop production, comes the need for crop protection. Farmers complained about the onset of army worms attacking their crops, and they said there was little they could do to mitigate the impact. Extension workers, agrodealers and government officers lack the capacity to deal with sudden pest outbreaks. These challenges need further attention by implementing partners in crop protection activities, e.g. how to monitor, identify and treat pests. The implementing partners can explore areas like bio-pesticides produced from local plants, e.g. leaves of the Neem tree which the implementing partners promoted for control of pests. Post- harvest losses are also too high and require continued attention from implementing partners.

4.2.2. IR.1.2. Interventions to stabilize the business investment environment and accelerate market growth

Karamoja is the only region in Uganda that does not have a Chamber of Commerce. GHG focused on establishing District-level Business Forums that now have 514 members, 65% of whom are women. Each forum has its own charter and objectives, but their main thrust is to represent and advocate for their members, while also providing business services such as photocopy services, business development training, and others. The goal is for the business forums to join into the Karamoja Chamber of Commerce. The forums' activities have positively influenced the local investment environment, created synergies for business growth and linkages, and markets for improved livelihoods in Karamoja. The forums have developed close relationships with local government, in some instances including sharing office space. GHG has already observed that the forums are taking their role seriously by identifying and advocating for their members' interests, and that local government is open to their suggestions. While the forums are relatively new, they have the potential to improve the business enabling environment. GHG has provided

a broad range of support activities for them over the past three years aimed at improving their effectiveness and sustainability.[10]

GHG worked with seven existing savings and credit cooperatives (SACCOs) in the three districts, two of which were women-owed. The SACCOs had savings and loan portfolios of $10,000 and $5,000 respectively, at the beginning of the GHG program but were not fully functional. In the final year of GHG, 7,026 beneficiaries transacted at the four remaining SACCOs (the other three SACCOs were dropped for poor performance), and as a result 1,377 loans worth Ugx 692,292,900 (US$206,655) were disbursed with cumulative deposits of Ugx 1,898,383,083 (US$566,682). The two women led SACCOs were St. Monica in Kaabong and Kitogogong in Kotido; but as GHG closes, only Kitogogong remains functional. Five SACCOs were linked to MTN Mobile Money and these include: THUR, Kamukoi, Kitogogong, St Monica and Lotuke and thus the figure reflected of Ugx 844 million (US$251,940) is for the withdrawals and deposits going through the SACCOs attracting commission fees at the end of the month.

Households benefit when they generate more on-farm production, more off-farm income and have access to markets as a conducive business environment. Because men are predominantly livestock herders, women have taken advantage of self-retail trade and value-added production, e.g brewing (See Box 4.5.). GHG has improved the investment environment by stimulating the markets without distorting the market with free inputs. The use of subsidies has been effective in building demand. Household investments in food production have resulted in increased food security.

Box 4.5. Women's Sources of Income

- Livestock = 4.4% (Abim)
- Agriculture = 32.9% (Kaabong highest)
- Charcoal making, brewing, firewood sale =51.2% (highest Kotido)
- Remittances from outside village =6% (Kotido)
- Other sources = 5.4%

Source: Mercy Corps data from HNS.

GHG supported 1,128 businesses with business development services (BDS) in northern Karamoja's business community (IPTT #16). Women are prime beneficiaries of trainings in business skills (37% of businesses receiving BDS were women-owned). Implementing partners developed a five-step approach to stimulating private sector investment for women, called "POP" or Power of the Purse, in the agriculture and financial services sectors (See Box 4.6.). This involved consumer and business level research aimed at leveraging market information and behaviour change strategies to facilitate gender sensitive business growth. Based on field interviews, the POP pilot program was a successful intervention. Trainees received consultations with agribusiness specialists and gained access to credit from village savings and loan associations (VSLA).

Box 4.6. Good Market Access Impacts Household Nutrition

Findings of the HNS indicate that women who have market access have improved nutrition outcomes of their children. The association with underweight score was statistically significant. Market access means that women can engage in petty trade, earn income and buy food and services for their family.

GHG's interventions are improving the business environment for women entrepreneurs through support to the local business forums. Sixty-five percent of forum members are women (IPTT #19). New entrepreneurs also received support in non-agricultural enterprises like stove retailing, renewable energy briquette making, hair salons, crafts, and bakeries. The focus of the training is market-led and highly appreciated by beneficiaries.

[10] Mercy Corps. "Annual report for USAID's GHG project." USAID/Uganda. Kampala.

GHG supported the development of several market infrastructures to stimulate specific markets and value chains. GHG constructed livestock markets in Kaabong and Kotido, a food market in Kotido, and a slaughter house in Kotido town council. For the livestock value chain, GHG also strengthened the Kotido Butchers and Meat Handlers Association which now operates the Kotido slaughter house and a network of small butcher shops. While livestock production is dominated by men, poultry production is dominated by women. GHG promoted improved poultry production in recognition that most women own poultry, introducing a hybrid poultry breed (Kuroiler) for improved meat and egg production, particularly in peri-urban areas. GHG also supported rural women with local poultry breeds to vaccinate their poultry against Newcastle Disease. Demand for local feed can create a market opportunity for private suppliers. These investments have positive impacts for the local economy which stimulates further private investments in the livestock value chain.

Because of the vulnerability of the area to weather-related shocks, GHG conducted trainings in early warning reporting (EWR) for disaster preparation by communities and government departments centered around livestock production. EWRs are in place in 54 communities which is 200% of the target over the LOA. The local district government offices are partners in the program, and 271 people trained (86% of the target); and though some were female (69 women), they either did not attend for personal reasons or were replaced with male representatives (IPTT #22). Even with training by GHG, women can be pushed aside in a male-dominated society.

4.2.2.1. Gender analysis

Women face many obstacles preventing them from realizing their power as consumers. Women are known to invest a large portion of their earned income back into the household. During the planting season, women can spend more money on agricultural inputs than buying food supplies for their family. However, markets can be unfavorable for women's participation, reinforcing structural inequalities and uneven access to resources and opportunities. Women undertake hard physical labor in the agricultural plots and gardens and conduct the majority of household tasks such as childcare and maintaining the home, leaving limited time for business ventures. GHG addressed the issue head-on promoting greater engagement by men working as couples (see Box 4.7.).

Box 4.7. Gender Awareness Campaign

MC integrated a gender awareness campaign with the seed voucher program by distributing 19,000 stickers promoting the concept of "couples working together can achieve better crop yields." Community leaders and agrodealers passed out the stickers. Male Change Agents reinforced the messages. Gender training was also provided to key stakeholders like CAHWs, community leaders and agriculture extension agents.

GHG designed the Power of the Purse (POP) to develop and test a Women's Economic Empowerment (WEE) approach to addressing gender dynamics within MSD programs. The goal was to push retailers to increase business investment in women and girls and to generate a win-win situation for businesses, their customers and the communities they serve. POP has five distinct phases: (1) research to prove women's spending power; (2) identify sectors where women have the most spending power; (3) conduct business and consumer-level research making the economic case for investing in women as consumers using the research findings; (4) one-on-one coaching with businesses to improve the gender sensitivity of their product and service offering; and (5) a post-pilot assessment to measure impact. The project uncovered several lessons learned. Initial research into the agricultural sector shows that women's financial constraints are a barrier to the purchase of improved, certified seed. Retailers adopted discount promotions to address price sensitivities that could inhibit purchase. However, follow-up assessments revealed that price continued to limit seed uptake, even with discounts. This suggests that female customers' capital constraints were a much greater impediment than anticipated because women have few sources of income. Their

earnings are frequently used to meet household emergencies, which prevents the accumulation of capital needed to make farm-related investments at the start of the season. Also, female-oriented marketing and promotions will have limited impact if fundamental systems constraints are not also addressed such as information about product use and weather patterns. For female-oriented marketing and sales strategies to meet their full potential, retailers should consider investing time and resources into enabling women's access to information, in addition to seeds, and to seeking support in addressing systems deficits.

MC engaged retailers to see the value of women consumers with both "push" – outreach through POP (including women friendly savings groups) and "pull" – targeted subsidies to women to purchase agricultural inputs. MC increased opportunities for women to become active entrepreneurs through targeted trainings with MCG+ on poultry production, and networking within the business forum platform. MC invested in women as consumers in one-on-one coaching to improve gender sensitivity of their product and service offerings. The POP program was an eighteen-month trial, so too short to see significant impact, but the indication is that market systems can be catalyzed to benefit women and girls.

Another constraint facing women in their effort to be an income earner is that men will be absent from the household caring for their livestock. The absence of men falls heavily on women who are left to maintain the household, produce food, and generate income. GHG's efforts to promotes labor-saving technologies (agricultural machinery, and energy efficient stoves and briquettes) can free up women from tedious and time-consuming work to earn more income

4.2.2.2. Gap analysis

The local business environment remains weak, partly reflected in the overall business confidence remaining at around 65.9% since the start of the project (IIPT #18). Evidence of this is SACCO loans distributed mainly to agriculture producers and less to traders, processors and wholesalers; however, in 2017 (Y5) the numbers have flipped with the largest volume of loans to wholesalers and processors (US$103,000) (See IPTT #12). The demand for goods and services, as well as the creation of new business opportunities outside of traditional agricultural and livestock production remains flat. Investments are needed to increase agriculture and non-agriculture rural employment to stimulate economic growth and create job opportunities.

4.3. SO2. Health and Nutrition

Under SO2, GHG saw significant gains in access to quality health care, home consumption of nutritious foods, practice of health behaviors, as well as reductions in diarrheal disease. These intertwined results proved protective against undernutrition. The survey results found statistically significant relationships between SO2 program interventions and undernutrition status of children under five. Despite progress, much remains to be done given the high overall prevalence of stunting (43%), underweight (33%) and wasting (13%) captured in the household nutrition survey (HNS) for the final evaluation.

4.3.1. IR.2.1. Increased access to quality maternal and child health care improved

To improve access to quality maternal and child health and nutrition (MCHN) services, the GHG program focused on sustainable interventions that would improve the governance of health resources and mitigate core constraints to health delivery (infrastructure, staff and equipment). This was a strategic decision to limit the focus of health systems strengthening activities, as several implementing partners were working on complementary initiatives from within the health system (Baylor University in USA addressing supply chain and delivery of obstetric/neonatal care, WFP/UNICEF partners addressing nutrition counseling and CMAM/SAM services, etc.). GHG conducted health governance initiatives in partnership with District Health Technical (DHTs) teams, ensuring government capacity to lead these initiatives as the program

advanced. Initially, GHG and the district administrations set up a performance-based financing approach, in which GHG and the Districts worked together to establish goals for improved governance. This included strengthening district led support supervision to lower level facilities, improving the quality and timeliness of submitted health reports to the national Health Management Information System (HMIS), and the reconstitution of Health Unit Management Committees (HUMCs) (see Box 4.8.). Districts subsequently improved their data collection achieving over 85% accuracy, timeliness, and completeness of HMIS data in the year after the initiative started. Similarly, all 64 public health facilities in the region had a reconstituted HUMC by 2014.

To strengthen community involvement in the health accountability process, GHG implemented a Citizen Report Card (CRC) involving HUMC leadership, health facility staff, and community representatives to dialogue on health challenges, discuss patient health rights, and create action plans for improvements. Over 4,100 people attended the dialogues. CRC action plans resulted in government and/or community funding of solar lighting systems at two health centers, construction of three pit latrines, deployment of qualified staff to five health facilities, renovation of an out-patient clinic, money toward a borehole at Apalopama HCII, and fencing, among a few of the projects completed. By creating a collaborative relationship, the CRC approach was effective in having local government agencies and communities working together and holding each other accountable for improved community health services.

Box 4.8. Building trust between District Health Office (DHO) and HUMCs

The DHO receives health data from the HFs monthly. The DHO compiles the information and transmits it to the national office. The DHO has instructed the staff to share the DHMIS data with the HUMC on the performance of their HF. This type of engagement creates deeper understanding and trust between the DHO, HUMCs and local communities.

Improved governance can only do so much when health facilities, staff and equipment are not available. To address these core constraints, GHG constructed 14 health structures with required waste management facilities such as incinerators and placenta pits, improving health access for 84,506 women of reproductive age. To further improve quality health services, GHG also provided vital health equipment for these facilities such items as delivery beds, instrument sets for delivery, patient beds, stethoscopes, resuscitators and scales.

To sustainably address human resource gaps, GHG staff arranged for students at the medical university to participate in an internship program. GHG brought together Makerere University and the District Health Office to host medical student interns with project support in the beginning, but support phased out in 2016. All districts signed permanent partnership agreements with the University and sustainably moved forward without the support of GHG in 2017. Throughout the life of GHG, 92 students participated in six rounds of placements, contributing thousands of hours of care to the Karamojong population and most interns have expressed their desire to apply for full time positions in Karamoja upon graduation.

4.3.1.1. Gender analysis

Access to healthcare in the region is a gendered issue, with the GHG barrier analysis finding that antenatal care attendance and facility delivery are impacted by the support provided by the husband, or lack thereof. GHG addressed this through behavior change campaigns (BCC) targeted at the household and community level. MCAs worked to influence husbands to support women's healthcare. The project used video dialogues to influence key opinion leaders (mothers, fathers, elders and religious leaders) on the husband's role in child care and support to the woman to seek regular health care during and after pregnancy. This resulted in improvements in decision making on health care access. Women in communities with MCGs and MCAs were more likely than their peers in other areas to have greater control over decision making on when to purchase drugs and other personal healthcare choices. Furthermore, women in these areas were

39% more likely to have control over family planning and child spacing than peers without these interventions. These are significant steps to ensure that progress in quality health care access is for all people, regardless of gender.

4.3.1.2. Gap analysis

While the capacity of districts to provide quality care to constituents improved with GHG interventions, more needs to be done. CRC dialogues helped resolve several accountability issues at the facility level; however, challenges remain in ensuring effective management of funds and other resources. This could partially be improved by increased policy clarity regarding the supervision responsibilities of sub-county authorities, especially regarding HUMC oversight. Additionally, severe understaffing of technical positions at public facilities remains a serious challenge. Implementing partners will need to engage regional and national stakeholders to address these gaps.

4.3.2. IR.2.2. Increased consumption of nutritious foods by household

GHG targeted efforts to improve consumption of nutritious food during the 1,000 day window, reaching pregnant and lactating women (PLW) and caregivers of children under two (CU2) to maximize impacts (see Box 4.9.). GHG integrated interventions so that households that received supplementary food also received behavior change messages around key topics like infant and young child feeding (IYCF) (see Box 4.10. on training modules). and received capacity building to improve food production capacity and buying power. This was critical to help households make the jump from knowing the correct behavior to being able to practice and maintain the correct behavior. The primary behavior change interventions were the MCG approach (reaching 24,056 women), the MCA approach (reaching more than 800 men), and community dialogues. These activities made considerable progress across a range of nutrition behaviors. The 2016 MCG impact evaluation (see page 21 in that report) found that the majority of MCG behavior change program targets had been met for mothers with children 0 to under 6 months (77% of indicators met).[11] For example,

Box 4.9. MCGs Spring to Life

GHG originally started MCGs in areas with food distributions in line with PM2A guidance but expanded care groups to cover all sub-counties in 2016 due to their success in creating behavior change among women and caregivers of children under two. Under GHG, 231 MCG reach 2,470 leader mothers and a network of 21,586 neighbor women with monthly lifesaving behavior change messages.

- 87% of mothers of children under 6 months reported attending 4 antenatal care visits during their pregnancy,
- 92% reported delivery at facility, 88% reported exclusive breastfeeding, and 89% reported attending regular growth monitoring and promotion.

Comparable results were seen among mothers of children 6-23 months (meeting 71% of indicators), with

[11] Tidwell, B. and T. Davis. (2016). "Growth, Health and Governance Program – Kotido, Kaabong and Abim Districts, Karamoja, Uganda. Mercy Corps and World Vision.

- 99% of mothers reporting seeking care for episodes of child diarrhea,
- 81% reporting a tippy tap in the household,
- 93% reporting the child slept under a bed net, and
- 84% reporting presence of a kitchen garden.

Box 4.10. MCG Curricula Module 3

Essential Nutrition, Hygiene and Care during Infancy

1. Exclusive Breastfeeding
2. Proper positioning & attachment to the breast
3. Increasing breast milk supply
4. Complementary feeding- children <1 yr
5. Complementary feeding- children 1-2 yrs
6. Hygienic food preparation and handling
7. Danger signs during childhood illness
8. Feeding during illness
9. Signs of Undernutrition
10. Growth Monitoring Nutritious Porridge Recipe

Source: GHG-FY5-Qtr#1, Oct.-Dec. 2016.

GHG made significant gains in improving dietary diversity and meal frequency for CU2. Quantitative survey results show that dietary diversity status is a statistically significant predictor of stunting, wasting and undernutrition in line with findings from other contexts. Both the MCG Evaluation and this study's quantitative evaluation reveal that the prevalence of Minimum Acceptable Diet (MAD) is near 58% (MCG Evaluation) and 47% (this evaluation). These evaluations tested a sub-sample of GHG intervention groups. MAD was recorded at 2.1% during the population based survey at baseline.[12] It is likely these numbers are slightly inflated due to respondent bias, but that the overall figure is so significantly above baseline and in line with trends of improved food security it represents progress in adequate consumption of food. Unsurprisingly, women receiving additional life skills and business development support through MCG+ were less likely to have undernourished children than women in standard MCGs.

Table 4.2. Association between Nutritional status and MAD and MDD score by MCG and MCG+

	MCG		MCG+		Total		p-value
	N.	col%	N.	col%	N.	col%	
DDS							
Less than 4 food groups	357	59.8	61	44.2	418	56.9	0.001*
More than 4 food groups	240	40.2	77	55.8	317	43.1	
Total	597	100	138	100	735	100	
MAD							
Did not receive MAD	240	65.8	39	48.75	279	62.7	0.093
Received MAD	125	**34.2**	41	**51.25**	166	**37.3**	
Total	365	100	80	100	445	100	

Source. Mercy Corps, Household Nutrition Survey, 2017.

