

Trip Report- Developing a Behavior Change Strategy in Sierra Leone

Sierra Leone SNAP (Sustainable Nutrition and Agricultural Promotion) MYAP

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- 1- Training Participants
- 2- DBC Training Curriculum, Adapted English version
- 3- Training Objectives and Schedule
- 4a &b- Christian and Muslim Sermon Guides for Mothers and Newborns (pdf)
- 5- DBC Frameworks (EBF and ANC frameworks are updated based on BA results)
- 6- Updated questionnaires
- 7 Barrier Analysis Data Sheets (Note: most powerful determinants are highlighted)

Acronym List

ABO	Achievement-based Objective
ANC	Ante-Natal Care
BA	Barrier Analysis
BC	Behavior Change
BCC	Behavior Change Communication
CWIQ	Core Welfare Indicator Questionnaire
DBC	Designing for Behavior Change
DHS	Demographic and Health Survey
EBF	Exclusive Breastfeeding
FGD	Focus Group Discussion
GOSL	Government of Sierra Leone
GM	Growth Monitoring
HWWS	Handwashing with Soap
IEC	Information, Education, and Communication
IMC	International Medical Corps
ITN	Insecticide Treated Nets
IYCF	Infant and Young Child Feeding
LNRA	Learning Needs and Resource Assessment
MOH	Ministry of Health
OIC	Opportunities Industrialization Centers
PD/HEARTH	Positive Deviance/Hearth
ACDI/VOCA	Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance
SNAP	Sustainable Nutrition and Agriculture Promotion
MYAP	Multi-Year Assistance Program

SAMPLE WORKSHOP AGENDA

Designing for Behavior Change Workshop 13-17 September 2010

Workshop Objectives

By the end of the training, participants will have:

- 1) **Analyzed** the different components of the Designing for Behavior Change framework and practiced completing each of these components based on real or sample data;
- 2) **Utilized** the results from formative research to identify barriers and motivators (key determinants) effecting behavior change in a specific priority or influencing group;
- 3) **Applied** the DBC framework to their own projects or to a case study to develop strategies informed by formative research results; and

- 4) **Modified** the components (the behavior statement; description of the priority group; and selection of determinants, key factors, and activities) of their DBC frameworks according to the feedback from peers and facilitators, in order to improve the quality and increase the potential success of their behavior change strategies.

Agenda

Day 1 - Monday

Session	Session Title	Duration	Timeframe
1	Opening Session	2 hr	8:30 - 10:30
	BREAK	15 min	
2	Introduction to Behavior Change: Our Roles & the Process of Planned Change	1 h 55	10:45 – 12:40
3	Overview of the Designing for Behavior Change Framework	1 h	12:40 – 1:40
	LUNCH - BON APPETIT !	1 h	1:40 – 2:40
4	Defining & Selecting the Behavior (includes break)	1 h 30	2:40 – 4:25
5a	The Priority and Influencing Groups (2 hr 20 min total)	50 min	4:25 – 5:15
E	Evaluation of the Day	15 min	5:15 – 5:30

Day 2 - Tuesday

6	Energizer: Sing it!	40 min	8:30 – 9:10
5	The Priority and Influencing Groups (cont.)	1 hr 30 min	9:10 – 10:40
	BREAK	15 min	10:40 – 10:55
7	Our DBC Frameworks Part 1: Describing the Behavior and Priority Group	1 hr	10:55 – 11:55
8	Identifying Determinants & Key Factors that Influence Behavior (2 hr 25 min total)	1 hr 25 min	11:55 – 1:20
	LUNCH	1 hr	1:20 – 2:20
8	Identifying Determinants & Key Factors that Influence Behavior	1 hr	2:20 – 3:20
	BREAK	15 min	3:20 – 3:35
9	The “Exercise” Exercise	1 hr	3:35 - 4:35
E	Evaluation of the Day	15 min	4:35 - 4:50

Day 3 - Wednesday

10	Energizer: Review of Concepts	30 min	8:30 – 9:00
11	The Barrier Analysis	1 hr	9:00 – 10:00
11	The Barrier Analysis (includes 15 min. break time)	1 hr 45	10:00 – 11:45
12	Preparation and Practicum - Conducting a Barrier Analysis	1hr 45	11:45 - 1:30
	LUNCH	1 hr	1:30 – 2:30
12	Preparation and Practicum - Conducting a Barrier Analysis (cont.)	1 hr 15	2:30 – 3:45
E	Evaluation of the Day	15 min	3:45 – 4:00

