

Integrating Nutrition in Value Chains-Malawi FY2015 Fourth Quarterly Report (July-September 2015) With Annual Results



AUTHORITY/DISCLAIMER

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Fourth Quarterly Progress Report
(June-Sept 2015)
with Annual Results for FY2015
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Acronyms and Abbreviations

ACE	Agricultural Commodity Exchange for Africa
ADC	Area Development Committee
ADMARC	Agricultural Development and Marketing Corporation
AEDC	Agriculture Extension Development Coordinator
AEDO	Agriculture Extension Development Officer
AFO	Association Field Officer
ALF	Assistant Lead Farmer (also an extra-terrestrial being on a hit 1980's TV show)
AGRA	Alliance for Green Revolution in Africa
AHCX	Auction Holdings Commodity Exchange
AI	Artificial Insemination
AIDS	Acquired Immune Deficiency Syndrome
AMC	Association Management Center
ANC	Ante-Natal Care
BCC	Behavior Change Communication
BDS	Business Development Services
BSP	Business Service Provider
BVO	Bid Volume Only
CADECOM	Catholic Development Commission of Malawi
CBCC	Community Based Child Care Center
CBO	Community Based Organization
CCAP	Church of Central Africa – Presbyterian
CDCS	Country Development Cooperation Strategy (USAID)
CIP	The International Potato Center
CISANET	Civil Society Agriculture Network
COP	Chief of Party
COR	Contracting Officer's Representative
DAI	Development Alternatives, Inc.
DARS	Department of Agriculture Research Services
DfID	Department for International Development (UK)
DID	Differences-in-differences
DNC	District Nutrition Coordinator
DQA	Data Quality Assessment
DSA	Daily Subsistence Allowance
EMMP	Environmental Mitigation and Monitoring Plan
ENA	Essential Nutrition Actions
EPA	Extension Planning Area
ESCOM	Electricity Supply Company of Malawi
FAS	Field Accounting System
FBO	Farmer Based Organization
FISP	Fertilizer Input Subsidy Program
FMB	First Bank of Malawi

FtF (FtF)	Feed the Future
FTFMS	Feed the Future Monitoring System
FUM	Farmers Union of Malawi
FY	Fiscal Year
GAC	Group Action Committee
GALS	Gender Action Learning System
GHI	Global Health Initiative
GMP	Monthly Growth Monitoring
GoM	Government of Malawi
GP	Groundnut platform
GVH	Group Village Head
Ha	Hectare
HIV	Human immunodeficiency virus
ICT	Information Communication Technology
IITA	International Institute of Tropical Agriculture
INVC	Integrating Nutrition in Value Chains
IFRI	International Food Policy Research Institute
IIF	Investing in Innovation Fund
IP	Implementing Partner
IPC	Innovation and Productivity Centre
IPM	Integrated Pest Management
IR	Intermediate Results
ISF	Implementation Support Fund
IT	Information Technology
IYCF	Infant and Young Children Feeding
LUANAR	Lilongwe University of Agriculture and Natural Resources
LPO	Local Purchase Order
M&E	Monitoring and Evaluation
MAC	Marketing Action Center
MAPAC	Malawi Program on Aflatoxin Control
MBC	Malawi Broadcasting Company
MBG	Milk Bulking Group
MDI	Malawi Dairy Industries
MISST	Malawi Improved Seed Systems and Technologies Program
MIM	Malawi Institute of Management
MIP	Market Information Point
MKW	Malawi Kwacha (symbol for)
MMPA	Malawi Milk Producers Association
MoA&FS	Ministry of Agriculture and Food Security
MOH	Ministry of Health
MOU	Memorandum of Understanding
MSU	Michigan State University
Mt	Metric ton
MZ	Malawi Zebu (cows)
NA	Nutrition Assistant
NASFAM	National Association of Smallholder Farmers of Malawi

NFRA	National Food Reserve Agency
NGO	Non-Governmental Organization
OBM	Opportunity Bank of Malawi (Also referred to as OIBM)
OCA	Organizational Capacity Assessment
OFSP	Orange Fleshed Sweet Potato
OPC	Office of President and Cabinet
OPI	Organizational Performance Index
OVO	Offer Volume Only
PCI	Project concern International
PDI	Positive Deviance Inquiry
PSA	Public Service Announcement
QR	Quick Response
RLEEP	Rural Livelihoods Enhancement program
SAIOMA	Strengthening Rural Input and Output Markets in Africa
SCU	University of South Carolina
SOYAMA	Soy Bean Association of Malawi
SSDI	Support for Service Delivery Integration
STTA	Short Term Technical Assistance
Sub-IR	Sub Intermediate Results
SUN	Scaling Up Nutrition
TA [T/A]	Traditional Authority
TWG	Technical Working Group
UNC	University of North Carolina
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USG	United States Government
VAC	Village Aggregation Center
VC	Value Chain
VCC	Value Chain Competitiveness
VFP	Village Financial Platform
VSLA	Village Savings and Loan Associations
WRS	Warehouse Receipt System
ZBS	Zodiac Broadcasting Station
ZOI	Zone of Influence

Executive Summary

This report is a combination of INVC's 4th quarterly activities report for the FY15 fiscal year and our annual summary of results from FY15. As such it is a bit of an amalgam. In the annexes of the present report we have presented key accomplishments, constraints, and lessons learned from the fiscal year. We note that this fiscal year INVC assisted 237,948 rural households directly. Of these 31,273 (13.1%) are vulnerable either being female or youth headed households. Since inception INVC has directly assisted 299,551 households. With a mean family size of 5.6 this means that INVC has assisted 1.677,486 rural Malawians.

Q4 saw the recruitment of new component leads for agricultural productivity (C-2) and Local Capacity Building (C-4). We also recruited two new value chain officers and a hearty crew of interns joined our team across all administrative and technical sectors. The interns have added new energy, passion and life experience to our team and have proven themselves assets on many fronts.

Q4 is marketing season for soybeans and groundnuts. It is also the period chosen to undertake both our annual agriculture and nutrition outcome surveys. It is a time to evaluate yields and gross margins, technology adoption and to start planning for the FY15/16 agricultural season. Many activities undertaken during the reporting period focused on partnership, integration and building momentum from the community on up, rather than from the center on out. As will be seen below, our gender and village financial platform activities accelerated during this reporting period. Nutrition activities focused on growth monitoring, establishment of backyard gardens and outreach on health and hygiene.

Much time was spent consolidating relationships at the district level with government technical services. Further we focused a lot of attention on collaborating with our local grantee partners to set milestones for the new fiscal year and to clear outstanding unreconciled advances from previous periods.

INVC has made real progress against its targets and integrated impact from our collective efforts is starting to be visible in the communities we serve. We feel optimistic about the coming year even as there are still challenges to face, especially as we transition to closing out this phase of the project and focus our efforts on ensuring the positive initiatives begun over the past years continue beyond the lifespan of our project.

What follows is a summary of results obtained by technical component during Q4.

In **gender**, this quarter saw the on-boarding of our gender specialist, the completion of our staff/partner gender sensitization training in Machinga and Mangochi, the rolling out of both GALS (Gender Action Learning System) leadership training and the training of literacy trainers. By the end of the reporting period 188 GALS champions (124 women and 64 men) had been trained in Lilongwe, Mchinji and Mangochi and were actively preparing to roll out cascading training to 10 households in each of their communities (a total of 1880). The GALS methodology begins with a life visioning tool, prioritizing goals and aspirations and mapping out pathways to achieve these. It then moves into a gender balance tree analyzing household/community relations, decision making and the changes necessary to reach the established goals. Finally GALS concludes with an empowerment map. This map identifies change agents and mentors in the household or community who can contribute to the realization of the goals. The champions were chosen by the community and needed to have affiliation both with the Care group clusters and the agricultural "farm" clubs and associations. In

literacy, 50 trainers were identified by their communities but only 49 were trained as trainers. INVC decided to revert to the government literacy curriculum instead of adopting the Reflect model because it gives us wider access to materials and trained facilitators as well as providing a link to government services in the districts and providing proximity mentorship for center facilitators. Sessions were facilitated by the Community Development Officers and their Assistants in the Districts of Lilongwe, Mchinji, Balaka, Machinga and Mangochi. Two EPA were selected per district for the initial literacy push which is destined to reach 1500 new learners starting in Q1FY16.

By the end of this quarter our **Village Financial Platform** activities in Mchinji had resulted in INVC extending assistance to 498 savings groups with a total membership surpassing 10,000, of whom 85% are women. In total 105 village agents have been trained in facilitation skills, approximately 44.26 million kwacha (appx.\$80,500) has already been mobilized by these platforms and our first 1TOP video production had been produced and was in the process of dissemination. Thirty-five percent of members belong to farm clubs, while 49% are members of Care Groups. In September alone 14.4 million kwacha in savings was accumulated (appx\$26,182).

Integration at INVC takes on many different and diverse forms. Because we implement primarily through local implementing partner grantees, sometimes these relationships are direct and sometimes they are indirect. This quarter saw direct relationships reinforced and diversified at the district level with community development, agriculture and health staff- both frontline agents and district supervisory personnel. INVC participated in DEC meetings, assisted in financing DNCC meetings and agricultural fairs and participated actively in centrally funded technical working groups on aflatoxin, agriculture and nutrition. Through our grantee IP we contracted the DADO to facilitate training in Good Management Practices for grain legumes and composting. With the DCDO we facilitated the training of community based literacy trainers. With Baylor/Tingathe, Community based health educators cross trained care groups in HIV/AIDS in Lilongwe District. With Njira we conducted joint supervision missions in Balaka and Machinga to monitor and support health promoters and we participated in stakeholder mapping in Balaka as part of a Civil Society working group co-chaired with Njira. Collaboration with the International Potato Research Center (CIP) has resulted in scaling up dissemination of sweet potato vines through Care Groups.

This reporting period was the height of the agricultural marketing season for groundnuts and the continuation of the season for soybeans. Under **Component 1: Value Chain Competitiveness**, INVC partners sourced 560 mT of groundnuts and 464.6 mT of soybeans from beneficiary farmers in Lilongwe, Mchinji, and Dedza for a total sum of 331 million Kwacha (appx \$601,820 USD). NASFAM aggregated 18.96 mT of soybeans and 47.42 mT of groundnuts while CADECOM Dedza aggregated 50 mT of groundnuts. A series of trainings in Aflatoxin control and management were held for 872 lead farmers of whom 39% were women in collaboration with the South African Trade Hub. With assistance from Michigan State University, INVC hosted a three day food safety training course focused on global food safety requirements. In total 27 people participated including 13 agro-processors, the poultry trade association, a representative from LUANAR and the Ministry of Agriculture. During this quarter 14,301 mT of commodities were deposited under warehouse receipts programs but soybeans accounted for only 715 mT of this. ACE traded 34,911 mT of commodities this reporting period but only 19,141 (54.8%) came from the INVC Zone of Influence. ACE facilitated 39 Bid Volume Only Auctions for 19,142 mT of maize from the food reserve agency valued at 5.03 million USD. In addition 1824 farmers were uploaded into the ACE MIS database while 274 farmers (35% women) visited Market Information Points. Training in structured trade awareness occurred for 6,748 farmers of whom 52% were women in the CADECOM Dedza, FUM and NASFAM intervention zones.

Accomplishments in **Component 2: Improving Agricultural Productivity** this quarter focused on seed recovery and capacity building of lead farmers and beneficiaries. NASFAM recovered 664.920 mT of Soybeans and 35.3 mT of in-shell groundnuts to their Association level seed bank structures while CADECOM Dedza recovered 19.8 mT of in-shell groundnuts for their EPA level seed banks. This represents 61% of the projected soybean recovery and only 23% of the projected groundnut recovery. At the time of this report the quality of stock in the seed banks was being evaluated, but it appears from an initial review as though much of the stock will need to be liquidated and the proceeds used to procure high quality certified seed. Recovery was low this year because of poor harvests due to environmental conditions; confusion between humanitarian assistance being extended to needful farmers and seed loans, leading many farmers to the conclusion they would not be held accountable for reimbursements committed to at the beginning of the season; divergence of opinion as to the quantities needing to be reimbursed, high market prices incentivizing farmers to sell rather than save, and the inadequacy of sanctions for farmers (and others) who attempt to scam the system. Additional to seed recovery was capacity reinforcement for lead farmers in the cultivation of pigeon pea and Orange Fleshed Sweet Potato (OFSP) as well as in integrated pest management (IPM), composting, and the basics of best practices in legume crop management and land preparation. In total 11,933 farmers were trained, 56% of whom were women. Training by Farmers Union (FUM) in composting, land preparation and OFSP registered the participation of and joint facilitation with the AEDO at the EPA level.

This fiscal year 81,131 individuals received assistance in improving their agricultural productivity or food security. Of these 44,996 (55.5%) were women. In total since project inception INVC has offered short term agricultural productivity capacity building to 179,365 individuals. During FY15 the project assisted 5,461 producer organizations almost doubling the number of producer organizations assisted since inception. During FY15 with INVC assistance our beneficiaries leveraged over \$4.7 million dollars in agricultural loans. While 65% of the beneficiaries were wholesalers and processors, 14.3% were rural smallholders. By the end of FY15, 133,492 farmers had applied at least one of the technologies promoted by INVC. On a slightly darker note, yields of groundnuts decreased 70% and yields of soybeans declined by 2.7%. Gross margins for groundnuts decreased 32.6% from FY14, while those of soybeans increased by 45.3%.

Under **Component 3: Improving community capacity to prevent under-nutrition**, 300 nutrition promoters assisted 10,554 lead mothers and fathers. Drop out of Lead parents during the reporting period was 28 (0.27%) members all in Lilongwe and Mchinji districts. During the quarter 1, 489 Government frontline workers (HSAs, AEDCs and AEDOs) were trained in SUN/ENA and care group model. A total of 93 cooking demonstration sessions were done during the period. In total 3,858 care group members participated (555 male and 3302 female). In addition, 47 demonstration sessions for the establishment of new backyard gardens were conducted by Nutrition Assistants (NA) and promoters with the help of Agricultural Extension District Officers (AEDO)s and Agricultural Extension District Coordinators (AEDC)s. In sum 1,234 community members (796 male, 438 female) participated. This participation led to a total of 1,300 new backyard gardens established while 1,482 old ones continued to be managed.

During the quarter 114,595 children participated in the growth monitoring and promotion sessions in Mchinji, Lilongwe, Mangochi and Balaka. No growth monitoring and promotion sessions were recorded in Machinga.

The project continued to see positive adoption of recommended individual and household practices on hygiene and sanitation. 47,238 households were reported to have maintained various sanitation facilities and 4,915 households constructed new facilities. These included pit latrines, hand washing

stations, dish racks, rubbish pits and dry lines. In addition, 52 WASH demonstrations and community sensitization sessions were held. Over 2, 018 community members (387 male, 631 female) participated in these sessions.

During this reporting period a total of 14 community drama groups were established (2 in each of the 7 EPA) to assist in behavioral change messaging. Two hundred and ten (210) members (148 male, 62 female) participated.

This FY we note that INVC provided nutrition assistance directly through our Care Groups to 139,701 under five children, 51.8% of whom are female. This resulted in 19% of children in the 6-24 month age bracket receiving a minimally acceptable diet. A further 338,421 people were trained in child health and nutrition. Sixty-two percent of these were women. Women's dietary diversity however decreased by 7% from last year and the percent of children exclusively breastfed also decreased by 6.5% from 2014.

INVC's **Capacity Development** Specialist left the project for greener pastures at the end of June 2015. We spent much of the quarter seeking an ideal replacement who commenced with the project on 1 November 2015. Technical capacity building activities are thus covered under the relevant technical component in the present report. Next quarter's report will once again see this component highlighted.

This quarter **the M&E team** has been busy with GIS mapping, unique ID roll out and annual outcome surveys for nutrition and agriculture. We have also spent a lot of time building the capacity of our partner field staff. It has been an intense quarter especially given that we are also reporting on our full fiscal year results.

INVC wishes to thank the USAID Mission for its continued support, guidance and counsel. We appreciate the feedback we receive on a regular basis and the sense that we are collectively engaged on a challenging and innovative development initiative which will have long term positive impact on the lives of the Malawian people

Cross Cutting Initiatives

GENDER

Introduction

After recruiting two gender officers in quarter 3, the component of gender has implemented two interventions in Mchinji, Lilongwe, Balaka, Machinga and Mangochi namely; Adult Literacy and Gender Action and Learning System (GALS). A series of activities took place this reporting period. These include:

- gender sensitivity trainings,
- community sensitization meetings of key informants,
- briefing session of GALS trainers,
- GALS champion trainings,
- collection of GALS baseline data
- coordination meetings with INVC staff and partners
- adult literacy Instructors trainings,
- briefing of the INVC Adult literacy concept to the District Community Development Officers in all seven Districts and
- identification/selection of adult literacy instructors.

During the quarter, the gender component received an Independent Gender Advisor Consultant. The role of the Gender Advisor among others is to help strengthen the capacity of partners and secretariat staff in gender interventions.

Accomplishments

Gender Sensitivity Training - Project wide

The Gender team has made significant strides in ensuring that all FtF-INVC staff are aware of gender inequalities and have acquired basic strategies for mitigating gender constraints for beneficiaries within nutrition, agriculture production and value chain competitiveness components. This was achieved by organizing a gender sensitivity training session in all the seven INVC zone districts.

The training aimed at assisting FtF-INVC secretariat staff, partner program staff, including field officers, to meet the project's institutional and programmatic goals of ensuring that there is equal access to resources and opportunities for all beneficiaries and to make gender equality, gender mainstreaming and women's empowerment a tangible priority when designing and implementing projects/activities and when communicating with beneficiaries.

A gender consulting firm known as *DMT Consult* was hired through a procurement process to facilitate the trainings.

This was a two-phase training approach with the second phase taking place this quarter from July 01 to July 02, 2015 in Machinga and Mangochi districts.



Gender sensitivity training session in progress at Boadzulu resort. Participants by the beach during gender sensitivity training in Mangochi

The second phase training began in Liwonde, Machinga district at Ngoms Lodge on 01 July, 2015 which targeted participants from Machinga and Balaka districts. There after another day long session took place in Mangochi district at Boadzulu Resort. The trainings which included FtF –field staff and partners’ field staff integrated all levels of staff and partners into each training session but also incorporated staff from each component to ensure that participants gained insight into constraints cross sectorally.

Overall, 41 total participants (13 Females and 28 Male) were trained this quarter.

Please see the table below number of participants.

Number of Participants trained in gender sensitivity during the second phase.

Date	District	Venue	No. Trained		
			Male	Female	Total
01 July, 2015	Machinga & Balaka	Ngoms Lodge	18	9	27
02 July, 2015	Mangochi	Boadzulu Lodge	10	4	14
Total			28	13	41

The sessions also included district government officials from within the FtF zone of influence especially those representing technical services of the Ministries of agriculture, health/nutrition and gender. The presence of district government officials at the sessions contributed to the potential for further collaboration and efficient coordination of upcoming activities within the districts.

Their presence also provided FtF staff with a unique perspective for how gender constraints affect beneficiaries and the community-at-large. FtF staff also gained knowledge of how the line ministries seek to alleviate these gender challenges.

The trainings began with introducing participants to key gender concepts to provide participants with a framework to discuss and analyze gender equality and women's empowerment issues in Malawi and later narrowed its focus to address specific issues within FtF. This process also provided a clear pathway for how and why these ideas are relevant within the context of FtF programming. As a result, participants were empowered to unpack gender constraints that affect beneficiaries and the productivity of FtF.

At the conclusion of each training during Phase II sessions, the facilitators conducted formal evaluation to assess course quality as well as uptake of teaching.

Reviewing of gender sensitivity consultants reports

As indicated earlier, gender sensitivity trainings sessions were facilitated by DMT consult. This quarter the gender team has invested time in reviewing the reports. The signed contractual agreement between the FtF-INVC and DMT Consult indicated that the consultant must produce three training reports and the gender reference manual. The training reports include: first phase-report, second phase report and the final report. On top of the three reports, the consultant had to produce the gender reference training manual that will be used by FtF-INVC staff and the partners to enhance their understanding in the subject matter. The first deliverables presented by the consulting firm were insufficient and required massive retooling before rising to minimally acceptable levels.

Gender Action and Learning System (GALS)

One major activity that has been implemented this quarter is the component of GALS. GALS is a gender and development approach which empowers and strengthens women's confidence and cultivates their analytic and communication skills. It is a community led methodology aimed at social and economic transformation and gender equality.

The activity is participatory and specifically designed to include low literacy men and women and individuals who have never had an opportunity for leadership training.

GALS serves as catalyst for change by facilitating a plan and environment in which people can develop visions for self and family. These visions of change have SMART milestones. They include:

1. Vision Journey: starting with participant's vision for a happy life
2. Gender Balance Tree: identifies the changes required in gender relations within households to achieve the vision
3. Empowerment Map: looks at the changes in family and community and identifies people who can mentor or contribute to achieving the vision.

The process also helps participants to prioritize what goals they want to achieve and set milestones as benchmarks to provide proof of success toward their realization of such visions. There are many female smallholder farmers who possess qualities of good leadership but are denied the opportunity to exercise such because of inadequate exposure to meaningful entry points for leadership and fear to express their desire for leadership. The GALS process will therefore address this gap. GALS emphasis on personal development also creates a pathway for women to create strategies that increase their income, making their entrance into markets and value chains more possible.

Purpose and objectives:

The purpose of this intervention is to promote leadership and negotiation skills, gender equality and women's empowerment, and to foster equitable decision making within households and the community at-large for 15,000 beneficiaries in 3 districts.

- To increase leadership and communication skills and cultivate confidence
- To facilitate effective gender dialogue among men and women to identify and reduce constraints that hinder livelihoods, income, and greater participation in agriculture value chains.
- To facilitate experience sharing on visioning
- To increase gender parity in decision making related to the use of household resources.

With these skills and experience, beneficiaries, particularly women, will gain confidence as well as the ability to meet challenges that they have identified in pursuing better livelihoods and economic development. These new skills are particularly important for improving women's participation in markets and value chains. Under GALS this quarter the following activities have been achieved as follows.

Community mobilization and sensitization

The FtF-INVC gender team in collaboration with FUM and NASFAM conducted community mobilization and sensitization which took place from 22/07/15 to 29/07/15 in Mangochi, Lilongwe and Mchinji districts. All respective key informants were invited and sensitized to the GALS intervention approach. The key informants included; Nutrition promoters, Cluster/GAC chairpersons, Cooperative/Association chairpersons, Group Village Headmen, Field Organization Facilitator, Agriculture Field Officer, Nutrition Assistants, Lead Farmers, Area Development Committee chairpersons, Village Development Committee, AEDCs, AEDOs, CBOs representative, Community Development Agent-gender, HSAs, Head Teachers, stakeholder panel members and Social Welfare.

Members present during sensitization meetings were briefed on the selection criteria for the GALS champions which included being: ***a care group cluster member; a single head of household; a spouse or couples selected at household level; ideally NASFAM or FUM member; someone who has never held or campaigned for leadership position, and a person who has never received leadership training.***

It was emphasized during the meetings that the community/ assembly should choose the champions with guidance from lead farmers, promoters, cooperative/association chairpersons because they deal directly with household beneficiaries and would be in a better position to ably identify the right beneficiaries to be trained as champions. All key informants were delighted with the new intervention in their respective communities.

Briefing session for GALS Trainers

The gender team, jointly with NASFAM and FUM, conducted a briefing session for NASFAM certified-GALS trainers in Lumbadzi-Lilongwe on 07/08/2015.

After conducting community sensitization sessions, the gender team, in collaboration with NASFAM and FUM, thought it wise to conduct a one day briefing session for 10 certified GALS trainers already existing in NASFAM structures of Lilongwe EPAs (Ukwe, Mpenu and Chiwamba).

The main objectives of the briefing session were; a) to divide the trainers into groups for easy sharing of facilitation sessions, b) to ensure that trainers were refreshed on the GALS concept and c) to build confidence and prepare trainers in advance for the training of GALS champions as well as improving their training skills consistency of message and quality in delivering the training..

GALS Champions trainings

After conducting sensitization meetings, a series of GALS training sessions took place in the districts of Mangochi, Lilongwe and Mchinji. The trainings were facilitated by 10 NASFAM certified GALS trainers from Chiwamba, Mpenu and Ukwe EPAs in Lilongwe.

The Training sessions targeted 188 beneficiaries as champions. A total of 188 (124 females and 64 males) GALS champions were trained this quarter as follows:

Summary of Participants

	District	EPA	Partner	Participants		Total
				Male	Female	
1	Lilongwe-South	Mpenu	NASFAM	6	23	29
2	Mchinji	Chiosya	NASFAM	12	12	24
3	Mchinji	Mkanda	FUM	8	23	31
4	Lilongwe-South	Thawale	FUM	5	19	24
5	Mangochi	Nankumba North	NASFAM	17	24	41
6	Mangochi	Nankumba-South	NASFAM	16	23	39
TOTAL						188

The involvement of both male and female as GALS champions and the use of care group structures will help identify and minimize gender constraints that lead to low participation of men as beneficiaries within nutrition activities. Identifying male champions to support women's empowerment and thereby ensuring that all participants should at least talk during the trainings will increase women's openness and decision making within households which will lead to greater nutrition for families and greater participation by women in marketing and in the upper portion of the value chains.



A facilitator conducting training session at MT Lodge in Mangochi | Trainers and technical team during review session.



participants from Mkanda EPA in Mchinji during the training



participants of same vision working on gender balance tree in LL

GALS Baseline data collection

During the period of the training sessions, the INVC gender team planned to use the opportunity of participants' availability in one place to collect baseline data on GALS to act as a benchmark for future comparison. The baseline questionnaire covered the main objectives of GALS intervention such as; leadership skills, empowerment, participation in value chain processes, labor divisions and decisions making at household level.

Just before the actual administering of a questionnaire, enumerators (AFOs, FOFs and Nutrition Assistants) from the targeted EPAs were oriented on how to administer the questionnaire. The questionnaire was pre-tested before actual collection of data to the beneficiaries of Mpenu EPA in Lilongwe district.

Data was collected from 188 participants/GALS champions from Mchinji, Lilongwe and Mangochi districts. Data was collected outside the training session when participants were free. Data that has been collected during this quarter will be compared as the champions progress in their life vision.

This approach of collecting data during the training period was very cost effective and time-saving as all respondents/participants were present in one place/training venue. The presence of the field officers during the training sessions made it easier to collect data.

Adult Literacy

Adult literacy is another major task under the Gender component in INVC project. Since the Gender analysis that took place in June 2014 highlighted high illiteracy levels amongst women in INVC zone of influence as one of the challenges for INVC project, it was then decided to introduce adult literacy as one of the solutions to this problem. This activity aims to improve women's capacity to take part in other activities that men dominate like leadership positions and decision making at both community and household levels.

INVC is following the Malawian government curriculum and methodology in running this program. We will be using the Chuma ndi Moyo books. Instructors are community selected and are given an honorarium of K1000 per month. INVC is targeting to have 50 classes and 1500 learners in five of the seven districts where INVC is working, namely: Lilongwe, Mchinji, Mangochi, Machinga and Balaka. Initially it was planned that this program will be implemented in all the districts but due to budgetary constraints, two of the districts were removed namely: Ntcheu and Dedza. With the help and guidance from the District Community Development Officers, EPAs in which INVC will implement this

program were selected and the criterion was areas with high illiteracy levels in the districts. The EPAs selected are as follows:

- Lilongwe – Mpenu and Thawale EPAs
- Mchinji – Chioshya and Mkanda EPAs
- Mangochi – Namkumba North and South EPAs
- Machinga – Nyambi and Mtumbi EPAs
- Balaka – Bazale and Ulongwe EPAs

During the fourth quarter a number of activities under this program were undertaken in collaboration with the government technical services in all the 5 districts.

Community Mobilization and Sensitization

From 13 to 17 July 2015 a tour to all the districts was undertaken with the objective of meeting with the District Community Development Officers to receive from them a clear picture of how adult literacy is being implemented by the Government and to explore how INVC and the Government could collaborate and assist each other where needed. It was then indicated that there is a need to undertake community mobilization and sensitization at the EPA level and for the field staff and Promoters do the sensitization at village level. The government staff offered to assist in training the instructors in all the districts using the Community Development Assistants who are field based and native to the areas where this program is implemented.

Community Mobilization and sensitization at EPA levels was conducted in two phases. The first phase was initiated together with GALS in the districts where GALS is being implemented. These districts are Mangochi, Lilongwe and Mchinji. The second phase was accomplished in Balaka and Machinga districts in late July. In all these meetings INVC invited all key informants and most of them attended. These included: Nutrition Assistants, AFOs, FOFs, Promoters, GAC/Cluster chairs, teachers, HSAs, ADC members, Village Heads, and ACPC members, just to mention a few.

During the meetings participants were briefed/reminded on who INVC was and the activities already being implemented in their geography (Nutrition and Agriculture components). Thereafter participants were briefed of how and why INVC will implement adult literacy and who the beneficiaries will be for this program. It was clearly indicated that the target audience were FtF-INVC beneficiaries ONLY. They were also briefed that the instructors will be selected by the learners with the help of local leaders.

These instructors must meet the following criteria:

- A person with leadership skills
- Of good moral character
- Literate
- Holding a Junior Certificate of Education
- A current beneficiary of INVC
- Local to the community
- Reliable
- Mature

At the end of every meeting, an action plan was developed which indicated: the time the sensitization at village level was to be done, registration of interested learners, selection of Instructors and when the instructors training could occur.



Community mobilization meeting at Mtubwi EPA



Community mobilization at Mpenu EPA

Adult literacy Instructors training

The goal of the training was to impart basic skills concerning the Literacy Programme Approach to Adult Literacy Instructors for them to effectively handle and supervise Adult Literacy Classes in their respective areas. The specific objectives for this were that at the end of the training participants should be able to:

- Discuss the importance of literacy skills with adult learners.
- Explain how to establish and maintain a successful functional literacy class within a community.
- Explain the design of the functional literacy curriculum.
- Discuss the importance of literacy to the national development efforts.
- Discuss the potential challenges in combating illiteracy.
- Discuss how literacy will increase women's participation in decision making positions
- Discuss how to encourage action-oriented discussions and implement a problem-solving approach to integrated rural development.
- Appreciate and accept the spirit of volunteerism needed by literacy instructors to effectively contribute to the development of their communities.

- Share the importance of a management information system so as to effectively monitor and evaluate learner progress and report on the class status and activities.
- Discuss how to create an environment favorable to on-going literacy activities within communities
- Share ways of encouraging sustainable cooperative and collaborative literacy and post literacy activities

Some of the topics that were covered during these trainings in all five districts were;

- Community Development in Malawi
- Adult Literacy Program and its relationship to other Community Development programmes.
- The concept of literacy.
- Understanding adults and how adults learn.
- Establishing a functional Literacy committee.
- Class organization.
- Curriculum content and design.
- Functional Literacy programme linkages.
- How to teach Chuma ndi Moyo (including practices).
- Reporting on Functional Literacy class progress.
- Monitoring of classes.



Participants doing a group work at Nathenje RTC during the training



One of the participants during her practical session in Mchinji during the training

All these trainings were facilitated by the Community Development Assistants in the respective areas where Adult literacy is to be implemented. Supervision was done by District Community Development Officers from the respective districts. At the end of each training an action plan was drawn to guide each instructor on what he/she will do after they go back home.



One of the facilitators facilitating in Liwonde during the training

INVC targeted the training of 50 instructors but managed to train 49 instructors, because one did not show up and was not reachable by phone. Even the nutrition promoter from that area (Mkanda) could not be reached. Below is the summary of participants/instructors who were trained per district

District / EPA	Venue of training	participants		
		Males	Females	Total
Mangochi – Namkumba North & South	Monkey-Bay CRC	3	5	8
Lilongwe – Mpenu and Thawale	Nathenje RTC	8	2	10
Mchinji – Chioshya & Mkanda	NICE	9	2	11
Machinga – Nyambi and Mtubwi	M'manga TDC	8	2	10
Balaka – Bazale and ulongwe	M'manga TDC	1	9	10
TOTAL		29	20	49

Procure teaching and learning materials

INVC managed to press an order at Fattani Printers to print 50 copies of *Chuma ndi Moyo* teacher's guide and 1500 copies of *Chuma ndi Moyo* learner's books. The books are not ready yet but they will be soon. Every beneficiary will get one copy which he/she will use till he/she is declared literate. The books will remain with the adult literacy committee and new learners will have the opportunity to use the same books.

Networking and Collaborations

Since last quarter, the gender team has proactively collaborate with partners and individuals for potential collaborations and who are best equipped with knowledge, skills and ability to provide technical assistance. This has continued into the fourth quarter.

- NASFAM and FUM jointly with INVC gender team had a planning session of the activities especially GALS. Gals is mainly being implemented by NASFAM and FUM hence there was a need to plan as a team for good results and uniformity in the implementation.
- INVC-M&E Coordinator, FUM and NASFAM had a meeting and developed GALS indicators as a team that will be tracked by all partners.
- Meeting with INVC finance administrator and Chief operations manager on TAMIS trainings
- Meeting with Local leaders and stakeholder panel on gender interventions in the district
- Gender team had a meeting with INVC Chief of party and Deputy Chief of Party for discussing the status and updates on gender components.

Meeting with CADECOM have been conducted twice with Finance and Admin Manager and Supervisor to discuss the roles of both parties, the Project and CADECOM, and documentation CADECOM must produce for the Project to pay them their deliverables.

Constraints and challenges

- Delay in liquidation of funds by INVC partners causes delay of their funding for project activities as such it also affect the implementation of activities as most of the activities are being implemented by the partners –FUM and NASFAM. Various partners at managerial level were trained on procurement and reconciliation procedures by INVC hence there is hope that there will be change gradually
- There is no INVC gender training manual and policy as a reference for several activities.
- FUM had to do the GALS training again because there was poor coordination among the partners on the selection of gals champions in Mchinji-Mkanda EPA
- Working under budgetary constraints which led to participants being given the same rate of per diems without considering whether is rural or urban especially during the adult literacy instructors training. Field staff were also not budgeted for during these trainings because there was no money to carter for their expenses
- Initially Adult literacy Instructor's training is a 14 days training but because of budgetary constraints again it was conducted for 5 days. The facilitators did their best to cover all the important topics but still more time was not enough especially for the practical sessions. But since the facilitators were CDAs from their respective areas, they offered to help whenever the Instructors need help in the community.

Lessons Learned

- There is need to enhance coordination and communication for gender and all other INVC sections because the DNC for nutrition component in Mchinji and Mangochi raised a concern that they were not well informed in advance on gender activities in their locality.
- Conducting daily review sessions during trainings helped to minimize some challenges such as lack of confidence among the facilitators and has assisted building up team working spirit and improved facilitation skills.
- Involvement on local leaders from inception will improve ownership of the interventions and responsibilities by community. Leaders will be able to support the interventions because they were involved at the beginning. However feedback on the status of the interventions needs to be delivered in good times.
- There is need to establish adult literacy committees to help in supervision of the classes and also for the sustainability of the program after the project phases out. It is also a government structure of running adult literacy

Observations from the Quarter, conclusions and recommendations

- Most beneficiaries for GALS were so grateful for the training. During the initial phase of the training most participants were shy/ dormant and could not stand in front of others. On the subsequent days all participants were able to stand and talk in front of their fellow participants. This demonstrated that leadership and openness in the families will be improved as champions communicate with their spouses, gain confidence and begin to contribute in decision making to their spouses.
- For integration, it was very useful to have participants who belong to agricultural clubs as well as to nutrition care groups. This combination will enhance the production of the value chains as well as improve nutrition status of the household members.
- It was also beneficial to use NASFAM certified trainers to facilitate all GALS training sessions in Mangochi, Lilongwe and Mchinji district. The participants/champions gained more confident in themselves. The trainers also acted as role models to the champions because they were giving them their background on how they started their life vision journeys.
- There was very good coordination between INVC gender technical staff and partners in terms of communication and implementation of activities.

- There is a need for more follow-ups of the beneficiaries as well as frequent exchange visits among the champions from various districts. Exchange visits will help beneficiaries who could default to bounce back to their vision journey there by reducing poverty in the communities. The visits will also build team work and good relationship among the beneficiaries as they exchange stories.
- By the end of each training session, participants came up with an action plan which will be monitored by the field staff from both NASFAM and FUM. There was also selection for leadership positions such as the Chairperson, Secretary and Treasurer. The positions will be the bridge and communication link between the beneficiaries and the technical staff for easy communication and the monthly meetings will also be facilitated by the chairperson and record keeping was indicated as a must in all the EPAs.
- Most participants indicated that the training was a great achievement and necessary to change/improve their livelihood.
- The GALS instructors were so thankful for being offered this training. They say it is not beneficial for INVC only but also for their day to day life as they will have and use the knowledge for the rest of their lives.
- The Government Officers also expressed their gratitude for involving them right from the beginning of INVC's adult literacy initiative and they wish to remain involved till the completion of this project. They said they are ready to help whenever they are needed.

Principal Activities planned for Q1FY16

- Participate in gender technical working group meetings with government staff and other stakeholders.
- Conducting community feedback on the status of the intervention as it was done during the sensitization meetings.
- Conduct regular monitoring and supervision of partners as well as beneficiaries.

GALS

- Working with the value chain team to begin to understand the barriers to women's access to markets, and networking with government stakeholders and VSL groups in order to connect partners and beneficiaries with appropriate resources that increase women's empowerment.
- In collaboration with Pakachere develop the PDI tools to capture gender disparities, economic empowerment, as an individual, at household level as well as at the community level.
- Plan a positive deviance inquiry jointly with Pakachere to identify male participation in Care Group Activities.
- Encourage male participation in care groups by involving partners' staff from Nkhoma Hospital to mobilize male counterparts to take part during food processing and nutrition meetings. This has partially been achieved by registering male care group cluster members as GALS champions in order to improve their perception in decision making as well as their attitude of child caring and feeding as a woman's job.
- Introduce GALS approach to District Executive Committee meetings in all the FtF-INVC zone of influence where GALS will be implemented to ensure ownership, participation and good communication and collaboration with various stakeholders at district level.

Literacy

- Scale up to the two remaining districts namely: Dedza and Ntcheu. Already met with the District Community development Officers in the districts. There is need conduct Community Mobilization meetings and also train the Instructors after they have been selected

- Establish adult literacy committees in all the classes
- Introduce adult literacy to the District Executive Committee in all the districts INVC is working in.
- Procure teaching and learning materials e.g black boards, chalk, register books, primers
- Train instructors in Food processing and Preservation, Hygiene and Sanitation, Family Planning. All these courses are part of the government curriculum that INVC is also using. So it a requirement that these instructors be trained in all these.

Village Financial Platform

Introduction

The Village Financial Platform is developing into an activity that is showing very good results as well as being an excellent place to integrate messages on agriculture, nutrition and financial literacy.

Field officers in Mchinji are actively working with savings groups, signing up new groups and assessing existing groups. This quarter FtF-INVC recruited a new Village Financial Platform Officer to oversee the work from this activity. The new officer has an extensive background in finance, entrepreneurship and in establishing savings groups that will ensure well equipped field officers and financially healthy savings groups. There is also building excitement regarding the 1TOP video messaging project.

Accomplishments

Data Management and Capacity Building

The M&E team has developed a spreadsheet database that includes all the information from the “Diagnosis and Recommendations” form, which is part of a series of data collection tools to monitor and track project savings groups. The database is designed to track trends over time as each group is visited quarterly. Currently, it allows users to look at a snap shot of aggregated practices across the mass of VFP with whom FtF is working. Preliminary results as of the end of this quarter from this activity are as follows:

- There are a total of 498 savings groups, 490 are existing groups and 8 are brand new groups
- Currently there are 10,107 beneficiaries within the VFP structure.
- Total savings mobilized is 48 million kwacha. At the end of September the savings groups had an accumulated 44.26 million kwacha on hand as some of the accumulated shared out by older functioning groups.¹
- 85% of the membership is women and 15% are men.
- The average savings group size is 20 members. This has increased from 18.25 last quarter
- There are a total of 865 male and 5,303 female members
- 105 Village Agents in Mchinji volunteer for the VFP project
- 63 Village Agents have been trained in Facilitation skills, data collection using Inventory and diagnosis and recommendation forms, VFP manual, roles and responsibilities of Field Officers and Village Agents and Problem identification and solving skills.
- 105 Android Phones procured and 47 distributed.
- 47 Village Agents have also been trained in phone usage and how to gather GPS coordinates.
- 105 Village Agents T-Shirts have been procured.

¹ Share out occurs between September and December in most instances because members wish to invest their shares in agricultural inputs to prepare for the agricultural season. Loans are principally extended to members in the September to March “lean” period when members use the funds to buy food. Loans are extended to members in VFP groups every four weeks. The ceiling on loans equals three times the member’s individual savings. Interest rates are fixed by the savings group members. Loans are to be reimbursed in 12 weeks or less in three installment payments covering the principal and accumulated interest.



Trainers (CADECOM) and (Village Agents) at Mkanda EPA



Trainers (CADECOM) Officers with VAs at Kamwendo EPA

Summary of participants for the 3 days training conducted in Mchinji for Village Agents

	District	EPA	Partner	Participants		Total
				Male	Female	
1	Mchinji	Mkanda	CADECOM	13	6	19
2	Mchinji	Chiosya	CADECOM	13	13	26
3	Mchinji	Mikundi	CADECOM	9	9	18
TOTALS				35	28	63

Below are three key indicators out of 13 that are tracked. We will be working to improve with these savings groups with a snapshot of where these savings groups are as of the end of this quarter. The indicators are important because they give members encouragement and build trust with their leaders since VFP members are able to follow the transactions. This in turn builds the group and makes it stronger because people feel their money is secure.

- 15 % of groups lack savings transparency
- 15 % need to improve record keeping
- 27 % need to improve late payments

Of these percentages only one has shown improvement, **lack of savings transparency** which has improved from a response of 22% last quarter.

Record keeping has not improved it was at 8% last quarter.

Late loan repayments have not improved as well, increasing from 23% last quarter.

This calls for an action in the VFP groups during monitoring. We will concentrate on the areas that have not improved. Part of the reason for non-improvement can be attributed to the increase in VFP being assisted. Newly recruited VFP and newly created ones will obviously suffer from growing pains until the training firmly takes hold.

The tool we use is the Diagnosis and Recommendation form. When diagnosis is done a recommendation follows up to the group and a deadline is set for monitoring to make sure that the change has been effected.

In terms of integration with other INVC activities, currently 35 percent of beneficiaries are farm club members and 49 percent of the members are also members of nutrition care groups.

As stated in the list above, the database alert system has identified low performance of saving transparency, poor record bookkeeping quality and late repayments as three key areas where savings groups as a whole need capacity building. These are typical challenges for village savings and loan groups that when left uncorrected can erode their stability and performance. This quarter has focused specifically on addressing these roadblocks. The improvement is a two pronged approach which has started first with building the capacity of the VFP field officers

Constraints and challenges

- Delay in signing the contract between FtF and CADECOM that affected performance of the Field Officers because they were not receiving their salaries in time and they don't have reliable means of transport to the field. They are using pushbikes for long distances.
- The phones were not able to locate accuracy of the GPS coordinates because the range was more than 3,000m from the actual place. This cannot give accurate coordinates and the activity was suspended.
- There is need to have a budget during the training for Village Agents on how to use the phones and GPS capturing. The last sessions went beyond lunch time and the participants were hungry and effectiveness and concentration of the training was compromised.

Lessons Learned

- There is need to meet prospective Implementing Partners in time and sign contracts earlier as well to avoid CADECOM scenario and if possible to have an initial fixed amount of money to be released to the partners as a start up in implementing the activities.
- Despite not been given airtime, late salaries and no reliable means of transport for Field Officers, they have worked and achieved a lot in comparison to the conditions they were exposed to.

Observations from the Quarter, conclusions and recommendations

- The Android phones have greatly improved motivation for Village Agents and those that have not reached 100 beneficiaries are doing everything possible for them to qualify for the phone as well.
- The 1 TOP approach is improving message dissemination and the VFP groups are interested in watching them. If this is done for VSL messages, then Nutrition, Agriculture and Gender must follow.

Principal Activities planned for Q1FY16

- Continue working on the 2 new Video Scripts
- Approving scripts and supervising shooting of the videos.
- Distributing the Videos to Field Officers and Village Agents.
- Continue distributing the Android Phones to Village Agents.
- Training Of Trainers for Field Officers from Implementing Partners in Facilitation Skills, Village Financial Platform, 1 TOP, their roles and roles and responsibilities of Village Agents.
- Conducting training in Business Strategy and Financial literacy.
- Monitoring VFP Groups performance

3C-Integration

Introduction

At INVC integration takes on many forms. Sometimes the partnership is direct and sometimes it is secondary (through one of our local implementing partners). This reporting period we note an increase in collaboration with district level technical services, not merely with frontline workers (HSA, AEDO and Community Development Officers) but also at the district level with the DHO, the DADO and the DCDO. We are active in leadership roles in Civil Society stakeholder's platforms and participation in central level Technical Working Groups in Agriculture, Aflatoxin, and Nutrition.

During the reporting period INVC has supported and participated in agricultural fairs, DNCC and DEC meetings. Our local implementing partners FUM and CADECOM have engaged DADO personnel to facilitate training sessions and refreshers for AFO and Lead Farmers in Best Agronomic Practices. NASFAM's IPC coordinator for Balaka (paid from the INVC grant) chairs the District Agriculture Executive Committee.