Male change agents (MCAs) were also able to impact significant change around the gender norms related to nutrition, particularly sexual and reproductive health. Karamoja has some of the highest fertility rates in Uganda with the lowest demand for family planning.[13] Poor birth spacing is common, and GHG's Barrier Analysis identified male engagement as a critical predictor of contraceptive use. While considerable work

[12] ICF International. (2014). "Baseline Study of Title II Development Food Assistance Programs in Uganda." Contract #:AID-OAA-M-12-00009. Washington, D.C.
[13] Uganda Bureau of Statistics. (2017). Uganda Demographic and Health Survey 2016 – Key Indicator Report." Government of Uganda. Kamapala, Uganda.

remains in this area, GHG was able to hasten progress. As captured in the Gender Behavior Change Impact evaluation, women in communities with MCAs were more likely than their peers to decide together with their partner the ideal family size (32% more likely) and have control over the decision to use family planning methods (39% more likely).

In 2016, GHG pivoted to deepen the integration of women's economic empowerment with SO2, resulting in the introduction of the MCG+ model (see Box 4.11.). MCG+ layered additional training onto the MCG model, providing mentor-led trainings using the Savings with a Purpose (SWAP) module on life skills (communication, negotiation, leadership, etc.), business development (business planning, marketing, budgeting, etc.) and access to financial services (savings and credit through VSLAs and small capital grants). The VSLA empowers women by increasing their access and control over savings and credit.

Box 4.11. Being in a MCG+ boosts child's nutrition status

If a mother is in a MCG+, her children are less likely to be stunted and underweight. In further analysis with other variables associated with underweight, belonging to a MCG+ is a significant predictor of better nutrition.

The final evaluation quantitative household nutrition survey (HNS) reveals that this more intensive, integrated model of support is more protective against underweight than the normal care group approach (health and nutrition messages only). Children (CU5) whose mothers were in the MCG+ were less likely to be stunted, severely stunted, underweight and severely underweight than children of mothers in regular MCGs. There are multiple pathways in which the MCG+ can impact nutrition, among them the impact of financial services and livestock/agriculture links as noted above. Together with the MCG impact evaluation, this suggests that behavior change has been successful in changing attitudes towards nutrition related behaviors and that the gap between knowledge and practice is largely structural. O**nce women have access and control over the resources they need to implement the behaviors (e.g. financial capital, investments in post-harvest handling), they will successfully adopt the behavioral changes.**

Table 4.3. Association between nutritional status and being in an MCG or MCG Plus (+) group

	MCG CU5		MCG+ CU5		Overall Prevalence		p-value
Nutrition Outcome	**No.**	**(%)**	**No.**	**%**	**No.**	**%**	
Wasted	198	13.6	54	13.1	252	13.4	0.802
Severely Wasted	66	4.5	13	3.1	79	4.2	0.221
Stunted	653	44.7	159	38.5	812	43.3	0.025*
Severely stunted	321	22.0	72	17.4	393	21.0	0.045*
Underweight	501	34.3	121	29.3	622	33.2	0.057**
Severely underweight	183	12.5	38	9.2	221	11.8	0.064**

*There is a significant association between stunting, severely stunting for CU5 whose mothers in MCG or MCG plus (+) groups.

** There is a borderline significant association between under-weight, severely underweight with being in an MCG or MCG plus group

4.3.2.1. Gender analysis

MC added the Male Change Agents (MCA) activity because men's attitudes and knowledge were a barrier to adoption of health practices by women.[14] MCAs play important roles in social and behavioral change communications (SBCC) in the communities. MCAs promote positive messages to men on their roles in the household and the community their role as caregivers. MCAs are pivotal to ensure that change takes place in communities because men are involved at every step of the change process. MCA messages include shared workloads between genders in household activities and farm activities. MCAs are effective in educating the male head of a household about the need for spending money for balanced and healthy diet for their wives and children. An area for the MCA to address with men is the need for the household to pay their monthly maintenance fee for the community's borehole. This payment impacts the health of the family and can reduce the dependency of traditional water sources that can be contaminated.

4.3.2.2. Gap analysis

Household surveys conducted in the region found that rates of stunting, wasting and underweight for children remain stubbornly high. A gap exists in the knowledge of how mothers access and utilize food in the household setting. Poverty and the lack of resources are some of the constraints on whether a household can provide a diverse and balanced diet for her family. It would be important for stakeholders to continue to scale up the mother care groups (MCGs) to MCG+ so that they can better deliver integrated support for mothers and their children. The delivery could be handled by the government in the CHEW approach (Community Health Extension Workers) having the right mix of financial and non-financial support (t-shirt, badge, and bicycle) and adequate stocks (so no stock outs).[15]

4.3.3. IR.2.3. Reduced incidences of diarrheal diseases

Diarrheal diseases are a major factor in the cause of malnutrition, morbidity and even death of children. As reported by WHO[16], lack of access to WASH can affect a child's nutritional status in many ways. The results of the household nutrition survey (HNS) found that a child that had an episode of diarrhea in the last two weeks was a strong predictor of the child being stunted, wasted and underweight. The high level of association places a lot of emphasis on the need for clean water, sanitation and hygiene of the household and the community (See Box 4.12.). Households without proper hygiene can slip into an environment of contamination. GHG's WASH initiatives focus on controlling WASH related diseases through clean household practices.

Box 4.12. Diarrhea and nutritional outcome in children

The HNS found that a mother that reported her child having a diarrhea episode was a strong predictor of the child's nutritional status (associated with being stunted, underweight and wasted.) Of the three indicators, the predicator of being underweight was significant. The incidence of diarrhea would have a more pronounced effect in the short term on underweight.

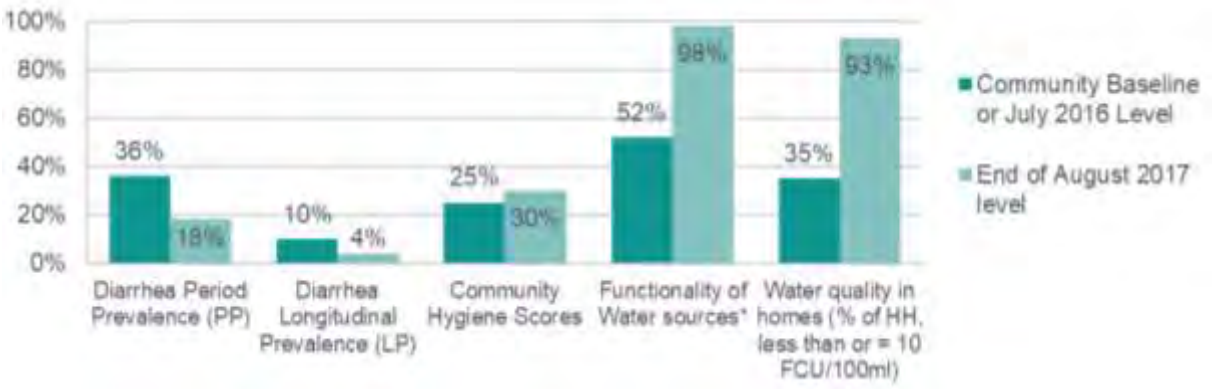
In the household nutrition survey, diarrhea prevalence in CU5 was 41%, and it was found to be significantly associated with children's nutrition status. Children that experienced diarrhea episodes within the two weeks prior to the survey were more likely to be stunted (PR= 1.52, 95% CI=1.33-1.72), underweight (PR=1.52, 95%CI=1.33-1.72) and wasted (PR=1.91, 95% CI=1.51-2.41).

[14] Howe, K. (2013). "A gender assessment of Northern Karamoja: Livelihoods, Health and Peace." The Sustain Project, Mercy Corps. The Feinstein International Center, Tufts University.
[15] Brunie, A. et al. (2014). "Keeping community health workers in Uganda motivated: key challenges, facilitators, and preferred program inputs." Global Health: Science and Practice (GHSP).
[16] http://www.who.int/water_sanitation_health/publications/washandnutrition/en/; consulted 20 August 2017

Improvement in food security requires a multi-sector approach that includes improved environmental conditions in the village such as improved sanitation, clean water, access to a health care facility, education and economic livelihoods. Reduction of diarrheal disease is an important indicator that a community has obtained the recognition of having a healthy environment for its residents.

GHG has had good success in reducing diarrhea disease through GHG's WASH activities and met or exceeded all of its IR2.3 annual WASH targets. As seen in Figure 4.4., within a period of one year, prevalence of diarrhea declined and community hygiene scores improved. The improvement in the functionality of boreholes and the improvement in water quality are important contributing factors. GHG, through its partners Whave and World Vision, implemented a multi-dimensional community-based program which is impacting the health and sanitation conditions in communities. The district, county and sub-county officials support WASH activities. GHG employs a package of interventions in a village which includes increasing demand for and supply of clean water and sanitation services, adoption of hygiene behaviors, and strengthening the governance and enabling environment at the community and local level following the Food for Peace (FFP) Technical Reference Guide, 2017.[17] GHG promotes the supply of clean water infrastructure, e.g. boreholes (construction and rehabilitation), along with behavioral change initiatives in the village for sanitation and hygiene.

Figure 4.4. Impact to date against indicators within the Whave program



Source: Mike Barbee. 2017. "GHG-Karamoja WASH and Nutrition Brief." Mercy Corps, Kampala, Uganda.

4.3.3.1. Sub.IR.2.3.1. Access to safe drinking water strengthened

GHG's original strategy was to construct or renovate existing boreholes to ensure safe water compared to traditional water sources. With its implementing partners, Whave and WV, GHG constructed or renovated 428 water boreholes/wells (45 new and 383 renovated) during the life of the program (LOP). GHG provided basic water services to 313,313 people through year five, exceeding the target by 74,265 people (IPTT #46). The percent of households with an improved water source was 37% at the baseline and will be re-measured in the February 2018 endline survey.

[17] USAID. (July, 2017) "FFP Technical Reference Chapters for Development Fund Assistance Programs." Washington, D.C.

As part of its greater strategy for improving water service supply, Whave is engaging stakeholders at the grassroots and national levels to improve sustainable WASH delivery district-by-district by focusing on rural water services and creating a well-defined Public-Private Partnership (PPP) regulatory framework. The Whave approach is to achieve the systemic change that results in improved community based management (iCBM) that will enable people to continue using their water point year in and year out with minimal down time.[18] (see Box 4.13.). Whave exceeded its targets during the life of GHG.

Box 4.13. Less Diarrhea because of WASH

In a focus group with 14 young men and one woman in Kanyalaka South, Abim District, they spoke about the positive effects of improved water supply and the role of latrines in keeping the village healthy. Before the borehole and latrines, they would attend the health facility as often as once per week for diarrhea-related issues. Now they visit the health facility (HF) once in two or three months.

To insure sustainability, Whave introduced their public-private partnership model to communities for a sustainable safe rural water supply. Early surveys of all sources (638) across the 11 operational sub-counties revealed a dire picture with less than 50% of water sources functional. Whave engaged 131 communities to determine commitment to maintenance support. Out of 131 communities, 69% (91 of 131) of the communities committed to supporting the on-going maintenance of the water source, with 24 boreholes being repaired to date, benefitting 16,888 people (8,951 female) who have gained access to improved water. The Whave development model is for borehole rehabilitation (provide labor and parts) and is subsidized, which tends to attract communities needing larger rehabilitations. In the case of the Abim Hand Pump Mechanics Association (HPMA), labor and parts for rehabilitation are paid by communities, but GHG supports the HPMA to improve its organizational capacity to govern itself, stock the parts, conduct the repairs, and advertise their services. The evaluation team found that in FGDs, village leaders and residents appreciated the importance of having a reliable source of clean water (see Box 4.14.). Residents perceive water as a public good, and as such, projects must continually reinforce the village's responsibility for fees and upkeep of the well (Box 4.15).

Box 4.14. Community Borehole

[18] Mike Barbee (2017): A Public-Private Model of water service in Northern Karamoja. An Analysis of Successes and Learning within the GHG program. Consultant's report to Mercy Corps.

A stipulation in the water improvement plan is for households to contribute, first with an initial fee of UGX 200,000, which is paid to the district government. After payment, GHG approves the village for a borehole – either new construction or renovation of an existing well. Once the well is constructed or rehabilitated, each household is engaged to pay a monthly fee into a community owned operating fund. A Water Service Provider (WSP) then provides preventative maintenance with oversight by the Water Users Committee (WUC). The WSP is a private entity which specializes in preventive maintenance of water sources, their repair and upkeep, and hygiene promotion services. Whave builds the capacity of the WSP and pays the WSP based on the number of days his or her contracted boreholes function each month. The public-private business model is sound and certainly worth replicating in the districts.

Box 4.15. Difficulty in payment of fees

In an interview of the chairperson of Naoyabul WUC, Mrs. Nakiru Betty said women were enthusiastic about having a functioning borehole which was maintained and fenced. The difficulty was the payment of the monthly fee because of the lack of cash by households. People will demand water even though they have not paid their fee.

The evaluation team found in field visits to communities with the traditional model (as opposed to the Whave model) that the recurrent monthly payment is problematic for households. Community buy in for fee payment is more limited and users stated that they cannot pay because of competing demands for money in the household. Borrowing money to buy food is a common coping mechanism by households. An added problem is that water is seen as a common good, and that if one household does not pay, then someone else will pay -- in the end, no one pays. Finally, out of frustration, the WUC becomes lax in demanding the collection of funds without much recourse to seek payment from non-payers. Records kept by WUC are not updated properly and verification of who has paid becomes difficult to track as time passes.

GHG's community-led and market-driven approaches have been successful for WASH interventions. Community leaders reported that there had been significant health improvement with the reduction of diarrheal diseases in Abim, Kotido and Kaabong. Successful WASH interventions are when communities are engaged from the start of the process, before construction or renovation of a well.

Gender analysis. Women and children bear the greatest costs when the boreholes do not function. In village interviews, women said they benefit from having a clean and dependable water supply as it prevents sickness and reduces visits to the health facility. Women expressed their appreciation of GHG since they do not have to spend prolonged periods searching for water of questionable quality, and then carrying the water long distances to the homestead, which is mainly done by women and small children of the household. Clean water is now easily available for cooking, washing and their children are no longer regularly sick from water-borne diseases.

Gap Analysis. Despite the progress made in provision of clean water, long-term financial sustainability of WUCs needs to be addressed. A sustainable model requires that households benefiting from the borehole pay their water user fees. The fee collection system will need to be addressed by the community leaders to strengthen the long-term viability of the borehole system, WUC, and the HPMA and insure sustainability of the water supply system for villages. GHG made efforts to link the WUCs to SACCOs and local banks and to establish VSLAs in the community. Households can make deposits into their SACCOs or VSLAs which enables households to better manage their money and reduce the transaction cost of paying for services, such as water, as they transition to modern livelihoods.

4.3.3.2. IR 2.3.2. Communities' sanitation access and hygiene practices improved

GHG's approach to improve environmental health in communities is to eliminate the pathway of disease transmission by reducing untreated human waste and unsafe water. The most vulnerable and least empowered households are without hygienic toilets and improved sanitary facilities.[19] GHG has a goal of improving sanitation from 13% of households in the baseline to an expected 22% by the end of the project. (USAID evaluation team will measure in 2018). Through trainings and the community led total sanitation (CLTS) approach, households have been exposed to using soap (or ash) and water around the critical times for handwashing. GHG supports the construction of VIP latrines and school hygiene clubs to improve nutrition outcomes among children and to reduce the dropout rates of adolescent girls. In FY16, GHG constructed five (5) VIP latrines across five (5) primary schools and equipped them with rain harvesting and handwashing facilities. The five facilities serve a total of 3,475 pupils from Nakapelimoru, Opopongo, Nachakunet, Kawalokol and Narengepak schools.

To address community-level sanitation behaviors, particularly widely practiced open defecation, under World Vision, GHG continued with the implementation of the CLTS approach in 67 villages, strengthening the implementation through standardization of processes, improved monitoring and layering of additional BCC activities (dialogues, MCAs, etc.) in target communities. Under Whave, GHG has triggered an additional 80 villages[20].

Open Defecation Free (ODF) villages. ODF certification has been successful in some areas, specifically in Kaabong and Abim. Success is due in part to the involvement of district government officials, and good commitment of all groups (youth and adults) of the local community willing to change and learn from others.[21] WV reported that the numbers of declared ODF villages varied by district (see Table 4.5.). The small numbers of ODF villages in Kotido is a challenge to future programs. In some communities, residents are more engaged in gold mining and other activities and are not willing to allocate time to build or repair a latrine.

Table 4.5. Villages receiving WASH improvements by districts

Organization	Type	Abim	Kotido	Kaabong
World Vision	ODF villages	4	1	32
World Vision	Boreholes	15	13	16
Whave	Boreholes	28	36	57
Note: WV constructed new boreholes while Whave renovates boreholes.				

There is a strong correlation between stunting and poor sanitation practices. Poor hygiene results in a child becoming stunted and anemic. Rates of stunting become lower if there is a total sanitation program in the village.[22] In field interviews, members of intervention village said there is less diarrhea in the village because of available clean water and sanitation. The introduction of ODF and CLTS programming is creating a healthy environment for the community for environmental and health improvements.

[19] SNV website on WASH programshttp://www.snv.org/sector/water-sanitation-hygiene
[20] GHG FY 2016 Annual Results Report
[21] http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/Good_practice_CLTS_Uganda.pdf
[22] Cummings, O. and S. Cairncross. (2016). "Can water, sanitation and hygiene help eliminate stunting Current evidence and policy implications." Maternal and Child Nutrition. Wiley. p. 91-105.

Gender analysis. The impact of WASH related diseases is gendered with a higher burden on mothers who are socially expected to lead on care for their sick children with trips to the health clinic. Cooperation from all family members is important to control diarrhea, and this is a weak link in the path to improved hygiene. Men are reluctant to dig latrines, leaving the burden to women. The education of young girls is important to their social and economic development, and girls can be reluctant to attend school if latrines are not available or are in poor condition. Programs for children about sanitation and hygiene should continue in future programs.

Gap analysis. GHG made progress at improving sanitation and hygiene; however, large numbers of households still do not have adequate sanitation facilities or follow good hygiene practices. A constraint mentioned in field visits was the lack of adequate building materials for the flooring of latrines which has slowed the spread of latrine construction. The introduction of a public-private partnership (PPP) model for latrine building can be developed to attract funding to start a business, much like the HPMA, to incentivize young men and women to build and maintain latrines. (see recommendations in Chapter 5.) Where there is a problem with low performance of CLTS practices by villages, other approaches can be tried, such as the Clean Household Approach (CHA).[23]

4.4. SO3. Governance

GHG's approach to conflict management has involved enhancing social cohesion (by building dispute resolution capacities and platforms within and between communities), and strengthening the capacities of and cooperation between actors and institutions with responsibilities for conflict management.[24] GHG's conflict approach has evolved over the life of the program based on Karamoja's return to prevailing peace in 2013 and 2014. GHG's original strategy was to focus on reducing cross-border raiding and ambushes. However, research conducted by MC found that this type of conflict had reduced to episodic, seasonal events and more persistent and regular conflicts moved more toward petty theft, domestic abuse, and sexual violence.[25] At the same time, previously existing elements of gender-based violence continued or worsened, such as the excessive bridewealth demanded for a bride's family to allow a marriage. Furthermore, the assessment found that local conflict mitigation and management (CMM) structures had failed to evolve with the change in conflict dynamics, so that District Peace Committees, Sub-County Peace Committees and traditional authority groups, called *akiriket*, were oriented toward mitigating inter-clan conflict arising from raids, but government was largely incapable or unwilling to respond to the widespread, low-level insecurity that has replaced the high-profile cross-border raiding.

