



**ENGINE: Empowering New Generations to
Improve Nutrition and Economic Opportunities**
A project supported by the US Global Health and Feed the Future Initiatives

Save the Children

Year IV: Annual Report
Submitted: 30 October 2015

September 27, 2014– September 28, 2015



Contact Information for this report:
Habtamu Fekadu, MD, MSc
Chief of Party, ENGINE Project
Email: Habtamu.Fekadu@savethechildren.org

Table of Contents

Acronyms.....	Error! Bookmark not defined.
Executive Summary.....	Error! Bookmark not defined.
Reporting Period.....	Error! Bookmark not defined.4
Publication/Reports.....	Error! Bookmark not defined.4
Technical Assistance.....	Error! Bookmark not defined.
Travel and Visits.....	Error! Bookmark not defined.
Field Monitoring and Supervision Visits.....	Error! Bookmark not defined.
Accomplishments and successes during the reporting period	21
IR 1: Capacity for and institutionalization of nutrition programs and policies	Error! Bookmark not defined.3
IR 1.1: Strengthened policy environment	Error! Bookmark not defined.3
IR 1.2: Pre-service and in-service nutrition training for health care agents strengthened.....	Error! Bookmark not defined.0
IR 2: Quality and delivery of nutrition and health care services improved	35
IR 2.1: Quality of nutrition services strengthened	35
IR.2.2 Health and nutrition services seeking behaviors increased.....	42
IR 2.3: Access to health and nutrition services increased	43
IR 3 Improved prevention of under-nutrition through community based nutrition care and practices.....	44
IR 3.1: Improved maternal, IYCF knowledge and practices	44
IR 3.2: Increased access to food and economic strengthening opportunities through programming and cross-sector linkages	47
IR 3.3: Livestock productivity and milk availability in pastoralist and agro-pastoralist woredas of Somali Region increased	52
IR 3.4 WASH-related behaviors improved.....	56
IR 4: Rigorous and innovative learning agenda adopted.....	60
Challenges and constraints and plans to overcome during reporting period.....	68
Environmental compliance.....	69
Financial Analysis	70
Annex 1: Report on partnership with GRAD in non-AGP woredas.....	72
Annex 2: Report on partnership with GOAL in non-AGP woredas.....	78
Annex 3: Work plan, PMP and FtF matrices.....	82
Annex 4: Report on NNCB high level exchange visits to Brazil and Uganda	82
Annex 5: Trip Reports	Error! Bookmark not defined.82
Annex 6: Success Stories	82

Acronyms

ACoE	Academic Center of Excellence
AEWs	Agriculture Extension Workers
AGP	Agricultural Growth Program
AKLDP	Agriculture, Knowledge, Learning and Documentation Project
ANC	Antenatal Care
AOR	Agreements Officer's Representative
ARM	Annual Review Meeting
ATVET	Agriculture Technical and Vocational Education and Training
BCC	Behavior Change Communication
CAHW	Community Animal Health Worker
CC	Community Conversation
CCA	Community Change Agent
CHDs	Child Health Days
CMAM	Community-based Management of Acute Malnutrition
CQI	Continuous Quality Improvement
DAs	Development Agents
DZARC	Debre Zeit Agricultural Research Center
EBF	Exclusive Breastfeeding
ECC	Enhanced Community Conversations
EHNRI	Ethiopian Health and Nutrition Research Institute
EMRDA	Ethiopian Muslim Relief and Development Association
ENGINE	Empowering New Generations in Improved Nutrition and Economic Opportunities
EOTC-DICAC	Ethiopian Orthodox Tewahedo Church Development and Inter-Church AID Commission
EOS	Enhanced Outreach Strategy
EPHI	Ethiopian Public Health Institute
ES	Economic Strengthening
ETS	Effective Teaching Skills
FANTA-III	Food and Nutrition Technical Assistance III Project
FBP	Food by Prescription
FCD	Food cooking demonstrations
FGDs	Focus Group Discussions
FTC	Farmer Training Center
FtF	Feed the Future
FMoA	Federal Ministry of Agriculture
FMoE	Federal Ministry of Education
FMoH	Federal Ministry of Health
GAIN	Global Alliance for Improved Nutrition
GoE	Government of Ethiopia
GHI	Global Health Initiative
GRAD	Graduation with Resilience to Achieve Sustainable Development
GTP	Growth and Transformation Plan
HC	Health Center
HDA	Health Development Army
HEP	Health Extension Plan
HEW	Health Extension Worker
HFs	Health Facilities
HH	Households
HMIS	Health Management Information System
HP	Health Post
HW	Health Worker

ISS	Integrated Supportive Supervision
IYCF	Infant and Young Child Feeding
IYCN	Infant and Young Child Nutrition
JHU-CCP	Johns Hopkins University Center for Communication Programs
LES	Livelihood and Economic Strengthening
LMD	Livestock Marketing Development
LOL	Land O' Lakes, Inc.
LSHTM	London School of Hygiene and Tropical Medicine
MIYCN	Maternal, Infant and Young Child Nutrition
MAM	Moderate Acute Malnutrition
M&E	Monitoring and Evaluation
MI	Micronutrient Initiative
MIYCF	Maternal, Infant and Young Child Feeding
MIAYCN	Maternal, Adolescent, Infant and Young Child Nutrition
MNCH	Maternal, Newborn and Child Health
MSG	Mother Support Group
NACS	Nutrition Assessment, Counseling and Support
NGO	Non-governmental Organization
NFFSC	National Food Fortification Steering Committee
NNCB	National Nutrition Coordination Body
NNP	National Nutrition Program
NNTC	National Nutrition Technical Committee
NSA	Nutrition-sensitive Agriculture
OR	Operations Research
OTP	Outpatient Therapeutic Program
PEPFAR	President's Emergency Plan for AIDS Relief
PHCU	Primary Health Care Unit
PLHIV	People Living with HIV
PM	Performance Management
PNC	Post-natal Care
PSNP	Productive Safety Net Program
PSE	Pre-Service Education
PVP	Private veterinary practitioner
Q&A	Question and Answer
QI	Quality Improvement
RHB	Regional Health Bureau
RNCB	Regional Nutrition Coordination Body
RNTC	Regional Nutrition Technical Committee
SAM	Severe Acute Malnutrition
SBC	Social and Behavior Change
SBCC	Social and Behavior Change Communication
SBM-R	Standards-Based Management and Recognition
SNNPR	Southern Nations, Nationalities and People's Region
SURE	Sustainable Undernutrition Reduction in Ethiopia
TA	Technical Assistance
ToR	Terms of Reference
TOT	Training of Trainers
TSFP	Targeted Supplementary Feeding Program
TU	Tufts University
TVET	Technical and Vocational Education and Training
TWG	Technical Working Group
USAID	United States Agency for International Development
VESA	Village Savings Association
VHH	Vulnerable Households

VI	Valid International
WASH	Water, Sanitation and Hygiene
WNMCB	Woreda nutrition multisector coordination body
ZC	Zonal Coordinators
ZHD	Zonal Health Department

Executive Summary

Background

Program areas

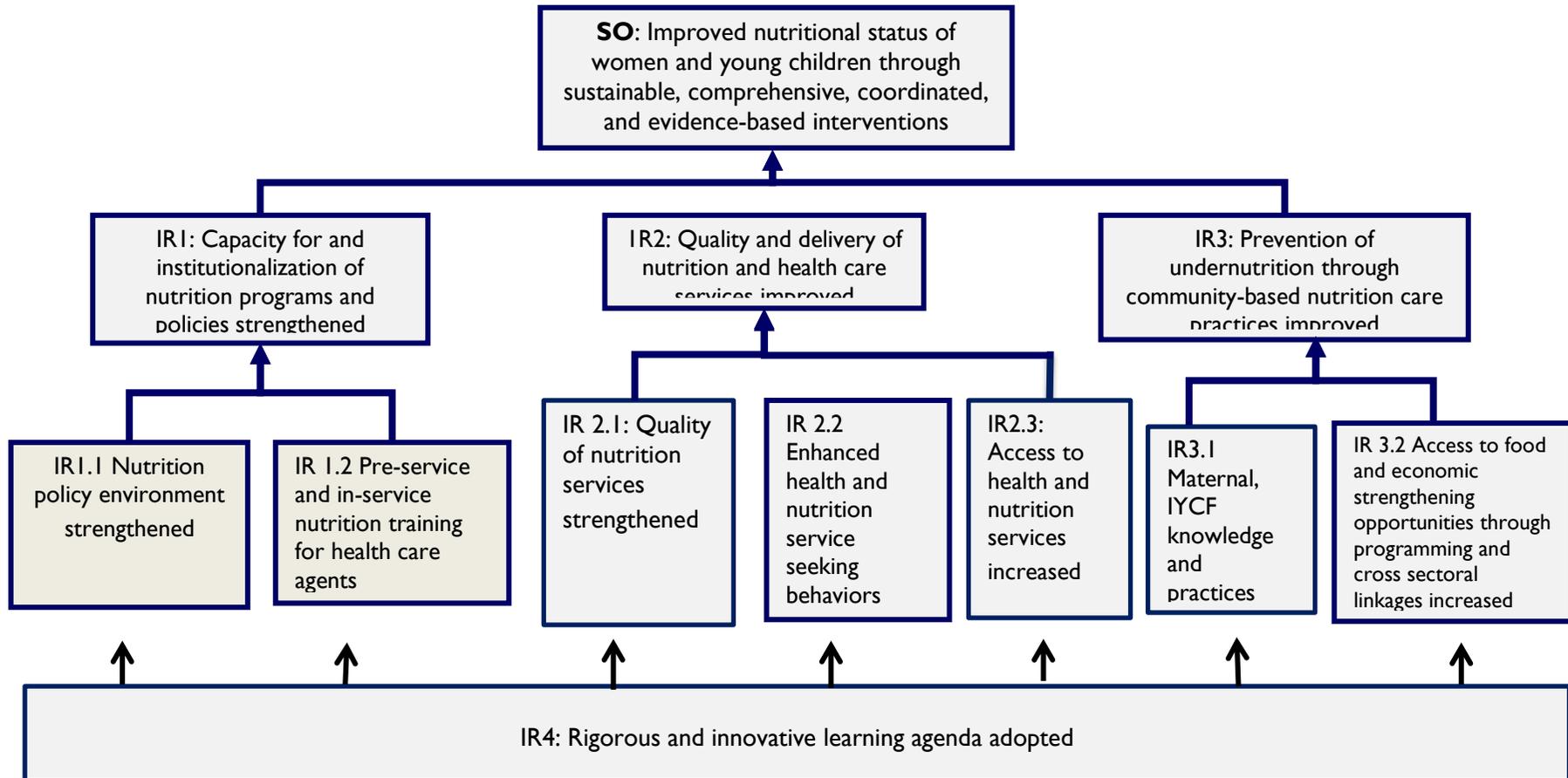
Empowering New Generations to Improve Nutrition and Economic Opportunities (ENGINE) is USAID's flagship integrated nutrition program, which aims to improve the nutritional status of Ethiopian women and children under-5. The primary objective of this five-year (2011-2016) program is to prevent under nutrition during the first 1,000 days, from conception until the child is 2 years old.

Save the Children leads the implementation of ENGINE through a strong multi-sectoral platform driven by evidence-based nutrition specific and nutrition sensitive interventions that support existing government structures and synergistic partnerships with other USAID-funded projects. ENGINE implements its integrated nutrition package in 83 Agriculture Growth Program (AGP) (food secure) woredas, 17 non-AGP (food insecure) woredas in partnership with USAID/Graduation with Resilience to Achieve Sustainable Development (GRAD) and GOAL and in this reporting period started implementation in an additional 16 woredas in Somali Region.

Results framework

The expected results for the project as shown below include: IR1: Capacity for and institutionalization of nutrition programs and policies strengthened; IR2: Quality and delivery of nutrition and health care services improved; IR3: Prevention of undernutrition through community-based nutrition care practices improved; and IR4: Rigorous and innovative learning agenda adopted.

Results Framework for the ENGINE Project



Program implementation strategy

As a technical assistance (TA) project, ENGINE facilitates a multi-sector implementation strategy that builds capacity for nutrition at the policy and implementation levels; strengthens pre-service and in-service nutrition education; supports large-scale SBCC for nutrition; and links nutrition, livelihood, WASH and food security interventions. ENGINE's robust learning agenda also supports and guides effective national nutrition policy and practices to reduce undernutrition.

Save the Children manages this integrated nutrition project through partnership with the following sub-grantees: Jhpiego, Tufts University (TU), Land O'Lakes (LOL), Jimma University and three local non-governmental organizations (NGOs) and two international TA providers – Valid International (VI) and The Manoff Group (TMG).

ENGINE continued its partnership with the Federal Ministry of Health (FMoH), Federal Ministry of Agriculture (FMoA) and their respective decentralized health and agriculture offices at the regional, district and *kebele* levels. Additionally, ENGINE works with universities, regional colleges and the Ethiopian Public Health Institute (EPHI) on operational research and the integration of nutrition into pre-service training.

Key Achievements

ENGINE made significant progress toward reaching its objectives in Year IV covering the period from September 27, 2014 to September 28, 2015.

Geographic coverage and beneficiaries

During the reporting period, ENGINE continued implementing its nutrition specific and nutrition-sensitive agriculture (NSA) interventions¹ in 83 Agriculture Growth Program (AGP) or “productive” woredas² in Amhara, Oromia, SNNP and Tigray regions and scaled up activities in 17 non-AGP or “food-insecure” woredas in Amhara, Oromia and SNNP regions in partnership with Graduation with Resilience to Achieve Sustainable Development (GRAD) and GOAL. In Year IV, ENGINE also expanded into 16 pastoralist and agro-pastoralist woredas in Somali region. ENGINE interventions will benefit around 4.6 million under-5 children and 18,016 most vulnerable households over the life of the project.

Nutrition policy and multi-sectoral coordination

In Year IV, ENGINE played a key role in supporting the revision of the National Nutrition Strategy and NNP 2016-2020, both of which will be finalized in Year V. ENGINE, with partners, supported exchange visits for NNCB, NNTC and Regional NNCB members to Brazil and Uganda to learn from their experiences and best practices in implementing and coordinating successful multi-sector nutrition programs. The lessons learned were shared with the NNCB who called for implementation of key recommendations.

ENGINE also played a key role in building capacity for implementation of the NNP in the five project regions, and supporting roll-out of the NNP to woreda level. ENGINE supported the establishment of Regional Nutrition Coordination Body and Technical Committees (RNCB and RNTC) in Somali Region, and supported existing RNCB and RNTCs in Amhara, Oromia, Tigray and SNNP. The support included the organization of multi-sector capacity building workshops in partnership with UNICEF for 226 participants in four regions. To further support the implementation of NNP at the woreda level, ENGINE supported 35 woreda multi-sectoral coordination meetings in ten model

¹ Direct nutrition interventions include promotion of vitamin A, iron and zinc, and MIYCN. Nutrition-sensitive agriculture activities include demonstrations at Farmer Training Centers (FTCs) and schools; homestead production of fruits and vegetables; provision of livestock; and promotion of dietary diversity.

² AGP aims to increase agricultural productivity and market access for key crop and livestock products in 83 woredas with increased participation of women and youth.

woredas, as well as 64 meetings in additional woredas, which have strengthened the implementation and monitoring of nutrition by all sectors.

ENGINE also provided technical support to integrate nutrition into the next Productive Safety Net Program (PSNP) and AGP 2. ENGINE provided technical support to pilot the blended training manual for health workers, and continued providing technical support to the National Food Fortification Steering Committee (NFFSC).

Nutrition advocacy and social and behavior change communication

In Year IV, ENGINE held two consultative workshops with Ethiopian Orthodox Tewahedo Church (EOTC) leaders and scholars which resulted in the development of a sermon guide for religious leaders to support teachings on thematic areas related to fasting and pregnancy, fasting during lactation, fasting and children under-5 and gender roles/family support during the first 1000 days. The guide will be presented to the overall assembly of church scholars and the Holy Synod council members for endorsement early in Year V.

ENGINE also participated in FMoH advocacy and social and behavior change communication (SBCC) technical working Group (TWG) meetings aimed at harmonizing and endorsing SBCC materials for the country. ENGINE participated in a workshop called by FMoH to draft comprehensive nutrition guidelines for health facilities and communities. The draft guidelines were submitted to the FMoH for review and endorsement. ENGINE also shared its SBCC materials and experience with the Sustainable Undernutrition Reduction in Ethiopia (SURE) project which is supporting FMoH to develop new nutrition SBCC approach.

Nutrition capacity building

ENGINE provides nutrition capacity building for the Government of Ethiopia (GoE) staff in both pre-service and in-service settings.

Pre-service education

ENGINE improved the quality of pre-service nutrition education at 12 higher education institutions³. During the reporting period, ENGINE held a consultative meeting with representative TVET institutions from different regions of Ethiopia, FMoA, FMoE, regional agriculture bureaus and ENGINE partners, to discuss possible mechanisms to strengthening pre-service nutrition education for mid-level agriculture discipline (DAs). As a result two new nutrition course were developed for ATVETs that will be adopted nationally. Essential nutrition contents were also integrated into 25 plant science, animal science, horticulture, rural development and extension courses as well as into food science and post-harvest technology of agriculture subjects. ENGINE also continued to support Hawassa University to establish a nutrition academic center of excellence (ACoE), which was inaugurated in Quarter III. The vision of the ACoE is to contribute to the reduction of undernutrition by creating a centralized learning laboratory that links nutrition research with policy, training, and the provision and utilization of high quality, innovative community-based nutrition services.

In Quarter IV, ENGINE with the USAID Agriculture, Knowledge, Learning and Documentation Project (AKLDP) and Jhpiego carried out a rapid assessment of FtF capacity building activities. The final report is under preparation and will be submitted to USAID in the next quarter.

In-service capacity building

ENGINE trained 6,242 (598 female) health and agricultural workers in nutrition. The project also integrated nutrition into 238 woreda and zonal level review meetings, and conducted supervision visits at 2856 health centers (HCs) and health posts (HPs) with government counterparts. The project provided training on Maternal, Infant and Young Child Nutrition (MIYCN) for 2,347 (1,139

³ The 12 target institutions include four universities (Jimma, Hawassa, Gondar and Mekele), four regional health science colleges (Hawassa, Shashemene, Bahir Dar, Araya Kahu (Axum) and four agricultural TVET colleges (Dilla, Alage, Bure and Shire).

female) health workers (HWs) and health extension workers (HEWs) to build their capacity to provide quality nutrition services. ENGINE trained 918 (143 female) development agents (DAs) in nutrition-sensitive agriculture (NSA) to integrate nutrition into agriculture to advance their capacity and provide them with tools to promote NSA. As a result of ENGINE's capacity-building activities, HWs and HEWs counseled 306,926 pregnant and lactating women on exclusive breastfeeding (EBF), complementary feeding (CF), and dietary diversity at health centers (HCs) and health posts (HPs). At the facility level, 67,469 children suffering from diarrhea were treated with oral rehydration salts (provision of zinc was limited due to lack of supply nationally), and 151,412 pregnant women received iron-folate supplementation. Over the last two quarters, 1,227,305 children were supplemented with Vitamin A (age 6-59 months) and 825,907 children received deworming tablets (age 12-59 months).

In Year IV, ENGINE scaled up its nutrition Quality Improvement (QI) approach and integrated quality of nutrition services into the quality improvement process of 153 health facilities. In addition 50 Primary Health Care Units (PHCU) implemented a continuous quality improvement (CQI) process with close support from ENGINE. ENGINE facilitated learning visits between facilities for 2015 HWs, HEWs, and zonal and woreda health offices to exchange QI best practices and lessons learned. ENGINE documented best practices on quality of nutrition services from ten health centers in Quarters III and IV.

ENGINE completed an assessment on the effectiveness of MIYCN training among 94 HWs and HEWs in four regions. The assessment found that 95 percent of HWs found the training to be 'highly effective' and highlighted the importance of practical training exercises in addition to theoretical sessions, which will be emphasized in Year V.

Nutrition sensitive livelihoods

ENGINE continued to support most vulnerable households (MVHHs) with nutrition-sensitive livelihoods interventions, including providing seeds for improved homestead vegetable production to 8984 MVHH, and provision of productive livestock to 4528 households. ENGINE trained 5235 MVHHs on homestead gardening and animal care with content on gender, nutrition and environmental issues integrated into the curriculum. To build the capacity of households, schoolteachers and agriculture workers in nutrition-sensitive agriculture, ENGINE trained 19,178 (49 percent female) farmers and government workers on Nutrition-Sensitive Agriculture. As a result, 7408 new vulnerable households benefited directly from ENGINE homestead gardening, small livestock and milk matters assistance, while 175 savings groups were established and 185 savings groups linked to microfinance institutions.

In order to disseminate and increase the adoption of improved nutrition and agronomic practices, ENGINE provided training to 7993 model farmers living in kebeles adjacent to ENGINE supported FTCs. The training focused on nutrition sensitive agriculture, dietary diversity and included agronomic and cooking demonstrations. ENGINE conducted an assessment among trained farmers that showed that 97 percent of the respondents were motivated adopt the practices they observed in the demonstration events. ENGINE will conduct another assessment in Year V with observation of homestead gardens for verification of actual implementation of promoted agronomic practices.

In Year IV, LOL documented ENGINE's livelihoods approaches and identified key lessons learned, challenges and achievements. The assessment highlighted ENGINE's adaptations over the life of project to increase the nutrition impact of livelihood interventions, including the emphasis on poultry and dairy cows in Year IV. ENGINE also identified and supported seed suppliers in ten woredas to serve as sustainable suppliers of high quality vegetable seeds for MVHHs beyond the life of the project.

In Quarter III, ENGINE began implementation of livelihoods activities in Somali region, which included mapping and assessments for irrigated fodder, rangeland management and fodder enclosure

interventions. ENGINE also initiated a voucher system for provision of fodder seeds, supplementary feed and animal health services. 275 HHs from 40 kebeles received training and fodder seeds and began production of fodder on their homesteads.

Social and behavior change communication

During this reporting period, ENGINE finalized the development and production of materials, and began implementation of enhanced community conversations (ECCs) in 21 woredas in four regions through local non-governmental organizations (LNGOs). To date, ENGINE has conducted 9072 sessions for 29,935 community members (divided into three types of groups: mothers, fathers and grandmothers) in two rounds of ECCs. ENGINE also developed content for sessions #7-10, which will be rolled out in the next quarter. ENGINE also modified the ECC sessions for use in non-AGP woredas by GRAD, as well as a modification which will allow ENGINE savings groups in all AGP woredas to conduct ECCs without a virtual facilitator.

ENGINE continued its innovative mNutrition SMS messages and Interactive Voice Response (IVR) service for 509 Agriculture Extension Workers (AEWs) and Health Extension Workers. ENGINE also developed a toolkit based on available SBCC materials for DAs to use to improve their support to HHs on nutrition sensitive livelihood activities and promotion of dietary diversity. The toolkit will be finalized in Year V. ENGINE's SBCC strategy and materials were formally launched and showcased to government, partners and media during a national launch event in Quarter IV.