On a partner to partner level, Baylor/Tingathe collaborated with INVC by providing three HIV/AIDS awareness sessions with Care Groups in Lilongwe. With Njira we conducted joint supervision missions monitoring and mentoring nutrition promoters in Balaka and Machinga. Too we assisted Njira in the recruitment and replacement of promoters and lead parents. INVC and MISST, through its separate CGIAR centers collaborated on work planning focusing on standardization of demonstration plot protocols, joint farmer field days and the production of training materials. With CIP we focused on the sourcing and distribution protocols of OSFP vines to care group members and benefitting households.

Accomplishments

INVC participated actively in technical working groups on Aflatoxin, Agriculture and Nutrition.

A number of meaningful integration related activities were conducted with different partners during the period. Series of meetings were done with Baylor College, SSDI-Communication, SSDI-Services, PCI-Njira Project, CIP and the government (DNCC, DEC,).

Using its Community-based Health Educators, Baylor facilitated three (3) HIV and AIDS education sessions to care groups in Traditional Authority Kabudula in Lilongwe.

INVC conducted joint supervision, replacement and recruitment of promoters with Njira project in Balaka and Machinga.

Meetings were done with CIP to plan for the sourcing, distribution of OFSP vines, and establishment of actual number of this year's OFSP beneficiaries. It is anticipated that 25, 200 INVC care group members will benefit from vines (11, 200 in the scale up district and 14, 000 in Lilongwe and Mchinji). One stakeholder mapping was done in Balaka in collaboration with the Civil Society Organization (CSO) members where INVC co-chairs with Njira Project.

In addition, INVC through Nkhoma Hospital participated in a stakeholder preparatory meeting for Agriculture Field day on 14th August, 2015 at Chiwamba EPA. The meeting was facilitated by Ministry of Agriculture and Food Security.

The project also participated in one (1) Agriculture Fair at Ngombe and Kubuli villages in Lungwena EPA in Mangochi. The fair was organized by District Agriculture Department, and theme was to

promote irrigation, in order to have food security and improve Nutrition. INVC backyard garden in the village was showcased and demonstration on the six food groups with food items was also done.

Collaboration with STEPS occurred as we co-piloted the Organizational Performance Index (OPI) assessment with NASFAM and Pakachere.

Toward the end of the reporting period we focused on joint work planning with MISST and its component sub-partners identifying technical areas of collaboration, notably joint demonstration plots with common technological introductions, collaboration on farmer field days and the production/dissemination of extension reference sheets.

Challenges

- The first challenge of partnership is the time investment necessary in getting from the idea to the starting line for action implementation. This is a hidden cost and is often downplayed and kept behind the curtain but for things to move forward from the idea to the execution stage requires multiple meetings between key project personnel in order to build consensus and to iron out the nitty gritty details
- Money- who pays for what in a collaborative relationship. This is unclear, it is the unspoken elephant in the room and no partner budget contains resources discretely targeted for “integration” and “partnership”.
- Commitment. For partnership to work all parties need to see it in their mutual interest. In other words both partners need to be pulling the cart, together.
- Management of different delivery mechanisms and approaches among and between implementing partners
- Sharing of credit equally both with input indicator reporting and later on with impact/outcome reporting. Partner engagement needs to be linked to impact. Currently partnership initiatives do not receive credit from the Mission or from the Districts/GOM

Lessons Learned

- Partnership needs to be more than profacia box checking
- Fluid communication is key. It must be started, maintained, frequent and continuous. It must include partners, stakeholders and donor representatives.

INVC Indicators

Output Performance Indicator	INVC Achieved			
	FY 15 Q4	FY 15 Year to date	LOP Results to Date	Life of Project Target
1 Number of rural households benefiting directly from USG interventions	105,534	237,948	299,551	300,000
Gendered Household Type				
<i>Adult female no adult male</i>	14,658	15,747		
<i>Adult male no adult female</i>	7,367	14,681		
<i>Male and female</i>	82,786	163,339		
<i>Child no adults</i>	723	15,526		
<i>Disaggregates not available</i>	-	27,499		
New/Continuing				
<i>New</i>	21,438	32,433		
<i>Continuing</i>	84,096	205,515		
<i>Disaggregates not available</i>				
2 Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	5,892	81,131		
Sex				
<i>Male</i>	2,540	36,135		
<i>Female</i>	3,352	44,996		
<i>Disaggregates not available</i>	-			
Type of individual				
<i>Producers (Farmers)</i>	5,794	80,840		
<i>Government staff (Extension, EPA etc.)</i>	98	209		
<i>Private Sector (Processors, service providers)</i>	-			
<i>Civil Society (NGO' CBO, FBO, research etc.)</i>	-	82		
<i>Disaggregates not available</i>	-			
3 Number of private enterprises (for profit), producer organizations, water users associations, women's groups, trade and business associations and community based Organizations (CBOs) receiving USG assistance.	6	5461	10,879	10,000

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with Annual performance highlighted

	Organization Type				
	Private enterprises for profit	0			
	Producer organizations	6	5461		
	Women's groups	0			
	Trade and business Associations	0			
	CBO	0			
	Duration	0			
	New	0	1651		
	Continuing	6	3810		
	Disaggregates not available	0			
4	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation	200000	200000	\$ 200,000.00	2,200,000
5	Value of agricultural and rural loans	\$ 3,018,800.87	\$ 4,749,072.61	\$ 11,346,970	6,800,000
	Type of loan recipient				
	Producers	\$ 65,457.98	\$ 680,351.87		
	Local Traders/assemblers	\$ 198,904.06	\$ 366,802.88		
	Wholesalers/processors	\$ 2,239,303.92	\$ 3,082,949.70		
	Others	\$ 515,134.92	\$ 618,968.16		
	Disaggregates not available	\$ -			
	Sex of recipient				
	Male	\$ 75,930.56	\$ 1,652,435.80		
	Female	\$ 95,206.25	\$ 195,146.73		
	Joint	\$ 2,847,664.05	\$ 2,847,664.05		
	Companies	\$ -			
	Disaggregates not available	\$ -	\$ 53,826.03		
	Size of Loan Recipient				
	Micro	\$ -			
	Small	\$ -			
	Medium	\$ -			
	Other	\$ -			

6	Number of children under five reached by USG-supported assistance (through care group model)	100,797	139,701	139,701	175,000
	Male	47,186	67,327		
	Female	53,611	72,374		
	Disaggregates not available	-			
7	Number of children under five reached by USG-supported assistance (through Child Health Days)	60,645	776,378	776,378	NA
	Male	28,806	366,229		
	Female	31,839	410,149		
	Disaggregates not available	-			
8	Number of people trained in child health and nutrition through USG-supported programs	231,718	338,421	338,421	300,000
	Male	83,714	128,521		
	Female	148,004	209,900		
	Disaggregates not available				
9	Number of MSMEs, including farmers, receiving business development services from USG assisted sources	94	262	677	675
	Size of Enterprise				
	Small	64	101		
	Medium	24	32		
	Large	6	22		
	Sex of Enterprise Owner				
	Male	48	151		
	Female	14	50		
	Joint	32	61		
	Type of Enterprise				
	Ag. Producer	65	204		
	Input trader	0			
	Trader	8	19		
	Output processors	12	12		
Non- Ag.	9	27			
Other	0				
10	Number of USG social assistance beneficiaries participating in productive safety nets	10,107	10,107	10,107	TBD
	Male	1,488	1,488		
	Female	8,619	8,619		
	Disaggregates not available	0	-		

Comments	
1	NASFAM has registered 20,203 new beneficiaries in the Q4 of FY15 which are not yet entered electronically. Significant numbers of farmers are dropping and many new ones are signing up resulting in a significant annual turnover of beneficiaries with NASFAM.
2	The individual training numbers have tapered down among the partners this year due to a reduction in activities due to partner inability to liquidate funds
3	Farmers have formed new clubs and GACs and NASFAM has expanded into some new areas in the project ZOI hence the growth in this indicator
4	The project finally has gathered some data for this indicator and we expect these numbers to improve significantly as we expand our partnerships in the upper end of the value chains.
5	ACE has significantly expanded activities for farmers under this indicator
6	Nutrition data from the field has been very inconsistent in the Q4 mostly with Nkhoma Hospital. The highest numbers reached during the fiscal year were in the scale up districts registering 94,964 in Q3 and Nkhoma registering 44,737 in Q4. We feel there is significant underreporting on this indicator and plan to ramp up data collection in the coming year.
7	This is the highest number reached during the first bi-annual Child Health Days in all the five districts therefore there is no double counting occurring here. Care Group numbers are subtracted from this number to avoid double counting.
8	Results for this indicator are high due to the allowance for double counting. The team intends to monitor more closely these activities to improve the quality and therefore the impact of these trainings.
9	ACE is still the main implementing partner reporting on the MSME indicators but other partners have been trained and it is hopeful that we will be gathering more data for this indicator in the coming year..
10	This is a new indicator we have been requested by USAID to start reporting. This indicator measures the number of beneficiaries in the project Village Financial Platform activities which right now are occurring in Mchinji.

Progress on Performance Indicators as of September 30, 2015					
Outcome Performance Indicators	Annual (Oct 1 -Sept 30 FY14)		RESULTS TO DATE FY15 CUMULATIVE	LIFE OF PROJECT TARGET	
	Baseline	Achieved			
11	Gross Margin per unit of land or animal of selected product				
	<i>Groundnut (dollars per hectare)</i>	319	215	410	
	<i>Soybean (dollars per hectare)</i>	170	247	189	
	Sex Disaggregate				
	<i>Male</i>				
	<i>Female</i>				
	<i>Joint</i>				
	<i>Association Applied</i>		-		
12	Score in percent of combined key areas of organizational capacity amongst USG direct and indirect implementing partners	Baseline	FY14 Results	FY15 Results	LOP Target
				80	82.4
	<i>Nkhoma</i>		73		
	<i>Cadecom</i>		75		
	<i>CISANET</i>		88		
	<i>ACE</i>		78		
	<i>Pakechere</i>		85		
	<i>NASFAM</i>		72		
	<i>FUM</i>		88		
<i>All</i>	38	80			
13	Number of private enterprises (for profit, producer organizations, water users associations women's groups trade and business associations and community based organizations (CBOs) that applied new technologies or management practices as a result of USG assistance.	Baseline	FY14 Achieved	FY15 Achieved	LOP Target
	<i>Producer Organizations</i>	N/A	8,093 (87%)	9,138 (84%)	3,000
	<i>Private Enterprises</i>	N/A			
	<i>Total</i>	N/A	8,093 (87%)	9,138 (84%)	3,000
14	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance	Baseline	FY14 Achieved	FY15 Achieved	LOP Target
	<i>Producer</i>	N/A	135,114	133,492	150,000
	<i>Other</i>				
	Sex of Enterprise Owner				
	<i>Male</i>		52,694	46,055	
	<i>Female</i>		82,420	87,437	
	Technology				
	<i>Crop Genetics</i>			122,813	
	<i>Pest Management</i>			6,423	
<i>Cultural practices</i>			133,492		
15	Number of hectares under improved technologies or management practices as a result of USG assistance (for	Baseline	FY14 Achieved 42,426	FY15 Achieved 46,407	47,000

	soy bean and groundnuts)				
	Sex of Enterprise Owner				
	Male		10,607	406	
	Female		15,273	6,891	
	Joint		16,546	39,110	
	Association Applied		0	0	
	Technology				
	Crop Genetics		30,716	40,056	
	Pest Management		33,177	1,007	
	Cultural practices		42,303	46,407	
16	Yield of soybean, groundnut, and milk	Baseline	FY14 Achieved	FY15 Achieved	LOP Target 2015
	Groundnut (tons per hectare)	1.52	1.4420	0.4333	1.75
	Soybean (tons per hectare)	0.87	0.6690	0.6510	1.00
17	Value of incremental sales(collected at the farm) of soybeans and groundnuts attributed to FtF implementation	Baseline	FY14 Incremental Sales Achieved	FY15 Incremental Sales Achieved	LOP Target 2015
	Groundnut	\$2,540,352	\$976,587	-\$3,662,376	\$1,000,000
	Soybean	\$468,992	\$473,547	\$1,251,870	\$1,000,000
18	Value of exports of targeted agricultural commodities as a result of USG assistance (\$)	Baseline	FY14 Achieved	FY15 Cumulative Achieved	LOP Target 2015
	Value of Exports \$	N/A	\$460,000	\$460,000	\$3,000,000
	Volume of Exports MT	N/A			
	Nutrition Expansion Districts (Balaka, Machinga, Mangochi)	Baseline	FY14 Results	FY15 Results	LIFE OF PROJECT TARGET
19	Prevalence of children 6-23 months receiving a minimum acceptable diet	11%	N/A	19%	22.5%
20	Women's dietary diversity: Mean number of food groups consumed by women of reproductive age (15 to 49 years)	4.1	N/A	3.8	5
21	Percent of 0-5months children exclusively breastfed in target district	71.9%	N/A	65.4%	85%
22	Total quantity of targeted nutrient rich value chain commodities set aside for home consumption by direct beneficiary households (kgs/beneficiary)	Baseline	FY14 Results	FY15 Results	LOP Target
	Groundnut	N/A	N/A	8.8	N/A
	Soybean	N/A	N/A	8.9	N/A

COMMENTS & DEVIATIONS	
<i>Index / reference numbers correspond with the indicators above</i>	
11	The actual number for gross margin is reported here, the extrapolated and disaggregated numbers for the gross margin indicator which are difficult to interpret will be loaded into FTFMS. Note that overall gross margins dropped for groundnuts but were higher for soy which is encouraging given the poor agricultural year.
12	There was no OCA performed this fiscal year but our new Capacity Building Specialist is planning one for Q3 in FY16. INVC staff worked with USAID and the MAPS project to pilot test the OPI indicator last quarter. We will explore these results once the report is finalized.
13	A high number of respondents from the organizational survey applied new technology (84%) thus we met our target.
14	100% of the members surveys applied some form of new technology or improved management practice and because this indicator is relatively easy to achieve we achieved our target. This number would have been even better had we not experienced such a high turnover at NASFAM. We will work hard to achieve the LOP target of 150,000. The technology disaggregation is new this year.
15	Even though our number of beneficiaries has dropped the farm size is slightly larger hence the good achievement for hectares under improved cultivation. This shows that farmers are growing more legumes which is a positive trend.
16	Yields have dropped for both soy and groundnuts this year due to the drought. This drought had a much more negative effect on groundnuts because it occurred during the flowering stage of the plant when pods were being formed. Soy matures earlier than groundnuts and was not as negatively effected.
17	The values show for FY14 and FY15 are the incremental sales over the previous year. Total Sales for groundnuts in FY14 was \$5,132,740 and this year it was \$1,470,364. These numbers are an extrapolation for all FTF-INVC beneficiaries.
18	This number is low which is due to the fact that many exports take place on the informal market which is very difficult to track. Also the government of Malawi issued very few export permits last year hence the very poor showing here. The project intends to explore ways of estimating informal market transactions in subsequent reports. This is particularly important for groundnuts since many of them leave the country for Burundi and DRC in the informal channel. There were no exports reported in FY15 but we intend to gather more data and hope to report numbers next quarter.
19	The nutrition outcome survey took place in June of this year. This is after approximately a year of implementation for the scale up districts of Balaka, Machinga and Mangochi and a year and a half for Lilongwe and Mchinji. The survey consultant mentioned that many families were complaining about the lack of food due to the drought.
20	The Story Workshop study commissioned by INVC found that there were cultural barriers to eating certain foods (e.g. eggs and bananas). The low number for this year was also likely impacted by the drought. The team intends to explore this in the coming year.
21	The results for exclusive breastfeeding do not look good this year. We plan to perform some positive deviance studies to determine what the barriers may be to exclusive breastfeeding. Preliminary information from a study done by Story Workshop indicated that women did not think breastfeeding was enough for their children so they introduced other foods. Also the drought and flood disrupted many families and likely had an effect as many women had to pick up piece work in order to make ends meet for their families.
22	This is a new indicator which the project is working with SPRING to determine how best to track and measure. Preliminary findings show that farmers may set aside foods for consumption but this does not mean they will actually be consumed as unanticipated events occur during the year.

Component 1: Advancing Value Chain Competitiveness

Introduction

The current reporting period extends from July-September 2015. This is the marketing season in Malawi. Component 1 activities focused on marketing and food safety. This component promoted access to end markets by smallholder farmers. In collaboration with Southern Africa Trade Hub INVC facilitated aflatoxin control and management training in all districts of our ZOI. In collaboration with Michigan State University, INVC organized a national three day food safety training for legume processors. Additionally, the component carried out a pre-feasibility assessment of World Food Program's Home Grown School Feeding project.

Accomplishments

Development of Markets:

During the period under review, Component 1 examined the feasibility for school and community feeding programs in collaboration with WFP. WFP is targeting smallholder agriculture and is a major buyer of legumes, including soybeans and groundnuts, for school and community feeding programs. WFP targets the very groups that INVC project endeavors to target, and works with NASFAM in Mangochi and CADECOM in Dedza.

The pre-feasibility study was carried out in four schools (Koche, Makawa, St. Charles Lwanga and Ulande) in Mangochi. The study showed that there are many opportunities for INVC to collaborate with WFP. Potential avenues of collaboration include:

- linking soybean and groundnut production to school and community markets.
- food processing,
- good manufacturing practices,
- good storage practices,
- good hygienic practices and
- HACCP.

The study provided insights into the food security challenges ahead, and afforded ample opportunities for INVC beneficiary farmers to supply the schools and communities with legumes. INVC has shared the report with USAID/Malawi and WFP for further action.

During this reporting period, Estrell Trading Limited sourced 60 MT of shelled groundnuts worthy MK35 million from Lilongwe with the assistance of INVC. Estrell Trading Limited became a new lucrative end market for groundnut farmers.

Afrinut Limited sourced 500 MT of unshelled groundnuts valued at MK175 million from Mchinji, Lilongwe and Dedza.

The Poultry Association of Malawi created a new market for soybean farmers when beneficiary farmers of NASFAM in Nampeya EPA in Machinga were trained on poultry rearing and feed

manufacturing. The beneficiary farmers supplied soybean to their association for conversion to chicken feed. All of these new market opportunities were developed because of the INVC facilitated buyers' tour initiative accomplished during Q3.

During this quarter INVC carried out an assessment of village aggregation centers. NASFAM aggregated a total of 18.96 MT of soybean and 47.42 MT of groundnuts. These were aggregated in 63 marketing centers of the 265 centers registered during FY2015. The low volume of aggregated produce may be due to small harvests this year and the unwillingness of farmers to sell to NASCOMEX.

FUM aggregated 464.59 MT of soybeans in all their 10 aggregation centers. The farmers sold the aggregated volume for MK121 million.

CADECOM aggregated less than 50 MT in their five aggregation centers. The volumes were low due to dry spell that affected production of groundnuts in Dedza.

Food Standards and Safety:

During this quarter, a series of aflatoxin control and management training sessions (Table 1) were held for lead farmers in all districts in ZOI. A total of 872 farmers (532 men and 340 women) were trained. These trainings launched in Q3 with a training of trainers in Lilongwe attended by our COR, Lynn Schneider in picture with trainers.



The aflatoxin control and management training were collaboratively organized and conducted by INVC and SATH. INVC mobilized the farmers and SATH sponsored the facilitator, Professor Archileo Kaaya of Makerere University, a professor of food safety and head of Food Science and Technology Department. Professor Kaaya is a regional expert in low cost technology for removal of aflatoxin contaminated nuts using a mild heat treatment of raw groundnuts, removal of the skins, and manually removal of contaminated nuts based of discoloration.

Table 1 Attendance of lead farmers during aflatoxin training

District	Partner	Men	Women	Total	Dates of Training
Dedza	CADECOM	66	34	100	13-14 July 2015
Dedza	FUM	44	36	80	15-16 July 2015
Mchinji	FUM	20	20	40	17-18 July 2015
Mchinji	NASFAM	67	53	120	10-11 Aug2015
Lilongwe	FUM	13	5	18	15-16 July 2015
Lilongwe	FUM	45	13	58	17-18 July 2015
Lilongwe	NASFAM	76	54	130	12-13 Aug 2015
Ntcheu	NASFAM	80	18	98	14-15 July 2015
Balaka	NASFAM	28	27	55	17-18 Aug2015
Machinga	NASFAM	17	8	25	17-18 Aug 2015
Machinga	NASFAM	12	15	27	19-20 Aug 2015
Mangochi	NASFAM	17	19	36	17-18 Aug 2015
Mangochi	NASFAM	47	38	85	19-20 Aug 2015
Total		532 (61%)	340 (39%)	872	

During the period under review, INVC in collaboration with SATH and Afrinut Ltd organized two day Safe Disposal of Aflatoxin Contaminated Material workshop that was held from 16 to 17 July, 2015 at the Afrinut Groundnut Factory in Lilongwe. 14 people (6 men and 8 women) attended the workshop. They were drawn from Afrinut, Valid Nutrition, FUM, CADECOM, Poultry Industry Association, and Sunseed Oil Ltd

The aim of the workshop was to train the participants on safe handling and disposal procedures for aflatoxin contaminated material (shells, cake, and off-grade groundnuts). Dr. Kerstin Hell (Aflatoxin Management Specialist) and Dr. Benoit Gnonlonfin (Lead Aflatoxin Management Specialist) from Benin trained the participants. The participants were trained in correct handling and disposal procedures for aflatoxin contaminated materials and were equipped with skills to comply with USAID 22 CFR 216 Environmental regulations.

During Q4 INVC attended a one day meeting of the Malawi Aflatoxin Technical Working Group (MATWG) on 10th August 2015 at the Peacock Hotel in Lilongwe in its capacity as a Technical Committee Member of the Malawi Program for Aflatoxin Control (MAPAC). The agenda for the meeting included a review of the Malawi Economic Impact Assessment of Aflatoxin and updates on the implementation of the Malawi Program for Aflatoxin Control (MAPAC) especially progress of the task teams of Food Safety Policy and Awareness Strategy. Twenty-four people (17 men and 7 women) attended the MATWG meeting including participants from the Consumer Association of Malawi, ISCRISAT, NASFAM, CISANET, MOIST, MoAIWD, MoIT, MoH, MBS, USAID Malawi, INVC, PACA and AU.

During this quarter, INVC in collaboration with Michigan State University undertook a pre-training assessment of Afrinut Ltd, Valid Nutrition, Sunseed Oil, Charles Stewart, Project Peanut Butter, Universal Industries and Rab Processors Ltd. This was followed up with a three day Food Safety Training held from August 31 to 2 September 2015 at Sunbird Lilongwe Hotel, Lilongwe. 27 people (19 men and 8 women) attended the training. The participants come from Exagris Ltd, Estrell Trading

Ltd, ACE, Ministry of Agriculture, Lilongwe University of Agriculture and Natural Resources and small scale food processors.



Professor Leslie Bourquin and Assistant Professor Deepa Thiagarajan of Michigan State University (MSU) facilitated the training which covered basic level in good manufacturing, good storage, good hygienic practices and HACCP. This basic, foundational level, training will be followed up with intermediate and advanced level training in FY2016. The legume processors will also be mentored to comply with international food standard and safety requirements.

Sales and Market Options:

Warehouse Receipt System

During this quarter, 14,301 MT of commodities were deposited under the warehouse receipt system. Out of this, 14,126 MT were within INVC's ZOI, and soybeans accounted for 715 MT (5.1%). In last quarter, 2,570 MT of soybeans were deposited. The drop is because this quarter is off marketing season for soybeans.

Contracts

During this quarter, 34,911 MT of commodities were traded by ACE. Out of this 19,141 MT valued at MK4,819, 200,283 (USD9,340,711) were traded within INVC's ZOI. There were 136 contracts of which 90 (66.2%) were from within INVC's ZOI. The trade agents facilitated eight contracts of 81.78 MT valued at MK17,082,500 (appx. USD \$34,285).

Bid Volume Only (BVO) Auctions

During this quarter, 39 BVOs for 19,142 MT of maize of the National Food Reserve Agency were conducted using ACE's trading platform. The BVOs were valued at MK2,569,798,283 (USD5,027,157).

Market Information:

Evaluation of Market Information System (MIS) and Market Information Points (MIPs)

During this quarter, INVC evaluated ACE's market information system (MIS) and Market Information Points (MIPs) in Mchinji, Lilongwe, Dedza and Balaka. The aim of the activity was to evaluate existing MIS and MIPs in order to understand and appreciate their operations and make recommendations for improvement. Out of the existing three MIPs, INVC found only one was operational in Dedza. The Mchinji MIP was in dilapidated state. Its internet has not been operational during the past 18 months. The rural trade agents operate the MIPs using mobile phones to upload data into computers. This is costly and inefficient. The study found out that all three MIPs require renovation and branding, and they need to be user friendly with adequate room, modern equipment and functional v-sat connectivity. There is need for a deliberate policy effort to encourage beneficiary farmers to patronize the MIPs. The study found out that there is slow progress of uploading beneficiary farmers of NASFAM, FUM and CADECOM into ACE's MIS due to work in progress on upgrading of MIS.

During this quarter, 1,824 farmers were uploaded on ACE database. A total of 274 farmers (177 male and 97 women) visited the MIPs. The attendance remained low due to off marketing season for soybean and lack of promotion of the MIPs by ACE.

Sensitization and Training on Structured Trade

During this quarter, 6,748 (3,225 men and 3,523 women) farmers and stakeholders were sensitized on structured trade. These awareness campaigns targeted NASFAM, FUM and CADECOM beneficiary farmers. During Q3FY15 2,083 (1,007 men and 1,076 women) farmers and stakeholders were sensitized; thus this quarter saw an increase of 124% in total participation.

ACE conducted refresher training for Rural Trade Agents in the period under review. The participants included Rural Trade Agents from Mchinji, Dedza and Balaka under the MIPs.

Radios and Newspapers

During the quarter under review, 12 radio programs were aired and 12 newspaper inserts were placed in local media. The newspaper inserts concerned weekly prices and structured market information. The radio programs discussed structured marketing services including forward contracts, warehouse receipt system and auctions.

Financial Services:

Collateral Financing Facilities

During the period under review, INVC engaged ACE to extend bridging finance to Lifidzi Smallholder Farmers Association of Chafumbwa EPA in Dedza through either Estrell Trading Limited or Afrinut Ltd.

The deal did not go through because ACE was not willing to offer the loans to the farmer group. Afrinut turned down the offer due to high interest rate. Estrell Trading could not participate due to lack of certifiable storage facility.

During the period under review, financial resources were availed to ACE by FMB Bank, CDH Bank, IndeBank, EcoBank and Export Development Fund remained at MK4,050,000,000 (USD7,714,286). ACE managed to disburse MK1,625,337,912 (USD2,959,619) in this quarter as follows:

- MK41,015,471 (USD2,830,789) for bridging finance;
- MK8,810,221 (USD16,871) for 70% warehouse receipt financing; and
- MK1,556,511,471 (USD108,6810) for forward contracts.

Innovative Value Chain Financing

During the period under review, an innovative value chain financing mechanism was discussed with stakeholders. It involves a triangle of financier, buyer and seller (farmer). The consultative meetings were held with ACE as financier, Afrinut Ltd, Estrell Trading Ltd and Lifidzi Smallholder Farmers Association of Chafumbwa EPA in Dedza.

The outcomes of the meetings were inconclusive. This will be pursued further with some modifications.

Challenges, Solutions and Actions taken:

- **Lack of interest to develop market opportunities for farmers by implementing partners.** The challenge has been the unwillingness of NASFAM to open up the soybean and groundnut markets to other market players in EPA where NASFAM is the sole or dominant extension service provider. NASCOMEX remains a preferred and monopolistic market for NASFAM Development. INVC managed to persuade NASFAM to participate in organized market options for farmers to sell their produce. NASCOMEX participated in the seller/buyer meetings through the buyers' tour. NASCOMEX looks to develop its own vertically integrated, profit making opportunities rather than assisting in connecting the farmer members of NASFAM affiliated clubs and associations with interesting economic opportunities. Reticence was expressed in offering choice to farmers in the identification of raw production buyers, in placing of farmgate processing technologies, and in promoting messaging on outgrower opportunities among others.
- **Bi-Lateral trade mission did not take place in the quarter due to change of priorities.** INVC changed its priority for conducting trade mission to Tete and Nampula in Mozambique and Chipata in Zambia in order to develop the local market first before embarking on the regional market. The buyers' tours were therefore conducted throughout the ZOI where buyers/processors/transporters were taken to farmers.
- **High transport costs for both farmers and buyers/processors.** INVC continued to bring markets closer to farmers by strengthening a network of 750 village aggregation centers in all 66 EPAs in the ZOI. INVC used drama performance by Pakachere to change behavior of farmers to start selling their produce as a group. INVC involved both implementing and technical support partners in delivering collective marketing messages through radio.

- **Limited access to market information.** INVC evaluated the Market Information Points (MIPs) and Market Information System (MIS). INVC and partners (NASFAM, FUM, CADECOM and ACE) drew a deliberate policy to encourage beneficiary farmers to patronize the MIPs. INVC supported ACE to hire a consultant to help in uploading of implementing partners' beneficiary farmers on its database. INVC is also supporting ACE to hire a consultant to develop new MIS modules of integrating warehouse receipts and forward contracts into its database.
- **Lack of available financing for farmers and aggregators.** The banks are still unwilling to lend to smallholders because of lack of collateral and failure to repay loans. INVC continued talking to the banks including DCA guarantee loan facility and partners. INVC started designing and innovating value chain financing in collaboration with implementing partners, financiers, and processors.
- **NASFAM has a commercial arm NASCOMEX whose role is to buy and market product produced by their NASFAM subscribers.** This is an outstanding issue that needs behavior change by NASFAM. INVC started to offer market options to NASFAM's beneficiary farmers including NASCOMEX. INVC should continue this.

Lessons, Best Practices, Conclusions and Recommendations:

- Different expectations resulting in conflict of interest. The lesson is to balance the expectations and engage in effective communication.
- Best practice was offering smallholder farmers lucrative market options where they can sell their soybeans and groundnuts.
- Weak marketing teams within IPs – NASFAM and FUM have full time INVC supported marketing officers. NASFAM's marketing officer does not dedicate all his time to INVC's activities. FUM just hired its marketing officer in this quarter and has yet to be trained. CADECOM does not have a marketing officer.
- Lack of focus in marketing activities – because of weak or inexistent marketing teams within partners, marketing activities are treated as peripheral to the core mission of our INVC IP grantees.
- Conflicting roles within partners like NASFAM Development versus NASCOMEX
- Unwillingness of NASFAM to open the legume market within their geographical area to competitors. This contradicts the spirit of competitiveness promoted by INVC.
- Reluctance of some partners to guarantee loans for their member associations and cooperatives like the Development Credit Authority loan guarantee facility which ACE and NASFAM are underutilizing, and not extended it to farmer associations and cooperatives.
- Component 1 should continue and scale up the activity of offering market options to farmers.
- Component 1 should continue to facilitate food safety training to intermediate and advanced levels.
- Component 1 should continue with cascading the aflatoxin training to farmers in all 66 EPAs in ZOI.
- Component 1 through management should continue to resolve to NASFAM/NASCOMEX conflict of interest, and brokering actions of CADECOM and FUM.

Planned Activities for Next Quarter:

- FY2016 Component 1 work plan and budget in October
- FY2016 Partners work plan and budget in October
- FY2015 Q4 and annual reports in October
- Soybean upgrading plan finalizing in November
- Groundnut upgrading plan finalizing in November
- Marketing meetings with DADOs in the ZOI in November
- Facilitate buyers' tours in November and
- Meeting on DCA guarantee facility in the first 2 weeks of December

Success Story: Ntcheu smallholder farmer lauds structured markets

Stain Kasiya, a smallholder farmer from Kadzakadza village, Traditional Authority Kwataine in Ntcheu District was probably the happiest man this marketing season after securing lucrative end-markets for his soybeans. Unlike the past when he would sell to vendors at give-away prices, this year he sold 200 kg to NASCOMEX and 1500 kg to the Agriculture Commodity Exchange (ACE). From his 1900 kg production of soybeans he saved the rest (200 kg).

Kasiya, who is a member of Nsipe NASFAM Smallholder Farmers Association and chairperson of Thokozani Farmers Club, learned about the new market options when he attended a buyers' tour at Nsipe Extension Planning Area (EPA) in May, 2015. Feed the Future Malawi: Integrating Nutrition in Value Chains (FtF-INVC) project in collaboration with its partners organized the tour for farmers in Mchinji, Lilongwe, Dedza, Ntcheu, Balaka, Machinga and Mangochi. The overall objective was to facilitate direct interaction between processors, buyers, traders and exporters with smallholder farmers. Over 30 processors/buyers/transporters including NASCOMEX and ACE participated in the exercise.

The 43-year old Kasiya and wife Aida, who depend on agriculture to take care of their eight-member family including an orphan, were among the farmers who attended the buyer's tour session held at Nsipe EPA in Ntcheu. The two grow maize, soybeans and groundnuts. They also operate a mini grocery store to supplement their farming income so they can send their five children (two boys and three girls) to school. This season, they say, has been a breakthrough year in their agriculture.

"We have been growing soy beans and other crops for a long time without making any profit because we were selling the crops to vendors immediately after harvest at very low prices. We were ignorant of the existence of other market options," said Kasiya's wife, adding, "Our mindsets changed when we heard from and saw many buyers and processors at the organized buyers' tour on May 26, 2015 at Nsipe EPA. A large number of processors and buyers were in our village, telling us about lucrative markets."

Every farmer, said Kasiya, was moved by ACE's message as it gave them hope for the betterment of their livelihoods.

"We decided to take a risk by not selling our soy to vendors but through the ACE trading platform," Kasiya explained, adding, "It was amazing. At that particular time the vendors were buying the soybean at MK140/kg per kilogram in most markets. I was linked to a buyer through ACE and my entire harvest of 30 bags of soybeans were sold at MK230/kg. This allowed me to make MK345,000 instead of MK210,000 I would have made by selling to a vendor. This brought us a gain of MK135,000 (64% above vendor price)."

With the extra cash, the family paid full school fees for their 16 year-old form four son, bought 4 bags of cement to upgrade their house and topped up capital for their mini grocery.

It is clear that lack of good markets for various commodities farmers grow (including soybean), has for many years prevented people from enjoying improved livelihoods from the farming business. Kasiya and his wife like other farmers in their community depended solely on local ambulatory

vendor market outlets, and made no gains over the many years they had been in the farming business. The experience selling through the ACE structured market trading platform has brought new hope and the family has plans to double their soybean production in the next growing season.

“Although this was my first time to realize such a huge profit, I would like to urge my fellow farmers to treat farming as a business by not rushing to sell their commodities to vendors who only buy at exploitive prices. Farmers should exercise patience and sell through lucrative markets like the ACE platform,” Kasiya said.

Success story: Farmers' cooperative gains from auction marketing

A smallholder farmers' cooperative in rural Lilongwe, for the first time sold its produce through auction marketing this season, a development which has helped them rake in higher profit than ever before. This was made possible by Feed the Future Malawi: Integrating Nutrition in Value Chains (FtF-INVC) project in collaboration with its partners: Farmers Union of Malawi (FUM) and Agricultural Commodity Exchange (ACE).

FUM plays significant role in building the capacity of cooperatives in the country. It links them to structured markets like ACE. One of the many cooperatives being supported by FUM is Kampini Cooperative in Mitundu, Traditional Authority Chiseka in Lilongwe. Kampini cooperative was established in 2010 with the aim of accessing more lucrative markets for its members. The farmers aggregate their produce and sell as a group. As of September 30, 2015 the group had over 200 (118 male and 82 female) member farmers.

In 2014, FUM linked the group to ACE and the farmers benefitted through training on structured trade and grain marketing. "Following the grain management training, we started receiving market information on prices from ACE," said Kadammanja Banda, the group's executive member.

The members aggregated 30 metric tonnes of maize which were sold on Bid Volume Only (BVO) auction. On the 28th day of October 2014 World Food Programme tendered a BVO session for purchasing maize through ACE trading platform. The cooperative's bid during the session turned out successful and their maize was bought at a price of K95 per kilogram and generated total income of MK2,850,000.

"It was unbelievable for us to gain K450,000 more income on our commodity through ACE trading platform because at that time, the ruling market price of maize was less than MK80/kg yet we were able to sell at MK95/kg," Banda said, smiling.

KB, as Banda is popularly known among his peers, said the new experience had shown that ACE trading platforms provide farmers with bargaining power, allowing them to decide the commodity price.

"This opportunity would not have been there if we had opted to sell our commodity to the local vendors. As a cooperative, we look forward to having more opportunities to trade through structured markets. It is high time that we smallholder farmers should benefit more from our hard work through the utilization of structured markets," He said.

Success story: New farming technologies give a disabled woman a reason to smile

Elesitina Dafuleni Yohane, 39, is a married smallholder female farmer with one child. She has been physically challenged from birth. She comes from Chopenga Village, Group Village Head Chindamba in Traditional Authority Kachere, located approximately 50Km west of Dedza District.

Despite her physical status, Yohane who is a member of Tiyanjane Farmers Club works admirably hard in her field. She started growing soybeans from a very young age but she could not achieve production levels that would make her efforts worthwhile. This was mainly due to the poor agriculture practices she used to follow. However, things took a spectacular turn for her when the Feed the Future Malawi: Integrating Nutrition in Value Chains Project (FtF-INVC) through Farmers Union of Malawi (FUM) launched its activities in the area.

She was excited with the double row soybean planting technology INVC introduced through FUM in her area. She realized that this innovation would solve her land shortage problem.

During the 2014/2015 cropping season, Yohane adopted and practiced the soybean double row planting technology. Amazingly, out of the 12 kilograms of soybean seed that she planted, she managed to realize a production of 250 kilograms despite the prolonged dry spell which severely hit the area. She sold the produce for about MK60,0000 part of which she used to buy some building materials for the construction of a house. She used the remaining money to meet some of her domestic needs.

For the coming cropping season, Yohane has set aside 0.4 ha for soybean production and she has vowed to continue following the recommended farming practices learnt from FUM under INVC project.

“My intention is to become self-reliant and prove the critics wrong including those who think that disability is inability. With the new technologies, I can foresee my life transformed for the better due to the INVC project,” Yohane said.

Success story: Smallholder farmers thrilled at selling directly to processors

About 12,000 smallholder farmers in Mchinji, Lilongwe and Dedza sold their groundnuts collectively to high value end-markets in the country during this year's marketing season.

Afrinut Limited, the largest processor of groundnuts in Malawi, bought over 500 metric tonnes (MT) of unshelled groundnuts worth MK175 million (appx. \$318,200 USD). According to Lisbon Kalumbi Qoma, the company's operations manager, the groundnuts were sourced from Mchinji and Dedza districts.

"Farmers sold their unshelled groundnuts at over MK360/kg and they saved on labor for shelling. Unshelled groundnuts have less aflatoxin contamination," said Qoma with a broad smile, adding, "This year our company bought less aflatoxin contaminated nuts and therefore incurred less wastage than in previous seasons." Qoma thanked FtF-INVC for promoting in-shell groundnut trade.

Another beneficiary company is Estrell Trading Company, a woman-owned business that processes groundnuts into powder and butter. The company bought over 60 MT of groundnuts in Lilongwe valued at MK35 million (appx . \$63,640 USD)

"Thank you so much FtF-INVC for linking me to the village aggregation centers in Lilongwe where I picked up all my requirements at a central place. I saved time and money and reduced transaction costs," said Cecilia Rice owner and manager of the company.

In both cases, the smallholder farmers received high prices for their groundnuts. They benefited from end markets that came to their farms. The processors saved time and money as they picked their purchases from a central place instead of spending costly resources: time, fuel, and vehicle wear and tear looking for small quantities of products from diverse homesteads on poor roads..

"Traders rip off farmers, but sourcing directly from the farmer associations blocks out unscrupulous buyers and is a win-win with farmers and processors," said Rice.

Component 2: Improving Agricultural Productivity

Introduction

The current reporting period extends from July to September 2015. In this quarter, the main production activity for our local partners NASFAM and CADECOM was finalizing soybean and groundnut seed recoveries. FUM concentrated in capacity building and trainings on Orange Fleshed Sweet Potatoes (OFSP) and composting. Collaboration with Feed the Future Malawi Seed System Technologies also intensified during this period. In addition, collaboration with Micotoxin Lab from University of Georgia and LUANAR is in the pipeline. During this reporting period INVC also undertook its annual agricultural outcome survey. Selected results are presented both in this chapter and in the M&E section. The draft report is under review and will be presented to the Mission once it has been finalized.

Accomplishments

Agricultural Outcome Survey

The Outcome survey, undertaken in August 2015 interviewed 2120 farmers across the project Zone of Influence, 62% of whom were female. Of these, 625 grew groundnuts only, 811 grew only soybeans and 684 cultivated both grain legumes. The average farm size was three acres. Given that the draft report only became available after the close of the current reporting period, comparative year on year analysis and more in depth interpretation of the data will be provided in subsequent quarter's reporting. A summary of findings from the 2015 study shows that:

- Over half the farmers adopted at least one new production technology with more soybean farmers and more women appearing as early adopters.
- Most land area under new technology was dedicated to improved varieties (637 ha) while far less (352 ha) was dedicated to double row planting or ridge spacing.
- Women tended to plant more land area to new technologies than men.
- Easily adopted new technologies for both soybeans and groundnuts are those which tend to increase yield, thus improved varieties and weeding, or those decreasing post-harvest loss – improved storage technologies
- While greater than 90% of farmers had heard of collective marketing and 63% of farmers were conversant on the principles of warehouse receipts (WRS), very few farmers surveyed had practiced any of the newly promoted marketing techniques. Only 44% of farmers surveyed aggregated their product for collective marketing while only 7% had participated in a warehouse receipts program. It should be noted however that this is a great leap forward from 2014 when less than 6% of farmers were using any of the marketing technologies promoted by INVC. In 2014 only 1.14% of farmers surveyed had participated in a warehouse receipts program while only 0.35% were aggregating their product and 2% were involved in collective marketing.
- Yields decreased for both groundnuts and soybeans this year because of poor climactic conditions prevailing throughout the project's ZOI, but gross margins for soybeans were higher than in 2014
- Gross margins for groundnuts decreased from \$318,92 in 2014 to an average of \$215 in 2015.
- Gross margins for men were higher than gross margins for women in both groundnuts (\$261 vs \$188) and soybeans (\$337 vs \$246)

- Gross margins were greatest among FUM farmers, followed by those of CADECOM
- Beneficiaries practicing integrated pest management realized the highest gross margin for soybeans (\$313). This was followed by those adopting recommended row spacing (\$300) and then double row planting (\$272). It should be noted that farmers practicing IPM were most likely to have adopted an umbrella of productivity enhancing technologies promoted by the project.
- For groundnuts, beneficiaries practicing doubled up legume production had the highest gross margins (\$304).
- The greater the number of technologies adopted and used together, the higher the gross margin.
- Productivity was highest in Mchinji for both soybeans and groundnuts.
- Gross margin for groundnuts was highest in Mangochi, while Mchinji exhibited the highest gross margins for soybeans. Farmers assisted by CADECOM had the highest gross margins for soybeans.
- Farmers growing both groundnuts and soybeans tended to save more for household consumption than farmers who only grew either groundnuts or soybeans.
- Male headed households tended to save more groundnuts than women headed households (13 kg vs 6.6 kg). This same tendency held true for soybeans with male headed households reserving 11.1 kg for consumption vs 7.6 in female headed households. However, male headed households cultivate larger land areas than female headed households, respectively 0,29 ha vs 0,26 ha for groundnuts and 0,26ha vs 0,25 ha for soybeans. When the savings per head of household, disaggregated for gender are normalized with total land area cultivated to the legume in question we find that the percentage of crop saved is not significantly different on a percentage basis between male headed households and female headed households and in fact averages 7.7% of total production.
- NASFAM beneficiaries saved the least amount of groundnuts for consumption (7.9 kg) while FUM farmers saved the most (11.3 kg);
- FUM Farmers reserved the most soybean for consumption (10.8 kg) while CADECOM farmers reserved the least (6.3 kg).

COMPARISON OF GROUNDNUTS PRODUCTION BETWEEN 2014/15 AND 2013/14 REPORTING PERIODS

Comparison of groundnuts in terms of gross margin per hectare (USD/ha), total production (mt) and total yields (MT/ha) were undertaken for the years 2013/14 and 2014/15, and the results are shown in the tables below (Tables 1-3): All entities under review showed that the gross margins, production and yield of groundnuts for the year 2013/14 were higher than that of 2014/15. The differences between the years mentioned indicate losses in groundnuts production proved by negative results in gross margins returns, total production yield and total yield respectively.