With its local partners, KAPDA and AWOTID, GHG focused on issues with sub-county peace groups and traditional authorities to address inter clan and intra community social problems within the district (vertical coordination). At the same time, GHG addressed the need by districts and sub-counties for cross-boundary issues (horizontal communication) between formal government organizations. GHG built the capacity of local peace committees and other groups to effectively mitigate and manage conflict without violence. AWOTID was engaged to address land issues while KAPDA focused on livestock raiding. In Abim District, communities were more consumed by land wrangling, domestic violence, political conflict and

[23] Save the Children. (nd). "Clean household approach to reduce stunting and improve child health." Save the Children. Washington, D.C.
[24] Kurtz, J., and McMahon, K. (2015). Pathways from Peace to Resilience: Evidence from the Greater Horn of Africa on the Links between Conflict Management and Resilience to Food Security Shocks. Washington, DC: Mercy Corps.
[25] Vaughn, J. and S. Gurung. (2013) "Conflict management system in Karamoja: an assessment of strengths and weaknesses." Mercy Corps. USA.

rape/defilement rather than cattle raiding. Both partners received training and capacity building in sexual gender based violence (SGBV).

Cattle raiding is the primary form of armed conflict with GHG recording 23 armed conflicts (in the prior quarter) in 2013 (IPTT). Armed conflict escalates and abates dependent on the season and pastoralist movements. The number of armed conflicts has gradually declined over the past five years with GHG reporting 12 armed conflicts (for the prior quarter) in 2017. This is a 48% reduction from the baseline.[26] While there are many contributing factors to this achievement, including a large government disarmament program, the Uganda Peoples' Defense Force (UPDF) was somewhat effective in retrieving stolen livestock. The percent of supported community structures that have mitigated two or more conflicts has exceeded the target of 75% to 93.3% at the end of the project. Though cattle raiding still occurs, there has been some success in retrieving livestock. A more balanced approach to different conflict types by the GHG program has been an effective strategy.

The evaluation team found in conducting KIIs and FGDs that improved governance at the local level played a key role in Karamoja's improved security leading to economic growth, and by extension, possibly improved health outcomes. Increases in mobility means that access to health facilities and markets also improved.

GHG recognizes the importance of developing the capacity of and empowering community institutions (see Box 4.16.). Conflict mitigation is not a "one-off" exercise for GHG but rather engrained as a continual process that is both fluid and contextual. Civil society organizations (CSOs) whose members are from the community can engage to address negative behaviors such as SGBV, theft, petty crimes, land disputes and alcoholism because they are present in the community rather than outsiders. For example, in Abim, GHG works to address land tenure issues to change peoples' attitudes and behavior to resolving land conflicts rather than resorting to violence. This includes promoting women's land rights. The metrics used for measuring attitude and behavior change are meant to enable stakeholders on both sides of a conflict to understand what "change in empowerment and dialogue through good governance" looks like.

Box 4.16. Land Issues on the Increase

Improved security in Karamoja has made the region's land more valuable, attracting extended family members and outside investors, creating conflict between rightful owners and outsiders. Land tenure issues are important in all three districts, but are slightly different in each district according to participants in FGD.

4.4.1. IR.3.1. Local conflict prevention and management capacity strengthened

[26] Numbers of reported incidents of armed conflict in the past 3 months: FY13 (23), FY14 (47), FY15 (8), FY16 (14), Fy17 (12). FY15 has seen positive decline in armed conflicts leading to lower incidents reported. FY17 reported a decline from FY16. The high number is likely a result of continued cross-border raids from Kenya. Reference IPTT.

GHG worked with two partners, KAPDA and AWOTID, providing them with training and other support to carry out CMM approaches working primarily through local formal and informal authority structures that bolster local systems for conflict resolution and government service improvement. Both KAPDA and AWOTID achieved significant results within GHG, strengthening local conflict management capacity by training peace committees, women's groups, youth groups and sub-country governments on conflict monitoring and reporting, referral pathways, early warning, advocacy, reconciliation, mediation, linking formal and informal governance structures, etc. In a FGD in Kotido, representatives from five YCBOs indicated that there was a strong commitment by leaders (male and female) to address societal issues, e.g. SGBV, alcoholism, and to work with government officials on getting information to their communities.

Box 4.17. Woman fights for land title

Mrs. Ayugi Stella from Alerek in Abim District attended an AWOTID workshop on land rights. She learned about her rights to own land. She returned home to her village and convinced her father to give her a parcel of land which he did, as well as giving parcels to three younger children.

Interview conduct in AWOTID office
August 21, 2017

During the program, MC and its partners trained 213 groups in conflict mitigation (see Box 4.17.). This is 163% above GHG's overall target for this indicator. Youth were trained in conflict management skills which is important to countering the rise in SGBV and theft, which are conducted largely by youth.

GHG built the capacity of public-sector institutions to share information across departments, sub-counties and communities about conflict situations when they arise. Traditional leaders (customary) serve as the front line in dealing with community-based problems. GHG trained 655 of these local leaders to improve their effectiveness (29% female). A total of 1,145 government staff were also trained (27% female). GHG devoted more efforts in the final year of the project to recruit and empower women at the sub-county level to participate in conflict mitigation and inclusive governance.

The GHG program offered forums to build consensus among multiple parties to advance civil/security and civil/political dialogue. GHG conducted 277 forums during the program, exceeding its target of 220. The impact of these forums has been to keep the issues important to community in the forefront of local government decision makers and the broader community.

In Kaabong District, interviews revealed that GHG's conflict and governance activities resulted in the following outcomes.

- Increased food production - most people have moved to fertile areas hence increased availability of food at household with surpluses sold for increased cash income,
- Improved relations with freer movement between the Jie, Dodoth, Matheniko and Acholi,
- Increased trade and barter between the Karamojong and other tribes like Iteso and Acholi, and
- Community members hold their leaders accountable for their actions.
- Shared household roles in terms of decision making, control of family assets. Both men and women sit, discuss and decide what goat/cow to be sold and what will the money be used for (families set priorities),
- Reduced domestic violence hence there is a lot of mutual understanding in family,
- Improved availability of food at the household due to collectively shared work, and
- Change in attitudes of men towards embracing household work.

In Abim District, interviews revealed that GHG's conflict and governance activities resulted in the following outcomes.

- Functionality of the informal and formal land structures has improved at both the district and sub county level due to refresher quarterly trainings and exchange learning visits,
- Reduction of land grabbing cases going to courts of law due to establishment and functionality of the Land Focal Point Volunteers and Area Land Committees at all the sub counties,
- The legal system and courts have referred land cases to AWOTID and Land Focal Point volunteers for mediation,
- GHG has increased the awareness by communities (including women and girls) of their land rights and has helped over 200 people to resolve their land conflicts peacefully through mediation approaches and registration of their land. By peacefully resolving cases of land through mediation, communities save time and money that would have been wasted in courts of law. Communities remain harmoniously living together. By formally registering their land, communities gain confidence, security, and stability in their livelihoods. They can also use their land registration to access financial security from the Agriculture Development Bank

Box 4.18. Mediation for Land Ownership

With the help of AWOTID, Mrs. Achen Grace attended a workshop by the Land Focal Point Volunteers (LFPVs) which helped to resolve a land dispute through mediation with her daughter-in-law and was able to reclaim and retain ownership of her parcel of land.

Interview conduct in AWOTID office
August 21, 2017

As reported in FGDs and KIIs, improved security has created increased opportunities for food production with farmers having access to more fertile land, leading to increased yields and surpluses for sale in the market. With peace has come the inter-mingling of tribes such as the Jie, Dodoth, Matheniko and Acholi with increased trade between Karamojong and other tribes, primarily Iteso and Acholi. With more inter-tribal interaction, there is a larger role for local leaders to represent their (tribal) communities, including being held accountable for their actions.

4.4.1.1. Gender analysis

The empowerment of women and youth is an important development that is leading to a more stable environment for the local communities. GHG encouraged local women to participate in peace building roles, striving for inclusiveness of women and youth throughout GHG's activities. However, GHG found that women often lacked the necessary skills to be effective in these new roles. GHG's Behavioral Change and Communication (BCC) Gender study found that women were twice as likely to say they are confident in public speaking, but they still lacked the necessary skill, experience, and enabling environment (i.e. support from men).[27] A challenge is empowering women to become effective leaders in reporting and mediating conflicts. Government agencies have become active in resolving conflicts which has minimized to some extent the role of traditional leaders – though they are still important in communities. However, in areas where traditional leaders are active, women traditional leaders have less impact than their male counterparts. This reflects the biases and obstacles that women face in government/conflict resolution activities. This was even more pronounced for female government leaders (IPTT #56).

It is common to find women leaders serving on more than one community organization, e.g. WUC and the HUMC. There are female traditional leaders reporting conflicts but much less than men which indicates the obstacles they face.[28] These leader women are motivated and willing to improve their communities. It is important to encourage these women through training and recognition for their work. GHG, by targeting

[27] Mercy Corps. (2016). "Behavioral Change and Communication Gender Study."
[28] Vaughn, J. and S. Gurung. (2013) "Conflict management system in Karamoja: an assessment of strengths and weaknesses." Mercy Corps. USA.

women as leaders in their communities, provided a gender perspective in how best women can participate and be a catalyst for change in knowledge, attitudes and behavior.

GHG developed a women's leadership curriculum series for all its committees and groups. These committees function at varying levels of effectiveness. In FGDs, the evaluators found improvements in gender balance and women's participation on these committees and groups, like HUMC, WUC and Peace Committees. The evaluation team recommends continued work in the follow-on project to improve the monitoring, mobilization techniques, and gender inclusion given that women have been left out of the education system and have a high level of illiteracy.

4.4.1.2. Gap analysis

GHG made progress in building the capacity of CBOs and public-sector institutions to collaborate on peace issues. However, communities still lack functional indigenous institutions needed to plan and execute interventions to address changing conditions. The need for functional institutions to address land tenure is becoming increasingly important throughout Karamoja, as well as, addressing environmental issues and the impact of climate change. GHG supported local institutions to reinforce platforms for addressing peaceful conflict resolution. Some of the platforms are in formal government structures; and so long as they remain part of the government, they are sustainable. The platforms developed by civil society organizations can only best be effectively evaluated two years after the GHG program ends. Many of the platforms are embedded in formal governance structures.

The majority of women and youth do not participate in governance-related dialogues and remain marginalized in their communities without a clear pathway to becoming change agents. As reported in the BCC Gender Study, women become empowered through trainings and mentoring; however, the cultural context and men's attitudes still present formidable barriers. These are conditions which can foment civil disobedience in the future if left to fester. Youth who lack employment or pathways to a better life in the rural areas can be prone to poor social behaviors. In a FGD in Abim with youth, one youth was frustrated at not completing his schooling because he lacked funds to continue his education. The group suggested that youth apprenticeships would be helpful. Another factor encountered was that some women could not take the time away from their household duties to be involved in their community. Labor allocation studies could better inform future programs to tackle these challenging issues.

4.4.2. IR 3.2. Constructive male and female youth engagement in peace and development initiatives enhanced

GHG supports six (6) youth-led community based organizations (YCBOs) in Kotido District (see table 4.6.). YCBOs are composed of men and women under the age of 35. This age group can be very effective as change agents influencing their peers for peace and development. Each of the YCBOs supports several smaller individual groups (see the number next to each name). The groups are gender balanced and a woman leads the PADO group. During a FGD in Kotido with representatives of the YCBOs, the members were positive about the role they could play in addressing issues of peace and development of their communities. The representatives are motivated and both men and women were active and comfortable working as a team in their YCBOs (see Box 4.19.).

Box 4.19. Six Youth-Led CBOs (YCBOs)-Advancing Peace in Karamoja Region

GHG supported and trained YCBOs which in turn conducted 75 consensus building activities in FY-2017. These activities are conducted in response to communities' demands for accountability from their

Table 4.6. Youth-led Community Based Organizations (YCBOs) in Kotido District

s/n	Youth-Led CBO & No. of groups supported by YCBO	Group Founder Members		Secretariat/implementation Team	
		# females	# males	# males	# females
1	PADO– (5)	18	12	1	2
2	JIECODI – (5)	19	16	2	1
3	KART – (9)	15	15	2	1
4	NATYA	15	20	2	1
5	JIEDAY – (4)	7	13	2	1
6	LOTYOG – (4)	13	17	2	1

Note: JIECODI – Jie Community Development Initiative, JIEDAY – Jie Disarmed Youth Group; LOTYOG – Lotanyat Youth Group; KART – Karamoja Action Research Team; PADO – Pastoralism and Development Organization Uganda; NATYA – Napumpum Cattle Traders Youth Association

GHG assisted the youth groups to conduct dialogues and meetings, and also purposely included the youth in a wide range of GHG activities, in some cases through customized activities. Participants in a Kotido FGD reported their interaction with GHG interventions as shown in Box 4.20. Every person in the FGD was a member of a VSLA which shows the significance of this activity in their daily lives.

GHG linked YCBOs to government institutions through joint initiatives to establish dialogue, and supported 107 joint dialogues during the program. This effort resulted in empowering youth to be recognized, valued and listened to by district government officials. The involvement of district officials offers the chance for sustained improvements. The joint efforts between the public sector and CBOs reinforce the empowerment of youth to be a catalyst for reducing violence and create positive change.

Box 4.20. Priority Areas of Youth Leadership

In a FGD in Kotido with 17 youth leaders, they reported their involvement in GHG activities:

- VSLA participation (17 persons)
- SACCO member (8)
- Mother Care Group (3)
- Male Change Agent (3)
- Sensitizing on harmful cultural practices (10)
- Energy saving stoves (4)
- Cross-border peace building (8)
- Young girl mentoring and family planning (6)
- Social accountability meetings (14)
- Capacity building in youth roles – responsibilities (15)

As security in Karamoja improved, GHG adapted by shifting emphasis to addressing harmful practices, such as alcohol abuse. In FGDs and KIIs, the evaluation team found youth advocacy in communities has a positive effect on the reduction of the consumption of alcohol. Many communities have stopped the sale of illicit alcohol which has reduced its consumption because of youth initiatives within the district. A key informant in Abim town spoke about efforts in the town to mobilize the community to stop the sale of cheap alcohol being sold in shops in the town. The group consisted of male leaders in the business community trying to reduce the level of alcohol consumption.

At the start of GHG, the percentage of youth with the propensity (risk) to cause violence was estimated at 37%. This indicator will be re-measured by USAID in 2018; however, GHG does not anticipate that it has dramatically improved due to limited economic opportunities for youth and the growing youth bubble. GHG has been proactive in engaging both youth and other stakeholders to make positive changes; however, factors such as unemployment, early marriage, alcohol abuse and domestic violence continue to have a negative impact on Karamoja's youth. The opportunity for inclusion of youth in discussions with government organizations and CSOs is important, and GHG found that youth were indeed interested in engaging with local government based on the focus group discussion held in Kotido.

In a focus group discussion with representatives from the six YCBO (17 people in attendance of which 8 were females), the groups reported that their assistance from GHG has enabled them to confidently promote their ideas, speak with and rally other youth, and lobby for an activity with local government. As a result, they now believe that they have a "voice" in their future and feel empowered, especially women, and are able to continue these activities without additional assistance.

GHG has seen increased youth membership on formal local government structures at the sub-county level over the past five years. These youth have actively participated in a wide range of activities, most notably peace building initiatives and addressing important social and economic issues for youth. Youth have the image of being "conflict causers" but are now also becoming known as "problem solvers." This has reduced the number of conflicts related to criminal activity, especially petty theft which is often youth-led.

Prevailing peace has enabled community members, including youth, to become more mobile and to farm areas that were previously closed due to insecurity. GHG staff reported that more youth are now becoming engaged in agriculture, which was verified in FGDs.

4.4.2.1. Gender analysis

Employment and training programs for youth and women (especially the inclusion of girls) are crucial for gender inclusion. A pivot to greater attention on adolescent girls is necessary if the nutrition status of the women and their children is to improve. With the growing livestock herd and growing youth population, there are opportunities for youth in livestock activities, but their interest is in new types of activities such as livestock trading and meat processing instead of herding. Although little is known about whether the current generation of youth wish to remain in pastoralism versus other livelihood options, we do know that many (especially males) currently are without gainful livelihoods and, in turn, make up a large proportion of raiding and armed criminal gangs in rural areas, including the *lonetia*[29] gangs[30].

4.4.2.2. Gap analysis

Years of marginalization resulted in women and youth being disenfranchised and disconnected from their communities' development process. They often lack the skills, tools and motivation to be effective male and female youth leaders at the community, parish, district, region and even national levels. Members of youth groups can be invisible within the community because of the high level of inertia against change due to the local context and the role of traditional leaders. It will take a proactive program of exchange visits to areas outside Karamoja so people can see how their lives can improve with change. In addition, investing in education and vocational skill training is an obvious area of potential support, but also facilitating low-capital start-up enterprises in trade and services through formation of local savings and credit groups both for youth and women is an equally important area that would benefit from support[31].

Adolescent youth programming was omitted from the program's original design (the PM@2A approach begins with pregnancy), which has left a gap in GHG's youth programming. Future programs should target adolescent girls to delay pregnancy and possibly change their course to an entirely different trajectory. Girl-

[29] Lonetia is the name for young men who engage in theft of livestock, food, and non-food items opportunistically and join into small groups;

[30] USAID (2016): Resilience and risk in pastoralist areas: recent trends in diversified and alternative livelihoods. USAID East Africa Resilience Learning Project. Feinstein International Center, Friedman School of Nutrition Science and Policy, Tufts University.