WASH

During the reporting period, ENGINE begun implementing WASH activities at the community level, including training savings groups to serve as distributors for WASH products including water filters, play mats for children and improved sanitation slabs. After significant procurement delays, ENGINE delivered water filters to trained savings groups in WASH focus woredas who begun selling the filters in Quarter IV in 10 woredas. ENGINE also provided filters to 223 health posts in the target woredas. Savings groups also sold 100% of play mats they received to provide a clean space for children to prevent diarrheal disease and environmental enteropathy. ENGINE also promoted the use of tippy taps which were established in 2213 households with children under two. ENGINE established, trained and supported sanitation marketing groups in 10 woredas who began production and sale of improved latrine slabs in quarter IV, which were purchased by 349 households.

Operations research and surveys

In Year IV, ENGINE finalized the data analysis and report for a study on moderate acute malnutrition and completed data collection on severe acute malnutrition study which is currently being analyzed. The birth cohort and agriculture-nutrition panel studies are progressing as planned with active participation from ENGINE-supported PhD students who enrolled in the newly formed Human Nutrition Department PhD program at Jimma University. Preliminary findings of the birth cohort and agriculture-nutrition studies were disseminated in quarter IV. In addition to seven PhD students, ENGINE provided technical and financial assistance to 25 students for their MSc thesis nutrition research studies at five universities. Findings from completed MSc studies were disseminated in Year V.

Save the Children with TU and VI completed planning and preparation for the end line impact survey which will commence in early Year V. ENGINE also completed baseline surveys jointly with both GRAD and GOAL for both partnerships in non-AGP areas. Based on mid-term evaluation recommendations ENGINE completed two rounds of a survey to collect food security and dietary diversity information from livelihoods beneficiaries. The periodic data collection allows ENGINE to determine whether approaches and interventions are working and to make adjustments in strategies and activities as needed.

Gender

In Year IV, ENGINE introduced gender focused activities in communities based on the gender analysis and strategy prepared in Year III. Decision making and communication skills training was conducted for 1853 men and women to improve household communication and joint decision making behaviors among the members of targeted HHs. ENGINE also oriented men on project activities and the importance of supporting women with household activities, provided labor savings to 57 women, identified male role models on supporting HH nutrition among ECC groups, and conducted exchange visits for women's savings group members to share best practices. Gender indicators were also included into PMP and integrated into survey of critical outcome indicators in MVHHs.

Partnership

Working closely with USAID, ENGINE continued to coordinate FtF nutrition activities using the FtF nutrition technical working group (TWG) platform. In Year IV, the FtF partnership at regional level was functional in Amhara, Tigray SNNP and Somali regions. ENGINE partnered with Peace Corps and hosted a 3rd year volunteer. ENGINE also partnered with GRAD and GOAL to implement development oriented and resilience or emergency projects in 17 non-AGP woredas.

Implementation in non-AGP woredas

In Year IV, ENGINE completed scale up to 17 non-AGP woredas in partnership with GOAL (10 woredas) and GRAD (seven woredas). Implementation with GOAL has progressed well with 1250 HHs with CMAM beneficiaries identified and reached with vegetable seeds, goats and training. The goats provided included one milking goat per HH, so children would immediately benefit from increased milk consumption. East and West Hararghe zones in E. Oromia were significantly affected by drought during Year IV which may impact the results of the partnership; ENGINE is working with GOAL and zonal and woreda offices to respond to the drought, including providing CMAM training for 64 health workers from seven hospitals and 45 health centers in East and West Hararghe. In GRAD partnership woredas, ENGINE supported the establishment of multi-sector nutrition coordination bodies in all seven woredas, and built the capacity of the health system to provide quality nutrition specific interventions, through the training of 757 health workers and program managers in child health and nutrition and ongoing supportive supervision and mentoring. In Quarter III, ENGINE and GRAD completed an updated work plan that limited ENGINE's role in provision of livelihood support to VESA group members. ENGINE will provide TOT training on poultry, perma-garden and ECCs going forward.

Implementation in Somali region

ENGINE in Somali region was formally launched in February 2015 and activities were initiated in all 16 project woredas in the region. ENGINE supported launching the NNP in the region, MIYCN and program managers training, begun adaptation of nutrition counselling materials with RHB and partners, and initiated milk matters livelihood interventions including implementation of a voucher system for fodder seeds, supplementary feed and animal health services. During Year IV, a severe drought impacted the region, Sitti Zone in particular, which may impact ENGINE's ability to deliver the expected results in the most affected woredas.

Reporting Period

This is the ENGINE project's **Year IV Annual Report** covering the reporting period from **September 27, 2014 to September 28, 2015**.

Publication/Reports

Did your organization support the production of publications, reports, guidelines or assessments during the reporting period?

No/Not Applicable

Yes

If yes, please list below:

Title	Author	Date
ENGINE Supported MSc Thesis / Abstracts From Local Universities	ENGINE	Oct 2014
Outcomes of Moderate Acute Malnutrition and their determinants in under-five children: a prospective cohort study from a food-secure setting in rural Ethiopia	<i>Valid International, Jimma University and Save the Children</i>	Oct. 2014
Using the Q-methodology to understand local perceptions of the definition, causes, and solutions of malnutrition in Jimma zone, Ethiopia	<i>Valid International, Jimma University and Save the Children</i>	Dec 2014
<i>Determinants of Participation in the "Nutrition-sensitive" Agricultural Activities of a Large-scale Integrated Nutrition Program in Ethiopia</i>	<i>Jennifer Coates and Yohannes Tesema</i>	<i>Jul. 2, 2015</i>
<i>Maternal, Infant and Young Child Nutrition Training Effectiveness Assessment in Oromia, SNNP, Amhara and Tigray Regions</i>	<i>Save the Children ENGINE</i>	<i>June 30, 2015</i>
<i>Post-Harvest Losses and Handling Practices of Temporary and Permanent Crops Produced In Relation with Food Security of Households in Ethiopia: Secondary Data Analysis</i>	<i>Hawassa University – Tufts University</i>	<i>June 2015</i>
<i>Evaluating Multisectoral Strategies for Improved Nutrition and Food Security in Ethiopia [Agriculture Nutrition Panel Survey. Round 3 – Post Harvest Report</i>	<i>Tufts University (Addisalem Fikre)</i>	<i>May 02, 2015</i>
Predictors of Household Dietary Diversity in Ethiopia: Analysis of the 2011 Welfare Monitoring Survey data	<i>Jimma University – Tufts University</i>	<i>June 2015</i>
Maternal Psychosocial Stress and its Implications on Maternal and Infant Nutrition: Validation of the Patient Health Questionnaire as a Screening Instrument for Depression in Pregnant Women (Afaan Oromo Version)	<i>Yitbarek Kidane, Tefera Belachew, Markos Tesfaye, Eva Kantelhardt, Veronika Scherbaum</i>	2015

Technical Assistance

Did your organization utilize short-term technical assistance (TA) during the reporting period?

No/Not Applicable

Yes Please list below:

If yes, please attach an electronic copy of the TA report as part of your submission. Trip reports from Quarter IV are included in **Annex 5**.

TA Consultants

Name	Arrival	Departure	Organization	Type of TA provided
Brian Doston	29 Sept 2014	3 Oct 2014	LOL	Follow up on LOL registration issue with Save the Children and USAID Discussed Year IV work plan with the LOL / ENGINE team
Yohannes Tesema	Feb. 1 2015	Feb. 22, 2015	Tufts	Provided technical support and guidance to the data manager, training of study supervisors and data collectors for the two longitudinal studies currently underway
Meghan Loraditch	Feb. 3, 2015	March 7, 2015	Tufts	Addressed management issues with partners, data management needs and provided ongoing support and supervision to project field activities
Dr. Shibani Ghosh	Feb. 5, 2015	Feb. 14, 2015	Tufts	Discussed with senior management about ENGINE end line evaluation survey and presented the Birth Cohort study implementation to ENGINE project staff
Meghan Davis	Feb. 9, 2015	Feb. 14, 2015	Tufts	Assisted with training Jimma University study lead on expense reporting, particularly on how to report receipts and expenditures against budget line items, the need for supporting documentation of expenses, namely trip reports for per diem and travel expenses and on the procurement process
Dr. Jennifer Coates	Feb. 13, 2015	Feb 17, 2015	Tufts	Assisted in preparation and implementation of enumerator training of Round 3 Ag-Nut Panel data collection Assess systems and progress in place for data management and data quality assurance

Adriane Seibert	Feb 21, 2015	March 3, 2015	Save the Children	Supported ENGINE Plus launch and implementation planning and provided assistance in modification of materials including MIYCN manual for Somali Region
Dr. Paluku Bahwer	March 08, 2015	March 12, 2015	Valid International	Checked data quality and analysis of SAM study
Lydia Clemmons	May 4, 2015	May 16, 2015	The Manoff Group	SBCC TA for development of ECC session 7-10 scripts
Stephen Sara	May 30, 2015	June 14, 2015	Save the Children	WASH short-term technical assistance (STTA)
Joy Del Rosso	June 30, 2015	July 11, 2015	Save the Children	Support SBCC strategy in Somali region
Timothy Nziok	June 28, 2015	July 2, 2015	Land O'Lakes (LOL)	Management and partnership STTA for LOL. Assessed performance and addressed any challenges or issues.
Meghan Davis	July 24, 2015	August 3 rd , 2015	Tufts	Visited Jimma University to conduct financial compliance monitoring
Adriane Seibert	August 3, 2015	August 15, 2015	Save the Children	Supported FGDs in Somali region to inform adaptation of SBCC materials
Meghan Loraditch	August 9 th , 2015	September 2 nd , 2015	Tufts	Participated in the End line and 4 th round Ag-Nut data collection training, organizing Tufts-ENGINE OR dissemination symposium, provided ongoing support and supervision to project field activities
Marion Min-Barrow	August 16, 2015	August 27, 2015	Tufts	WEAI tool pre-testing for Ag/Nutrition panel study
Paluku Bahwer	August 24, 2015	Sep 2, 2015	Valid international	Support SAM data analysis
Hazem Shawky	Sept 5, 2015	Sept 16, 2015	Save the Children	Support budget preparation and financial monitoring

Travel and Visits

Did your organization support international travel during the reporting period?

No/Not Applicable
 Yes

All international travel to conferences, workshops, trainings, HQ or meetings

Name	Destination	Departure from Ethiopia	Arrival in Ethiopia	Host organization	Purpose of the travel
Dr. Habtamu Fekadu, COP	Washington, D.C.	29 Nov 2014	7 Dec 2014	Save the Children	To attend Save the Children US Global Nutrition Technical Team Retreat and to attend and present ENGINE's research and documentation activities at <i>What is Growth Good For</i> Technical Symposium
Dr Habtamu Fekadu, COP	Brazil	July 21, 2015	July 27, 2015	Center of Excellence against Hunger in Brazil	Experience exchange visits to countries that have successfully implemented multi-sector linkages / food fortification
Kebede Tafesse, Sr. Livelihood and Nutrition Advisor	Uganda	July 19, 2015	July 25, 2015	Food Fortification Initiative / center - Uganda	Experience exchange visits to countries that have successfully implemented multi-sector linkages / food fortification
Zelalem Mekuria, Sr. SBCC Manager	Kenya	Sept 13, 2015	Sept 16, 2015	CRS	To attend and present ENGINE SBCC experience at <i>2015 Integrated Nutrition Conference</i> in Nairobi organized by CRS.

Field Monitoring and Supervision Visits

Have any program **monitoring visits/supervisions** been made during the reporting period?

No/Not Applicable

Yes

Please list below:

Description of monitoring team	Start date	End date	Sites visited	Written recommendations provided
Finance and award manager	19 Oct. 2014	24 Oct. 2014	Jimma University, Save the Children finance office	Review of sub-agreement and financial performance
ENGINE COP, Health and Nutrition team and Jhpiego PSE team	4 Nov. 2014	6 Nov. 2014	Alage ATVET, Shashemene Health Science College, Hawassa University	Use the Pre-service Education (PSE) institution logo for presentations and abide with USAID's branding. For agriculture skill lab prepare board with the benefit of the selected crop on each plot. Distribute ENGINE counseling tools to each of the Health Science college skill lab.
ENGINE COP and DCOP (with Jhpiego PSE team on Jan 26)	26 Jan. 2015	28 Jan 2015	Jimma University and Tufts University, Goma woreda	Inter-institutions learning exchange visit for Jimma University would help to improve the organization and utilization of skills lab. University management needs to ensure lab is available to and used by students to improve quality of education. Sub-grantees need to review and abide by USAID/ENGINE branding guidelines. Important oral comments and recommendations given.
Monitoring and evaluation team	17 Feb 2015 27 March 2015	23 Feb 2015 12 April 2015	Tigray, SNNP and Oromia	ENGINE central M&E team provided data quality monitoring and provided feedback to regional teams to strengthen routine data collection and reporting
Monitoring and evaluation (M&E) team	23 Feb 2015	25 Feb 2015	Woliso	Monitoring of Tufts University and Jimma University. Provided guidance on branding, election neutrality and data quality assurance.
ENGINE COP, Operations & Compliance Manager and Finance and award manager	20 March 2015	22 March 2015	Bahirdar and South Achefer woreda	Reviewed and monitored award and finance management and program implementation Recommendations on utilization and documentation of all program forms provided as well as action points for support of Regional Nutrition Coordinating Bodies (RNCB) and Regional Nutrition Technical Committees (RNTC) and cascading of NNP to woreda and kebele level.

Finance and award manager and Operations and Compliance Manager	30 March 2015	3 April 2015	Hawassa Field offices	To review and monitor program implementation and awards and finance. Strong performance observed. Recommendations provided on budget tracking of AGP and non-AGP woredas and timely report submission.
Sr SBCC Manager	April 1st May 6th	April 4th May 9th	Tis Abay kebele South Achefer Kebele (both in Amhara region)	Observation and monitoring of 2 ECCs (per visit) was conducted. Interviews with CCAs and LNGO focal persons on ECC implementation. CCAs given guidance on how to lead ECCs more efficiently. Several home visits were conducted
Finance and award manager	June 07, 2015	June 11, 2015	Jimma University Tufts finance office for OR	Review of sub-agreement and financial performance and technical support on reporting and recording
ENGINE research and Monitoring and Evaluation (M&E) advisor	June 07, 2015	June 09, 2015	Jimma University OR study sites; Dimtu woreda	Check the progression of data collection and quality of data. Discuss with SAM primary investigators and Save the Children team on the finalization of the study and appropriate advice was provided.
ENGINE research and M&E advisor	June 09, 2015	June 11, 2015	Jimma Tufts longitudinal study sites and Jimma University MSc students	Tufts staff were advised to work on documentation and identify areas that need further research. Staff were also advised to abide to USAID brand rules. Jimma University MSc students' thesis work progress, financial utilization and reporting were assessed.
M&E team	May 12, 2015 June 08, 2015	May 16, 2015 June 11, 2015	East Oromia, West Oromia, and SNNP; Amhara	ENGINE country office M&E team provided data quality monitoring and provided feedback to regional teams to strengthen routine data collection, recording and reporting
Health & Nutrition and Livelihoods teams	June 19, 2015	June 23, 2015	E. Hararghe zone, Oromia	Monitoring of joint ENGINE/GOAL implementation: -At facility level the HWs and HEWs are providing treatment of SAM and in parallel with treatment the preventative nutrition counselling is being conducted. -Provision of vegetable seeds should consider the water requirement of the vegetable crops. Promotion of orange fleshed sweet potato should be considered for East and West Hararghe. -Feeding goat milk to children should encompass the food safety, including boiling milk rather than providing raw milk.

ENGINE Livelihoods Advisor, PSE advisor, USAID A/AOR and FMoA delegates	August 27, 2015	August 29, 2015	Limu Bilbilu woreda (E. Oromia), Malga woreda (SNNP), Alagae TVET and Hawassa University ACoE	ENGINE multi-sector nutrition coordination activities, nutrition sensitive livelihood activities and pre-service education activities shown to MoA representatives. Interest and commitment for collaboration with MoA increased.
ENGINE SBCC team member	August 5 th 2015	August 12 th , 2015	Amhara and Oromia	FGDs with DAs confirmed that they need job aids. Already developed materials such as flipchart selected for adaptation and accordion leaflets selected as job aids.
ENGINE research and M&E advisor	Sept 17, 2015	Sept 18, 2015	Jimma Tufts study sites and Jimma and Hawassa Universities MSC students	Tufts staff operating at the ground was advised to work on documentation and identify areas that may need further researching that may contribute addressing undernutrition. Staffs were also advised to abide proper USAID brand rules. Jimma and Hawassa Universities MSc students' thesis work progress, financial utilization and reporting were assessed. Students were advised to properly acknowledge donor in their thesis work and submit soft and hard copy of thesis to ENGINE at the end.
ENGINE WASH advisor	Sep 15, 2015	Sep 27, 2015	SNNPR (two districts) and Amhara (three districts)	Activity of savings groups and sanitation marketing groups monitored, and guidance provided on how to speed up the implementation. Good progress reported on WASH interventions

Note: the monitoring trips included here highlight financial and management monitoring of sub-primes and regional offices. ENGINE thematic teams conduct frequent programmatic monitoring and technical assistance trips to regions.

Accomplishments and successes during the reporting period

Project management

ENGINE Chief of Party (COP) and Deputy Chief of Party (DCOP) reviewed the project management and performance with the Deputy Country Director twelve times during the reporting period to discuss budget utilization, procurement challenges, implementation in non-AGP woredas, and implementation in Somali region and staff retention, among other issues. ENGINE senior management conducted regular management meetings with sub-primes, senior advisors and regional teams to monitor the project performance as per the project work plan. In this reporting period, ENGINE management had eight regular meetings with ENGINE Agreements Officer's Representative (AOR).

Sub-grantee management

ENGINE continued its regular staff meetings to discuss progress toward completing planned activities as outlined in the sub-grantee Year IV work plans, and met individually with sub-primes to quickly resolve any outstanding issues to achieve optimal project performance. LOL successfully completed registration in Ethiopia during the reporting period. During the reporting period, ENGINE conducted field monitoring of sub-primes' implementation and for compliance. The ENGINE M&E and research advisor conducted field monitoring of Tufts and Jimma University. The senior nutrition and livelihood advisor provided routine monitoring of LOL activities. ENGINE senior SBCC manager conducted monitoring of LINGOs implementation of ECCs. ENGINE held three quarterly review meeting with sub-primes to review achievements and challenges encountered during the reporting period. Save the Children's sub-agreement with Jimma University for the implementation of acute malnutrition research concluded at the end of Sept 2015. All final reports and close-out activities will be completed by JU with support from Save the Children early in Year V.

Staff recruitment

During the reporting period, ENGINE completed all recruitment for expansion to Somali Region as well as recruited coordinators for non-AGP woredas to support joint implementation with GRAD and GOAL. During Quarter III, the Sr. Policy Advisor seconded to the FMoH resigned. ENGINE in collaboration with FMoH is recruiting for the position with a new focus on utilization of nutrition research produced by ENGINE. All key personnel were retained during the reporting period.

ENGINE start-up in Somali region

ENGINE in Somali region was formally launched in February 2015 following the signing of a tripartite agreement between SCI, Somali BoFED and USAID. ENGINE completed start-up activities and begun implementing in 16 woredas in the region, including launching the NNP in the region and establishing a regional nutrition coordination body and technical committee. ENGINE adapted its training manuals and provided MIYCN training for 106 HWs and HEWs, and program planning and supervision training for 36 health and agriculture program managers in the region. To guide the implementation of the livelihoods activities, including rangeland management, enclosures for animals, and voucher programs for seeds, animal feed and veterinary services, ENGINE carried out community conversations and a mapping assessment. ENGINE also supported the establishment of a nutrition SBCC TWG at the RHB which has mapped and assessed available nutrition counselling materials and identified needed adaptations to ensure SBCC materials are relevant for the Somali context. ENGINE is leading the adaptation process, while coordinating closely with PRIME, and adaptation will be completed in Year V. During Year IV, a severe drought impacted the region, particularly in Sitti Zone which may impact ENGINE's ability to deliver the expected results in the most affected woredas and may require a change in approach to respond to the situation during Year V.

ENGINE, GRAD and GOAL partnerships in 17 non-AGP woredas

In Quarter II, ENGINE scaled up to six non-AGP woredas in SNNPR reaching all 17 non-AGP woredas in partnership with GOAL and GRAD.

There were some initial challenges to joint implementation with GRAD due to delays in USAID's funding to GRAD for the partnership, and a lack of clear direction from GRAD management to implementing partners. ENGINE provided support for woreda nutrition multi-sector coordination bodies, conducted MIYCN training for HWs and HEWs, provided supportive supervision and mentoring to improve the delivery of nutrition counselling. Following a joint work planning meeting in Quarter III with management and regional teams from both projects, GRAD requested a reduction in ENGINE's role in livelihoods activities; moving forward ENGINE's role will be to provide TOT training to GRAD for homestead gardening and poultry management. In Quarter IV, ENGINE completed the adaptation of ECC materials for non-AGP woredas which will be rolled out in Year V. ENGINE assisted GRAD to integrate nutrition into a GRAD HH survey which will serve as a baseline for the partnership. See Annex 1 for more details.

Joint implementation with GOAL is progressing well with all 1250 targeted CMAM HHs selected in collaboration with GOAL, woreda and kebele officials. ENGINE supported woreda level nutrition multi-sectoral coordination, built HWs and HEWs' capacity in MIYCN, provided training to DAs on perma-gardens, and provided vegetable seeds, goats and training to targeted HHs, and completed a joint baseline assessment. The collaboration has been effective, particularly in East and West Hararghe where the partnership has been operating for a longer period of time and where ENGINE and GOAL staff are co-located. See Annex 2 for more details. East and West Hararghe were severely affected by drought in Year IV which affected the ability of MVHHs to grow produce in their homestead gardens and increased the incidence of acute malnutrition in the implementation woredas. In Quarter IV, ENGINE responded to demand from government to fill gaps and provided CMAM training for 64 health workers from seven hospitals and 45 health in East and West Hararghe. ENGINE's support was coordinated with GOAL to fill needs not met by GOAL. The impact of the drought will continue and likely worsen in Year V affecting the expected results of the partnership.

IR I: Capacity for and institutionalization of nutrition programs and policies

IR I.1: Strengthened policy environment

Planned activities

- Support national and regional nutrition multi-sector coordination mechanisms
- Address gaps in existing nutrition-related policies and guidelines
- Support national level food fortification and micronutrient survey
- Implement education quality improvement process to strengthen nutrition education
- Strengthen Nutrition Curriculum at project supported institutions
- Build staff capacity and create an enabling environment for competency-based nutrition education
- Strengthen nutrition in-service training and provide supportive supervision

Strategy I.1.1: Strengthen existing nutrition multi-sector coordination

Activity (i) Support the nutrition multi-sectoral coordination mechanism

Support national, regional and woreda nutrition multi-sector coordination mechanisms

ENGINE provided technical and financial support to the Annual Multi-Sectoral Nutrition Review Meeting and Capacity-building workshop held on October 20-22, 2014 in Addis Ababa. ENGINE led the programmatic working group and prepared the annual multi-sectoral nutrition summary report, which was reviewed by the nutrition case team at the Federal Ministry of Health (FMoH), and distributed to members. The NNCB meeting August 2, 2015 was conducted following the experience sharing visits to Brazil and Uganda for NNCB members in Quarter III (see additional detail below). The NNCB accepted the main recommendations from the two exchange visit and called for implementation of the action plans. The FMoH will prepare a summary report regarding the need for high level multi-sectoral platform and Nutrition and Food Policy that will be shared to the Prime Minister's office.