Table 1: Comparison of Groundnuts gross margins between 2014/15 and 2013/14 reporting periods

								Who grew Groundnuts only		
		Male	Female	FUM	NASFAM	CADECOM	Pooled	Male	Female	Pooled
GM /Ha of Groundnuts (USD/ha)	2014/15	261	188	257	207	81	215	228	112	153
	2013/14	404.07	241.98	420.45	233.97	298.74	318.92	406.6	225.95	306.27
Difference		143.07	-53.98	163.45	-26.97	-217.74	-103.92	-178.6	-113.95	-153.27

Table 2: Comparison of total production of Groundnuts (MT) between 2014/15 and 2013/14

Total Production (mt)	2014/15	67.4	86	61.9	82.3	9.2	153.4	27.9	30.9	58.8
	2013/14	104.85	89.21	167.45	121.28	36.28	325.03	39.81	30.38	114.48
Difference		-37.45	-3.21	105.55	-38.98	-27.08	171.63	-11.91	0.52	-55.68

Table 3: Comparison of total Yield of Groundnuts (MT/Ha) between 2014/15 and 2013/14

Total Yield of Groundnuts (MT/ha)	2014/15	0.5304	0.379	0.5248	0.4035	0.2865	0.4333	0.5167	0.3059	0.3794
	2013/14	1.069	0.67	1.106	0.702	0.705	0.865	1.026	0.594	0.796
Difference		0.5386	-0.291	0.5812	-0.2985	-0.4185	0.4317	-0.5093	-0.2881	-0.4166

COMPARISON OF SOY BEAN PRODUCTION BETWEEN 2014/15 AND 2013/14 REPORTING PERIODS

SOY BEAN GROSS MARGIN COMPARISON

Table 4 presents results of gross margins for soy bean for the periods 2014/15 and 2013/14. In general, the results show that farmers realized higher gross margins in the period 2014/15 than the period 2013/14. The difference was higher in farmers under CADECOM (143.86).

Table 4: Comparison of soybean gross margins between 2014/15 and 2013/14 reporting periods

								Who grew soy only		
		Male	Female	FUM	NASFAM	CADECOM	Pooled	Male	Female	Pooled
GM /Ha of Soy (USD/ha)	2014/15	310	209	259	243	281	247	337	246	284
	2013/14	259.73	129.09	162.93	176.43	137.14	170.24	246.59	117.75	165.54
Difference		50.27	79.91	96.07	66.57	143.86	76.76	90.41	128.25	118.46

SOY BEAN TOTAL PRODUCTION COMPARISON

Table 5 presents the difference in total production of soy bean between 2014/15 and 2013/14. Again total production was high in the period 2014/15, except for farmers under CADECOM whose total production went down by 2.53MT although they realized higher gross margins.

Table 5: Comparison of total production of soybean (MT) between 2014/15 and 2013/14 reporting periods

								Who grew soy only		
		Male	Female	FUM	NASFAM	CADECOM	Pooled	Male	Female	Pooled
Total Production (mt)	2014/15	121	129	55	189	6	250	75	72	147
	2013/14	67.45	53.45	54.93	132.34	8.53	195.81	28.88	20.74	77.54
Difference		53.55	75.55	0.07	56.66	-2.53	54.19	46.12	51.26	69.46

SOY BEAN PRODUCTIVITY COMPARISON

Table 6 shows that households which reported to have more male decision power their productivity went down in 2014/15 period by 0.15MT/ha. Under INVC partner organizations, productivity of farmers under NASFAM went down by 0.047MT/ha.

Table 6: Comparison of soy bean productivity (MT/ha) between 2014/15 and 2013/14 reporting periods

								Who grew soy only		
		Male	Female	FUM	NASFAM	CADECOM	Pooled	Male	Female	Pooled
Yield of soybeans (MT/ha)	2014/15	0.8288	0.542	0.7143	0.6342	0.6667	0.651	0.8824	0.6207	0.7313
	2013/14	0.977	0.489	0.674	0.682	0.503	0.669	1.099	0.474	0.699
Difference		-0.1482	0.053	0.0403	-0.0478	0.1637	-0.018	-0.2166	0.1467	0.0323

Development of Private Sector Outgrower Schemes

Sunseed Oil

In July Sunseed oil approached INVC for assistance in building an outgrower relationship with FUM cooperatives in the INVC ZOI. Sunseed had previously participated in the marketing buyers tour and as reported previously, Sunseed Oil Ltd bought 165 MT of soybeans at MK220,000 per MT worth MK37,300,000 (appx \$83,000) from farmers in Kalulu EPA. Sunseed Oil Ltd offered to enter into contract farming with soybean farmers in all the 11 EPAs visited and they undertook a verbal agreement with FUM to this effect. In August joint meetings were held at FUM and a way forward was mapped out with roles and responsibilities attributed to each party. FUM was supposed to hold general assembly meetings with each cooperative interested in undertaking production of soybeans under contract and aggregation of the production at harvest for sale to Sunseed. Once the general assemblies had approved proof of concept they were to nominate a focal committee to liaise with Sunseed Oil. Sunseed Oil stated their willingness to identify and provide appropriate seed varieties, to provide extension assistance in the growing of the soybeans, to provide the transport picking up the aggregated soybeans and to pay the harvest at prevailing world market rates and further to explain these rates and their trending to farmers. INVC agreed to assist in the development of the outgrower contracts, to support refresher training for extension staff of both FUM and Sunseed in Good Agronomic Practices. We further agreed to provide inoculum and the training on its

application and to support exchange visits for lead farmers to the Sunseed Oil processing plant. Originally, Sunseed had proposed working with 5 cooperatives, three in Mchinji and two in Dedza and to support up seed for 500 ha of soybeans. As with any new partnership, there were growing pains. The general assembly meetings took much longer to occur than anticipated. Ground trothing found that the draw zone for aggregation to cooperative warehouses was only an 8 km radius, while not all the cooperatives were found to have the requisite management structure, governance or warehouse space. Further, Sunseed decided it was too risky to invest \$100,000 of their own funds in seed this year as they self-finance and do not leverage external financing for their businesses due to religious prescription. In the end, to calibrate the outgrower effort with FUM Sunseed proposed working with only one cooperative in Mchinji and providing only 2mT of certified soybean seed, enough to plant 16.5 ha with double rows at a density of 120 kg/ha. Assuming distribution of 12 kg of seed to farmers for cultivation on 0.125 ha. each, in double rows, 166 farmers can potentially benefit from this outgrower scheme this year. Actual numbers will be firmed up next quarter.

Charles Stewart Poultry

During an end market analysis exercise in March/April 2015, Charles Stewart expressed their interest to engage INVC's beneficiary farmers in contract farming. They planned to procure 700 MT of soybean grown by out-grower smallholder farmers. Several meetings were held. As of November 2, 2015, Charles Stewart changed their priorities from an out-grower scheme to a marketing contract. The change was necessitated by a USD1.5 million poultry farming project due to start soon that is financed by Malawi Investment Challenge Account. The company needs to concentrate on this project before embarking on a soybean production contract with farmers. The company has a lean staff to get involved in two big contract farming projects. Instead, the company opted for an easier to implement marketing contract. The company wants INVC to link them to farmer groups within a radius of 100 km from their Lilongwe factory. They also want INVC to help in identifying the farmer groups and enforcement of the contracts. They aimed to purchase 700 MT of soybeans directly from the farmer groups at agreed prices.

Seed recovery

Local partners NASFAM and CADECOM finalized seed recoveries for soybeans and groundnuts during this period. Recovered volumes were relatively variable. In the case of soybeans, recovery in Mchinji actually surpassed the expectations (103 %), while in Balaka it was below 20 percent. For groundnuts, in Balaka, while NASFAM expected no recoveries this year, the IPC actually recovered 4,479 kg, and in Ntcheu groundnut recovery was about 116 % over the expected volumes. Overall, CADECOM in Dedza performed poorly, able to recover about 19 MT of seed while the total projection was about 107 MT (18 percent). The table below summarizes the quantities expected, recovered and percentage achieved by crop and partners.

Table 1. Seed Recovery Performance during the 2014-15 Production Season

Partner	EPA/IPC	Crop	Expected recovery	Actual recovered	% Achieved
NASFAM	Balaka	Soy	129,485	24,958	19%
	Lilongwe North	Soy	217,966	56,509	26%
	Lilongwe South	Soy	197,261	121,117	61%
	Mchinji-MASFA	Soy	274,195	282,227	103%
	Namwera	Soy	172,637	110,009	64%
	Ntcheu	Soy	103,503	70,100	68%
Total Soybeans			1,095,047	664,920	61%
NASFAM	Balaka	Groundnuts		4,479	
	Lilongwe North	Groundnuts	68,114	4,424	6%
	Lilongwe South	Groundnuts	61,644	18,484	30%
	Mchinji-MASFA	Groundnuts			
	Namwera	Groundnuts			
	Ntcheu	Groundnuts	6,809	7,930	116%
CADECOM	Bembeke	Groundnuts	20,000	150	1%
	Chafumbwa	Groundnuts	25,000	8,400	34%
	Golomoti	Groundnuts	20,000	1,050	5%
	Kanyama	Groundnuts	22,000	8,500	39%
	Mtakataka	Groundnuts	20,000	1,687	8%
Total Groundnut			243,568	55,104	23%

NASFAM and CADECOM attributed the low quantities recovered this year to the following factors: i) poor harvest across the INVC ZOI and in general across the country, ii) high grain prices which created an incentive for farmers to sell their seed during a period of high food insecurity across the country, iii) general expectations that more “free” seed would be available in the coming season.² NASFAM also cited limited financial support to IPCs as a factor contributing to low seed recovery.

The issue of seed recovery, however, is not new and has been problematic since the beginning of the project. The seed recovery in the case NASFAM works as follows:

At registration soybean farmers are promised 6 kg of seed and inoculum. This amount is enough to plant about 0.125 hectares (0.3 acres) in single rows. The agreed return ratio is 2.5:1 meaning that farmers are supposed to return 15 kg of soya seed at the end of the season.

In the case of groundnuts, NASFAM provides farmers with 15 kg of seed, again enough to plant, in single rows, about 0.125 hectares, and the return totaling 37.5 kg of seed.

CADECOM provided 12 kg of seed and expected to receive back 24 kg (2:1 ratio).

The system as currently operated presents several challenges to farmers and partners. Among the issues most prominently observed during the last growing season are:

- 1) Farmers do not see the seed recovered as their own. The revolving seed system is meant to help farmers obtain quality seed from their peers. However, farmers continue to perceive it as an input loan obtained at the beginning of the season for which they need to repay at harvest time. Because there is limited control from partners and farmers believe is a loan repayment, there is no incentive to provide quality seed back to the pool.
- 2) The recovery ratio is insufficient to guarantee enough seed in the following season. Because seed recovered tends to be mixed and of poor quality, losses after grading can be significant.

² At the time the seed recovery ended, farmers still counted on the government program FISP as source of seed. In addition, humanitarian responses to the current food insecurity in the country created expectations among farmers that there would be seed available for free through projects.

In addition, after about three years, old seed must be removed from the pool because it has lost vigor. For example, for groundnuts, the Ministry of Agriculture calculates that the total lost after shelling and grading is about 40 percent. In the case of CADECOM farmers are currently returning about 9.6 kg and in the case of NASFAM just returning the same amount they received before. With this system there is no opportunity to grow the seed bank and render it sustainable.

- 3) Partners have not been able to establish proper traceability systems. Currently, farmers bring their seed in and deposit it in a warehouse, or give it to a lead farmer in charge of storing these bags. In most cases, farmers bring in anything (mixed varieties, foreign matter, sticks, twigs, rocks, poor quality grain etc..) and partners later on grade and test for germinative capacity. The bags farmers return have no number, no name and no card to trace them back. Ideally, the FAO recommends that seed should be traceable back to the actual farm where it was grown in order to have complete information about seed.
- 4) Lack of proper seed storage compromises the quality of seed. In many villages there is simply no warehouse to store seed. In areas where there are warehouses, they are not designed to store seed, nor have not capacity for it. For example, soybean seed needs to be stored at 12 percent or less moisture content in rooms at 4 to 15 degrees Celsius during summer time.³ Groundnuts must be stored in shell and in sacks on top of pallets to avoid contamination.

INVC has worked with partners to improve their seed recovery system. In August, NASFAM concluded a Seed Bank Development Strategy. The review included improvements in the seed distribution administrative tools such as Memorandum of Understanding (MoU) that is signed between IPC Associations and the beneficiary club. In the case of CADECOM, main changes to their recovery system will include a change in the deadline for recoveries, and more targeted seed distribution. For example, in Mtakaka and Golomoti EPAs, the seed distributed (CG7) is not appropriate for the zone because they need shorter cycle varieties (90 days) for these area. In other areas, such as Bembeke EPA where groundnuts simply do not grow well, CADECOM will target soybeans and orange fleshed sweet potatoes as alternative.

Despite the current remediation measures, combined with others already recommended in previous seasons, the seed recovery system will continue to struggle to achieve its goals unless farmers clearly take ownership of the system. Farmers must be closely involved in monitoring the quality of seed as it enters the warehouse and most importantly they need to know that they are truly the owners of the seed recovered. This will ensure that farmers clearly understand their rights and responsibilities. Further, it will act as incentive for them to provide quality seed to the seed bank rather than side-selling their good seed and providing the seed bank with their worst quality production.

³ Iowa State University. Soybean extension and research programs

Technical Training:

Training during the fourth quarter focused on creating awareness about two different crops: pigeon peas and orange fleshed sweet potato (OFSP), and technical knowledge about integrated pest management and composting.⁴

NASFAM in collaboration with ICRISAT conducted field day trainings in Swaibu and Madzianjuchi Group Action Committees (GAC), located in Balaka IPC (Machinga district). In total, 114 farmers (45 male and 69 females) participated of this field day.

During this training, NASFAM AFO's demonstrated the performance of Chitedze 1, Chitedze 2, Mwayiwathu Alimi and M'thawajuni (local variety) varieties.



Figure 1 NASFAM farmers learning about pigeon peas, Machinga District

About 80 percent of participants preferred the local variety over the hybrid varieties due to its resistance to pests and diseases. According to farmers, the local variety does not require a lot of chemicals.

FUM beneficiaries participated in trainings and field days to learn more about OFSP. In addition to training, field officers, government extension workers and beneficiaries identified trial sites and lead farmers received mother and baby bundles.⁵ Farmers also receive training in land preparation and planting of vines.

OFSP activities are part of integration activities with the International Potato Center (CIP). CIP, in collaboration with INVC implementing partners, distributed bundles to different farmers in Dedza, Lilongwe and Mchinji.⁶ CIP's "mother/baby trial" works as follows: a lead farmer is in charge of managing a mother trial plot which contains all six varieties. Fifty farmers each manage a baby trial plot which contains a specific variety. The varieties farmers planted were Chipika, Mathuthu, Kadyaubwere, Anaakwanire, Zondenji and Kaphulira. All these varieties are equally rich in vitamin A. The main differences among varieties are taste (e.g., Kadyaubwerere is a sweet variety) and yield (Anaakwanire is high yielding). These trials are expected to inform about best environmental conditions for growth.

CADECOM trained 1,158 farmers (532 are males and 626 females) in IPM and aflatoxin management. FUM organized composting training in all 10 INVC EPAs in Dedza, Mchinji and Lilongwe. Participants included Lead and Associate Lead Farmers as well as Government Extension Staff. Agricultural Extension District Officers (AEDOs) with support from FUM FOFs facilitate the training sessions. The main objective of the training was to teach farmers compost preparation and techniques for application as well as discussing the benefits of composting. Out of the four different composting methods, farmers indicated they would prefer to make pit manure because it is less labor intensive and the materials to make the manure are easily found within their localities. During the training farmers evaluated the cost of using compost compared to chemical fertilizers. In

⁴ In Malawi, composting is commonly referred to as manure making.

⁵ CADECOM farmers received bundles and training in June. NASFAM chose not to participate in this program because the organization decided to focus on vine multiplication.

⁶ Other trials are in Balaka with the INVC nutrition component, and in Lilongwe and Mchinji with Nkhoma Hospital, also part of the nutrition component.

addition they learned that compost improves soil texture, soil structure and water retention, enabling crops to survive in times of low rains.

Table 2. FUM Composting Methods Characteristics, 4th Quarter 2015

Method	Characteristics
Bo cash	Made using husks, ash, fresh cow or goat dung, virgin soil, yeast and water. All this materials are mixed and every three weeks stirred until it is ready for use.
Pit manure	Made using maize stalks, soybeans or groundnuts residues, cow or goat dung, and water. A pit is dug a meter deep, 1.5 meters width and 1.5 meters length. The materials are laid in layers until the pit is full. At every layer water is added to enhance decomposition.
Chinese compost (Changu)	Made using pit manure materials, the difference is that this type of manure is done on the bare ground and in cone shape. The compost is supposed to be turned every six days
Frame compost	Made using pit manure materials; the difference is that with this type of manure a fence is constructed with the same measurements as pit manure.

FUM and CADECOM also conducted “refresher” training based on crop management learned in previous seasons. CADECOM conducted trainings in all five INVC EPAs. Lead farmers trained their fellow farmers on the following topics: Aflatoxin management (dangers and prevention), drying of groundnuts, land preparation, planting groundnuts in double rows, seed, storage of groundnuts. In total 3,486 farmers (1,127 males and 2,359 females) participated during this refresher training.

FUM staff and government extension personnel jointly facilitated the refresher trainings. The main objective of the training was to equip lead farmers and assistant lead farmers with knowledge in good agronomic practices and the establishment of demonstration plots with recommended technologies and those with conventional methods. Topics during these sessions focused on land preparation, conservation agriculture in legumes and planting technologies.

In total 11,933 farmers participated in different training sessions during this quarter. It is important to note that on average female participation on all agricultural productivity activities has been above 50 %. The table below summarizes the number of participants at different training sessions, by partner, topic, district and EPA.

Table 4. Participation in Agricultural Productivity Related Activities during 4th Quarter 2015

Partner	Topic	District	EPA/IPC	Female	Male	Total	% Female	Participant
CADECOM	IPM	Dedza	Bembeke	108	120	228	47%	LF, ALF
	IPM		Chafumbwa	172	112	284	61%	LF, ALF
	IPM		Golomoti	92	127	219	42%	LF, ALF
	IPM		Kanyama	137	73	210	65%	LF, ALF
	IPM		Mtakataka	117	100	217	54%	LF, ALF
			S/Total IPM	626	532	1,158	54%	
CADECOM	Crop Mgmt Refresher	Dedza	Bembeke	234	93	327	72%	Farmer
	Crop Mgmt Refresher		Chafumbwa	413	325	738	56%	Farmer
	Crop Mgmt Refresher		Golomoti	186	112	298	62%	Farmer
	Crop Mgmt Refresher		Kanyama	742	179	921	81%	Farmer
	Crop Mgmt Refresher		Mtakataka	784	418	1,202	65%	Farmer
			S/Total	2,359	1,127	3,486	68%	
FUM	Composting	Dedza	Chileka	143	164	307	47%	AEDO, Farmer, FOFs
	Composting		Thawale	147	204	351	42%	AEDO, Farmer, FOFs
	Composting	Lilongwe	Chitsime	208	214	422	49%	AEDO, Farmer, FOFs
	Composting		Ngwangwa	404	294	698	58%	AEDO, Farmer, FOFs
			S/Total Composting	902	876	1,778	51%	
FUM	Composting launch	Dedza	Kabwazi	234	225	459	51%	AEDO, Farmer
			Linthipe	254	204	458	55%	AEDO, Farmer
			Lobi	223	112	335	67%	AEDO, Farmer
			Mayani	215	207	422	51%	AEDO, Farmer
			S/Total	926	748	1,674	55%	
FUM	Land prep.	Dedza	Kabwazi	152	145	297	51%	AEDO, LF, ALF
	Land prep.		Linthipe	188	185	373	50%	AEDO, LF, ALF
	Land prep.		Lobi	145	99	244	59%	AEDO, LF, ALF
	Land prep.		Mayani	129	79	208	62%	AEDO, LF, ALF
	Land prep.		Thawale	147	207	354	42%	AEDO, LF, ALF
	Land prep.	Mchinji	Kalulu	70	64	134	52%	AEDO, LF, ALF
	Land prep.		Mkanda	96	170	266	36%	AEDO, LF, ALF
			S/Total	927	949	1,876	49%	
FUM	OFSP orient.	Dedza	Chileka	70	88	158	44%	AEDO, Farmer
	OFSP orient.		Kabwazi	90	80	170	53%	AEDO, Farmer
	OFSP orient.		Linthipe	97	71	168	58%	AEDO, Farmer
	OFSP orient.		Lobi	107	53	160	67%	AEDO, Farmer
	OFSP orient.		Mayani	111	59	170	65%	AEDO, Farmer
	OFSP orient.		Thawale	55	106	161	34%	AEDO, Farmer
	OFSP orient.	Lilongwe	Chitsime	65	99	164	40%	AEDO, Farmer
	OFSP orient.		Ngwangwa	100	103	203	49%	AEDO, Farmer

Partner	Topic	District	EPA/IPC	Female	Male	Total	% Female	Participant
	OFSP orient.	Mchinji	Kalulu	144	210	354	41%	AEDO, Farmer
	OFSP orient.		Mkanda	52	87	139	37%	AEDO, Farmer
			S/Total	891	956	1,847	48%	
NASFAM	Pigeon pea intercrop	Machinga	Balaka	69	45	114	61%	Farmer
Total number of farmers trained during Q4				6,700	5,233	11,933	56%	

Challenges and Actions taken:

Table 5. Challenges and INVC support by Partners, 4th Quarter 2015

Partner	Challenges	Action taken
CADECOM and NASFAM	Seed recovery system issues: Seed ownership, recovery ratio, traceability system, seed storage.	<ul style="list-style-type: none"> - INVC supported NASFAM to hire interns to provide IPC coordinators with backstopping and help quantify the recoveries. - INVC provided NASFAM support to conduct the Seed Strategy Meeting with included all IPCs - NASFAM developed a Seed Strategy which contains information on seed recovery mechanisms with farmers, such as model of MoUs, promotion of seed repayment by club and not by association. - INVC worked closely with CADECOM project manager to recommend seed recovery deadlines (e.g., groundnuts should not be accepted after 30th September) and penalties for those farmers who did not return their seed. - INVC and CADECOM agreed to work together to develop a seed recovery protocol that FOs can use during the next season.
NASFAM	Financial challenges: Limited number of trainings during the season Field staff could not produce results with limited operation support.	<ul style="list-style-type: none"> - Work closely with project manager to identify activities that could be conducted with minimum financial support and to promptly clear vouchers. - Communication with NASFAM managers to make sure they address this issue
CADECOM	Limited adoption of agricultural techniques learned in previous seasons	<ul style="list-style-type: none"> - Focus groups with farmers to understand technologies more accepted and technologies that are not applied. - Working with lead farmers to reach out to those still reluctant to use the recommended technologies
FUM, CADECOM, NASFAM	Limited focus of FOs and AFO's on INVC activities	<ul style="list-style-type: none"> - Sharing of personnel resources paid by INVC represents a huge cost for the project and compromises the completion of activities. - All project managers participated in extended work planning session with other USAID projects which resulted on work plans for integration purposes. However, projects are still reluctant to reach agreements about implementation and sharing costs. - INVC monitored closely with project managers to ensure that FUM and FOs had the funding available to conduct activities.

Lessons and Recommendations:

Seed recovery systems need to be replaced with market-driven community seed banks. NASFAM recovered around 600 MT of soybean seed and 40 MT of groundnut. Assuming that this seed has the quality expected, it could benefit about 55,300 beneficiaries in the forthcoming season. However, INVC and partner NASFAM has no information about the quality of the seed recovered.

After years of the system not working, NASFAM is still proposing to continue with an inefficient and costly seed recovery system, mostly because it represents NASFAM's main value proposition to new farmers. However, beneficiaries have grown very frustrated with NASFAM for not fulfilling its commitments and the year on year dropout rate is as high as 60 % in some areas.

Similarly, CADECOM uses the seed revolving system as a way of attracting new farmers, without necessarily having a proper strategy to solve its inefficiencies. In addition, CADECOM has not developed a system by which farmers who do not fulfill their commitments are not allowed to continue in the association. Thus, the incentive to commit fraud is very high.

Community seed banks managed by smaller groups and with a market orientation has been more successful in Malawi and elsewhere. NASFAM has developed a community seed multiplication scheme in Mchinji that is working very well, recovering seed and selling to other farmers.⁷ The system works well because the farmers are specialized in seed production and know that they will have a market for their products through NASFAM. In other countries like in Zambia, when farmers know they can have a market for their products they are more willing to bring back their seed to their associations (e.g., IFAD community seed bank in Luapula province).

Farmers do not wait for directives to apply the techniques they have learned. INVC beneficiaries are now carrying out seed germination tests well before the onset of rains. The germination tests assist farmers to plan effectively because they know in good time whether the seed that they have kept is viable or not. Farmers are also requesting training they see fit their needs. For example, FUM farmers have embraced composting and are already are working to have it ready during the season. Reportedly, almost 70 % of farmers who attended the training started composting and are also sharing with fellow farmer composting techniques.

Farmers prefer experiential, on field training. Traditional training methods (e.g., a consultant providing training in a classroom) are not as effective as field days, with farmers actually observing what they are listening. Although field days are more expensive because fewer people can attend at any one time, they serve INVC beneficiaries better. INVC and implementing partners started conversations with FAO to expand farmer field schools. However, the cost of implementing it as designed by FAO is too costly for partners. INVC is working with other USAID partners such as MISST to increase the level of collaboration, particularly the sharing of activity costs so the number of field days can be increased.

Concerted efforts to include women farmers in trainings have paid off during the 2014-15 season. All partners reported more female participants during trainings and field days. Success stories from female farmers adopting improved varieties, and technologies have demonstrated the growing interest among women and the benefits of "insisting" to make activities more gender sensitive. However, increasing the numbers has not and will not be INVC ultimately objective.

⁷ Dr. Patrick Okori during a joint meeting with the Ministry of Agriculture and FAO to determine the level of humanitarian assistance mentioned NASFAM seed multiplication system as an example.

Planned Activities for Q1FY16:

The following are the key planned activities for next quarter:

- ✓ Monitor seed germination tests (NASFAM and CADECOM)
- ✓ Collaborate with MISST in the distribution of 280 MT of certified soya and groundnut seed to about 20,000 current INVC registered beneficiaries
- ✓ Monitor setting up of demonstration plots with NASFAM, FUM and CADECOM
- ✓ Conduct the first field day in collaboration with MISST
- ✓ Collect success stories with partners

Success story: Economic Empowerment through groundnut production

Hudson Jeputala, a 38-year-old father of four, is a real lead farmer. He lives in Khomera Oyera village, Traditional Authority Kachere in Dedza District.

He started growing groundnuts in 1998, joining the Integrating Nutrition in Value Chains (INVC) project through partner CADECOM in 2013. Since he joined the project, Hudson has made sure he truly benefited from this project. During the first season, he received 10kgs of groundnuts seed and regularly attended trainings sponsored by the project. He quickly adopted the new technologies in groundnut production he learned: land preparation, planting groundnuts, pest and disease control, weeding, collective marketing, drying groundnuts using Mandela Cock, and groundnut storage.



Hudson, his Wife and last born daughter standing at their house

During land preparation he also learnt about the recommended spacing in groundnut production and double row planting. He adopted the recommended spacing (ridge spacing of 75cm, plant spacing of 15cm) and double row planting and this has enabled him to harvest more groundnuts than he ever expected during a very bad season.

In a small area of about an acre, Hudson planted 22kgs of shelled groundnuts and harvested 300kgs. Prior to harvesting, with the assistance of his association, he had already had identified buyers for his harvest. In previous years, he was lucky if he could harvest 75kg total of unshelled groundnuts from 1 acre.

This upcoming season, Hudson plans to buy farm inputs using the funds realized from the sales of groundnuts. He has also started building a corral for a cow that he is planning to buy in the future.

COMPONENT 3: Improving Community Capacity To Prevent Under-Nutrition

Introduction

During the period July to September 2015 a number of substantial achievements were accomplished. These were largely due to enhanced capacity built within partner institutions, rigorous monitoring and mentorship by INVC to its partners as well as very strong collaboration formed with government. During this reporting period INVC trained the frontline workers (HAS, AEDO and AEDC) in nutrition activities. These services later provided various technical support to project activities. This support, often logistical and organizational in nature, allowed timely implementation of planned activities by partners and staff. As a result of this assistance, a number of activities were carried out including expansion of care group activities at the household level; joint supervision, theatre performances, airing of radio programs and capacity building of various groups such as project staff, promoters and lead mothers/fathers. INVC continued supporting Child Health Days campaigns. We participated in agriculture fairs, and enhanced our partnership with other USAID funded projects in different thematic areas such as HIV and AIDS.

Accomplishments

Behavior Change

Nutrition Outcome survey

Under supervision of INVC's M&E Component, one Nutrition Outcome Survey was conducted in Lilongwe, Mchinji, Balaka, Machinga and Mangochi. The objective is to conduct a Nutrition outcome analysis in successive project years to measure progress against a select set of project indicators. The outcome survey was undertaken in Lilongwe, Mchinji, Balaka, Machinga and Mangochi Districts. The study is intended to inform social and behaviour change messaging for pregnant women, lactating mothers, community leaders and other care givers. The nutrition indicators analyzed included:

- Prevalence of children 6-23 months receiving a minimum acceptable diet.
- Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age (15 – 49 years).
- Per cent of 0 -5 months children exclusively breastfed in the five districts

Key findings of the survey are:

1. Mean household size is 5.6. Households are, on average largest in Mchinji (5.9) and smallest in Lilongwe and Balaka (5.5).
2. The mean age of Heads of households is 35.9 years. 19.3% of households are female headed. The mean years of schooling for heads of households are 5.4years. Schooling is least in Mangochi (4.9 yrs) and greatest in Balaka (5.6 years).
3. A majority of women in households have attended some formal education (65.8%) but 59.5% only attended some primary school.
4. Most mothers followed the appropriate recommended infant feeding practices. Sixty-five point four percent of respondents replied that infants under 6 months are exclusively breastfed. Comparison with baseline indicates significant improvement in Balaka (from 73.8 to 83.3%) and a significant drop in Machinga (from 77.5% to 50%).

5. Only 21.6% of children receive the minimally accepted diet. In Balaka 60% of children receive a minimally acceptable diet while in Mangochi none of the children of households interviewed do.
6. Complementary food fed to young children is often of poor quality and contains a limited number of food groups. Cereal grains and vegetables are low in energy and nutrient density. It is difficult for children to reach their recommended daily equivalents. Children need to be fed more often than adults because of their small stomachs and must eat highly nutritious food.
7. One third of all children consume groundnuts; 27.3% consume some other beans. Only 17% of children consume soybeans or soy products.
8. 31% of women of child bearing age surveyed had consumed beans; 39.1% consume groundnuts while, on average, only 16.5% of women consume food containing soybeans or soy products
9. Overall 78.4% of non-breast fed children receive four meals a day. This ranged from 65.2% in Lilongwe to 100% in Balaka.
10. 86% of beneficiaries use improved water sources
11. 79.8% of beneficiaries use improved sanitation facilities, while 20,3% use open pit facilities or go to the field to do their business
12. 80% of young children's open defecation faeces are disposed of safely either in a toilet or a latrine.
13. Only 21% of beneficiaries have attended a drama group presentation. Only 5.9% have attended performances by a theater performing group (semi-professional actors). Those who have, benefitted from messaging in maternal and child nutrition, diet, sanitation and health. To ensure greater participation at community theater events every opportunity to publicize should be used including announcements on community radio and at religious meetings.
14. 61.3% have heard broadcasts of nutrition related radio programming
15. Promoters are responsible for geographic areas too large to cover effectively, thus they often do not know some of the care groups or their lead parents.
16. Nutrition coordinators are hardly known by lead parents, except in Machinga.

For the complete findings please see Annex 2.

Theatre performances

In Balaka, a series of sensitization sessions were undertaken in some care groups to mobilize members to participate in theatre performances during their sessions. Two hundred and ten (210) members (148 male, 62 female) participated in the sessions. A total of 14 community drama groups were established (2 in each of the 7 EPA).

Airing of radio programs and public service announcements/jingles

Communication efforts aimed at educating intended beneficiaries on agriculture value chains were intensified during the quarter. Three (3) radio jingles/public service announcements (PSA) on marketing and post-harvest handling produced in the previous quarter continued to be aired. A total of 809 jingles/PSAs were aired (257 on Mudziwathu Radio Station in Mchinji, 276 on Zodiak Broadcasting Corporation and 276 on MBC Radio 1).

Interpersonal communication by promoters and lead mothers with household members on various behaviors

In addition to the usual care group sessions and mass media communication (radio jingles/PSAs/drama), individual interpersonal communication (one-on-one) through home visits by

the trained promoters and lead mothers/fathers) continued during the period. Messages disseminated focused on:

- importance of accessing antenatal care services when one is pregnant,
- importance of exclusive breastfeeding and how best to breastfeed,
- complementary feeding for children above 6 months and
- health related messaging on sanitation and hygiene.

A total of 500,990 community members (173,440 male and 326,950 female) were reached. Female participation was almost double that of males.

By district, more people were visited in Mangochi and Mchinji than any other district. Relatively more people were reached in Mchinji as Nkhoma Hospital beefed up its field staff (Nutrition Assistants) which enhanced coverage. Mangochi has relatively high outreach due to its population size in some communities where INVC is intervening. The least intense coverage occurred in Balaka with only 14,683 visited. During the quarter, the INVC nutrition team in Machinga district did not address Cards # 21 & 22 (Antenatal services and maternal diet) as they were adequately covered in the previous quarter. In addition, during Machinga complementary food preparation sessions no men participated owing to entrenched traditional beliefs and perceptions that issues related to cooking are solely for females.

It must be emphasized that while INVC is also addressing all other nutrition/health thematic areas as presented in the counseling cards, the project is taking deliberate efforts to address Cards # 2, 3, and 4, related to breastfeeding (exclusiveness, duration, positioning, attachment, and continuing breast feeding during childhood illness. This is because there are an increasing number of women who are becoming pregnant; an increased number of children being born and thus increased exposure to water borne diseases in some communities.

Tabel ...: Number of community members reached with various nutrition interventions by district

District	ANC and diet		Exclusive Breastfeeding		Complementary Feeding		WASH		Total		
	M	F	M	F	M	F	M	F	M	F	Total
Lilongwe	11,041	23,323	20,135	41,439	8,747	19,675	7,272	16,189	47,195	100,626	147,824
Mchinji	17,898	37,070	27,849	51,933	6,437	12,267	2,337	4,201	54,521	105,471	159,992
Balaka	547	2,576	1,388	2,803	1,055	2,762	998	2,554	3,988	10,695	14,683
Machinga	0	0	5,279	7,768	0	2,182	849	866	6,128	10,816	16,944
Mangochi	16,443	21,535	21,172	35,133	11,462	22,238	12,531	20,433	61,608	99,339	160,947
Total	45,929	84,504	75,823	139,076	27,701	59,124	23,987	44,243	173,440	326,947	500,390

Nutrition

Promotion of cultivation of high nutritive-value crops

Backyard Gardens

During the period, cultivation of highly nutritive indigenous green leafy vegetables like *nkhwani* (pumpkin leaves), *khwanya* (bean leaves) and *bonongwe* (amaranth) continued. In the quarter, 1300 new gardens were established (923 in Lilongwe, 199 in Mchinji and 178 in Balaka thus making the total number of gardens established and maintained to 2,782. Balaka had the least number of gardens established and maintained largely due to water scarcity. As part of INVC's continuous mobilization effort for cluster members to grow various indigenous vegetables, 47 household-based demonstrations for the construction and maintenance of backyard gardens were undertaken (14 in Balaka and 33 in Mangochi). A total of 1,575 members participated, (438 male and 1,137 female). It has been observed through our routine monitoring that the most commonly grown vegetables are pumpkin leaves, amaranth, okra and tomatoes as well as the non-indigenous vegetable, rape. As experienced

during the previous quarter, the vegetables are grown with technical support from NASFAM AFOs, AEDOs and AEDCs from Ministry of Agriculture and Food Security. This initiative has even attracted support from policy makers e.g. Members of Parliament (MPs) to ensure that such gardens are scaled up in their constituencies.



Figure...: MP for Mangochi visiting one of the gardens in his area



Figure....: Cluster member in his garden in Mchinji

Promotion of these vegetables is enhancing community members' access to the much needed Vitamin A and micronutrients for proper growth, boosting of immunity and good vision. Those who grow the green leafy vegetables in abundance are able to sell some and earn some money to meet other basic needs such as salt, meat products, sugar, soap and some school materials for their children e.g. exercise books and pens. INVC noted that water scarcity, lack of watering cans and absence of available vegetable seed affected establishment of backyard gardens in most communities.

Planning for growing of Orange Flesh Sweet Potatoes (OFSP)

The focus for this activity during the quarter was mainly planning for the next growing season (November 2015-March 2016). A series of meetings were held with the International Potato Institute (CIP) to plan for the sourcing and distribution of OFSP vines, as well as the determination of the actual number of beneficiaries to receive the vines. It is anticipated that 25,200 INVC care group members will benefit (11,200 in the scale up districts and 14, 000 in Lilongwe and Mchinji). This is a significant increase from FY14's 450 beneficiaries. INVC and CIP plan to provide the varieties *Chipika*, *Kaphulira* and *Kadya ubwerere* which the beneficiaries last season preferred based on taste, productivity and size of the tuber when mature. Continued testing of other varieties namely, *Zondenj*, *Anaakwanire* and *Mathuthu* will continue this season..

Facilitation of food processing

Food preparation, preservation and utilization sessions were facilitated in all five (5) districts as part of INVC's continuing effort to impart knowledge and skills to community members. A total of 99 cooking demonstration were undertaken and a total of 4, 335 community members participated. More women (3,747) participated than men (588). Lilongwe conducted the least number of sessions (6) during the period compared to Mangochi (33). It was observed that in Machinga, the participants were all women (960). The participants included lead parents, cluster members, some traditional leaders and NASFAM AFOs. Promoters and NAs facilitated the sessions under technical guidance by district Nutrition Coordinators and HSAs.

Table...: Number of cooking demonstrations done by district and sex

District	Number of sessions	Participants		
		Male	Female	Total
Lilongwe	6	41	544	585
Mchinji	10	20	400	420
Balaka	21	89	1047	1136
Machinga	29	0	960	960
Mangochi	33	438	796	1234
Total	99	588	3747	4335

Some of the food items that were prepared during these cooking demonstrations include soy porridge combined with eggs, soy wheat cakes, soy banana porridge, soy fritters, soy milk, *Cheula* and soy sausages. Some non-legume based recipes were also made which included cassava fritters, sweet potato porridge and tomato products. Although overall participation for males is low, it was however encouraging to see men participating in some sessions especially in Mangochi, Balaka, Mchinji and Lilongwe. All these materials used in the demonstrations were mobilized by community members themselves. It must be emphasized however, that food insecurity experienced in most communities within ZOI has greatly reduced our food processing intervention. Most households have no soybeans, groundnuts or maize for consumption.



Figure: Cooking demonstration at Chiwamba in Lilongwe



Figure...: A man participating in cooking demonstration in Mchinji

Promotion of energy-saving stoves

Promotion of energy saving, fuel efficient, stoves continued among beneficiaries. This quarter the project facilitated construction of the stoves in 563 new households. Those lead parents receiving training in stove construction during the previous reporting period (1, 184) continued their dissemination of this technology. This quarter, 9 stoves were constructed in Lilongwe and 554 in Mangochi. Our beneficiaries appreciate these stoves because they are affordable, easy to use, and produce less smoke, thus reducing risks of contracting pulmonary related diseases especially among women who are the principal family food preparers. This new technology is assisting women to spend less time fetching firewood thereby leaving them time for other gainful activities including having more time to take care of their under five children.

Hygiene and sanitation

Promotion of sanitation and hygiene also continued in the quarter. Using the water, sanitation and hygiene card (Card #9) of the Counseling Card document, 47,238 households were reported to have maintained various sanitation facilities while 4,915 constructed new ones. Through monitoring, it was found that facilities constructed and reported in the previous report(6, 363) were still functional and in use. These facilities included pit latrines, hand washing stations, dish racks, rubbish pits and

clothes drying lines. In addition, 52 WASH demonstrations and community sensitization sessions were held this quarter. In total, 2, 018 community members (387 men, 631 women) participated.



Figure...: NA, Nellie Manda, demonstrating WASH at Ngongomwa care group, Balaka



Figure...: HSA addressing community members on WASH and a cross session of participants at Kwitanda, Mangochi

Access to, and utilization of, key nutrition-related services among targeted population including community surveillance and referrals

The project continued with growth monitoring and promotion sessions as one way of continuously assessing the nutrition status of the children under-five in the ZOI so that those children found to be malnourished could immediately be referred for remedial health services at nearby clinics. During the quarter, 114 595 children participated in the growth monitoring and promotion sessions in Mchinji (43, 696), Lilongwe (36, 419), Mangochi (20,975) and Balaka (13,505). A more detailed analysis of growth monitoring and promotion interventions in Lilongwe and Mchinji found that out of the total number of children (80,115) that attended the sessions, only 4% (3,278) were underweight and 18% were referred to HSAs for further assessment. The table below presents detailed analysis of the children by specific age group who were monitored. No growth monitoring and promotion sessions were recorded during this quarter in Machinga.

Table...: Number of under-five children accessed GMP services by district, sex, condition and referral

District	Number of Children						Total number of Children (A+B+C+D)	Total number of Children reported attending GM sessions	% of children reported attending GM sessions	Number of Children reported Underweight	% of children reported under weight	Number of Children reported Referred to HSAs	% of children referred to HSAs
	0 – 5 Months		6-59 Months		0-59 Months								
	Male (A)	Female (B)	Male (C)	Female (D)	Male (A+C)	Female (B+D)							
Lilongwe North	3,279	3,701	9,553	10,064	12,832	13,765	53,194	18,184	0.68	385	0.02	86	0.22
Lilongwe South	4,170	5,072	7,489	8,869	11,658	13,941	51,200	18,235	0.71	582	0.03	73	0.13
Mchinji	4,935	5,937	22,185	22,679	27,120	28,616	327,338	43,696	0.78	2,311	0.05	445	0.19
Total	12,384	14,710	39,227	41,612	51,611	56,322	431,732	80,115	2.17	3,278	0.10	604	1

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Promoting Vitamin A Supplementation and De-worming through Child Health Days



During the quarter, one (1) Child Health Day campaign was supported by INVC in Lilongwe through Nkhoma Hospital. The health centers which were supported were Area 25, Ukwe, Lumbadzi, M'bang'ombe and Ngoni in Lilongwe north; and Nathenje, Matapila and Chadza in Lilongwe South. Nkhoma Hospital field teams carried out a number of monitoring visits to assess availability and access to essential supplies such as Vitamin A, Mebendazole (de-worming medicine) and tally sheets at each centre. It was encouraging to note that most health centers were using tally sheets that were gender disaggregated; and in areas where HSA were not familiar with the tool, DNCs and M&E officers from Nkhoma assisted in explaining its use. Like during previous CHDs, INVC continued to provide a presentation on hygiene and sanitation, six food groups, importance of Vitamin A supplementation and deworming tablets at each site.

Figure...: Under-five child taught hand wishing after accessing CHD

Creating an enabling environment for execution of nutrition activities

Orientations of HSAs and AEDOs

A total of 1, 489 Government frontline workers (HSAs, AEDCs and AEDOs) were trained in SUN/ENA and the Care Group model this quarter. Of the total, 145 were trained in Mchinji, 169 in Lilongwe, 215 in Machinga, 452 in Balaka and 508 in Mangochi. The training has enhanced capacity of these frontline workers to effectively monitor and mentor INVC promoters and lead mothers/fathers in various care group activities. Their active understanding of the INVC nutrition component activities contributes to improved success with cooking demonstrations, WASH, and the establishment and management of backyard gardens.

Verification exercise for promoters and lead mothers for efficient execution of nutrition interventions

INVC with assistance and support from HAS, AEDO and AEDC carried out continuous verification of care group members to ascertain whether promoters and lead mothers/fathers recruited were still working. During the period, it was found that all 300 promoters were still operational and receiving support from government frontline workers although at different levels and degrees. Also almost all 10,554 lead mothers and fathers were still involved in counseling households in their communities excepting for 28 members who had dropped in Lilongwe and Mchinji districts but were immediately replaced.

Village Development Committee (VDC) and Area Development Committee (ADC) meetings

One VDC meeting and one ADC meeting were facilitated by Nkhoma Hospital in Lilongwe and Mchinji. The objective of these meetings was to brief community leaders on the status of the INVC project in their communities. The meetings were held at Group Village Headman (GVH) Kawere, Mkanda EPA in Lilongwe District and in both Mikundi and Chioshya EPAs in Mchinji District. In

Balaka, 188 Village Health Committees (VHC) were revamped so that they become effective agents for INVC project. In Balaka there are now 750 VHCs, of which 300 are assisted by INVC.

Participation in District Executive Council (DEC) meetings

During the quarter, INVC supported and participated a number of DEC meetings in Mangochi, Balaka, Lilongwe, Machinga and Mchinji. The meetings provided a fora for INVC to present progress and share its work plans with local government officials and technical services.

Mentoring, Coaching and Monitoring

One high-level mentorship and coaching was provided to INVC Secretariat and district staff by Kirsten Weeks (DAI Global Lead Health, Nutrition and Livelihoods). Kirsten came to Malawi in September 2015 and visited care groups and some farmer clubs in Mchinji, Lilongwe, Balaka and Machinga. Her recommendations after her field visit were that:

- (a) INVC should tailor and update care group counseling materials to develop a job-aide for lead mothers to accompany the current materials (Cards) with a question and answer flow chart to guide selection/prioritization of counseling card messages based on household needs;
- (b) Use other WASH counselling materials available in the MoH rather than just focusing on the Counselling Card the project is using,
- (c) She further recommended that INVC should reach out to MoH to access these materials, printing them for care groups, and then providing a rapid review to incorporate them into the care group materials;
- (d) Nutrition team should develop district level plans in collaboration with the INVC agriculture team as well as other USAID partners to better integrate and reinforce activities and implementation; and
- (e) INVC should clearly define benefits of collaboration with roles and responsibilities outlined in MOUs.