Day 4 - Thursday

Field Work	Conducting a Barrier Analysis (Includes 1 hr for travel time)	5 hr	8:00 - 1:00
	LUNCH	1 hr	1:00 – 2:00
13	Compiling & Analyzing Data	1 hr 30	2:00 – 3:30
	BREAK	15 min	3:30 – 3:45
14	Our DBC Frameworks Part 2: Identifying the Most Powerful Key Factors that Influence Behavior Change	1 hr 15 min	3:45 - 5:00
E	Evaluation of the Day	15 min	5:00 - 5:15

Day 5 - Friday

15	Energizer: Musical Chairs	30 min	8:30 – 9:00
16	Feedback Groups - I	1 hr 15	9:00 – 10:15
	BREAK	15 min	10:15 – 10:30
17	Selecting Project Activities	1 hr	10:30 - 11:30
18	Our DBC Frameworks Part 3: Planning Activities	1 hr	11:30 – 12:30
19	Poster Session/Gallery Walk (Final Suggestions) (1 hr. 35 min.)	1hr	12:30 - 1:30
	LUNCH	1 hr 30	1:30 – 3:00
19	Poster Session/Gallery Walk (Cont.)	35 min	3:00 - 3:35
20	Wheel of Solutions	25 min	3:05 - 3:30
21	Closing Session – Workshop Evaluation and Next Steps, Comfort Chart, Participant Recognition	1 hr 30 min	3:30 - 5:00

Trip Report- Developing a Behavior Change Strategy and Implementation Plan

Dates of Trip:	21 October – 7 November 2010
Training Dates	25 -29 October 2010
Consultant/Lead Training Facilitator:	Linda Morales
Co- Facilitators for Training/Field Work:	Claire Orengo, Joseph Juana

Background/Introduction

The ravages of a decade of civil war have left Sierra Leone a country with staggering food insecurity. Currently, seventy percent of Sierra Leone’s population lives in poverty, with 26 percent living in extreme poverty. Infrastructure has been destroyed, and human capacity is diminished due to a lack of educational opportunities and an outflow of technical talent. In 2009, the International Food Policy Research Institute ranked Sierra Leone among the five countries with the highest Global Hunger Index score² and among the six countries most severely affected by and vulnerable to the global economic downturn. The Human Development Index, which looks beyond GDP to a broader definition of wellbeing ranks Sierra Leone as the 180th least developed country (out of 182). Notably, over one third of children under the age of five suffer from chronic malnutrition; most of the rural population suffers from a four-month-long lean season; and one in eight Sierra Leonean women will die from pregnancy-related causes.

A consortium consisting of ACDI/VOCA, International Medical Corps (IMC) and Opportunities Industrialization Centers (OIC) have recently initiated a comprehensive and integrated approach to reduce food insecurity and chronic malnutrition in Sierra Leone. The Sustainable Nutrition and Agricultural Promotion (SNAP) Multi-Year Assistance Program (MYAP) proposes to reduce food insecurity and increase resiliency of vulnerable rural populations in 18 of the most malnourished and impoverished chiefdoms in four districts: Bombali (3), Kailahun (5), Koinadugu (7 chiefdoms) and Tonkolili (3). The program is designed around two major objectives: to reduce chronic malnutrition among children under five and to enhance livelihood opportunities. SNAP has also been designed with five major crosscutting themes that run through all program activities. These are: resiliency to shocks, productive youth, gender equity, environmental stewardship, and good governance. The total number of SNAP direct beneficiaries is 405,049.

Improper Feeding Practices: Improper feeding practices contribute to the perilous state of health among young children. Only 11 percent of mothers exclusively breastfeed their babies for the first six months, and only one third of mothers initiate breastfeeding within two hours of delivery. The first foods given to a child are cereals, fats and oils, while many particularly nutritious complementary foods, such as eggs, fish and meat, are believed to be taboo.

Low Dietary Diversity: The predominance of starchy staples like rice and cassava, and the lack of animal proteins, vegetables and pulses lead to micronutrient deficiencies, with dangerous impacts on the health of pregnant women and their children. Thirteen percent of rural women are moderately or severely malnourished. Roughly 46 percent of women demonstrate some level of anemia, with 76 percent of children under the age of five showing the same condition.