In Quarter III of this reporting year, ENGINE provided technical and financial support for the NNP launch and establishment of the Somali Regional Nutrition Coordinating Body (RNCB) and Regional Nutrition Technical Committee (RNTC). Regional bureau heads who function as chairs, co-chairs and members of the RNCB, signed the NNP and committed to cascade the program down to kebele levels. In Quarter IV, ENGINE supported five multi-sectoral coordination workshops in five woredas (Shinile, Maiso, Gursum, Awbare and Dheghbur) which led to establishment of woreda level Nutrition Coordination Bodies and Nutrition Technical Committees.



Figure 1: Members of RNCB pledging to be nutrition champions

ENGINE supported RHBs to organize nine quarterly NNP regional multi-sector technical committee meetings in Amhara, Oromia, SNNPR and Tigray (table 1.1). In Amhara, additional meetings were held by the technical committee to ensure that NNP activities are well integrated into sectors. In Oromia region only one meeting was held due to government focus on other priorities. During these meetings, the multi-sectoral technical committees exchanged updates about the progress of planned nutrition activities, challenges and opportunities. Major activities accomplished include engaging all regional partners working in nutrition to become part of the MSNTC; discussing partner' performance against work plans; building the capacity of newly joined NNP partners; supporting the NNP implementing sectors to prepare an integrated nutrition-sensitive plan; and building the capacity of NNP implementing sectors at different levels.

Table 1.1 Regional multi-sectoral technical committee meeting

Region	Plan	Achievement	% achievement
Amhara	2	4	200
Oromia	2	1	50
SNNP	2	2	100
Tigray	2	2	100
Total	8	9	113

Regional level RNCB meetings were not regularly conducted due to lack of availability, limited commitment of the committee members and lack of accountability to higher body in the region, such as Regional President's Office, as most of them are chaired by RHB. ENGINE will continue to efforts to revitalize RNCBs through discussions with the relevant bodies at regional levels. A key recommendations from the exchange visits conducted by regional sector heads and vice presidents suggested that it might be more effective for RNCBs to report to Regional Presidents rather than RHBs which may increase RNCB motivation to be active and engaged.

ENGINE identified 10 woredas during Year IV to serve as models of mutli-sectoral nutrition coordination, and provide operational evidence for effective coordination. All ten woredas established coordination mechanisms in Quarter I. Coordination mechanisms are structured differently in the various regions. Woreda nutrition multi-sector coordination bodies in six model woredas in Amhara, Tigray and West Oromia are led by woreda administrators, while in two model woredas in SNNPR the bodies are led by the woreda health offices. In East Oromia, based on the

recommendation of the technical committee, leadership was transferred from the woreda health office to the woreda administrator for strengthened coordination. Leadership by woreda administrators appears to be the preferred model of maintaining strong leadership and functional coordination bodies. Using the woreda administrators to lead the coordination bodies was a key recommendation from the RNCB and RNTC exchange visits to Brazil and Uganda. The woreda nutrition coordination bodies are showing tangible impact as demonstrated in Box 1.

In Year IV, ENGINE provided technical and financial support to 99 (117%) woreda multi-sectoral coordination meetings in Amhara, Oromia, SNNP and Tigray regions to orient woreda implementing sectors to the NNP and ensure nutrition is included in each sector's woreda plan. Targets in Amahara and SNNP regions were surpassed (219% and 129% respectively) as additional meetings were conducted at zonal levels based on demand from zonal authorities. Thirty five of the 99 meetings of woreda nutrition multi-sector coordination bodies (WNMCB) took place in ten model woredas in Oromia, Amhara, SNNP and Tigray. The strengths and challenges/lessons learned identified during meetings and field visits in model woredas as well as major action points are summarized in table 1.2 below.

Box 1: Success of Woreda Nutrition Multi-Sector Coordination

Woreda Nutrition Multi-Sector Coordination in Guduru woreda, western Oromia takes on Goiter

The Woreda Nutrition Multi-Sector Coordination in Guduru woreda was determined to tackle the issue of goiter and promote the use of iodized salt. They effectively raised the issue at the quarterly woreda council meeting conducted. After lengthy discussion and debate among the council and all 246 participants, the following points were agreed and acted on immediately:

1. All members of the woreda council were to use only iodized salt as an example for the rest community, with immediate implementation
2. To disseminate important information on the use of iodized salt throughout the woreda and community via kebele representatives
3. To control non-iodized salt in markets and make only iodized salt available

Local merchants are now selling iodized salt in the community and the members of the Nutrition Multi-sector Coordination Body continue to monitor and support the change.

Effective Nutrition Multi-Sector Coordination in Takusa Woreda, Amhara

Takusa woreda in North Gondar Zone of Amhara region is an ENGINE model woreda for nutrition interventions, including woreda multi-sector coordination. With ENGINE's support, Woreda Nutrition Multi-sectoral Coordination Committee (WNCC) and Woreda Nutrition Technical Committee (WNTC) were established and training on nutrition and the role of each sector in implementing the NNP was provided. The technical committee is meeting quarterly and the coordination committee meeting monthly. In QIV of this reporting year, the woreda multi-sector coordination bodies achieved the following:

Community Level:

- The WNTC prepared an annual plan for the two committees
- WNTC assisted the NNP implementing sectors to mainstream nutrition into their annual plan
- Twenty four kebeles of the woreda prepared annual nutrition implementation plan
- The woreda council has allocated 9,000 ETB for woreda nutrition technical committee as running cost
- Kebele Nutrition Technical Committee and the WNTC are sending monthly performance reports to WNTC and WNCC respectively

Agriculture Sector:

- Started to promote nutrition dense fruit and vegetable production to non-ENGINE kebeles

Education Sector:

- Established school based nutrition clubs in non-ENGINE intervention schools
- Encouraged schools to conduct agronomic practice and food cooking demonstrations for students, teachers and parents in non-ENGINE schools

Trade and Transport Office:

- Regularly checking whether the available salt for sale is iodized or not.
- Provided awareness for salt traders concerning salt storage, iodized salt regulation and how to supply iodized salt to the community with good iodine loss protection

Communication Office:

- Produced IEC/BCC materials concerning nutrition for the community
- Supported local mass Medias to disseminate key nutrition messages in their promotion work.

Table 1.2: Major identified strength, gaps and action points suggested during model woreda nutrition multi-sector coordination body meetings and field visits

Region (model woreda)	Strength	Gap identified during meeting/field visit	Action points/recommendations
West Oromia (Woliso and Guduru)	Nutrition counseling is continuously conducted for mothers at HPS	All sectors are not equally responding to strengthen nutrition multi-sectoral implementation	Directions was given by woreda administrator to each sector to implement nutrition activities in their sector plans and follow up
	Mothers started constructing handwashing corners	Agronomic practices were not strengthened at schools	The HEW & DA jointly conduct visits and demonstrations at farmer's yards and schools.
Amhara (South Achefer and Takusa)	Establishment of kebele level committee / taskforce. Monthly reporting of NNP update from kebele to zones	Poor documentation at the woreda and kebele levels High turnover among the WNTC committee members The support of sectors at the region and zonal level to the woreda is very low; no regular supervision	Provide stationery and other materials for documentation
	Farmers neighboring to ENGINE kebeles started preparing back yard farms for vegetables and fruits	Unavailability of multi-sectoral plan at kebele level	Preparation of sectoral and multi-sectoral plan at kebele level (with the assistance of the technical committee)
East Oromia (Yaya Gulele and Lemu na billillo)	MVHHs are widely practicing homestead gardening	The MVHH saving groups have not finalized formal registration	Agreed that kebele chairman, AEWs and the community leaders should finalize all legal requirements
	HHs are using iodized salt	Poor documentation of Nutrition Multisectoral Coordination Body (NMCB) activities	All documents of meetings and field trips (minutes and summary reports) are agreed to be filed at WoHO and administration office
	NMSCB leadership was transferred from woreda health office to the woreda administrator for strengthened coordination		
Tigray (Enda Mehoni and Tahtay Adiabo)	Households are using iodized salt	Poor coordination at kebele level	Establishment of kebele level nutrition technical committee
	Households benefiting from milk and vegetable produced from homestead gardening	Poor savings group performance	Strengthened follow-up and support
SNNP (Misrak Melga and Yem Special Woreda)	Promotion of cooking demonstration at each "Gote" level	Discovery of non- iodized salt packages in the market	Promote the use of iodized salt and strengthen enforcement of salt iodization regulation. Recommended for periodic quality checkup/Iodine test
	The crosscutting intervention /WASH and Gender/are well mainstreamed	Turnover of nutrition trained staff	Organize gap filling training

ENGINE supported establishment and/or meetings of woreda level nutrition multi-sector coordination bodies in seven GOAL and five GRAD partnership woredas (see annexes 1 and 2).

Table 1.3. Woreda multi-sector coordination meetings conducted in AGP woredas in Year IV

S/N	Regions	Annual Planned	Annual Achieved	Achievement %
1	Amhara	16	35	219
2	Oromia	39	28	72
3	SNNPR	24	31	129
4	Tigray	6	5	83
	Total	85	99	117

Conduct multi-sector nutrition training workshop with key nutrition stakeholders

After the roll-out of the NNP in year III, ENGINE supported the establishment of RNCB and RNTC structures in Amhara, Oromia, Tigray and SNNPR. In Year IV, ENGINE, in partnership with UNICEF, FMoH and RHBs facilitated and supported capacity-building workshops for members of RNCB and RNTC in Oromia, Amhara, SNNP and Tigray regions. The objective was to strengthen the capacity of the members of RNTC to implement the NNP and to promote a common understanding of nutrition among the sectors at regional, zonal and woreda levels. A total of 226 participants (58 from Oromia, 51 from Tigray, 52 from SNNP and 65 from Amhara) made up of RNCB and RNTC members, zonal administrators and economic and social advisors, senior experts, university lecturers and representatives of parliament attended the workshops.

Following the regional level capacity-building workshop, ENGINE supported two zonal level capacity-building workshops in Amhara region and three in Oromia. In Amhara, training was cascaded to all zones, some of which cascaded the training to woreda level to build capacity of the NNP implementing sectors. In Oromia, all nine sectors from the zones participated and prepared a work plan to ensure sustainable coordination and build capacity of woreda multi-sectoral teams and drafted a terms of reference (TOR) for the zonal coordination body. Administration offices are assigned to oversee implementation of NPP at zonal levels. In Tigray region, ENGINE supported roll-out of NNP to zonal and woreda level in three Zones.

Promote exchange visits among countries that have successfully implemented multi-sector linkages

ENGINE with the input of partners supported the organization of NNCB and NNTC experience sharing exchanges to Brazil and Uganda, in addition to coordination and financial contributions ENGINE provided technical support to prepare the Ethiopian delegates, and sent two representatives. Brazil was selected as it has made significant improvement in reducing the level of stunting, and Uganda was selected to demonstrate the impact of the nutrition multi-sectoral coordination platform in the Office of Prime Minister and to showcase its successful national food fortification program. The high-level visits were conducted in Quarter IV and reports and recommendations were prepared following the exchange. The visits provided a demonstration of the success of multi-sector nutrition coordination in other countries, and build commitment of NNCB and NNTC members. The visits effectively engaged the leadership of FMOA, FMOH and regional leadership and bureaus. Two of the key recommendations from the visit were that the NNCB should report to the Prime Minister's office rather than to FMOH to strengthen accountability of implementing sectors, and to have a National Nutrition and Food Policy in place of NNS. See Annex 4 for full reports on the visits.



Figure 2: Members of high level visit to Brazil and WFP Center of Excellence to fight Hunger

Activity (iii) Develop national nutrition advocacy approach

The ENGINE Social and Behavior Change Communication (SBCC) team held two rounds of consultative workshops with Ethiopian Orthodox Tewahedo Church (EOTC) religious leaders and church scholars, in Year IV. The first workshop in September 2014 created awareness on the effects of fasting practices on maternal under-nutrition and childhood stunting, in the first 1000 days. During the workshop, issues related Ethiopian Orthodox teachings related to fasting and pregnancy; fasting during lactation; fasting and children under 5; and gender roles/family support during the first 1000 days were discussed. During the follow-up workshop in March 2015, the findings generated during the previous workshop were utilized to develop content for a sermon guide based on the church's teachings on four thematic areas. Church scholars and preachers outlined the laws and regulations of the church and compiled the content into a draft sermon guide. During the last quarter of the year, ENGINE's SBCC team reviewed and finalized content and design of the draft sermon guide which will be presented to the overall assembly of church scholars and the Holy Synod council members for endorsement, in the presence of his Holiness Abune Matias I, Patriarch of the EOTC, in the first quarter of year V.

An advocacy technical working group (TWG) meeting was held at FMOH in the first quarter of the year, to discuss a follow-up advocacy workshop for the remaining parliamentarians. ENGINE recommended that FMOH follow-up on the action points agreed during the first advocacy workshop, and proposed to conduct the workshop for the incoming new federal parliamentarians and regional parliamentarians following the 2015 election. ENGINE will support a workshop for new parliamentarians in Year V if FMOH confirms the availability of parliamentarians, in the new fiscal year.

The Office of the First Lady (OFLE) also showed a strong interest in ENGINE's advocacy workshops, conducted with Orthodox Christian Religious leaders and scholars, to refine religious guidance to improve fasting practices related to maternal and child nutrition. ENGINE and World Vision were recognized for their advocacy efforts to engage religious leaders and were asked to present their findings to OFLE representatives in June. The First Lady W/ro Roman Tesfaye expressed interest in supporting ENGINE's advocacy efforts and to work collaboratively in the future to find sustainable solutions to reduce maternal under-nutrition and childhood stunting. ENGINE will seek to engage with OFLE in Year V where possible.

ENGINE participated in an advocacy and SBCC TWG meeting to begin FMoH harmonization of nutrition SBCC materials. ENGINE shared SBCC materials at FMoH request, and was appointed as a member of the SBCC material selection and message harmonization committee of the TWG. ENGINE participated in a message harmonization workshop in Quarter III where nutrition SBCC materials developed by partners were reviewed and categorized. FMoH plans to adapt existing materials for national use in order to minimize duplication of efforts, and ensure consistency in message delivery.

The London School of Hygiene and Tropical Medicine (LSHTM) has been appointed to assist in the development of SBCC materials for FMoH for national use through the SURE project. LSHTM representatives held a number of consultative meetings with ENGINE staff to review the SBCC materials developed by the project and determine the feasibility of adapting materials for FMoH. LSHTM representatives showed great interest in the SBCC materials and plan to use them in the adaptation.

FMoH in collaboration with the USAID funded Health Communication Capacity Collaborative (HC3), selected ENGINE as a member of the SBCC technical committee for the upcoming International SBCC summit, to be held in February, 2016, in Addis Ababa. Several committees were formed in August, to assist in various capacities, as part of the preliminary preparations and coordination efforts for the event.

Strategy I.1.2 Support development and revision of policies, guidelines and standards

Activity (i) Address gaps in existing nutrition-related policies and guidelines

Throughout Year IV, ENGINE facilitated various TWG meetings and actively engaged in the development of NNP II and revising the National Nutrition Strategy (NNS). ENGINE provided financial support for the NNP II and NNS revision first block write-up meeting in Quarter II where a draft revised NNP II document was produced. ENGINE also provided technical support for the NNP II development second block write up meeting in Quarter III. Following the block write up meetings, a revised drafts of each strategic objective were developed, which require final review by the core NNP II development team. The NNP II core team meeting was held to finalize the document which was prepared for approval. Following the Sekota Declaration and the high level exchange visit, guidance was given that the NNS will be updated to National Nutrition and Food Policy. ENGINE will support preparation of the policy in Year V. NNP II is expected to be approved early in Year V. ENGINE's technical support to FMoH included placement of a seconded advisor with the Nutrition Case Team who helped conduct the FMoH's nutrition agenda and activities.

ENGINE participated in the review of AGP and drafting of recommendations to the FMoA on how to incorporate nutrition sensitive approaches and nutrition indicators into the program. A decision by the FMoA on what nutrition content to include in AGP2 is pending. In Quarter IV, following exchange visits to Brazil and Uganda, the FMoA initiated work on the development of Nutrition Sensitive Strategic plan for Growth and Transformation Plan (GTP) II (2016-2020). ENGINE in partnership with FAO, USAID Agribusiness and Market Development (AMDe) project and others is providing technical support; the strategic plan is expected to be completed in Year V.

In Quarter II, the FMoH prioritized preparation of a Comprehensive Community Based Nutrition (CCBN) guide and package for health centers, health posts and communities to standardize nutrition services. In Quarter III, ENGINE participated in a technical working group meeting held in Adama where Comprehensive Nutrition Service Guidelines was developed and submitted to FMoH for review and approval by FMoH is pending. In Quarter III, the FMoH Maternal and Child Health (MCH) Directorate launched a Reproductive, Maternal, Newborn and Child Health and Nutrition (RMNCH/N) platform to guide and coordinate the work of partners, which ENGINE is participating in.

ENGINE participated in a steering committee for a European Union (EU) funded nutrition situation analysis, contributing to steering committee meetings and a workshop where results of the analysis were shared and discussed. ENGINE also provided information on its nutrition-specific and

nutrition-sensitive interventions in AGP woredas with the consultants leading the review and organized a site visit for the team in Quarter III.

In the WASH sector ENGINE is working with government and implementing partners, such as National Water, Sanitation and Hygiene Task Forces and Ethiopia WASH movement, participating in meetings and providing technical support to partners where needed. ENGINE was invited to join the task force by the FMOH. ENGINE is also participating in preparation of the National Sanitation Marketing training manual.

Activity (ii) Support national efforts on micronutrient control and prevention

As one of its capacity building objectives, ENGINE continued to provide technical and financial support to FMOH, EPHI and the Ministry of Trade and Industry (MoI) to conduct national level activities to facilitate the prevention and control of micronutrient deficiencies in Ethiopia.

National micronutrient intervention guidelines revision

ENGINE took the lead in addressing comments from FMOH Office of Minister on the micronutrient intervention guidelines. The revised guidelines were submitted to the nutrition case team of FMOH for comment. Comments given were addressed and the final version of the document is ready for printing.

Support national micronutrient survey

The government of Ethiopia, led by EPHI/FMOH conducted a major micronutrient survey (iodine, iron, zinc, vitamin A and B12), which will be used as evidence and input for the development of a national food fortification strategy. ENGINE provided technical and financial support to EPHI/FMOH to conduct the national assessment in Year IV. In Quarter III, household level data collection and data entry was completed by EPHI. EPHI finalized the preliminary report on household and clinical data and shared with the FMOH for in-house review. Following amendments, the report will be released to partners. Currently EPHI is working on the laboratory analysis of the biological specimens to deliver the complete report, including biochemical results.

National food fortification plan of action

In Quarter I, ENGINE supported and participated in a meeting chaired by MoI to finalize flour and edible oil fortification standards for iron and other micronutrients. In Quarter II, ENGINE facilitated and participated in a meeting held at the FMOH to discuss the EPHI report on the rapid assessment of iron content in industrially processed wheat flour. The meeting participants agreed that the findings would be presented and discussed further in the upcoming national food fortification steering committee meeting. However, due to competing priorities, the meeting was not held in quarter IV. The result of this assessment is intended to be used as a final input to the flour fortification standards as well as the National Food Fortification Implementation Plan of Action.

IR 1.2: Pre-service and in-service nutrition training for health care agents strengthened

Strategy 1.2.1: Pre-service education for health care providers and agricultural agents

Activity (i) Develop and deliver pre-service education through partnerships with universities, colleges and other programs

Sub-activity (i) Implement education quality improvement process to strengthen nutrition education

During Quarter I, ENGINE conducted an education quality improvement workshop for the College of Dry Land Agriculture and Natural Resources, Mekelle University which was the last remaining Phase II institution to be trained. A total of 24 (all male) instructors attended the workshop.

All six Phase II institutions conducted baseline assessments and provided feedback to their respective staff on quality of agriculture education in general and status of nutrition sensitive agriculture education in particular at their respective institutions and developed an action plan to fill identified gaps.

ENGINE also facilitated two benchmarking visits to the best performing institutions (Alage ATVET College and University of Gondar) in Quarter IV, which created an opportunity for institutions to share their best practices and challenges encountered during the course of implementation. The visit strengthened the commitment made by ATVET institutions to deliver nutrition contents in a more organized manner and successfully persuaded health science universities to establish separate nutrition skills lab. Benchmarking visits for regional health science colleges were not conducted due to scheduling issues.

A two day nutrition knowledge sharing workshop was conducted for all project supported institutions to share best practices and challenges and identify approaches to overcome their institutions' specific gaps with integrating nutrition content into courses, utilizing effective teaching skills and organization and utilization of nutrition skills labs. The participants of the knowledge sharing workshop also attended the inauguration ceremony of Academic Center of Excellence for nutrition (April 2, 2015) at Hawassa University, which provided an additional learning opportunity.

A two-day review workshop was conducted in Quarter III to review the progress of Phase II institutions on major project intervention areas including integration of nutrition core competencies into curricula and the ability of faculty to effectively teach the content. The workshop also served as a platform for the participating institutions to share their best practices and critical challenges as well as possible solutions. Institutions were also able to exchange reference materials supporting nutrition education. A total of 26 (1 Female) participants attended the workshop. An annual ENGINE PSE review meeting was conducted in Quarter IV with all institutions participating.

Sub-activity 2: Strengthen Nutrition Curriculum at Project Supported Institutions

In the first quarter of Year IV, ENGINE provided five nutrition refresher trainings to 133 (7 female) ATVET instructors. The plan was to train 120 instructors however 133 instructors were enrolled to ensure new staff were trained. The training was instrumental in standardizing the nutrition knowledge of ATVET instructors and responding to challenges encountered during delivery of newly integrated nutrition contents in to their courses. Moreover, it has motivated instructors to provide more emphasis on nutrition topics in the new academic year.

A consultative meeting with representative TVET institutions from different regions of Ethiopia, FMOA, FMOE, regional agriculture bureau and ENGINE partners was held to discuss possible mechanisms to strengthening pre-service nutrition education for mid-level agriculture disciplines. A total of 25 participants attended the consultative meeting (Box 2). In the second quarter, nutrition core competencies were designed for mid-level agriculture cadres and Bachelor of Science agricultural disciplines from phase II institutions. Essential nutrition contents were integrated into 25 courses from plant science, animal science, horticulture, rural development and extension subjects as well as food science and post-harvest technology of agriculture disciplines, these courses were introduced in the second half of the academic year, and have been adopted for use at many of the institutions.

Box 2: ENGINE's National Impact on Agriculture Curriculum

In Year IV, ENGINE organized a consultative workshop to discuss mechanisms to strengthen pre-service nutrition education for mid-level agriculture disciplines (DAs). Based on the consensus of this consultative meeting, two new nutrition courses were created and integrated to the revised ATVET curriculum nationally in collaboration with FMoA and TVET agency. While national curricula changes are beyond the scope of ENGINE, the project successfully utilized the opportunity to expand its impact on nutrition. This is a success of the project as the new nutrition courses will benefit students at all TVETs nationally, not only in ENGINE supported institutions and demonstrates the increased commitment of FMoA and FMoE on nutrition.