[31] USAID (2016): Resilience and risk in pastoralist areas: recent trends in diversified and alternative livelihoods. USAID East Africa Resilience Learning Project. Feinstein International Center, Friedman School of Nutrition Science and Policy, Tufts University.

focused programming could include specific protection concerns and challenges for girls, while simultaneously leveraging their new autonomy gained to help them attain greater empowerment, development and security.[32]

4.5. Cross-cutting issues: Gender, Youth and Vulnerable Populations

Throughout the GHG program, a gender, youth and vulnerable populations' team coordinated with the three SO teams to ensure that the needs of gender, youth (boys and girls) and vulnerable populations were integrated into GHG programming. Each of GHG's SO teams received support in the form of research, training, messaging, coaching, advice and by conducting spot checks in support of quality implementation. GHG conducted a gender behavior change impact assessment to guide activities going into the final year of the project. Cross-cutting outputs were:

- Development of a women's and youth's leadership curriculum and providing training for Peace Committees (female and male), HUMCs, and Area Land Committees (ALCs) and supporting GHG's relevant sectors in gender and youth mainstreaming, and to specifically develop women's leadership capacities and creating the right environment to foster women's participation,
- Introduction of the male change agent model which resulted in positive behavior change and has been a critical intervention in changing social norms and attitudes,
- Development of display and instructional materials for videos to facilitate community dialogues and intensive conversations on gender, division of labor, decision-making, gender based violence, alcoholism and women's participation,
- Ongoing airing of a series of gender behavior change messages on Voice of Karamoja radio station,
- Layering gender messaging into seed voucher activities to improve women's empowerment by reducing the workload imbalance between genders,
- Integration of gender and youth training for Community Animal Health Workers (CAHW), agricultural extension workers, business forums, and small businesses,
- Implementation of the MCG+ model to empower women through increased access and control over savings and credit coupled with training on life skills and business development, and support of small grants for IGA start up,
- Capacity building of young men and women through GHG-supported youth groups, KAPDA and AWOTID,
- Improved awareness of Sexual and Gender Based Violence (SGBV) drivers, impact and reporting procedures, through conducting security dialogue meetings, sensitization meetings against harmful traditional practices, capacity building of traditional and nontraditional structures, and overall collaboration and coordination,
- Increased participation of youth and women in local government planning process through community dialogues, leadership training, and community meetings,
- Reduction of harmful cultural practices that particularly impact women (forced marriage, child marriage, SGBV) and the gendered nature of crime through community dramas and meetings, and technical training involving police and other officials,
- Creating gender balanced water user committees,
- Construction of VIP latrines for girls and school hygiene clubs to improve nutrition outcomes among children and to reduce the dropout rates of adolescent girls, thus delaying early marriage and improving maternal education level,
- Generated a series of recommendations for increasing women's participation on the HUMCs as part of the Citizen Report Card (CRC) findings and shared with district officials responsible for

[32] Mercy Corps. (2015) "Wealth and Warriors – Adolescents in the Face of Drought in Turkana, Kenya" Portland, Oregon.

appointing HUMC members. The national Ministry of Health (MoH) expressed interest in the report findings and in the possibility of making adjustments to their new draft guidelines to ensure that they are gender-responsive and adjusted to the local context.

GHG efforts to target women, youth and vulnerable populations were critical to the overall accomplishments of the entire GHG program. Women and youth representation and active participation on community organizations and in business activities increased over the LOP. Despite these efforts, active participation by women and youth often remains less than that of men and can be further expanded in future programs.

4.6. GHG's adaptive management approach (AMA)

GHG utilized an innovative approach to identify trends that may affect its program's interventions (according to the STRESS Report) to stay "ahead of the curve" of contextual changes by making proactive program adjustments. Below are a few examples where GHG used AMA to improve its program.

- GHG realized early in the program that men's attitudes and knowledge are barriers to adoption of good health practices by women and their children. To address this, male change agents (MCAs) were trained in behavioral change communication. These 800 MCAs serve important roles by working with their peers to educate them on how to acceptably break restrictive gender roles, and engage in good social and health behaviors.

- Field data indicated that if women were going to achieve good health outcomes from the project, they would need access to adequate health services. GHG made needed investments in infrastructure improvements (buildings and equipment) in health centers that were not originally part of the GHG program. The community became a partner in this process through the establishment of the HUMC. Health and nutrition indicators could then improve for PLW and their children in the MCGs.

- GHG's STRESS Report identified an increase in alcohol abuse in HHs and its effect on domestic violence. GHG conducted regulatory work and developed public service messages against alcohol abuse and domestic violence in Years 4 and 5 of the project. A few sub-county governments banned the import of liquor from outside the area to curb alcohol abuse, while the districts of Abim and Kotido tightened anti-alcohol regulations that were more enforceable.

- GHG's STRESS Report identified that access to financial services is a key resilience capacity to shocks and stresses. GHG expanded its "savings with a purpose (SWAP) / VSLA" activities in Year 4 to almost all business groups involved with GHG.

GHG's AMA was effective at guiding the program's intervention in testing approaches, iterating, and revising its programming in response to the evolving contextual landscape of the Karamoja region. To effectively implement AMA, GHG reported that it had to expand its monitoring and evaluation staff and resources and to conduct quarterly review meetings with structured sessions to design adaptations.

4.7. Development Food Assistance Program (DFAP) Results

The focus of USAID's DFAP is to build a community's capacity for sustainable food security. GHG focused its resources on strengthening the most vulnerable members of northern Karamoja's communities, in particular pregnant and lactating women (PLW) and children under 2 (CU2). MC and its implementing partners initiated a number of interventions that developed the capacities of households in modern agriculture and livestock, improved health systems, instilled peace and empowered women. MC implemented a strategic plan to be a market facilitator of ideas and resources to counteract the deep-rooted culture of dependency. The plan is based on the Making Markets Work for the Poor (M4P) approach which strives to connect households to viable markets for long term sustainability. GHG supported efforts to prevent asset depletion during periods of high stress in targeted chronically food insecure HHs. This requires development of communal (boreholes, latrines, health clinics, road) and social assets (community led total sanitation, water user committee, health unit management committees, VSLAs) coupled with timely and efficient delivery of food rations for vulnerable women, children and other individuals at-risk.

4.7.1. Resilience

Mercy Corps defines resilience as the capacity of communities in complex socio-ecological systems to learn, cope, adapt, and transform in the face of shocks and stresses. Resilience is not the outcome of good development, but rather an ability that allows development to continue in a positive trajectory despite disruption. GHG's strategy promoted household resilience through a multi-faceted approach that relies on the participation of the private and public sectors, community based organizations (CBOs), and civil society organizations (CSOs).

In support of the private sector, GHG helped business forums to conduct business development services (BDS), while GHG supplemented this with training, mentoring, credit guarantees, market linkages and small grants. The creation of a supply chain from input providers to producers will continue to operate even in the face of a shock to the system. GHG's efforts to establish a supply chain for seed and animal health drugs is important if producers are to increase production of food.

GHG trained community leaders and government officials at the district and sub-county levels in developing management plans to counter environmental shocks and stresses, whether related to climate, politics, or other areas. In Year 5, GHG focused on shocks that impact livestock. Many families own livestock (over 75% in the household survey) and use them as a family asset which they sell when the family must buy food or other items in times of stress. Livestock production in Karamoja's semi-arid climate can be a more reliable source of income than crop production, and therefore is important to achieving resilience.

GHG's support to village saving and loan associations (VSLA) is an important coping mechanism for poor households. Households can tap into the VSLAs as a mechanism to both save money during periods of cash surpluses and borrow money to cope with food shortages in the lean season. The VSLA is an important source of cash to purchase inputs for modern technological inputs, e.g. seed, plant protection chemicals. During the planting season, it was reported that households spend more money on agricultural inputs than they do on food purchases.

4.7.2. Sustainability

While GHG ends in January 2018, Mercy Corps has already been awarded the follow-on program (Apolou) which will continue for another five years. The follow-on project will continue with some activities similar to GHG, while other activities will be modified to reflect the shifting needs in Karamoja. GHG has implemented its activities in an environment characterized by a high level of dependency due to decades of donor support, and very little support from the local or national government. Certain activities conducted by GHG are public goods and should ideally be continued through government support e.g. the MCGs and the VHTs. The GoU is getting good return on their public investments with funds leveraged from USAID and other donors.

The provision of supplemental feeding is not a sustainable activity, and efforts to improve local food production and local food markets would be the best strategy for achieving food security. Food distribution programs could be oriented to a cash program specifically targeted to vulnerable groups, e.g. 1000 day beneficiaries, HIV or disabled people. Programs could also bolster local markets to ensure affordable food is then available for purchase. The focus of supplemental feeding should be on food distribution and subsidy, not food aid, in order to meet households' long term nutritional needs.

GHG supported a number of CBOs which offer important services to the local communities. If possible, pushing these CBOs into public-private partnerships with the GoU would be advisable and this is indeed what GHG has been focused on. For example, the WUC and the HUMC are two CBOs that could benefit from support from the district health office (DHO) and the district water office (DWO). These CBOs are important to addressing communities' WASH and health service needs. As the economy improves in Karamoja, communities will be in a better situation to take responsibility for funding necessary operations of their assets, e.g boreholes, water supply systems, sanitary assets, etc.

Livestock remains the best and most reliable economic opportunity for the Karamoja region. The efforts by GHG to introduce simple animal health supplies through the private sector is a sound approach. The public health sector needs to restrict its services to surveillance, diagnostics, and reporting. When there is a serious disease outbreak, then the public sector should mobilize resources and specialists for treatment along with local vets and CAHWs. Otherwise, the private veterinary services need to be in the forefront of animal health services. The CAHWs suffer when the public sector encroaches on normal market activities, undermining the effort of the private service providers. GHG can continue to advocate for these individuals, provide training to them in vet and business skills, and educate the public of the services they provide and payment of fee for services.

Karamoja is a region that has a long history of donor support. At present there are over 50 non-government organizations (NGOs), civil society organizations (CSOs) and international donor agencies that operate programs in agriculture, health, rural development, social services and peace initiatives. MC participates in several regular fora that brings together representatives from these various organizations to discuss their on-going programs. These fora occur at the district, regional and national levels, and MC can advocate for coordination of organizations in designing and implementing programs to prevent redundancy in efforts, as well as, a shared agreement to distribute fewer free inputs by organizations operating in Karamoja. The prospects for sustainability of the continued impacts of GHG can be evaluated in four areas: sustained resources, capacity building, motivation, and linkages.

4.7.2.1. Resources

Two areas of importance for food security are agricultural extension services for the introduction and adoption of modern agricultural technologies and maternal child health and nutrition (MCHN). Both of

these activity areas require resources from the public sector, with the district and sub-county government agencies having key responsibility. For agricultural technology services, Karamoja's public sector remains essentially absent while private sector agrodealers provide farmers with information, technical guidance and market access. Agricultural extension services were re-introduced to Karamoja in 2017, but until they achieve activities at scale, private sector agrodealers can continue to sustain the development achieved to date based on their motivation to expand their agricultural input and commodity businesses.

GHG's health activities are now firmly rooted in the district and sub-county government activity plans and budgets. The health facilities constructed by GHG are operating based on local government support and staffing. The health delivery system will continue to need both hard and soft investments from the public and private sectors. Most basic health services needed by households can be provided by local health clinics, and these can be continually upgraded by the government and donors.

For sanitation and water supply activities, it is important that cost-sharing is part of the community's contract to participate in borehole construction and rehabilitation as it establishes the core relationship between households, communities and public agencies. The service fees charged through GHG's partner, Whave, seem reasonable and not overly burdensome. The fees paid by households are set aside to pay for the service rather than being collected and going into the general government fund account which usually pays government salaries. The exit plan for the water supply projects needs further clarity as to the best exit strategy for continued payment of operating repairs.

4.7.2.2. Capacity building

GHG empowered communities through leadership trainings of traditional leaders, both male and female, to adapt to challenges, while at the same time building the skills of district and sub-county officials to insure peace continues in the districts. GHG supported large numbers of actors and their organizations to conduct conflict mitigation and management (CMM). In a FGD, representatives of YCBOs said they can address conflict issues with their communities and their local government representatives after GHG closes.

GHG identified actors in the private sector who operate, or have the potential to operate, viable businesses. The project supported entrepreneurs to compete in the market space and establish market linkages. The trainings have been far-reaching including mothers in MCG+, business entrepreneurs (both male and female), producer organizations, women's groups, trade and business associations, and community based organizations (CBOs). Training was both technical (e.g. permagardens) and managerial (financial management, women empowerment skills, etc.). Trainings provided to VSLAs and SACCOs strengthened the financial sector which is very important to the sustainability of many activities. It is the VSLAs and SACCOs that are resources for households to access during periods of stress. GHG trained 392 businesses and business groups during the program. GHG also strengthened local government officials through the development of early warning systems (EWS), health services, water access, and sanitation and hygiene (WASH). The capacity building of these individuals and their organizations creates the foundation for continued peace, food security and economic growth.

4.7.2.3. Motivation

GHG has followed its core philosophy of being a market facilitator to allow public and private sector stakeholders to take the lead on activities. The profit motive is the driver for private sector activities and not free hand outs. The e-voucher system is an example of GHG using subsidies to prime the supply chain and then gradually withdraw from the activity leaving agents and producers engaged in business transactions. The environment for private investment is improving slowly and will further improve if the government and NGOs do not give out free inputs. Free inputs have a pervasive negative impact on the

culture when producers will not pay for livestock health services provided by the CAHWs. This is partly the reason why the CAHW system has not been very effective to date.

4.7.2.4. Linkage

GHG engaged with several key stakeholders in the public sector at the district and national level on stakeholder committees. These panels (health, agriculture, gender and others) establish policies which can have far-reaching impacts for many beneficiaries as GHG transitions into Apolou. GHG's staff hold leadership positions on several of these district-level platforms and will continue to do so in the follow-on project. GHG regularly informs stakeholders of conditions among their beneficiaries, as well as, provides and receives feedback on what other agencies and NGOs are doing. This feedback helps to guide on-going development activities so there is no working at cross-purposes or redundancy in activities.

The investment by GHG in road construction in Kotido is a good example of the multiplicity of benefits derived from one investment linking to others. The GHG funded road construction had a profound impact on an area that resulted in one community investing in a connecting feeder road to the new road.

Finally, GHG's focus as market facilitator, connecting producers and agricultural dealers and their agents, will ensure that demand and/or supply of goods and basic services are sustained and enhanced once the activity withdraws support. Private businesses have the incentives to provide products and services to their customers which is the gold standard for sustainability.

5. SYNTHESIS, LESSONS LEARNED, RECOMMENDATIONS

5.1. Synthesis

Karamoja no longer experiences widespread conflict and insecurity, which has created an opportunity for the Karamojong to cultivate fields, freely move their livestock, participate in markets, and access a wide range of services. Assistance programs have shifted focus from distributing food and other assets, to building the capacity of the Karamojong to produce their own food. With increasing crop and livestock production, 50% of households now report that they are food secure even though direct food aid has ended. (In 2013, 18% of households said they were food secure when many organizations were distributing food). Market activity has visibly increased, while government services for health and education have also improved. Despite this, undernutrition has not significantly improved and remains critically too high. Households remain on the edge of a poverty trap and have been unable to emerge out of poverty though there are some notable successes from GHG.

The region is a net importer of food, so local producers could fill the food deficits at a cost less than imported products because of road infrastructure and transportation costs. Many people are engaged in the agricultural and livestock value chains, and this sector remains the main gateway to economic development for many people in the region. GHG's focus on being a market facilitator by linking agricultural producers with input dealers and service providers has been effective at extending Uganda's value chains into Karamoja.

In all three of GHG's strategic objectives, a multi-sectoral approach has been the best method to achieve sustained, long term peace and food security. The multi-sectoral approach is inclusive of all partners - public, private and civil society - to work in harmony, to plan and share information, to avoid duplication and to leverage resources. A stove-pipe approach to interventions would not have resulted in the multiplicative impacts that were achieved by GHG. The GHG team played a coordination role with the government and other donors. With over 50 NGOs operating in the Karamoja Region, it is important to have open and regular dialogue with working groups around agriculture, livestock, natural resources, health, youth and peace initiatives. In northern Karamoja Region, there are six programs in governance, nine in nutrition, five in WASH, twenty in livelihoods and 26 other projects in various areas of development.[33]

5.1.1. Growth

In the medium term, the best options for food security are in the agriculture and livestock sub-sectors (see Box 5.1.). Livestock, cereal grains and vegetables are important sources of food to diversify the local diet which is predominately carbohydrates. The evaluation team witnessed examples of good agricultural and livestock practices that can serve as models for scaling. Women are in the forefront of the modernization of agriculture by demanding quality seeds and using these to improve their

Box 5.1. Technologies Improve Agricultural Systems and Nutrition Outcomes

Producers can benefit from a selection of agricultural inputs, including extension advice and training, demonstration plots, improved seeds, animal traction and implements, veterinary medicines, animal health services, market access, market information, income generating activities, and financial services.

Households that utilize these inputs will see nutrition outcomes of their children improve. This evaluation found significant associations between access to extension services and community animal health workers and the improved nutrition outcomes for children under five.

[33] List of collaborating projects in Karamoja Region was provided by MC staff.

supply of nutritious foods for their families. Women are also becoming more active in poultry and milk production.

GHG activities enabled households to generate food and income that is used to purchase food and productive assets. A significant intervention has been the support to VSLAs and SACCOs which enable people to access their savings and receive loans which they can use to adopt better practices. VSLAs also serve as a bank for saving money to be used later as a coping mechanism when food supplies are exhausted. Working alongside the district government, GHG provided agricultural extension training to boost agricultural production and productivity.

Currently, household members are targeting "low hanging fruit" for cash income, such as collecting firewood, making charcoal, and producing bricks which are extractive businesses and if left uncontrolled can damage the environment. Beer production from sorghum is another activity that women conduct to generate income, but has the dubious relationship with the rise in alcohol abuse and the beer waste being fed to children and pregnant and lactating women. Casting a wider net for job creation must be a priority of future programs.

5.1.2. Health-nutrition

GHG has contributed to significant improvements in the health services for communities, ranging from constructing and equipping new health facilities to improving the quality of and demand for health services. These improvements along with behavioral change communications has resulted in higher numbers of women delivering their babies in a HF. In addition, GHG has helped communities gain access to reliable water sources and have improved hygiene and sanitation in their community and home. GHG activities in the health component have a strong synergy to interventions conducted in the livelihood and governance components. These cross-interventions are positively impacting the nutrition outcomes of households (see Box 5.2). It will be important for future programs to further investigate the reasons why improvements in nutritional outcomes have not improved compared to the baseline; except for the Minimum Acceptable Diet (MAD) score (see Table 5.1.)