As on-going activity, all DNCs and NAs were supervised and coached in various topics. In turn, the DNCs and NAs provided coaching and mentoring sessions to promoters and lead mothers/fathers. The supervision provides support to field staff, promoters and lead mothers/fathers on how best they can disseminate information and also to ensure that the information that is being delivered is of high quality.

Rolling out interventions in the Impact evaluation zone

Following the recruitment and training of 27 Nutrition Assistants (NA) in the impact evaluation areas in Lilongwe and Mchinji, care group activities fully commenced. The NAs rolled out activities like WASH, education on exclusive breast feeding, food processing, and promotion of growth monitoring to Care Groups. Like in other ZOI, NAs, promoters and lead mothers/fathers are closely mentored, coached and supervised either directly by INVC nutrition staff or by the staff of Nkhoma Hospital.

Constraints and challenges

- Delays in the payment of promoter monthly stipends have resulted in decreased motivation to work after being promised the money. In trying to minimize risks by paying through direct cash, INVC and Nkhoma Hospital have explored the possibility of paying through individual bank accounts or mobile money, however finalization of the process has been delayed.
- Some promoters and lead mothers still have problems in filling out the new reporting forms thereby delaying transmission of vital information in a timely fashion. Because of this the project risks losing such data/information.
- Delays in the procurement of weighing scales and growth monitoring charts have negatively affected growth monitoring and promotion sessions.
- Food insecurity (lack of maize as staple food, soy beans and groundnuts due to poor harvests resulting from last year's environmental conditions- flood followed by drought) has negatively affected food processing sessions and cooking demonstrations in nutrition.
- Water scarcity, lack of watering cans and vegetable seed which have affected rollout of backyard gardening interventions in most communities under INVC.
- There is still limited participation of males in most care group activities.

Lessons Learned

- The orientations for HSAs and AEDOs which INVC conducted have enhanced collaboration between the project and government i.e. promoters and HSAs. HSAs and AEDOs/AEDCs are now providing more technical support to the project activities e.g. cooking demonstrations, WASH, vegetable gardening, GMP etc.
- Introduction of promoter stipends has motivated promoters. From the time promoters started being paid, the collection and submission of reporting forms has to a certain extent been timely and thorough in terms of data.
- Given vegetable seed and watering cans most cluster members can establish backyard gardens especially in areas where there is available land in the *dambos*.
- INVC currently does not have easy and simple-to-read materials for promoters and lead mothers/fathers other than the counselling cards.
- Some partnerships INVC has entered into with other USAID funded partners are not clearly defined in terms of benefits of collaboration with roles and responsibilities outlined in MOUs, making accountability difficult.

Principal activities planned for Q1 FY16

- Train District Nutrition coordinators and Nutrition Assistants in Growth Monitoring Promotion and CCFLS at GAC level
- Develop, produce and air radio jingles and PSAs that focus on 15 key messages, dietary diversity and best agriculture practices, marketing and gender
- Conduct community-based drama performances (Community-based theatre groups & Pakachere Travelling Theatre Group)
- Conduct CCFLS and Growth Monitoring sessions to enhance care group complementary feeding behaviors bi-monthly
- Rollout care group activities focusing on Counselling Card 9 and Topic 13 in the Family Health Booklets of *Moyo ndi Mapamba* (Sanitation and hygiene)
- Promote growing of OFSP at household level
- Print 300 copies of different manuals (translated care group manual, SUN/ENA manual, food processing and Extension workers orientation manual).
- Continue with integration related activities with Government and USAID funded partners.

Success Story: Healthy Mothers, Healthy Households

The people of Lipagani village Traditional Authority Chikhwewo in Machinga have a confession to make: “We would grow bananas – many of them, but would only eat little; we would sell them at the market for very little to buy *matemba* (tilapia),” they say.

Cluster members in a happy mood during at one of their monthly

Surprisingly, this is a common story in many parts of the country. People grow nutritious foods but they do not eat them. When they do, it is in too little amounts to have impact on their bodies. They sell



it all to make money, not knowing that in so doing, they are depriving their households of very important nutrients.

Such was the case with the people of Lipagani that they would grow bananas and pawpaws but only took them to the village market. It was until two years ago when Feed the Future Malawi: Integrating Nutrition In Value Chains arrived in the area to promote household nutrition, that they realized how wrong they had been.

Lead mother Molesi (r) observing a breastfeeding mother

Under the project and with funding from USAID, the people of Lipagani, just like many others in Chikhwewo extension planning area (EPA), were placed into clusters where, Raphael Timba, a promoter was chosen to train them on the importance of good nutrition and how to attain it.

Community members in the care group are also taught good hygienic practices such as using a pit latrine, washing hands before eating any food, body hygiene and the need to eat all six groups of foods.



It was during such interactions that they discovered the importance of not wasting fruits before consuming them.

“Before, we had the habit of selling all the bananas and pawpaws. Now we only sell surplus fruit. We eat most of it and give it to our children to take to school,” says Tiji Molesi, a lead mother who tours target families in the area, explaining to pregnant and breastfeeding mothers the need to mind the nutrition of their families.

Bananas, which are a common sight in the area, have many health benefits. They are a good source of Vitamin B6 and a good source of manganese, Vitamin C, dietary fiber, biotin, and copper. They are also a good source of potassium, an essential mineral for maintaining normal blood pressure and heart function.

On their part, pawpaws are an excellent source of Vitamin-A which is required for maintaining healthy mucus membranes and skin and is essential for healthy vision, among other health benefits.

Molesi’s story is shared by another young mother from the same area, Loveness Frank whose twins are growing fast and healthy.

“My lead father is Mr John Maposa. He taught me to eat perfectly including fruits and other nutritious foods such as soy, groundnuts and vegetables. Now that I have twins, he comes now and again to monitor their progress,” she says.

All the women under the care group who had babies born during the last two years, brought them forward and they all looked healthy and strong, just like their mothers.

Monitoring and Evaluation

Introduction

This report covers the July through September 2015 time period as well as a recap of the entire 2015 fiscal year. The report is organized to cover the activities that took place in the fourth quarter followed by a recap for the entire year including results compared to previous years and progress toward targets.

This quarter the M&E team has been busy with GIS mapping, unique ID roll out and outcome surveys for nutrition and agriculture. We have also spent a lot of time building the capacity of our partner field staff. It has been an intense quarter especially given that we are also reporting on our full fiscal year results.

Accomplishments

This quarter we began to rollout the GIS mapping of nutrition and agriculture locations along with the unique beneficiary ID. We completed the GIS mapping for Lilongwe our largest district, and will be moving south to the USAID surge districts of Balaka and Machinga in Q1FY16. The process of rolling out unique IDs is going much slower than anticipated as there are a number of steps involved in validating the data which are outlined below. We are continuing the roll out process which will hopefully go smoother as we learn how to be more efficient. Our Nutrition Outcome survey and Agricultural Outcome surveys have been concluded and the data cleaning is complete with the results tabulated. The results from these two surveys are written up in detail in the M&E annex where full year results are reported for Fiscal year 2015.

Data Quality, Data Entry and Unique ID

The nutrition form booklets have been printed and distributed to field staff in all five of the nutrition districts. Nkhoma Hospital will have to procure these booklets on their own next quarter. Form booklets are being produced currently on the agriculture side by NASFAM, CADECOM and FUM and will be distributed next quarter.

The process of rolling out unique IDs is underway. For each partner, the lists are being produced and organized by each promoter and lead farmer. These lists are then verified and validated in the field, duplicates are removed, names are added, drop outs are deleted and name spellings are modified to be consistent. The data base is then updated and any new IDs are assigned. This is a time consuming process not only because all IDs have to be verified out in the field but also because of beneficiary dropout. There has been a very high dropout rate with NASFAM which is estimated to be about 40%. This dropout is mostly due to farmers not obtaining seed from NASFAM, as well as not wanting to repay loans.

Below is a table communicating progress for the unique ID task. It is organized by each step of the process. Due to beneficiary dropouts, staff turnover, poor record keeping in the field and other challenges the INVC M&E staff will be working on this task until the end of the project.

INVC Unique ID Progress			
Partner	Percent Issued	Percent Field Verified	Percent Updated in Database
NASFAM	100	100%	60%
FUM	100	0%	0%
CADECOM	100	100%	90%
NKHOMA	100	5%	0%
INVC Nutrition	100	5%	0%

The dropout rates are much lower for nutrition because the care groups are more stable than farm clubs. Because of this, the verification and database updating process will not be as labor intensive for nutrition because there will be fewer records to change.

Nutrition Outcome Survey

The nutrition outcome survey has been completed and the data has been cleaned and analyzed. The team performed some QC for transcription errors and found 100% of the questionnaires we checked to be error free. In other words all the data from the hard copy questionnaires had been correctly transferred to SPSS/STATA.

Agricultural Outcome Survey

The agriculture outcome survey has been completed and the data has been cleaned and analyzed. The team performed QC for transcription errors and found some issues with transcription during this process. The contractor was in the middle of their double entry process hence we caught more errors than we normally would. We were assured that these errors would be rectified and when we went back to pull a new sample of questionnaires for follow up QC we found no issues. The results from this survey are being verified in SPSS and are presented in the annex of this chapter.

GIS Roll Out

This quarter we finalized our GIS gathering tools. An additional pilot exercise took place down in the scale up districts of Machinga and Mangochi to correspond with M&E training that was being conducted for nutrition assistants. Data on care group meeting places was gathered for a total of five promoters. After some last minute changes to the data gathering tools we commenced data gathering and finalized the mapping for both nutrition-the care group meeting places and agriculture-lead farmer households and aggregation centers for the whole district of Lilongwe. We are training partner field staff to gather this data. The process involves a day of training and initial data gathering. The field staff are then issued devices to continue the exercise.

Once data begins to come in we clean the data on a daily basis, clear questions with partner staff and store the clean files in a separate folder. Once the entire district is mapped we create a shape file and map showing the locations for the interventions for the entire district and then submit the GIS data to USAID. A total of 93 promoters were mapped on the nutrition side in 11 EPAs and 740 lead farmers were mapped on the agriculture side for both FUM and NASFAM in 17 EPAs. We have begun to move the GIS data gathering process down to the scale up districts of Balaka, Machinga and Mangochi as well as FUM areas in Mchinji and plan to finish mapping them next quarter.

Below is a full page map of the projects agriculture and nutrition implementation areas in Lilongwe district. This map shows NASFAM EPAs shaded green and FUM EPAs shaded pink.

- The waypoints for a few of the aggregation centers need to be checked as they appear in the wrong EPAs
- Technically the project's nutrition activities are not supposed to be located in Dedza however the map clearly shows that we have care groups that are spilled over into the northern part of Dedza district.

We are continuing to map our implementation areas and plan to have all of Machinga and Balaka mapped next quarter.

Staffing

We have a new M&E GIS Coordinator who has been working to train partner staff. He is new to working with NGOs and developed his GIS skills working with a local construction company. We have also brought on 3 interns from LUANAR and University of Malawi to assist with the various initiatives that we have going on in the M&E department. We are very happy to have the additional staff to help us with all the work.

M&E Partner Training

Detailed M&E training has taken place for all partner field staff except for NASFAM. Training for FUM field staff took place in August and INVC Nutrition staff were given M&E refresher training in July of this quarter. This should result in excellent improvements in data quality. The NASFAM training was held off while they were selecting their new M&E Officer. It is to be completed next quarter. The interview process has been completed and an offer letter has been sent out to the top candidate. There has also been a lot of staff turnover at NASFAM so we hope to conduct this M&E training next quarter to bring all the new staff up to speed.

Constraints and challenges

- The unique ID roll out process is continuing but progress has been slowed by poor data quality most of which stems from the annual turnover of NASFAM beneficiaries. Farmers are dropping out at an alarming rate and new farmers are joining which has created another large data entry backlog. In addition the team is finding beneficiaries that have not been correctly registered which has created another back log.
- Our output numbers have been impacted by the roll out of the unique ID which has identified duplicates and ghost beneficiaries thus reducing our overall numbers particularly on the agricultural side. This will continue.
- Field staff turnover with our partners is a major issue with Nkhoma and NASFAM. This year NASFAM lost more than 8 staff including their M&E officer and Nkhoma lost 5 key staff including the INVC program manager who left in Q3 and has not been replaced.

Lessons Learned

- NASFAM has high dropout rates for farmers. This due to several reasons:
 - Many of these farmers did not obtain any seed from NASFAM.
 - Farmers had poor yields this past year and many did not want to pay back their seed loans
 - Some GACs are poorly managed by local leadership
- The GIS activity, along with the unique ID roll out, has assisted the project in identifying duplicate beneficiaries to minimize double counting.
- NASFAM has a new M&E officer however this person will need much support from both INVC and NASFAM.

Observations from the quarter, conclusions and recommendations

- Partners are making progress on improving data quality in the field.
- Preliminary results from the Outcome surveys show this year has been a challenging year for agriculture with a drastic reduction in groundnut yields.
- Nutrition numbers show an improvement over last year but there is some variability due to the poor agricultural year and the number of mothers exclusively breastfeeding has not shown improvement .

Principal activities planned for Q1 FY16

- Continue to gather GIS data for the INVC ZOI with a focus in Balaka, Machinga and Mangochi
- Continue with the roll out of unique IDs for agriculture and nutrition and meet with Njira project to compare M&E systems
- Focus the M&E team on seed distribution and traceability of that seed
- Schedule M&E training for NASFAM field staff
- Conduct internal DQAs for Nkhoma and NASFAM

Conclusion

This reporting period saw an acceleration of our activities under gender and village financial platforms while we assessed our progress in agriculture and nutrition. The marketing season has proven to be highly profitable for our small holder farmers while our partner processors both improved their knowledge of and commitment to food safety and began to explore creative solutions to ensuring an adequate supply of quality raw product to their factories at harvest during 2016. In agriculture we began planning the 2016 agricultural campaign with training in crop management and best agronomic practices taking place concurrently with seed recovery. The nutrition team focused on growth monitoring, promotion of back yard gardens, and messaging on health and hygiene while our M&E team spent most of the quarter chasing numbers and performing data quality assessments with our local implementing partners while at the same time undertaking to finalize our unique ID verification process and commence integrating GIS into our M&E portfolio.

As a program we have increased our outreach, assistance and partnership with technical services at the district level and have progressively increased our web of partnerships intersectorally as well as intrasectorally. The Program today is much different than it was a year ago. We are proud of what we have accomplished to date under difficult and challenging implementation conditions. We firmly believe in empowering Malawians to develop their Malawi and in the adage that there are local systems and local solutions to be capitalized upon and reinforced. We continue to fight on behalf of our rural beneficiaries so that they gain maximum benefit from our program and are actively committed to fighting elite capture and avoiding conflicts of interest.

The addition to our team of a diverse group of young university educated interns has added energy, passion and a new perspective to our implementation. We can only hope that the operational experience they gain through our program will assist them in their future careers; and that they will act as our ambassadors within the Malawian community.

Our team at INVC is looking forward to an intense and highly productive final project year. In closing we wish to thank the Mission for their continued support to our program. We can only hope that the results produced and impact now being consolidated in the field among our beneficiaries will engender the continued confidence we feel is so rightly deserved.

Annexes

- 1) The year in review, FY15 at INVC
- 2) Nutrition Outcome Survey
- 3) A few words on Grants



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Annex 1: The year in Review, FY15 at INVC

Key Accomplishments

Challenges

Lessons Learned and potential solutions

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Shaping a more livable world

Introduction

This annex of our report captures in a very succinct fashion key achievements, constraints and lessons learned during the implementation of INVC activities during FY15. It focuses on technical and cross-cutting components of the program as well as challenges of working through local implementing partners. We have not focused here on 3-C integration as the achievements, challenges and lessons learned from this landmark Mission initiative have been well documented through other avenues offered to us.

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INVC FY15 Results from M&E

Introduction

This section provides analysis of the project's outcomes and overall progress for the entire 2015 fiscal year. This section focuses on outcome indicators and analyzes successes as well as areas where the project needs to improve.

Output Indicators Progress Toward Targets

The M&E team has been spending a lot of time verifying and validating reported data as we roll out unique IDs and gather waypoint data in our Zone of Influence. This process will continue as we accelerate the rolling out of the unique ID and beneficiary numbers will change as duplicates are identified, drop outs are identified, and database corrections are made.

INVC Output Progress Toward Targets		
Indicator	LOP Progress	LOP Target
Number of rural households benefiting directly from USG interventions	299,551	300,000
Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	179,365	140,000
Number of private enterprises (for profit), producer organizations, water users associations, women's groups, trade and business associations and community based Organizations (CBOs) receiving USG assistance.	10,879	10,000
Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation	200,000	2,200,000
Value of agricultural and rural loans	11,346,970	6,800,000
Number of children under five reached by USG-supported assistance (through care group model)	139,701	175,000
Number of children under five reached by USG-supported assistance (through Child Health Days)	776,378	175,000
Number of people trained in child health and nutrition through USG-supported programs	338,421	300,000
Number of MSMEs, including farmers, receiving business development services from USG assisted sources	677	675

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The table above shows the projects progress toward targets for output indicators. INVC has met targets for 6 out of the 8 indicators and is on track to meet them all. The Private Sector Investment indicator was adjusted to 0 from last year after the team performed an internal DQA and found an incorrect methodology being utilized to calculate this indicator. We have contacted several private companies that we have been working with in both of the projects targeted value chains and we are confident that we'll have the data for this indicator in time for next quarters report. The Value Chain team has confidence that we will be able to meet the target for this indicator.

The project has done an excellent job in scaling its activities to cover a large number of beneficiaries. The number of children reported under the care group model is an underreported number which the team intends to correct during the coming year. The challenge for the end of the project will be to deepen the projects impact in the coming months to produce meaningful outcomes for the projects beneficiaries.

Agricultural Outcomes

The 2015 agricultural outcome survey was completed in September 2015. A total of 2,120 farmers were surveyed in the 7 districts of the projects zone of influence. 625 farmers grew groundnuts only, 811 grew soybeans only and 684 grew both soybeans and groundnuts. A total of 738 hectares were planted with 354 under groundnuts and 384 planted with soybeans.

The results were mixed primarily because of the poor agricultural year due to the floods down south in Balaka and Machinga and the month long drought that took place in March and affected the entire projects zone of influence.

Yield Comparison Soy and Groundnut 2014 and 2015 (MT/ha)				
	Baseline	2014 Yields	2015 Results	LOP Targets
Soybeans	0.87	0.669	0.651	1
Groundnuts	1.52	1.442	0.4333	1.75

Note from the table above that soy yields were slightly down but groundnut yields were less than a third in 2015 of what they were in 2014. This is primarily due to the dry period occurring during the flowering stage of the groundnut plant when pods are being formed. Because of the lack of water many pods were not fully formed. This affected our progress towards our LOP targets for yield. We will have to double our efforts this coming year to improve farmer yields if we are to meet our targets for yield by the end of the project.

Below is the table comparing gross margins for 2014 and 2015. Note that the gross margins are higher for soy in 2015 but lower for groundnuts. The high soy gross margin this year was due to the improved price for soy which was in high demand at harvest. The gross margin for groundnuts was lower primarily because of the drought caused reduction in yield. Based on this year's numbers we have met our gross margin for soybeans but will have a lot of work to do if we are to meet our goals for groundnut gross margin this coming season.

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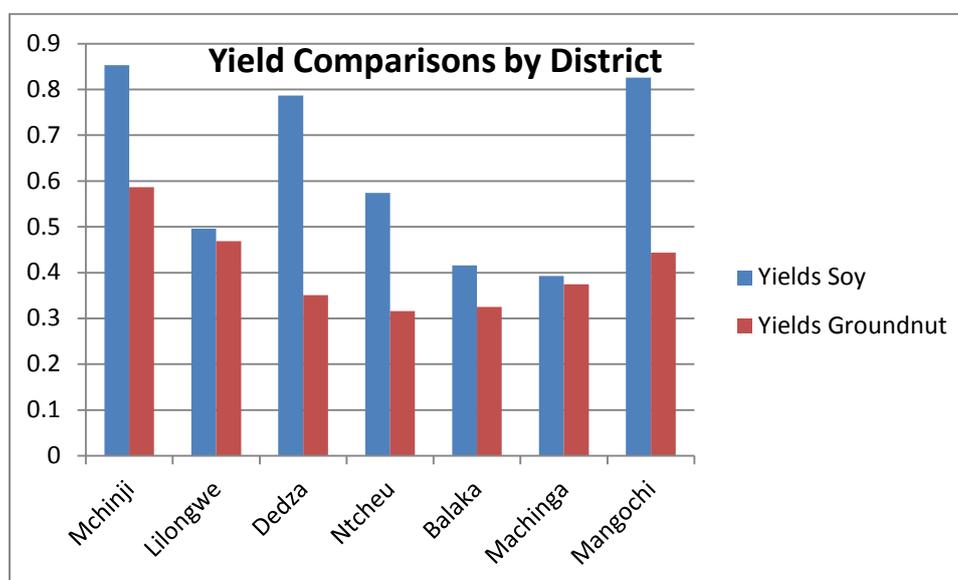
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Gross Margin Comparison Soy and Groundnut 2014 and 2015 (USD/ha)				
	Baseline	2014 Results	2015 Results	2015 Targets
Soybeans	151	170	247	185
Groundnuts	340	319	215	400

It is interesting to look at the graph below that compares yields by district. There is a correlation between whether or not INVC is promoting a given crop and the yields reported by farmers. Note that in Dedza where we are promoting groundnuts with CADECOM the yields are very low. The same is true for NASFAM in the other districts where we are promoting mostly soybeans. Could this be due to the fact that the farmers don't want to show good results for fear of paying back their seed loans? We will need to explore this further in the coming quarters.



All of the soybean and groundnut farmers applied at least one of the projects promoted technologies. 5.6 percent of the soybean farmers applied all of the projects recommended management practices and only 1.8 percent of the groundnut farmers applied all of the recommended management practices. This probably also had an impact on the lower yields for groundnuts. This is obviously an area where we want to see improvement. The total number of farmers that applied at least one technology is 133,492 which is 95% of the projects 2015 target.

The average farm size was found to be .257 hectares for soybeans and .164 for groundnuts with the total hectares to be 738 for the sampled farmers. Of these 738 hectares 737 (or 99%) of them were found to be under improved cultivation Extrapolating this total for the total number of beneficiaries the number comes to 46,407 hectares under improved cultivation. This number is slightly higher than the reported number in 2014 of 42,426. The 2015 number overachieves our 2015 target of 45,000 for hectares under improved cultivation.

INVC did not perform any OCA assessments this year due to the turnover of our Capacity Building Specialist. This position was filled at the end of the fiscal year and we anticipate an assessment in Q3 for this indicator. The project

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has participated in a pilot of the OPI indicator which is a good compliment to the OCA. The report from this activity which was performed with USAID and the MAPS project has not been finalized.

Nutrition Outcomes

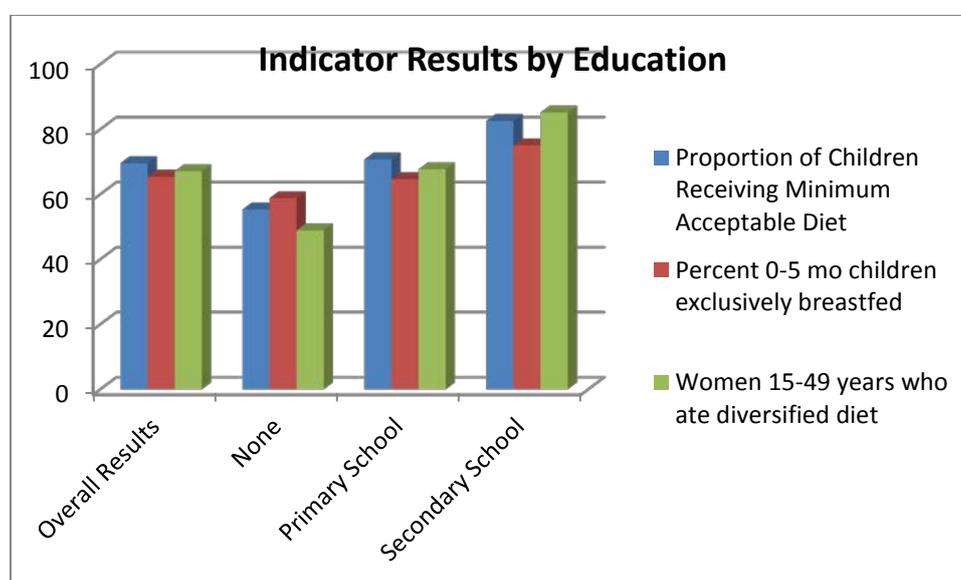
The 2015 nutrition outcome survey was completed in September. A total of 1,608 beneficiaries were surveyed in the 5 nutrition districts of the projects zone of influence.

Below are tables showing our progress toward targets. Based on the results below the project is making some progress toward it's LOP goals. Two out of the three nutrition outcome indicators are trending in a positive direction. The Exclusive breastfeeding number is not good and we need to determine the barrier(s) to mothers exclusively breastfeeding their children. A study performed by the Story Workshop indicates that many mothers do not feel that breastfeeding is enough to satisfy their children. The project will explore this in the coming months.

The primary reason for nutrition outcomes not showing better results is that nutrition activities did not begin till early 2014 in Lilongwe and Mchinji and did not begin till the end of FY14 in Balaka, Machinga and Mangochi. This late start in implementing nutrition activities has a direct impact on the projects progress toward targets but more time is needed to show results.

Indicator	Baseline Value	2015Results	LOP Targets
Proportion of Children Receiving Minimum Acceptable Diet	11%	19%	22.50%
Percent 0-5 month children exclusively breastfed	71.9%	65.40%	85%
Mean Number of Food groups consumed by women 15-49 yrs. of age	4.1	3.8	5

Below is a graph showing indicator results by education of the mother or care group member. Note how the indicator values improve with improved education. This is no surprise but it illustrates the importance of the education of the mother on improved household nutrition.



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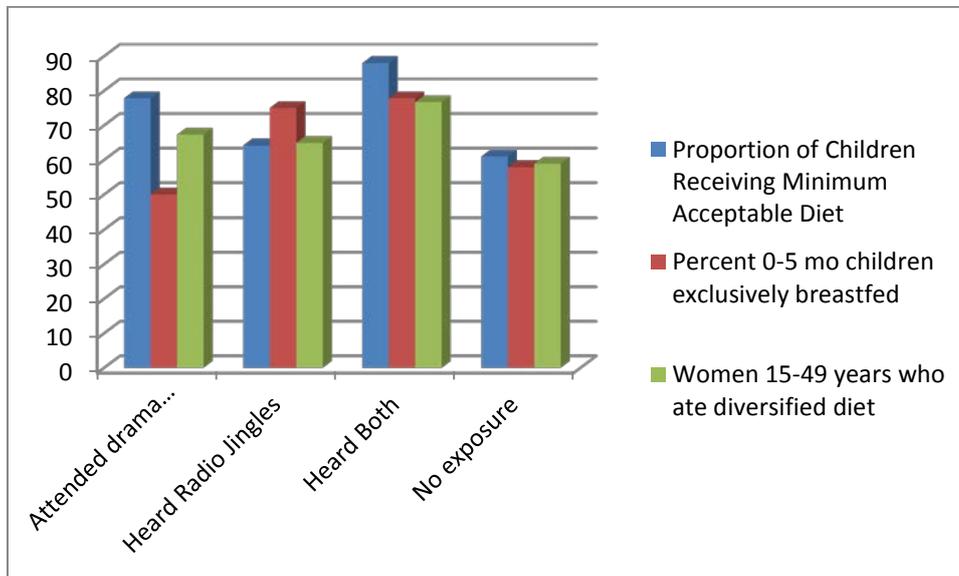


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The table below shows indicator values for beneficiaries that have heard radio jingles or attended drama performances. Beneficiaries that have heard both drama performances and radio jingles have the best results for all of the indicators. Because of this high correlation, the project intends to intensify these activities in the coming year. The numbers for breastfeeding need to be examined more closely. This is an indicator that the project wants to focus on more closely especially given the impact it has on stunting.



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Key Accomplishments this Fiscal Year

Cross Cutting Components

Gender

- The Gender team made strides to network with several gender sector actors in order to build relationships and advance its upcoming activity plans.
- There was an extensive review of leadership, adult and financial literacy, and gender sensitivity training tools in order to select methods most appropriate for INVC beneficiaries.
- For leadership training, INVC's Gender component will be using the Gender Action Learning System (GALS) in partnership with NASFAM and FUM. This tool was assessed in March with the assistance of the NASFAM gender team, which has been successfully implementing GALS since 2013 in several of its associations. The activity is participatory and is specifically designed to include low literacy men and women and individuals who have never had an opportunity for leadership training. GALS serves as catalyst for change by facilitating a plan and environment in which people can develop visions for self and family. These visions of change have SMART milestones.
- INVC met with the Ministry of Education and ActionAid to leverage these relationships for adult literacy programs. Both provided guidance on how beneficiaries might benefit from existing structures within their communities and they have also extended an invitation to continue dialog for selecting appropriate literacy activities for INVC's beneficiary communities.
- The gender officer also assisted the nutrition team by conducting gender sensitization discussions with nutrition assistant staff as well as newly hired promoters. Some issues addressed highlighted included the importance of male participation in care groups and food processing and understanding gendered behaviors and stereotypes and their consequences within care group structures and communities.
- All FtF-INVC staff have an awareness of gender inequalities and have acquired basic strategies for mitigating gender constraints for beneficiaries within nutrition, agriculture production and value chain competitiveness components. This was achieved by organizing a gender sensitivity training session within each district of our ZOI. Overall, 157 total participants (52 women and 118 Men) have been trained this quarter. The sessions also invited and included district government officials within the FtF zone of influence from the ministries of agriculture, health/nutrition and gender. The presence of district government officials at the sessions contributed to the potential for further collaboration and efficient coordination of upcoming activities within the districts. Their presence also provided FtF staff with a unique perspective for how gender constraints affect beneficiaries and the community-at-large. FtF staff also gained knowledge for how the ministries pursue alleviating these gender challenges.
- The FtF-INVC gender team in collaboration with FUM and NASFAM conducted community mobilization and sensitization in Mangochi, Lilongwe and Mchinji districts. All respective key informants were invited and sensitized to the GALS intervention approach. The key informants included; Nutrition promoters, Cluster/GAC chairpersons, Cooperative/Association chairpersons, Group Village Headmen, Field Organization Facilitator, Agriculture Field Officer, Nutrition Assistants, Lead Farmers, Area Development Committee chairpersons, Village Development Committee, AEDCs, AEDOs, CBOs representative, Community Development Agent-gender, HSAs, Head Teachers, stakeholder panel members and Social Welfare

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- A one day briefing session for 10 certified GALS trainers already existing in NASFAM structures of Lilongwe EPAs (Ukwe, Mpenu and Chiwamba).
- A total of 188 (124 females and 64 males) GALS champions were trained in 6 EPA of three Districts-Lilongwe, Mchinji and Mangochi.
- Collection of GALS baseline data Data was undertaken from the 188 participants/GALS champions from Mchinji, Lilongwe and Mangochi districts. Data that has been collected during this quarter will be compared as the champions progress in their life vision.
- Adult literacy Instructors trainings were facilitated by the Community Development Assistants in the respective areas where Adult literacy is to be implemented. Supervision was done by District Community Development Officers from the respective districts. 50 instructors were targeted but INVC managed to train only 49 in the five districts of Mangochi , Lilongwe, Mchinji, Machinga and Balaka.

Village Financial Platforms

- Village Financial Platform (VFP) moved from concept to an implemented pilot project in Mchinji District with a trained staff and an institutional linkage to one of INVC's existing institutional partners.
- INVC initiated contact with other stakeholders in the Feed the Future, Malawi zone of influence in order to exploit possible pathways for collaboration.
- INVC attended a Lilongwe District Council meeting and a village savings and loan stake holder mapping exercise.
- In collaboration with NASFAM's Community Development Officer the VFP team field tested of the VFP concept and 1TOP tool in Lilongwe South.
- INVC organized a 3-day field officer training to learn about implementation of the VFP and 1TOP approach with active participation by SOS and CARE village and savings agents.
- Four VFP field officers were employed and they have each disseminated one video to each savings group that they enlisted in the VFP.
 - A 2-day refresher training course for VFP field officers was designed and planned to bring all of the field officers up to speed on the methodology. The workshop took place on June 30th and July 1st to cover topics such as: Sensitizing savings groups to observe that savings are recorded correctly; Improving the skills of the savings group record keeper; Strengthen calculation ability to conduct share outs; Developing skills to improve saving group dynamics; and Improving field officer facilitation skills.
- There are a total of 498 savings groups, 490 are existing groups and 8 are brand new groups
- Currently there are 10,107 beneficiaries within the VFP structure.

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- Total savings mobilized is 48 million kwacha (appx \$87,300). At the end of September the savings groups had an accumulated 44.26 million kwacha on hand as some of the accumulated shared out by older functioning groups.
- 85% of the membership is women and 15% are men.
- The average savings group size is 20 members. This has increased from 18.25 last quarter
- There are a total of 865 male and 5,303 female members
- 105 Village Agents in Mchinji volunteer for the VFP project
- 63 Village Agents have been trained in Facilitation skills, data collection using Inventory and diagnosis and recommendation forms, VFP manual, roles and responsibilities of Field Officers and Village Agents and Problem identification and solving skills.
- 105 Android Phones procured and 47 distributed.
- 47 Village Agents have also been trained in phone usage and how to gather GPS coordinates.
- 105 Village Agents T-Shirts have been procured.

Component 1: Value Chain Competitiveness

- The End Market Analysis (EMA) was carried out in Lilongwe and Blantyre. The project EMA investigated the demand for soybeans and groundnuts in key end markets. A total of 15 private sector actors were interviewed. In total they sought 70,000 MT of soybeans and 9,720 MT of groundnuts in FY2015. The EMA found out that the key constraints were quantities and quality. The EMA results were disseminated to farmers through extension field officers, radio messages, drama performances, and buyer/seller meetings. These resulted in establishment of long term business relationships and business deals in excess of \$150,000 USD.
- INVC piloted a Buyers' Tour (BT) in Mchinji, Lilongwe, Dedza, Ntcheu, Machinga and Mangochi. The project BT took 30 processors, buyers, traders and transporters to meet with farmers at village aggregation center level. The new approach of bringing buyers together with farmers in their communities offered beneficiary farmers of NASFAM, FUM and CADECOM options to market their products. These resulted in establishment of long term business relationships, business deals in excess of USD 150,000, and new markets like Afrinut Ltd, Estrell Trading, Sunseed Oil Ltd, ACE and NASCOMEX.
- A desk study was undertaken on accessing regional markets and a database was developed in collaboration with the Malawi Oil Seed Transformation Technical Working Group (TWG). The study revealed that Malawi Oil Seed Transformation (MOST) Technical Group had a database on the regional markets. INVC agreed to access the MOST's database, and upgrade it to include all SADC and COMESA countries
- A review of quality management systems, food safety and food standards for groundnuts and soybeans and their related processed products was undertaken. As a result of this review INVC sought reinforced collaboration with South African Trade Hub for aflatoxin mitigation and with Michigan State University for Food Safety training for processors

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- Trained 1,065 farmers, processors, farmer association/cooperatives and exporters as follows: 872 (532 men and 340 women) lead farmers on aflatoxin control and management; 105 (64 men and 41 women) farmers and extension staff on low cost technology for removal of contaminated nuts; 42(29 men and 13 women) people on Blue Technology for sampling, testing and analysis of aflatoxin; 19 (10 men and 9 women) people on disposal of aflatoxin contaminated material; and 27 (18 men and 9 women) processors on basic level food safety.
- Provided customized support to six processors to adopt improved technologies and practices, meet Malawian norms and Standards and expand investments . INVC and Michigan State University supported Afrinut Ltd, Valid Nutrition, Project Peanut Butter, Charles Stewart Ltd, Sunseed Oil Ltd and Rab Processors on good manufacturing practices, good hygienic practices and hazards analysis for critical control points (HACCP).
- Undertook a feasibility analysis of collaboration with World Food Program for school and community feeding programs at four schools in Mangochi
- Evaluated three market information points (MIP) within the INVC Zone of Influence and provided recommendations for improvement
- Under a grant with INVC, the Agricultural Commodities Exchange (ACE) upgraded its market information platform through an STTA contracted with Agro-tech and a second with AVENIR/GMEX in order to develop modules for the integration of warehouse receipts and forward contracts in addition to SMS extension messaging.
- During this year, ACE facilitated a total of 25,111MT of commodity deposits comprising of 2,875 soybeans and the rest cereal grains. 18,051 MT of commodities were deposited under the warehouse receipt system. In the year being reported, soybean production dropped by 30% due to climatic conditions like dry spells and floods.
- 61 Buyer Volume Only (BVO) auctions were conducted on ACE's trading platform. The BVOs were valued at \$6, 967,535 for 28,819 MT of commodities. BVO auctions became popular and attractive among traders in the year under review.
- ACE trained 17,457 farmers (8,656 men and 8,801 women) on structured trade. These training targeted NASFAM, FUM and CADECOM beneficiary farmers. ACE has by end FY2015 trained 43,567 farmers (23,254 men and 20,313 women), an increase of over 40% in this year
- Established 750 Village Aggregation Centre (VAC). Set up activity with implementing partners in all 66 EPAs in ZOI. Buyer/seller meetings were held in the ZOI through Buyers' Tours. The distribution of the VACs was: 600 NASFAM, 100 FUM and 50 CADECOM. Farmer groups aggregated their soybeans and groundnuts in the VACs.
- Pakachere Travelling Theatre and Pakachere Drama Groups were used to promote collective behavior in crop marketing of soybeans and groundnuts. The marketing messages covered collective aggregation and marketing, structured trade like Offer Volume Only, Bid Volume Only, Warehouse Receipt System, and market/sales options such as buyers, traders, and processors.
- Radio message on marketing were aired on local radios by ACE, NASFAM and Pakachere. In sum, 38 radio programs were aired and 48 newspaper inserts were made in local media. The newspaper inserts were on

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weekly prices and structured market information. The radio programs discussed structured marketing services including forward contracts, warehouse receipt system and auctions

- INVC piloted dissemination of messages through videos in Mchinji. The video marketing messages included household decision making in marketing, collective marketing, structured markets and market options.
- \$7,714,286 in collateral financing facility were availed to ACE by FMB Bank, CDH Bank, IndeBank, EcoBank and Export Development Fund. Out of this, ACE disbursed a total of USD4,326,059 with bridging finance of USD2,949,785; 70% warehouse receipt of USD29,160; and forward contracts of USD1,347,114. This represented 56.08% utilization of the financing facility over the year.
- Met FMB Bank and OBM Bank on access to loan by smallholder farmers. The banks showed unwillingness to lend to smallholder farmers due to lack of collateral and likely failure to pay the loan.

Component 2- Improving Agricultural Productivity

- The project successfully procured 100 MT of certified *Seranade* seed and 2,020 Kg of the inoculum, *Glycimax*. The seed was packed by SeedCo in small bags of 3kg, four of which were packed in a larger, 12-kg bag. All bags were properly labeled. Right before planting, field officers and lead farmers from NASFAM inoculated the soya seed.
- In total 38,998 farmers received soya seed and inoculum and planted an estimated total 468 MT soybeans with certified or recycled seed.
- During FY15, the project trained around 20,000 extension officers, government extension officers, lead farmers (LF) and assistant lead farmers (ALF) in crop planting and gap filling; doubled-up legume technology; weed management; soil fertility management and integrated pest management, harvest and post-harvest management.
- Farmer-to-farmer trainings reached to 56,121 farmers in the first quarter; 65,489 farmers in the second quarter; 49,622 in the third quarter and 11,933 farmers in the fourth quarter. All participants during Phase I and II Crop Management Training received handouts: English versions for extension staff and Chichewa versions for LFs and ALFs. INVC and IP technical staff jointly developed training materials which comprised of best practices in soybean and groundnut harvest and post-harvest management adapted to local conditions. Topics included: when and how to harvest, drying, sorting and grading, packaging and storage. Particularly for groundnuts, emphasis was on aflatoxin prevention through harvesting on time, drying properly and storing in-shell.
- NASFAM extension personnel in Mchinji, Ntcheu and Namwera Innovation and Productivity Centers (IPC) trained 5,658 farmers (51.7 percent women) in weeding, pest and disease management during this reporting period. These trainings were financed by associations in these districts using their own funds.
- Lead Farmers (LF) and Assistant Lead Farmers (ALF) who successfully managed demonstration plots were able to show thousands of farmers the differences in production where inoculum and double row planting was applied.
- Demonstration plots for soya showed that it is possible to obtain 3,600 Kg using all the technologies promoted by INVC. In the case of groundnuts, yields can reach 2,000 kg even under extreme weather conditions, like those observed this year.

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- IPM demos were established to demonstrate the combined impact of a package of improved practices. The demonstrations were conducted by Farmer Organization Limited (FOL), in collaboration with NASFAM and FUM. A total of seven IPM demo sites, each with four measuring 500 m², planted with soybean and groundnut in either the 'farmer standard' practice (conventional plant density, no inoculum, no pesticides) or the package of improved practices (higher plant density recommend by INVC, soy inoculum, seed dressing, other pesticides as needed) were established in the seven INVC districts (one per district). A total of 107 LF and ALF and 26 extension staff attended this first field day at seven sites. In the second quarter 60 extension staff, 7 of whom were female, participated in two field days. Among the farmers, gender parity with 82 males and 117 females was much better. Finally, three field days were dedicated to the safe use of Actellic Gold for control of warehouse storage pests. In total 144 farmers (45 women) from NASFAM, CADECOM, and FUM and a warehouse manager from ACE participated in this training. In general, the IPM demonstrations have been a success. They allowed INVC staff to recognize the key pests and diseases of groundnut and soybean, compare the impact of seed dressing and pesticide spraying (of which only one application of a fungicide and in some cases an insecticide needed to be made), and visually compare the impact of soybean inoculum side by side with plots that did not receive inoculum.
- CADECOM Dedza FOs conducted yield assessment close to maturity in all EPAs and observed that during flowering period the district experienced a dry spell in all the areas affecting all crops. CADECOM reported that the reduction in groundnut production ranged from 40 to 55 percent. Kanyama EPA was the worst performing with loses up to 55 percent followed by Bembeke with 50 percent reduction in production. Chafumbwa, Golomoti and Mtakataka EPAs had reductions up to 40 percent. This situation caused FOs to adjust their yield expectations from 1,500 kg/ha, to 700 to 800 kg/ha.
- In collaboration with USAID, INVC and partner ACE develop a Safer Use Action Plan (SUAP) that is now in place and used at different warehouses throughout the country.
- CADECOM and NASFAM finalized seed recovery across INVC ZOI. The recoveries for soya totaled 665 MT (61 percent of expected volume) and for groundnuts 55 MT (23 percent of expected volume). At the end of FY2015 both partners were working on sorting and grading the recovered seed and re-defining their seed recovery plans for next year. INVC recommended several corrective actions. However, the system needs major changes to work well for our beneficiaries.
- Successfully collaborated with Feed the Future Malawi Improved Seed System Technologies (MISST) project on five joint field days where different legume varieties were shown side by side with INVC-promoted technologies.
- INVC and the International Potato Center (CIP) collaborated on a pilot introduction of Orange Fleshed Sweet Potato (OFSP) vines to INVC beneficiaries in Lilongwe and Balaka in February, and during "Dambo" (winter season) in Dedza and Mchinji.
- Radio messages on land preparation and crop management, collectively developed with the Component 2 team and Pakachere, aired through Zodiak Radio and rural radio services. The messages were: Importance of early planting and gap filling in soybean and groundnut production to maximize yield; crop rotation; weed management in soy bean and groundnut fields; integrated pest management, as prevalence of pests and diseases result in significant reduction in crop yield; early land preparation (advantages of proper ridging, 75 cm apart and 50 cm wide that could accommodate double rows of groundnut at 30 cm and soybean at 20 to 30 cm apart); need to

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always to plant good quality certified seed as it easily germinates, grows and matures fast, resilient to drought and resistant to diseases; pesticide safety by always following the instruction on the label on the pesticide container and marketing. Pakachere also uses these themes as script for community theater plays.