ENGINE COP giving an opening speech during the consultative meeting

Following a review of the curriculum, six trainings on technical updates in nutrition were provided to instructors from Phase II institutions. The trainings were designed to enable instructors to understand the role of agriculture in nutrition, the current status of nutrition in the country and the country response as laid out in the NNP. A total of 142 (34 female) instructors participated from the trainings.

In order to promote awareness of the importance of nutrition among agricultural students, nutrition forums were conducted at eight agriculture institutions. The 2205 students who attended were encouraged to play a role in tackling the problem of malnutrition. These forums were intended to reach students who did not benefit from the updated courses and the forums provided an opportunity to reach graduating students with the key messages prior to entering the workforce. Four of eight institutions organized exhibitions of agricultural products and food items whose nutrition values were explained to the audiences. All institutions led the facilitation role at their respective institutions and covered the cost for organizing the events which is an outcome of capacity built so far and an indication of current degree of ownership.



Figure 3: Nutrition forum & Food exhibition conducted at Mekelle University, Tigray

Sub-activity 3: Enhance faculty instructional capacity and create an enabling environment for Competency-Based Nutrition Education

In Year IV, ENGINE conducted five Effective Teaching Skills trainings for a total of 121 (17 Female) instructors from Phase II institutions. The six day training equipped instructors from each institution with focused teaching and assessment skills for the classroom as well as practical sites. The training also created a forum for institutions to discuss the opportunities and anticipated challenges to improve the quality of agriculture education.

In order to enhance instructors' capacity to facilitate nutrition education at clinical sites, a five day dietetics training was given for 19 (5 female) nutrition instructors from five Phase I health science institutions. The training gave practical exposure to in-patient dietary assessment and management techniques as well as an understanding of existing potential to provide dietary support at health facilities. The training also built the instructors' capacity to apply their nutrition background at clinical and practical sites.

As part of an ongoing process to establish and equip new nutrition skills labs or lab corners at all eight project supported health science institutions, ENGINE distributed a second round of skills lab materials for Phase I institutions. Currently, all four project supported universities (Mekelle, Gondar, Jimma and Hawassa) have separate nutrition skills labs and all four regional health science colleges (Hawassa, Shashemene, Bahir Dar and Araya Kahu) have nutrition lab corners. Personal protective equipment was distributed to three ATVET institutions and audio/visual materials, reference books for supporting classroom teaching and overall education quality improvement were procured and distributed to Phase II institutions. Soft and hard copies of 77 different reference materials for nutrition sensitive agriculture were also delivered to Debre Markos University. Moreover, nutrition IEC/BCC materials developed by different stakeholders were collected and distributed to project supported institutions.

Sub-activity 4: Monitor and evaluate implementation of pre-service education strengthening activities

ENGINE conducted four joint program monitoring visits with Save the Children and Jhpiego to six project supported institutions (Hawassa University ACOE, Jimma University, Mekelle University Health and Agriculture colleges, Shashemene Health Science College, Araya Kahu HSC and Alage Agriculture College). The visiting team reviewed the implementation progress of each institution to date; identified persistent gaps to be addressed during the remaining project duration and discussed with management on strategies to institutionalization and sustain effective interventions.

In addition, twenty four supportive supervision visits were conducted to all Phase I and Phase II institutions. The visits focused on reinforcing the integration of nutrition content into the courses and on the institutionalization of quality improvement initiatives. Similarly, technical support was given for health science colleges in reorganizing the space in the skills lab, re-arranging the skills lab materials and mobilizing existing resources so as to fully support the competencies taught by each discipline. In addition, the agricultural colleges at the five Phase II universities and the nutrition department at Bahir Dar University were visited to discuss the results of the baseline assessment and ways to strengthen the agriculture education quality improvement initiatives at their college. Recommendations were given for the institutions to improve their performance on quality improvement implementation, documentation and system design for sustainability of the program activities. The institutions were performing well in other areas including utilization of donated materials, curriculum strengthening and documentation of program activities.

In order to assess the impact of ENGINE's comprehensive PSE activities implemented over the last four years, ENGINE conducted a student competency assessment among students from project supported institutions. The graduating class of BSc. Nursing and Midwifery as well as mid-level Plant and Animal Science students were assessed for their nutrition competency in Quarters III and IV. The findings are being analyzed and report will be shared in the next quarter.

Activity (ii) Establish Nutrition Center of Excellence (ACoE)

In Year IV, ENGINE provided a range of technical and material support to Hawassa University for establishment of an Academic Center of Excellence (ACoE) for Nutrition, including renovating and equipping the nutrition skills lab, provision of nutrition learning materials, development of webpage for the ACoE on Hawassa University's website, installing a high speed Wi-Fi internet connection for the skill lab and provision of audio visual aids for the Nutrition Club. In Quarter III, ENGINE supported Hawassa University to formally inaugurate the ACoE with the aim of creating an academic environment that links training, high quality and innovative community-based nutrition services, and nutrition research to contribute to reduction of under-nutrition among women and children in Ethiopia.

In Quarter IV, a benchmarking visit was organized for ACoE staff to three accredited laboratories (Alert training center laboratory, Bless agri-food laboratory service and Ethiopian commodity exchange sensory laboratory) to learn about the process of accreditation of the services the ACoE will provide. As an outcome of the visit, the institution formed a committee to identify laboratory services which need strengthening before application for accreditation of the lab. In addition, ENGINE provided a six day instructional materials design and delivery skills training for 22 faculty members which will enable the ACoE staff to design and deliver quality in-service nutrition training, which the ACoE plans to offer in Year V. In Year V, ENGINE with Hawassa University will develop and implement sustainability plan for ACoE.

Strategy 1.2.2: Strengthen nutrition in-service training and provide supportive supervision

Activity (i) Strengthen nutrition service provision through in-service training and supervision

In Year IV, ENGINE provided technical assistance to FMoH in finalizing and piloting the blended and integrated nutrition training package prepared for health workers. ENGINE oriented the nutrition case team at regional health bureau of SNNP and Tigray regions on the purpose of the training package, mode of delivery, role of regional nutrition case teams and how to operate the CD based version for self-paced learning.

IR 2: Quality and delivery of nutrition and health care services improved

Planned activities:

- Integrate nutrition into the facility quality services and implement quality improvement (QI) model to improve quality of nutritional services
- Promote coaching/mentoring and supportive supervision for health service providers
- Build capacity of frontline health and agriculture workers to provide high quality services
- Conduct food cooking demonstrations (FCD) to promote dietary diversity
- Improve tools used by frontline health and agriculture workers to ensure proper Maternal, Infant and Young Child Nutrition (MIYCN) counselling
- Continue implementation of Enhanced Community Conversations (ECCs) through local non-governmental organizations (LNGOs)
- Support target woredas in Child Health Day (CHD)/routine implementation

IR 2.1: Quality of nutrition services strengthened

Strategy 2.1.1: Facilitate integration of quality improvement processes with Government of Ethiopia coordination entities, health facilities and communities

Activity (i) Develop quality improvement model to improve the quality of nutritional services at community and facility level

To measure and improve quality of nutrition services in a continuous manner, ENGINE works with health facilities and woreda health offices to integrate nutrition into facilities' quality improvement services. ENGINE's quality improvement (QI) process helps health facilities and woreda offices to identify issues, implement changes and track progress in the effective delivery of nutrition services.

In Year IV, ENGINE supported PHCUs to establish performance monitoring and quality improvement teams at HCs. Through this process health facilities in four regions were able to assess the quality of nutrition services provided and incorporate QI activities into the facility annual work plans. A total of 153 HCs with established QI services integrated nutrition into the process reaching 113% of the annual target (153/135). Fifty PHCUs in four regions applied continuous quality improvement (CQI) model with close follow-up by ENGINE staff reaching 125% of the target. The demand from woreda offices to expand the reach of the CQI process to additional health facilities was the reason for over achievement. The primary challenge in implementing CQI was timely initiation of the process which was delayed in some facilities due high staff turnover, perception of CQI as "extra" work or limited engagement of woreda offices and PHCUs. However, once introduced, the process has been greatly valued by facility and woreda staff and positive results have been documented.

In Quarters III and IV, ENGINE facilitated learning visits between facilities in four regions to create a platform to share best practices in improving quality of nutrition services and outcomes (Figure 4). A total of 205 HWs, HEWs, zonal and woreda health office staff participated. ENGINE monitored and documented best practices associated with the delivery of quality nutrition services in 10 facilities in collaboration with facility quality focal persons in four regions.



Figure 4: Quality improvement experience sharing session at Deri health center, SNNPR

In Quarter IV, ENGINE adapted, pre-tested and finalized the nutrition quality improvement tool for use in Somali region. The QI manual for Quality of Nutrition Services Improvement was also adapted for use in Somali Region.

Activity (ii) Promote coaching/mentoring and supportive supervision for health service providers

ENGINE zonal coordinators mentored a total of 4,021 HWs and HEWs achieving 93 percent of Year IV target (4,021 / 4,308) (table 2.1) including Somali and non-AGP target woredas. Out of the total reached, 2,205 were HWs and 1,816 were HEWs. In AGP woredas, 3,639 (2,377 females) HWs and HEWS were reached out of the planned 3,960. The mentoring aimed to enhance the capacity of HWs and HEWs to provide quality MIYCN services and support to mothers and caretakers at health facilities. Comprehensive and standardized mentoring and supervision checklists, the MIYCN training guidelines and counseling cards were all used during the mentoring and coaching processes.

In Somali Region, the supervision teams identified shortages of essential drugs and nutrition supplies. ENGINE supported the delivery of micronutrients to 54 Health facilities. Absence of counseling/IEC materials and poor documentation for antenatal care (ANC), post-natal care (PNC) and nutrition services in all HFs were major gaps identified during the visits. ENGINE, in collaboration with Somali Regional health Bureau, will address these gaps in Year V.

Table 2.1: Summary of HEWs and HWs mentored by regions

Name of region	HWs and HEWs mentored				
	Planned	Achieved			
		Male	Female	Total	%
Amhara	1,076	329	813	1,142	106
Oromia	1,836	693	897	1,590	87
SNNP	1,076	180	613	793	74
Tigray	320	84	235	319	100
Somali	-	97	80	177	-
Total	4,308	1,383	2,638	4,021	93

ENGINE zonal coordinators (ZCs) and nutrition officers, in collaboration with woreda health offices, conducted initial supervision visits to 2247 HFs and follow-up supervision visits to 880 HFs in AGP

and non-AGP woredas of five regions (table 2.2). The supportive supervision visits aim to improve the delivery of nutrition and health services provided by HWs and HEWs. ENGINE's supportive supervision and mentoring improved nutrition services at HFs by monitoring the supply of micronutrients, especially zinc and iron-folate supplements, as well as improving the quality of nutrition counseling. It also improved participation in food cooking demonstrations (FCDs) and attendance at counseling services, which is expected to improve mothers' MIYCN and Water, Sanitation and Hygiene (WASH) knowledge and practices. Gaps identified included expired stock or absence of zinc and vitamin A in some facilities, inadequate nutrition counselling and shortage of nutrition counselling materials in some non-AGP woredas. ENGINE overachieved its target for the year due to opportunistic visits to previously visited facilities in proximity to new health facilities being visited.

Table 2.2: Summary of health facilities reached through joint supportive supervision by regions

Name of region	First visit to HFs			Second visit to HFs			Total	%
	Planned	Achieved	%	Planned	Achieved	%		
Amhara	405	764	189	83	325	392	1089	223
Oromia	742	795	107	159	298	188	1093	121
SNNPR	244	444	182	91	141	154	585	174
Tigray	208	178	85	108	77	72	255	81
Somali	-	66		-	39		105	
Total	1,600	2247	140	441	880	200	3127	153

Strategy 2.1.2: Build the capacity of health facility staff and frontline workers to provide high quality services

Child health and nutrition training by region

In Year IV, ENGINE trained 6,242 health and agriculture workers (2,598 female), reaching 93 percent of the annual target in AGP, non-AGP and Somali woredas. Trainings covered MIYCN/IYCF, nutrition planning and management for program managers; QI, NSA, WASH, M&E, Effective teaching skills and nutrition for instructors and CCA training for implementing ECC for nutrition in 1000 days and WASH (table 2.3).

Table 2.3: Summary of people trained in child health and nutrition by region and gender

Regions	Annual target	Annual achievement			%
		Male	Female	Total	
Amhara		753	540	1293	
Oromia		1040	889	1929	
SNNPR		715	680	1395	
Tigray		224	268	492	
Somali		517	148	665	
National level trainings		395	73	468	
National	6713	3644	2598	6242	93%

During the year, ENGINE extended its nutrition activities (program managers, MIYCN, and NSA training) to non-AGP woredas through partnerships with GOAL and GRAD, reaching 106 percent (496/470) and 124 percent (757/620) of training targets respectively (Annex 1 and 2).

Activity (i) Provide training to program managers, health workers and health extension workers

Training for program managers on nutrition program management

In this reporting year, ENGINE provided nutrition program planning and supervision training for 250 (17 female) woreda managers (out of 282 planned targets) from health and agriculture sectors in five regions. A total of 77 program managers (three female) were trained from non-AGP woredas (35 from GOAL and 42 from GRAD woredas; 41 were trained in Quarter IV) and 36 program managers were trained from Somali region while 137 were trained from AGP woredas. The training was designed to familiarize program managers with the concepts of integration of health and agriculture, nutrition-sensitive agriculture, food and nutrition security, on the impact of malnutrition, and planning and supervision of nutrition activities. As health and agriculture managers were occupied with other government priorities in preparation for the elections in May, fewer individuals were trained than planned (table 2.4).

Table 2.4: Summary of program managers training by region

Name of region	Planned	Achieved			
		Male	Female	Total	%
Amhara	57	44	4	48	84
Oromia	112	94	8	102	91
SNNP	61	47	3	50	82
Tigray	16	14	-	14	88
Somali	36	34	2	36	100
Total	282	233	17	250	89

Provide Maternal Infant and Young Child Nutrition and on job training for health workers and health extension workers

During this reporting period, ENGINE provided MIYCN and on-the-job training for 2,347 HWs and HEWs (1,139 female) from five regions in AGP, non-AGP and pastoralist woredas reaching 103 percent (2,347/2,284) of the annual target. In non-AGP woredas, ENGINE in collaboration with GOAL and GRAD trained 323 (133 female) and 351 (204 female) frontline health workers (HWs HEWs respectively). In SNNPR more HEWs than planned were trained, as the HEWs were available during woreda health sector review meetings. Fewer staff were trained in Somali region due to the delayed start of program activities in the region. The purpose of the training was to build capacity of HWs and HEWs to provide quality nutrition services. The training, in conjunction with mentoring and supportive supervision, has helped to improve facility-based routine nutrition services.

Table 2.5: Summary of MIYCN training by region and gender

Name of region	Planned	Achieved			
		Male	Female	Total	%
Amhara	395	257	141	398	101
Oromia	811	368	510	878	108
SNNP	426	226	388	614	144
Tigray	92	31	65	96	104
Somali	560	326	35	361	64

Total	2,284	1,208	1,139	2,347	103
-------	-------	-------	-------	-------	-----

Provide training for health care workers on quality of nutrition services improvement

ENGINE trained 864 (301 female) HWs, HEWs and woreda offices on basic quality of nutrition services improvement. This training aimed to increase knowledge on the concept of quality improvement techniques and to build participants' skills to measure, analyze and improve quality of nutrition services at health centers, health posts and community. The target for training in this period was exceeded by 34 percent (864/645) of the annual target. The training reached more staff than targeted due to woreda offices demand to provide the training to additional health facilities.

Table 2.6: Summary of QI training by region and gender

Name of region	Planned	Achieved in Year IV			
		Male	Female	Total	%
Amhara	176	137	92	229	130
Oromia	244	150	121	271	111
SNNP	161	199	-	199	124
Tigray	64	77	88	165	258
Somali	-	-	-	-	
Total	645	563	301	864	134

Activity (ii) Provide development agents/agricultural extension workers with gap-filling training on nutrition-sensitive agriculture

In Year IV, ENGINE provided TOT on nutrition sensitive agriculture for agriculture workers, woreda office staff and ENGINE staff from Oromia, Tigray, Amhara, and SNNP. A total of 31 (five female) participants were trained. The training helped participants to train other DAs in the agriculture sector to integrate nutrition into day-to-day activities.

Overall, ENGINE trained 918 (143 females) DAs/AEWs on NSA training in AGP, non-AGP and woredas of Somali region achieving 115 percent (918/799) of the annual target. In non-AGP woredas, ENGINE in collaboration with GOAL and GRAD trained 133 (22 female) and 364 (74 female) frontline agricultural workers respectively. One hundred thirty three trainees out of 364 GRAD and all 226 Somali trainees were trained in Quarter IV. The training objective was to integrate nutrition into agriculture to advance DA/AEWs capacity and share tools to promote NSA.

Table 2.7: Summary of NSA training by region and gender

Name of region	Planned	Achieved			
		Male	Female	Total	%
Amhara	127	165	59	224	176
Oromia	208	190	30	220	106
SNNP	208	177	27	204	98
Tigray	16	7	6	13	81
Somali	240	210	16	226	94
National	-	26	5	31	
Total	799	775	143	918	115

Other Child Health and Nutrition Training

As described under IR 3.1 and 3.4, ENGINE also trained 844 CCAs to implement ECC and trained 109 individuals on sanitation marketing.

Conduct post-training MIYCN assessment

In Quarter III of this reporting period, ENGINE conducted an MIYCN training effectiveness assessment to evaluate the MIYCN course and identify areas that need improvement. Based on the recommendations made by the study, ENGINE will strengthen post-training follow up and joint supportive supervision, and focus on practical clinical skills during refresher trainings to be provided in Year V.

Activity (iii) Conduct food cooking demonstration (integrated with iodized salt utilization and hand washing) at community, school, farmer training center and health facility levels

ENGINE conducts Food Cooking Demonstrations (FCDs) at the community level to address low dietary diversity for mothers and children. During the reporting period, ENGINE supported 3,011 FCD events at health facilities and in community settings in AGP (2,446), non-AGP (448), as well as pastoral and agro-pastoral woredas of Somali region (117), reaching 127 percent of the annual target (3,011/2,956). A total of 116,902 individuals attended the demonstration events (table 2.9). HEWs in Amhara exceeded expectations due to their own drive to conduct FCDs and demand from the community. During the demonstrations ENGINE promotes the importance of using iodized salt and handwashing. ENGINE reviewed and standardized cooking demonstrations based on the lessons from monitoring visits to the regions, the standardized demonstrations include preparation of recipes for children 6-11 and 12-24 months of age utilizing available staples in each region. ENGINE also emphasized FCD operating procedures to ensure that HEWs were not expecting or waiting for purchase of flour and oil by ENGINE. ENGINE shared the developed standard operating procedures with FtF partners.

Table 2.9: Total number of FCD events and participants in AGP, non AGP and pastoral woredas

Name of region	Number of FCD events			Number of FCD participants by Sex				
	Planned	Achieved	%	Planned	Achieved			
					Male	Female	Total	%
Amhara	650	1,181	182	19,130	19,438	15,954	35,392	185
Oromia	1,181	915	77	37,940	21,967	26,502	48,469	128
SNNP	773	603	78	24,884	9,049	14,943	23,992	96
Tigray	192	195	102	5,760	3,262	3,088	6,350	110
Somali	160	117	73	4,000	267	2,432	2,699	67
Total	2,956	3,011	102	91,714	53,983	62,919	116,902	127

Activity (iv) Improve tools used by frontline health and agriculture workers to ensure proper maternal, infant and young child nutrition counseling

ENGINE distributed new SBCC posters utilizing SBCC concepts aligned with messages in ECCs to 468 health centers and 1900 health posts. These posters are used at the health facilities to create awareness on maternal, infant and young child nutrition.

ENGINE assessed the need for additional FMOH standard nutrition counseling materials in all AGP and non-AGP woredas. All required materials were printed in Quarter III and distributed to HCs and HPs in Quarter IV. The counseling materials (developed by Alive and Thrive) were distributed as per the requirements of each region and cover all ENGINE AGP and non-AGP woreda HCs and HPs.

In Somali region, ENGINE facilitated the establishment of SBCC working group at RHB which reviewed available nutrition counselling materials, identified the best materials and the adaptations needed, and began the process of adapting the materials for use by HWs and HEWs. The adaptation will be completed in Year V and counseling materials will be distributed to HCs and HPs in 16 woredas in Somali region.

Launch innovative mNutrition service to improve tools for health and agriculture workers
 During this reporting period, ENGINE provided mNutrition service to 509 newly registered frontline workers (HEWs and AEWs), reaching 102 percent of the annual target in four regions. Frontline workers have received SMS messages from ENGINE twice weekly for 10 weeks, encouraging them to access the Interactive Voice Response (IVR) service using their mobile phones.

During this reporting period, ENGINE completed an initial assessment of the mNutrition service for HEWs and AEWs in three regions, and TMG did an additional analysis of mNutrition data. A total of 4,560 SMS messages were sent to 241 registered AEWs and HEWs during Phase 1, and a total of 5,130 SMS messages were sent to 268 newly registered AEWs and HEWs during Phase 2. Overall, the results showed that frontline workers found the mNutrition service to be a useful tool to help them with their day-to-day health and nutrition activities and increased their knowledge of the 'First 1000 Days' concepts. TMG provided the following recommendations on program design, content and technology recommendations as ways to improve the service:

1	Recommendations on Program and Content Design	<ul style="list-style-type: none"> • Implement future phases of the mNutrition service in tandem with core SBCC activities such as ECCs. • Design new SMS and IVR messages that complement other SBCC materials to be used by DAs.
2	Technology transfer recommendations	<ul style="list-style-type: none"> • Explore ways to combine IVR and SMS in one platform, by either: <ul style="list-style-type: none"> i) using a newly developed software platform, ii) using the FreedomFone IVR platform with limited SMS capability, or iii) using FrontlineSMS or another SMS platform that integrate with a voice messaging platform. • Find ways to cross-reference files in FrontlineSMS with calls in FreedomFone IVR.
3	Recommendations on Cost Issues	<ul style="list-style-type: none"> • Find options to subsidize or provide free calls into the IVR system to minimize barrier to sustain use of the service by extension workers in the long term.

ENGINE has also developed and distributed leaflets to provide frontline workers with hands-on information on how to use the service and how it would benefit them to improve their work related to nutrition activities. Additional leaflets will be distributed in Year V to increase utilization of the service.

Monitor and report maternal, infant and young child nutrition counseling for mothers by trained health workers

In Year IV, ENGINE built the capacity of HWs and HEWs through coaching, mentoring and formal trainings. During joint supportive supervision, the teams assessed HWs and HEWs routine nutrition service performance in their respective catchment areas. Facilities have also started sending reports on provision of routine nutrition services to woredas. During the year, the trained health workers counseled 306,926 pregnant women on exclusive breastfeeding (EBF), complementary feeding (CF) and dietary diversity at health centers, achieving 117 percent (306,926 / 262,089) of annual target. HEWs also counselled 206,645 lactating mothers on EBF and CF, including counseling during postnatal visits to HPs. As table 2.10 shows, almost all mothers and children visiting the facilities received direct nutrition services on a routine basis as a result of ENGINE-supported MIYCN training, coaching and supportive supervision. To this end, a total of 519,287 mothers received iron supplements and 186,567 children with diarrhea were treated with ORS at routine services at health centers and health posts. Treatment for zinc is lower due to stock outs or expiration of stock of zinc throughout the year.