Box 5.2. Children's Nutrition Outcomes Improve when:

- Mother belongs to a MCG+
- Mother belongs to a savings group
- Mother is not being abused
- Family owns title to land
- Family receives ag advice
- Family owns livestock
- Family trades in goods
- Family offers diverse diet for child

Table 5.1. Nutritional outcomes for children under five years

Indicators	Baseline for GHG (a)	HNS – MCG (b)	HNS – MCG+ (c)
Stunting	36.9%	44.7%	38.5%
Wasting	12.8%	13.6%	13.1%
Underweight	28.1%	34.3%	29.3%
Dietary Diversity Score		40.2%	55.8%
Minimum Acceptable Diet	2.2%	44.7%	55%

Note: (a) Baseline estimate from population based survey at the start of the project (2013), (b) GHG Household Nutrition Survey of a sample of Mother Care Group members (2017), (c) Household Nutrition Survey of a sample of Mother Care Groups Plus (2017)

5.1.3. Governance

While the Uganda military played a major role for disarming the population of Karamoja, the district and sub-county governments along with traditional leaders and CBOs are taking the lead to ensure peace continues. The police force is relatively new in Karamoja and communities are now referring crime to the police instead of taking matters into their own hands.

Great strides have been made in achieving inclusive governance through local community-based organizations filling the role of both representation and advocacy between the community and local government. However, these organizations and local government remain weak and have limited capacity, as well as, the necessary financial resources to provide services. Enforcing ordinances that restrict certain types of alcohol sales and early marriage, maintain valley dams and other public assets, and mandating primary school education remain challenging. However, the local government has been improving its ability to successfully negotiate herd movements to neighboring districts and to restrict livestock from grazing privately-owned fodder fields.

5.2. Lessons Learned

The most impactful lesson learned for GHG has been its employment of the adaptive management approach which has had effective results across all three components and the cross-cutting theme of gender equity and empowerment. The use of the STRESS process by GHG to track changes and listen to staff in the field prompted key mid-course adjustments. The modifications of existing activities and the addition of new activities have kept the project team focused on what are the best interventions for the beneficiaries and clients. The following lessons learned are listed by SOs.

5.2.1. SO1. Livelihood

- The Karamojong can and are willing to adopt new practices providing that a benefit can be demonstrated. The change in herders' mentality seen in purchases of health services and medicine can spread to other sectors.

- In the semi-arid zone of Northern Karamoja, pastoral livestock systems have a comparative advantage for production of both large and small ruminants. As found in other arid and semi-arid lands (ASAL) in the Greater Horn of Africa, realization of these benefits to livestock keepers is the ability for mobility to seasonally trek to traditional grazing areas. Disruption of these seasonal movements (government regulations, livestock raiding and community restrictions on trekking routes) creates economic hardship for households depending on their livestock for their livelihood. Communities will have to cooperate on protecting grazing areas, producing and storing fodder, establishing water points and ensure trekking routes. There are economic benefits which are currently not being recognized in livestock production that can be captured by communities and can benefit regional development.

- It is evident that producers (mostly women) will invest in agricultural inputs. Household food security in Karamoja is linked to increased food grain production, i.e. maize, sorghum and millet. There are several complementary agricultural commodities that could provide additional protein to improve household nutrition. Varieties of groundnut, cowpeas, pigeon peas can be inter-cropped through intensive production systems and at the same time improve soil fertility.

- The adoption of improved agricultural technologies requires a package of improved inputs. The important lesson learned is that producers (mostly women) value the improved seed varieties, and they will spend money on inputs to increase the food supply for their family and for the market. Other inputs are needed, e.g. fertilizers, plant protection, small-scale machinery and equipment (irrigation) to reduce the amount of labor by women in crop production, and allow them to be more efficient in production.

- Demonstration plots are effective at showing farmers how their fields and gardens can be improved for increased food production. The impact of the demonstration plots is dependent on understanding women's perceptions on best crops and practices, which differ from men's perceptions. Agricultural advisors will need gender sensitivity training. These advisors need to assess the uptake of modern technologies caused by the demo plots. Soil testing needs to be included in the program activities with the application of organic and inorganic fertilizers to get the expected yield response.

- Infrastructure investment has a significant impact on economic development and livelihoods. The GHG investment in a 36 kilometer road in Kacheri is a good lesson learned for economic development. By opening a transportation route, the road has led to multiple positive impacts. The infrastructure improvement reduces transport costs which has been shown to have a direct effect on producers who will adopt improved, modern technologies and become linked to the marketplace. In addition, the people of Kacheri invested their own money and labor to build two shorter feeder roads to connect their village to the new main road.

- MC is testing opportunities for several alternative income generation activities (IGA) for households, e.g. ploughing services, stove retailing, etc. It is important that market research evaluate the demand, price points, promotions, and profitability of these investments to ensure an adequate return on a woman's time, her effort, control over decisions and income earned. A business advisor can assess these conditions and also the environmental impacts, e.g. cutting trees for charcoal and firewood.

5.2.2. SO2. Health

- Disease surveillance and reporting through primary data collection is an important part of ensuring good health care services. The sharing of that data with communities and its HUMC can lead to better patient services at the health care centers.

- Knowledge can be transferred on health and nutrition, but there is no guarantee that practices will be adopted or that the intended impact will be achieved. It continues to be a challenge to find the path to achieving real change and not just the transfer of information on household nutrition. There is a need to have a deeper understanding of the household dynamics in food utilization and causes of malnutrition to better understand why nutrition indicators are not improving faster.

- Communities need a strong CLTS program that engages all households in buying into the collective will to improve their water resources and their sanitation and hygiene. Communities must come up with a solution to the free-rider that some households will delay or just not pay their user fees if they let others in community pay for them. Government agencies must be an active partner in the sanitation program. Market driven approach and services delivery on a "Payment-by-Result" basis is more incentivizing and attractive for community members and thus contributing more success and becoming more resilient to shocks. It is necessary to have strong follow-up structures at the community level to prevent back-sliding into old habits of water usage when borehole breaks and household return to the practice of open defecation.

- MCAs play an effective role in achieving behavioral change. Men serve as educators to families and as mentors to other men. MCAs can advocate for husbands to share household, child care and farming duties with the wife. When it comes to health decisions, MCAs can influence men in making appropriate decisions on health of the wife and children, child spacing, and prevention of destructive behavior, such as alcoholism.

- Support for fora and other means of communication (drama shows, radio, MCA dialogues) is important to continuing the awareness building for appropriate behavioral change. The MCA program showed how important it is for engaging men in the process to achieve gender equality and equity and the positive impacts it has on household livelihoods.

5.2.3. SO3. Governance

- Social issues (alcoholism and SGBV) have increased and these issues can be best dealt with by YCBOs and informal traditional leaders. Peoples' trust in government agencies is not high. Findings from the HNS found that women are more comfortable addressing concerns to their traditional leaders on these social issues. It is important to continue to support local institutions that are familiar to the community.

- Conflicts will increase over the access and control of natural resources because of climate change. Communities can be proactive with early discussions and the use of mediation skills to avoid conflicts. Communities will need to learn to cooperate to implement plans that can accommodate multiple users of the available resources. Without the engagement of all parties then tensions will simmer until they explode suddenly into violent conflict. The situation can be managed through participatory approaches involving all parties.

- The women of a community play an important role to long term success in achieving peace in Karamoja Region. The group of women who traveled to the raiding village in South Sudan was a special, learning event illustrating that women can be effective peace-makers. Women have the capacity to address conflict with an approach that can reduce tension and establish dialogue for resolution. Programs that can empower women to take on leadership roles in their community will have great benefit for many people.

5.3. Recommended Action Plans

The continuation of food security programming is recommended with emphasis on adaptive management programming that considers the rapidly changing context and opportunities to effectively integrate growth, health and governance activities.

5.3.1. Growth

5.3.1.1. IR 1.1. Improved productivity and market access

To further increase productivity and market access in Karamoja, programs will need to balance much-needed short-term increases in yields with long-term sustainability and resilience, in part by adopting "Climate Smart Agriculture" as recommended by the FAO- UN[34] and by intensifying agricultural production. Specific recommendations include:

- Prioritize agricultural intensification and integration
    - Adopt farming systems approaches that integrate crop and livestock production and capitalize on their synergies, e.g. combining poultry, home gardens, small ruminants, silage from crop-residues, multi-purposed trees and water collection systems in a holistic farming systems approach. This integrated approach can sustainably increase food production and productivity. The inclusion of livestock into the farming system is new (because livestock were previously at the kraal or distant pastures) and there is potential to significantly improve the diet and incomes of the household. Care should be taken to avoid unsafe

[34] FAO-UN. (2013). "Climate Smart Agriculture Sourcebook." http://www.fao.org/docrep/018/i3325e/i3325e.pdf

environments that lead to environmental enteropathy or unsafe food such as raw milk or blood that can carry disease (tuberculosis, brucellosis, etc.).

- Intensify crop production with cost-decreasing technologies (maize shellers, oxen and ploughs) for reduced labor inputs and increased productivity that increase smallholder farmers' food supply and incomes. These technologies further enable communities to invest in agricultural and non-agricultural commodities and consequently expand the local economy. Programs should include yield-increasing technologies and crop types that can markedly boost the availability of food and/or increase incomes of smallholder farmers. Agricultural extension services are required to sustain the gains made in farmer productivity under GHG. The private sector agrodealer-agent business model continues to be the best channel for inputs, demonstration plots and extension education.

- Systematically evaluate and then roll-out selected (proven) research findings (e.g. from USAID's Africa Rising program) for agriculture and livestock practices suitable in a semi-arid ecosystem and transfer to agricultural extension workers (AEWs), community animal health workers (CAHWs) and in on-farm demonstration plots and farmer field schools (FFS).

- Transition to a Value Chain development approach
  - A growing opportunity exists for feed production (hay, silage, mineral blocks), and milk collection and processing. Households can undertake backyard fattening. This will drive the demand for manyatta-based animal health services (versus CAHWs that move with the herd) and will require additional strengthening and availability of CAHWs, and their connection to commercial drug suppliers and private veterinary practitioners, who can serve as advisors and for referrals. CAHW services can gain efficiencies by utilizing mobile money transfer to pay for services.
  - For farmers to increasingly commercialize their production, programs should also focus on developing more competitive and efficient markets through a private market systems approach.
  - Improve distribution systems that include Karamoja-based storage and distribution centres, will reduce entry barriers for a wide range of traders and businesses.

- Promote nutrition-sensitive agriculture
  - Foodgrain and vegetable production need to be priority crops with an emphasis on crops with additional nutritional values, such as bio-fortified food crops that are adapted to farming systems in the Karamoja region that can provide needed protein and micronutrients to households.
  - Animal Source Foods (ASF) are part of the traditional diet and will be readily adopted in conjunction with manyatta-based livestock production systems.
  - Advocate for better food systems built on "nutrition – sensitive value chains". The government should develop targeted public policies that promote value chains that will benefit households in the Karamoja region. Proposed policies can include bi-fortification of foods with vitamins and minerals and can begin to address nutrient deficiencies in primary foodstuffs.

- Increase the focus on environmental mitigation
  - Support communities to complete plans using the Landscape Management Approach (LMA) to develop their community resource management for balancing grazing, cropping, water, and forestry within a climate smart agriculture approach to address risks of climate change.

- Continue the business development of renewable energy briquettes and energy efficient stoves which are taking hold in urban areas of Karamoja and stoves have the potential to reduce local charcoal and firewood demand.
- Promote the establishment of tree planting of multi-purpose trees (such as Moringa Oleifera and nitrogen-fixing trees) for commercial and household use. These fast-growing trees are suitable to the climate of Karamoja Region. The high rate of harvesting for charcoal production must be replaced with specific and protected tree plots for household fuel, animal feed and environmental benefits. Short-term support to growers could be to establish tree nurseries.

- Prioritize gender to improve impact and program effectiveness
  - Support gender behaviour change activities that enable husbands and wives to make joint decisions about what to produce, how to share responsibilities, and how to spend money are essential for increasing productivity and incomes to lead to improved nutritional outcomes for households.
  - Women and youth need to actively participate in the design and implementation of such programs to ensure that they are successful and sustainable.

5.3.1.2. IR 1.2. Business investment environment stabilized

Enabling environment requires that local businesses have access to basic services and markets and that they have a voice so they can collectively influence policies to improve the business environment. There are no large businesses in Karamoja, and few obvious business leaders. However, here are opportunities for producers in Karamoja to export livestock, crops and other products beyond the Karamoja region. Specific recommendations include:

- Further expand (inclusive) access to financial services. Easy access to financial services and mobile money agents is needed to facilitate the additional costs associated with adoption of the modern technology for crop and livestock production and marketing. Agricultural producers will need credit (or savings) through their VSLAs and SACCOs to purchase seeds, fertilizers, chemicals, tools/equipment and post-harvest technologies (PIK bags). Larger investments could be sourced through a regional or national agricultural development bank.

- More infrastructure is required for markets to operate efficiently, necessitating continued investments needed in physical infrastructure such as roads, electricity, irrigation, and markets to speed up both technology adoption and improve market linkages.[35] This should include strengthening support services, such as information technologies (IT) that can use solar panels around which the small household level businesses can flourish. Promoting the sale of inexpensive cell phones for households for knowledge and information sharing would also be productive.

- Prioritize Business Development Services to help Karamojong entrepreneurs gain the required business skills despite low literacy and numeracy. These services are best delivered by other local business, or business forums, that have the ability to communicate at an appropriate level. Pivot to include adolescent training in life skills and business management to create employment opportunities for youth as alternatives to early marriage and pregnancy.

- Use business forums and other groups as a spring board for business growth. Support business creation through the Business Forums (precursor to Chambers of Commerce) that now exist in all

[35] Damania, R. et al. (2017). "Agricultural Technology Choice and Transport." Am. Jo. of Ag. Econ. 99 (1), 265-284.

Karamoja Districts and aspire to represent their members' needs while also providing services to their members.

- Continue with roll-out of the M4P approach and promote the approach to other NGOs (and government) to reduce market interference.

5.3.2. Health and nutrition

Future programming needs to build upon GHG's strong partnerships with stakeholders in the health system.

5.3.2.1. IR.2.1. Increased access to quality maternal and child health care improved

- Efforts focused on government stakeholders
  - In partnership with the DHO, activities should continue to improve health delivery services by improving the governance of the health delivery system, especially in areas where GHG previously supported health facilities (HFs) with improved buildings, equipment and staff development.
  - Programs can support government agencies in their health promotion programs (such as exclusive breast feeding up to six months). The activities conducted by GHG helped improve pregnant and lactating women's (PLW) attendance at health facilities. The continued support to HUMCs with assistance of LMs and MCA serving in supporting roles can promote the importance of greater utilization of HFs.
  - Advocate for policies creating coordinated programs that address high rates of stunting, increase breastfeeding, and increase children's intake of protein.[36]
- Improve health technologies
  - Explore technology for health platforms to bridge gaps in access to healthcare and behavior change uptake, such as telemedicine or mobile reminders for key dates, such as antenatal care appointments.
  - Encourage VHTs and households to improve access to mobile phones. VHT's with mobile phones can respond quickly and effectively when observing early signs of malnutrition. In a recent Karamoja Food Security Assessment (KFSA), less than 23 percent of households had mobile phone technology. If mobile phones could be available through a cost-share voucher program, then the VHTs can reach individuals that need to be reminded about appointments at the HF and follow up on the care being given to malnourished mother or child. These technologies will improve the efficiency and effectiveness of the VHT. The VHT could carry supplies of vitamin supplements to provide to mothers and children instead of having them travel to the health clinic and wait in line– anything that can make the mother's life easier is an improvement.
- Further empower communities to support public services and demand accountability.
  - HUMCs should be further strengthened and also include more women members. CRC activities should also continue and will likely produce additional improvements in the quality of health services and motivate the communities to more fully utilize the services.

[36] Badiane, O. and J.v.Braun. (2017). "5 Lessons from Africa for Policy Makers to Reduce Malnutrition." IFPRI. Washington, D.C.

- HUMCs can address other important health issues in the community. The status of HIV prevalence in the community is an issue that requires transformative change. The high level of alcohol abuse by both men and women is another example of needed transformational change. Women impacted by sexual and gender violence need to know about a pathway to care at the HF. Young girls face health concerns from early marriage to early pregnancy, and these are gender related issues. If the women leaders in HUMCs are empowered with skills training and tools, they are in the best position to address these health issues affecting young girls, alcohol abuse and HIV. At the same time, male change agents (MCAs) can have a set of messages for young men that parallel what the HUMC committees are advocating.

Box 5.3. Citizen Report Card for Health

Improvements in the governance of health resources can occur using the CRC. Local governments led the CRC exercise by building the capacity of the sub-county health assistants to facilitate dialogue and build ownership between HF and communities. GHG conducted 2365 community health surveys and 53 facility assessments and findings shared with 53 HFs. Joint action plans were completed for 45 health facilities.

5.3.2.2. IR.2.2. Increased consumption of nutritious foods by household

The persistent elevated levels of undernutrition require a deeper understanding of the critical barriers in household food systems. It is important to close the knowledge gap to include increasing the consumption and utilization of quality, dense nutritious foods.

- Adopt a "sustainable nutrition – sensitive value chain (SNSVC) approach" with the emphasis on how to improve dietary diversity and micronutrient utilization through research on fruits, vegetables, animal source foods, and other foods. This could include food budgets on what women pay for available food throughout the year. Research on the inclusion of bio-fortified crops, e.g. legumes high in iron and protein, would be important as would fortification of maize and sorghum flour. Wild foods (over 130 varieties have been identified in Karamoja) can be researched and potentially added to the diet to lower the cost, increase diversity and improve the quality of food consumed. Sorghum beer by-products (dregs) could also be researched to determine if they can be converted to a safe food addition in the human diet.

Other nutrition-related recommendations are included in the section-heading for the other IR's.

5.3.2.3. IR.2.3. Reduced incidences of diarrheal diseases

Improvement in food security is a multi-sector approach which requires improved environmental conditions in the village: improved sanitation, clean water, health care facilities, education and economic livelihoods. Reduction of diarrheal disease is an important indicator that a community has obtained the recognition of having a healthy environment for its residents.