Access and Use of Health Services: While medical services are technically free under the government's primary health care plan, a lack of supplies and unreliable payment of salaries for health unit staff have resulted in high unofficial charges for treatment. The Government of Sierra Leone (GOSL) Core Welfare Indicator Questionnaire (CWIQ) 2007 survey found that, of those needing medical treatment, the single greatest deterrent to seeking care was the cost.¹⁶ Roughly half of all pregnant women in rural areas do not attend the recommended three antenatal visits, and few parents take sick children for treatment. According to the 2008 Demographic and Health Survey (DHS), only 46 percent of children with symptoms of acute respiratory infection and 44 percent of children with fevers were taken to see medical providers. Only 47 percent of children with diarrhea were taken to see a medical provider.

Poor Hygiene and Sanitation: Poor household hygiene and sanitation practices lead to diseases among vulnerable children. Only 38.7 percent of households have a water supply that is considered "safe," i.e., piped into a dwelling, borehole, tube or mechanical well and protected well/spring. Forty seven percent of rural households in Sierra Leone do not have a toilet and instead resort to open defecation. (**Note:** the above six paragraphs were adapted from the Executive Summary of the *Sierra Leone USAID Title II MYAP SNAP Program proposal*, submitted by ACDI/VOCA on January 15, 2010.)

In order to ensure that behavior change activities would be developed according to an evidenced-based, systematic methodology, the program engaged the assistance of a Behavior Change Consultant to guide the team in this area. From 25-29 October, 2010, the consultant, in close collaboration with two co-facilitators, Claire Orenge and Joseph Juana, conducted a training

workshop on the “Designing for Behavior Change (DBC) methodology for 12 participants, including: the District Technical Advisors-Health and Nutrition in Koinadugu and Kailahun, the District Technical Advisors-Nutrition in Bombali and Tonkolili, the District Supervisors- Health and Nutrition – Bombali, Tonkolili and Kailahun, the WASH Supervisor, the Medical Director for IMC/SNAP, Gender Officer, M & E Officer, two Agronomists, the Program Coordinator, and the team leader/IMC/SNAP Country Director- these last two individuals attended several sessions of the workshop, but due to other priorities were not able to participate in its entirety (see Annex 1 – Training Participants).

The methodology was based on the BEHAVE framework, developed originally by AED in the late 1990’s, and adapted by the Social and Behavior Change Working Group of The CORE Group (a collaborative of organizations working to improve maternal and child health, many of whom receive USAID funding for child survival programming) from 2005-2008. The DBC methodology consists of developing a framework for planning for behavior change which is based on formative research and includes five key steps: 1) definition of the key behavior to promote, 2) detailed description of the priority group and identification of the most influencing group, 3) research in the form of a Barrier Analysis or Doer/Non-Doer Survey to determine the most powerful determinants of change (barriers and motivators), 4) the writing of key factors, and 5) the selection of activities according to specific criteria and which will address the key factors (see Annex 2-DBC Training Curriculum, Adapted English version).

Training Objectives and Participant Expectations

The overall objectives were that by the end of the training, the participants will have:

- Analyzed the different components of the Designing for Behavior Change framework and practiced completing each of these components based on real or sample data;
- Utilized the results from formative research to identify barriers and motivators (key determinants) effecting behavior change in a specific priority or influencing group;
- Applied the DBC framework to their own projects or to a case study to develop strategies informed by formative research results; and
- Modified the components (the behavior statement, description of the priority group, selection of determinants, key factors, and activities) of their DBC frameworks according to the feedback from peers and facilitators, in order to improve the quality and increase the potential success of their behavior change strategies.

In addition, each of the 19 sessions had specific Achievement Based Objectives (ABOs) (for overall objectives, please see Annex 3- Training Objectives and Schedule; for session ABOs, please see Annex 2 training curriculum).

Prior to initiating the workshop, the consultant requested that a short survey be completed by each of the prospective participants. This Learning Needs and Resource Assessment (LNRA) was designed to provide insight on their level of experience with the topic, as well as to determine their expectations for the workshop. Approximately 3 weeks prior to the start of the workshop, the consultant sent this survey to the IMC/SNAP office unfortunately, only a few of the participants managed to complete the survey. The LNRAs indicated a very minimal familiarity with planning for behavior change methodologies. The LNRAs also indicated that

many of the team members had varying ideas about what key behaviors the project was promoting.