Table 2.10: Total number of pregnant, lactating mothers & children who received direct nutrition service

Health post direct routine nutrition services	Amhara	Oromia	SNNP	Tigray	Total
# of pregnant women who sought ANC services	62,079	69,455	40,007	23,568	195,109
# of women provided with iron-folate	50,170	45,991	34,623	20,628	151,412
# of postnatal women counselled on EBF and CF	98,639	63,349	22,033	22,624	206,645
# of children diagnosed with diarrhoea	31,955	22,916	13,484	11,369	79,724
# of children 0-59 months with diarrhoea who received zinc & oral rehydration salts (ORS)	23,673	21,352	10,906	11,538	67,469
HCs summary	Amhara	Oromia	SNNP	Tigray	Total
Total # of pregnant women sought ANC service	123,905	118,994	39,947	47,895	330,741
# of pregnant women counselled on infant and maternal nutrition	119,651	102,459	38,150	46,666	306,926
# of ANC women supplemented with iron-folate	110,302	81,608	33,478	43,894	269,282
# of lactating women counselled on infant feeding and maternal nutrition	50,200	90,910	30,431	29,813	201,354
# of lactating women supplemented with iron-folate	32,972	36,531	16,199	12,891	98,593
Total # of babies visiting the under-five clinic	207,521	144,171	109,213	96,533	557,438
# of babies(0-59) in sick babies assessed/checked for malnutrition	202,762	137,869	102,972	94,706	538,309
# of children advised for increased feeding	192,234	117,469	97,811	90,613	498,127
# of children diagnosed with diarrhoea	54,946	34,787	15,144	21,678	126,555
# of children 0-59 months with diarrhoea who received zinc & ORS	52,019	31,693	14,235	21,151	119,098
HCs and HPs summary	Amhara	Oromia	SNNP	Tigray	Total
Pregnant and lactating mother counselling on nutrition	268,490	256,718	90,614	99,103	714,925
Mothers received iron supplementation	193,444	164,130	84,300	77,413	519,287
Children with diarrhea treated with ORS and zinc	75,692	53,045	25,141	32,689	186,567

In this reporting period, ENGINE expanded its mentoring to GRAD-ENGINE woreda health centers and health posts in Amhara and Oromia regions. The aim was to maximize performance of health workers in providing quality of nutrition and other services. Similarly, ENGINE supported health centers and health posts in MIYCN counseling, and ensured all facilities had MIYCN registration books and reporting formats. Following support and training, the majority of health centers in East and West Hararghe (GOAL partnership woredas) have started to produce and communicate nutrition counseling service reports using the same format provided to them. In coordination with GOAL and the zonal and woreda health offices the ENGINE team is also responding to the current nutrition emergency situation in both zones (East and West Hararghe) of Oromia region, by providing training to health professionals and monitoring of CMAM management. The support was coordinated with GOAL and the zonal and woreda health offices to fill gaps.

Similarly, ENGINE supported GRAD-ENGINE woreda health centers and health posts to conduct MIYCN counseling and ensured all facilities had MIYCN registration books and reporting formats. As a result, from 15 health centers in two target woredas in Oromia, 3,572 mothers out of 3,941 who attended ANC visits received MIYCN counseling services and iron folate supplements.

IR.2.2 Health and nutrition services seeking behaviors increased

Strategy 2.2.1: Develop the social and behavior change communication strategy as it relates to health-seeking behaviors

This is presented in IR 2.1 and IR 3.1.

IR 2.3: Access to health and nutrition services increased

Strategy 2.3.1: Strengthen the referral system and access to essential supplies with maternal and child health services

Activity (i) Link with existing program and partners

Support implementation of woreda Child Health Days

Child Health Days (CHDs) are a community-based health platforms organized quarterly to screen for malnutrition in children under-5 and pregnant and lactating women, and to provide group educational sessions for women and children. CHDs also provide vitamin A and de-worming every six months. During the reporting period, the CHD program is transitioning to routine service through the Health Extension program (HEP). However, there are some target woredas where the service is not yet integrated with routine services (14 in Amhara and 9 in SNNPR). ENGINE provides technical and logistics support for vitamin A supplementation (combination of CHD and routine service delivery) and deworming in all target woredas of Oromia, Amhara, SNNP, Tigray and Somali regions. As a result, a total of 1,227,305 (91%) children were supplemented with vitamin A and 825,907 (84%) received deworming tablets. ENGINE provided support in transporting nutrition commodities to sites, and will continue supporting the routine vitamin A and de-worming efforts at HC and HP levels. In Somali region ENGINE will pilot Enhanced Outreach Strategy (EOS) transition to CHD in six woredas during Year V.

Table 2.11: Total number of pregnant, lactating mothers & children who received direct nutrition service

Name of region	Vitamin A Supplementation			De-worming		
	Planned	Achieved	%	Planned	Achieved	%
Amhara	430,135	206,099	47.9	324,530	142,903	44
Oromia	533,490	591,554	111	402,510	424,466	105
SNNP	287,381	320,033	111	216,824	226,341	104
Tigray	105,792	103,365	97.7	39,910	27,629	69.2
Somali	-	6257		-	4568	
Total	1,356,798	1227305	90.5	983,774	825,907	84

As woredas are no longer implementing CHD activities in Year V, this may result in a coverage drop because routine service delivery has not yet proven to be as effective as CHD in coverage. In Quarter IV, ENGINE began the process of identifying the technical support needs of regions to increase coverage through routine services in project areas while supporting the transition from EOS to CHD transition in Somali region. ENGINE will not support CHD in Year V, except in Somali Region.

Activity (ii) Establish CMAM sites to treat acute malnutrition if there is sufficient need and supplies are available

In Year IV, ENGINE continued to provide technical assistance to the 46 facilities implementing CMAM that were established in Years II and III. In quarter IV, ENGINE provided CMAM training to 63 health workers from 7 hospitals and 45 health centers in East and West Hararghe zones of Oromia. The training was for staff from established facilities and planned in collaboration with zonal and woreda health offices and GOAL to avoid duplication of efforts. ENGINE will provide additional monitoring and logistics support in Year V in response to the ongoing drought.

IR 3 Improved prevention of under-nutrition through community based nutrition care and practices

Planned activities

- Adaptation of SBCC materials for non AGP woredas
- Mobilize communities to promote MIYCN practices
- Monitor, provide feedback and document lessons learned, best practices and results
- Establish MVHHs savings groups for Year IV selected HHs
- Train most vulnerable households in livelihood and economic strengthening inputs
- Support well-performing schools in the demonstration of agronomic cooking practices to farmers
- Support MVHHs in homestead production
- Facilitate and monitor vet vaccine and drugs supply system
- Enclosure and Rangeland Management Assessment
- Mapping of the selected area for fodder/forage development using GPS
- Train and mentor smallholders fodder producing HHs on improved fodder/forage
- Conduct Natural Resource Management (NRM) and Community Mobilization training
- Subsidize provision of WASH technologies
- Household latrine access and use improved through sanitation marketing
- WASH behaviors promoted in community

IR 3.1: Improved Maternal and IYCF knowledge and practices

Strategy 3.1.1: Develop the SBCC strategy through powerful formative research

Activity (i) Roll out phased implementation of ENGINE's SBCC strategy

In Year IV, ENGINE disseminated its SBCC strategy at national, regional and woreda level. ENGINE organized workshops in Amhara, West Oromia, East Oromia and SNNPR for woreda and kebele health and agriculture officials, HEWs, AEWs, DAs and farmer's cooperative heads on ENGINE's SBCC strategy and ECC implementation. A total of 790 participants attended workshops on the SBCC strategy and implementation in the community. ENGINE also disseminated the SBCC strategy and oriented ENGINE staff and LNGO focal persons and partners in five regional offices. The orientation meetings provided a common understanding of the strategy, and an overview of the behavior change concepts, materials and structure of the ECCs to ensure that regional offices are able to provide strong monitoring and support to ENGINE SBCC activities.

In Quarter IV, ENGINE organized a national SBCC Strategy Dissemination Workshop to bring together various stakeholders, including representatives from ministries of health, education and agriculture, international non-governmental organizations, USAID and members of the press. The workshop shared the project's comprehensive SBCC strategy and introduced the package of multi-media communication materials that ENGINE developed to improve key nutrition behaviors through ECCs at community level. The SBCC strategy highlights the new approach used for ENGINE's SBCC programming, under the overarching theme "Nutrition is a Family Affair" and explains how pro-nutrition information and skills are promoted through improved community dialogue using innovative audio recordings and skills-building interactive methods to engage communities.

Strategy 3.1.2: Promote optimal nutrition practices through dynamic communication channels

Activity (i) Update existing materials and develop new media and materials in line with revised social and behavior change communication strategy

In Year IV, ENGINE finalized the design of new SBCC materials, in line with the SBCC strategy, for ECCs sessions 1-6, including flipcharts, virtual facilitator recordings, ECC training manuals, games, accordion leaflets, promotional materials, music videos and songs. In Quarter II, ENGINE packaged and distributed all SBCC materials for the first round of ECC implementation to all LNGOs in four regions. In June, ENGINE packaged and distributed SBCC materials for the second round of ECC implementation to LNGO representatives in four regions.

The Manoff Group (TMG) provided technical assistance to develop SBCC materials for ECC sessions 7-10 and Agriculture/Nutrition materials for DA/AEWs. ENGINE, with technical assistance (TA) from The Manoff Group, finalized content, scripts and designs for ECC sessions 7-10 which will be rolled out in Quarter I of Year V. The audio recording of scripts for sessions 7-10 with virtual facilitator will be completed in the next quarter. The Agriculture/Nutrition materials will also be completed in Quarter I of Year five.

Following the launch of ENGINE in pastoralist communities in Somali Region, ENGINE held meetings with USAID/PRIME and the RHB to determine SBCC material needs in the region. ENGINE initiated the process to establish an SBCC working group under the leadership of the RHB. The taskforce reviewed existing materials and identified the need for adapted materials relevant to the Somali pastoralist setting, to be produced or adapted to support nutrition counseling, both in health facilities and in communities through HEWs and DAs. Following this, ENGINE recruited an SBCC coordinator for the region and materials adaptation for use in facilities is underway through the SBCC TWG in RHB with ENGINE leadership. ENGINE has also completed rapid formative research and cultural inventory to guide the development and adaptation of messages and SBCC materials for community conversations in the region. ENGINE is partnering with PRIME on this process to ensure consistent messaging and efficient utilization of resources.

Implementation in non-AGP woredas

Following the completion of ENGINE's SBCC materials for AGP woredas, ENGINE and GRAD established a taskforce to select and adapt ECC materials for use in non-AGP woredas. The taskforce met twice and selected sessions and identified adaptations needed.

SBCC materials and ECC content were adapted for GRAD and ENGINE's non-AGP woredas in line with SBCC strategy and program requirements. A total of eight SBCC materials were adapted and session outlines were condensed to accommodate a reduction from ten to eight sessions. Amendments were made based on relevant MIYCN content and integrated WASH components, suitable for ECC implementation through GRAD's Village Economic and Social Association (VESA) groups. These materials are under printing and will be rolled out via GRAD VESA groups in Quarter I of Year V.

ENGINE also completed adaptation of AGP ECC sessions 1- 10 to be delivered without virtual facilitators by ENGINE savings groups with the support of HEWs in all AGP woredas. The materials are being printed will be rolled out in Year V.

Activity (ii) Mobilize communities to promote maternal infant and young child nutrition practices

Sub-activity (i) Implement Enhanced Community Conversations through local non-governmental organizations and social networks

In Year IV, ECC implementation started in 21 woredas in Quarter II, through three LNGOs in four regions. A total of 844 CCAs were trained through cascade trainings (772 in Quarter II and 72 in Quarter IV) for the first and second round respectively, to facilitate ECCs at community level. This achieved 56% of annual target (844 /1,512). The main reason for this underachievement was the previously selected CCAs were used to conduct ECCs for the second round, instead of selecting new CCAs to train.

A total of 14,998 participants (99% of target) were reached in the first round of ECCs through 4,536 ECC sessions (sessions 1-6); and in the second round of ECCs 14,937 participants (99% of target) were reached through 4,536 ECC sessions. In order to expand ECCs to additional woredas, ENGINE in collaboration with the LNGOs selected 10 new woredas for ECC implementation, which will start in the first quarter of Year V.

Sub-activity (ii) mobilize communities through religious leaders to support nutrition social change

As described in detail in IR 1, ENGINE is working in collaboration with EOTC church scholars to shed light on the fasting practices related to maternal under-nutrition and childhood stunting, in an effort to improve and standardize religious guidance for communities. A team of EOTC scholars were assigned to outline the laws and regulations of the church and develop content for sermon guides based on church doctrine, using the four themes outlined by ENGINE. Following this, the sermon guides were reviewed and refined by senior church scholars, before ENGINE's SBCC team put the final touches to the design. The final and printed sermon guides will be presented to the Holy Synod council members for endorsement, planned in October 2015.

Activity (iii) Deliver radio magazine on 1000 days

In Quarter IV, ENGINE finalized recruitment of a suitable radio production company and initiated production of a radio series to broadly disseminate key information on 1000 days. ENGINE and the production company have collected relevant real-life stories from communities as part of the innovative and interactive radio formats. To date episodes 1-5 (of 16 planned) have been produced in both Amharic and Oromiffa and reviewed by ENGINE.

ENGINE also identified radio stations with the capacity to air the radio programs with FM signals reach areas where ENGINE project activities are operational. ENGINE is negotiating air time that is appropriate for rural community where ENGINE operates. The selected radio stations (Amhara radio and Fana Radio (with coverage in Oromia and SNNP)) will begin airing radio programs in the second quarter of Year V.

Activity (iv) Monitor, provide feedback and document lessons learned, best practices and results

Following the start of ECC implementation, LNGOs and the ENGINE SBCC team are monitoring the roll-out of the ECC package. Feedback from ECC participants is very positive with appreciation for the innovative approach and interactive adult learning methods used during the ECCs. Preliminary observations show that ECC participants are eager to adopt the pro-nutrition behaviors taught during ECCs. Home visits to participants of ECCs verified that pregnant women are using iron and folic acid (IFA) reminder calendars at home. Monitoring of ECCs has also identified some challenges that ENGINE and LNGOs are addressing during implementation, including the overall duration of some of the sessions and of the amount of noise during mothers' groups as there are many young children present.

To discuss both the successes, challenges and way forward with ECCs, ENGINE held a review meeting with the three implementing LNGOs in June. EOTC also held a review meeting for participants and government partners from Tigray, Amhara and SNNP in Quarter IV. Several ECC participants attended and shared their experiences. Role models from Tigray, Amhara and SNNP explained how adopting desired behaviors taught during ECCs have impacted their lives and that of their children for the better, by providing them with skills-building tools on how to build chicken coops/tippy taps and how to add star foods (especially animal source foods) to their children's meals. Role models reported that they have witnessed several improvements, including:

- Several men reported having built chicken coops, tippy taps and latrines and started supporting their pregnant or lactating wives with household chores.

- A pregnant woman reported feeling less tired by taking IFA every night and using the IFA calendar as a reminder tool.
- Several ECC participants who started giving their children animal source foods and vegetables stated seeing significant growth with less crying and lethargy.
- A grandmother reported starting a perma garden in her back yard

Government counterparts expressed their wish for ECC expansion throughout the regions. Participants identified needed actions for improvement including systematic use of ECC monitoring tools by LNGOs and regular monitoring of CCAs by supervisors.

In Year IV, ENGINE with support from TMG updated ECC monitoring forms and developed an approach and tools to assess and document the ECCs. The documentation will be completed by TMG in Year V.

IR 3.2: Increased access to food and economic strengthening opportunities through programming and cross-sector linkages

Strategy 3.2.1: Apply economic strengthening interventions

Activity (i) Match economic opportunity with household interest and capabilities

ENGINE, in partnership with kebele development committees, selected 3,138 (100% of the target) most vulnerable households (MVHs) in Quarter I for livelihood and economic strengthening (LES) support in the four main regions of the country. All the selected MVHs were oriented on project-related support, nutrition education and the roles and responsibilities of MVHs.

Activity (ii) Strengthen MVHH saving groups and create access to financial services

In order to ensure MVHs have access to savings and financial services, ENGINE established 175 saving groups in AGP woredas, achieving 101% of the annual target. The group members started saving 5 to 10 ETB per month. During Year IV, ENGINE linked 185 saving groups (SG) established in year three and year four to rural saving and credit cooperatives and MFIs.

In Quarter II, an assessment was conducted to understand the status of the saving groups formed during the project implementation. The results indicated that the regular monthly meetings provided a central platform for strong solidarity and support among members and the contributions are from profits generated through IGA's initiated by ENGINE. To ensure cash safety, saving groups bank money collected to avoid holding it in cash. The assessment identified the need for additional capacity building of financial management for the group members. Building this capacity and ensuring all savings groups are linked to credit cooperatives will be the focus of this activity in Year V.

ENGINE, partnering with GOAL, supported the establishment of 42 saving groups (48%), consisting of 10-25 members in East and West Hararghe target woredas. The regional team is also working with woreda sector offices to link the group with microfinance institutions to derive maximum benefit from the savings.

Strategy 3.3.2: Facilitate community based learning on agriculture techniques for increased production of diverse foods

Activity (i) Promote demonstration plots and school demonstration gardens

During the reporting period, ENGINE team and woreda agriculture office experts provided on-site TA to schools. The technical support focused on vegetable production, management of fruit seedlings and demonstration of agronomic and cooking practices. In addition to the TA support, ENGINE supported schools to organize agronomic and cooking practice demonstration events to promote dietary diversification and MIYCN to the wider communities. A total of 160 events (106% of target) were organized in Amhara, Oromia, SNNP and Tigray Regions. To ensure the continuity of the school garden activities in ENGINE supported schools, training on nutrition and school

gardening was provided for 138 focal teachers during the reporting period in Tigray, Amhara, Oromia and SNNPR, reaching 97 percent of the annual target.

ENGINE provided a total of 111 FTCs with vegetable seeds in this reporting period reaching, 100 percent of the annual target. In addition to the provision of vegetable seeds, the ENGINE team, together with woreda agriculture office experts, provided on-site TA to the FTCs. Technical support focused on vegetable production and fruit seedling management. The FTCs were also used as training and demonstration locations for farmers from adjacent kebeles. During Year IV, 589 DAs from neighboring kebeles participated in experience sharing visits to the supported FTCs to build knowledge and capacity to introduce homestead gardening to small holder farmers in other ENGINE kebeles.

Activity (ii) Increase and measure adoption and diffusion of cooking and agronomic demonstrations and trainings

In order to disseminate the technology and increase the adoption rate of agronomic and cooking demonstrations, ENGINE provided training to 7993 model farmers (98% of target) living in kebeles adjacent to the ENGINE targeted FTCs. The training focused on nutrition sensitive agriculture, dietary diversity and included agronomic and cooking demonstrations.

In Quarter I, ENGINE conducted an assessment among 1294 ENGINE-supported MVHHs on their capacity and intention to support themselves in purchasing and using seeds and inputs to sustain homestead vegetable production. The assessment revealed that 99% of the MVHH were interested in continuing vegetable production in the future and 75% indicated that they will purchase seed from their income or harvest vegetable seeds for the future use. In addition, 97% of the interviewed participants revealed that they are able to locate vegetable seed supply sources locally.

ENGINE assessed the impact of the trainings and demonstration events held at FTCs and schools on adoption of agronomic practice demonstrations by participating farmers. The assessment indicates that 97 percent of the 595 respondents were motivated to adopt the technologies they observed in the demonstration events and many have already started adopting the technologies to grow different types of vegetables in their garden. In Quarter I of Year V, ENGINE will conduct another assessment and include observation of homestead gardens to verify the implementation of promoted agronomic practices.

Activity (iii) Facilitate effective approaches to small scale horticulture and animal production to increase access to food for the most vulnerable households

During the reporting period, ENGINE provided 8,609 MVHHs in AGP woreda selected in Year III and Year IV with vegetable seeds including cabbage, carrot, Swiss chard, Irish potato, sweet potato (orange and white flesh), pumpkin, green beans and kale in Amhara, Oromia, SNNP and Tigray Regions. ENGINE, partnering with GOAL, also provided vegetable seeds to 1250 CMAM beneficiaries in East Oromia and SNNP. Post distribution follow up visit by DAs and zonal livelihood coordinators indicated that farmers in East Oromia started planting vegetable at their homesteads, but that production was limited due to shortage of rain; in SNNP many farmers have not yet planted seeds due to lack of rain. In GOAL partnership woredas, 802 households in East Oromia were trained on homestead vegetable production and goat rearing; training in SNNP will be conducted in the next quarter as distribution was completed late in Year IV.

Table 3.1: Number of MVHHs provided with vegetable seeds in AGP woredas

Region	Year IV target	Year IV Achievement	Percentage achievement

Tigray	786	851	108
Amhara	1692	1892	112
Oromia	4200	4234	101
SNNP	1632	1632	100
Total	8310	8609	104



Figure 5: Homestead vegetable production in Endemehomi woreda

During the reporting period, a total of 4,433 MVHHs in AGP woredas were trained in vegetable and fruit production, irrigation, water and livestock management (feed preparation, forage production and animal health), reaching 97 percent of the annual target (table 3.2). 1295 MVHHs received additional training on improved dairy management. Particular emphasis was placed on introducing improved practices for vegetable and fruit production and livestock management to MVHHs, as well as nutrition and gender themes that focused on dietary diversification and the role of women in household decision-making.

Project monitoring indicates that investment in diversification has increased consumption of nutrient-rich vegetables, with opportunities remaining to increase the period of consumption each year and enhance the availability and affordability of locally-sourced inputs. As observed in field visits, project households provided with livestock and vegetable seeds are earning more income than before and engaging in new financial planning efforts through savings groups. ENGINE participants are receiving support in production, through Development Agents, and in nutrition education, through Health Workers. This is improving the access, availability, utilization and stability of nutritious foods among MVHHs. The training supports the participants to utilize the project assistance and inputs (vegetable seeds and productive livestock) effectively and efficiently.

Table 3. 2: Number of individuals trained in vegetable and fruit production, irrigation water management and livestock management by regions

Region	Year IV target	Achievement	
		Total	Percent
Tigray	581	614	106 %

Amhara	1145	1156	101%
Oromia	1754	1692	97 %
SNNP	1105	971	88 %
Total	4585	4433	97 %

In Quarter I, ENGINE finalized a sustainable vegetable seed supply strategy, which outlines possible mechanisms to acquire vegetable seeds for MVHHs and other communities for sustainable production in ENGINE project areas. ENGINE conducted a preliminary assessment in ten model woredas and identified seed dealers (private vendors and farmers' cooperative) to be supported by ENGINE to provide sustainable vegetable seed supply in the woredas. The support to seed dealers is based on the specific needs of the dealers identified during assessment, and strengthens linkages with vegetable producing farmers in their surroundings to purchase seed from the suppliers. Through program monitoring ENGINE has identified that MVHHs have started purchasing vegetable seeds from the supported dealers in at least three woredas. ENGINE will continue and scale up implementation of sustainable seed strategy in Year V. A review of livelihood activities by LOL found the current model to be successful, but identified the use of a voucher system in future programming as a good model to link HHs to private seed dealers and strengthen the dealers throughout the life of project.