SIR 2.3.1. Access to safe drinking water strengthened

- Government policy for WASH is needed to address the issue of installation and maintenance of boreholes. A successful WASH program should be multi-sectoral, engaging the ministries of health, agriculture, education and water resources to work together for investments to be sustainable. A borehole is likely the most expensive investment for a village and its residents.

- WASH service provision requires further scaling. Scaling-up should be achieved through a WASH public-private partnership (PPP) framework of the service provider and the government agency acting in partnership, such as the District Service Utility (DSU). DSU is a WASH PPP general framework within which a Service Provider and GoU operate in partnership for water point management and services delivery. Good coordination run by DSU will be crucial for sustainability of WASH interventions after the GHG program stops. A market based approach for services established on a "Payment-by-Result" is more incentivizing and attractive for community members and thus achieving more successful outcomes. If CBOs can implement programs with steady cash flow, like water user fees, the community will be more resilient and able to perform at a higher level. Success of GHG's activities in SO1 to increase household income will remove the constraint of households being unable to pay fees for clean water. Long-term financial sustainability will be fully achieved once continuity in the delivery of products and services related to water, sanitation and hygiene is assured and the activities of boreholes repair or maintenance are locally financed through fees regularly collected from HHs.

- The members of the WUC need to have the relevant skills to promote the concept that households own the borehole and are entitled to its benefits. The education of residents is important if the WUC is to implement a user fee that will cover the costs for repair. Women can play a pivotal role in leading the awareness program because they have the most to lose if the well malfunctions and they must collect water from distant, unsafe sources. Women gather at boreholes, and the MCAs and women leaders can take the opportunity at these occasions to build consensus about payment of fees. Empowering women leaders in the water resource system for a village would have immediate and effective impacts for sustainability of the borehole. Men are more likely to avoid payment preferring to spend money on their priority needs while women would be more inclined to budget for the water they use.

SIR 2.3.2. Communities' sanitation access and hygiene practices improved

An improvement in sustainable sanitation and hygiene practices depends on behavioral change, and has the potential to positively impact child survival and well-being of the household. Some recommendations to consider for future programs are:

- Continue school-based educational activities for better hygiene practices. Schools are a good place to educate children about the costs of poor sanitation. Low attendance by girls' in school is partly due to lack of available sanitary and private latrines. More and better latrines at schools would help in improving the situation for all children. School health clubs can be scaled up to promote hygiene for boys and girls.

- It is important that rural communities have institutions to push for an increase in demand for improved sanitation services. The district government departments can be encouraged to take the lead with district-wide coverage to support communities and their institutions for both sustainability and learning. Government support to the committees seeking CLTS status can be effective in engaging households in behavioral change. It is important to work closely with the DHO to have a program led by a district-wide sanitation officer. Other change agents, like religious leaders, can be brought into the education and promotion program. Sanitation promotion needs to be a long-term health promotion effort.

- Market development should be part of the CLTS approach. The development of a PPP can be a worthy pilot program patterned after the HPMA. Public participation can be with the District Sanitation Unit (DSU) to promote small businesses to construct the improved sanitation facilities. The engagement of private sector entities to provide local low-cost sanitation materials. For example, the supply of concrete slabs to cover the latrine, piping, and tools can be supplied through the private sector. Priority should be given to the use of low-cost local materials. Youth groups could be employed in the business of

sanitation infrastructure just like the HPMA for bore hole servicing. Creation of demand for sanitation services requires having affordable materials available at the same time as the creation of demand. The service business model should be financially viable and can be taken to scale.

- In Kotido District, only 28% of households have at least 15 liters/day of water available[37] which requires special efforts. District government departments need to step-up outreach programs to communities for water and sanitation improvements. A plan to inject additional rewards or incentives, such as positive attention from their local government officials, can be used to motivate resistant communities to adopt WASH improvements. Continuation of WASH activities employing the iCBM approach should also be prioritized, engaging both public and private stakeholders in delivery of services. A redoubling of efforts, especially in Kotido, is necessary with new tactics used for addressing reluctant communities.

5.3.3. SO3. Governance for Peace and Food Security

Continued peace is a prerequisite for achieving food security. While peoples' livelihoods have certainly improved during the GHG program, the number of reported conflicts is still high and can be further reduced through additional capacity building of youth groups, peace groups (PGs), formal and informal structures, and by improving the capacity of women to be leaders in these groups. Youth groups have the potential to be the front-line actors against current and future conflicts and can take the lead in mobilizing their communities. KAPDA and AWOTID, MC's partners in GHG, need to continue to support YCBOs and women to interact with government authorities in a positive and proactive way. These efforts build trust and avoid backsliding into violence and deeper poverty.

- Land rights and the management of natural resources are keystones for development of the Karamoja Region. With the peace dividend in hand, great strides can be made by government and local communities to both protect natural resources while also allowing smallholder farmers to have access to suitable agricultural land complementing livestock producers increasing utilization of Karamoja's vast rangelands. As part of this initiative is the government role in Early Warning Systems (EWS), and how communities use the information for dealing with consequences of climate change. Addressing adverse impacts of climate change on food security and livestock assets can reduce conflict.

- Continue to support youth groups dedicated to addressing social issues in their communities with skill development in the areas of Outcome Mapping (OM), accounting, monitoring, mobilization techniques and gender inclusion. Building their capacities to engage government to have a voice in policies and plans for climate adaptation is also important. Support should also include gender awareness and women's empowerment to address the vestiges of discrimination. It is necessary to elevate women and youth into roles of active leadership in community organizations.

- Support women's involvement in decision-making in mitigating the impacts of climate change because women are mainly responsible for food production and are more vulnerable to the effects of climate change.

6.0 ANNEX TABLES

Annex Table 6.1 Interviews conducted of WASH stakeholders - numbers of FGD, KII and attendance in interviews

District	FGD	KII	No. in Attendance (both FGD and KII)

[37] World Food Program. (2016). "Food Security and Nutrition Assessment, Karamoja, Uganda." Makerere University School of Public Health.

			Male (M)	Female (F)	Total
Kotido	5	5	32	18	50
Kaabong	8	3	59	34	93
Abim	7	3	53	22	75
TOTAL	20	11	144	74	218

Annex Table 6.2. Seed sales through e-voucher program

	2015	2016	2017	Composition of 2017 sales
Ag. Dealer Participating in E-voucher for seeds	12	12	8	
Seed sold in voucher program	3 MT	48 MT	591 MT	Sorghum-Maize = 169 MT 16,900 AC Bean-Legume = 421 MT 10,626 AC
Area Planted with Seed Voucher Program	139 AC	2,235 AC	27,526 AC	

Annex Table 6.3. Sales of animal health care for ticks and internal parasites for livestock

	Annual Sales		Value
Sales of Tick medicine	4,200 units		28,000,000 UGX
Amount of internal parasite control drug	3,250 liters		

Annex Table 6.4. Demonstration plots and participants in districts

	Abim	Kaabong	Kotido
Demo plots (numbers)	35	65	20
Lead Farmers – number	35	65	20
Average area of demo HA	14.164	26.3046	8.09371
Direct Follower Farmers – numbers	Not measured in these terms		
Increase in number of plots from 2013 to 2017			
2013	0	0	0
2014	0	0	0
2015	21	36	12
2016	35	65	20
2017	35	65	20
No. of additional farmers collecting seeds/plants for their fields – gardens			
Demos with vegetables near or in manyattas	30	60	10

Annex Table 6.5. SIF awards made to youth groups

S/N	Name of group	Items received	Type of business	Value of the items
1	KART	Tri-cycle	Grains milling and cereal Banking	6,700,000
		Grinding Mill		16,190,000
		Tarpaulins		500,000
2	PADO	1. Hair conditioners 2. Mirrors 3. hair treatment 4. Saloon Tech items 5. Solar system and installation	Uni-Sex Saloon Business	1). 800,900 2). 1,000,000 3). 686,000 4) 1,262,600 5). Est at 5,200,000
3	JIECODI	Set of Bakery items	Bakery	
4	NATYA	Tri-cycle	Grains milling and cereal Banking	6,700,000
		Grinding Mill		16,190,000
		Tarpaulins		500,000
5	LOTYOG	Tri-cycle	Grains milling and cereal Banking	6,700,000 16,190,000 500,000 1,200,000

Annex Table 6.6. Reported conflicts for the past twelve months

Location/District	Types of Conflicts	Number of Conflicts	Status of the conflicts		
			Resolved	Pending	Referred
Abim	Land related conflicts	58	38	05	15
Kaabong	Cattle theft and attempted cattle rustlings	41	11 (All cattle recovered and returned to owners; culprits arrested)	17 (No recoveries and no arrests made)	13 conflicts were attempts to
Kotido	Land Border Conflicts	2	1	1	0
	Cattle theft and rustling (most pronounced ones)	13	8	5	0

Annex Table 6.7. Capacity building program for SO3 partners

Partners	Process and Gaps identified	Approach to manage gaps
KAPDA	Conducted Organizational Capacity Assessment/Organizational Capacity Index (OCI) and identified the following gaps. 1. Weak Governance structure/system (Board of Director) i.e. poor board composition, BOD not performing to its expectation 2. No organizational sustainability plan and strategy 3. Inadequate KAPDA Monitoring and Evaluation systems 4. No resource Mobilization Team/Body formally reinstated 5. Inadequate implementation techniques 6. Finance and procurement 7. Resource Mobilization gaps	• Developed a Capacity Development Plan for KAPDA's prioritized gaps , to be implemented by KAPDA • Conducted capacity building trainings e.g. Proposal writing, PM@MC trainings, Land Rights trainings, Communication, documentation and reporting training • On field Mentorships • Finance and Procurement trainings • Conflict mitigation and Governance training
AWOTID	Conducted an OCI for AWOTID and observation of gaps during interaction and implementations Gaps identified • Finance and procurement issues • Governance issues associated with the BOD • Poor communication and networking • Programme management issues • Resource mobilization and Audit issues • Fleet management issues	Developed Capacity Development Plan By use of OCI priorities identified Conducted in room capacity building trainings and mentorship sessions • Finance, Procurement and Logistics trainings • PM@MC training • Communication, report and documentation training • Proposal development training • On Field Mentorships

		• Conflict mitigation and Governance training • Land rights training
YOUTH GROUPS	Self-Assessment and Observation during activity implementation. We observed and they also identified the following 1. Program management gaps 2. Resource mobilization issues 3. Monitoring and evaluation issues 4. Report writing communication and documentation issues	• Conflict mitigation and Governance training • PM@MC training • Communication, report writing and documentation training • Proposal development training • Monitoring and evaluation training

7. SCOPE OF WORK

SCOPE OF WORK – FINAL EVALUATION OF GROWTH, HEALTH, GOVERNANCE (GHG) PROGRAM

Project/Consultancy Title: Final Evaluation of USAID funded GHG program, implemented by Mercy Corps

Project Location(s): Karamoja, Uganda

Target Districts: Abim, Kotido, Kaabong, Amudat, Nakapiripirit

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Background Information

Mercy Corps is an international NGO that has worked to alleviate poverty and oppression in transitional environments since 1979. Operational in Uganda since 2006, Mercy Corps implements programs designed to promote, good governance, peace, food security, and economic development across Northern Uganda.

Mercy Corps has been implementing the USAID funded Growth, Health and Governance (GHG) program in Northern Karamoja, Uganda since 1st July 2012. The program ends 31st January 2018 but the evaluation will cover the 1st July 2012 to 30th September 2017 implementation period. The goal of the program is **to improve peace and food security in Karamoja** through an integrated, gender-sensitive approach focused on three strategic objectives:

1. Livelihoods strengthened
2. Nutrition among children under two improved
3. Governance and local capacity for conflict mitigation improved.

Evaluation Rationale

The final evaluation will be conducted by an external contractor to:

- Evaluate the appropriateness of the program goal, objectives and theory of change, given the context of Northern Karamoja. Appropriateness will be measured by relevance of the strategies and interventions implemented by the program to achieve its goal of improved food security in the context of Karamoja from a resilience lens, noted by the extent to which interventions strengthened, or failed to strengthen, the capacities of Karamojong to respond to shocks and stresses
- Evaluate the intended and unintended, positive and negative impacts of program interventions in

relation to the stated goals and objectives through a series of beneficiary surveys, community level data and key informant interviews with institutional stakeholders. Following analysis, assessment findings will need to be integrated to form a cohesive narrative of program impacts, including conclusions, lessons learned and recommendations for future programming

- Collect best practices of the GHG Program to use for internal organizational learning and dissemination outside of Mercy Corps
- Identify how the GHG program supported the USAID DFAP overall objective
- Evaluate the application and utility of GHG's adaptive management approach
- Assess program sustainability based on four criteria: Capacity, Motivation, Linkages and Resources

Measure the progress made to date against each of the Strategic Objectives, including cross-cutting objective of gender equality, and each of the intermediate results.

a. Under Strategic Objective 1: Measure progress towards economic development through a facilitation approach, with intermediate results focused on improved productivity among male and female agriculturalists, agro-pastoralists and pastoralists and the extent to which interventions have stabilized the business investment environment and accelerated market growth
b. Under Strategic Objective 2: Measure progress towards improved maternal and child nutrition, with intermediate results focused on increased access to quality health care, increased consumption of nutritious foods, and reduced incidence of diarrheal disease through WASH interventions
c. Under Strategic Objective 3: Reduced incidence of inter-ethnic armed conflict, with intermediate results focused on capacity development of conflict management actors, and constructive youth engagement. Additionally, the study will note the progress made through adapted strategies to address the changing nature of conflict in the region

It should be noted that USAID will conduct their own independent endline assessment in the GHG project area. This evaluation will not duplicate that but will complement it with a larger focus on learning and best practices.

Evaluation Design & Methodology

Methodological Approach

This is a mixed methods, participatory evaluation. Several targeted quantitative assessments may need to be combined into a cohesive final narrative. The following data collection and analysis methods expected include:

- Site visits and observations
- Qualitative data collection- Semi-structured stakeholder interviews and focus groups with beneficiaries, stakeholders and key informants
- Quantitative data collection- series of quantitative surveys targeting select target populations as well as broader community level data collection
- Facilitated meeting – a meeting to be held with MC and partner staff and stakeholders to reflect on program implementation, challenges and successes
- Document review

Data Collection & Analysis

Any quantitative data must be dis-aggregated by both sex and age, as well as geographic location. External stakeholders should be included in the evaluation, as appropriate, to provide additional insight and validation of results. Stakeholders may include: sub-grantees, local NGO partners, local government, and private sector actors.

Existing data sources to inform the evaluation include:

- Monthly, quarterly and annual program and M&E reports
- Annual PREP reports
- Sector specific assessments and evaluations conducted internally and externally throughout the life of the program, in particular but not limited to:
    - MCG Assessment
    - Gender and Youth Behavior Change Assessment
    - VHT Assessment
    - MCHN Barrier Analysis
    - CRC Reports
- Mercy Corps Karamoja STRESS Report
- Food security and nutrition analysis and monitoring tools: WFP FSNA Reports, USAID TOPS Karamoja Seasonal Analysis and Intervention Guide, Cost of Diet in Karamoja, etc.
- Research papers developed by the program's learning partners
    - Livelihoods Dynamics Baseline
    - Conflict Management Baseline and Endline
    - Urbanization Study
    - Gender Assessment
- Indicator Performance Tracking Table
- Performance Management Plan
- USAID FFP Baseline

The evaluation will be conducted in Kotido, Kaabong, Abim, Amudat and Nakapiripirit Districts of Karamoja. A map of the region is included in Annex A.

Evaluation Products

The following is required and should be prepared and delivered separately:

Deliverable	Estimated Date of Submission
An evaluation plan including: o Evaluation methodology o Roles/Responsibilities of each team member o Protocols and instruments for each assessment, including data collection and analyses o Evaluation itinerary o Statement of limitations of the methods and potential effects on results	June 2017
Dissemination plan for external audiences including USAID, development partners, research institutes etc.	June 2017

Oral de-briefing and validation of finding with project staff in Uganda	August 2017
An in-country presentation of preliminary results to project leadership and donor	August 2017
Draft final evaluation report in soft copy	September 2017
Electronic files of the clean (final) qualitative and quantitative data collected	September 2017
Final evaluation report in hard (5 copies bound) and soft copy, structured in the guidelines listed below written in English	October 2017
Presentation on the final evaluation findings presented to Mercy Corps Uganda and USAID; soft copy of PowerPoint slides presented	October 2017
At least two focused case studies/learning briefs ready for external dissemination	October 2017

Please note that during this time Mercy Corps Uganda will be closed for Public Holidays on Martyr's Day 3rd June, Heroes Day 9th June, Independence Day 9th October, alongside 1-2 days for Eid.

Reporting

The final evaluation report will not exceed 30 pages, not including annexes, and will be structured in accordance with the following guidelines:

- **Cover Page, List of Acronyms**
- **Table of Contents** – identifies page numbers for the major content areas of the report
- **Executive Summary (2-3 pages) -** should be a clear and concise stand-alone document that gives readers the essential contents of the evaluation report in 2 or 3 pages, previewing the main points in order to enable readers to build a mental framework for organizing and understanding the detailed information within the report. In addition, the Executive Summary helps readers determine the key results and recommendations of the report. Thus, the Executive Summary should include: major lessons learned; maximum of two paragraphs describing the program, summary of targets and intended outcomes; areas of meaningful under or over achievement; and possibly a few lines describing the action plan developed to follow up on evaluation recommendations and how the evaluation report will be disseminated.
- **Methodology -** sampling method including strengths and weaknesses of method used, inclusion of stakeholders and staff, rough schedule of activities, description of any statistical analysis undertaken, including justification and software package used. The discussion of any random sampling used should include details on how the random respondents were identified and invited to participate. This section should also address constraints and limitations of the evaluation process and rigor. The methodology section should also include a detailed description of data collection techniques used throughout the evaluation.
- **Results** – to be organized under strategic objectives and evaluation questions, as appropriate.
- **Synthesis, Recommendations and Lessons Learned -** include concrete recommendations for current or future project improvements/changes, pull out organization lessons learned, and generally comment on data and results. Everything presented in this section must be directly linked back to the information presented in the Results section of the report. Ideally, items discussed here will not be completely new to the reader, but rather will refer to previous

discussions. Recommendations that are not directly tied to Results can be included in an Evaluator Comments section for the report.

- **Annexes** - data collection instruments in English and translation; list of stakeholder group with number and type of interactions; SoW; qualitative protocols developed and used; any data sets can be provided in electronic format; photos; participant profiles or other special documentation used.