Since during the training, a couple of the participants mentioned that they were expecting to learn IEC, or BCC or Behavior Change Communication, the facilitator clarified that the training would focus on Behavior Change strategy (which goes beyond communication and IEC interventions to discern what barriers prevent people and what key motivators encourage them to change their behavior). During the training, the facilitator provided many examples of behavior change activities that have nothing to do with materials development, IEC, or BCC (for example, advocating for changes in policy, i.e. EBF friendly policies in the workplace; or addressing access by establishing community-based distribution outlets for ITNs; or setting up HWWS stations by the latrine, including tippy taps and soap tied with stockings; or using positive deviants for FP promotion, etc).

Working Groups

For the majority of the training, the large group was divided into smaller working groups comprised of a mix of participants with different capacity levels. To reinforce and practice the major concepts of developing a BC strategy, each group developed a framework based on the five components: behavior statement, description of the priority group, most influential determinants, key factors, and activities. The following is a list of each group and its members:

Group 1-Pre-natal Visits/Care: Simeon Tucker, Peter Ndoinjie.

Group 2- Continued Breastfeeding along with complementary feeding for 6-24 month olds:
Daniel Williams, Henry Tucker

Group 3- Gender Based Violence: Beatrice, Dr. Zenebe

Group 4- Handwashing with Soap (HWWS): Sahr Sinnah, Dominic Sesay

Group 5- Agriculture- Appropriate weeding techniques: Anthony Amara, Alpha Mansaray

Group 6- Exclusive Breastfeeding: Peter Karimu, Moses Bull

Key Training Challenges & Next Steps

Each evening, after the day's sessions, the lead facilitator and co-facilitator modified sessions for the following day and incorporated feedback from the daily evaluations. In addition, the lead and co-facilitator strategized as to how they could provide better attention to those participants that might require additional assistance. From the very start, on Day 1 and continuously throughout the workshop, all of the participants actively participated in the exercises.

A couple of areas in which the participants could have used more time and practice are: 1) using 5 ways to describe the priority group, especially the "common practices and identification of the step of planned change"; 2) developing key factors; 3) pretesting and role-playing using the questionnaire; and 4) using the list of criteria for developing effective activities which respond to the key factors. To the facilitator's pleasant surprise, the writing of several of the key factors during the group work was quite well-done (this tends to be one of the more difficult parts of the strategy development). However, for a couple of groups, the exercise proved more difficult and

while the group feedback session enabled them to improve their capacity to critique the formulation of their key factors, still more work could be done to improve staff capacity in this area. Writing of the key factors is crucial in the DBC framework design because if they are not done correctly, then activities selected will not necessarily address the most powerful determinants as shown through the research. Also, more time should be spent in the future on helping staff to think "outside of the box" when selecting their activities for addressing the key factors.

Participants brainstormed "next steps" which would need to be completed in order to apply their new skills and implement their DBC strategies. These were:

- Prioritize the behaviors
- Describe the priority group in 5 ways
- Conduct the BA and identify the most powerful determinants (confirm the determinants that participants had identified during the workshop setting)
- Make sure that activities planned reflect the key factors
- Replicate parts of the training for other colleagues/program teams
- Incorporate the results of the DBC strategy into program planning

Participant Evaluations

In general, participant final evaluations were extremely positive, with several participants mentioning that they had learned several behavior change tools that they would be able to apply in their work. In response to "what I liked most about the workshop", the comments were:

- *Group work*
- *The way the topics were treated throughout the workshop and the manner in which the DBC framework was designed tactically through all of the steps*
- *Full participation from all participant from start to finish; facilitators respected views of all; facilitators appreciated all contributions (meaningful or not) by thanking them*
- *Facilitation methods used*
- *Developing/designing the BC framework*
- *Good interaction between the facilitators and participants (3)*
- *Level of participation was great!*
- *Community focused*
- *Getting to know Doers & Non-Doers; priority and influencing groups*
- *Some details in BC*
- *The criteria in the selection of appropriate activities*

Additional comments on the evaluation were:

- *Time spent for field activities or pretesting was not enough*
- *This type of workshop should be residential so that it can be more effective and for more quality attention*
- *This workshop is a learning process where I will be able to identify particular behaviors practiced by priority groups and find ways and means in contacting influencing groups to help priority groups to do the behavior positively (e.g. EBF)*
- *The lead facilitator and co-facilitators are expert in conducting DBC framework*
- *Thanks for facilitating as this has increased my skills in the field*
- *It's a good learning stage and hope continue following the steps to do a BA*