Activity (iv) Support the establishment of improved chicken multiplication units through supporting private chicken producers.

ENGINE started to implement its public-private partnerships between public research centers and small-scale private chicken producers to improve the chicken supply chain in Year IV. In Quarter I, ENGINE delivered incubator-hatchery machines to the private poultry farms in Ambo and Bahir Dar. Six private chicken growers; three in each Ambo and Bahir Dar, were trained and are now conducting the business of receiving day-old chicken from the multiplication units and raising them for two months before selling to ENGINE for provision to MVHHs. In Year IV, 100 MVHHs in West Oromia and 117 MVHHs in Amhara received chickens from this model.

The businesses benefit from the support of woreda livestock offices in Guder Woreda and Bahir Dar by providing the required technical support and vaccination services to both private chicken multiplication units and growers. One area for improvement is for multiplication units and out growers to keep and maintain proper records of expenses and revenues, as well as establish better informed price setting. To ensure these small enterprises remain viable, ENGINE will train private chicken producers on business management and in Year V. In Quarter IV, ENGINE also linked USAID LMD project to the chicken multipliers to receive additional marketing support from LMD as well as to link the multipliers to new potential markets.

In Year IV, ENGINE also supported private chicken feed suppliers to improve MVHHs' access to feed. Private chicken feed suppliers are located in major towns with limited marketing to farmers. ENGINE provided business development support to ten selected feed suppliers and linked them with MVHHs who were provided chickens. Chicken recipient MVHHs are now linked to private chicken feed suppliers. ENGINE will continue to strengthen linkages between MVHHs and chicken suppliers in Year V.

ENGINE has learned that woreda and kebele-based government livestock experts have technical limitations on improved chicken production and healthcare. Thus, prior to distributing improved chickens to farmers, ENGINE provided hands-on training to 165 government livestock experts based in woredas and kebeles on improved chicken production and healthcare. Trained woreda agriculture staff cascaded improved chicken management training for chicken recipient MVHHs to improve access to quality extension services. One of the challenges faced by MVHHs is preparing replacement stock of chickens as the initial group ages. ENGINE and trained woreda agriculture staff

will continue to provide technical support to MVHHS in Year V to undertake this activity which is critical to sustainability of the intervention. ENGINE, with woreda livestock agencies, also provided logistic support to rural vet clinics/health posts to improve access to chicken vaccines and drugs. ENGINE reached 57 vet-clinics, 75 percent of the annual target.

ENGINE learned from its internal survey in Amhara Region that 91 percent of interviewed households had prepared homemade poultry feed at least once. Similarly, 79 percent paid for the treatment and vaccination service that were provided to their chicken; this is a positive indication that the poor are investing their income for their own economic and nutrition improvement.

Activity (v) Promote farming technology package and livestock at household level

During the reporting period, ENGINE provided 3,278 new MVHHS with productive livestock (751 MVHHS received chicken, 1,002 MVHHS received heifers and 1,525 MVHHS received sheep or goats) based on their interest and capacity to manage the livestock. In GOAL partnership woredas, ENGINE provided 4621 goats to 1250 (100%) CMAM beneficiaries in all target non-AGP woredas.

Prior to distributing animals to MVHHS, ENGINE ensured all animals were vaccinated, dewormed and treated for parasites. Supported MVHHS were linked with nearby public and private veterinary service providers for ongoing animal health services.

Table 3.3: Number of most vulnerable households provided with productive livestock in AGP and non-AGP woredas

Region	Year IV target	Year IV Achievement	Percentage accomplishment
Tigray	288	284	99%
Amhara	872	894	103 %
Oromia	2324	2271	97 %
SNNP	1059	1077	103 %
Total	4543	4526	99.6%

Project targeted households, particularly those with sheep and goats are earning more income than before and engaging in new financial planning efforts through savings groups. According to the findings of the LES study, nearly all (99.4%) ENGINE participants report both selling and consuming vegetables and animal proteins (particularly eggs and milk), using the income to purchase staple grains, agricultural inputs and kerosene; cover educational costs, improve their homes; and, in some cases, invest in improved hygiene (soap and latrine construction). Income increases are greatest among households who received livestock, with ENGINE contributing approximately 20% of household income among livestock-holding households. An internal study conducted on the poultry activities indicated good consumption of eggs among both participant households and the wider community, with 98% of households who received chickens reporting that they now consume eggs and 76% reporting that they sell eggs to neighbours for consumption and breeding. This was achieved by a number of innovations, including improved genetics and management practices, along with blended nutrition education.

Backyard forage development was introduced to supplement traditional animal feed sources – mainly open grazing and crop residues – when households faced challenges accessing inputs for homemade feed. Forage crops promoted are specific to each area based on adaptability to the climate, and include Sesbania in almost all regions, Tree Lucerne and elephant grass. These are generally grown around the boundaries of the homestead, on land that is not typically used for producing other crops. This willingness to adapt, along with ENGINE’s approach to delivering trainings through the DAs, appears to be working well, with 63% (5,171 out of 8,119) of households who were provided livestock electing to grow supplemental forage as reported in project monitoring records.

A survey of 41 households in Gechi Woreda of Oromia region indicated that average milk production had increased from 0.86 litres/day to 2.04 litres/day as a result of dried brewery by-product distributed as a supplement feed. About half of this milk was used for butter and cheese. Of the remainder, a majority (60%) was consumed by children. Over three-quarters (78%) of households reported that they intended to continue purchasing dried brewery bi-product.

In Year IV, with private matching funds from Athene/Gaming for Good, ENGINE provided cost-share for 3526 MVHHs that received sheep or goat to purchase a heifer. The MVHHs sold offspring of the sheep/goats and provided 50% - 65% of the cost of heifer with ENGINE providing the funds for the remaining cost of the animal. This has directly increased milk consumption in project supported MVHHs.



Figure 7: Heifers purchased with matching funds in Lemu Bilbilu woreda

Activity (vi) Promote Asset Protection through Micro-insurance

Introduce micro-insurance mechanisms for livestock among targeted MVHHs

Savings groups received orientation on the benefit of contributing money for livestock health insurance as part of an introduction to micro-insurance mechanisms. To date, 30 groups out of 34 groups targeted in Year IV started contributing money in addition to their regular savings which shows 88 percent of the annual target. The annual accomplishment is encouraging as the activity is dependent of the interest of the HHs. Group members will be encouraged to use the money for immediate cash need to treat sick animals in credit. The long term goal of the micro-insurance activities are to ensure that farmers are able to replace their livestock in event of an animal's death

IR3.3 Livestock productivity and milk availability in pastoralist and agro-pastoralist woredas of Somali Region increased

In Quarter III, ENGINE began implementation of livelihood/milk matters interventions in Somali region. Key activities include initial assessments, introduction of a voucher system, and initiation of irrigated fodder production in agro pastoral woredas and area enclosures and rangeland management in pastoral woredas.

IR3.3.1 Support for scaling up milk production to vulnerable households through improved access to animal feeds

Activity (i) Support irrigated fodder production

Support and enhance households' capacity of fodder production, productivity and quality

During the reporting period, ENGINE identified and mapped 40 kebeles for irrigated fodder production where permanent water sources are available. To build households' capacity for fodder production, the project works with smallholder fodder producing households in the intervention sites. Using PRIME developed training materials, ENGINE trained 275 (172 females) HHs (from Jigjiga, Gursum, Babile, Shinile, Hudat and Dolo Ado woredas) in improved fodder/forage development strategies, agronomic practice and management reaching 92 percent of the annual target.

Each targeted HH is expected to produce fodder on half a hectare of land. A total of 275 HHs received eight kilogram of Sudan grass seed for forage production through a voucher system from private seed providers. Sudan grass is a drought resistant fodder crop and the grass is growing well in riverine areas (Dolo Ado and Hudat) and areas receiving Keran rains (Jigjiga, Gursum and Babile). In Shinile woreda, Baraq kebele has a water stream which the community uses to cultivate Sudan grass (Figure 8).



Figure 8: Seed distribution through voucher system rays agri-business cooperative (left) and cultivated land in Baraq kebele of Sitti Zone (right)

Establish fodder production and marketing groups and enhance their capacity on production, productivity, quality and marketing

ENGINE established and strengthened four of five planned cooperatives on fodder production and marketing along riverine and agro-pastoral livelihood zones, in Wabi Shebelle, Genalle and Dawa river basins. The cooperatives produce and sell fodder to the general community as well as to ENGINE beneficiaries. Two cooperatives (Quman and Horsed in Jigjiga and Dollo Ado woredas) are existing PRIME supported cooperatives. ENGINE established two new cooperative in Hudet and Shinile woredas. One remaining cooperative will be established in Dolobay woreda of Liben zone next year.

During Quarter IV, ENGINE provided a three day training for 60 members (18 female) from four cooperatives located in Jigjiga, Shinile Hudat and Dolo Ado (table 3.4). The fifth cooperative, initially proposed from Kersadula woreda, will be selected from Dolobay next year. The training was facilitated by a qualified professional from regional and woreda cooperative agencies. The training objective was to build the knowledge and skills of the existing cooperative leaders and members so that they can promote the concept and principles, and understand the bylaws, leadership and management structures, and enhance their knowledge of book keeping and financing principles.

In addition, fifteen members of Quman fodder producing cooperative also received a three day training on improved fodder/forage development strategies, conservations, agronomic practices and management. Quman and Horses cooperatives are already producing fodder. The remaining cooperatives will receive the training in Year V.

Table 3.4: Trained cooperative members

S/N	Name of woreda	Name of cooperative	Members trained			Remark
			Male	Female	Total	
1	Jigjiga	Quman	12	3	15	Existing/PRIME
2	Shinile	Mahdiya	6	9	15	New/ENGINE
3	Dolo Ado	Horseed	11	4	15	Existing/PRIME
4	Hudat	Daruur	13	2	15	New/ENGINE
5	Dolobay					Recently replaced Kersadula
	Total		42	18	60	

Activity (ii) Enclosures or drought reserve and Rangeland Management

Enclosure and rangeland management are among key approaches to ensure availability of fodder for targeted households (HHs) and their milking animals during the dry season. During the reporting period, ENGINE targeted eight pastoral and two agro-pastoral woredas for enclosure and participatory rangeland management activities. During the same period, ENGINE assessed the status of enclosures in 42 kebeles and rangeland management in 43 kebeles of the 10 target woredas. The assessments aimed to identify community practices and challenges in using enclosures and rangeland management and devise approaches for using these practices for ENGINE milk matters intervention.

The major findings of the enclosure and rangeland assessment include:

- In all the kebeles assessed, communities practiced traditional rangeland management system. However, the practice of enclosure is not common in 20 kebeles of six woredas.
- Seventeen kebeles from three pastoral and two agro-pastoral woredas have the practice of privately owned enclosures (Degahbur, Ararso, Kabribeyah, Awbare and Babile). This can initiate conflict during the dry seasons when the competitions over resources are potentially high. Consultation should be done with community elders or clan leaders to mitigate the problem.
- Lack of knowledge by the community on deforestation of rangeland for charcoal production, wood, and expansions of invasive plants like prosopis trees, partinium and expansion of farming in riverine areas were among the main challenges in rangeland management.
- There is no enclosure and rangeland management committees to manage the enclosures but the community members use their traditional system to manage these resources.
- Capacity building training for the community members and supply of hand tools are required to properly manage the rangeland and enclosures.

Based on the findings of the assessment, ENGINE consulted communities and conducted community conversations with customary institutions, community representatives, government experts, natural resource management stakeholders and users from the 42 kebeles of all project woredas. The discussions focused on the importance of natural resource management, how to address the identified challenges, and informed alternative ways of drought resistant mechanisms like rangeland, enclosure and cut and carry systems to feed their animal especially milking animals to yield enough milk for children in the dry season. A total of 2,578 household members participated in the conversations achieving 86 percent of the annual target.

Following the community conversations, ENGINE identified 500 hectares of potential land for enclosure; target communities enclosed 454 hectares of land in 35 kebeles of 10 woredas reaching

114 percent of annual plan. ENGINE also identified natural resource management stakeholders and users for participatory rangeland management in ten woredas.

ENGINE provided 1200 kilogram of Luceane seed, the most appropriate fodder/forage for pastoral woredas through a voucher system, to 925 HHs from Maiso, Awbare, K/bayah and Shinile woredas to increase production of fodder at the enclosures and rangeland management sites. The beneficiary community contributed their labor for land preparation, sowing, seed preparation and weed prevention. Over-sowing of the enclosure has not yet been started in Babile, Gursum, Kabribeyah, Awbare and Maiso woredas due to delayed onset of the Karan rain.

Activity (iv) Harvesting and conservation of surplus feed

A three day training on harvesting and conservation of surplus feed and haymaking was conducted for household beneficiaries in Quarter IV in Moyale, Filtu, Dolo Ado and Hudet woredas of Liben zone. A total of 90 participants from four woredas attended the training. The training was not provided in other areas due to delayed seasonal rains.

Activity (v) Support vulnerable households to purchase supplementary feed

In Quarter IV, ENGINE distributed 1,900 quintals of supplementary feed to 2,495 poor or vulnerable HHs in thirteen target woredas (1,260 HHs on non-cost share and 1,235HHs on cost share), to supplement milking cattle and goats during dry season. Through project monitoring, beneficiary HHs reported improved milk production after provision of supplementary wheat bran feeding which has led to improved milk consumption for children under five, pregnant women and lactating women.

IR 3.3.2: Health care provision for animals

Identify private veterinary services for partnership

Animal health service delivery is a critical component of the Milk Matters intervention package to increase milk productivity. As part of the animal health service, targeted milk-producing animals receive basic health care from private veterinary pharmacies and community animal health workers (CAHWs) linked to the private vet pharmacies (PVPs) through a voucher system.

ENGINE established partnerships with 15 PVPs in fourteen woredas (including two in Dagahabur woreda) to provide animal health care services via a voucher system to project beneficiaries. PVP partnerships were delayed in the two remaining woredas due to inaccessibility and insecurity. Ten PVPs are PRIME supported, and ENGINE has strengthened their business through linking them to CAHWs and to beneficiary communities through the voucher system.

Provide animal health service on cost sharing and non-cost share

During Year IV ENGINE facilitated the provision of animal health care for beneficiary households through a voucher systems in 14 woredas (Kersadula and Aware were not targeted due to geographical inaccessibility and insecurity respectively). ENGINE provided orientation about the voucher system and facilitated links between the CAHWs, PVPs and the beneficiary communities.

As a result, 1, 840 vouchers have been distributed to 1,840 beneficiary households, of which a total of 1,755 households accessed animal health services using the voucher program, 937 HH accessed health services without HH contribution while the remaining 818 HHs provided some cost share. During the animal health treatment service delivery through the voucher system, a total of 4,661 heads of animals have benefitted out of which 748 heads were lactating cows and 3,913 heads were lactating goats.

IR 3.3.5: Capacity building through trainings and extension work

FTC capacity assessment

ENGINE conducted capacity assessment of 24 FTCs in 15 targeted woredas. The assessment helped identify potential FTCs for subsequent capacity building and use as demonstration/training sites for ENGINE milk matters interventions. Out of the 24 FTC assessed, 19 FTC were found to be functional and five non-functional. All the FTCs assessed were established by the government and staffed by minimum of one and maximum of seven DAs. The main gaps identified during the assessment were lack of refresher training for DAs, lack of equipment and materials, shortage of budget to adopt new technologies, shortage of water and lack of awareness by the community about the services provided by the FTCs which leads to under-utilization of service. In Year V, ENGINE will prioritize eight FTCs in agro-pastoral woredas for fodder production demonstration using small scale irrigation.



Figure 9: Dismantled Higloley kebele FTC (left) and Harawe kebele FTC (right)

Train woreda agricultural professional on community based natural resource management

During the reporting period, ENGINE trained 88 (12 female) woreda agricultural professionals including DAs, animal health technicians, and natural resource management experts from nine project woredas achieving 110 percent of annual target. The training builds the capacity of the woreda agricultural professionals to manage and facilitate mapping of the natural resources and to take part in the development of participatory natural resource management activities. The trained woreda agricultural professionals will take the lead in the facilitation of community action plan (CAP) and establish indicators for progress monitoring the CAPs.

Training on fodder production, management and harvesting for the Development agents:

In Quarter IV, development agents from ten woredas were trained on fodder production; management and harvesting to assist the small holder farmers to better manage fodder/forage harvesting and conservation to resist the long dry seasons. A total of 76 participants attended the training. The underachievement (68% of plan) was due to the drought in Shinilie woreda and lack of security clearance in Aware woreda. The trained DA's will be expected to fully support the fodder producing households and the cooperatives on their day to day activities in the field.

Conduct Natural Resource Management (NRM) and Community Mobilization (CM) training for project staff

During the reporting period, a total of 39 ENGINE staff members and staff from regional agriculture bureaus were trained on natural resource management and community mobilization. The training equipped the staff with the knowledge and skills for effective community mobilization to ensure active beneficiary participation.

IR 3.4 WASH-related behaviors improved

Planned activities

- Subsidized provision of WASH technologies
- HH latrine access and use improved through sanitation marketing
- WASH behaviors promoted in community

In Year IV, ENGINE initiated implementation of WASH interventions in 10 WASH focused woredas in Amhara, Oromia, SNNP and Tigray regions. The interventions were designed based on formative research carried out during Year III.

Activity (i) Subsidized provision of WASH technologies

In the reporting period, ENGINE promoted establishment of locally made hand washing stations (tippy-tap) among targeted households. Tippy taps are promoted near household latrines or food preparation and cooking areas to enable hand washing at critical times. In the reporting period, ENGINE reached 2213 (89%) households with children age below two years, including 1296 in Quarter IV, in WASH focused kebeles. Promotion of tippy taps is managed through inter-sectoral collaboration with health extension workers, kebele development agents and saving groups and micro enterprises members as well as through ENGINE's ECCs. In addition to the accomplishments reported here, ENGINE has observed a high level of adoption of tippy-taps and other WASH practices outside of WASH focused woredas due to promotion via ECCs.



Figure 10: household tippy tap in SNNPR

In Year IV, ENGINE procured and begun providing subsidized water filters and child friendly play mats to target households with children under two. Sawyer water filters were procured based on feedback from a Willingness to Pay Study conducted in Year III. Due to significant delays in importation and delivery by the vendor, filters were received in Quarter IV and distributed to ENGINE supported savings groups in the 10 WASH focused woredas for subsidized sale to community members. In Quarter IV, 56 water filters (1% of annual target) were sold. The low performance in this activity is due to procurement delays as well as limited availability of cash in target households prior to harvest period. ENGINE is promoting the products and remaining product will be sold to community members in Year V with a significant increase in sales expected following harvest.

In Quarter IV, ENGINE provided a total of 223 (93%) water filters to health posts in WASH intervention woredas of Oromia, Amahara, SNNP and Tigray regions. The filters are being used at health posts to ensure access to safe drinking water, including for preparation of ORS. The health posts also serve as a demonstration points for the products.



Figure 11: SAWYER water filter with locally available bucket and jerrycan at Ahuri HP, South Achefer Woreda

In Year IV, ENGINE introduced an intervention providing child friendly play mats to enable mothers to keep children in clean environments and separated from animal feces in order to reduce diarrheal disease and environmental enteropathy. ENGINE procured and sold 4289 mats (100% of annual plan) with a subsidized price for households with children under two. The mats were distributed through the same channel as the filters and were well received. Project monitoring and supervision has found that the mats are being used appropriately by mothers. Due to the high demand, ENGINE will provide technical support for savings groups to procure and sell additional mats at market price in Year V.

Activity (ii) HH latrine access and use improved through sanitation marketing

ENGINE consulted and coordinated with partners (including experience sharing visits to Plan International and Catholic Relief Service sites) and actively engaged in GoE National WASH Movement and the National Sanitation task force as the project designed and rolled-out a sanitation marketing approach to improve demand for and access to sanitary latrine slabs in the 10 WASH woredas.

In Year IV, ENGINE adapted a sanitation marketing training manual and trained 25 participants including 12 government WASH focal persons (regional and district) and 13 ENGINE regional and zonal MNCH and WASH coordinators who led the implementation of WASH activities in the target woredas. In collaboration with woreda officials, ENGINE identified 23 saving groups and four micro-enterprise groups capable of engaging in Sanitation Marketing interventions in the ten WASH focused woredas. ENGINE trained a total of 109 (female=68) group members on sanitation marketing, reaching 145% of the annual target. The overachievement is because the woreda staff were included in the training to enable them to support the sanitation marketing activities.

ENGINE provided the trained groups materials to launch businesses, including initial materials for production of slabs. The trained groups began production and sales of improved latrine slabs in Quarter IV and 349 households (50% of annual target) purchased slabs. These sales show that demand exists in target communities and ENGINE will continue to provide technical support the groups in Year V. As with other WASH goods, sales are expected to increase following the harvest.



Figure 12: Trainees exercising making sanitary latrine slab (East Oromia)

In Quarter IV, ENGINE undertook sanitation marketing formative research in the 10 WASH focused woredas of Oromia, Amahara, SNNP and Tigray regions. The overall purpose of the sanitation marketing formative research was to generate viable information on demand for sanitation options and supply chains in the proposed intervention sites. Interventions were developed based on research available from partners, but ENGINE undertook rapid research to better inform the ongoing implementation of sanitation marketing activities in Year V. The data analysis, interpretation and development of a report is in progress and will be available in the next quarter.

Activity (iii) WASH behaviors promoted in community

In Year IV, ENGINE developed and utilized a WASH/Sanitation Marketing training manual and also revised the MIYCN and Nutrition Sensitive Agriculture training manuals to ensure WASH content was adequately addressed.

In Year IV, 23 schools established or revitalized WASH and Nutrition clubs. In collaboration with regional health bureaus, ENGINE facilitated a celebration of Global Handwashing Day events at selected WASH focused districts of Oromia, Amhara, SNNPR and Tigray regions in Quarter I. The events were conducted in 11 (92%) selected schools of WASH intervention districts. A total of 10,145 (4,919 females) individuals were reached through celebration of Global Handwashing day at schools events.

In Quarters III and IV, ECCs were conducted in 21 woredas (IR 3.1), which include a WASH session to promote appropriate WASH practices, including construction of tippy-taps and separation of livestock from children.

IR 4: Rigorous and innovative learning agenda adopted

Planned activities:

- Implement Operations research (OR)
- Capacity building/support PhD and MSc students
- Conduct project monitoring assessment / survey
- Preparation for project end line survey for impact evaluation
- Implement project monitoring and data quality system
- Develop communication strategy

Strategy 4.1: Design and delivery of a research strategy

This section of report comprises details on operations research, ENGINE end line survey, project monitoring and evaluation and capacity building activities implemented by ENGINE and partners during the reporting period.

Activity (ii) Conduct OR studies on acute malnutrition

Moderate acute malnutrition (MAM)

The purpose of the MAM OR was to provide evidence for whether there is a need for a Targeted Supplementary Feeding Program (TSFP) in food-secure settings of rural Ethiopia. In this reporting period, a MAM operational study article was finalized with input from Valid, Jimma and Save the Children. VI submitted the manuscript to a peer-reviewed journal for publication early in Quarter IV.

Severe acute malnutrition (SAM)

The objective of the SAM OR was to determine the long-term health outcomes of children age 6-59 months successfully treated for SAM in a community-based management (CBM) program compared with a control group of children under-5 in the same community.