Team Composition

The evaluation team should hold the following general capacities:

- Cultural sensitivity
- Facilitation skills
- Excellent writing, communication and analysis skills
- The team conducting on the ground surveys should be mixed age and gender

The evaluation team should have a minimum level of expertise in the following areas (those in bold are essential):

- **Food security**
- **Nutrition (including Anthropometric measurements)**
- **Livelihoods (including market systems development experience)**
- **Livestock**
- Resilience
- WASH
- Infrastructure
- Community strengthening
- **Conflict & Governance**
- Gender & Youth

The composition of the team should include at a minimum:

- Evaluation Leader
- Technical specialists (covering the areas included above)
- Field coordinator
- M&E specialist (design tools, input data, analysis)

The evaluation team will report to:
Chief of Party, GHG – Tracy Mitchell

And work closely with:
DCoPs
Program Management Advisor
MEL Manager
Field Staff

Final composition of the external evaluation team is to be made upon contracting and agreement with Mercy Corps. It is likely that local enumerators will be engaged throughout the evaluation process to provide local language skills and build local capacity for technical evaluations.

Schedule and Logistics

The duration of the evaluation is estimated at 10-15 weeks during June – October 2017.

Timeframe	Activity
2 weeks	Document review
2 days	Initial staff and stakeholder meetings
1 week	Develop necessary data collection tools
1 week	Enumerator training, pre-testing
2-3 weeks	Data collection
1 week	Upload and analyze data
2-3 weeks	Prepare draft evaluation report
2 weeks	Finalize report/Debrief with MC & USAID

Mercy Corps Uganda will support the evaluation team with the organization of in-country logistics including transport, accommodation and technical assistance, as required.

Budget

Actual funding amounts are subject to availability of funds. Mercy Corps intends to award a contract pursuant to this notice of funding opportunity. Mercy Corps reserves the right to fund any one or none of the applications submitted and to negotiate with the selected proposed contractor.

Necessary Skills/Qualifications

- List of previous similar works, including examples of evaluation reports (40 points)
- Experience of evaluating USAID funded programs, in particular DFAPs (20 points)
- Understanding of the market facilitation approach and adaptive management (10 points)
- Understanding of the activity, requested service evidenced by a relevant and detailed work plan (10 points)
- Experience working in Uganda, in particular Karamoja or other areas at a similar level of development (10 points)
- Experience working with illiterate groups, and a wide variety of stakeholders, including local government and private sector actors (10 points)

Application Requirements

- Technical proposal, including evaluation approaches, proposed sampling frame, workplan, composition of evaluation team
- Capacity statement of the firm/team
- CVs of assigned personnel
- Budget / price for the work – indicate level of effort for each team member
- At least two examples of previous evaluation reports

Failure to include documentation for the criteria above will result in disqualification.

8. REFERENCES FOR GHG EVALUATION

Folder name: General KMJ Doc

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9. SCHEDULE OF INTERVIEWS WITH STAKEHOLDER GROUPS AND TYPES OF INTERACTIONS

Day	Date	Group or Individual	No. in Attendance	Types of Interactions (KIIs or FGDs)
Monday	8/07/2017	Team.1. Meeting with Tracy Mitchell, Chief of Party, of GHC for overview of the project.	Team plus MC's COP	Team. Key informant interview
Tuesday	8/08/2017	Meeting with DCOP on the nutrition survey	Team plus MC staff	
Wednesday	8/09/2017	Team.1. Team meeting at Kampala University to discuss the nutrition HH survey	Team.1. 6 persons	Team meeting
Thursday	8/10/2017	Team Meeting in MC offices in Kampala to discuss the design of the nutrition survey with DCOP, team members and nutrition specialist – Mr. Ambayo Henry. Review interview guides and logistic plans for travel to Kotido Discuss use of enumerators for HH survey.	Team.1. Seven people	Consultative approach to finalize HH nutrition survey
Friday	8/11/2017	Team.1. Team discussions on the trip to Kotido District about the tasks and protocols for the field work.	Team.1. Three persons	Team. Team discussions
Saturday	8/12/2017	Team meeting with MC on logistics for field work in Kotido GS&JB1[38]. Meeting with ag dealer in Kotido town on seed e-voucher and post-harvest equipment with T. Mitchell JB.2. Meeting with Trader in Grains in particular Maize. Led and held by JB. JB.3. Meeting and visit to market. Assessment of crops. Informal FGD on cropping. JB.4. Meeting with chicken farmer. Assessment of milling	Team and MC Kotido staff GS&JB1.One person Two persons JB.3. Five persons JB.4. 1 one person in her homestead	Group meeting GS&JB.1. KII JB FGD JB.3. FGD JB.4. KII

[38] JB=Jim Barnard, PK=Paulson Kasereka, GS=Greg Sullivan

		equipment. Meeting with Tracy Mitchell and Greg Sullivan JB.5. meeting with machinery repair after observation of specialist replacement. Team.1. Field work at Apalopama HC. Key Informant Interview with Mr Labeja Ensio, Secretary of Health Facility and member of HUMC. Accompanied by Mary Achen PK.1. Discussion held with M. Achen on MCGs, HF, and VHT, HCII and HCIII	JB.5. two persons Team.1. two persons PK.1. One person - female	JB.5. FGD Team.1. FGD PK.1. KII
Sunday	8/13/2017			
Monday	8/14/2017	GS.1. Training of the enumerators and the VHTs in proper survey management JB.1 Visit to Kraal leader and team associated with herd management. Past Karenga. PK.1. 1.FGD with Whave staff - mixed in Kotido office. PK.2. FGD with Whave WUC - mixed in Nakaa Village, Kamor Paris, Panyangara Subcounty, Kotido District. PK.3. FGD with Whave community members - Men in Nakaa Village, Kamor Paris, Panyangara Subcounty, Kotido District. PK.4. FGD with Whave WASH village users - Women in Nakaa Village, Kamor Paris, Panyangara Subcounty, Kotido District.	GS1.Approximately 18 people JB.1 eight senior leaders 1. Total = 6 2. Total = 10 3. Total = 10 4. Total = 6	GS1. Group Training JB.1. FGD PK.1.FGD PK.2.FGD PK.3.FGD PK.4. FGD
Tuesday	8/15/2017	GS.1. Training of the enumerators and the VHTs in proper survey management by supervisor JB1 visit to ag dealer. Meet sample of agents.	GS.1. 18 people in training JB1 Examine business options	GS.1. attend training by supervisor JB1. KII.

		Examine storage for materials. JB2 Visit to crush system handing 1000? Bovines for treatment with anthelmintics and de-ticking. JB 3 visit to MCG plus near to Kotido PK. 1. On trip in Kotido. Discussion with Andrew Tumuhameho, World Vision Monitoring Officer. Focuss on World Vision strategy in implementing CLTS approach PK.2. Key Informant Interview with Mr Samuel Nyama, Whave WASH service Provider at MC Office, Kotido. Mr Samuel lives in Rengen SubCounty, Kotido District. PK.3. Key Informant Interview with Mr Peter Lokinei, Whave WASH service Provider at MC Office, Kotido. Mr Samuel lives in Loselang, TC Kotido, Kotido District. PK.4. FGD with World Vision CLTS commuty members and Community Natural Leaders in Kalep, Kotido District.	and sample Vit A supplemented food kindly supplied. JB2. JB2 5 people JB3 8 women – video of song and dance made. PK1.Total=1 PK.2.Total=1 PK.3.Total=1 PK 4. Total = 10	JB2. FGD JB2. FGD PK 1 KII PK 2 KII PK 3 KII PK 4 FGD
Wednesday	8/16/2017	JB.1. Examine the market then meet with traders, Meet with traders both internal to the Karamjong area and for "export" beyond. Led by Moses. JB.2. visit medicine dealers and discuss issues related to trading. JB visit loading areas and discuss issues related to transport – limited. Visit Levi District Coordinator and discuss need for fisheries officer in	JB.1 25 persons in two FGDs over two hours. JB.2. Two persons in small FGD	JB.1. FGD JB.2. FGD

		Kotido town. Examine vaccine storage. PK.1. FGD with Kotido - Kraal cattle dealers - mixed. Kanawat livestock market: WASH linkages with livelihoods in households. PK.2. FGD with World Vision WUC in Lemukial, Naseperwae Parish, Kawakol SubCounty, Kaabong District. PK.3. FGD with World Vision village water users. PK.4. FGD with KAPDA Town Council Peace Committee (TCPC)	PK.1.Total=15 PK.2.Total=10 PK.3.Total=10 PK.4.Total =15	PK.1.FGD PK.2.FGD PK.3.FGD PK.4. FGD
Thursday	8/17/2017	JB.1. Kraal leader – herd health – Ariko Zachery, Karenga on site JB.2. Ag Agents in Kaabong JB.3. Greenbelt Ag Dealer – Hellen Asio in Lobalangit to discuss business linkages, demand and change over time. Acheng Hilda. JB.4. DVO PK.1. On trip from Kotido to Kaabong. Discussion with Moses Opiu, MC Team Leader-Livestock-Health and Market. Focus on links between water from boreholes and livestock PK.2. At MC Kaabong office: discussion with Nangiro Simon Peter Achuka, Conflict and Governance Officer - MC Kaabong Office. Focus on Governance structures involved in GHG activities	JB.1. JB.2. 3 agents JB.3. 1 person JB.4. 1 person PK.1.Total=1 PK.2.Total=1 PK.3.Total=10	JB.1. KII JB.2. FGD JB.3. KII JB.4. KII PK.1.=KII PK.2.=KII PK.3.=FGD

		PK.3. FGD (both men and women) with World Vision CLTS community members in Nanyolechua, Parish, Kawalakol Subcounty, Kaabong District. PK.4. On trip from Kaabong Whave office. Discussion with Ronald Okuja, Project Manager, Whave- Karamoja Region. Focus on Whave strategy in implementing GHG activities. PK.5. FGD (both men and women) with Whave WUC in Naoyabul, Komuria Parish, TC Kaabong, Kaabong District.	PK.4.Total=1 PK.5.Total = 10	PK.4.=KII PK.5.=FGD
Friday	8/18/2017	GS.1. Meeting with the LC in Keyenga on the role of civil society groups to address challenges GS.2. Meeting with Female Peace and Justice Group JB.1. District Vet Officer JB.2. Meeting with extension officer Sylvia JB.3. Meeting with Animal Drug Supplier – Amaicori JB.4. Meeting with Sharia VSLA JB.&GS.5. Poultry farmer – Lomoe Betty PK.1.HUMC Chairpersons in MC Office	GS.1. three persons GS.2. 12 women in the discussions about conflict resolution and new areas of concern, GBV, alcohol JB.1. Two persons JB.2. one person JB.3. one person JB.4. Eight persons JB.&GS.5. one person PK.1.Total=11 PK.2.Total=9	GS.1. KII with the LC officer and KAPDA GS.2. FGD JB.1. KII JB.2. KII JB.3. KII JB.4. FGD JB&GS.5. KII PK.1. FGD PK.2. FGD

		PK.2. Health Facility Managers, Kaabong District		
Saturday	8/19/2017	GS&JB.1. Visit to the slaughterhouse and meeting with members of the butchers' association GS&JB.2 Meeting with the members of the hides-skins association at the slaughterhouse JB&GS 3 Meeting with members of butchers Association JB&GS 4Meeting with administrative staff at the slaughter house. GS.1. Interview two female workers at the slaughterhouse who clean the facility each day GS.2. Observe members of Mother Care Groups (MCG) in manyattas for the Nutrition Survey	GS.1. & JB.1. approximately 15 people GS&JB.2.12 persons JB&GS.3.Two slaughterhouse workers JB&GS.4. Six women with GS.1 two persons GS.2. eight women and their children.	GS. And JB.1. FGD GS&JP2. FGD JB&GS.3.Group interview JB&GS.4. FGD GS.1. FGD GS.2. Group
Sunday	8/20/2017	In Kitedo		
Monday	8/21/2017	Team travels from Kotido to Abim by van. PK.1. FGD with Abim Women Together in Development (AWOTID) in TC Abim. PK.2. FGD with Area Land Committee (ALC) in Abim. PK.3. Discussion with Akol Moris, Conflict and Goverance Officer, MC Abim Office. Focus on land conflicts and women involvement at community levvel JB.1. Meeting with Abim Business Forum	PK.1.Total=6 PK.2.Total =6 PK.3. Total=1 JB.1. GS.1.	PK.1.FGD PK.2.FGD PK.3. KII

		GS.1. Meeting with Nutrition supervisor and team of enumerators		
Tuesday	8/22/2017	PK.1. FGD with HUMC chairpersons in MC office, Abim District. PK2. FGD with In-charge Health Facility Managers, in MC office, Abim District. PK3 and JB. FGD with Hand Pump Mechanic Association (HPMA) members in Abim. Examination of pricing system. Visit to store to examine equipment and spares. GS.1. Training of enumerators and Village Health Team (VHT) for nutrition survey	PK1.Total=12 PK.2. 11 PK3 and JB =10 GS.1. 18 people in training.	PK.1. FGD PK.2.FGD PK.3.FGD GS.1. Training session
Wednesday	8/23/2017	PK&GS.1. FGD with World Vision WUC in Tyen Opobo North, Kulodwong Parish, Alerek SubCounty, Abim District. PK&GS.2. Field trip with Peter Azuba World Vision WASH Officer. Sustainability of boreholes under World Vision approach PK&GS.3. FGD with World Vision CLTS community member in Kanyalaka South, Wilela Parish, Magamaga SubCounty, Abim District JB1. Retailer of energy efficient stoves JB2. Team of charcoal briquettes makers in Abim town Phone call with representative of the Kara. Livestock Development Agency	PK&GS1.Group interview (13 people) to discuss success of borehole and their activities. PK&GS2.1 1 person PK&GS3. Fifteen people: 1 woman and 14 boys and young men JB.1. Two people	PK&GS1. FGD on Sanitation and Youth issues PK&GS.2. KII PK&GS3. FGD JB1. KII

Thursday	8/24/2017	Team to Kampala by van GS & PK.1. Mr. Emmanuel Okeeh, Biostatiscian for Abim District in Mbara on way to Kampala	GS&PK.1. One person met	GS&PK.1. Discussion on access to DHMIS database
Friday	8/25/2017	Team.1.Debriefing meeting at MC office, Kampala - Uganda. GS&PK.1. From Kampala to Entebe, by taxi for departure from Uganda on Saturday	Team.1. Tracy, Lizzie, and Maggie	Team.1. Team debrief on the field work

10. QUALITATIVE GUIDES DEVELOPED AND USED

10.1. SO1. Guides for interviews on livelihoods

The approach is based upon a cross sectoral approach with a mixed method methodology. In each group the interviewer met at least one key informant, and the average number were substantially more. And additionally, focus groups as appropriate I prefer the quality of the informant and their potential responses rather than geographical location. I have strong experience of semi-structured interviews. This approach as it will allow the collection of responses to consistent questions but does not stop the exploration of new opportunities for questioning should it arise. All interviews will be semi-structured. These are well understood and is a method ideal for disparate groups and allows the interviewer to probe and examine areas that may not have been known prior to the interview. This process was observed on the visit day of field interviews in Kotido. As an example, on the visit to the slaughterhouse it was found that the hooves were sent to waste and the value chain relating to the sale of hides and skins had broken down entirely despite the market facilitation approach adopted by MC. A structured interview format is ideal if the subject matter is well known. It does not allow looking at the latest trends.

Ag dealers and traders

1.What made you go into this business? Did MC assist your decision and give any training? Was the training appropriate? Was the training useful. Do you need more training to increase your capacity? What types?

2. What are the main products in which you trade? How do you acquire your inputs? Has MC assisted in this process? Do you wish to expand your business into other areas?

3. What is important about these products for your customers? Has MC assisted in any way? If training is needed, what type?

4. Do you have any challenges in getting supplies? Does MC assist in any way? How important is MC assistance?

5. Do you get repeat purchases from your customers?

6. What advice do you give about the products to your customers?

7. Is the voucher scheme of importance to your trade?

8. What are the main challenges to the operation of your business? (Transport will be named so the goal is to get passed that.)

9. Do you test seeds for germination?

10. Have you seen how effective and productive the new seeds are? Do you carry out germination tests? Do you know how to carry out germination tests?

11. Have you visited a demo plot? What is your opinion on these plots? Do you have a role to play for increasing your sale through demo plots?

12. What do you want for the future of your business.

13. What do your customers want for their future?

Backyard poultry operator

1. What made you go into this business?

2. Did MC assist in your decision and give any training? Was the training appropriate? Was the training useful? Do you wish to have more similar training to increase your capacity? Is it business training or technical training?

3. How do you acquire your inputs? Has MC assisted in this process?

4. Do you keep you chicken housed? Are you aware of the risks associated with keeping chicken in a human living area? Are you aware of Zoonoses?

5. Chickens. How many chicken do you keep, or have you kept?

6. How did you obtain the chicks – and at what age did you receive them? What are the type of chicken?

7. What is more important eggs or chicken to eat

8. Pricing and markets availability for: Feed: Do you buy commercial feed? Do you mix your own feed? Try to determine costs per kilo. How are feeds are obtained? The amount fed?

9. How do you mill the feed? How do you mix the feed?

10. Disease control and mortality? – vaccination etc? Does a CAHW treat your poultry?

11. What are the main challenges to the operation of your business – always transport will be named so the goal is to get passed that?

12 What do you want for the future of your business? Can MC assist with this?

Vegetable garden operators

1. What made you go into this activity?

2. Did MC assist in your decision and give any training? Was the training appropriate? Was the training useful. Do you wish of more similar training to increase your capacity?

3. How do you acquire your inputs?

4. What crops do you grow? Why do you grow them? Has MC assisted in this process?

5. Do you use the vegetables to feed your family? What are the nutritional benefits of such foods?

Note This will be heavily influenced by the nutrition surveys and the analysis of food groups.

Extension agents and demo sites

1. What made you go into this business?

2. Did MC assisting your decision and give any training? Was the training appropriate? Was the training useful? Do you wish for more similar training to increase your capacity?

3. How many people do you train?

4. How many are adopters? What % of the total is that? Is it possible to increase? Do you know of any adopters who are not in the MC curtilage?

5. Have you had business training or technical training?

6. What is the reaction to those not in the MC mainstream to the demo sites?

7. What is the attendance at the training sessions?

8. What are the main challenges to the operation of your work – always transport will be named so the goal is to get passed that?