- The Outcome survey, undertaken in August 2015 interviewed 2,120 farmers across the project ZOI, 62 percent of whom were female farmers. The average farm size was 0.35 ha and 29.5 percent grew groundnuts only, 38.2 percent grew soybean only and 32.3 grew both legumes.
- All of the beneficiary farmers in our ZOI have adopted at least one recommended technology, however, less than 5% have adopted the full package of technologies promoted by INVC. The most widely adopted were those that will increase yield (improved varieties and weeding), and those decreasing post-harvest loss (improved storage technologies). The least adopted were double row and ridge spacing. In general, women adopted more new techniques than men.
- Gross margins across the ZOI were positive for groundnuts and soya, though for groundnuts they were significantly less than last year. Year on year yields decreased for both crops this year because of poor climactic conditions prevailing throughout the country.¹
- Gross margins for men were higher than gross margins for women in both groundnuts (\$261 vs \$188) and soybeans (\$310 vs \$209). Gross margins were greatest among FUM farmers, followed by those of CADECOM

Component 3- Improving Community Capacity to Prevent Under-Nutrition

- INVC has established very strong mechanisms for the delivery of nutrition interventions in Malawi through care groups. It has six (6) District Nutrition Coordinators, 29 Nutrition Assistants, 300 promoters, 852 care groups, and 10, 554 lead mothers/fathers. These structures have high capacity, communally grounded/positioned and could be used by any other partner in an integrated manner.
- 139,701 Under-five children (67,327 males and 72,374 females) have so far been reached by INVC-supported assistance through care groups e.g. food preparation and utilization, complementary feeding sessions, optimal breastfeeding, and growth monitoring and promotion sessions among others.
- Over 776,378 under five children (366,229 males and 410,149 females) have been reached by INVC-supported assistance through Child Health Days in all the five nutrition impact districts of Mchinji, Lilongwe, Balaka, Machinga and Mangochi.
- A total of 338,421 people (128,521 males and 209,900 females) have been trained in child health and nutrition through backyard garden establishment and management, WASH, food preparation and utilization, theatre for development, SUN/ENA among others etc.

¹ Crop production was adversely affected by excessive rain in January and early February and dry spells in March leading to crop losses of as high as 40 percent, according to the Ministry of Agriculture.



- General awareness on nutrition and agriculture value chains (crop management, harvest and post-harvest handling, aflatoxin management, marketing) has been created through airing of radio programs, jingles, PSAs and theatre performances.
- There has been certain level of adoption of recommended individual behaviors and household practices on hygiene and sanitation. More community members have constructed pit latrines, hand washing stations, dish racks and rubbish pits. Old facilities are being maintained and new ones put up. Most households have backyard gardens and some women are accessing health services e.g. ANC, CHD, GMP in the ZOI which we believe is partly due to our efforts.

Component 4- Local Capacity Building

- **Follow up work for the September 2014 OCA** - FtF-INVC worked with all the seven partners following the OCA exercise to refine and strategize on the capacity building action plans developed from the identified gaps. This resulted in partner specific capacity building plans.
- **Development of Policy Briefs** - FtF-INVC, through CISANET, supported the translation of four policy briefs from English to Chichewa, covering the following topics:
 - Adoption of technologies in the groundnuts and soya beans value chains: understanding the policy gaps.
 - Agriculture for Nutrition and Health: where we are and what can be done?
 - Challenges and constraints to up scaling climate smart agriculture.
 - Agriculture Development and Youth Involvement.
- **Development of Business Plans** - FtF-INVC partnered with three Business Service Providers (BSPs) namely Umodzi Consulting; Tradeline Corporation and Target Consulting to facilitate the development and mentorship of business plans for Lilongwe North AMC, Lilongwe South AMC, Ntcheu AMCs, Balaka AMC and Namwera AMC under NASFAM. The goal is to assist the AMCs to become independent profit and loss centers.
- **Financial Liquidation Training** - INVC conducted a course for partners in Financial Liquidation. Eighteen participants from partners comprising Program Managers and Financial Accountants participated.
- **Intensified Training** – In quarter 3 INVC offered three monthly training sessions for all of our local implementing partners to address topics brought up by them as topics of priority interest: procurement processes and procedures, work planning and budgeting and monitoring and evaluation. Each session was a full day and was designed to address partner issues to shore up apparent gaps in their capacity.
- **OPI Pilot** - INVC was involved in series of preparatory meetings for the piloting of Organizational Performance Index (OPI) tool to generate experiences and lessons learned for adaptation in Malawi. The OPI was eventually piloted jointly with USAID and STEPS on two partners: NASFAM and Pakachere. The data from the assessment is being analyzed and the report is currently being finalized. The OPI tool is a results oriented and evidence based tool and should work as an excellent complement to the OCA tool.

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FY-15 Challenges and Potential Solutions

Cross Cutting Activities

Gender

- Delay in liquidation of funds by INVC partners causes delay of their funding for project activities as such it also affect the implementation of activities as most of the activities are being implemented by the partners –FUM and NASFAM. Various partners at managerial level were trained on procurement and reconciliation procedures by INVC hence there is hope that there will be change gradually
- There is no INVC gender training manual and policy as a reference for several activities.
- FUM had to do the GALS training again because there was poor coordination among the partners on the selection of gals champions in Mchinji-Mkanda EPA
- Working under budgetary constraints which led to participants being given the same rate of per diems without considering whether is rural or urban especially during the adult literacy instructors training. Field staff were also not budgeted for during these trainings because there was no money to carter for their expenses
- Initially Adult literacy Instructor's training is a 14 days training but because of budgetary constraints again it was conducted for 5 days. The facilitators did their best to cover all the important topics but still more time was not enough especially for the practical sessions. But since the facilitators were CDAs from their respective areas, they offered to help whenever the Instructors need help in the community.

Village Financial Platforms

- The institutional relationship with CADECOM has been difficult. They have experienced problems attaining milestones and vouchering in a timely fashion to keep themselves liquid for activities top continue uninterrupted. This is a relationship calibration issue that will likely work its way through with continued partnership and collaboration.
- The smart phones chosen are experiencing difficulty in capturing GIS data and in downloads/operations of the 1TOP video clip. We are exploring alternative apps for GIS and verifying if certain phones, after distribution to promoters have not been attacked by a virus requiring full reconfiguration of their operating systems.

Component 1: Value Chain Competitiveness

- **Limited participation of partners in value addition and marketing activities.** The challenge was that implementing partners focused on agriculture productivity with less attention paid on value chains. The results were limited value addition and marketing activities undertaken by implementing partners for their beneficiary farmers. To increase engagement INVC facilitated the active participation of partners in developing marketing opportunities for farmers. INVC ,through the implementing partners, worked closely with ACE and Pakachere in setting up aggregation centers and collective marketing activity for beneficiary farmers.

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- **Lack of collaboration amongst partners:** The challenge was that both implementing and technical support partners need to improve communication effectively amongst themselves. INVC facilitated the establishment of collaborative work among partners. INVC supported ACE to upload beneficiary farmers of NASFAM, FUM and CADECOM into its market information system platform. ACE started sending SMS to the beneficiary farmers directly from its database. INVC facilitated a Marketing Technical Working Group (TWG) meetings for all partners to plan and implement joint projects like establishment and frequentation of Market Information Points (MIPs), expansion of MIPs at partner level. INVC facilitated collaborative work on promotion of collective marketing through drama and radio by joint planning and implementation by Pakachere, ACE, NASFAM, FUM and CADECOM.
- **Unwillingness of NASFAM to open up the soybean and groundnut markets to other market players.** NASCOMEX has been a preferred and monopolistic market for NASFAM Development. INVC managed to change the mindset of NASFAM who started opening up the markets to other market players including NASCOMEX. For example, NASFAM organized buyers' tours of 30 buyers/processors including NASCOMEX to its beneficiary farmers in ZOI. INVC supported NASFAM, financing the hiring of a full time marketing officer who worked exclusively for NASFAM. This reduced the dependency of NASFAM Development on NASCOMEX.
- **Limited provision of marketing and market information services by ACE.** Farmers have not been able to access structured markets and market information provided by ACE. INVC supported ACE to hire a consultant who helped in uploading implementing partners' beneficiary farmers on ACE's database. INVC's financial support enabled ACE to hire a second consultant to design a new module for MIS linking the warehouse receipt system and forward contract markets to the basic MIS platform. INVC evaluated ACE's Market Information Points (MIPs) and formulated recommendations on branding and marking MIPs to render their services more attractive to farmers.
- **High transport costs for both farmers and buyers/processors.** INVC brought markets closer to farmers through implementing partners' network of 750 village aggregation centers in all 66 EPAs in the ZOI. The centers were designed as aggregation and as selling points. Buyers bought soybeans and groundnuts from farmers at the centers.
- **Lack of available financing for farmers and aggregators.** The banks are still unwilling to lend to smallholders because of lack of collateral and failure to repay loans. INVC continued dialoguing with to the commercial lending institutions including DCA guarantee loan facility and partners. INVC started designing and innovating value chain financing opportunities in collaboration with implementing partners, financiers, and processors.

Component 2: Improving Agricultural Productivity

- **Seed revolving funds are highly inefficient.** During FY2015, under the seed recovery system utilized by CADECOM and NASFAM, farmers received 12 kg of soybean (only NASFAM farmers) or 15 kg of groundnut seed. Farmers were expected to 'repay' this 'loan' with 2 kg for every kg they received after harvest. (NASFAM changed their rule during the season and required a repayment rate of 2.5 kg). The main objective for both NASFAM and CADECOM was that the 'recovered' seed would be redistributed to new members before the next growing season. Several issues with this system need careful consideration and modification for this revolving seed fund to work as intended:
 - NASFAM and CADECOM value proposition message needs to be clearly defined and explained to farmers. Farmers do not perceive recovered seed as their own seed and they understand that it will be used to "attract" more members for the organizations. In addition, partners have not clearly stated to beneficiaries that this seed is a loan or what the penalty for farmers who did not

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repay the loan would be. Thus, the incentive to return seed is very low. In fact, most farmers have consistently returned poor quality seed believing that they would not be the beneficiaries of this seed next season.

- The recovery ratio is not enough to guarantee enough seed the following season. Because seed recovered tend to be mixed and of poor quality, losses after grading can be significant. In addition, after about three years, old seeds must be taken out of the pool because they have lost their germinative capacity. Legume seed loses its vigor quicker than cereals. This is especially true for soybeans which are soft and fully exposed to environmental factors. Groundnuts stored in shell are less susceptible but the cultural practice has been to store groundnuts which are already shelled. The Ministry of Agriculture calculates that the total loss for groundnuts after shelling and grading is about 40 percent. Assuming this percentage, CADECOM farmers are currently returning only about 9.6 kg and NASFAM farmers are returning just the same amount they received before. With this system there is no opportunity to grow the seed bank.
- Partners have not been able to establish proper traceability systems. Currently, farmers bring their seed and deposit their bags in a warehouse, or give them to a lead farmer in charge of storing these bags. In most cases, there is no quality assessment performed upon receipt. Farmers bring anything and partners later on grade and test for germinative capacity. The bags farmers return have no number to trace them back. Ideally, the FAO recommend that seed should be traceable back to the actual farm where it was grown to have complete information about seed. As it is right now, partners do not know where the seed is coming from, nor even who actually received it.
- Lack of proper seed storage compromises the quality of seed. In many villages there is simply no warehouse to store seed. In areas where there are warehouses, they are not designed to store seed, or have not capacity for it. For example, soybean seed needs to be stored at 12 percent or less moisture content in climate controlled spaces at 4 to 15 degrees Celsius during summer time.² Groundnuts must be stored in shell and in sacks on pallets to avoid contamination.
- Availability of free seed through other programs deterred some farmers of fulfilling their obligations. As seed donation is generally used to attract new members, this dynamic of limited recovery of poorer quality seed will undoubtedly affect NASFAM's and CADECOM's future expansion efforts.

Despite repeated efforts from INVC to meet, discuss and establish a proper seed recovery system this season, NASFAM and CADECOM were not able to plan and strategize proper working system. Since March, INVC sponsored meetings and invited different stakeholders to roundtables to address this important issue. However, nothing concrete materialized until the end of the third quarter. The last week of September, CADECOM shared its plans about seed recovery strategies and the gap they expect for next season. NASFAM did not turn their plans until October. Both plans were incomplete, leaving out issues such as lack of traceability and quality of seed. Finally, despite repeated requests NASFAM did not provide a well-documented distribution of certified seed and soybean inoculum to beneficiary farmers during the last season, also affecting the information about traceability that is so important in a seed revolving system.

² Iowa State University. Soybean extension and research programs

- Limited quality data from demonstration plots.** In FY15, partners planned for more demonstration plots than those reported. CADECOM expected to establish 400 demonstration plots, but only 240 plots were effectively established, operated and monitored. According to CADECOM, LFs cited lack of land for demo plots as one of the main reasons the expected number was not achieved. Similarly, FUM planned 740 demonstration plots across the 10 EPAs. However, they only managed to account for 576 demonstration plots. According to FUM, the factors for the decrease included that some of farmers had hoped to receive seed so when they realized that FUM would not be distributing seed decided to drop their land destined for the demonstration. Other farmers relocated and abandoned the demonstration plots and in some cases death of the farmer meant there was no responsible focal point to manage the demonstration protocol. NASFAM reported that there were 680 demonstration plots across all IPCs, but only provided information for 292 plots by the end of the third quarter. NASFAM did not provide additional information on the remaining plots. INVC continued working with project managers, and involved FOs and AFO's to document all these activities, particularly focusing on the coming agricultural season. For this season, we are collaborating with partners to provide a protocol for LF so they can effectively monitor demo plots. In addition, INVC is working on an outline for reporting by the AFO's and FO's. Lastly, a proper inventory of demonstration plots using GIS technology will be conducted at the time of establishing these plots.
- The main challenge for INVC partners continues to be timely and accurate reporting.** Throughout the season, all partners were continuously late in submitting reports. Once submitted, the quality of reports was inadequate. In some cases they did not report on very important activities such as partnerships with other projects (field days with MISST), conflict of schedules for beneficiaries (INVC scheduled a field day, but farmers decided to participate in food distribution), reasons for not distributing equipment to LFs and ALFs, among other omissions. When they reported on activities, the information was not relevant to the objective of the activity. For example, all partners conducted field days. However, in the reports they tended to highlight issues such as people did not receive soft drinks, rather than asking people about the usefulness of the experience. Providing numeric data continues to be challenging. In some instances, when INVC requested data for demonstration plots, INVC program managers and field officers were slow responding to requests for information. Once the numbers were provided, they were simple unrealistic (e.g., 4.5 MT yield for groundnuts) . INVC started to enforce a monthly reporting timeline to address some of these issues. The project has provided more funding and will work more closely with project managers to address reporting issues sooner in the quarter. INVC will monitor more closely with FO's on the ground to validate the data received from partners.
- Difficulties in work planning and budgeting by IP resulting in delay signing grant amendments** IP financial constraints restricted mobility of extension workers resulting in difficulties organizing farmers in time for the crop management trainings which also affected farmer attendance. In some of the NASFAM EPAs, particularly in Balaka and Ntcheu, farmers did not receive sufficient seed or seed of the proper type and variety for their environmental conditions. Some seed received was of poor quality. In certain instances promised seed was never delivered. This was revealed during the consultant-led crop management training sessions. This has negatively affected crop establishment and development in these EPAs. INVC requested partners to provide work plans and activity budgets from March – April and from May –September. IPs did not provide these documentations on time so some activities were not correctly funded. All IPs received their advances for April and had cash available for May activities but often cash flow management proved an issue with our IP grantees . Several activities such as the Actellic Gold demonstrations and the OFSP demonstrations had to be funded directly by INVC. INVC is working with partners to change the type of grant mechanism extended to them, adopting one where payment is based on the accomplishment of discrete, detailed milestones..

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- **Erratic climatic conditions greatly impact beneficiaries' capacity to increase or even maintain production.** Heavy rains in January and February led to excessive weed growth. Early dry spells in March affected crop production in most EPA's in our ZOI, but especially Dedza, Balaka, Ntcheu, and parts of Lilongwe and Mchinji. Climatic conditions led to outbreaks of leaf-feeding caterpillar pests and leaf rollers on soybean in some areas, particularly parts of Machinga and Balaka. Heavy rains also made travel difficult and prevented farmers from attending the Phase II crop management training events leading to shortfalls in attendance (up to 50 percent in some areas). During the season, INVC emphasized IPM field days. This coming year we will include more demonstrations plots. In addition, INVC is planning to introduce more conservation agriculture topics as well as small scale irrigation systems training with farmers.

Component 3: Improving Community Capacity to Prevent Under Nutrition

- **Low participation of males in most key nutrition interventions** e.g. cooking demonstrations. This continues to affect uptake of requisite knowledge and skills needed at household level for food preparation, preservation and utilization to meet nutritional requirement especially among pregnant women, lactating mother and under five children
- **Limited access to certified soy bean and groundnut seed among most registered NASFAM club members,** who are also care group members. As mentioned above the quantity and quality of seed distributed and the choice of farmers to receive seed created many issues. Seed provided was insufficient to plant promoted technologies, receiving households received small quantities of seed insufficient for planned land areas and seed distribution was limited to farm club members, not necessarily for their spouses. As a result, most care group members did not grow soy bean or groundnuts and this has affected consumption of the associated legume products promoted under the project.
- **Food insecurity (lack of maize as staple food, soy beans and groundnuts) in most households.** During the year, Malawi experienced erratic rainfall which has negatively affected production of soy bean and groups, and as a result availability of food stuffs for food processing and cooking demonstration sessions were insufficient and these activities needed to be scaled back in some communities. This challenge is likely to lead to increased incidences of malnutrition.
- **Exclusive breast feeding numbers are low.** Some mothers still feel that their child is not being well enough nourished when breast fed exclusively. Other mothers are hesitant to breast feed for extended periods of time because of concern their breasts will lose their shape and attractiveness. In some instances, mothers forced to leave their homes due to flooding ceased exclusive breast feeding in the camps, being shy to do so when surrounded by strangers. Given all this, the project needs to monitor training activities to improve the quality of message delivery, but also to counsel mothers with specific concerns.
- **Low patronage of community members including some cluster members in ANC services** despite promoter/lead mother messages due to long distances to health facilities. In Malawi most health centers are far apart and most community walk longer distances to get to the nearest centers for health services. Due to limited access to ANC services e.g. contraceptive most community continue to register high births.
- **Non-adherence to airing schedule on some approved radio jingles and PSAs** by some radio stations. In trying to compensate for the lost airtime some programs were aired out of date according to the farming calendar, rendering them irrelevant at that time.

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Component 4- Local Capacity Building

- **Issues with Financial Compliance** - Partners continue to have challenges with USAID compliance which falls under the Finance and Administration capacity dimensions despite getting a higher score by all the seven partners in this capacity area of the OCA. Many of the liquidations that they submit have inadequate supporting documentation.
- **Lack of Internal Systems** - Partners have undeveloped systems for quality control, human resources, traceability, financial controls and internal policies and procedures despite relatively good scores in the OCA.
- **Lack of Monitoring and Evaluation Expertise** - The capacity section of Project Performance Management in the OCA, especially related to monitoring and evaluation, including supervision is also still a challenge as most partners have not had dedicated M&E staff and have not developed nor have had familiarity with Monitoring and Evaluation. Most Partners are showing an improvement in this area and they all currently have dedicated M&E staff.
- **Slow Liquidation of Advances** – Partners continue to have problems with basic compliance requirements for financial reporting. They have trouble gathering supporting documentation, organizing this documentation, and providing quality control on their document submissions.
- **Poor Cascading of Training** - Training offered to national partner staff of IP grantees is rarely cascaded down to field staff by partners. This slows work progress as partner field staff are often unfamiliar with protocols.
- **High Staff turnover** - Regular staff changes within Implementing Partners affects capacity building efforts and program follow-ups. These changes occur at all levels of the organizations from Program Manager, M&E Officer, and Accountants and in particular field staff.

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Lessons Learned:

Cross Cutting Activities

Gender

- All interventions or activities need to consider and address the literacy levels of beneficiaries. This also includes the printing of resource materials. In many instances an absence of deliberate attention and adaptation, may prevent people, especially women from participating or understanding the objectives partners are attempting to instill.
- It was very useful to have staff from each component and partner to participate in the gender sensitization trainings together. It was particularly valuable to split senior staff among each session so that they were not participating in one training together, but rather dispersed between all trainings to provide a variety of viewpoints and understanding. It was also beneficial to include district officials in the trainings as they were able to see not only commitment of FtF partners but also the commitment of the project as a whole to collaborate with government.
- There is need to enhance coordination and communication for gender and all other INVC sections because the DNC for nutrition component in Mchinji and Mangochi raised a concern that they were not well informed in advance on gender activities in their locality.
- Conducting daily review sessions during trainings helped to minimize some challenges such as lack of confidence among the facilitators and has assisted building up team working spirit and improved facilitation skills.
- Involvement on local leaders from inception will improve ownership of the interventions and responsibilities by community. Leaders will be able to support the interventions because they were involved at the beginning. However feedback on the status of the interventions needs to be delivered in good times.

Village Financial Platforms

- The VFP monitoring tools and data template have been adapted twice since implementation commenced. This was to accommodate more information for data collection purposes. Sections for detailing individual savings group member names and contacts, adding Group Village Heads, and simplifying gender disaggregation of data were adjusted. These efforts were the result of the M&E team's extensive participation in ensuring data collection tools are efficient and user friendly. These adaptations demonstrate the need for continuous dialog with field officers to ensure the pilot is capturing the necessary data to determine if the VFP is meeting its objectives.
- VFP is an excellent entry point that FtF can use for integrated messaging. . Savings group members have expressed interest in other aspects of FtF activities and have requested to learn some of the technologies used within agriculture and nutrition.
- It has also been noted that with field officers have been conduits of information exchange regarding the prices of commodities, particularly for groups that do not have access to competitive market price information. More investigation will be done to provide an accurate and detailed account of this observation.

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- The Implementing Partner – CADECOM is willing to work with us as well as the communities out there and there is good communication and coordination from both sides.

Component 1: Value Chain Competitiveness

- **Common interests and divergent priorities on marketing activities were identified** that helped INVC and implementing/technical support partners to plan and execute joint marketing projects. The lesson learned is that knowing the different stakeholders' interests helps facilitate new marketing activities such as Buyers' tours organized jointly by ACE, CADECOM, FUM, NASFAM and Pakachere which brought together 30 processors, traders and transporters to farmers at village aggregation centers.
- **Working collaboratively** with INVC, implementing partners, technical support partners, other development partners, private sector, and public sector ensured maximum effectiveness and efficiency of marketing processes. The lesson learned is that appropriate collaboration coupled with effective communication can improve marketing activities among stakeholders such as aflatoxin and food safety trainings conducted jointly by INVC, Southern Africa Trade Hub, Michigan State University, implementing partners and private enterprises.
- **Crop aggregation and collective marketing can be improved through a mix of marketing activities.** The lesson learned is that assisting famers to set up 750 physical village aggregation centers and the associated training in village aggregation and collective increased helped in reduction of farmer transport costs and streamlined marketing along the marketing channels.
- **Access to markets by smallholder farmers can be enriched** with support offered to the smallholder farmers to identify market opportunities for their soybeans and groundnuts starting with local markets and progressing to national and regional markets - market options for smallholder farmers to sell their produce. The lesson learned is that innovations such as End Market Analysis, market options, warehouse receipts, commodity exchanges, marketing contracts, and production contracts improved smallholder farmer integration in commercial markets.
- **Access to market information by smallholder farmers can be enhanced** by uploading of smallholder farmers in national market information systems to receive market information regularly. The lesson learned is that price discovery improved smallholders' certainty about where to sell, and SMS-based system was cheaper and highly effective. Implementing partners' beneficiary farmers were uploaded on ACE's market information system.
- **Training on aflatoxin control and management, and food safety** can advance the capacity of smallholder farmers and processors knowledge and skills to meet quality and safety requirements. The lesson learned is that training empowered smallholder farmers and processors in soybean and groundnut value chains.
- **Access to financial services by smallholder farmers and SMEs increases their participation in soybean and groundnut value chains.** The lesson learned is that agricultural loans accelerated sales of groundnuts and soybeans, and improved smallholder integration in commercial markets.

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Component 2: Improving Agricultural Productivity

- Farmers still struggle to adopt some of the recommended practices** such as ridge spacing, double row planting. In some instances more positive reinforcement is important to convince farmers of the benefits of double row planting. In others, such as the ridge spacing, INVC and partners should look into promoting planting other crops or intercropping. INVC and partners should showcase high-performing farmers who have consistently applied INVC-recommended best practices. These farmers have achieved soybean yields more than triple the average based on monitoring surveys.
- Communication is fundamental when planning events.** Plan training events at least one month ahead of time, communicate clearly with IPs, ensure that IPs have resources on the ground to communicate training (or field demo) events to beneficiary farmers. Know the key events (field days for other projects, training events for other projects, markets days, elections, cultural events, etc.) per Districts (and EPA where necessary) to avoid conflict with INVC events. This will require closer communication with District and EPA level project and government staff.
- NASFAM and CADECOM need to rethink their seed recovery systems.** They need to look into market-driven approaches which have been successful should they want to continue this route. Community seed banks managed by and for smaller groups and with a market orientation has been more successful in Malawi and elsewhere. NASFAM has developed community seed multiplication scheme in Mchinji that is working very well recovering seed and selling to other farmers. The system works well because farmers specialized in seed production and know that they will have a market for their products through NASFAM. In other countries like in Zambia, when farmers know they can have a market for their products they are more willing to bring back their seed to their associations (e.g., IFAD community seed bank in Luapula province).
- Farmers prefer trainings on site in-situ and in the field.** Traditional training methods (e.g., a consultant providing training in a classroom) are not as effective as field days in messaging, with farmers actually observing what they are listening. Although field days are more expensive because fewer people can attend each session, they serve beneficiaries better. INVC and implementing partners started conversations with FAO to expand farmer field schools. However, the cost of implementing FFS as designed by FAO is too costly for partners. INVC is working with other USAID partners such as MISST to increase the level of collaboration, particularly sharing activity costs so the number of field days can be increased. INVC still needs to provide basic capacity building support to IPs and farmers. However, development of training material should be IP-driven rather than INVC. This would lead to a higher degree of ‘ownership’ and interest in further developing the material.
- INVC farmers do not wait for directives to apply the techniques they have learned.** INVC beneficiaries are now carrying out seed germination tests well before the onset of rains. The germination tests help farmers to plan effectively because they would know in good time whether the seed that they have kept is viable or not. Farmers are also requesting trainings they see fit their needs. For example, FUM farmers have embraced composting and are already are working to have it ready during the season. Reportedly, almost 70 percent of farmers who attended the training started composting and are also sharing with fellow farmer composting techniques.
- Efforts to include women farmers in trainings have paid off during the FY2015.** However, there is still a long way to go to have more women in leadership positions. Consistently, our surveys have shown that women tend to adopt new practices quicker than men, and also are more willing to try new techniques. Success stories from female farmers adopting improved varieties, and technologies showed the growing interest among women and the benefits of “insisting” to make activities more gender sensitive. However, increasing

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the numbers has not and will not be INVC ultimately objective. Gender sensitive trainings, more support to hire women in leadership positions is still needed.

Component 3: Improving Community Capacity to Prevent Under-Nutrition

- **Engagement of government structures at district/community levels enhances effective implementation of nutrition interventions.** During the year, INVC oriented HSAs and AEDOs on SUN/ENA and care group model; and in collaboration with our field staff these frontline workers are now providing more technical support to the project activities e.g. cooking demonstrations, WASH, vegetable gardening, growth monitoring and promotion.
- **Provision of incentives (stipends, branded *zitenje*, t/shirts, and carrier bags) motivates community volunteers** (promoters, lead mothers and fathers) to delivery on the project planned activities. The project noted that from the time promoters started being paid their stipends, the collection and submission of reporting forms greatly improved in terms of deadlines and quality.
- **Provision of vegetable seed and watering cans facilitates establishment of backyard gardens** especially in areas where water is available
- **Any partnerships forged with other USAID partners should be entered into with clear defined MOUs** and associated to ensure accountability both to the communities served as well as to USAID as a donor.
- **Food processing through cooking demonstrations facilitates efficient knowledge and skills transfer** to community members on food preparation, preservation and utilization and likely to contribute significantly to malnutrition.
- **Nutrition related technologies that use local materials and engage local communities and change agents (models) are more likely to be adopted and sustained.** INVC has noted that use of energy saving stoves, establishment of backyard gardens and construction of hygiene and sanitary facilities have been widely adopted and maintained.
- **Cultural beliefs continued to affect adoption of some nutrition behaviors** for examples men's participation in cooking demonstration, ANC, maternal nutrition, and promotion of optimal breast feeding and exclusive breast feeding in the first six months of a baby's life. These crucial interventions are culturally considered as female domain in most INVC impact areas. Further there remain cultural prescriptions against eating certain foods during pregnancy (ie. Eating eggs ensures your child will be bald). Shyness and religious prescription against exposing too much of a woman's body need to be discussed with influential community leaders to enable them to influence attitudes which impede the adoption of critical early stage child nutritional practices.
- **Use/engagement of reputable/institutions of higher learning to offer training on nutrition related interventions is more impactful** as they offer comprehensive theoretical and practical concepts on nutrition making participants have requisite knowledge and skills required to execute their work. For example, INVC engagement LUANAR in TOT on food processing and utilization and there is noticeable difference in those who participated (DNCs and NAs).

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Component 4- Local Capacity Building

- **Intensify Capacity Building Interactions** - Continued regular interaction with partners through training, coaching and mentoring will significantly improve their capacity and efficiency in financial liquidation and enable them acquire clear guidance on supporting documents required for submissions to FtF-INVC. Training therefore needs to expand beyond the classroom to partner offices and out into the field where it is more practical and relevant to address partner's specific gaps in knowledge.
- **Cascade Training to the entire organization** - Due to the fact that National partners staff rarely cascade their knowledge from training to staff at field level, INVC has assisted Partners to develop plans for cascading the training down to field staff. Since USAID compliance is a project wide challenge the message around proper financial liquidation need to be transferred all the way out to the field. In many cases such as with M&E INCV has taken the training directly out into the field.
- **Reduce targets or direct implement** - Partners are not equipped with the policies or procedures to properly comply with USAID requirements. The rapid expansion throughout the projects zone of influence has slowed to a crawl as partners are unable to properly liquidate all the advances from previous quarters. USAID contractors need to work more slowly and methodically with local partners with fewer demands on results so that they can step their way through the requirements. Projects with large targets need to either work with more experienced partners or to direct implement themselves. In the case of INVC, Local Solutions coupled with large targets has not worked well for the beneficiaries.
- **Change the Grant Instrument** - At the beginning of the FTF-INVC project it was assumed that partners were strong and had the proper internal systems to execute on work plans and at the same time comply with USAID requirements. The grant instruments utilized for INCV gave partners too much leeway and assumed that internal controls existed. Different grant mechanisms should be utilized that are based upon deliverables resulting from executions on a work plan. Simpler grant mechanisms such as FOGs facilitate clear expectations and require a step by step approach to work plan execution. This will make expectations clearer and more transparent to partners across the board thus reducing DAI's financial exposure.
- **OCA by itself is inadequate** – The OCA as a self-assessment tool can work well with a skilled facilitator. As employees gain more self-knowledge, organization scores drop dramatically. Our partners have not yet reached this stage. A complimentary tool to the OCA is the OPI which is based on performance and is entirely evidence based. Moving forward these two tools should work well together to assist organizations to strengthen their weaknesses. We also anticipate scores to drop initially which will be a good sign of progress.
- **Lack of Proximity with Local Government** – Local solutions has removed INVC further away from having proximity with beneficiaries and with local government. The project has taken on ore staff to allow for a more local focus with district focal points. This should facilitate 3cs and in particularly communication with local government entities.

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REPORT

INVC Nutritional Follow-Up Survey

LILONGWE, MCHINJI, BALAKA, MACHINGA AND MANGOCHI

Beatrice Mtimuni, PhD

September 2015

LUANAR

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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
DDDS	Dietary Diversity Score
EBF	Exclusive Breastfeeding
FtF INVC	Feed the Future, Intergrating Nutrition in Value Chains
GMP	Growth Monitoring and Promotion
HDD	High Dietary Diversity
MDD	Minimum Dietary Diversity
LDD	Low Dietary Diversity
HIV	Human Immunodeficiency Virus
INVC	Intergrating Nutrition in Value Chains
IYCF	Infant and Young Child Feeding
IYCN	Infant and Young Child Nutrition
LUANAR	Lilongwe University of Agriculture and Natural Resources
MDHS	Malawi Demographic and Health Survey
NASFAM	National Smallholders Association of Malawi
CADECOM	Catholic Development Commission in Malawi
FUM	Farmers Union of Malawi
NSO	National Statistical Office
TA	Traditional Authority
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

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We thank all data collection supervisors, enumerators and data entry clerks for their dedication, cooperation and hard working spirit throughout the entire survey period. Above all we thank The Almighty God for the travel mercies and keeping the entire survey team in good health throughout the survey period.

EXECUTIVE SUMMARY

Introduction

This report presents findings of the beneficiary based follow up nutrition representative survey conducted in Mchinji, Lilongwe, Balaka, Machinga and Mangochi districts where Integrating Nutrition in Value Chains (INVC) Project is being implemented. The objectives of the current study were to establish:

1. Prevalence of children 6-23 months receiving a minimum acceptable diet
2. Dietary Diversity for women aged 15 – 49 years
3. Percent of 0 -5 months children exclusively breastfed in the five districts

Methodology for data collection and analysis

The survey used a two-stage sampling methodology. The first stage led to selection of total number of beneficiaries to participate in the survey from each district. The second level of sampling was selection of beneficiary households done based on proportion to beneficiary population size to ensure adequate representation and give equal opportunity to each beneficiary. The total number of beneficiaries sampled was 1,608 (331 from Lilongwe, 359 Mchinji, 305 Balaka, 307 Machinga and 306 from Mangochi). Four teams carried out fieldwork from July to August 2015. Data entry started concurrently and was completed by mid-September 2015.

Major findings

Main indicators established by the baseline survey

The current study was conducted to determine a number of key indicators that would assist in monitoring and evaluating the activities implemented in the five districts. These are summarized in the Table that follows:

Summary of the main baseline survey indicators by district

Parameter	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall 2015	2014*
Proportion of children 6-23 months who received minimum acceptable diet:							
Breastfed children 6 – 23 months	n=92 19.6	n=120 17.5	n=126 27.0	n=142 13.4	n=125 17.6	n=605 18.8	32.5
Non-breastfed children 6 – 23 months	n=4 25.0	n=19 10.5	n=5 60.0	n=6 33.3	n=3 0.0	n=37 21.6	40.9
All children 6-23 months	20.2	16.5	28.2	14.2	17.2	19.0	
Proportion of children who received minimum meal frequency:							
Breastfed children 6-8 months	n=9 83.7	n=9 81.7	n=11 91.3	n=21 90.8	n=21 91.2	n=71 88.2	84.4

Breastfed children 9-23 months	n=56 65.2	n=80 72.5	n=89 76.2	n=95 75.4	n=82 75.2	n=402 73.4	73.2
Non-breastfed children 9-23 months	n=4 100	n=19 68.4	n=5 100	n=6 66.7	n=3 100	n=37 78.4	31.1
Percent 0-5 months children exclusively breastfed	n=16 66.7	n=24 70.6	n=15 83.3	n=11 50.0	n=21 60.0	n=87 65.4	71.9
Women 15-49 years who ate diversified diet	n=259 66.4	n=276 60.7	n=221 63.3	n=232 63.6	n=257 70.0	n=1245 64.6	74.6
Mean number of foods consumed by women 15 to 49 years of age	n=390 3.8	n=456 3.6	n=349 3.8	n=365 3.9	n=367 4.2	n=1927 3.8	4.1

***The baseline was conducted only in Balaka, Machinga and Mangochi**

Infant and young child feeding practices indicators

Most of the mothers had followed the appropriate recommended infant feeding practices in that most respondents (65.4%) indicated that their infants less than 6 months of age had been exclusively breastfed. Comparison with the baseline in 2014 revealed significant improvement in Balaka from 73.8 percent to 83.3 percent, significant drop in Machinga from 77.5 percent to 50.0 percent in 2015.

Breastfeeding is universal in Malawi and 99.4 percent of children 6 – 23 months were reported to have ever been breastfed, 94.2 percent were still breastfeeding while 99.3 percent of these had been breastfed the day before the survey.

Current feeding practices as captured by feeding pattern the day before the survey revealed that the majority of the eligible children (95.3%) had been fed but only 21.6 percent of the children had received minimum acceptable diet and Balaka registered the highest proportion (60%) while in Mangochi none of the children received the minimum acceptable diet. Overall 78.4 percent the non-breastfed children were fed at least 4 times the day before the survey and ranged from 65.2 percent in Lilongwe to 100 percent in Balaka.

Water and Sanitation

Eighty-six percent of the beneficiaries use improved water sources (piped water, tube well or borehole, protected well, protected spring) and ranged from 76.2 percent in Machinga to a high of 92.1 percent in Balaka. Most household members (79.8%) were using improved sanitation facilities while 20.3 percent had either open pit or no sanitary facility but used the bush or fields to dispose of excreta. About eighty percent (80.1%) of young children's faeces (aged 0–3) are disposed of safely, either thrown into a toilet or a latrine or by the children themselves using the toilet.

Conclusion and recommendations

Dietary pattern for infants and young children in all the five districts were problematic in that very few children had been fed minimum acceptable diets. A relatively high proportion was fed with acceptable meal frequency but the quality of infant and young children's diet was low. It

implies that the complementary food fed is of poor quality and composed of a limited number of food groups. Cereal grains eaten with vegetables are the main stay of the diet for both the children and their mothers. All these are bulky and have low energy and nutrient density, hence difficult for the children to meet their recommended daily nutrient requirements. Children, because of their small stomachs and high nutrient requirements, need to be fed at least 4 times but with highly nutritious feeds.

Most of the households had access to safe water sources mainly the borehole. The fact that a significant proportion had diarrhoea during the dry season may indicate unsanitary environment and that care of the water at home is inadequate leading to contamination. Early introduction of fluids and other food should strongly be discouraged because it limits the frequency of breastfeeding by the infant and exposes the baby to the risk of infections.

While production of legumes is promoted to increase productivity, special effort should be made to intensify the utilization component. This will entail keeping some for home consumption and the surplus for sale to meet other household requirements. Actual cooking demonstrations and processing should be done to improve skills of the beneficiaries so that consumption of legume food products at household level is increased and dietary diversity improved.

The few individuals, who attended drama groups, appear to have benefited in the following areas; maternal and child nutrition, diet, sanitation and health. Promotion of these should be strengthened and scaled up to other districts as well. To ensure that many people patronize theatre, every opportunity that avails in the village such as religious meetings should be used to widely publicize the events.

Frontline workers should continue to include MIYCN messages to mothers at any opportunity that avails itself. It is important to include even cooking demonstrations using locally available foods to encourage the mothers to adopt the appropriate maternal, infant and young child feeding practices. For the frontline workers to effectively convince the communities they work with, separate training sessions in MIYCN should be designed targeting all frontline workers and community leadership for the care groups including lead mothers/fathers.

It was observed that the promoters are responsible for an area too large for them to keep track of so that they did not know some of the care groups and their members. In addition the nutrition coordinators are hardly known by the lead mothers let alone the care group members in all the districts except Machinga to some extent. Hence, supportive supervision at all levels is required. It is further suggested that a systematic way be devised to keep track of the beneficiaries and caregroup names to ensure that the data base is regularly updated.

1.0 INTRODUCTION

Feed the Future Malawi-Integrating Nutrition in Value Chains (INVC) Project is a four and half year effort supporting the United States Government's *Feed the Future* Initiative in Malawi. The project is designed to help advance the vision of Feed the Future and Global Health Initiative in Malawi with activities that will assist in achievement of the two over-arching goals:

1. Sustainably reducing rural poverty; and
2. Improving Nutrition

The project through its integrated approach is focusing its nutrition efforts on:

- Improving access to diverse and quality foods
- Improving Nutrition Related behaviours
- Improving beneficiary use of maternal and child health nutrition services

1.1 Survey Purpose and Objectives

The main purpose of the survey was to conduct a nutrition outcome survey to monitor and evaluate the USAID/FtF-INVC activity in Lilongwe, Mchinji, Balaka, Machinga and Mangochi.

The objectives of the current study were to establish:

4. Prevalence of children 6-23 months receiving a minimum acceptable diet
5. Dietary Diversity for women aged 15 – 49 years
6. Percent of 0 -5 months children exclusively breastfed in the five districts

2.0 DESIGN AND METHODOLOGY

The survey was a beneficiary based survey covering the districts where the INVC project is being implemented. These are Lilongwe, Mchinji, Balaka, Machinga and Mangochi. The survey employed mainly quantitative methods to determine the selected key survey food and nutrition indicators

2.1 Pre-survey preparations

A number of activities were undertaken in preparation for the actual survey which include the following:

- A household questionnaire was developed, translated into local language and pre-tested in an area that was not sampled for actual data collection. The tool was appropriate to capture variables for the desired indicators. The data collected included; demographic and household characteristics, infant and young child feeding practices; child health and care practices.
- Drafting of enumerator manual based on the household questionnaire in readiness for training
- Recruitment of survey teams (supervisors, data expert, data entry clerks and enumerators)
- Printing of survey instruments for training and pretesting

Given the desired sample size of 1600 that was required for the nutrition follow up survey in five Districts (Mchinji, Lilongwe, Balaka, Machinga and Mangochi and due to oversampling 1608 households were interviewed in all the 5 districts:

- All villages participating in INVC programme were obtained from INVC Offices in Lilongwe to select beneficiaries from each of the districts).
- The list of beneficiaries for the 5 districts that were obtained indicated different implementing partners that is, Nkhoma Synod in Mchinji and Lilongwe while NASFAM, CADECOM and FUM are implementers in Machinga, Balaka and Mangochi.

2.2 Sampling procedures for the follow up survey

Given the desired sample size of 1,600 for determination of the key nutrition indicators in all the five districts (300 per district plus oversample), sampling for the survey was done in 2 stages.

First stage:

The sampling procedure used to select the beneficiaries to participate in the nutrition survey was as follows:

- Total number of beneficiaries participating in INVC project in each of the 5 districts was obtained from INVC project office. The lists were by district, Traditional Authority, Group Village Headmen and finally by village.

- The total number of beneficiaries to be interviewed in each district was 300 and an additional allowance was made for an extra 100 beneficiaries to be shared among the 5 district based on population proportion to size (PPS).

Based on this procedure the total number of beneficiaries sampled from each district was 331 for Lilongwe, 359 in Mchinji, 305 in Balaka, 307 in Machinga and 306 in Mangochi giving a total of 1608.

Second stage:

The second level of sampling was selection of beneficiary households to be interviewed within each participating village. The number of beneficiary households to be interviewed in each participating village was determined by total number of beneficiary households in each of the participating villages in the district. Thus, sampling was based on proportion to beneficiary population size to ensure adequate representation and give equal opportunity to each beneficiary. Each beneficiary household was assigned a serial number. The required number of beneficiary households were randomly selected.

2.3 Survey organization and data collection

A total of 24 persons (11 females and 13 males) were engaged in the nutrition outcome survey organized into 4 teams each comprised 1 supervisor, 3 enumerators, 1 data entry clerk, and a driver. Supervisors have vast experience in nutrition surveys employing qualitative and quantitative methodologies. All supervisors had minimum qualification of Bachelors degree. All enumerators and data entry clerks have a minimum of Diploma but with vast experience in nutrition surveys

The team leader was the overall coordinator for the survey while the data expert was responsible for data management and analysis. The data expert has vast experience in data management in food and nutrition related surveys and research.

2.3.1 Training of team members, pretesting of survey tools and feedback

A total of 12 enumerators, 4 field supervisors and 4 data entry clerks were trained by the consultant assisted by the data expert from 22nd to 25th July 2015. The training covered survey objectives, sampling methodology and interviewing techniques to maintain data quality, and research ethics. However, most of the time concentrated on administration of the survey instrument to develop their skills. It involved going through the survey tool item by item to understand the data to be captured. In addition, the training was interactive and included group discussions, simulation of questionnaire administration in pairs. The teams were also trained in group dynamics and teamwork as well as survey ethics and ethical conduct in communities because these could affect data quality.

Before commencement of the actual survey, the survey tools and instruments were pre-tested at

one of the villages in Lilongwe. Each enumerator completed two questionnaires which the data entry clerks practiced on. The pre-test exercise was comprehensively discussed in plenary session and necessary changes on the questionnaire were made accordingly in readiness for data collection.

2.3.2 Actual data collection

Data collection ran from 28th July to 23rd August 2015. During data collection, the enumerators moved in their respective teams. Logistics and geographic coverage of the selected villages was coordinated by the team supervisors. This included coordinating and supervising the movement of the enumerators and in-field data entry clerks. The supervisors also communicated with nutrition coordinators and care group leaders in efforts to locate some sampled beneficiaries with names unknown by the village leaders. The data collected included:

- Household and demographic composition
- Infant and Young Child Feeding practices. Owing to its critical importance in enhancing good nutrition, infant and young child feeding was assessed and benchmarked in each district. Emphasis was placed on assessing the occurrence, nature, duration and frequency of exclusive breastfeeding (EBF) and complementary feeding, as well as occurrence of dietary diversity as key determinants of nutritional well being among infants and young children. In addition, the quality of the diet for children 6-35 months and women 15 – 49 years) was assessed using a proxy indicator of dietary diversity. The indicator assesses all foods and beverages consumed the previous 24 hours, with the aim of determining whether or not there is adequate variety in the foods consumed to warrant satisfactory nutrition.
- Child Health and Care Practices: Infant and childhood illnesses (diarrhoea, fever and chills and lower respiratory infections) was also assessed. Such conditions affect food consumption, digestion, absorption and utilisation. Caregivers, care-seeking behaviours and home-based care of ill children and women was therefore investigated.
- Water and sanitation
- Social and behaviour change communication: This section applied to Mchinji and Lilongwe only because the activity has not yet started. Varying information relating to theatre and radio was solicited including theatre attendance, radio listening by the beneficiaries, the main topics they remembered.