The comfort chart was used to measure improvements in the level of comfort of the participants in certain topics included in the training, such as developing a well written, clearly defined behavior statement, or defining the priority group, or conducting formative research to determine the most powerful determinants, etc. The participants found this to be a revealing way to see their own progress during the training. When the comfort chart was completed at the beginning of the training, many participants had placed their dots in the column with the number 1 (indicating that they felt very uncomfortable with the topic); the majority of participants had put their check in the second or third column (indicating they were somewhat uncomfortable or comfortable enough with the topic); and only a few participants had placed checks in the fourth column (indicating they were very comfortable with the topic). When the same comfort table was completed at the end of the training, the majority of the marks were in columns 4 and 5 (very comfortable or extremely comfortable) and a few were in column 3 (comfortable enough with the topic). According to their responses, conducting the barrier analysis and writing of key factors were the two skill areas in which some participants felt they would need more practice.

Results of the Barrier Analysis

During the week following the workshop, Ms. Morales, Ms. Orengo, and Mr. Juana facilitated the team in collecting data and compiling results from a barrier analysis conducted in two project districts: Koinadugu and Kailahun. During two full days, three different teams of two persons each attempted to locate and interview mothers in each district regarding their behaviors, key barriers and motivators, with respect to five different behaviors: Prenatal visits, Handwashing with Soap, Exclusive Breastfeeding, Complementary Feeding, and Health-Seeking behavior. Unfortunately, due to 3 flat tires, the time it took to repair or replace them, the difficult terrain (which made movement to the project areas quite slow, and the difficulty in finding non-doers for one of the behaviors, the team in Koinadugu was only able to complete the data collection for HWWS and EBF. However, during a return visit the following week, the team completed the data collection for Koinadugu for the remaining behaviors. For each of these behaviors, the teams selected only mothers with at least one child less than five years. Please see chart below for details on individuals interviewed:

Behavior	Criteria for Interviewee	Kailahun		Koinadugu	
		# of Doers Interviewed	# of Non-Doers Interviewed	# of Doers Interviewed	# of Non-Doers Interviewed
HWWS	Mother with U5s	37	32	25	26
EBF	Mother with U5s	25	31	24	24
Pre-natal Visits	Mother with U5s	36	29	29	28
Complimentary Feeding	Mother with U5s	29	27	35	27
Health Seeking Behavior	Mother with U5s	32	31	25	25
Total Interviewed		159	150	138	130

A Note on Analysis

The barrier analysis enables one to identify the most powerful determinants of behavior by asking certain questions which represent determinant categories (such as "What makes it difficult/easy to do the behavior?" [Determinant category: Perceived Self-Efficacy] and "Who approves/disapproves of you doing the behavior?" [Determinant: Perceived Social Norms] and "What are the benefits /inconveniences of doing the behavior?" [Determinant: Perceived Positive/negative consequences], etc.) and comparing the responses provided by Doers (people that actually "do" the behavior regularly) to the response of "Non-doers" (people that do not do the behavior). To identify those determinants that are the most powerful, the team looks at the percentage gaps between "Doers" and "Non-Doers" regarding their responses to the same questions. Those that are the most significant are generally those that show at least 15-20 percentage points between the percentages of doers and non-doers who responded in a certain way. These results should also be confirmed by checking the p-values (which should be $<.05$ and identifying the responses with higher Odds Ratios- if below 0, one must divide 1 by the OR to compare apples to apples).

Key Results

In order to analyze the results thus, the team first compiled all of the most common responses to each question for Doers and Non-Doers; responses were then tallied for each question, and percentages of Doers and Non-Doers having the same response were calculated and compared in order to identify the greatest gaps between Doer/Non-Doer percentages. Unfortunately, sample sizes for each behavior were smaller than hoped for (below the recommended 45 Doers and 45 Non-Doers), primarily because of the time needed to travel to the project areas and to locate appropriate respondents (see chart above for sample sizes for each behavior). The smaller sample sizes may have prevented the team from seeing truly statistically significant differences in the responses for some behaviors.

A. Handwashing with soap

Analysis of the results showed that the determinants which appear to be the most powerful were:

1. Kailahun

- **Perceived Self Efficacy** – In response to the question, what makes it difficult to HWWS during the 4 critical moments: 47% point gap for the response "**soap not available/support from husband for buying soap**" and a 48% point gap for the response "**no water**" (both with extremely low p-values of .0000025 and .0000096 respectively and ORs of 0 and .05, respectively)- indicating a high association between this determinant and the behavior. For the latter, Doers were 20 times more likely to say "no water" than Non-Doers.