9. What do you want for the future of your work? Can MC assist with this?

People doing income generating activities outside agriculture and livestock

1. What made you go into this business. - Has MC assisted in any training.

2. Is it business training or technical training?

3. Is the business profitable?

4. Questions to determine purchase prices, costs, and labor/time needs

5. What is your customer base?

6. How do you widen the reach to your customers for increased sales?

7. Do you promote your activities in any way?

8. Marketing Questions follow based on available market? What does your customers view of your products? If appropriate – Do you get repeat purchases.

9. What is your main competition?

10. What do you want for your future business? Can MC assist with this?

10.2. SO2. Guides for Health and Nutrition

Health Unit Management Committee (HUMC)

These committees were established to represent the community needs regarding health delivery services in coordination with the Health Center (HC).

1. How effective is the HC in your community in providing health care services?

2. What is the best way to educate the committee in how the HC is performing?

3. What are the key factors you look for in how effective the HC is in your community?

- competency of the staff

- friendliness of the staff at the health clinic

- Number of staff members

- no stock outs.

4. How effective is HC sharing of information on the performance of the HC?

5. What are the key activities to ensure the HC continues to operate and treat community effectively?

Health Clinic (HC)

The HC is a government facility in communities for delivery of an array of health services. More complicated health issues are referred to the HC-3 or HC-4 or the district or regional hospital. The local HC is the one that MCG members would attend for ANC and delivery of their babies.

1. How effective is your HC in meeting the demand for services by your local communities? Major challenges in providing services?

2. How effective is the training system for HC staff and is there a reward system (incentives) for "learning and doing by the staff"?

3. How do you rate the performance of HUMC in supporting the HC? Excellent, Good, fair, poor, very poor? Why? What can be done to improve the HUMC in your community?

4. What does the GoU need to do to ensure that the HC facility continues into the future?

5. How effective is the role played by the VHT? Are there ways to better utilize the VHT?

GHG Staff – Nutrition Director

1. Do you believe MCG and MCG+ are able to sustain themselves after the end of the project?

2. What are the needs for the MCG to be successful for mothers and their children into the future?

3. Please describe your relationship with the District Health Office (DHO)? Is it a relationship that is positive?

4. How can the project engage young women before they become trapped in early marriage and pregnancy?

5. What is the most effective way to achieve behavioral change in health and nutrition at the household level?

1. What is your role in achieving a healthy environment for your community?

2. What are some of the major challenges for women bearing and raising young children?

3. Is the MC project able to create effective behavioral change in your community?

4. What are the set of factors necessary to see a healthy environment take hold in your community?

Village Health Team (VHT)

1. What is your role in achieving a healthy environment for your community?

2. What are some of the major challenges for women bearing and raising young children?

3. Is the MC project able to create effective behavioral change in your community?

4. What are the set of factors necessary to see a healthy environment take hold in your community?

Mother Care Groups (MCG) and Mother Care Group Plus (MCG+)

1. What is your view on the sustainability of the program after the project ends?

2. What have you learned to be a member of a MCG? Do you count on your husband to help you during and after your pregnancy to raise your child?

3. To those mothers that are Lead Mothers, ask them the challenges they face with their group of Neighbor Mothers (NM)?

4. Ask mothers in the MCG+ how has the group performed in saving and borrowing money for repayment?

5. How has being linked to a Village Savings and Loan Association (VSLA) improved your livelihood?

6. Have you borrowed money from your VSLA or SACCO and if so what for?

District Health Officer (DHO)

1. How do you view the health delivery services to villages in your district? HC, VHT, HUMC, other

2. Do you find the communities you serve participating to the highest degree possible? What can they do better? What resources do they need from the MC project?

3. How has MC been effective in assisting in the improvement of the health services? What areas can they do improve?

4. How would you rate the skills of your staff at the HC? Do they require improve skills and trainings?

5. Do you see value in sharing your data from the HC in a community with the HUMC of that community? If so, why?

WASH for village users

Region:
District:
Sub-county:
Village: _____
Interviewer: _____ Date:_____ day/month/year Time: _____

Observe the WASH facility and make notes about its condition and surrounding area. Describe the WASH intervention visited (e.g. Is there visible feces in the sanitation facility? (take photo)

1. Are you using improved drinking water source? (If possible, visit and take picture)

2. Do you r village has boreholes? If yes, what is the medium height (in meter or miles?)

3. Do you have cleansing agent and water available at hand-washing?

4. Do you know 3 of 5 critical moments for hand-washing after defecation?
5. Did you learn something new through Mercy Corps interventions on WASH? Yes-Explain

6. What is the benefit of WASH facilities on this village in terms of: income, nutritional behavior?
   - Impact on income:…….
   - Impact on nutrition improvement/behavior:…….
7. What un-intended impact did you experience while benefiting from Mercy Corps activities?
   - Positive impact:……
   - Negative impact: ……..

8. In the case Mercy Corps would initiate new activities, what should be among top priorities? What remains unaddressed?
   - Sexual Gender Based Violence?
   - Alcohol?
   - Inclusive government?
   - Others?
   - Conflict?

9. What new strategy should Mercy Corps apply for such new issue?

WASH for Female Water Users Committees

Region:
District:
Sub-county:
Village: _____
Interviewer: _____ Date:_____ day/month/year Time: _____
Ratio of Men to Women on the committee_____

Observe the WASH facility and make notes about its condition and surrounding area. Describe the WASH intervention visited (e.g. Is there visible feces in the sanitation facility? (take photo)

1. Tell me about your Water User Committee: what is it? Its mission? Achievement?
   - Who is the most common user of the facility? Men, women or children?
   - Who carries out the work in maintaining the facility?
   - Is the division of labour shared fairly between the men and the women?

2. What training did you receive from Mercy Corps Program? List some of them.

3. What is the benefit of WASH facilities on households income, nutritional behaviors in households, and conflict in your village?

- Impact on households incomes:…….
- Impact on nutrition improvement/behavior:…….
- Impact on conflict in village:…….

4. What un-intended impacts did WUC experience while benefiting from Mercy Corps activities?

- Positive impact:……
- Negative impact: ……..

5. What is your plan for work when Mercy Corps program ends? Will the activities of WUC continue after Mercy Corps projects expires? How – Explain your plan for the future.

6. In the case Mercy Corps would initiate new activities, what should be among top priorities? What remains unaddressed?

- Gender Based Violence
- Promoting household equality eg decision making
- Alcohol
- Inclusive government
- Others

7. What new strategy should Mercy Corps apply for each new issue?

If it is a committee then some questions about women's participation in the committee:

- Are you present at all committee meetings?
- Are you able to talk freely?
- Are your opinions listened to and respected when it comes to decision making?
- Have you received capacity building training? If yes, has it helped you to make your opinions heard within the committee?
- What improvements could be made to include your opinions more in decision making?

WASH for Water and Sanitation Providers (WSP)

District_____ Date_____
Sub-County_____ Number of Males ___ Females_____
Locations of the HUMCs_____

The leaders of at least five Water and Sanitation Providers will be invited to a central location for a focus group discussion. The discussion will focus on the capacity of the WSPs to address the needs of the community.

1. Please describe the role that WSP plays in providing clean water, promoting sanitation and hygiene in the community?

2. Do your village has boreholes? If yes, what is the depth of water from the surface (in meter or mile?)

3. What are the key positive changes you have seen because of WSP?

4. As a leader of your WSP, what are some of the challenges you face in insuring its effective operation?

4. How would you describe your relationship with the Hand Pump Mechanics Manager in your community? Can it be improved?

5. Are you able now to better to provide clean water in your community because of HPM support?

6. What are some new opportunities for WSP in it next step of growth for the community?

7. What un-intended impact did WSP experience while benefiting from Mercy Corps activities?
- Positive impact:……
- Negative impact: ……..

8. What is your plan for work when Mercy Corps program ends? Will the activities of WSP continue after Mercy Corps projects expires? How – Explain your plan for the future.

9. In the case Mercy Corps would initiate new activities, what should be among top priorities? What remains unaddressed in providing clean water and sanitation related services?

10. What new strategy should Mercy Corps apply for such new issue?

WASH for Health Unit Management Committee (HUMC)

District:
Health sub-District:
Sub-County:
Name and level of Health Facility:
Name and title of Key Informant:
Name of Interviewer
Date_____

Number of Males _____ Females_____

The leaders of at least five HUMCs will be invited to a central location for a focus group discussion. The discussion will focus on the capacity of the HUMC to address the needs of the community.

1. Please describe the role that HUMC plays in creating a healthy environment of your community?

2. What are the key positive changes you have seen because of HUMC?

3. As a leader of your HUMC, what are some of the challenges you face in insuring its effective operation?

4. How would you describe your relationship with the Health Facility Manager in your community? Can it be improved?

5. What was GHG's role in helping you strengthen your health management unit?

6. What are some of the key factors to keep the members of HUMC informed on the operations of the health facility?

7. Are you able now to better address health issues in your community because of HUMC?

8. What are some new opportunities for HUMC in it next step of growth for the community?

9. Anything else you would like to share with the GHG program?

Aspects to be discussed about Governance (select some of them)

Number of committee members:
Ratio Male: Female =

By-laws / Regulations:

Meetings schedule:

Participation in meetings:

Consensus-orientation:

Accountability:

Transparency:

Responsiveness:

Effectiveness:

Efficiency:

Inclusiveness

Women Members of a HUMC

District_____ Date_____
Sub-County_____ Number of Females_____
Ratio of Men:Women on HUMC_____
Locations of the HUMC_____

Ten to fifteen women of a HUMC will be asked to attend a focus group. The group will be asked about their HUMC and their health facility. The discussion will focus on how the women perceive two entities to better serve their interests.

1. How would you rate the health environment of your community? Good, normal and poor

2. What role did HUMC play in the development of the health environment?

3. What was GHG's role in helping you as member to strengthen the capacity of your health facility?

4. Was the GHG's successful in strengthening the capacity effective?

5. How would you describe your working relationship with the HUMC in your community? How can it be improved?

6. How would you describe your relationship with the Health facility responsible government department which oversees your facility?

7. How would you describe the relationship between the HUMC and the health facility?

8. What are the constraining factors limiting your health facility to effectively improve the health environment? Probe on stock outs, staff skills,

9. What are some of the positive impacts of the HUMC? What are some of the negative impacts?

11. Anything else you would like to share about your interactions with the GHG program?

12. Are you present at all HUMC meetings?

13. Are you able to talk freely?

14. Are your opinions listened to and respected when it comes to decision making?

15. Have you received capacity building training? If yes, has it helped you to make your opinions heard within the committee?

16. What improvements could be made to include your opinions more in decision making?

Health Facility Managers

District_____ Date____ Sub-County_____ Male___ Female_ Locations of HUMCs_____
The managers of at least five health facilities will be invited to a central location for a focus group discussion. The discussion will focus on the capacity of the Health Facility to address community needs.

1. Can you describe your relationship with the GHG program? How did program support health facility?

2. What was GHG's role in helping you strengthen the capacity of your health facility?

3. How would you describe your working relationship with the HUMC in your community? How can it be improved?

4. How would you describe your relationship with the responsible government department which oversees your facility?

5. What are the constraining factors limiting your health facility to effectively improve the health environment?

6. What are some of the positive impacts in your relationship with the HUMC

7. What are some of the negative impacts?

8. Anything else you would like to share about your interactions with the GHG program?

10.3. Interview Guides for Governance

Region: District:
Sub-county: Village: _____
Name of CBO_____Date:_____ day/month/year Time: _____Interviewer: _____

1. What is the objective of your CBO/CSO?
   - Peace building?
   - Women's rights?
   - Improve health or nutrition for children under 5 years old? Others?

2. What are your major challenges in operating your CBO?

3. Can you describe your relationship with the GHG program? How has the program supported your CBO/CSO? (Probe for associated results)?

4. Do you have any other donors? How has your work with GHG helped you become more competitive for other funds? (e.g. governance finance protocols etc).

5. After the end of MC project, can you sustain your activities? (Probe around additional soureces of financial support or possible income generating activities (IGA)?

6. What positive benefits for the community have you observed from your activities?
   - Livelihoods?
   - Equality?
   - Peace building?
   - Reduce conflict?
   - Law enforcement?
   - Democratic process?
   - Inclusion?
   - Gender inclusion and participation?

7. Did you observe an un-expected result which occurred from your activities?
   a. Positive, but un-expected? B. Negative, but un-expected?

11. Household Nutrition Survey Questionnaire

1. To crop list "do you grow" please add **Sunflower and Cassava.** And subject to Henry and Flo add these to the food groups.
2. Please add a question about alternative sources of income: Do you receive any remittances? Are these from a relative yes/no. Do you make any income from any sources other than farming?
3. Do you buy inputs or seeds from an agent or agrodealer. Can we capture the name and location of the agent or agrodealer.
4. Do you buy animal veterinary inputs from an agent or agrovet shop. Can we capture the name and location of the agent or agrovet.
5. Do you or any member of your family meet a CAHWs. Do you make use of products with their advice.

Date _____
Recorder's name _____
District _____
Sub County_____
Village_____

Nearest Health Facility name _____

Interviewee name _____

1.	**Socio Demographic Characteristics**	
1.1	How long have you been in this village (If they stay in this village less than 6 months should be excluded?) ……..	
1.2	Age of respondent	----------
1.3	Gender	a. Male 1 b. Female 2 c. Others (please
1.4	Gender of Household head	a. Male 1 b. Female 2
1.5	How many members are in your family?	----------
1.6	Education background of Household head	a. None 1 b. Some Primary 2 c. Primary completed 3 d. Secondary (some or higher) 4
1.7	Do you plant crops?	a. Yes 1 b. No 2
1.7.1	If yes, which crops (multiple selections possible), if no skip to livestock	a. Maize 1 b. Millet 2 c. Ground nuts 3 d. Vegetables (non-leafy vegetables). 4 e. Vegetables leafy greens 5
1.7.2	Did you plant seeds purchased through a voucher?	a. Yes 1 b. No 2 c. N/A 3
1.8	Do you have any livestock?	a. Yes 1 b. No 2

1.8.1	If yes, which animals do you own? (multiple selection possible)	a. Cattle 1 b. Shoats 2 c. Poultry 3 d. Bees 4 e. Other_____ 5
1.8.2	What source does your household primarily receive income from?	a. Livestock b. Agriculture c. Other (charcoal burning, brewing, firewood sales) d. Remittances from outside village e. Other (list)

2.0.	**Behavior Change Communication**	
2.1	Are you a member of an MCG+ Savings Group (if yes skip to LM/NW if no next)?	1. Yes 2. No
2.2	Are you a Leader Mother or a Neighbor Woman?	1. Leader Mother 2. Neighbor Mother
2.3	Is someone in your HH a member of any savings group or SACCO?	1. Yes 2. NO
3.0.	**Satisfaction with health care services**	
3.1.	Is there any one time you have had concerns with the quality of services at your local health facility?	1.Yes 2. No
3.2.	Do you know whom to contact/consult in case you have concerns with the quality of health care?	1. Yes 2. No
3.2.1	If yes, whom do you consult? (multiple selections allowed)	a. Health Unit Management Committee b. L C I c. Health Center Staff d. d. Others please specify_____
	INSERT 1 or 2 QUESTIONS that relate to Domestic Violence.	

3.0. Child dietary diversity score

In the table below, probe for the consumption of any one food from the different food groups listed. Indicate 1= if the child consumed at least one food from the same food group and 0= if the child did not consume any food from the listed food group.

Food group	**Examples**	**Yes =1 NO=0**
CEREALS	maize, rice, wheat, sorghum, millet or any other grains or foods made from these (e.g. bread, noodles, porridge or other grain products)	
WHITE ROOTS AND TUBERS	white potatoes, white yam, white cassava, or other foods made from roots	
VITAMIN A RICH VEGETABLES AND TUBERS	pumpkin, carrot, squash, or sweet potato that are orange inside + *other locally available vitamin A rich vegetables*	
DARK GREEN LEAFY VEGETABLES	dark green leafy vegetables, including wild forms + *skumawiki, dodo, malakwang*	
OTHER VEGETABLES	other vegetables (e.g. tomato, onion, eggplant) + *other locally available vegetables*	
VITAMIN A RICH FRUITS	ripe mango, ripe papaya*, passions or other bright colored fruits*	
OTHER FRUITS	other fruits, including wild fruits and juice	
ORGAN MEAT	liver, kidney, heart or other organ meats or blood-based foods	
FLESH MEATS	beef, pork, lamb, goat, rabbit, game, chicken, duck, other birds, insects	
EGGS	eggs	
FISH AND SEAFOOD	fresh or dried fish	
LEGUMES, NUTS AND SEEDS	dried beans, dried peas, lentils, nuts, seeds or foods made from these- gnut paste, odii	
MILK AND MILK PRODUCTS	milk, cheese, yogurt or other milk products	
OILS AND FATS	oil, fats or butter added to food or used for cooking	
SWEETS	sugar, honey, sweetened soda or sweetened juice drinks, sugary foods such as chocolates, candies, cookies and cakes	
SPICES, CONDIMENTS, BEVERAGES	spices (black pepper, salt), condiments (soy sauce, hot sauce), coffee, tea, alcoholic beverages	

4. Anthropometry and history of illness of children under 5 years.

2.3.1	How many children under five are in your home?	_____
2.2	What is the birth date of **CHILD 1?** Use date on Child Health Card How old is your child? What is the sex of the child? What is the weight of **CHILD 1?** What is the length (<2 yrs) or height (>2yrs) of **CHILD 1?** What is the MUAC measurement of **CHILD 1?** In the last two weeks, has **CHILD 1** had an episode of diarrhea (loose watery stool 3 times or more during a day)? *NOTE: This captures incidence* How many days in the past two weeks did the child have diarrhea? *NOTE: This captures duration* Has the child experienced any other illnesses in the past two weeks?	Date of Birth ____/___/_____ _____ M/F …… kgs …… mm …….. mm 1. YES – continue to duration question 2. NO – skip duration question …….. a. Cough b. Fever c. Ear/skin infection d. Other (specify)
2.2.3	Is there another child under five with a birth card from the HH? (if yes, repeat until no more children, if not proceed)	1. YES- Repeat anthropometrics 2. NO- continue

12. PHOTOGRAPHS

12.1. Evaluation team conducting FGD on impacts of WASH activities in Abim District

12.2. GHG's trained community animal health workers treating cattle for ticks

12.3. Women working in their garden, Kaabong District

12.4. Taking height measure of child whose mother in Mother Care Group in Kotido