2.3.3 Quality control

The consultant was in charge of the entire process throughout the training and data collection period. The supervisors were the lead persons for introducing their teams in each village, and checking of questionnaires. This ensured quality of data collected from the field, completeness of the team's assigned work and that methodological and other field challenges are attended to immediately in the field. Spot checks of filled questionnaires were made in the field so that

errors are rectified immediately. Daily briefings will be were made every evening where teams shared experiences so that any errors are not repeated; corrections were made to ensure smooth implementation of the survey. In addition, quality check was also done by INVC staff in the course of data collection.

2.4 Data management and analysis

Data entry started in the field simultaneously as data collection progressed. Any errors detected were communicated to the supervisors for sharing with their team members and appropriate corrections were made before commencing data collection the following day. In so doing errors were minimized and enhanced data quality.

2.4.1 Data cleaning and analysis

Data cleaning, lead by the data expert, was carried out soon after data entry was completed to ensure that the information had been entered correctly. Where some discrepancies were detected in the entered data base, the data entry teams physically checked the questionnaires and corrections made wherever necessary.

After completion of data cleaning, production of survey outputs such as **descriptive statistics**, **cross tabulation** commenced using SPSS 16.0 package and continued as the survey report during drafting.

CHAPTER 3: RESULTS AND DISCUSSION

This chapter presents results from the 2015 Nutrition Outcome Survey conducted in Mchinji, Lilongwe, Balaka, Mangochi and Machinga where FtF-INVC's interventions are operational. A total of 1608 households were sampled with 22.3 percent (359) from Mchinji, 20.6 percent (331) from Lilongwe, 19 percent (305) from Balaka; and 19.1 percent (307) from Machinga and 19 percent (306) from Mangochi district.

3.1 Main indicators established by the 2015 Nutrition Outcome Survey

The current study was conducted to determine a number of key indicators that would assist in monitoring and evaluating the activities implemented in the five districts. The indicators that the survey concentrated on are presented in Table 1. Detailed analyses of the key indicators are provided in the relevant sections that follow in the chapter.

Table 1: Summary of the main baseline survey indicators by district

Parameter	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall 2015	2014*
Proportion of children 6-23 months who received minimum acceptable diet:							
Breastfed children 6 – 23 months	n=92 19.6	n=120 17.5	n=126 27.0	n=142 13.4	n=125 17.6	n=605 18.8	32.5
Non-breastfed children 6 – 23 months	n=4 25.0	n=19 10.5	n=5 60.0	n=6 33.3	n=3 0.0	n=37 21.6	40.9
All children 6-23 months	20.2	16.5	28.2	14.2	17.2	19.0	
Proportion of children who received minimum meal frequency:							
Breastfed children 6-8 months	n=9 83.7	n=9 81.7	n=11 91.3	n=21 90.8	n=21 91.2	n=71 88.2	84.4
Breastfed children 9-23 months	n=56 65.2	n=80 72.5	n=89 76.2	n=95 75.4	n=82 75.2	n=402 73.4	73.2
Non-breastfed children 9-23 months	n=4 100	n=19 68.4	n=5 100	n=6 66.7	n=3 100	n=37 78.4	31.1
Percent 0-5 months children exclusively breastfed	n=16 66.7	n=24 70.6	n=15 83.3	n=11 50.0	n=21 60.0	n=87 65.4	71.9
Women 15-49 years who ate diversified diet	n=259 66.4	n=276 60.7	n=221 63.3	n=232 63.6	n=257 70.0	n=1245 64.6	74.6
Mean number of foods consumed by women 15 to 49 years of age	n=390 3.8	n=456 3.6	n=349 3.8	n=365 3.9	n=367 4.2	n=1927 3.8	4.1

*The baseline was conducted only in Balaka, Machinga and Mangochi

3.2 Socio-Demographic Characteristics

3.2.1 Household Composition

Presented in Table 2 are some key aspects of household composition in the five districts. From a total of 1,608 households that were interviewed, the total number of household members was 13,546 and mean household size was 5.6 with a range of 5.5 in Lilongwe and Balaka to 5.9 in Mchinji. The average age of the household head in the 5 districts was 35.9 years, which is similar to the average age reported in the 2010 Malawi IHS3 and 2008 Malawi Census datasets. From Table 2 the results also show that there were more female members in the households visited (51.9% of female members to 48.1% of the male household members respectively). The majority of the households were male headed (Table 2).

Table 2: Household characteristics by district

Characteristics	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Total sampled HHs	331	359	305	307	306	1608
<i>Type of Household head:</i>						
Male Head	86.5	85.0	80.5	74.5	75.5	80.7
Female head	13.5	15.0	19.5	25.5	24.5	19.3
Total household members	2748	3149	2618	2456	2575	13546
Mean Household size	5.5	5.9	5.5	5.6	5.7	5.6
<i>Sex of household members:</i>						
Male	47.6	48.4	50.3	47.1	47.3	48.1
Female	52.4	51.6	49.7	52.9	52.7	51.9
<i>Age related characteristics:</i>						
Mean age of male HH (yrs)	36.0	36.5	35.2	35.0	36.6	35.9
Mean age of female HH	37.2	38.2	33.7	35.2	36.0	35.9
Mean years of schooling	5.4	5.4	5.6	5.3	4.9	5.4

3.2.2 Age of the household members

Presented in Table 3 is the proportion of members according to age grouping, it can be seen that the majority of the household members (56.8 percent) were aged between 0 and 15 years while 5.2 percent were 45 years and older. The trend is similar for each district and suggests high dependency ratio.

Table 3: Age category of the household members by district (percent)

Age category of household members	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Age not known	0.2	0.1	0.0	0.0	0.0	0.1
0-5 years	22.1	23.7	26.3	28.5	27.4	25.4
6-10 years	18.6	17.8	18.7	16.7	17.2	17.8
11-15 years	13.9	13.7	13.5	13.5	13.5	13.6
16-20 years	8.4	9.3	8.8	7.5	7.9	8.4

21-25 years	7.5	7.9	7.4	8.7	8.2	7.9
26-30 years	6.7	6.4	7.4	7.4	6.8	6.9
31-35 years	7.6	6.6	6.0	6.5	6.3	6.6
36-40 years	6.5	4.6	5.1	3.7	4.5	4.9
41-45 years	2.9	3.8	2.9	2.6	2.8	3.0
45 + years	5.7	6.0	4.0	4.9	5.3	5.2

3.2.3 Educational Level of household members

Overall, the majority of the women (65.8%) had attended formal education but 59.5 percent only had some primary education. Mangochi registered the lowest proportion (58.6%) and 12.6 percent had not attended any schooling. In contrast, Balaka district had the highest proportion of women (70.6%) with formal education and 6.8 percent had attained some secondary school education while 63.8 percent had attained some primary school education. Consistently a higher proportion of male household heads had not been to school in comparison with all the male family members in all districts. Among female heads the same trend is also observed. This is because most of the household heads are elderly.

Table 4: Educational Level of household members by gender and district

Educational level	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
All Males:						
None	9.9	5.8	3.0	7.0	11.1	7.2
Primary School	58.2	59.2	56.5	55.2	53.3	56.4
Secondary school	10.0	9.7	11.6	7.6	6.5	9.1
Post Secondary	0.1	0.3	0.0	0.4	0.4	0.2
University	0.1	0.0	0.0	0.0	0.0	0.0
Under-age	21.8	25.0	28.9	29.9	28.7	27.1
Male household heads:						
None	12.3	6.5	4.2	12.5	20.2	11.0
Primary School	65.4	73.5	66.9	69.2	62.3	67.4
Secondary school	22.0	19.4	28.9	17.7	16.2	21.0
Post Secondary	0.3	0.6	0.0	0.7	1.2	0.6
All Females:						
None	8.2	6.7	4.2	8.8	12.6	8.2
Primary School	61.9	64.3	63.8	55.4	53.4	59.5
Secondary school	6.2	5.7	6.6	6.3	5.0	6.0
Post Secondary	0.2	0.2	0.2	0.0	0.2	0.2
University	0.4	0.0	0.0	0.0	0.0	0.1
Under-age	23.2	23.1	25.2	29.5	28.8	26.1
Female household heads:						
None	15.1	9.1	4.7	22.1	33.6	18.8
Primary School	67.9	76.4	84.9	72.1	56.1	70.6
Secondary school	13.2	12.7	10.5	5.8	10.3	9.9
Post Secondary	1.9	1.8	0.0	0.0	0.0	0.5
University	1.9	0.0	0.0	0.0	0.0	0.2

The low educational level among respondents and household heads is of great concern as low literacy levels are often associated with poor child feeding and health seeking behaviours. Presented in Table 5 are selected child and maternal indicators in relation to educational level on the respondent and male household head. Consistently the proportion of children receiving minimum acceptable diet, the infants exclusively breastfed and the average number of food groups eaten by the children increased with increasing educational level of the mother and male household head. Similar trend is also observed for dietary diversity and the minimum number of food groups eaten by women of child bearing age. Maternal educational level appears to influence the selected child and maternal indicators more than household head educational level.

Table 5: Child feeding and maternal dietary diversity by educational level of mother and male head

Indicator	Overall Results		None		Primary School		Secondary School		Post Sec School	
	n	%	n	%	N	%	n	%	n	%
Education level of respondent:										
Children who received minimum acceptable diet	475	69.6	52	55.3	366	70.7	57	82.6	0	0.0
0-5 months children exclusively breastfed	87	65.4	10	58.8	64	64.6	12	75.0	1	100.0
Mean number of food groups consumed by Children 6-35 months	764	4.7	84	4.6	583	4.7	95	4.9	2	5.5
Women 15-49 years who ate diversified diet	667	67.1	65	48.9	508	67.7	92	85.2	2	66.7
Mean number of food groups consumed by women 15-49 years of age	667	4.5	65	4.4	508	4.5	92	4.6	2	4.5
Education level of the male heads:										
Children who received minimum acceptable diet	376	72.0	40	66.7	260	71.0	73	79.3	3	75.0
0-5 months children exclusively breastfed	69	66.3	5	71.4	43	64.2	21	72.4	0	0.0
Mean number of food groups consumed by Children 6-35 months	608	4.7	66	4.6	410	4.7	127	4.8	5	5.4
Women 15-49 years who ate diversified diet	875	68.8	82	62.1	580	67.4	205	75.6	8	100.0
Mean number of food groups consumed by women 15-49 years of age	875	4.5	82	4.5	580	4.5	205	4.6	8	5.5

3.2.4 Main occupation of the household members

Overall 29.3 percent of the household members were either young children or the elderly and 32.7 percent were schooling. There were only slight differences between male and female household members. Nevertheless farming was the main occupation. This pattern is observed in all the five districts (Table 6). The results clearly indicate that most households did not have

steady source of income. Hence, food availability and other household requirements are likely to be negatively affected.

Table 6: Household characteristics on occupation by district and gender

Main occupation	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Male:						
None (young children and the elderly)	25.3	27.5	30.0	33.1	32.4	29.5
Farmer	33.0	33.9	22.7	24.2	24.9	28.1
School teaching	0.0	0.4	0.1	0.0	0.1	0.1
Artisan/blacksmith	2.2	1.6	2.2	2.7	2.9	2.3
Civil servants	0.2	0.0	0.2	0.3	0.2	0.2
Trader/shopkeeper	2.7	1.5	3.4	2.9	2.7	2.6
Seasonal Agriculture labour	0.5	0.1	0.5	0.2	0.6	0.4
Permanent agriculture labor	0.0	0.3	0.2	0.0	0.2	0.1
Casual labour	0.5	0.2	1.4	0.3	0.8	0.6
Seasonal non-agriculture labour	0.1	0.2	0.2	0.3	0.4	0.2
Permanent Non Agric labour (e.g. Mining)	0.8	0.1	0.6	0.6	0.3	0.5
Student	33.3	34.3	37.3	32.1	32.2	33.9
Private sector/NGO	1.2	0.0	1.0	2.0	1.2	1.0
Female:						
None (young children and the elderly)	26.5	27.0	26.7	32.6	33.4	29.1
Farmer	38.2	38.6	35.1	35.2	36.6	36.9
School teaching	0.1	0.1	0.3	0.0	0.0	0.1
Artisan/blacksmith	0.1	0.1	0.0	0.0	0.2	0.1
Civil servants	0.1	0.1	0.0	0.0	0.0	0.0
Trader/shopkeeper	1.6	0.3	3.2	1.8	1.2	1.6
Seasonal Agriculture labour	0.0	0.0	0.3	0.1	0.1	0.1
Casual labour	0.1	0.0	0.1	0.2	0.1	0.1
Seasonal non-agriculture labour	0.1	0.0	0.2	0.1	0.4	0.2
Permanent Non Agric labour (e.g.mining)	0.1	0.0	0.0	0.0	0.0	0.0
Student	32.8	33.5	33.7	29.9	27.0	31.5
Private sector/NGO	0.1	0.1	0.2	0.1	0.4	0.2

3.3 Water sources and sanitation

3.3.1 Sources of drinking water

Water, sanitation and hygiene (WASH) is one of the eleven proven high impact interventions that are being promoted in scaling up nutrition in Malawi. Unprotected water is potential source of food and water-borne infections that can affect food intake and impact negatively on productivity of a household. Information on source of water is presented in Table 7. Overall, a significant proportion of the households (14.1 percent) did not have access to portable water and the proportion varied in the districts (8.0 percent in Balaka and a high 23.8 percent in Machinga). Consistent with the baseline of 2014 Machinga was particularly worse off and require assistance in provision of safe water sources.

Table 7: Main source of water used by households by district

Main water source	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Piped within dwelling	0.6	0.3	0.0	0.0	0.0	0.2
Piped into yard or plot	0.3	0.0	0.3	3.3	0.0	0.7
Public tap	0.0	0.0	7.2	4.6	1.0	2.4
Borehole with pump	78.9	84.4	84.3	66.4	85.3	80.0
Protected dug well	3.3	5.8	0.3	1.6	1.3	2.6
Protected spring	0.0	0.0	0.0	0.3	0.0	0.1
Total Protected	83.1	90.5	92.1	76.2	87.6	86.0
Rainwater collection	0.0	0.0	0.0	0.3	0.0	.1
Unprotected dug well	14.2	8.9	4.3	21.2	8.5	11.4
Unprotected spring	0.6	0.3	0.7	1.0	0.0	0.5
Pond, river, stream. Lake	2.1	0.3	3.0	1.3	3.9	2.1
Total unprotected	16.9	9.5	8.0	23.8	12.4	14.1
Distance to water source and back	18.2	21.4	18.1	20.9	16.8	19.2

3.3.2 Ownership of sanitation facilities

Proper disposal of wastes may result in better health due to reduction in such disease conditions as diarrhoea and parasitic infections which in turn can result in lowered morbidity and mortality. In addition, ownership of sanitation facilities such as latrines gives dignity to household members. Table 8 shows that the most common toilet facility was the traditional pit latrine located within the dwelling yard. Most household members (79.7 percent) were using improved sanitation facilities. It is of concern that a significant proportion of the households (20.1 %) had either open pit or no sanitary facility hence using the bush or fields to dispose of excreta. This practice may be contributing to diarrhoea episodes a significant proportion of the children had suffered from two weeks prior to the surveys.

Table 8: Household Toilet Facility by District

Parameter	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Household toilet facility:						
Flush to sewage	2.4	0.3	1.6	2.3	1.3	1.6
Pour flush latrine	0.3	0.8	0.3	0.7	0.7	0.6
Traditional pit latrine	76.7	69.1	80.7	74.2	88.9	77.6
Total Protected	83.1	90.5	92.1	76.2	87.6	86.0
Open pit	1.8	2.8	2.0	3.6	0.7	2.2
No facilities or bush	18.7	27.0	15.4	19.3	8.5	18.1
Location of toilet facility:						
Within the yard	78.3	70.4	80.3	71.3	82.8	76.6
Outside dwelling	12.9	16.6	13.9	18.5	13.8	15.1
Disposal of stools of children 0-3 Years:						
Children always use toilet	4.8	3.2	6.6	7.7	6.6	5.8
Thrown into toilet	71.5	62.8	72.5	70.9	75.9	70.4
Buried in yard	2.2	7.6	3.8	3.4	1.9	3.9
Thrown outside yard	3.8	9.2	3.3	3.8	3.8	4.9
Use neighbors toilet	17.7	17.2	13.7	14.1	11.8	14.9

The young children (0-3 years) may not be able to use toilet facilities properly but their stools should be properly disposed of. Respondents were asked to explain how they dispose of the stools of young children and the results are presented in Table 8. Overall, 70.4 percent of young children's faeces are disposed of safely. However caregivers need to wash hands with soap always after handling stools to prevent cross infection and contamination. It is of grave concern that about 15 percent of care givers claimed to use neighbours' latrine, this is not likely to be followed consistently. Education on importance of ownership and use of appropriate sanitation facilities should be included regularly in caregroup sessions.

3.4 Infant and young child feeding practices

3.4.1 Age distribution of the sampled children

Distribution of children aged 0 to 35 months in the sampled households by age group and gender are presented in Figures 1. There were 1,200 children and 49.8 percent of the children) were male and 50.2 percent were female hence both sexes were adequately represented in the districts.

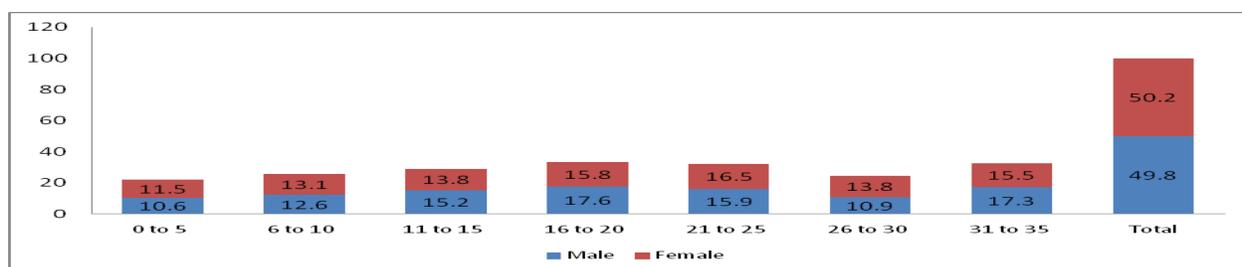


Figure 1: Distribution of children 0-35 months in sampled households by age group (months) and gender

The distribution of the sampled children aged 0 - 35 months by district are shown in Table. In each district a high proportion of the children were in the 6 to 23 month age range. Total number of children was highest in Mchinji because more households had been sampled.

Table 9: Distribution of the children aged 0-35 months by district

Age group	Lilongwe		Mchinji		Balaka		Machinga		Mangochi		Overall	
	n	%	n	%	N	%	N	%	n	%	n	%
Children 0-5 months	24	11.8	34	12.5	18	7.9	22	8.3	35	14.9	133	11.1
6-23 months	96	47.3	139	51.3	131	57.7	148	56.1	128	54.5	642	53.5
24-35 months	83	40.9	98	36.2	78	34.4	94	35.6	72	30.6	425	35.4
Total	203	100	271	100	227	100	264	100	235	100	1200	100

3.4.2 Exclusive breast feeding

There were 133 children under 6 months of age and 87 of these children had not been given any thing such as water, various solids and yogurt which implies that these children were being breastfed exclusively. The survey results show that exclusive breastfeeding for the first six months is claimed to be widely practiced in the 5 districts (Table 10). Overall, 65.4 percent of infants less than 6 months of age were exclusively breastfed which is slightly lower than national prevalence of 71.4 percent based on 2010 (NSO and ICF Macro, 2011) and 70.2 percent based on 2014 MICS (NSO, 2014). Early introduction of fluids and other food should strongly be discouraged because it limits the frequency of breastfeeding by the infant and exposes the baby to the risk of infections.

Table 10: Prevalence of exclusive breastfeeding during first 6 month by district in 2014 and 2015

District	Exclusive breastfeeding prevalence (Percent)	
	Baseline (2014)	Follow up (2015)
Lilongwe	71.0*	66.7
Mchinji	71.0*	70.6
Balaka	73.8	83.3
Machinga	77.5	50.0

Mangochi	69.6	60.0
Overall	71.9	65.4

*Based on 2010 DHS

Comparison between the baseline in 2014 and the current survey reveal significant improvement in Balaka from 73.8 percent to 83.3 percent in 2015. It is of grave concern that Machinga registered a significant drop from 77.5 percent in 2014 to 50.0 percent in 2015. Nutrition education among the care groups that are currently operational in the area should emphasize appropriate infant and young child feeding. The baseline did not cover Lilongwe and Mchinji hence comparisons could not be made.

Table 11 presents the feeding practices followed in the five surveyed districts. Consistent with the 2014 MICS estimates, the INVC survey results show that almost all children (99 percent) between the ages of 6 and 23 months were reported to have ever been breastfed, 94.2 percent were still breastfeeding while 99.3 percent of these had been breastfed the day before the survey. From 18 months of age, a significant proportion of the children are weaned off the breast and from 24 to 35 months old children are almost all completely weaned off the breast. There seem to be no differences between gender of the child and the child's district of origin.

Table 11: Breastfeeding practices among children 6-23 months by sex and district n=642

Parameter	n	Child breastfeeding practices		
		Children ever breastfed %	Children still breastfeeding %	Children* breastfed day before survey %
Age in months:				
6-8	92	100	100	100
9-11	97	100	100	99.0
12-17	217	100	97.7	100
18-23	232	98.3	86.4	98.5
Sex:				
Male	320	99.4	94.1	99.3
Female	318	99.4	94.4	99.3
Total	638	99.4	94.2	99.3
District:				
Lilongwe	95	99.0	95.8	98.9
Mchinji	137	98.6	86.3	100
Balaka	131	100	96.2	98.4
Machinga	147	99.3	95.9	99.3
Mangochi	128	100	97.7	100

*Percent of the children still being breastfed

3.4.3 Complementary feeding

The national guidelines for infant and young child feeding, recommend the introduction of complementary food to infants around 6 months of age because by that age breast milk alone is inadequate to meet daily energy and nutrient requirements to maintain a child's optimal growth and development. The respondents were asked a number of complementary feeding related practices done the day before interviews and the results are presented in Table 12. A high proportion of children had been given water (over 80 percent), while a significant proportion was given clear broth (over 40 percent) and thin porridge (over 26 percent) across the districts. All these are bulky and have low energy and nutrient density, hence difficult for the children to meet their recommended daily energy and nutrient intakes.

Table 12: Complementary feeding related practices day before the survey by district

Feeding practices	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Children fed breast milk with bottle/cup/spoon (%)	5.3	1.4	1.8	2.9	1.6	2.4
Medicine and vitamins (%)	11.1	6.4	11.0	9.4	11.1	9.7
Given Thanzi ORS (%)	4.2	2.9	2.1	7.1	3.1	3.9
Plain water (%)	81.4	83.5	85.4	87.6	81.5	84.0
Infant formula (%)	0	0	1.4	0.6	1.2	0.7
Mean number of times infant formula given	0	0	0	0	3.0	3.0
Tinned milk, powdered (%)	8.3	4.1	2.7	1.2	1.9	3.4
Mean number of times tinned milk given	1.5	3.2	2.0	2.0	3.0	2.2
Juice /drinks (%)	5.0	1.2	0.7	1.8	1.9	1.9
Clear broth or <i>msuzi</i> (%)	53.7	49.1	52.4	44.7	45.7	48.8
Yogurt (%)	4.2	0.0	1.4	1.2	0.0	1.2
Mean number of times yogurt given	1.8	0.0	1.5	2.0	0	1.8
Thin porridge (%)	26.4	27.5	26.5	32.7	34.6	29.8
Other liquids such as thobwa	16.5	23.3	25.9	15.4	13.0	18.8

Presented in Table 13 are the common foods served to children 6 to 23 months the day before the survey. The results show that the main stay of the diet for the children is the maize staple eaten with vegetables. It is of concern that most of the children had other vegetables such as cabbage, egg plants which are less nutritious than the dark green vitamin A rich vegetables. Fish is the main animal source food included in the diet. Similar dietary pattern was observed for women of child bearing age (15 to 49 years) suggesting that the children depend more on family meals once complementary feeding is initiated.

Table 13: Food types consumed by the 6-23 months children by district (%)

Foods consumed	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Food made from grains	86.3	90.6	90.0	91.8	93.8	90.8
Vitamin A rich vegetables	12.6	17.5	10.9	9.6	6.2	11.4
White tubers and roots	22.1	18.1	17.7	19.7	13.3	18.0
Dark green leafy vegetables	63.2	67.4	56.9	60.5	52.3	60.0
Other vegetables	71.6	68.8	80.0	69.4	71.9	72.3
Vitamin A rich fruits	3.2	5.1	7.7	6.8	5.5	5.8
Other fruits	7.4	9.4	9.2	6.8	7.0	8.0
Organ meat (Iron rich)	4.2	.7	1.5	.7	.0	1.3
Flesh meat	12.6	12.3	12.4	4.1	7.0	9.4
Eggs	6.4	3.6	10.0	2.0	5.5	5.3
Fish	17.0	10.1	16.9	33.3	31.2	22.1
Food from Soya	21.5	25.4	16.9	9.5	13.3	17.0
Food made from g/nuts	22.3	41.3	29.2	37.4	32.0	33.3
other beans	23.4	22.5	31.5	25.2	33.6	27.3
Milk and milk products	10.6	7.2	5.4	4.8	5.5	6.4
Oils and fats	61.7	52.9	53.8	53.1	54.7	54.8
Sweets	50.0	45.7	45.4	38.1	38.3	43.0
Beverages e.g. tea	26.3	32.6	28.5	13.6	21.1	24.1
Spices, condiments	1.1	2.9	2.3	2.0	4.7	2.7
Insects	1.1	0.7	0.8	0.0	0.8	0.6

The current survey solisted food intake of the 6 – 23 month of children during day and night (24 hour recall) preceding the survey and feeding frequency. From this information the proportion of children who received minimum acceptable diet (defined as consumption of at least four out of seven food groups in the previous 24 hours). The minimum acceptable diet is based on the recommended 7 food groups which are: 1) infant formula, milk other than breast milk, cheese or yogurt or other milk products; 2) foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; 3) vitamin A-rich fruits and vegetables (and red palm oil); 4) other fruits and vegetables; 5) eggs; 6) meat, poultry, fish, and shellfish (and organ meats); 7) legumes and nuts. The minimum feeding frequency for the children by their breastfeeding status was also generated. The results are presented in Figure 2. The highest proportion of breastfed children who received the minimum acceptable diet were from Balaka (27 percent) while the worst was Mangochi where none of the children received the minimum acceptable diet. It is of grave concern that only a small proportion of non-breastfed children (ranging from 14.2 percent in Machinga to 60 percent in Balaka) received minimum acceptable diet. Overall, only 19

percent (122 of 642) of the children received minimum acceptable diet (Table 1). The national averages for non-breastfed children are 45.4 percent based on 2010 MDHS (NSO and ICF Macro, 2011) and 5.2 percent based on 2014 MICS (NSO, 2015). These children are no longer being breastfed hence are solely dependent on the non-nutritious bulky porridge which was the main food given to children. These are not likely to meet their recommended nutrient requirements.

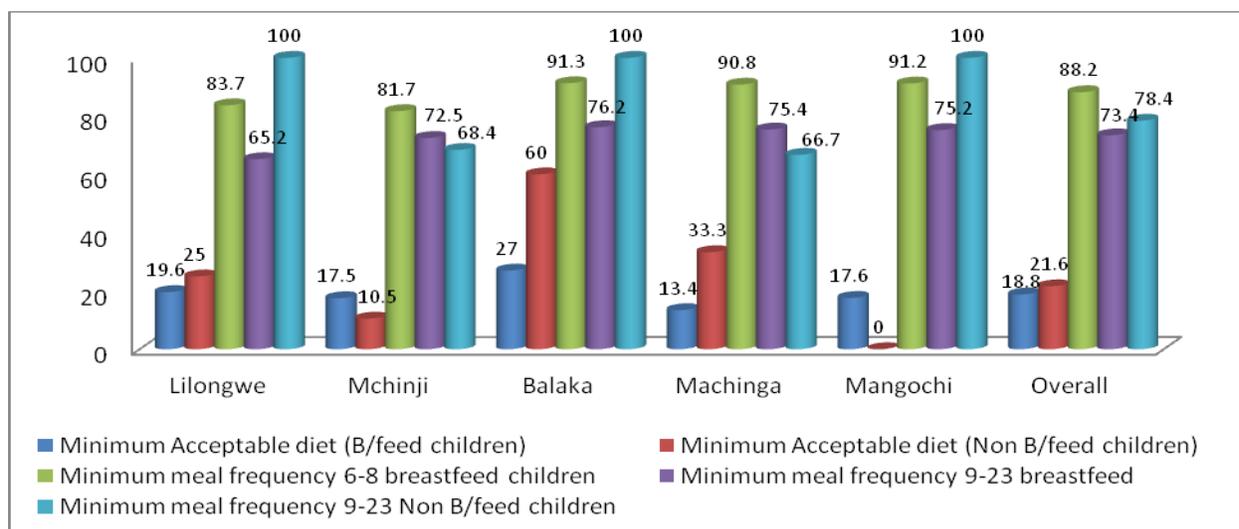


Figure 2: Minimum Acceptable diet and Minimum meal frequency for breastfed and non breastfed children 6-23 months

Overall, 88.2 percent of breastfed children (6-8 month) and 73.4 percent (9-23 months) were fed with acceptable minimum meal frequency of at least 3 meals and 4 meals respectively in the previous 24 hours prior to the survey (Figure 2). It is commendable that all the non-breastfed children in Lilongwe, Balaka and Mangochi had been fed with acceptable minimum frequency. The most recent reported national averages are 48.3 percent for breastfeeding children and 28 percent for nonbreastfed children (NSO, 2015).

Although a high proportion of the 6-23 children (65.2 percent to 100 percent) based on their breastfeeding status were fed with minimum meal frequency, a high proportion failed to receive minimum acceptable diet. It implies that the complementary food fed is of poor quality and composed of a limited number of food groups. These results suggest that many of the children are not likely to meet their daily energy and nutrient requirements.

3.4.4 Dietary diversity for children 6-35 months

At least 50 percent of the eligible children had consumed a highly diversified diet the day before the survey (Figure 3). Almost all children aged 24 months and older had been completely weaned off the breast hence solely dependent on the given food. The more diversified the diet is the high the likelihood that daily energy and nutrient requirements would be met. Dissemination

of appropriate complementary feeding that emphasizes on importance of dietary diversity and frequent feeding should continue to be promoted in the care groups.

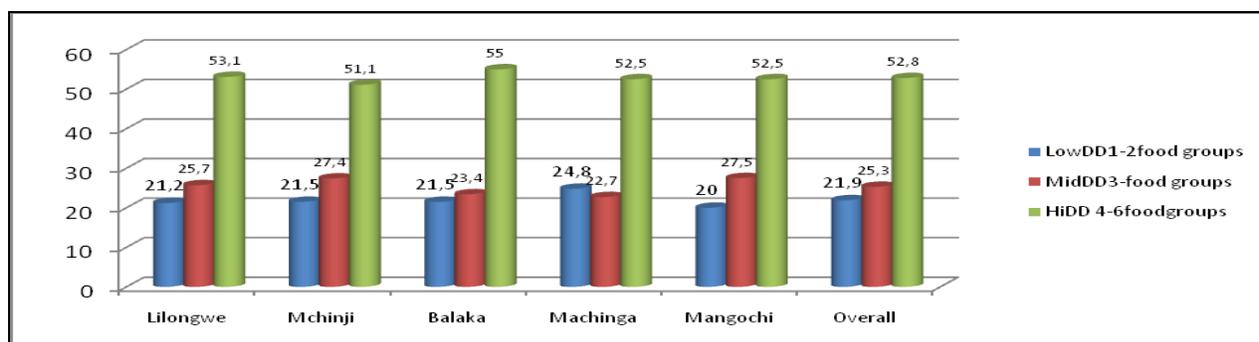


Figure 3: Dietary diversity of children 6-35 months by district

There was a positive relationship between educational levels of both the household head and the caregiver and dietary diversity of the child ($p < .000$). The relationship appears to be stronger between mother's education and the child's dietary diversity (Table 14).

Table 14: Dietary diversity for children 6-35 months by education of household head and caregiver (percent)

DD level	Education of household head			Education of caregiver		
	None	Primary	Secondary	None	Primary	Secondary
LDD	24.4	17.2	18.6	16.3	9.6	6.7
MDD	14.2	11.9	7.0	17.7	12.2	5.9
HDD	61.4	70.9	74.4	66.0	78.2	87.4

3.4.5 Consumption of the promoted legumes products

INVC projects promote groundnut, soya bean and beans hence consumption of these products was assessed for the children 6-23 months of age based on the 24-hour recall. A total of 642 children (96 from Lilongwe, 139 Mchinji, 131 Balaka, 148 Machinga and 128 Mangochi) were assessed. The results are presented in Figure 4. In all districts 33.3 percent of the children ate groundnuts followed by other beans (27.3 percent) while consumption of soybeans was 17.0 percent. Utilization component of the interventions implemented need strengthening to include cooking demonstrations to motivate beneficiaries to increase consumption of legume food products at household level.

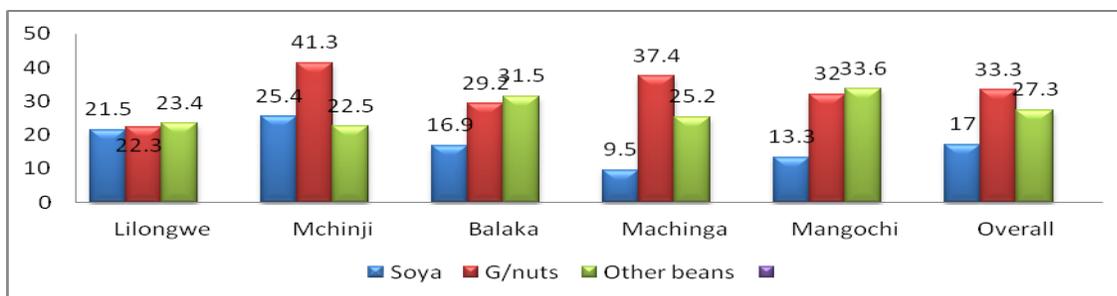


Figure 4: Consumption of groundnut, soya bean, bean and dairy foods

3.4.6 Consumption of vitamin A and iron rich foods

Based on the 24 hour recall, it was possible to assess consumption of foods rich in vitamin A and iron among children aged 6 to 35 months. Findings reveal that in almost all age groups less than a quarter of the children were consuming foods rich in Vitamin A or iron (Table 15). While the proportion was higher among children aged 24-35 months, the proportions were still significantly low ranging between 44 percent and 59 percent. These results suggest that a high proportion of the children in all five districts may have low food-based micronutrient intake and as such this is an area that needs special attention during the caregroup education sessions. In addition, mothers should be reminded to participate in “Child health days” campaign conducted biannually by Ministry of Health and vitamin A supplements and deworming drugs are given to children underfive years of age.

Table 15: Consumption of vitamin A and iron rich foods by children age 6-35 months

Parameter	% consuming foods rich in vitamin A in last 24 hours		% consuming foods rich in iron in last 24 hours		Total number of children n
	Unweighted	Weighted	Unweighted	Weighted	
Age in months:					
6-8	53.3	51.1	20.7	21.4	92
9-11	77.3	76.2	21.6	24.7	97
12-17	82.0	81.5	32.1	35.1	217
18-23	91.1	92.2	37.3	38.2	236
24-35	91.8	91.4	37.3	40.0	425
Sex:					
Male	83.6	84.9	29.5	32.1	534
Female	85.3	84.8	32.2	32.6	532
District:					
Lilongwe	86.6	86.6	29.8	32.3	179
Mchinji	88.6	88.5	23.6	23.0	237
Balaka	82.6	82.8	28.2	26.7	209
Machinga	85.1	85.1	34.9	35.8	242
Mangochi	81.5	85.0	30.8	36.7	200

3.5 Childhood illness and care

Table 16 presents period-prevalence of selected illnesses for children aged 0 – 35 months who were reported to have had an episode of diarrhoea, symptoms of acute respiratory infection (ARI), or fever during the 2 weeks prior to the survey. About 20 percent of the children were reported to have suffered from diarrhoea including bloody diarrhoea and the prevalence was highest in Mchinji (28.1 percent).

Table 16: Reported selected disease episodes two weeks before survey and care by district

Parameter	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Children who had diarrhea (%)	23.9	28.1	17.2	26.2	21.5	23.5
Duration and care element associated with the diarrhoea episode:						
Mean number of days	4.1	4.1	3.8	4.2	4.4	4.1
Presence of blood in stools	4.2	6.9	12.8	10.4	10.0	8.7
Received appropriate treatment	64.6	77.8	84.6	68.7	74.0	73.6
Fluid intake during the diarrhoea episode:						
Less	51.9	55.3	45.5	51.5	42.1	50.4
About the same	29.6	13.2	18.2	12.1	5.3	15.8
More	18.5	31.6	36.4	36.4	47.4	33.1
Nothing to drink	0.0	0.0	0.0	0.0	5.3	0.7
Food intake during the diarrhoea episode:						
Less	81.8	86.3	87.5	68.8	81.8	80.4
About the same	18.2	2.0	8.3	8.3	6.1	7.9
More	0.0	7.8	4.2	14.6	6.1	7.4
Nothing to eat	0.0	3.9	0.0	8.3	6.1	4.2
Children who had fever (%)	24.9	32.9	22.6	38.9	28.6	30.1
Fluid intake during the fever episode:						
Less	50.0	66.0	71.4	52.9	70.0	61.1
About the same	19.2	8.0	10.7	13.7	5.0	11.4
More	30.8	26.0	17.9	31.4	20.0	26.3
Nothing to drink	0.0	0.0	0.0	2.0	5.0	1.1
Food intake during the fever episode:						
Less	88.6	90.0	81.8	76.5	76.3	82.2
About the same	8.6	6.7	6.1	8.6	5.3	7.3
More	.0	1.7	9.1	7.4	2.6	4.5
Nothing to eat	2.9	1.7	3.0	7.4	15.8	6.1
Children who had malaria (%)	10.9	10.1	11.1	20.8	8.9	12.6
Fluid intake during the malaria episode:						
Less	51.9	55.3	45.5	51.5	42.1	50.4
About the same	29.6	13.2	18.2	12.1	5.3	15.8
More	18.5	31.6	36.4	36.4	47.4	33.1
Nothing to drink	0.0	0.0	0.0	0.0	5.3	0.7
Food intake during the malaria episode:						
Less	81.8	86.3	87.5	68.8	81.8	80.4
About the same	18.2	2.0	8.3	8.3	6.1	7.9
More	0.0	7.8	4.2	14.6	6.1	7.4
Nothing to eat	0.0	3.9	0.0	8.3	6.1	4.2

It is of concern that about 30 percent did not receive appropriate treatment. In addition, 50.4 percent and 80.4 percent reported to have reduced fluid and food intake respectively. Similar trend is seen for fever and malaria as well. These are disease conditions that Global Action plans seek to significantly reduce since they all contribute to child mortality. Appropriate health care seeking behavior and appropriate feeding practices during illness messages should be emphasized at every opportunity in these communities.

3.6 Women’s dietary diversity

Inadequate dietary intake is an immediate cause of undernutrition. Alongside improving food security, nutrition education should emphasize the need for households to adopt dietary diversification as a key determinant of nutritional and health well-being of all household members.

The variety of foods consumed by women of child bearing age the day prior to the survey (24 hour recall) was solicited. Most women ate at least 3 foods per 24 hour period since the overall mean number of foods eaten is 3.8 food types as shown in Table 15. As expected, the most commonly consumed food groups are grains (97.3 percent in Mchinji to 100 percent in Lilongwe) mainly in the form of maize meal (*nsima*), followed by vegetables, legumes and oils and sweets (Table 17). This suggests that energy dense diets are consumed in the five districts. The proportion of women who consume any animal food source is 47.7 percent. The results therefore suggest that fish, mostly small fish eaten with bones, is the major animal food source in all the five districts (26.8 percent overall). Similar dietary pattern was observed for the children aged 6 to 23 months suggesting dependency of the young children on family meals once complementary feeding is initiated.

Table 17: Common foods eaten by women 15-49 years of age by District

Parameter	Lilongwe	Mchinji	Balaka	Machinga	Mangochi	Overall
Common foods consumed (%):						
Food made from grains	100.0	97.3	99.0	99.1	99.5	98.9
Vitamin A rich vegetables/tubers	16.1	25.9	8.1	11.9	9.1	14.5
White tubers and roots	15.5	11.2	14.6	29.4	22.0	18.6
Dark green leafy vegetables	69.0	75.9	63.1	69.3	64.0	68.5
Other vegetables	88.1	85.3	89.4	85.3	89.8	87.4
Vitamin A fruits	2.4	8.5	9.6	13.8	12.9	9.7
Other fruits	10.1	12.5	12.6	11.0	10.8	11.5
Organ meat (Iron rich)	.6	.4	.5	.9	.0	.5
Flesh meat	11.9	14.7	12.6	6.0	8.6	10.8
Eggs	6.5	6.2	11.1	4.6	4.3	6.5
Fish	19.0	13.8	23.7	36.7	40.9	26.8
Food from Soya	23.8	27.2	11.6	6.9	14.0	16.6
Food made from g/nuts	38.1	48.2	30.8	41.3	35.5	39.1
Any food from other beans	26.8	25.0	38.4	31.2	32.3	30.7
Milk and milk products	9.5	3.1	3.0	3.2	2.7	4.1
Oils and fats	66.7	61.2	62.1	61.5	62.9	62.7

Sweets	45.8	39.3	33.3	32.1	34.4	36.7
Beverages e.g. .coffee/tea	27.4	23.2	25.3	15.1	19.9	21.9
Spices, condiments	4.2	4.0	2.0	2.8	4.3	3.4
Mean number of foods eaten	3.8	3.7	3.8	3.8	4.0	3.8

About 31 percent of women of child-bearing age (15-49 years of age) had consumed beans, 30.8 to 48.2 percent had consumed groundnut containing foods, while less than 15 percent (6.9 to 27.2 percent) had consumed food containing soya beans (Figure 5). This suggests that most of the women do not consume significant quantities of these commodities being promoted by INVC. Utilization component of any nutrition related interventions require comprehensive promotion including cooking demonstrations in all the five districts to foster positive behavior change.

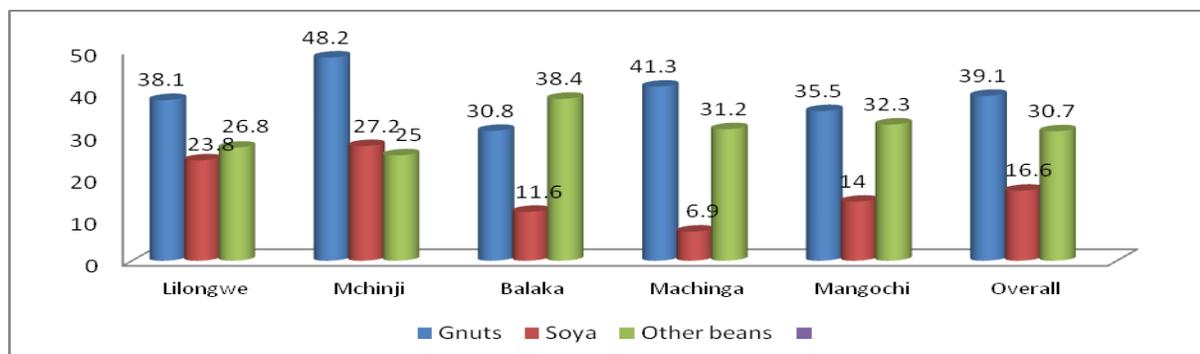


Figure 5: Consumption of groundnut, soya bean and other beans by women age 15 to 49 years

A diet comprising of at least 4 out of the 6 food groups is a highly diversified diet (HDD) while a diet comprising of 2 or fewer food groups is a low diversified diet (LDD). Food consumed the day before the survey was therefore analyzed to establish the dietary diversity status of women of child bearing age. Overall 64.6 percent had achieved high dietary diversity level (Figure 6). It is of concern that 12.9 percent of the women failed to consume a diversified diet. It should be noted that the wider the variety of foods consumed the higher the likelihood that the diet will meet the daily energy and nutrient requirements of the consumer.

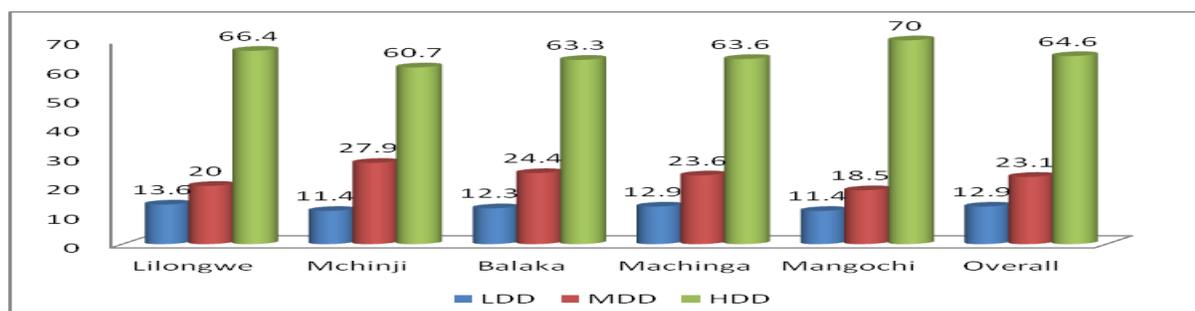


Figure 6: Dietary diversity for women 15 -49 years

Educational level of both the household head and the mother appear to be an important factor affecting dietary diversity of women of child bearing age as shown in Table 18. Consistently the proportion of the women with the highest dietary diversity increased as education level increased.