->**Program Implications:**

1) Promote the use of "tippy taps" made from 5 liter jerry cans (which can help conserve precious water resources) by providing the raw materials, and training individuals in how to make them for their own households. Conduct demonstrations in the use of the "tippy taps" and provide individuals with the skills necessary to set-up handwashing with soap stations next to existing latrines. If we tie the construction of latrines to the establishment of handwashing stations, we will further address the issue of providing easier access to "DO" the behavior during at least one of the critical moments (**Note:**

during a Field Work Lessons Learned discussion, the team mentioned that they were surprised at the lack of handwashing facilities available in the communities).

2) Community Teachers Association (CTA)/school management committee to introduce in non-UNICEF supported schools with metal lock-box for keeping soap secure at night.

3) Work with local soap producers to supply low-cost soap (via micro-credit schemes).

4) Other potential ideas: mothers donate long bar of soap to schools for use at handwashing stations.

5) School feeding programs: the project can potentially collaborate with Catholic Relief Services & the World Food Program to jointly add HWWS to their existing program.

- **Perceived Divine Will**-- There was a high association between this determinant and the behavior as evidenced by the very low p-value of .0000025 and the 47% gap for the response "yes" to the question "**do you think that it's God's will that your child gets diarrhea?**" (OR cannot be calculated)

-> **Program Implications:** For a primarily Christian area, the project should consider partnering with local pastors to introduce sermon outlines on MCH to religious leaders (see Annexes 4a and 4b- Christian and Muslim Sermon Guides for Mothers and Newborns). Isaiah 65:20 is helpful -- it shows that it's God's will that NO children die *after only a few days*; this can be used to explain that parents are responsible for ensuring that their infants don't get diarrhea (which could become severe and cause death); one way to do this is to "wash your hands with soap during each of the 4 critical moments." The project may also want to work with Imams in an area with more Muslim followers to identify similar verses in the Qu'ran.

- **Perceived Social Norms**- Non-Doers were 8 times more likely than Doers to respond "No one" to the question, "**Who would disapprove/discourage you from hand washing with soap during the 4 critical moments?**" (p-value=.0003 and 42% gap).

-> **Program Implications:** The project can emphasize that everyone approves (& no one is likely to disapprove) of mothers washing their hands during each of the 4 critical moments. See discussion below for additional recommendations.

- **Cues for Action**- There was a high association between this determinant and the behavior as evidenced by the very low p-value of .0000025 and the 47% gap for the response "yes" to the question "**Is there anything that can help you remember to HWWS during the 4 critical moments?**" (OR =0)

-> **Program Implications:** Via focus group discussions or individual interviews, program staff need to find out what helps those mothers remember and promote this with the other mothers.

- **Perceived positive consequences**- Doers were 5 times more likely than Non-Doers to say that the advantage to HWWS is that it **prevents sickness, diarrhea or contributes to good health** (p-value =.04 and a 16% point gap).

- **Perceived Severity**- There was a high association between this determinant and the behavior as evidenced by the low p-value of .005 and the 19% gap for the response "yes" to the question "**Do you think your child could die from diarrhea if you don't HWWS during the 4 critical moments?**" (OR =0)

- **Perceived Risk**- There was a high association between this determinant and the behavior as evidenced by the very low p-value of .01 the 16% gap for the response "yes" to the question "**Do you think anything bad can happen to your child if you don't HWWS during the 4 critical moments?**" (OR =0)
- **Perceived Action Efficacy**- There is also a significant association between this determinant and the behavior since in response to the question, "**does HWWS prevent diarrhea, sickness, and other diseases?**" the "yes" response showed a p-value of .026 and an OR of 0.0 (however the gap was slightly smaller than the others at 13% points).