During the reporting period, SAM operational research data collection was completed and data analysis is being conducted by experts from both Jimma University Co-PIs and Valid international at Adama. The report writing is underway and planned to be finalized on Oct 2015.

Qualitative study: Community perceptions of malnutrition

The objective of the study was to gain insight into the complex nature of local knowledge and perceptions of the definition, causes and solutions of malnutrition in Jimma zone. In Quarter III, a manuscript from the study was submitted to BMC Health for potential publication. It is now under review and has passed an initial assessment. The results of the qualitative study were further presented in a poster at the “Together for Nutrition 2015” conference.

Activity (iii) Implement birth cohort study

The aim of birth cohort study is to determine the effectiveness of ENGINE direct and indirect interventions targeting maternal and child nutrition and health outcomes. The study provides an opportunity to understand how and why specific strategies and approaches address nutrition and health concerns of pregnant women and infants. The BC study follow-up interviews are progressing as planned. Thus far, all recruited participants have given birth and 4,128 (96 percent), 3,500 (82 percent) and 2,405 (56 percent) of the infants have reached three months of age. A total of 1,258 (29 percent) study participants have completed the study and been discharged while eight percent of participants were excluded according to the study protocol.

The recruitment of the household head has been completed (99.8 % achievement), and the second round of data collection from household heads is currently underway. During this reporting period, the Frontline Workers data collection was completed among HEWs and DAs. The data was analyzed and the preliminary results presented at the ENGINE operations research dissemination symposium organized by TU and held at the International Livestock Research Institute (ILRI), in Addis Ababa, in September 2015.

In this reporting year, eleven of twelve planned supportive supervision visits were conducted by the study manager and a team from Jimma and Tufts University to provide technical and administrative support.

Activity (iv) Conduct agriculture-nutrition cohort study

This study was designed to examine ENGINE's role in affecting nutrition, food security, and livelihoods outcomes through its integrated programming. The second round (pre-harvest) and third round (post-harvest) panel data collection were both completed in the reporting period, and reached >99% of the target sample size. The fourth and final round of data collection is underway and will be completed in the next quarter. Round one and two data results and findings were presented during the Tufts-ENGINE research dissemination symposium.

A qualitative study titled "Qualitative Research for Gender Differences in Nutrition Message Access and Uptake in Ethiopia" was conducted during Quarter IV and data was collected from five Ag-Nut study woredas. Data analysis is underway. The objective of this research is to examine the barriers and facilitators associated with nutrition-specific and nutrition sensitive message access and uptake, and how they differ between adult men and women.

Activity (v) Conduct secondary data analysis research

Nutrition policy research

The paper, "Dynamics of National Nutrition Program (NNP) Implementation in Ethiopia" was prepared and submitted to a journal for publication. The first round of comments were provided from reviewers and the investigators responded to the comments in Quarter IV, publication is pending.

Secondary data analysis research

Five Tufts-ENGINE sponsored abstracts from the secondary data research were accepted and presented (three oral presentations and two posters) at the NNP Operational Research Dissemination Workshop in Adama in October 2014. ENGINE organized an operational research dissemination workshop in Addis Ababa on March 13, 2015, where two abstracts were presented. These papers were presented, additionally, during the Tufts ENGINE Operations Research Dissemination Symposium on September 1st, 2015. A manuscript on dietary diversity is already in press.

Activity (vi) Build capacity of researchers and postgraduate students

Research capacity building

In Year IV, all seven PhD students were linked with promoters (PhD Advisors) in European Universities (four students with Ghent University, two students with Copenhagen University and one student with Wageningen University). The Tufts-ENGINE project manager was in Belgium in June 2015 to discuss with the Ghent University professors how to accelerate the PhD registration and supervision process, so as to complete the PhD program before September 2016. Following this discussion, four PhD students have planned to go to Belgium in November 2015. During this reporting period, one student went to Copenhagen University and one to Hohenheim University for

their PhD work. Two students drafted and submitted one paper each for publication in academic journals. Six of the PhD candidates attended two courses: Nutrition Policy Program, Planning & Interventions and Medical Research Ethics and Policy at Jimma University.

During the last three project implementation years, ENGINE supported 56 MSc student theses, from five government universities, in the NNP and ENGINE project objective areas, in order to build nutrition research capacity and support the development of skilled nutrition professionals. Abstracts of 22 completed MSc thesis findings were compiled and printed in booklets and disseminated in a workshop held on March 13, 2015.

In Year IV, ENGINE reviewed 31 proposals submitted from five government universities (Hawassa, Mekele, Haromaya, Jimma and Gondar) for financial support, and 24 proposals that satisfied selection criteria were provided support, meeting the annual target. ENGINE has supported a total of 80 students' MSc theses from five government universities.

In Quarter III and Quarter IV of this reporting year, ENGINE conducted supportive supervision visits to Jimma and Hawassa Universities to see how MSc thesis work was progressing, to check financial utilization, and orient students and their supervisors on branding issues.

Strategy 4.2: Develop and manage an innovative and dissemination strategy

Activity (i) Preparation for project end line survey for impact evaluation

During this reporting period, the end line survey data collection schedule was finalized and agreed upon with Tufts University and Valid International. Every effort was made to streamline the schedule while retaining the seasonal pattern so as not to compromise comparability with the baseline.

Data collection will start at the beginning of November 2015 and finish in July 2016 to allow adequate time for analysis and reporting. Survey team members were recruited and trained in Quarter IV. The questionnaire was modified to include WASH questions and remove sections no longer relevant such as coverage survey of immunization and CMAM.

During the reporting period, an ENGINE GRAD partnership baseline survey was initiated in non-AGP partnership woredas, which will be repeated in Year V to assess the impact of the partnership (see Annex 1 for more details), data collection, analysis and reporting was completed in Quarter IV. The draft report is circulating for comments and will be finalized in first quarter of Year V.

A similar baseline survey was conducted in ENGINE-GOAL partnership woredas (Annex 2) which will be repeated in Year V to measure the impact of the partnership. During this reporting period data collection and draft report writing was completed.

In Quarter IV, ENGINE began developing an evaluation plan for the Somali Region. The protocol will be finalized in the coming quarter.

Activity (iii) Documenting effectiveness of livelihood intervention

During the reporting year ENGINE-LOL completed the review of data quality, analysis and completed the final report of the ENGINE's livelihoods effectiveness study which was conducted in

Box 3: Key Findings from livelihood effectiveness study:

- Households targeted by ENGINE are cultivating 14 types of vegetable and root crops using planting materials and technical assistance from ENGINE along with fruit trees and rearing livestock.
- Both crops and livestock are providing food and income.
- These items complement staple and other crops, contributing to increased dietary diversity along with a new source of income.
- There are also indications of enhanced women's empowerment as women were reporting their influence on decisions around ENGINE-related inputs and activities, more than for traditional field crops.

Year III. Key findings are indicated in Box 3 below.

Activity (vi) Establish program monitoring system

Sub-activity (i) Performance data collected from ongoing activities on a timely basis

In Quarter II, the ENGINE country office M&E team provided a two day intensive M&E training to regional M&E coordinators from the regional field offices enabling newly recruited regional M&E coordinators to validate the quality and consistency of reported data.

Sub-activity (ii) Initiate annual assessment of critical outcome indicators

Based on the recommendations of ENGINE project midterm evaluation, ENGINE conducted a program monitoring assessment of critical outcome indicators to complement ENGINE's robust baseline and end line evaluation surveys. In Quarter I, ENGINE successfully designed and carried out a project monitoring baseline survey of 360 MVHH to be targeted in Year IV, as well as the current status of 500 MVHHs supported in Year III from ten ENGINE model woredas. The final report was shared in Quarter II. To understand trends in key MIYCN and livelihood outcome indicators in the course of project intervention, a second round of assessment was conducted in Quarter IV in the same households using the same methodology. Data analysis and report writing of this assessment will be finalized in Quarter I of Year V. The same survey will be conducted on the same households a third time in Year V.

Sub-activity (iii) Provide technical assistance to MOH, RHBs and WorHOs with the integration of nutrition indicators into HMIS

Partnering with regional and woreda health bureaus ENGINE provided capacity-building training to 156 (127 percent) health institute data workers/HMIS staff (45 in Amhara, 56 in Oromia, 31 in SNNPR and 24 in Tigray), on the basics of project monitoring and evaluation (M&E), data collection utilization, data quality management and reporting system and HMIS indicators with special emphasis on nutrition indicators. Special emphasis was placed on MCH and nutrition indicators. The aim of the training was to impart knowledge on data collection, data quality, utilization, reporting and documentation.

Sub-activity (iv) Support quality of program implementation and data utilization at all levels

In this reporting year, ENGINE supported and participated in joint annual health and agriculture sector planning meetings conducted in 79 woredas (95% of annual target) of Amhara, E. Oromia, W. Oromia, SNNPR and Tigray regions. The objective of the meetings was to connect and align ENGINE annual work plans with the health and agriculture offices and other woreda partners. The participants agreed to incorporate nutrition activities in their sector plans and committed themselves to closely monitor its implementation.

Thirty one (82% of annual target) nutrition multi-sectoral review meetings were organized at zonal levels in collaboration with partners (five in East Oromia, nine in SNNPR, ten in Amhara and 3 in Tigray). The meetings provide an opportunity for discussion of the progress of nutrition activities by each sector, gaps identified during supportive supervision visits and time to develop action plans to improve quality of nutrition service in all sectors. The meetings focused on building the capacity of the NNP implementing sectors.

In this reporting year ENGINE supported and coordinated 109% (181/166) health and agriculture level nutrition integrated review meetings (30 in Tigray, 38 in Amhara, 45 in SNNPR, 32 in E Oromia and 36 in W Oromia regions) and additionally 77 cluster PHCUs (50 in Amhara and 27 in E

Oromia). The objectives of the meetings were to review gaps identified during integrated supportive supervision and post-CHD assessment results, and develop action plans to address those gaps to ensure the quality of nutrition services improves at all levels. The meetings also provided time to discuss key nutrition successes stories - especially establishment of the NNP committee at lower levels, and integration of QI models in health services. The meeting identified key actions points including the need to reach all communities with cooking demonstrations and conduct follow-up after cooking demonstrations to ensure complimentary feeding practices at the household level are improving.

Nutrition integrated woreda health sector review meetings were conducted in seven ENGINE-GRAD partnership woredas in Amhara, Oromia and SNNP. The meetings reviewed the nutrition multi-sectoral coordination agendas, nutrition sensitive and specific interventions, maternal and child nutrition programs in each woreda, and discussed and prepared action plans for the next quarter. Similar meetings were held in two ENGINE-GOAL partnerships supported woredas in Oromia where nutrition sensitive and specific interventions were reviewed and the sectors produced an agreed plan of action.

ENGINE supported integrated health and agriculture woreda level review meeting in five GRAD partnership woredas: Deder, Shebedino, Boricha, Dale, and Burka Dimtu woredas of East Hararghe, West Hararge and Sidama zones (100 % of annual target). The objectives of the meeting were to strengthen multi-sectoral nutrition mechanisms and the implementation of nutrition sensitive and specific interventions.

The ENGINE country office M&E team continued to provide regular onsite regional routine data quality assessments (RDQA) on the recording, reporting, data utilization and data quality at field level. Two routine data quality assessments were done in Amhara, Oromia, SNNPR, and Tigray regions. In Quarter III, the M&E team also conducted a data quality assessment in Somali region using the same RDQA tool. RDQA assessed data quality at service delivery sites (schools, FTCs, HCs, HPs and also at woreda and regional offices) and ENGINE regional database and reporting system. The findings of the two assessments and action points were shared to regions and followed up by country office M&E team. Regional M&E teams also conducted their own DQA in their respective regions. The number of data discrepancies and overall documentation in both hard and soft copies has improved in Year IV. Major findings of DQA in terms of strength, weakness and action points and recommended are summarized below.

Table 4.1: Summary findings on overall data management and reporting system by region

National Nutrition Program Research Dissemination Conference

Region	Strength	Weakness	Action points / Recommendation
Amhara	Continues to show improvement in data management compared with the previous quarters	Use of livelihood format for reporting and documentation is minimal at woreda agriculture offices	Reorientation on reporting format should be given to focal persons
Oromia (East)	ENGINE health and nutrition interventions are well known and understood at all levels	Some of the FTCs are missing source documents	Zonal coordinator should provide data collection tools where missing
Oromia (West)	Compared to the previous RDQA findings, discrepancies between reported and recounted number have been reduced	Reports from some of the facilities are not received on a timely bases	Reminders should be sent to facilities by email and telephone
SNNP	Good coordination between the grass root government staff (Woreda Agriculture Office) and ENGINE staff	Livelihood registration formats prepared by Country Office M&E are not being used by some of the grass root levels	Proved support to facilities for consistent use of formats

EPI, in partnership with key nutrition stakeholders including USAID/ENGINE, World Bank, Micronutrient Initiative, UNICEF) and the Food and Nutrition Society of Ethiopia (FoNSE) held a three-day NNP Operations Research Dissemination Conference from October 23 – 25, 2014. ENGINE disseminated 11 operation research documents on topics of nutrition policy; micronutrient deficiencies; dietary diversity; complementary food product development; and nutrition and agriculture linkages. A total of 47 research papers on nutrition and related fields were presented. The conference was attended by ninety-five participants, including policymakers and parliamentarians, research institutes, academia, NGOs and UN agencies.

ENGINE operations research and MSc theses findings dissemination workshop

On March 13, 2015, ENGINE conducted a one-day workshop on ENGINE supported OR studies and MSc theses findings. In addition to disseminating findings from OR and MSc theses, the workshop served to increase understanding of the ENGINE OR studies and approaches, including international and local operations research implementation and experiences. A key recommendation was for ENGINE to support MSc research that is operational or intervention focused, rather than assessments of the current situation. It was also recommended that universities propose more research on nutrition-sensitive agriculture and gender.

Activity (v) Implementation of ENGINE's communication strategy

In the reporting period, ENGINE worked with knowledge management consultants to develop and finalize a knowledge management plan to be implemented during the remaining project period. ENGINE continues to update its project website <https://ethiopia.savethechildren.net/ENGINE> with resources and highlights of events to ensure they are readily available to stakeholders. ENGINE has also shared stories for publications with *USAID Frontlines* magazine, *Africa Agribusiness Magazine* (see box XX below) as well as the *Save the Children International Everyone Campaign* website. Working with a video production company, ENGINE completed the filming of eight short documentaries that showcase the project's successes and intervention areas. The videos are available on ENGINE's YouTube site. Many success stories were documented in Year IV, two of which and are included in Annex 6, describing the experience of a HEW in SNNP and the story of how ENGINE nutrition sensitive livelihood activities have transformed the life of one beneficiary.

In Year IV, ENGINE also reviewed, updated, edited, formatted and printed key project documents including a package of reports on research studies as well as key training manuals. ENGINE will finalize additional project documents in Year V and all will be disseminated widely.

In Year IV, ENGINE utilizing STTA from Save the Children and LOL completed documentation of key lessons learned and recommendations for future programming in the areas of QI and nutrition sensitive livelihood interventions. These have been shared with USAID and will be made available to public later in Year V. ENGINE will complete documentation of lessons learned in other technical areas including SBCC, WASH and pre-service education in Year V.

Crosscutting: Gender

Planned activities:

- Update gender topics in project materials
- Integrate gender activities at the community and household level
- Strengthen gender in program monitoring system

Update gender topics in project materials

In Year IV, ENGINE reviewed key training manuals and integrated gender topics in line with ENGINE's gender strategy. This included adapting gender content for the Somali region. Gender was also strongly integrated into ECC materials and implemented in Year IV.

ENGINE provided a one day gender sensitization training workshop to 14 ENGINE Addis based advisors and sub-prime staff. The training was delivered to sensitize ENGINE staff to gender concepts and requirements of gender integration and the tools available for use.

Regional level workshops on gender and nutrition were organized with participants from regional, zonal and Woreda level NTC members and Gender focal person's from the NNP member sector offices. The participants discussed topics such as "why nutrition matters", "the cost of hunger" and ENGINE presented on a gender and nutrition analysis and how the findings influenced the project's gender strategy. Five workshops (100%) were conducted in Amhara, Oromia, SNNPR, and Tigray regions.

Integrate gender activities at the community and household level

In Year IV, emphasis was given to implementing gender activities at community level in line with ENGINE's gender strategy.

Decision making and communication skills training for men and women was conducted to improve household communication and joint decision making behaviors among the members of targeted HHs. In Year IV, a total of 1853 men and women were trained in all four ENGINE intervention regions achieving 127% of the annual target; this includes 528 HH members reached in Quarter IV.

In Year IV, ENGINE organized exchange visits to facilitate experience sharing among the members of ENGINE supported saving groups. The experiences shared included livelihood activities, management of savings, HH decision making, nutrition behaviors and child feeding practices. The experience sharing visits took place within woredas with better performing and poor performing groups exchanging lessons. The visits allowed women to learn from each other's success and challenges to provide ideas on how improve their performance around savings and the livelihood activities. Twenty nine (29) out of 35 planned visits were conducted in Year IV, achieving 83% percent of the annual target in the four regions.

To impact and improve nutrition at household level, the role and contribution of men is crucial. In Year IV, ENGINE introduced activities to constructively engage men. As ECCs rolled out in Year IV, ENGINE selected 69 (82% of target) male ECC participants to serve as role models. The men were chosen as they were found to be supporting and providing their wives and children during pregnancy and breastfeeding as well as influencing others towards these behaviors. The men were recognized through certification and highlighting their positive support for their wives and children during different events.

To further engage men, ENGINE sensitized men in selected MVHHs to gain their support for the project activities undertaken by women in the households. A total of 2388 men (99% of annual plan), including 818 in Quarter IV, received orientation on supporting their family and their women on relieving women's work load and supporting their livelihood activities. ENGINE also conducted 65 cooking demonstrations for men (84% of annual plan) to improve male involvement and broaden their perspective on impact of gender on nutrition, specifically on preparation of diversified food for children and care for women during pregnancy and lactation.

ENGINE is promoting the labor saving technologies as a means to reduce women's workload. In Year IV, 57 women (114% of target) were provided with items including improved cook stoves which have a positive impact in reducing the women's work burden. The items were introduced to members of savings groups who will help to introduce the technologies to other group members and the broader community. The items were selected following an assessment in regions to identify the available options.

Strengthen gender in program monitoring

In order to more fully include gender into overall program activities, ENGINE integrated gender indicators, including HH decision making, into ENGINE PMP in Year IV. The indicator was included into the second round of MVHH which was carried out in QIV of this reporting period. The same survey using critical outcome indicators which will be repeated in Year V.

ENGINE's gender advisor is actively engaged in USAID Gender Champions working group, including in the planning of gender focused FtF meeting in the next quarter.

Environmental compliance

Animal feed and feeding

Year IV, ENGINE continued purchasing animals from the local market to avoid extra livestock stocking rates and additional pressure on the existing pasture. In addition, 4,433 MVHHs received training and TA on forage development and animal feed preserving techniques in AGP wordas.

Animal Health

In order to protect distributed animals from livestock diseases and maximize productivity, animals received vaccination against Anthrax, Black leg, Pastureullosis, PPR, and Pox, depending on the type of animal and area prevalence. All chickens distributed by ENGINE were vaccinated based on the recommendation of National Veterinary Institute (NVI) chicken vaccination calendar against NCD, Gumboro, Fowl typhoid, Fowl pox and Mareks.

Table 5: Environmental mitigation and monitoring

Activity description	Mitigation measures	Monitoring Indicator(s)	Output	Comment
			# of people trained	
Provide selected vulnerable households and women's groups with livestock and seedlings for production of fruits and vegetables	Provide training of feed preparation, forage production, livestock management and veterinary services	# of people trained on feed and livestock management	4,433	4,433 households received training on forage production and feed reserve
	Provide required vaccinations for livestock	# of animals vaccinated	22,843	During the reporting period, 22,843 animals have been vaccinated. All animals received a thorough animal health examination by a government veterinary officer.

Annex I: ENGINE-GRAD Collaboration Report

Introduction

Empowering New Generations for Improved Nutrition and Economic Opportunities (ENGINE), a USAID-funded bi-lateral project led by Save the Children, which initially operated in 83 productive woredas in Ethiopia, and which has subsequently expanded to 17 food-insecure woredas in partnership with GRAD and GOAL in Years III and IV, and to 16 pastoralist and agro-pastoralist woredas in Somali Region in Year IV. ENGINE focuses on improving the nutritional status of women and children, with an emphasis on children 0-23 months, pregnant women and lactating mothers through direct nutrition and nutrition-sensitive interventions.

Graduation with Resilience to Achieve Sustainable Development (GRAD), a USAID-funded project led by CARE, is operational in 16 food-insecure woredas in four regions (Amhara, Oromia, SNNPR and Tigray.) GRAD currently focuses on increasing household income and developing resilience to graduate beneficiaries out of food insecurity through asset-building and economic strengthening interventions on selected value chain commodities, income generating activities, nutrition education and nutrition-sensitive activities. The primary target group of GRAD's nutrition component is households with children 0-23 months, pregnant women and/or lactating mothers.

Geographic Targeting

Seven GRAD woredas were selected based primarily on the relative lack of nutrition services or programming in the areas. Within these seven woredas, kebeles and households currently targeted by GRAD were selected for joint interventions. The following table indicates woredas and kebeles proposed for ENGINE.

Table I- Woredas and kebeles proposed for ENGINE.

Region	Woredas	# of kebeles covered by GRAD
Oromia	ArsiNegele	10
	Adami Tulu	8
SNNPR	Loka Abaya	15
	HawassaZuria	14
	Meskan	22
Amhara	LiboKemkem	14
	Lay Gayint	7
Total	7	90

Objectives:

- To build the resilience of the targeted households and communities to overcome shocks
- To improve household nutritional status, particularly for children 0-23 months, pregnant women and lactating mothers; and
- To establish a monitoring, evaluation, and learning agendas in order to uncover lessons learned of employing the GRAD and ENGINE joint approach.

Detailed accomplishments of the ENGINE-GRAD collaboration

Project start-up and program management

In year IV, ENGINE scaled up to three woredas in partnership with GRAD in SNNPR, bringing the total to seven partnership woredas including two in Amhara and two in Oromia. In quarter one, a

one day orientation session was held in Amhara with GRAD’s local implementing partner (ORDA) and ENGINE project staffs which included an overview of the collaboration and its intended impact, progress reporting, modalities of livestock support to beneficiaries, and logistical issues. In quarter two, an ENGINE-GRAD partnership familiarization and joint regional work plan development workshop was held. The objective of the workshop was to orient stakeholders on the intended partnership, to discuss the modality of implementation, to prepare work plan and budget for the region and implementing woredas. Accordingly, participants discussed and understood implementation modalities and developed joint work plan for implementation.

GRAD regional and Addis Ababa level nutrition advisors visited ENGINE SNNPR projects office in February 2015. During the visit brief additional explanation was discussed on the nature of the partnership and experiences of other similar project implementing partners, in relation to issues such as; joint preparation to organize training/workshop events, beneficiary selection, health facility and community activities and on how to handle per-diem payments for workshop participants.

The projects signed an MOU to guide the work and collaboration of both partners. ENGINE recruited additional coordinators in each zone to support the partnership. In this reporting period, seven (58%) of community facilitators and 74 (53%) of animators were recruited to support the additional ENGINE-GRAD activities at grass root level. The recruitment of the remaining CFs and animators is under process. VESA nutrition discussion manual was also revised and is now ready for duplication and distribution.