Table 18: Dietary Diversity of women 15-49 years by education of Household head and caregiver

DD level	Education of household head			Education of caregiver		
	None	Primary	Secondary	None	Primary	Secondary
LDD	27.7	13.2	13.4	22.6	11.2	5.4
MDD	20.4	23.4	22.2	28.6	21.1	9.9
HDD	51.8	63.5	64.4	48.9	67.7	84.7

The actual types of food predominately eaten by the women at different levels of dietary diversity reveal that cereals and vegetables are consumed universally. However, it is mainly the HDD households who are likely to consume animal foods and legumes (Table 19). The LDD and MDD households are therefore at risk of a variety of micronutrient deficiencies. Clearly the higher the diversity, the more nutritious the diet becomes.

Table 19: Typical foods consumed day before the survey by dietary diversity level

Lowest dietary diversity (\leq 2 food groups) LDD	Minimum dietary diversity (3 food groups) MDD	High dietary diversity (>4 food groups) HDD
Cereals	Cereals	Cereals (staples)
Vegetables	Vegetables	Vegetables
	Legumes	Oils and fats
		Legumes
		Animal foods

In Malawi vitamin A deficiency and nutritional anaemia often due to iron deficiency, are among the micronutrient deficiencies of public health concern. Attention should therefore be paid to ensure that micronutrient nutrition that includes vitamin A and iron are adequately covered in any nutrition intervention implemented. Consumption of vitamin A and iron rich foods were assessed from the 24 hour dietary recall data and the results are presented in Figure 7. It is impressive that almost 90 percent of the women consumed vitamin A rich foods. It is of grave concern that in all the districts, the proportion of women that consumed iron rich food was less than 30 percent except for Mangochi and Machinga.

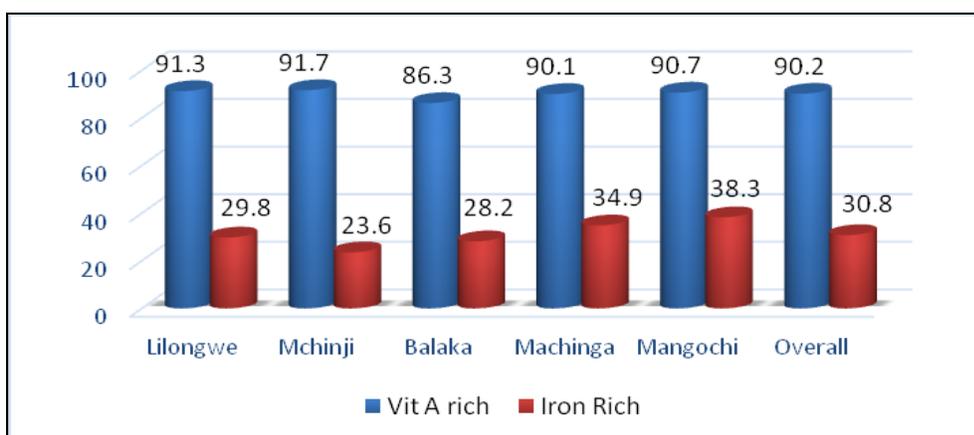


Figure 7: Consumption of Vitamin A rich and Iron rich foods by district

3.7 Communication (drama performances and Radio)

Communication utilizing Pakachere travelling theatre, Pakachere community drama groups and the radio is being implemented in Lilongwe and Mchinji. The current survey captured data on whether or not these have reached the communities and if so what messages have reached the people.

The results are presented in Tables 20 through 21. Overall a significant proportion had heard radio programme (61.3%) while only 21.6 percent had attended theatre performances. Even fewer beneficiaries had seen theatre performance and had heard a radio programme.

While few individuals had attended theatre performances it appears that the community drama groups are not fully functional as indicated by the fewer beneficiaries (5.9%) that had attended them. However it is encouraging that a significant proportion were able to recall maternal and child nutrition messages and water and sanitation.

Table 20: Attendance of drama performances and radio listening by District

District	Lilongwe		N	Mchinji		Both districts	
	n	%		%	n	%	
Beneficiaries who had seen drama performance	53	16.2	95	26.6	148	21.6	
Beneficiaries who had heard radio programme	192	58.7	224	63.6	416	61.3	
Beneficiaries who had seen drama performance and heard radio programme	33	10.3	52	14.9	85	12.7	
Performing group	Pakachere Travelling theatre			Pakachere community drama group			
District	Lilongwe	Mchinji	Overall	Lilongwe	Mchinji	Overall	

Percent attended performances	15.4	22.3	19.1	3.3	8.3	5.9
Recalled messages from theatre performances (%):						
Maternal ANC and Diet	35.7	45.3	41.0	5.2	14.4	10.0
Exclusive Breastfeeding	6.5	28.3	27.5	5.2	14.4	10.0
Complementary Feeding	23.9	24.6	24.3	5.2	14.4	10.0
Water and Sanitation	21.2	28.3	25.1	4.2	14.4	10.0

Theatre shows were perceived to be beneficial as it was reported by 53.4 percent who had attended the shows that they learned about disease prevention. Some beneficiaries even felt that drama contributed to reduction in gender based violence (Table 21). However quantification of the findings could not be done since only quantitative tools were used for data collection.

Table 21: Benefits of drama performances by district

Parameter	Lilongwe		Mchinji		Overall	
	n	%	n	%	n	%
Benefits of theatre performances:						
Reduced disease occurrences	18	48.6	35	56.5	53	53.5
HIV/AIDS prevention	16	43.2	20	32.3	36	36.4
Increased nutrition knowledge	3	8.1	4	6.5	7	7.1
Reduced gender based violence	0	0.0	3	4.8	3	3.0

Relatively more people had heard radio nutrition related messages either in a full radio programme or jingles (Table 22). The messages recalled and the perceived benefits are similar to those indicated for theatre and community drama. These channels should be utilized for further dissemination of the messages in addition to the care group model.

Table 22: Proportion of people heard radio message on nutrition

Parameter	Lilongwe		Mchinji		Overall	
Heard Radio Message	192	58.7%	224	63.6%	416	61.3%
Type of Radio Programme:						
Full radio programme	151	78.6%	162	72.3%	313	75.2%
PSA Jingles	41	21.3%	62	27.6%	103	24.7%
Topics remembered:						
Maternal ANC and Diet	128	68.8%	143	65.5%	271	67.1%
Exclusive Breastfeeding	46	24.6%	87	39.7%	133	32.8%
Complementary Feeding	75	40%	89	30.3%	164	40.3%
Water and Sanitation	42	23.0%	84	38.5%	126	31.4%
Importance of 6 food groups	25	6.1%	19	4%	44	2.2%
HIV/AIDS prevention	2	0.5%	0	0.0	2	0.5%
Gender based violence	1	0.2%	0	0.0	1	0.2%

Benefits of Radio programmes:

Low diseases occurrences	56	31.5%	84.4	41.8%	140	36.9%
Improved nutrition at household level	113	63.5%	107	53.2%	220	58%
Preventive in maintaining good health and family	9	5.1%	10	5.0%	19	5.0%

Further analysis was done to find out whether or not attendance of drama and radio listening may influence IYCN practices such as exclusive breastfeeding and consumption of minimum acceptable diet. In Lilongwe and Mchinji, 58 children were aged 0-5 months and 40 of these were being breastfed exclusively. There appear to be a positive relationship between radio listening and drama attendance with exclusive breastfeeding (Table 23). A significant proportion of children whose mothers participated in both were being exclusively breastfed (0-5 months) and received minimum acceptable diet (6-23 months). Use of both theatre and radio should therefore be strengthened in disseminating appropriate IYCN practices. Also presented in Table 23 is proportion of 6-23 month children whose mothers attended drama, listened to radio, participated in both and those without exposure to any in relation to consumption of minimum acceptable diet. Among the participating mothers, high proportions were those that had fed their children minimum acceptable diet.

Table 23: Effect of drama attendance and radio listening on IYCN and maternal dietary pattern

Indicator	Attended drama		Heard radio Jingles		Heard both		No exposure	
	n	%	n	%	n	%	n	%
Percent children receiving minimum acceptable diet	18	77.8	109	64.2	25	88.0	82	61.0
Percent 0-5 months children exclusively breastfed	2	50.0	28	75.0	9	77.8	19	57.9
Percent women 15-49 years who ate diversified diet	52	67.3	319	64.9	86	76.7	209	58.9
Mean number of foods eaten by women 15-49 years with HDD	35	4.7	207	4.5	66	4.6	123	4.3
Mean number of foods eaten by all women 15-49 years	52	4.1	319	3.8	86	4.1	209	3.6

Similar results are also seen for women of child bearing age. A higher proportion (76.7%) of women that had attended drama performance and engaged in radio listening had consumed a diversified diet compared with 67.3 percent and 64.9 percent of those that had only attended drama performance or listened to radio jingles respectively. Mean number of foods consumed were hardly affected (Table 22).

3.8 General Commentary and observations

Delays were experienced once a team entered a village due to a number of reasons which included the following:

- Some beneficiary names recorded in the data base were not known by the village leadership. In most villages especially in the Centre and the South, once a woman is married she uses her husband's first name as her surname. The name however changes once she is divorced to the first name of the new husband she is married to. The issue is further complicated by the fact that the woman often has another name she is usually known with in her village.
- Some of the sampled women had moved away from the village because they had gone to seek *ganyu* across the borders to Zambia or Mozambique. Others had married and opted to live at the husband's village.
- There were five beneficiaries who had passed on.
- A significant number of beneficiaries were not at home on the interview dates as most of them were engaged in small scale businesses.
- On day of data collection, two of the sampled women were sick and could not be interviewed.

The total number of sampled beneficiaries that had to be replaced is 264 (16.4%) as shown in Table 24. Before replacement, the teams consulted the village heads, lead mothers, promoters whenever possible for those who were not known. Those who were not at home, their homes were visited two times in the day and the following day before they were replaced.

Table 24: Number of beneficiaries replaced by reason and District

Reasons for replacement	Mchinji	Lilongwe	Balaka	Machinga	Mangochi	Total
Not at home	14	15	18	22	19	88
Moved away	21	20	11	6	19	77
No such person	15	17	16	29	13	90
Death	1	0	2	1	1	5
Refused to participate	2	0	0	0	0	2
Hospitalized	1	0	1	0	0	2
Total	54	52	48	58	52	264

It was further observed that the promoters are responsible for an area too large for them to keep track of their area so that they did not know some of the caregroup members. Likewise, a number of lead mothers indicated that they had interacted with their promoter only during the group formation. During data collection most of the promoters could not be reached by phone. In addition the nutrition coordinators are hardly known by the lead mothers let alone the caregroup members in all the districts except Machinga to some extent. Hence, supportive supervision at all levels is required. It is further suggested that a systematic way be devised to keep track of the beneficiaries and caregroup names to ensure that the data base is regularly updated.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

Dietary pattern for infants and young children in all the five districts were problematic in that very few children had been fed minimum acceptable diets. A relatively high proportion was fed with acceptable meal frequency but the quality of infant and young children's diet was low. It implies that the complementary food fed is of poor quality and composed of a limited number of food groups. Cereal grains eaten with vegetables are the main stay of the diet for both the children and their mothers. All these are bulky and have low energy and nutrient density, hence difficult for the children to meet their recommended daily nutrient requirements. Children, because of their small stomachs and high nutrient requirements, need to be fed at least 4 times but with highly nutritious feeds.

Most of the households had access to safe water sources mainly the borehole. The fact that a significant proportion had diarrhoea during the dry season may indicate unsanitary environment and that care of the water at home is inadequate leading to contamination. Early introduction of fluids and other food should strongly be discouraged because it limits the frequency of breastfeeding by the infant and exposes the baby to the risk of infections.

While production of legumes is promoted to increase productivity, special effort should be made to intensify the utilization component. This will entail keeping some for home consumption and the surplus for sale to meet other household requirements. Actual cooking demonstrations and processing should be done to improve skills of the beneficiaries so that consumption of legume food products at household level is increased and dietary diversity improved.

The few individuals, who attended drama groups, appear to have benefited in the following areas; maternal and child nutrition, diet, sanitation and health. Promotion of these should be strengthened and scaled up to other districts as well. To ensure that many people patronize theatre, every opportunity that avails in the village such as religious meetings should be used to widely publicize the events.

Frontline workers should continue to include MIYCN messages to mothers at any opportunity that avails itself. It is important to include even cooking demonstrations using locally available foods to encourage the mothers to adopt the appropriate maternal, infant and young child feeding practices. For the frontline workers to effectively convince the communities they work with, separate training sessions in MIYCN should be designed targeting all frontline workers and community leadership for the care groups including lead mothers/fathers.

It was observed that the promoters are responsible for an area too large for them to keep track of so that they did not know some of the care groups and their members. In addition the nutrition coordinators are hardly known by the lead mothers let alone the care group members in all the districts except Machinga to some extent. Hence, supportive supervision at all levels is required. It is further suggested that a systematic way be devised to keep track of the beneficiaries and caregroup names to ensure that the data base is regularly updated.

6.0 REFERENCES

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7.0 ANNEXES

Annex 1: Questionnaire for the Nutrition Outcome Survey for Monitoring and Evaluation of USAID/FtF-INVC Project: Lilongwe, Mchinji, Balaka, Mangochi and Machinga

Introduction: Enumerators, please introduce the purpose of the survey and state confidentiality of the responses. Please tell the respondent that participation in this study is voluntary and that s/he will not receive any direct benefit due to participation in this study. Use the introductory sheet provided to you.

INFORMED CONSENT MODULE: REQUEST FOR CONSENT [in Chichewa]:

How are you? My name is _____ I am here with a group of research workers from Lilongwe University of Agriculture and Natural Resources, Bunda Campus, a project called Feed the Future –Integrating Nutrition in Value Chains (INVC). The project aims at helping communities such as this one to grow more legumes to increase the harvest of high-value crops such as groundnuts, and soy beans that can be produced and sold. The aim is to improve the nutrition and incomes of households in this community by helping the local community to organize themselves and find ways to produce more food and be able to sell the extra.

This interview is meant to help us understand the current state of nutrition and health in this community. You have been randomly selected to be part of the group of households to provide the information needed to assess the existing situation. The information is needed to help clarify what are the best ways to assist the community to develop itself. Among other things, I will ask you a number of questions regarding your infant and young child feeding practices, types of foods consumed, health, your own dietary practices.

All the answers you give in this interview will be treated with strict confidentiality. The answers we get from you will be treated completely anonymously. Your name or the names of your family members or those related to you will NOT be used to identify your answers. No one will be able to identify your answers with you or your family members.

- Are you willing to answer these questions? YES/NO.
- Thank you for accepting to participate.

Muli bwanji, dzina langa ndine _____ ndabwera ndi anzanga akafukufuku kuchokera ku sukulu ya za malimidwe ku Bunda, kudzela mu polojekiti yotchedwa kudyetsera tsogolo la mawa – imene ikubweretsa pamodzi madyedwe oyenera ndi ndondomeko zokhuza zakudya.

Zolinga za pulojekiti imeneyi ndi kulimbikitsa ulimi wa mbeu za mtundu wa nyemba monga mtedza, **ndi soya ndicholinga chofuna kuchulukitsa kakolodwe ka mbeuzi zomwe ndi zaphindu ku thanzi lathu ndipo kuti zikakolodwe zambiri tingathenso kugulitsako. Pakutero titha kupititsa patsogolo thanzi komanso chuma mmabanja athu podzipezera tokha njira zimene zingalimbikitse ulimi.**

Cholinga cha kucheza nanu ndi kuti tidziwe za madyedwe ndi za umoyo kudera lino. Nyumba yanu ndi imodzi mwa nyumba zimene zasankhidwa kudzera m'mayere ndi cholinga choti tidziwe mwatchutchutchu za m'mene nkhani za umoyo ndi madyedwe zikuyendera kuno. Zimene mutiuzi zithandizira kuunikira njira zimene zingathandize dera lino kuti litukuke. Mwazina, ndikufusani mafunso okhudzana ndi kadyetsedwe ka ana ang'ono, mitundu ya zakudya, za umoyo, ndi zamadyedwe ayinuyo.

Zonse zimene tikambilane zikhala za chinsinsi, Mayankho anu onse asungidwa mwa chinsinsi, komanso dzina lanu kapena la wina aliyense wa pakhomo pano silikagwilitsidwa ntchito.

- **Ndinu okonzeka kutenga nawo gawo poyankha mafunso? INDE/AYI _____**
Zikomo kwambiri polola kutenga nawo mbali pazokambilana zanthu.

Date of interview (dd/mm/yy): ____/____/2015

Time Interview started ____:____ Time Interview Ended ____:____

QUESTIONNAIRE NUMBER: _____

Researchers & supervisor Details

		Code
Enumerator name		
Supervisor name		
Interview date		
Respondent: Beneficiary of NASFAM, CADECOM or FUM?	1 =NASFAM 2 =CADECOM 3 =Farmers Union of Malawi (FUM)	
District →see codes below:		
EPA		
Traditional Authority Name		
Group Village Headman (GVH) name		
Name of village		
Name of household head		

District Code

- 1=Lilongwe
- 2=Mchinji
- 3=Balaka
- 4=Machinga
- 5=Mangochi

A: GENERAL INFORMATION AND HOUSEHOLD COMPOSITION

Please provide me with information on the composition of your household as per the table below. Please note: A **“household”** includes all members of a common decision making unit (usually within one residence) that are sharing the same household resources. These include members who may be away from home e.g. school children attending boarding schools.

A0 Household size *pakhomo pano mulipo angati?* | _____ |

		A1	A2	A3	A4	A5	A6
No.	Household (HH) member NAME: Start with Household Head followed by spouse (if any) then followed by rest of household members	WHAT IS THE RELATIONSHIP OF THIS HH MEMBER TO THE HH HEAD <i>(see RELATIONSHIP CODES below)</i>	WHAT IS THE AGE OF THIS HH MEMBER? <i>(years)</i> >years and months if is under 5yrs	IS THIS HH MEMBER MALE OR FEMALE? 1=Male 2=Female	LEVEL OF FORMAL EDUCATION 1-None 2-Primary School; 3-Secondary.School; 4-Post secondary 5-University 6-Under age 7- Don't Know IF NONE go to A6	HOW MANY YEARS OF FROMAL SCHOOLING HAS THIS HH MEMBER HAD AS OF 2015 <i>(years)</i>	WHAT IS THE MAIN OCCUPATION OF THIS HH MEMBER <i>(see code below table)</i>
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

RELATIONSHIP CODES:

1. Head
2. Husband
3. 1st wife
4. 2nd wife
5. 3rd wife
6. 4th wife
7. Son
8. Daughter
9. Father
10. Mother
11. Brother
12. Sister
13. Cousin
14. Other relatives
15. Other non-relatives
16. Worker lives within HH
17. Worker lives outside HH
18. Wife

OCCUPATION CODE:

1. Farmer
2. School Teaching
3. Artisan/Blacksmith
4. Civil servant
5. Trader/Shopkeeper
6. Seasonal Agric. Labourer (*seasonal ganyu*)
7. Permanent agricultural labourer (permanent perm)
8. Casual labor
9. Seasonal non-agric Labourer (*non agric ganyu*)
10. Permanent non-agric labour (mining, transport)
11. Student
12. Housework
13. Retired
14. Military/Police
15. Fisherman
16. Other specify
99. None (*only for second, or those under elderly care incapacitated*)

B. WATER AND SANITATION

B1. Source of drinking water (Kodi madzi akumwa mumatunga kuti) <input type="checkbox"/>		
1. Piped water in dwelling	2. Piped into yard or plot	3. Public tap
5. Protected dug well	6. Protected spring	7. Rainwater collection
9. Unprotected spring	10. Pond, river or stream	11. Tanker-truck, vendor
		12. Other (Specify)
B2. Distance to water source and back (Mumatenga nthawi yaitali bwanji kupita ndi kubwerako)		
Number of . Minutes.....		
Water on premises.....888		
Do not know.....999		
B3. Type of toilet facility for household use (Kodi chimbudzi chanu ndi chotani) <input type="checkbox"/> (Enumerator verify the toilet facility)		
1. Flush to sewage system or septic tank	2. Pour flush latrine (water seal type)	3. Improved pit latrine (e.g. VIP)
4. Traditional pit latrine	5. Open pit	6. Bucket
		7. No facilities or bush or field
		8. Other specify
B4 Location of toilet facility (Chimbudzi chanu chili pati) <input type="checkbox"/>		
1 Within dwelling/yard/compound		
2 Outside dwelling/yard/compound		
B5 Disposal of young children stools of under 3yrs(Kodi akachita chimbudzi mumachisamalabwanji?) <input type="checkbox"/>		
1. Children always use toilet or latrine		
2. Thrown into toilet or latrine		
3. Thrown outside the yard		
4. Buried in the yard		
5. No young children in household		
6. Other (specify)_____		
C. MORBIDITY (ILLNESS RECALL)		
[Repeat for each child under 3 years] Bwerezani mafunsowa pa ana onse osapitirira zaka zitatu pakhomopo		
C1 In the last 2 weeks, has NAME had 3 or more semi-solid or liquid stools (acute diarrhea) in a 24-hour period? Kodi mwanayi (tchulani dzina) anatsegulako m'mimba masabata awiri apitawa? 1. YES 2. NO >> skip to C11 3. Don't Know >> skip to C11	Child1 (youngest) <input type="checkbox"/>	Child 2 <input type="checkbox"/>
C2 For how many days did NAME have the 3 or more semi-solid or liquid stools (acute diarrhea) in a 24-hour period? Kodi mwana ameneyi anatsegula mmimba masiku angati?	DAYS <input type="checkbox"/>	DAYS <input type="checkbox"/>
C3 During the time NAME had 3 or more semi-solid or liquid stools in a 24-hour period, was there any blood in the stool? Panthawi imene mwanayu(dzina lake) amatsgegula mmimba, chimbudzi chake chinali ndi magari? 1. YES 2. NO 3. Don't Know	<input type="checkbox"/>	<input type="checkbox"/>
C4 Did NAME receive ANY treatment for the diarrhea? Kodi mwanayi (dzina) analandira chithandizo china chili chonse pamene amatsegula mmimba? 1. YES 2. NO 3. Don't Know	<input type="checkbox"/>	<input type="checkbox"/>

<p>C5 When (child name) had diarrhea, what did you do? <i>Panthawi imene mwanayu amatsegula m'mimba, munapangapo chiani?</i></p> <ol style="list-style-type: none"> 1. Cease breastfeeding/giving food 2. Give salt for diarrhea at home 3. Go to church / preacher 4. Go to traditional healer 5. Go to health centre-post / hospital 6. Nothing 7. Other (specify) <p>Multiple answers possible</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C6. Which treatment was given to NAME for the diarrhea? (indicate all that apply) <i>Mwanayi(tchulani dzina) analandira chithandizo chanji atatsegula mmimba</i></p> <ol style="list-style-type: none"> 1 Oral Rehydration Therapy (ORT) 2 Zinc Supplements 3 Local/Homemade Syrups 4 Continued Breastfeeding Or Feeding 5 Other Specify <p>Multiple answers possible</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C7. When (NAME) had diarrhea, did the intake of fluid change ? <i>(Nthawi imene mwanayi (tchulani dzina) amatsegula mmimba kodi kaperekedwe kazakumwa kanasintha)?</i></p> <p>1. YES 2. NO 3 Don't know</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C8. If yes, did the fluid intake change in relation to the usual amount ? <i>(Ngati Inde kanasintha motani)?</i></p> <p>1. Less 2. About the same 3. More 4. Nothing to drink</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C9. When (NAME) had diarrhea, did the intake of food change <i>(Nthawi imene mwanayi (tchulani dzina) amatsegula mmimba kodi kaperekedwe kazakudya kanasintha)?</i></p> <p>1. YES 2. NO 3 Don't know</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C10. If yes how did the food intake change in relation to the usual amount? <i>Ngati Inde kanasintha motani)?</i></p> <p>1. Less 2. About the same 3. More 4. Nothing to eat</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C11. In the last 2 weeks, has NAME had a fever? <i>Kodi mwana wanuyu anantenthako thupi masabata awiri apitawa?</i></p> <p>1. YES 2. NO >> skip to C16 3. Don't Know >> skip to C16</p>	<input type="checkbox"/>	<input type="checkbox"/>

<p>C12 .When (NAME) had fever did the intake of fluid change ?(Nthawi imene mwanayi (tchulani dzina) anatentha thupi kodi kaperekedwe ka zakumwa kanasintha? 1. YES 2. NO 3. Don't Know</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C13. If yes did the fluid intake change in relation to the usual amount ? Ngati inde kanasintha bwanji? 1. Less 2. About the same 3. More 4. Nothing to drink</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C14. When (NAME) had fever, did the intake of food change Nthawi imene mwanayi (tchulani dzina) anatentha thupi kodi kaperekedwe ka zakudya kanasintha? 1. YES 2. NO 3. Don't Know</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C15. If yes how did the food change relation to the usual amount? Ngati inde kanasintha bwanji 1. Less 2. About the same 3. More 4. Nothing to eat</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C16. During the last 2 weeks, has NAME had malaria Kodi mwana wanuyu anadwalapo malungo masabata awiri apitawa? 1. YES 2. Yes without testing 3. NO >> skip to D01 3. Don't Know>> skip to D01</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C17. When (NAME) had malaria did the intake of fluid change ? Nthawi imene mwanayi (tchulani dzina) anadwala malungo kodi kaperekedwe ka zakumwa kanasintha? 1. YES 2. NO 3. Don't Know</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C18. If yes did the fluid intake change in relation to the usual amount ? Ngati inde kanasintha bwanji Less 2. About the same 3. More 4. Nothing to drink</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C19. When (NAME) had malaria, did the intake of food change Nthawi imene mwanayi (tchulani dzina) anatentha thupi kodi kaperekedwe ka zakudya kanasintha? 1. YES 2. NO 3. Don't Know</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>C20. If yes how did the food change in relation to the usual amount? Ngati inde kanasintha bwanji 1. Less 2. About the same 3. More 4. Nothing to eat</p>	<input type="checkbox"/>	<input type="checkbox"/>

MODULE D: INFANT AND YOUNG CHILD FEEDING

Enumerator Instructions:

Household identification (in data file, each respondent must be matched with the HH ID)

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Ask these questions of the primary caregiver of each child aged 0–35 months in the household. Check to see if EACH caregiver has given consent to be interviewed in INFORMED CONSENT MODULE. If a caregiver has not yet given consent, return to Module B and gain caregiver consent before proceeding. You should carry duplicate copies of this module in case there are more than 5 children 0-35 months old in the household.

No.	Question	Response codes	Child 1	Child 2	Child 3	Child 4	Child 5
D01	CAREGIVER'S ID CODE FROM THE HOUSEHOLD ROSTER		<input type="text"/>				
D02	CHILD'S ID CODE FROM THE HOUSEHOLD ROSTER		<input type="text"/>				
D03	What is [child's name]'s sex?	1 = Male 2 = Female					
D04	<p>Now I would like to ask you some questions about [child's name]. <i>Tsopano ndikufunsani mafunso okhudzana ndi (dzina la mwana)</i></p> <p>What is the date of birth of [child's name]? <i>Kodi (dzina la mwana) anabadwa liti?</i></p> <p>Does [child's name] have a health passport or any other written document with the birth date recorded? <i>Kodi (dzina la mwana) ali ndi bukhu la kuchipatala kapena china chiri chose chimene palembeda tsiku limene (dzina la mwana) anabadwa?</i></p> <p>IF THE HEALTH PASSPORT CONFIRMS THE INFORMATION IS CORRECT, RECORD THE DATE OF BIRTH AS DOCUMENTED ON THE PASSPORT.</p>		<input type="text"/> Day <input type="text"/> Month <input type="text"/> Year				

D05	How old was [child's name] at [his/her] last birthday? RECORD AGE IN COMPLETED YEARS		<input type="text"/>	Years	Years	Years	Years	Years				
D06	How many months old is [child's name]? RECORD AGE IN COMPLETED MONTHS		<input type="text"/> <input type="text"/>	Months	Months	Months	Months	<input type="text"/> <input type="text"/> Months				
D07	CHECK D04, D05, AND D06 TO VERIFY CONSISTENCY A) IS THE YEAR RECORDED IN D04 CONSISTENT WITH THE AGE IN YEARS RECORDED IN D05? B) ARE YEAR AND MONTH OF BIRTH RECORDED IN D04 CONSISTENT WITH AGE IN MONTHS RECORDED IN D06? IF THE ANSWER TO A OR B IS 'NO,' RESOLVE ANY INCONSISTENCIES. IF THE BIRTHDATE WAS RECORDED ON A HEALTH PASSPORT, THIS MAY BE USED AS THE CORRECT DATA SOURCE.	1 = Yes 2 = No 1 = Yes 2 = No										
D08	CHECK D06. IS THE CHILD UNDER 36 MONTHS?	1 = Yes 2 = No >> end module 9 = Don't know >> end module										

EXCLUSIVE BREASTFEEDING AND MINIMUM ACCEPTABLE DIET <i>Kuyamwitsa mwana mwa kathithi ndi kudya koyenera</i>							
D09	CHECK QUESTION D05. IS THE CHILD UNDER 2 YEARS OF AGE?	1 = Yes 2 = No >> D28					
D10	Has [child's name] ever been breastfed? <i>Kodi mwanayu (tchulani dzina la mwana) adayamba wayamwako chibadwire?</i>	1 = Yes 2 = No >> skip to D14 9 = Don't Know >> skip to D14					
D11	Is (child name) still breastfed? <i>Kodi (dzina la mwana) akadayamwabe?</i>	1 = Yes 2 = No >> skip to D14					
D12	Was [child's name] breastfed yesterday during the day or at night? <i>Kodi (dzina la mwana) dzulo anayamwako usana kapena usiku?</i>	1 = Yes >> skip to D14 2 = No 9 = Don't Know					
D13	<i>Sometimes babies are fed breast milk in different ways, for example by spoon, cup, or bottle. This can happen when the mother cannot always be with her baby. Sometimes babies are breastfed by another woman or given breast milk from another woman by spoon, cup, bottle, or some other way. This can happen if a mother cannot breastfeed her own baby. (Nthawi zina ana angapatsidwe mkaka wam'mawere, mwatchitsanzo kugwiritsa ntchito sipuni, kapu ngakhale botolo, izi zikhoza kuchitika pamene mwana sangakhale ndi mayi wake nthawi zonse, Nthawi zina mwana amayamwitsidwa ndi mai wina kapena kupatsidwa mkaka wammawere kuchokera kwa mai wina pogwiritsa ntchito sipuni, kapu kapena botolo. Izi zikhoza kuchitika ngati mai sangathe kuyamwitsa mwana wake.</i>						
	Did [child's name] consume breast milk in any of these ways yesterday during the day or at night? <i>Kodi (dzina la mwana) anapatsidwa mkaka wam'mawele kudzera munjira zimenezi dzulo?</i>	1 = Yes 2 = No 9 = Don't Know					
No.	Question	Response codes	Child 1	Child 2	Child 3	Child 4	Child 5
D14	Now I would like to ask you about some medicines and vitamins that are sometimes given to infants. <i>Tsopani ndikufuna kuti ndikufunsi za mavitamin kapenda mankhwala amene ana</i>	1 = Yes 2 = No 9 = Don't Know					

	<i>amapatsidwa</i> Was [child's name] given any vitamin drops or other medicines as drops yesterday during the day or at night? <i>Kodi (dzina la mwana) anapatsidwako mankhwala ena alionse dzulo?</i>						
D15	Was [child's name] given Thanzi ORT yesterday during the day or at night? <i>Kodi (dzina la mwana) anapatsidwako thanzi dzulo?</i>	1 = Yes 2 = No 9 = Don't Know					
<p>READ THE QUESTIONS BELOW. READ THE LIST OF LIQUIDS ONE BY ONE AND MARK YES OR NO, ACCORDINGLY. <i>Funsani mafunso ali mmunsiwa palokha palokha ndipo ayankhe eya kapena ayi?</i> Next I would like to ask you about some liquids that [child's name] may have had yesterday during the day or at night. READ THE LIST OF LIQUIDS STARTING WITH 'PLAIN WATER'. <i>Tsopano tikufunsani zakumwa zimene anamwako dzulo mwanayu (dzina la mwana)</i></p>							
D16	Plain water? <i>Madzi akumwa</i>	1 = Yes 2 = No 9 = Don't Know					
D17	Infant formula such as lactogen ? <i>Mkaka wa mwana wa kusitolo (Okhala mu chitini)</i>	1 = Yes 2 = No >> skip to D19 9 = Don't Know >> skip to D19					
D18	How many times yesterday during the day or at night did [child's name] consume any formula? PROBE: ANY MORE? <i>Kodi (dzina la mwana) anamwa kangati mkaka wa wana waku sitolo?</i>	98 = Don't know	<input type="text"/>				
			Times	Times	Times	Times	Times
D19	Did [child's name] have any milk such as tinned, powdered, or fresh animal milk? <i>Kodi (dzina la mwana) dzulo anamwako mkaka waufa, wamchitini monga Nido, kapena wa mkaka wa ziweto.</i>	1 = Yes 2 = No >> skip to D21 9 = Don't Know >> skip to D21					
D20	How many times yesterday during the day or at night did [child's name] consume any milk? PROBE: ANY MORE? <i>Kodi (dzina la mwana) dzulo anamwa kangati mkaka wina uliwonsewo</i>	Number of times 98 = Don't know	<input type="text"/>				
			Times	Times	Times	Times	Times

No.	Question	Response codes	Child 1	Child 2	Child 3	Child 4	Child 5
D21	Did [child's name] have any juice or juice drinks? <i>Kodi (dzina la mwana) anamwako juwisi wina aliyense ?</i>	1 = Yes 2 = No 9 = Don't Know					
D22	Clear broth or msuzi? <i>Anamwako nsuzi wina uliwonse?</i>	1 = Yes 2 = No 9 = Don't Know					
D23	Yogurt? <i>Nanga yogati kapena chambiko?</i>	1 = Yes 2 = No >> skip to D25 9 = Don't Know>> skip to D25					
D24	How many times yesterday during the day or at night did [child's name] consume any yogurt? PROBE: ANY MORE? <i>Yogatiyu kapena chambiko anamwa kangati dzulo?</i>	Number of times 98 = Don't know	<input type="text"/> <input type="text"/>				
			Times	Times	Times	Times	Times
D25	Did [child's name] have any thin porridge? <i>Kodi (dzina la mwana) anamwako phala la madzi-madzi?</i>	1 = Yes 2 = No 9 = Don't Know					
D26	Any other liquids such as thobwa? <i>Nanga chakumwa china chili chonse ngati thobwa?</i>	1 = Yes 2 = No 9 = Don't Know					
D27	Any other liquids? <i>Nanga chakumwa china chili chonse poonjezera tatchula kale zija?</i>	1 = Yes 2 = No 9 = Don't Know					

DIETARY DIVERSITY

No.	Question	Response codes	Child 1	Child 2	Child 3	Child 4	Child 5
	<p>Please describe everything that [child's name] ate yesterday during the day or night, whether at home or outside the home. <i>Fotokozani zakudya zonse zimene (dzina la mwana) anadya dzulo kunyumba kuno kapena koyenda, kuyambira mmawa kutacha mpaka madzulopamene amakagona.</i></p> <p>A) Think about when [child's name] first woke up yesterday. Did [child's name] eat anything at that time? IF YES: Please tell me everything [child's name] ate at that time. PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE. THEN CONTINUE TO PART B). <i>NGATI ANADYA, TCHULANI ZAKUDYA ZIMENE ANADYAZO, YESETSANI KUFUNSITSITSA</i> IF NO, CONTINUE TO PART B). <i>NGATI NDI AYI PITILIZANI KU PART B</i></p> <p>B) What did [child's name] do after that? Did [child's name] eat anything at that time? IF YES: Please tell me everything [child's name] ate at that time. PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE. REPEAT QUESTION B) UNTIL THE RESPONDENT SAYS THE CHILD WENT TO SLEEP UNTIL THE NEXT DAY. IF RESPONDENT MENTIONS MIXED DISHES LIKE A PORRIDGE, SAUCE, OR STEW, PROBE:</p> <p>C) What ingredients were in that [mixed dish]? PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE <i>FUNSITSITSANI KUTI KU CHAKUDYAKO ANATHIRAKO CHIANI?</i></p> <p>AS THE RESPONDENT RECALLS FOODS, UNDERLINE THE CORRESPONDING FOOD AND ENTER '1' IN THE RESPONSE BOX NEXT TO THE FOOD GROUP. IF THE FOOD IS NOT LISTED IN ANY OF THE FOOD GROUPS BELOW, WRITE THE FOOD IN THE BOX LABELED 'OTHER FOODS.' IF FOODS ARE USED IN SMALL AMOUNTS FOR SEASONING OR AS A CONDIMENT, INCLUDE THEM UNDER THE CONDIMENTS FOOD GROUP. ONCE THE RESPONDENT FINISHES RECALLING FOODS EATEN, READ EACH FOOD GROUP WHERE '1' WAS NOT ENTERED IN THE RESPONSE BOX, ASK THE FOLLOWING QUESTION AND ENTER '1' IF RESPONDENT SAYS YES, '0' IF NO, AND '9' IF DON'T KNOW: Yesterday, during the day or night, did [child's name] drink/eat any [food group items]?</p>						
	OTHER FOODS: PLEASE WRITE DOWN OTHER FOODS (TO THE RIGHT OF THIS BOX) THAT RESPONDENT MENTIONED BUT ARE NOT IN THE LIST BELOW. THIS WILL ALLOW THE SURVEY SUPERVISOR OR OTHER KNOWLEDGEABLE INDIVIDUAL TO CLASSIFY THE FOOD LATER.		WRITE FOODS MENTIONED HERE:				
No.	Question	Response codes	Child 1	Child 2	Child 3	Child 4	Child 5

D28	Food made from grains such as bread, rice, noodles, porridge, nsima , any other foods made from millet, sorghum, maize, rice, wheat or other locally available grains. ZAKUDYA ZOKHUTITSA:	1 = Yes 2 = No 9 = Don't Know					
D29	Pumpkin, carrots, orange/yellow fleshed sweet potatoes, or other locally available orange/yellow fleshed vegetables and tubers (Zakudya zofiira mkati)	1 = Yes 2 = No 9 = Don't Know					
D30	WHITE TUBERS AND ROOTS: White potatoes, white yams, cassava, or any other foods made from roots and tubers (Zakudya zagulu la zikhawo)	1 = Yes 2 = No 9 = Don't Know					
D31	DARK GREEN LEAFY VEGETABLES: Any dark green leafy vegetables such as cassava leaves, sweet potato leaves, amaranths, black jack leaves and any other locally available dark green leafy vegetables. (Ndiwo za masamba obiriwira)	1 = Yes 2 = No 9 = Don't Know					
D32	OTHER VEGETABLES: such as tomato, onion, eggplant) , including wild vegetables (Masamba ena monga tomato, anyezi, mabilinganya ndi ena opezeka kutchire)	1 = Yes 2 = No 9 = Don't Know					
D33	Ripe mangoes, ripe papayas or other local vitamin A-rich fruits. Mango akupsa, papaya wakupsa kapena zipatso zina zili zones zokhala ndi vitamin A	1 = Yes 2 = No 9 = Don't Know					
D34	OTHER FRUITS: such as citrus, apples, white guavas or any other fruits including wild ones. Zipatso zina monga maolanje, mandimu, nachesi, manyumwa, guwafa ndi zipatso za	1 = Yes 2 = No 9 = Don't Know					

	kutchire						
D35	ORGAN MEAT (IRON-RICH): Liver, kidney, heart, or other organ meats Chiwindi, impyso, mtima ndi zina	1 = Yes 2 = No 9 = Don't Know					
D36	FLESH MEATS: beef, pork, lamb, goat, rabbit, mice, wild game, chicken, duck, pigeon or other birds or any other meats Za gulu la Nyama monga: ng'ombe, nkhusa, mbuzi, kalulu, mbewa, nkuku, bakha, nkunda ndi china chilichonse cha mgulu la nyama	1 = Yes 2 = No 9 = Don't Know					
D37	EGGS: from any birds including chicken, guinea fowl, turkey duck or any other birds Maziraockhoka ku: nkuku, nkhang, nkukundembo kapena mbalame ina iri yonse	1 = Yes 2 = No 9 = Don't Know					
D38	FISH: Fresh or dried fish, shellfish, or sea Za gulu la nsomba food	1 = Yes 2 = No 9 = Don't Know					
No.	Question	Response codes	Child 1	Child 2	Child 3	Child 4	Child 5
D39	Any foods made from soybeans (Zakudya zochokera ku soya)	1 = Yes 2 = No 9 = Don't Know					
D40	Any foods made from groundnuts (zakudya zochokera ku mtedza/nsawa)	1 = Yes 2 = No 9 = Don't know					
D41	Any foods made from other beans, garden peas, cow peas, pigeon peas, nkhungudzu , lentils, nuts, or seeds, etc. (Zakudya zochokera ku magulu anyemba)	1 = Yes 2 = No 9 = Don't know					

D42	MILK AND MILK PRODUCTS: Cheese, yogurt, chambiko , or any other milk products (Zakudya zochokera ku mkaka)	1 = Yes 2 = No 9 = Don't Know						
D43	OILS AND FATS: Any oil, fats, or butter, red palm oil, avocado or foods made with any of these (Zakudya za mafuta)	1 = Yes 2 = No 9 = Don't Know						
D44	SWEETS: sugar, honey, or any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits (Zotsekemera)	1 = Yes 2 = No 9 = Don't Know						
No.	Question	Response codes	Child 1	Child 2	Child 3	Child 4	Child 5	
D45	BEVERAGES coffee, tea, thobwa, mahewu, soft drinks, sweetened soda, freezes, etc. Zakumwa	1 = Yes 2 = No 9 = Don't Know						
D46	SPICES, CONDIMENTS for flavor: such as chilies, spices, herbs or fish powder Zokometsera mu ndiwo:	1 = Yes 2 = No 9 = Don't Know						
D47	INSECTS: like insect larvae, flying ants, locusts, crickets, grasshoppers or any other edible insects Gulu la ziwala: ngumbi, dzombe, nkholulu, chithuli, kapena ziwala zina zili zones zodyedwa	1 = Yes 2 = No 9 = Don't Know						
	CHECK CATEGORIES 28-47 YANGA'NANI MAFUNSO 28-47	If all 'no' >> go to D48 Ngati zonse ayankha kuti ayi kapena sakudziwa pitani ku D48						

<p>D48</p>	<p>Did [child's name] eat any solid, semi-solid, or soft foods yesterday during the day or at night? <i>Kodi dzulo mwanayu anadyako zakudya zili zonse zamadzimadzi kapena zofewa kupatula mkaka wa mawere?</i></p> <p>IF 'YES' PROBE: What kind of solid, semi-solid, or soft foods did [child's name] eat? <i>Ndi zakudya ziti zimene anadya dzulo</i></p>	<p>1 = Yes >> go back to D28–D47 and record foods eaten. Then continue up to D49. 2 = No >> end module 9 = Don't Know >> end module</p>					
<p>D49</p>	<p>How many times did [child's name] eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night? PROBE: ANY MORE?</p>	<p>98 = Don't Know</p>	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <p>Times</p>	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <p>Times</p>	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <p>Times</p>	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <p>Times</p>	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <p>Times</p>

MODULE E: WOMEN'S DIETARY DIVERSITY

Household identification (in data file, each respondent must be matched with the HH ID)

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Enumerator Instructions:

Ask these questions of each woman of reproductive age (15-49 years) in the household. Check to see if EACH woman has given consent to be interviewed in INFORMED CONSENT MODULE. If a woman has not yet given consent, return to INFORMED CONSENTMODULE and gain her consent before proceeding.

You should carry duplicate copies of this module (MODULE F) in case there are more than 5 women of reproductive age in the household.