->**Program Implications:** To address these last six important determinant areas for HWWS, (**Perceived positive consequences**- i.e. Doers were 5x more likely than Non-Doers to mention as an advantage that HWWS prevents sickness, diarrhea & contributes to good health; **Perceived Severity & Perceived risk**- i.e. a larger percentage of Doers than Non-Doers believe that their child could be at risk and potentially even die, if they don't wash their hands with soap during the 4 critical moments and **Perceived Social Norms**- a greater percentage of Non-Doers feel that "no one" would disapprove of their handwashing with soap during the 4 critical moments), we can suggest that organizing the performances of a local theater troupe to include interactive productions on these issues followed by question and answer discussion periods would help the community of Non-Doers to overcome these barriers, or to change their perceptions that their child could be at risk and to emphasize the "enabler" that everyone would approve of their doing the behavior. Finally, to help mothers who are currently Non-Doers to understand that "handwashing with soap" is effective in preventing diarrheal and other diseases (**Perceived Action Efficacy**), and to help mothers develop a reminder tool (**Cues for Action**) to help remember the 4 important times to HWWS, we can plan an activity in which mothers who are "Doers" or Positive Deviants and have seen the positive results that handwashing with soap has on reducing disease episodes within their own family share these experiences as well as their reminder tools, with other moms and their own peers during Growth monitoring sessions or community vaccination/health days.

2. Koinadugu

- **Perceived Self Efficacy** – In response to the question, what makes it easier to HWWS during the 4 critical moments: Doers were 5 times more likely to say "**if soap and water were available**" than Non-Doers (p-value=.01 and a 33% point gap). For the same determinant, but with respect to what makes it difficult, there was a high association between the response "**workload**" and the behavior (p-value=.02 and a 19% gap).
->For **program implications**, see above recommendations for **Perceived Self-Efficacy- Kailahun**; also the issue of "workload" being too intense to allow time for HWWS during the 4 critical moments can be a theme to include in a local drama production such as recommended above for Kailahun.
- **Cues for Action** -- Doers were 20 times more likely to say "**used to it**" than Non-Doers in response to: "**is there anything that can help you remember to HWWS during the 4 critical moments?**" (p-value=.0007 and 40% gap)

->**Program Implications:** The project team can help women think of ways to make it more of a routine and to remember to do it (like putting the soap where one can see it easily, setting up HWWS stations, etc.).

B. Complementary Feeding

Analysis of the results showed that the determinants which appear to be the most powerful were:

1. Kailahun

- **Perceived Divine Will:** Doers were about 6 times more likely to say that "**it's God's will that their child loses weight, gets sick, or dies.**"

-> **Program implication:** if this is considered a Christian area, to introduce sermon outlines on MCH (see Annex 4). Isaiah 65:20 is helpful -- it shows that it's God's will that NO children die. The project may also want to work with Muslim leaders to identify similar verses in the Qu'ran.

2. Koinadugu

- **Perceived Self Efficacy:** Doers were about 8 times more likely than non-Doers to say that "**having food available**" makes it easier to provide appropriate complementary feeding to their infant (p-value=.005 and 28% point gap). Also important was "**when the child cries**" (with a p-value of .008 and a 19% gap, OR cannot be calculated)- see below, **Cues for Action.**

->**Program Implication:** Interventions planned for Strategic Objectives (SO) 1 and 2 will help address the food security issue.

1) In SO1, food will be distributed to participating beneficiaries on a monthly basis (Corn Soy Blend and Oil) while SO2 will be promoting agriculture.

2) Among SO2's targets will be family members of the beneficiaries targeted in SO1.

3) Home gardens (planned under SO2) will also contribute to improving the availability of vitamin-rich fruits and vegetables.

4) In addition to food security, the project staff may also need to promote improved "food use" as many families may have access to such foods as groundnuts, sweet potatoes, plantains, cassava leaves, avocados, oranges, grapes, fish, bush meat, cassava, rice, green bananas, but may not be using some of these foods because they are cultivating them as a cash crop. In addition, many particularly nutritious complementary foods, such as eggs, fish and meat, are believed to be taboo. A modified PD/Hearth intervention might be quite useful in this sense especially to provide an opportunity for mothers to: a) learn about various food combinations (healthy and delicious recipes); b) know what a variety of nutritious foods consists of; c) understand the importance of hand washing before food preparation and prior to feeding the family; d) recognize the importance of continuing to breastfeed (if the baby is under 6 month) and continuing to give breastmilk, as well as other fluids and foods when the child is sick; and e) learn how to help encourage infants 6 months and older to become healthy and enthusiastic eaters.