In quarter III, GRAD received additional funding from USAID to support the scale-up of nutrition activities in the joint woredas. This will enable GRAD implementing partners to carry out all planned activities without the previous budget constraints which had limited progress on the partnership.

ENGINE and GRAD held periodic management meetings to assess progress of the partnership and address implementation challenges. This included a one-day meeting in quarter III between both projects, including technical, regional and sub-prime staff to review and update a joint work plan to ensure both projects are working in unison. An output of the review meeting and subsequent follow up meetings was a joint work plan approved by both projects.

Capacity for and institutionalization of nutrition programs and policies

Support the nutrition multi-sectoral coordination mechanism

In Year IV, ENGINE provided financial and technical support to woreda level nutrition multi-sectoral coordination in all seven ENGINE-GRAD partnership woredas of Amhara, SNNPR and Oromia regions. ENGINE supported an NNP advocacy and sensitization workshops in the seven ENGINE-GRAD partnership woredas to roll-out the NNP and establish and strengthen woreda nutrition technical committee and nutrition coordination bodies. Three coordination meetings were held in quarter IV. Based on experience, ENGINE has advocated that WNCBs be chaired by the woreda administrators.

Quality of nutrition services strengthened

Working in partnership with GRAD, ENGINE trained 757 (134 percent of annual target) people in child health and nutrition, including health and agriculture program managers and GRAD gender and nutrition coordinators, integrating IYCF into CMAM and nutrition sensitive agriculture. The achievement exceeded the annual target because of provision of MIYCN training to HEWs at health sector review meetings as well as additional gap filling training provided due to staff turnover.

Table 2. Number of people trained in child health and nutrition by region

Regions	Annual Plan	Annual Achievement	%
---------	-------------	--------------------	---

		Male	Female	Total	
Oromia	131	105	37	142	108
SNNPR	230	175	150	325	141
Amhara	202	197	93	290	144
Total	563	466	281	757	134

Provide program managers training

ENGINE provided nutrition program managers training for 42 (3 female) (105% of annual target) woreda level agriculture and health office heads: 13 in Amhara, 13 in SNNP and 16 in Oromia regions. The training in Oromia was conducted in quarter IV.

The training aimed to capacitate the program managers in integrating nutrition into their respective woreda plans. At the end of the training participants developed post-training activity plans that included the establishment of NNCB & NTC, organizing and conducting NNP sensitization meetings and supporting ENGINE/GRAD program implementation at woreda level.

Provide MIYCN training for health workers and health extension workers

In the reporting period, ENGINE in partnership with GRAD, provided MIYCN training for 351 (204 female) health workers: 106 from Amhara, 179 from SNNP and 66 from Oromia health centers and woreda health offices of ENGINE GRAD intervention woredas reaching 135% of the annual target. The reason for overachievement is utilization of health sector review meetings as an opportunity to train HEWs on MIYCN, as well as gap filling training to address high turnover of HEWs in ante-natal clinics and under five clinics of health facilities. The training aims to build the capacity of the health workers in providing quality preventive nutrition services in facilities.

Print and distribute nutrition counseling materials to health facilities

In Quarter III, ENGINE completed an assessment of nutrition counseling materials available in health centres and health posts. Based on the identified gaps, counseling materials were distributed to 394 facilities (115 in Oromia, 108 in SNNPR and 171 in Amhara) in quarter IV (125% of annual target). Materials distributed include MIYCN counseling cards, and nutrition counseling 'briefcases' for HEWs. Provision of materials in conjunction with MIYCN training, supportive supervision and mentoring will improve the consistency and quality of nutrition counseling through the health system.

Support quarterly joint and regular nutrition integrated supportive supervision to health centers and health posts with woreda health office

ENGINE provided technical and financial support for integrated supportive supervision in SNNP, Amahara and Oromia regions. The supportive supervision was conducted eight times in seven woredas, including five joint visits in quarter IV, to assess the status of implementation of nutrition-related activities at health facilities after the support of ENGINE project. The supervision was held jointly with woreda health office experts using the checklist developed by ENGINE project and included antenatal, delivery, postnatal, U5 clinic and EPI units. HWs, HEWs and mothers and caretakers were interviewed and assessed for their level of service access, utilization and level of satisfaction.

In Amhara, a total of 35 HCs, 79 HPs, 145 HHs and 102 pregnant women were reached. In SNNP supervision was done at 4HCs and 8HPs. In Oromia, 8 HCs, 10 HPs and 20 HHs were provided supportive supervision.

Major findings of the supervision were the positive feedback on MIYCN services provided; proper registration at HCs, FCDs by HEWs and the health development army; MIYCN counseling; iron folate supplementation for ANC women; Vitamin A and zinc supplementation and documentation. Gaps identified during supervision were inadequate documentation and registration of nutrition

counseling in some facilities, shortage of MIYCN counseling cards at some facilities, zinc tablets near to expiration, and inadequate cooking demonstration practice and follow-up in remote kebeles. The identified gaps are being addressed through PHCU review meetings and ongoing mentoring.

Provide technical assistance (Mentorship) to health extension workers for the implementation of direct nutrition services at facility and community levels

Technical mentorship has been provided for 284 HWs and HEWs (207 females) in the reporting period, reaching 141% of annual target. The overachievement is due to the need for intensive support to improve nutrition services. Gaps in nutritional counseling were identified and addressed based on practical counseling demonstration. The focuses of the support were on; quality nutrition counseling, counseling card availability and utilization, supplementation of micronutrients, WASH and malnutrition treatment.

In two woredas (Adami Tulu and Arsi Negelle) of E. Oromia, monitoring & reporting of MIYCN counseling service was provided by trained HWs at health facilities; 7620 pregnant women out of 7989 ANC service users during the reporting period received nutrition counseling, which is 90% performance. All pregnant women were provided with iron-folate at 15 HCs of the two woredas targeted by ENGINE-GRAD partnership. Similarly, a total of 2,350 lactating mothers received recommended maternal, infant, young child nutritional counseling service during PNC service by trained HWs. A total of 5,678 sick children (0-59 months) visiting the U5 clinic during the reporting period; 1,412 were diagnosed with diarrhea and 1,355 (96%) were received zinc and ORS treatment (96%) during the reporting period

Conduct food cooking demonstrations at community levels including promotion of use of iodized salts and WASH

ENGINE technically supported nutrition cooking events at HPs and at the community level. A total of 6,256 participants (5,145 female) attended through 224 events. In Amhara, 156 demonstrations were conducted at HPs and community levels reaching 4,019 (3,268 female) participants; In Oromia, 56 events reached 1,882 participants and in SNNPR 12 events reached 355 participants. FCDs utilized locally available ingredients and emphasized use of iodized salt and hygiene and sanitation practices in addition to dietary diversity.

Conduct nutrition cooking demonstrations for VESAs

GRAD conducted cooking demonstration for 14,648 (82%) members of VESA groups. This is being carried out in VESA meetings, trainings and other opportunities. Mothers who have under two children, pregnant, lactating, VESA leaders and kebele leaders and all other members participated in those sessions that is bringing change in feeding practice by communities in preparing food using locally available nutrient dense food.

Provide development agent and agriculture extension worker training on nutrition-sensitive agriculture including keyhole gardening and perma-gardening

In Year IV, nutrition-sensitive agriculture and perma-garden training was provided for a total of 364 (74 females) DAs from ENGINE/GRAD implementing kebeles, which is 138% of the annual target. Participants were from Amhara 171 (f=48), Oromia 60 (f=8), and SNNPR 133 (f=18). In quarter IV, 83 DAs were trained. The training was overachieved due to the high turnover of trained DAs in ENGINE/GRAD woredas.

Conduct Enhanced Community Conversations using VESA structure

In Year IV, ENGINE and GRAD consulted and agreed on a package of eight ECC sessions to be delivered once per month to each VESA. ENGINE's SBCC team adapted ENGINE's ECC materials for the PSNP context with input from GRAD. The materials are in production and the ECCs will be rolled out in the next quarter.

Implement community based Nutrition-Sensitive Livelihoods

During the joint reprogramming meeting in quarter III, a number of changes were made to the joint work plan, clarifying ENGINE's role in direct livelihoods support to GRAD households, with ENGINE's role being support to FTCs and training of DAs in implementation woredas as well as provision of technical assistance at GRAD's request.

Select households among the village economic and social association group

GRAD and ENGINE selected 2,044 (219%) from VESA for nutrition sensitive project support. Selection criteria included households with children under 2 years, women of reproductive age, and economically poor households. The over achievement was due to increased attention and support provided from newly hired staffs.

Select farmer training centers with access to water to promote vegetables and fruit production

During the reporting year, seven (100% of plan) FTC promoted vegetables and fruit production for VESA members. ENGINE and woreda agriculture offices communicated with the respective DAs about the activities to be undertaken with the support of the ENGINE-GRAD partnership.

Provide Keyhole gardening/perma-garden training to community facilitators and animators at woreda level

Perma-garden training for GRAD's community facilitators and animators in all partnership woredas was provided in Year IV. The training was provided to 527 participants (71 female), which is 108% of the annual plan.

Train households from VESAs on homestead vegetable production including perma-gardening and keyhole gardening

Overall, 1,613 VESA households (173% of annual target) were trained on homestead vegetable production/perma-gardening during the reporting year. The objective was to provide VESA households with an attainable, practical and sustainable methods to increase their own household vegetable production and consumption to impact on household nutrition through improved agronomic practices.

In Amhara, 1,027 selected households received training on homestead vegetable production including perma-gardening and keyhole gardening and 204 (84 percent) households received vegetable seeds, fruit seedlings and hand tools on a revolving credit basis through the VESA structure. In Oromia, ENGINE and GRAD supported training of 235 VESA members on homestead vegetable production including perma-gardens. In SNNPR, homestead garden training was cascaded by GRAD CFs and animators to HHs. In the first round, 351 HHs selected from VESA (1 per VESA) attended this training,

Link HHs to agro-dealers to access vegetable seeds through GRAD modality

After the training, 939 HHs trainees were able to access vegetable seed through linkage with agro dealers and VESA in-kind credits. In the same reporting period vegetable seed including carrot, head cabbage, Swiss chard, onion and beet root have been accessed by beneficiaries. The overall achievement for the reporting period reached to 100.7%.

Conduct TOT training for community facilitators on chicken production and management

To deliver extension services for VESA beneficiaries, GRAD and ENGINE conducted training for 63 (10 women) DAs and veterinaries for two days on poultry management, improving the quality of production further. This is on top of 120 community facilitators included in TOTs in the reporting period.

Select and provide training for model farmers on chicken production and gardening

The overall achievement of this activity is 109.6% (785/716) in the reporting period. The project in Amhara and Oromia has given a two days training for 785 women on poultry management and handlings. All the 785 women were also supported to establish improved poultry production through VESA credit revolving funds. Also GRAD adopted its own homegarden and poultry strategy and packages with inputs from ENGINE

Provide improved chicken breed with package of technologies to model farmers per GRAD modality

In this reporting year, 414 (57.8% of the target) farmers were supported to engage in improved poultry production activities. The under achievement, due to the rainy season, will be made up in subsequent quarters.

Rigorous and innovative learning agenda adopted

Support and participate in WoHo regular nutrition integrated review meeting

ENGINE provided technical and financial support for nutrition integrated review meetings in the seven joint woredas in Amhara, Oromia and SNNPR. During the review meeting, key areas of nutrition multi-sectoral agendas, nutrition sensitive agriculture, and specific interventions were raised and reviewed. Participants included staff from health centers, health posts and woreda health offices.

Conduct review meetings of the joint plan with all implementing partners including relevant government offices

In year IV, eight (114% of plan) review meetings were conducted from Oromia, Amhara and SNNP regions of ENGINE GRAD joint woredas. The participants were came from different government sectors; agriculture, health, education, woreda extension and GRAD. As a result, the performances were reviewed, discussed and plan of actions were produced for better performance / achievement to be followed and evaluated in and will serve as a starting point for next year planning agenda. ENGINE assisted the woreda technically and financially.

Conducting baseline assessment

ENGINE and GRAD jointly conducted a baseline survey, embedded within the GRAD's annual IR Assessment. ENGINE provided inputs to the data collection tools and plan, which was developed and led by GRAD. The assessment included both livelihoods and nutrition indicators. The project teams jointly provided supportive supervision of data collection. Preliminary results have been prepared and ENGINE provided feedback on nutrition findings. The final report is now finalized.

Challenges

- No major challenges were experienced. However, some grey areas on understanding the partnership plan implementation modalities were observed among regional IPs in quarters I and II.
- Delay in GRAD budget for the partnership activities was the other challenge.

Measures taken

- ENGINE and GRAD collaboration has evolved and is now much stronger. In January 2015, an MOU was drafted and shared among implementing partners to serve as an additional clarification document and helped to strengthen the partnership.
- Partnership activities that required minimal budget were implemented through existing GRAD budget.
- GRAD budget increment for nutrition was released in QII. Consequently, ENGINE and GRAD joint plan revision workshop was held in May 2015. Representatives from regional implementers participated in the workshop. Finally, a new joint plan for the period June-September 2015 was developed.

- Successive ad hoc meetings among management and technical staff of GRAD and ENGINE are held as necessary to address emerging issues.

Annex 2: Report on partnership with GOAL in non-AGP woredas

Start up and Management

In Year IV, ENGINE scaled up to three woredas in E Oromia (Quarter I) and three woredas in SNNP (Quarter II) reaching all 10 joint PSNP woredas in partnership with GOAL. ENGINE recruited zonal coordinators to support implementation in the 10 woredas and established collaborative working approach with GOAL, including placement of ENGINE staff in GOAL offices in East and West Hararghe. ENGINE and GOAL signed an MOU to guide implementation of the partnership activities and prepared a joint work plan. ENGINE held periodic management meetings with GOAL to review status of the partnership and address any issues.

Capacity for and institutionalization of nutrition programs and policies

Support the nutrition multi-sectoral coordination mechanism

To improve multi-sector nutrition coordination, ENGINE supported establishment of *woreda* NCB and NTC in nine implementation woredas. The heads of the nine NNP implementing sectors in each region signed a TOR for the coordination bodies. Nine NCB meetings were held in Year IV to review the strategic objectives of the NNP and the role of each sector in addressing nutrition.

Build capacity of health system to implement direct nutrition interventions and Social and Behavior Change Communication on nutrition and WASH

In Year IV, ENGINE extended its nutrition specific support to all 10 GOAL partnership non-AGP *woredas*. Trained HWs and HEWs started counseling mothers on key preventive nutrition messages and conducted cooking demonstration to promote dietary diversity.

In partnership with GOAL, ENGINE reached trained 491 health workers, DAs and program managers in health and nutrition. The training includes health and agriculture program managers, integrating, MIYCN integrated with CMAM and NSA.

Table 1. Number of people trained in child health and nutrition by region

Regions	Annual plan	Annual achievement	Male	Female	%
E. Oromia	273	281	135	59	103
SNNPR	115	210	109	101	182
Total	388	491	244	160	126

Provide training for health and agriculture program managers (*woreda* heads)

In Year IV, ENGINE technically and financially supported nutrition program planning and supervision training for 35 (92% of plan) health and agriculture program managers in SNNPR, and Oromia to build their capacity to integrate nutrition into their respective *woreda* plans and coordinate nutrition programs. Participants developed action plans in line with ongoing nutrition program implementation in the region.

Provide integrated MIYCN into community management of acute malnutrition training

MIYCN training was provided to 323 HWs and HEWs, achieving 147% of annual plan. A total of 161 (41 female) participants attended the trainings. The target was overachieved as ENGINE utilized *woreda* health sector review meeting as an opportunity to train HEWs. Participants prepared an action plan to guide them in implementing preventive nutrition services, including orienting remaining HC staffs and HEWs on the content of MIYCN, conducting counseling for caregivers on MIYCN and orientating HDAs along with HEWs. Participating primary health care units were

provided with the necessary registration and reporting materials and practical demonstrations on how to use them.

In response to the ongoing drought and nutrition emergency in East and West Hararghe, ENGINE provided CMAM training for 64 health workers from seven hospitals and 45 health centers in East and West Hararghe in Quarter IV. The training was coordinated with zonal and woreda health offices and GOAL to avoid duplication of efforts.

Provide training to development agents, agricultural extension workers and GOAL woreda staff on nutrition-sensitive agriculture (NSA)

Training for DAs in NSA was conducted in all partnership woredas. The training developed the capacity of AEWs on NSA and the basic concepts of nutrition. A total of 133 DAs were trained (95 from Oromia 38 from SNNPR), achieving 102 percent of annual plan.

Provide TA (Mentorship) to HEWs for the implementation of direct nutrition services at facility and community levels

Though not included in the ENGINE work plan in GOAL partnership woredas, ENGINE provided monitoring and mentorship at health facilities following provision of MIYCN training. ENGINE visited 36 health facilities (23 HCs and 13 HPs) to provide mentoring in MIYCN counseling and to assess availability of MIYCN registration books and reporting formats at facilities. In East and West Hararghe, 52 HCs reported nutrition services, including nutrition counselling for 16401 pregnant mothers on recommended MIYCN practices. Similarly, a total of 2350 lactating mothers received recommended maternal, infant, young child nutritional counselling service during PNC service by trained Health Workers. Additionally, 14,285 pregnant mothers were provided with iron folate, and 4190 children with diarrhea attended were provided with zinc and ORS at under-five clinics.

Conduct nutrition cooking demonstrations at community levels biannually at health posts including promotion of use of iodized salts and WASH.

During the reporting year, ENGINE supported community level food-cooking demonstrations in GOAL partnership woredas, reaching 12,036 (8763 female) participants with 236 cooking demonstration, which is 94 percent of plan.

Distribute SBCC materials adapted to food insecure woreda SBCC materials

In Quarter III, ENGINE assessed the availability of nutrition counselling materials in health facilities to support preventive nutrition counselling. In Quarter IV, materials were distributed to 31HCs and 107HPs based on their need.

Implement community based Nutrition-Sensitive Livelihoods

Train development agents in water management, homestead and perma-gardening

In Year IV, ENGINE and GOAL provided training to 124 DAs (38 in SNNP and 86 in Oromia) on homestead vegetable production, including perma-gardening and water management. Trained DAs then developed an action plan to provide on-site support for HHs in their catchment area.

Target households of community management of acute malnutrition beneficiaries

ENGINE and GOAL selected 1250 (female headed 734) households in Oromia and SNNP regions for project support on livelihood interventions. Selection of the households is based on clinical records of children, targeting those who had suffered from relapse of acute malnutrition. In collaboration with kebele leaders and community elders ENGINE identified those who qualify both in terms of need and relapse of acute malnutrition. Children from well-off families suffering from relapse are referred for additional counseling on IYCF.

Provide vegetable seeds, fruit seedlings and hand tools to households

A total of 1250 (100% of plan) beneficiary HHs were provided with farm tools and vegetable seeds to support homestead gardening. The HHs received technical support from trained DAs. Post distribution follow up visits by DAs and zonal livelihood coordinators indicate that farmers in West and East Hararghe zones planted vegetable at their homesteads, but many of the crops failed due to the drought affecting the target woredas. In SNNP, many HHs have not yet planted seeds due to the lack of rains.

Provide on-site technical advice to households by woreda agriculture experts and ENGINE livelihood staff/development agents

In the partnership woredas, DAs provided on-site TA to 794 (91 percent) beneficiary HHs on homestead production; iodized salt utilization; dietary diversity for pregnant and lactating women and children under two; recommended agronomic practices; and sharing household chores among family members to support mothers.

Support agronomic demonstration at selected model HH

Agronomic demonstration were conducted at selected households and farmer training centers in order to provide practical awareness to beneficiaries on perma-garden preparation and agronomic practice of some nutrition dense vegetables production. A total 653 people attended 47 demonstration sessions (28 in West Hararghe and 19 events in East Hararghe) were carried out in presence of 653 (F=292) attendees (420 in W/H and 233 in E/H). Similarly, 15 agronomic practice demonstration sessions were organized at four FTCs in four woredas of West Hararghe where a total of 197 (F=127) farmers had attended the event. Demonstrations in SNNP did not start in Year IV due to delayed start of the project there.

Organize groups for saving

Saving groups help the participants to initiate the habit of saving, build the social capital of the groups and provide an entry point to join a local savings cooperative in order to derive more benefits. ENGINE and GOAL supported the establishment of 42 saving groups (48 percent of plan), consisting of 10-25 members, in East and West Hararghe target woredas. ENGINE and GOAL are working with woreda sector offices to link the groups to local microfinance institutions to derive maximum benefit. Groups will be formed in SNNP in Year V.

Goat or chicken provision for community-based management of acute malnutrition beneficiaries

ENGINE provided goats for 1248 (99.8 percent of target) CMAM beneficiaries in all targeted woredas with the involvement of a committee comprised from ENGINE and GOAL staff, woreda staff and representatives of the kebele development committee. Accordingly, 4621 goats were purchased and distributed to the seven targeted woredas based on prior selection and training of beneficiaries.

Train households on homestead vegetable production including Perma-gardens, Keyhole gardening poultry and goat rearing

ENGINE-GOAL supported integrated training of 802 (female364) CMAM beneficiaries in order to raise their awareness on livestock management and homestead production. The achievement was 64 percent (802/1250). In East Hararghe, Meta woreda AEWs provided additional on-site technical assistance for 71 CMAM beneficiaries on identified key gaps after training. These included iodized salt utilization, practicing diversified feeding and supporting pregnant and lactating women with HH activities.

IR 4 Rigorous and innovative learning agenda adopted

Conduct biannual review meetings at woreda level with health and agriculture offices

In the reporting period, ENGINE provided technical and financial support for integrated health and agriculture *woreda* level review meetings in seven *woredas* of East and West Hararghe. During the review meeting, key areas of nutrition multi-sectoral agendas, nutrition sensitive and specific interventions were raised and reviewed.

ENGINE also supported II health sector review meetings, where performances of key maternal and child healthcare programs, including maternal and child nutrition activities were reviewed. The review meeting facilitated discussion on the gaps and strength of quality of nutrition services performed at all levels. HWs, *woreda* health office experts, HEWs and other supporting staffs attended the meetings.

Conducting baseline assessment

In the reporting period, ENGINE and GOAL conducted a joint baseline survey in partnership *woredas*. Data collectors were trained, tools were piloted and updated and the survey was conducted in Meta and Odabultu *woredas* in Oromia. The survey was based on GOAL's standard survey with additional indicators provided by ENGINE to assess the impact of the partnership. The training ensured that data collectors were familiar with and able to accurately collect data on ENGINE indicators. Data collection is also planned in SNNPR, but was not conducted in the reporting period as approval from regional government is still pending. The draft report is prepared and it will be finalized and shared to partners in first quarter of Year V.

Annexes

Annex 3: work plan, PMP and FtF Matrices



**Annex 3
Matrices.zip**

Note: Work plan and PMP for Somali Region are presented separately.

Annex 4: Reports of NNCB Exchange Visits to Brazil and Uganda



**Annex 4 Exchange
visit reports.zip**

Annex 5: Trip Reports



**Annex 5 Trip
Reports.zip**

Annex 6: Success Stories



**Annex 6 Success
Stories.zip**