No.	Question	Response codes	Woman 1	Woman 2	Woman 3	Woman 4	Woman 5
E01	WOMAN'S ID CODE FROM THE HOUSEHOLD ROSTER		<input type="text"/> <input type="text"/>				
E02	In what month and year were you born? Kodi amayi munabadwa liti?	IF MONTH IS NOT KNOWN, ENTER '98' IF YEAR IS NOT KNOWN, ENTER '9998'	<input type="text"/> <input type="text"/> Month <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Year	<input type="text"/> <input type="text"/> Month <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Year	<input type="text"/> <input type="text"/> Month <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Year	<input type="text"/> <input type="text"/> Month <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Year	<input type="text"/> <input type="text"/> Month <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Year
E03	Please tell me how old you are. What was your age at your last birthday? RECORD AGE IN COMPLETED YEARS Muli ndi zaka zingati	IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04. IF RESPONDENT KNOWS HER AGE >> H05	<input type="text"/> <input type="text"/> Years				
E04	Are you between the ages of 15 and 49 years old? Kodi zaka zanu zili pakati pa 15-49	1 = Yes 2 = No >> end module 9 = Don't know >> end module					
E05	CHECK E02, E03 AND E04 (IF APPLICABLE): IS THE	1 = Yes 2 = No >> end module					

No.	Question	Response codes	Woman 1	Woman 2	Woman 3	Woman 4	Woman 5
	RESPONDENT BETWEEN THE AGES OF 15 AND 49 YEARS? IF THE INFORMATION IN E02, E03, AND E04 CONFLICTS, DETERMINE WHICH IS MOST ACCURATE.						
E06	Are you currently pregnant? Kodi Amayi panopa ndi nu oyembekezera?	1 = Yes 2 = No 9=Don't know					
Women's dietary diversity day before survey							
<p>Please describe everything that you ate yesterday during the day or night, whether at home or outside the home.</p> <p>A) Think about when you first woke up yesterday. Did you eat anything at that time? IF YES: Please tell me everything you ate at that time. PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE, THEN CONTINUE TO PART B. Amayi mundifotokozere zonse zimene munadya dzulo kuyambira mmawa kutacha mpaka madzulo pamane mukagona? IF NO, CONTINUE TO PART B.</p> <p>B) What did you do after that? Did you eat anything at that time? IF YES: Please tell me everything you ate at that time. PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE. REPEAT QUESTION B ABOVE UNTIL RESPONDENT SAYS SHE WENT TO SLEEP UNTIL THE NEXT DAY. IF RESPONDENT MENTIONS MIXED DISHES LIKE A PORRIDGE, SAUCE, OR STEW, PROBE:</p> <p>C) What ingredients were in that [mixed dish]? PROBE: Anything else? UNTIL RESPONDENT SAYS NOTHING ELSE. KUZAKUDYA ZIMENE MUNADYAZI MUTHIRAKO CHIANI?</p> <p>AS THE RESPONDENT RECALLS FOODS, UNDERLINE THE CORRESPONDING FOOD AND ENTER '1' IN THE COLUMN NEXT TO THE FOOD GROUP. IF THE FOOD IS NOT LISTED IN ANY OF THE FOOD GROUPS BELOW, WRITE THE FOOD IN THE BOX LABELED 'OTHER FOODS.' IF FOODS ARE USED IN SMALL AMOUNTS FOR SEASONING OR AS A CONDIMENT, INCLUDE THEM UNDER THE CONDIMENTS FOOD GROUP.</p> <p>ONCE THE RESPONDENT FINISHES RECALLING FOODS EATEN, READ EACH FOOD GROUP WHERE '1' WAS NOT ENTERED, ASK THE FOLLOWING QUESTION AND ENTER '1' IF RESPONDENT SAYS YES, '0' IF NO, AND '9' IF DON'T KNOW.</p> <p>Yesterday during the day or night, did you drink/eat any [food group items]?</p>							

No.	Question	Response codes	Woman 1	Woman 2	Woman 3	Woman 4	Woman 5
	OTHER FOODS: PLEASE WRITE DOWN OTHER FOODS TO THE RIGHT OF THIS BOX THAT RESPONDENT MENTIONED BUT ARE NOT IN THE LIST BELOW. THIS WILL ALLOW THE SURVEY SUPERVISOR OR OTHER KNOWLEDGEABLE INDIVIDUAL TO CLASSIFY THE FOOD LATER.		WRITE FOODS EATEN HERE:				
E07	CEREALS: such as bread, rice, noodles, porridge, nsima, any other foods made from millet, sorghum, maize, rice, wheat or other locally available grains. ZAKUDYA ZOKHUTITSA	1 = Yes 2 = No 9 = Don't Know					
E8	VITAMIN A RICH VEGETABLES AND TUBERS: Pumpkin, carrots, squash, orange/yellow fleshed sweet potatoes, or other locally available orange/yellow fleshed vegetables and tubers Zakudya za chikasu kapena zofiira mkati monga maungu, karoti, mbatata za chikasu kapena zofiira mkati	1 = Yes 2 = No 9 = Don't Know					
E9	WHITE TUBERS AND ROOTS: White potatoes, white yams, cassava, or any other foods made from roots and tubers Zakudya zochokera ku zikhawo monga izi: Mbatata, chinangwa kapena	1 = Yes 2 = No 9 = Don't Know					

No.	Question	Response codes	Woman 1	Woman 2	Woman 3	Woman 4	Woman 5
	zakudya zina zilizonse zochokera ku zikhawo						
E10	Any dark green leafy vegetables such as cassava leaves, sweet potato leaves, amaranths, black jack leaves and any other locally available dark green leafy vegetables. Za gulu la masamba obiliwira monga: chigwada, bonongwe, chisoso, kapena masamba ena ali onse obiliwira	1 = Yes 2 = No 9 = Don't Know					
E11	OTHER VEGETABLES: such as tomato, onion, eggplant) , including wild vegetables Masamba ena monga: tomato, anyezi, mabilinganya ndi masamba ena opezeka mu tchire.	1 = Yes 2 = No 9 = Don't Know					
E12	VITAMIN A RICH FRUITS: Ripe mangoes, ripe papayas Zakudya zokhala ndi vitamin A monga : mango, mpapaya kepana zina zakutchire zokhala ndi vitamin A or other local vitamin A-rich fruits.	1 = Yes 2 = No 9 = Don't Know					
E13	OTHER FRUITS: such as citrus, apples, white guavas or any other fruits including wild ones. Zipatso zina monga: mandimu, nachesi, lalanje, guwafa ndi zina zakutchire	1 = Yes 2 = No 9 = Don't Know					

No.	Question	Response codes	Woman 1	Woman 2	Woman 3	Woman 4	Woman 5
E14	ORGAN MEAT (IRON-RICH): Liver, kidney, heart, or other organ meats Zamkati monga: Chiwindi, impyso, mtima ndi zina	1 = Yes 2 = No 9 = Don't Know					
E15	FLESH MEATS: beef, pork, lamb, goat, rabbit, mice, wild game, chicken, duck, pigeon or other birds or any other meats Nyama monga: ng'ombe, nkhumba, nkhosa, nkuku, kalulu, mbewa, Nyama yakutchire, bakha, nkunda kapena Nyama ina iliyonse	1 = Yes 2 = No 9 = Don't Know					
E16	EGGS: from any birds including chicken, guinea fowl, turkey duck or any other birds Maziraockhoka ku: nkuku, nkhang, nkukundembo, nkhang kapena mbalame ina iri yonse	1 = Yes 2 = No 9 = Don't Know					
E17	FISH: Fresh or dried fish, shellfish, or seafood Za mgulu la msomba	1 = Yes 2 = No 9 = Don't Know					
E18a	Any foods made from soybeans, (Zakudya zochokera ku soya)	1 = Yes 2 = No 9 = Don't Know					
E18b	Any foods made from, groundnuts (Zakudya zochekera ku mtedza)	1 = Yes 2 = No 9 = Don't Know					

No.	Question	Response codes	Woman 1	Woman 2	Woman 3	Woman 4	Woman 5
E18c	Any foods made from beans, garden peas, cow peas, pigeon peas, nkhangudzu, lentils, nuts, or seeds (Zakudya za magulu a nyeba)	1 = Yes 2 = No 9 = Don't Know					
E19	MILK AND MILK PRODUCTS: Cheese, yogurt, chambiko, or any other milk products (Zakudya zochokera ku mkaka)	1 = Yes 2 = No 9 = Don't Know					
E20	OILS AND FATS: Any oil, fats, or butter, red palm oil, avocado or foods made with any of these (Za gulu la mafuta)	1 = Yes 2 = No 9 = Don't Know					
E21	SWEETS: sugar, honey, sweetened soda or any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits (Za kudya zotsekemera)	1 = Yes 2 = No 9 = Don't Know					
E22	SPICES and CONDIMENTS (Zokometsera zakudya): chillies, spices, herbs etc. ;	1 = Yes 2 = No 9 = Don't Know					
E23	BEVERAGES (zakumwa): coffee, tea, thobwa, mahewu, soft drinks, freezes, etc.	1 = Yes 2 = No 9 = Don't Know					

SECTION F: COMMUNICATION (Drama performances and radio -*applicable only in Lilongwe and Mchinji*) Pano ndikufusani mafuso okhudzana ndi masewero/ zisudzo zokhudzana ndi ukhondo, kadyedwe koyenera, kuyamwitsa mwakathithi ndi sikelo ya amai.

F1. Have you ever attended Pakachere drama performances? (Kodi munayamba mwaonerapo zisudzo/masewero za Pakachere?) 1. Yes _____ 2. No _____ If No on both go to F3 if either one go to F2

?	
Drama performances	Response 1=Yes 2=No
Pakachere community drama group	
Pakachere travelling theatre	

F2. If yes to F1 above, what topics do you remember that the drama group performed on? (Please tick all that applies)

?		
Topics remembered	Pakachere community drama group (1=yes 2=No)	Pakachere travelling theatre (1=yes 2=No)
1.		
Maternal ANC & diet (kadyedwe ndi sikelo ya amai) ²		
Exclusive Breastfeeding (Kuyamwitsa mwakathithi)		
Complementary feeding (Chakudya choonjezera akafka miyezi 6)		
Water sanitation and hygiene (ukhondo)		
Other specify _____		

F3. Have you ever heard a radio message on nutrition? Kodi munayamba mwavapo uthenga wapa walesi okhudza kadyedwe koyenera? / _____ / >> if no go to F7

1. Yes
2. No

F4. If yes in F3 above, what was it? Unali uthenga otani? (Please circle all that applies-Multiple answers possible)

1. Full radio program
2. Jingle/PSA
3. Other specify _____

F5.What topic can you remember that the radio program talked about? *Zinali mfundo ziti za uthenga ngati mungakumbuke?* (Please circle all that applies)

1. Maternal ANC & diet
2. Exclusive Breastfeeding
3. Complementary feeding
4. Water sanitation and hygiene
5. Other (specify)_____

F6.What benefits have the radio programs? *Ndi phindu lanji lomwe mwalipeza kudzera ma pologalamu apa wailesi amenewa?*

F7.What benefits have the drama performances been to you? *Ndi phindu lanji lomwe mwalipeza poonera zisudzo/masewero a Pakachere?*

Remember to record the finishing time!

Thank the respondent for participating in the survey

Annex 2: The Nutrition Outcome Survey Team

Supervisors:

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Justus Mlota	0888085293
Harry Utonga	0999285337

Team Leader: Beatrice Mtimuni

Data Manager: Maxwell Phiri

**Annex 3:
Nutrition
Outcome
Survey
Training
Programme**

Time/Day	22 July Wednesday	23 July Thursday	24 July Friday	25 July Friday	24 -27 July Saturday- Monday
0815-0830	Registration, Opening & Introductions Admin & logistical arrangements (Beatrice)	Recap of the first day	Field practical (Maxwell, Beatrice and survey teams)	(Field debriefing sharing experiences)	Field logistics - Printing of questionnaires, organizing all materials for field work (INVC, Beatrice)
0815-1000	Expectations, Purpose & agenda training (Maxwell, Beatrice)	Questionnaire discussions with survey teams (Maxwell, Beatrice)	Field practical (Maxwell, Beatrice and survey teams)	(Field debriefing sharing experiences)	Field logistics - Printing of questionnaires, organizing all materials for field work (INVC, Beatrice)
1000-1030 Tea Break					
1030-1230	Questionnaire discussions with survey teams (Maxwell, Beatrice)	Role play by survey teams in turns	Field practical (Maxwell, Beatrice and survey teams)	(Field debriefing sharing experiences)	Field logistics - Printing of questionnaires, organizing all materials for field work (INVC, Beatrice)
1230-1330 Lunch					
1330-1500	Questionnaire discussions with survey teams (Maxwell, Beatrice)	Interview techniques (Beatrice)	Field practical (Maxwell, Beatrice and survey teams)	(Field debriefing sharing experiences)	Teams leaving for field in Lilongwe, Mchinji Balaka, Machinga and Mangochi on Monday 27 July
1500-1530 Tea Break					
1530-1700	Questionnaire discussions with survey teams (Maxwell, Beatrice)	Field preparation -Logistics for pretesting (Maxwell, Beatrice)	Field practical (Maxwell, Beatrice and survey teams)	Team formation and wrap up for the day	Supervisors meeting with Team Leader and Data Manager

Annex 4: List of EPAs, TAs, GVHs and Villages for Nutrition Outcome Survey 2015 by District

District	EPAs	TAs	GVHs	GVHs	Villages	Villages	Villages
Mchinji	Msitu	Mavwere	Manthalu	Chilopa	Bakiele	Basikolo	Chalimba
			Kaponga	Chamasola	Belo	Bwanunkha	Chamasola
			Mkusa	Silombe	Batinosi	Benedicto	Nsapato
			Abraham	Maliketi	Bezayi	Bile	Bzala
			Basikolo	Mavwere	Changunda	Bokosi	Chaguluka
			Guwende				Abraham
	Mikundi	Nyoka	Mponda	Sepo	Mponda	Sepo	
			Mayola	Sawala	Lubeni	Malikanjero	
			Matutu	Katamanda	Sadoki	Matutu	
			Kangwele		Kapampika		
	Mkanda	Mkanda	Katutula	Mkanda	Leusan	Katutula	
			Matuwamba	Kamphata	Gastoni	Zenasi	
			Kadamba	Kaponola	Sawala	Akimu	
					Chimkwapa	Admson	
		Kaponola	Kawere		Kadamba	Guwani	Chikuta
			Lipunga		Khoza	Masumba	Chimombo
			Chikuta		Sunama	Chawala	Lipunga
						Kavere	
		Mduwa	Kazira	Mphomwa	Chalama	Mduwa	Chapita
			Mzama	Chikumba	Chatumbwa	Wilson	Mkunjuma
			Sundwe	Mtenje	Chagadama	Milosi	Biwi
			Mchifuwa	Mkunjuma	Chilagule	Chamveka	Pelegia
			Kanyenda	Mphenyengu	Chapondama	Bokosi	Modzi
			Mduwa	Chikoza	Chipuka	Bulikumwendo	Mphenyengu
			Tenje	Chimonjo	Mgando	Menyani	Wombani
			Kalombo	Kalinde	Mofati	Chakuwala	Zuwande
				Mikuwa		Biyuti	Malambuzi
							Zingalume
							Mtolongo
							Pungula
	Kalulu	Kapondo	Chagwirira	Kakunga	Nthende	Dambo	Kupeta
			Mchokwe	Mphanda	Mchokwe	Mwakwiza	Chisimpika
			Nkhwazi	Mkhumbi	Nkhwazi	Kachilika	Chiutu
			Kalulu	Mazenga	Jimu	Chaonongeka	Gumulira
			Chiwaula	Mkhuzi	Chagwirira	Chibwanzi	Chiganizo
			Jussi	Gumulira	Thangaludzu	Beke	Chaluma
			Msukwala	Mwanzalungu	Chiwaula	Chebele	Bikiwe
			Dambo	Mtukwa	Jussi		Chinkono
			Mlonyeni		Bonthe		Chingangawa
					Mazengera		Chimteteka
	Chiopsya	Simphasi	Mando	Langwani	Mandala	Chikoza	
			Kamangilira	Mapemba	Kamangilira	Lucio	
			Chikomeni	Mbuzi	Ligeliyo	Langwani	
			Matimba	Kanyimbo		Chidewa	
						Kachere	
		Zulu	Kamphande	Chinkhota	Chipozi	Mseche	Ngawande
			Chiferamthengo	Mkangala	Mbuzi	Benjamin	Chikhuti
			Mseche	Mumba	Chinsapo	Kantanda	Mchifuwa
			Benjamin	Kathyuka	Chisemphere	Kapalira	Mkangala
			Kapanira	Chimteka	Kamphande	Chintanda	Mumba
				Kayendekera	Chiferamthengo	Zidana	Mauadzinja
						Chikoloka	Kadula
						Mchidzanja	Kaligwenje
						Mtiwa	Gunde
						Matiwelo	Bokosi
						Suwerera	Masepa
Lilongwe	Kalolo	Kalolo	Mchepera		Msokoneza		Nakutepa
	Chileka	Malili	Mphandula		Kaphesi		Mwera
		Masumbankhunda	Njande		Mnjemu		Bweya
	Mpingu	Malika	Nsangwa	Chimbayo	Nsangwa	Mtondera	Kachule

			Nkantho	Kachule	Mafupa	Chimangansasa	Mbeta
	Ukwe		Liwinga	Mwera	Liwinga	Nkhwila	Chimwendo
			Mkanda	Chimwendo	Kachete	Msenda	Mdaliponda
			Chitedze	Mwanza	Msanu	Katona	
	Mchepera		Masakamika	Chiliza	Zalera	Kumale	
	Njerwa		Chimlenya	Kakungu	Chakwaira	Mnjolo	Nene
			Kanong'ona	Chisuzi	Chitipi	Muyanga	Chinthungo
			Buluzi	Kalolo	Kanyama	Chipampha	Kakunju
			Maziro	Guliguli	Kapasula	Mtambalika	Chisuzi
			Zapita	Chimwanza	Mphimbi	Chiliza	Kalolo
			Mtongolo	Chakuzamutu	Philimoni	Chikusa	Kaseza
			Chileka	Mtika	Kankumbwa	Msakwi	Mseru
			Dzama	Ndevu	Tumbi	Dzama	Chaola
			Mchepera		Chakakala	Maliseni	Kaziputa
			Nene			Chimpukwa	Msisamala
					Ching'ang'a		
	Ngwangwa	Kabudula	Chimbayo	Kalumba	Chimwendo	Kanyemba	
	Chigonthi	M'bang'ombe	Chinyama	Chigonthi 1	Mazi	Malango	Chipwaira
			Kalumba	Chakwanira	Mphimbi	Chinkhwinitumbi	Makoza
			Mtambo	Lombwa	Chipembere	Zanje	Besela
			Mphimbi	Zindo	Kaimbe	Kaluma	Chigonthi
			Chombwa	Mkambwe	Elisale	Kanike	Nkhosa
			Mtambo	Fulatila	Kaluwenya	Malonda	Ndelema
			Chilombo	Mgawachamba	Chapamba	Nyama	Lombwa
			Chidooka	Mkuzi	Mpombodzeke	Mpempha	Kandiwo
			Chidzuma	Mkhwanire	Nowa	Chirombo	Pawulo
			Kazembe	Chipwaira	Chimutu	Maloto	Mkambwe
			Makoza		Kazembe	Mkwiwale	Mtolabuku
			Kamsanga			Mkwanila	Ngawachamba
						Mtengambiri	Mkuzi
	Chiwamba	Chimutu	Msuzumire	Kumayanichezezeta	Msuzumire	Velemu	
		Chitukula	Kwindanguwo	Chitukula	Jumpha	Chang'ombe 2	
	Chitukula	Mtema	Chikanda		Sengani		
			Kamlembo		Mthindi		
	M'bang'ombe		Suntche	Chimpendo	Msindiza	Chilunga	Fulatira
			Fulatira	Chapata	Mwitha	Mahekamwina	Chigamba
			Chigonthi	Padzuwa	Khanyinji	Kamlembo	Kosamu
			Nkhalamba	Kafulatira	Chimutu	Suntche	Mkalamba
			Kholongo	Chimutu	Kadololo	Mchokwe	Dongolosi
			Kalambika	Masula	Chibade	Jede	Kwindaguwo
				Lapalama	Makhenjera	Nemeri	Kalambika
						Chakuma	Masula
						Guliguli	Mmodziutani
	Nyanja	Kalumbu	Njati		Mambala		
		Mazengela	Mwachilolo	Mkomba	Salimakuwala	Chikhombe	Yotamu
			Kalumbu	Matapila	Msemwe	Mtileni	Chalera
			Ngwena	Kaphala	Kacholo 2	Gaiti	Chilala
			Bango	Dzunda	Kalambule	Msavechete	Kanjunda
			Mphenzi	Msiko	Msonthi	Mkomba	Katanda
			Undi	Nyama	Ngwena	Mvuwa	Thondolo
			Kapedzera	Mdzeka	Sikadzi	Mnzingwa	Kumitumbu
			Kaphata	Kazizila	Undi	Kapoloaipa	Mpani
			Chikhombe	Nsaku	Mkanda	Mphambanya	Guwende
			Chikanda	Nkhudzi	Kafotsela	Nkhuni	Chilembwe
			Thondolo	Nkhwidzi	Malenga	Selengo	Mepundi
			Chauwa	Biwi	Nyamasankha	Kathumba	Nduwakunsi
			Khuzi	Njiwa	Mwachilolo	Dzimba	Chimphama
				Mzeka	Nthambala	Nkhwazi	Chimphwanya
	Mpenu					Nyengere	Mkhwidzi
						Mbiya	Chowe
						Kasuntha	Mzongo
						Chengamire	John
						Kamwana	Mdeka
							Nyanyu

	Thawale		Kalonanji	Disembala	Kamzimbiwoyera	Disembala	
			Chaphuka		Kabowa		
		Masula	Mtungwi	Chithonje	Yesani	Tsirizani	Mkuntha
			Ndelemanani	Chazondoka	Yeliyasi	Ntanga	Kamphango
			Kamsitu	Chisauka	Ndiyani	Chinzere	Tondombi
			Mchila	Kukhola	Mchila	Tikumane	Kalonga
			Kalonanji				
	Chitsime	Kalumba	Mphindo	Ng'ozo	Tandaila	Kumadzi	
			Mbano	Buluzi	Kanyenda	Ngala	
			Kalumba	Mminga	Gulule	Katosa	
			Mbuna	Kanyonikunsi	Kalumba	Chapata	
			Vuvulo	Zuluwanda	Vuvulo	Mtembenusa	
				Kuchiswe	Ng'ozo	Chitukula	
	Mlomba	Chadza	Mbalame	Kazonga	Mbalame	Mchotsa	Phambo
			Phula	Mthiko	Ng'ombe	Msodoka	Nakutumba
			Kalongsola	Chinthankhwa	Mcholo	Msiwa	Mphete
			Chinziri	Mdondwe	Chikomba	Chiwala	Jamu
			Mphete	Chingira	Matumbo	Maso Afiira	
			Chipwa				
		Tsabango			Mdondwe		
					Chansata		
					Ngomazondo		
					Chingira		
		Chiseka	Mwinimudzi	Chiphwanya	Chisanthi	Mazengera	Chauma
		Chitekwere	Chitekwere		Kamcheneeru		
		Kachere	Ng'ombeyagwada		Kapichira		
		Chilikumwendo	Kankodola	Chimphangu	Katukusa	Kanjerwa	Bango
			Khomela	Chamangwana	Kamtadza	Chinkhombe	Chidothi
					Tambala	Mwamphanda	Kanyezi
							Chimphangu
Balaka	Mpilisi	Nsamala	Nsamala	Kwitanda	Chinseu	Binesi	
	Ulongwe	Kalembo	Msulu	Mbawa	Chibwana	Kwitanda	
	Rivirivi	Chiyendausiku	Maninji	Lupanga	Kazondo	Gunda	Chiyendausiku
			Mkamwana	Chimdikiti	Piasi	Mbawa	Kapakunja
			Chikolongo	Kalembo	Mkanda	Chasinda	Kalilombe
			Chiyendausiku	Mwembe	Msulu	Chigwalugwalu	Million
				Simbota	Chikolongo	Mbawa	Mmangeni
					Magombe	Jalawe	Thaidoni
					Edwin	Masulamanja	Saiwa
					Chmdikiti	Simbota	Lakalaka
					Jenga	Joba	Lupanga
	Phalula	Chanthunya	Chanthunya	Maitoni	Chikwakwa	Ngoleka	Chingagwe
			Chimphakati	Manjanja	Mgozo	Masenjele	Chima
			John mapira	Chingagwe	Nkhumbira	Joe Linzi	Chitsulo
			Kavala	Bamusi	Manyombe	Mlunguzi	Didiya
			Nyanyala	Chandikora	Mbonani	Nsakanena	Manjanja
			Zimveka	Boaz	Mphenzi	Thindiri	Kapuku
			Madyeratu	Mthengomwacha	Kambodya	Tsanyawoyera	Kamkawo
					Kasyeto	Kachomba	Chizunguchino
					Kavala 1	Chendewa	Mkwezalamba
					Ngayaye	Chikondi	Kasamiza
					Mulunguzi	Kachingwe	Chandikora
					Chikamera	Mthengomwacha	Boaz
					Chimphonda	Chikamphonya	
	Utale	Nkaya	Semani	Mgomwa	Kamwendo	Semani	Kanyenga
			Kantwanje	Chambaluka	Chalamanda	Chilimba	Namgunda
			Maganga	Sato	Kantwanje	Jonasi	Jiya
			Dodoma	Ntaja	Misomali	Chingere	Chisoni
			Utale	Mkaya	Magombo	Phimbi	Chikapusa
			Phimbi	Kamowatimwa	Sakazao	Mbewe	Kamvazaana
			Muluma	Khwalala	Kadamo	Chidonthi	Mgomwa
					Njirayagoma	Kamowatimwa	Chambaluka
					Chibwana	Chambo	Chadzuma
					Ndimbule	Chilima	Bemeyani

					Mofolo	Kamdamanja	Muluma
					Jankeni	Kwalala	Nyalungwe
					Ntaja	Ngalaweza	Katuli
	Domasi	Mposa	Puteya		Thalama		
			Chipire		Pwetete		
	Mtubwi	Sitola	Mtamira	Zidyana	Mkomera	Taibu	Mkwanda
			Mlonya	Njerenje	Mtalika	Mlamila	Sitola
			Kalonjere	Zalimu	Chisese	Kumbani	Ali
			Sitola	Joshua	Imani	Zidyana	Mataya
			Magadi	Namitambo	Mwakwiwa	Chimpakati	Katunga
					Makangwala	Ganiwelo	Chingawa
					Bwanali	Jambawe	Chimitali
					Sulupi	Ajida	Ndawa
					Mlekano	Joshua	Kalonjere
					Puteya	Ntondekera	Makulisya
					Mamu	Labisoni	Chipamba
					Kasitomu	Wotala	Chilonga
					Chalema		Chilimani
	Mbonechera	Liwonde	Njahitu	Muluma	Chiwonda	Nsele	
		Nsanama	Chabwera	Napwanga	Kanyoza	Mpuhuwa	
			Makhoza		Makina		
	Nyambi	Chiwalo	Chitinji		Makhoza	Waiti	Phungu
			Sale		Imani	Tiferakaso	Mtila
					Makwinja	Mussa	Belo
					Bamusi	Kuseto	Chimwaza
					Mose	Tambula	Magwede
					Kumtundu	Nsigala	
					Dija	Mkopa	
		Mlomba	Lambulira	Likwakwa	Namveta	Likwakwa	
	Nsanama		Pulika	Lanje	Pulika	Mbwezo	
			Mbwezo	Bakali	Kasimanja	Asamu	
			Ntali	Mota	Kwakwanya	Mangolo	
		Nyambi	Mapata		Beyadi		
		Kapoloma	Chikumba		Landa		
	Nanyumbu	Kawinga	Kawinga	Chimbira	Bakali	Mahowa	Chimbira
			Balala	Mbwambwa	Namwewe	Mwamunthu	Mbwambwa
			Makhoyo	Nawanga	Chipole	Choga	Chikuta
			Mkwepere	Mkapa	Muharu	Chikumba	Muchirani
			Namanjonjoli	Njete	Lupiya	Kagwili	Abudu
				Mikonde	Kaliyala	Lodesi	Chilipa
					Makhoyo	Chipala	Njete
					Mailosi	Mapata	Mkonde
					Dam	Hilama	Chioza
					Jali	Chapola	
	Chikweo	Chikweo	Nyama	Welawela	Nyama	Welawela	
			Lulanga	Mikundi	Wanja	Gilini	
			Ngomano	Kambwiri	Saomba	Mikundi	
			Kalapwisa	Maonga	Kalapwisa	Maonga	
		Ngokwe	Khunga	Mkwinda	Witikani	Nachimbwe	Chimala
			Pohelya	Chimombo	Khunga	Matola	Sawanje
			Dinji	Chimala	Ajasi	Chimombo	Kwawira
			Likapa	Sawanje	Masamba	Mkwinda	
			Mwikuwa		Pakaka	Ndala	
Machinga		Mkoola	Kakwamba	Muheliwa	Kakwamba	Khapu	Mulura
			Mowere	Mgomba	Miso	Makumba	Lahuma
			Chisumbi	Mlinda	Nthato	Jonasi	Waliwa
			Issa	Mdala	Nambala	Msasa	Chimanga
			Mbungo	Maweha	Puluma	Simpwa	Likiya
			Lokho	Mawacha	Singani	Chisuse	Nolola
			Chisawa	Kwilasha	Nsinjiri	Kaumbi	Mangulu
			Nambala	Mpita	Chisumbi	Macheso	Mbirima
			Chisuwi	Pongolani	Lokho	Nantoso	Saidi
			Mtepo	Mulura	Chisawa	Lapukeni	Pangaunye
			Mwakhumbwa	Makawa	Nsolomba	Mlinda	Kwilasha

			Chisuse	Chimanga	Dalamponda	Siyani	Mpita, Juma
			Msasa	Mangulu	Mtepo	Muheliwa	Pongolani
			Macheso	Mwanayekha	Muhele	Mdala	Mwanayekha
Mangochi	Nasenga	Mponda	Chisambanopa	Mapata	Chisambanopa	Bonomali	
				Kalino	Sigele		
	Mthirammanja		Chimbende		Chawa		
	Namkumba		Ntalika		Chimbende		
	Lungwenya		Mzimbire		Mkwatula		
	Masuku	Bwananyambi	Tambala	Shwaibu	Msosa	Mpinga	Mvero
			Mpinga	Mponda	Mbande 1	Mlinde	Kambona
			Mlinde	Lumeta	Mzimbire	Rabson	Lumeta
			Dinesi	Mjathu	Salimu	Dinala	Mjathu
				Chinama	Kachala	Songolo	Mponda
					Misanjo	Mliule trust	Chinama
						Yohane	Shwaibu
	Katuli	Katuli	Kalanje	Mtundu	Kalanje	Limamu	Makanjira
			Katembo	Kaipa	Katembo	Naipwi	Ngalipa
			Salimu	Makande	Salimu	Mtundu	Kwitinji
			Mpitu	Makanjira	Magwede	Kaipa	Ngolonjele
			Mtelela	Ngalipa	Mtelela	Nakapa	Makunganya
			Kwilindi	Kwitinji	Bulaimu	Issa	Namalesawo
			Limamu	Ngolonjele	Kwizimbangwe	Chilimba	
			Naipwi	Lualika	Kasa	Makande	
	Maiwa	Chowe	Mtuwa	Kadewere	Bulaimu	Matenganya	
			Chipeleka	Kalonga	Chipeleka	Kawinga	
			Masi	Nalikolo	Malemia	Mdala makumba	
			Malikula	Nkulumba	Nsamala	Mkata	
			Makumba	Mdala	Batani	Kadewere	
			Moto		Malikula		
			Mkata		Madi		
	CAhilipa	Chilipa	Leveni	Masapi	Majawa	Nkalika	Makalakala
			Matenje	Nikisi	Ali Mdala	Leveni	Bamusi
			Kalino	Belo	Kwisimba	Chilipa	Masapi
			Kapire	Nkaweya	Kalonga	White	Nikisi
			Bamusi	Mtonda	Itimu	Kalino	Belo
				Chapola	Nkulumba	Kapire	Kaweya
						Katoleza	Chimwaza
		Namavi	Mkata		Chapola		
		Jalasi	Mdoka		Macheke		
			Mwanjati		Chilonga		
	Mtiya	Mtonda	Namwera	Kandulu	Mwanjati	Mdoka 2	
		Chimwala	Nsomba	Ngatola	Namwera	Chiumba	Khwasu
			Mbalame	Songa	Awadi	Maliro	Wisiki
			Mtonda	Mtendere	Makumba	Nsomba	Mtendere
			Nthangalanjovu	Chimwala	Matemba	Malopa	Mpalume
			Kusewa	Khwasu	Mbalame	Thangalanjovu	Songa
					Bakili	Chisawa	Lusewa
						Mawilinga	Ngwati
						Stambuli	Salawi
						Mphwanya	Ngwati
	Namkumba	Namkumba	Namkumba	Chilonga	Zita	Malopa 2	Kamangazuka
			Chimphepo	Malopa	Mbapi	Ziyadi	Chinawa
			Khombe	Binali	Makundika	Makunje	Kella
			Chogomere	Matope	Chamtulo	Chilonga	Kaizi
			Katole	Balakasi	Manzi	Idana	Makokola
			Kanyemba	Sosola	Chigomere	Kanyama	Makupe
			Nselema	Kela	Matapang'ombe	Bubakali	Mtiule
			Songa	Saidimatola	Abdul	Sokole	Namkumba
			Sokole	Mbzodzo	Simoni, Nselama	Binali	

Grants Management

INTRODUCTION

This quarter, funds amounting to US\$ 336,765 were distributed to eight grantees. Grantee expenses amounting to US\$ 452,379 were cleared during the same period. Cumulative grantee advances cleared by FtF-INVC are now 83% of total funds disbursed to grantees.

Five grant modifications were formalized during this quarter. These modifications were to provide a No Cost Extension upto 30 October 2015. Work continues to close out the IITA and CISANET grants.

A Fixed Price Purchase Order was signed with CADECOM for that grantee to fund consultants working with smallholder farmers on the Village Financial Platforms project.

Grantees showed some inconsistency when submitting documents for liquidation. Some of the common issues experienced are:

- Incorrect filling of time sheets
- Trip reports lack vital information such as number of attendees and their gender
- Withholding tax payments are not made.

The audit of USAID funds utilised by FUM has begun while NASFAM is expected to begin its audit on 2 November 2015. ACE and CADECOM are expected to begin their audits in the next quarter.

NASFAM has been requested to relocate to its intended location NA 4814, that was procured with INVC funds. Currently it has been placed in the NASFAM vehicle pool.

FtF-INVC engaged in 10 grants-related meetings with 17 grantee staff, during this quarter. Out of the 17 grantee staff, 3 were females. Some of the issues under discussion during such meetings were: work plans and budgets, liquidations, outstanding advances and grant closure.

NASFAM, CADECOM, ACE and FUM have submitted the first iteration of their respective workplan and budget for the period 1 November 2015 to 30 June 2016.

About the Fund

The \$11 million “Investing in Innovation Fund” (IIF) is an integral element of FTF-INVC’s programming across Components 1, 2, 3 and 4. The fund is open to private and non-governmental entities, and public-private partnerships that are able to demonstrate that proof-of-concept interventions can be tested in one growing or marketing season or less. Proposals must demonstrate a clear business case for scaling that is built upon end-market analysis and a financing plan. It is intended primarily to support the refinement and scaling of partner programs that align very closely with FTF-INVC objectives in value chain competitiveness, productivity, and community nutrition activities. ISF grants will also enable FTF-INVC to build partner capacity to meet the objectives of USAID’s FORWARD Policy.

The basic DAI Grants Manual was adapted to FTF-INVC's needs and submitted to and approved by USAID in the last quarter of FY 2012. Based on a request submitted by Ftf-INVC in the quarter ended 30 September 2014, we received approval from USAID to:

- a) Increase the Standard Grant amount ceiling from K1.5 m to K 4 m and,
- b) Increase the maximum period for Standard Grants from 18 to 36, months.

The Grants Manual is being amended by DAI Washington to address the approved changes.

USAID CONCURRENCE

The table below shows the cumulative progress to date in FTF-INVC grant review, USAID concurrence and signature.

Table 1: Cumulative progress in USAID concurrence and signature

Components	Concept Notes	Proposals	Total Received	Grants concurred by USAID to date	Grants signed to date including current quarter
Advancing value chain competitiveness	13	6	19	2	2
Improving productivity	6	7	13	4	4
Improving community capacity to prevent under –nutrition	2	2	4	2	2
Investing in innovation	0	2	2	1	1
Developing local capacity	4	1	5	1	1
Grant Total	25	18	43	10	10

Summary of Grants signed

Grantee	Grant modifications signed this quarter (US\$)	Total Signed Grants Value (US\$)
ACE		961,640
NASFAM		3,597,237
MMPA		336,088
IITA		591,610
FUM		854,777
CADECOM		633,003
PAKACHERE		331,149
NKHOMA		643,279
MIM		77,480
CISANET		166,786
TOTAL	-	8,193,049

ACCOMPLISHMENTS

MANAGEMENT OF POST-GRANT AWARD ACTIVITIES

Grant Modifications

During this quarter, 5 grant modifications were prepared for 5 grantees. These grant modifications provided them a No Cost Extension from 1 October to 31 October, 2015 to provide time for them to present and have their workplans and budgets for FY 16 approved.

Grant Closeouts

Reconciliations are still in process to close the IITA and CISANET grants. IITA presented a file containing expenditure from Department of Agriculture Resource Services (DARS) in September 2015. This file has now been finalised.

Analysis of the submission of expense reports

Grantee	Expense reports submitted and reconciled this quarter (US\$)	Expense reports submitted and reconciled (US\$) – Cumulative to date
ACE	125,338	901,167
NASFAM	87,597	1,680,999
MMPA	-	307,441
IITA	59,079	200,134
FUM	71,168	685,706
CADECOM	19,000	465,763
PAKACHERE	8,860	219,366
NKHOMA	61,784	469,903
MIM	-	54,926
CISANET	19,553	113,558
TOTAL	452,379	5,098,963

Grantees are expected to submit their expense reports on the 10th day of the following month. However, in practice, they submit their expense reports between the 15th and 20th day of the following month. US\$ 452,379 in expenses were 'cleared' by DAI, after we were satisfied that documents submitted were compliant with DAI and USAID compliance requirements.

As mentioned in the last quarterly report, DAI Washington requested the project to reconstruct the grantees' accounts as their expenditure has not been properly set off against the advances that financed such expenditure. What was done prior to DAI Washington's request, was according to guidance given to the Finance and Administration Director and Grants Manager, by the previous Chief of Party. The Grants Accountant responsible for NASFAM has now reconstructed the NASFAM account and is awaiting the Chief of Party's approval to effect changes on issues such as exchange rate and reallocation of expenditure to the correct advance.

The INVC Grants Accountants continue to meet once a week with the Grants Manager. During this meeting, grants issues are discussed, while also discussing what was achieved the previous week and plans for the coming week.

Grantees are still inconsistent in the documentation they submit for liquidation. Some of the common issues in liquidation submissions are:

- Incorrect filling up of time sheets, especially when there are public holidays
- Trip reports do not include vital information such as no. of attendees and their gender
- Withholding tax payments are not made.

A Fixed Price Purchase Order was signed with CADECOM for that organisation to fund Village Financial Platforms in Mchinji.

It has been noted for some time now that NASFAM has not located vehicle no. NA 4814, procured with INVC funds, in the proper location, Balaka. Instead the vehicle has been kept in the NASFAM Head Office pool of vehicles. The Chief of Party wrote to NASFAM regarding this issue and requested them to relocate the vehicle to the intended location at NASFAM Balaka office.

After receiving USAID's approval on 26 August 2015, INVC transferred ownership of Non-Expendable Property to MMPA on 23 September 2015.

ACE requested INVC to pre-approve a potential payment to a software services supplier Avenir Holdings. INVC reviewed ACE's documentation and asked for further clarification. ACE supplied the answers and INVC informed them that the documents were in order.

Grant Audits

INVC has requested 4 grantees, namely NASFAM (2013,2014), FUM (2014), ACE (2014) and CADECOM (2014) to have their grants audited as they have received more than US\$ 300,000 in funding in their respective financial year. The FUM audit has begun and draft report has been submitted, while NASFAM has engaged Graham Carr, who will commence the audit on 2 November 2015.

On 16 September 2015, USAID approved the Scope of Work (SOW) for CADECOM and ACE. This was conveyed on the same day to both CADECOM and ACE. ACE has made good progress and has begun the process of selecting an auditor. CADECOM has not made the expected progress; the Grants Manager who has already written to CADECOM on the issue will pay them a visit soon to clarify on the progress made.

Workplans and budgets

Grantees were informed in the first week of September 2015 to submit their workplans and budgets for the period October 2015 to June 2016, by 21 September 2015. ACE, NASFAM, FUM and CADECOM have submitted their first drafts and further iterations are now under discussion.

Per Diem payments

USAID clarified the per diem policy articulated by them at a Financial Management training seminar, held by them, to INVC. However INVC has not yet informed grantees of any changes in its current per diem policy. The Office of the President and Cabinet has communicated the new per diem rates to INVC and they are currently being analysed.

Non-expendable Property returns

The following grantees have sent their Non-Expendable Property returns:

ACE

NASFAM

FUM, and

PAKACHERE.

Nkhoma needs to send in its return while CADECOM does not have any qualifying property.

Cost share expenses

NASFAM has been requested to submit its cost share documentation to us but has not done so despite repeated requests.

Submission of Financial Reports

Most grantees submit accurate Financial Reports every quarter end.

Grantees also submit Financial Reports when they submit a funding request.

Grantee Funds Requests

The following grantees submitted funds requests and were paid during the quarter. A summary of such payments is shown in the table below:

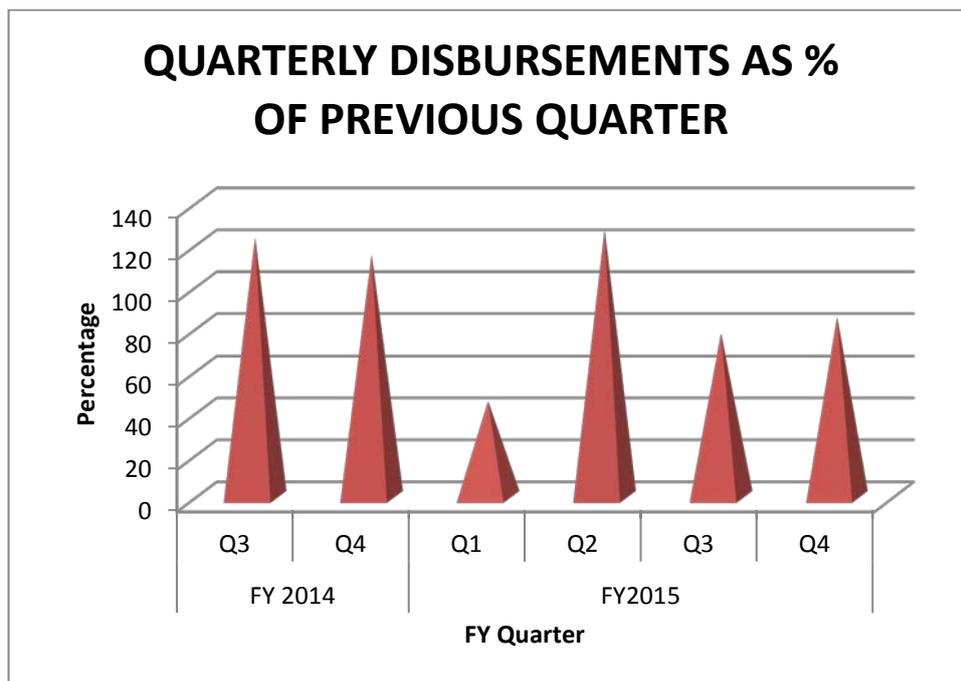
Summary of funds disbursed and advances cleared

Grantee	Funds disbursed by DAI this quarter (US\$)	Funds disbursed by DAI (US\$) – Cumulative to date	Cleared Advances (US\$)	Cleared Advances as a% of Funds Disbursed
ACE	36,980	846,221	846,221	100
NASFAM	79,980	2,009,690	1,680,999	84
MMPA		307,441	307,441	100
IITA		123,149	123,149	100
FUM	184,343	914,890	685,706	75
CADECOM	20,525	669,908	465,763	70
PAKACHERE	-	339,281	219,366	65
NKHOMA	14,937	601,219	469,903	78
MIM	-	54,926	54,926	100
CISANET		128,397	113,558	89
TOTAL	336,765	5,995,122	4,967,032	83

CADECOM and Nkhoma have both been requested to reduce their outstanding advances before further funding is provided by INVC. Furthermore Nkhoma has declared to us that their accountant has stolen US\$ 2.2 million from their coffers. The matter is currently being investigated.

The cumulative funds disbursed to grantees has been adjusted upwards by US\$ 471,331 being payments made direct to vendors that had not been included before.

Shown below is a graph denoting the trend of grants disbursed during the quarter as a percentage of the previous quarter.



Grantee Training on Grants/Finance/Reporting Issues

Interaction with Grantees

During the quarter, 10 meetings were held with a total of 17 staff (14 male and 3 female) from grantee entities. The topics covered in such meetings and coaching sessions included issues pertaining to, among others, work plans and budgets, liquidations, outstanding advances and grant closure.

Grantee Engagement

While there were no grantee review meetings this quarter, the Grants Manager and Grants Accountants continue to proactively engage with grantee staff to clear their expense claims.

CHALLENGES

Grantees have, overall, made improvements in presenting their expense documentation. However some of them continue to exclude valuable information that will validate the expense. Some of the aspects that continue to cause concern are:

- Poor attention to timesheet filling and signing.
- Procurement evaluations do not always agree with procurement committee Minutes.
- Trip reports lack essential data such as gender mix of attendees, no of attendees and trip dates.

Technical reports are sent far too late for us to present a credible quarterly report to USAID on time. Grantees are constantly reminded of this at meetings and with telephone calls.

PRINCIPAL ACTIVITIES PLANNED FOR Q1FY16

- Closing all grants expiring on 30 September 2015
- Approving work plans and budgets for new grants
- Issuing new grants for the period 1 October 2015 to 30 June 2016
- Completion of Reconstruction of NASFAM
- Close out IITA and CISANET grants.