- **Cues for Action:** Doers were about 6 times more likely than Non-Doers to say "**yes**" to the question "**is there anything that can help you remember to give a variety of foods at least 4x a day to your child?**" (p-value=.006 and a 28% point gap); again Doers mentioned "**when child cries**" as being a significant memory tool (p-value=.01 and OR

of 3.7 and a 29% point gap). This was also mentioned as an important issue above in Perceived Self Efficacy (with a p-value of .008 and a 19% gap, OR cannot be calculated).

-> **Program implication:** Via focus group discussions or individual interviews, program staff need to find out what helps those "Doer mothers" remember and promote this with the other mothers. While some mothers may believe that the child will protest (by crying) when s/he is hungry, the message that one should not wait until your child cries to ensure that s/he is well-fed (at least 4x a day with a variety of foods) needs to be promoted.

- **Perceived Social Norms:** Doers were about 5 times more likely than non-Doers to say "**husband**" as the person who would approve of their doing the behavior (p-value=.031 and 21% point gap).

-> **Program implication:** The project should develop a separate activity encouraging husbands to play a major role in supporting their wives in the proper feeding of complementary foods to children 6-24 months of age. This might be a Men's support group or a community event that village leaders hold especially for men with young children. Positive Deviant fathers could be asked to give testimonials at these events and to talk about how they support their partners in ensuring they have enough resources to provide the right foods during the 4 daily feeding times.

- **Perceived positive consequences:** There was a high association between "**prevents sickness**" as an advantage of performing the behavior (p-value=.01, OR couldn't be calculated, 20% point gap).

-> **Program implication:** A discussion which promotes the fact that "feeding your 6-24 month old with a variety of foods at least 4 times a day" can be incorporated into the above mentioned Men's Support Groups.

C. Ante-Natal Care Visits

1. Kailahun

- **Perceived Action Efficacy:** Again Doers were 16.7 times more likely than Non-Doers to respond "yes" to the question "**Do you think that making three antenatal visits to the nearest PHU can/could reduce the chances of you or your baby getting sick or dying during your pregnancy?**" (p-value= .0016 and 28% gap)
- **Perceived Risk/Susceptibility:** Doers were 16.7 times more likely to say that **they or their baby could get sick if they did NOT make 3 ANC visits during their pregnancy** (p-value of .0016 and a 28% gap).
- **Perceived Severity:** Doers were 4.3 times more likely than Non-Doers to say "yes" to the question, "**Do you think you or your child could die if you DON'T make 3 ANC visits during your pregnancy?**" (p-value=.012 and 27% gap)
- **Cues for Action:** Doers were 11 times more likely than Non-Doers to say "yes" to the question: **Is there anything that can help you remember to make 3 ANC visits during your pregnancy?** (p-value=.009 and 21% gap)
- **Perceived Self Efficacy:** Doers were about 6 times more likely than Non-Doers to say that "**the distance to the health unit**" makes it easier to go in for their 3 pre-natal visits during the pregnancy (42% gap); also **lack of husband's support** was a significant factor

in that Non-Doers were about 4 times more likely than Doers to cite this as something that makes doing the behavior difficult (p-value=.025, OR of 3.79 and 24% gap).

- **Perceived positive consequences:** Doers were 4 times more likely than Non-Doers to see "**getting medicines, ITNs, and vaccines**" as an advantage to going for PNC visits (p-value= .010 and a 31% gap)

->**Program Implications:** For the determinant categories, **Perceived Action Efficacy, Perceived Risk, Perceived Severity, and Perceived Positive Consequences, and Cues for Action**, we can conduct an activity such as organize Mothers Club meetings in which Positive Deviance moms discuss their experiences with Pre-natal visits and skilled births and emphasize the good health of their baby, the potential risks of not going for ANC visits, some ways that they have developed reminder cues, and the advantages of receiving medicines, ITNs, and vaccines as a result. We can also ensure that mothers tell interactive stories of two pregnant women: one who fails to make pre-natal visits who as a result, has complications and one who makes a pre-natal visit each trimester who has a healthy baby (or one who has a complication, but remembers what to do from her visit). For **Perceived Self-Efficacy**, we see a large gap and higher odds ratio for the responses "distance to the health unit" or "husband support" (which is to most likely pay for transportation to the health facility for the pre-natal visit), thus we can work with a local micro-credit group to set-up credit schemes which promote the development of small business ventures in which a portion of the revenue is placed in a revolving fund to enable pregnant women to access money for their transportation to the health unit. Also, we can work with men to establish Men's Support Group meetings or monthly community events that village leaders hold especially for men with young children. Positive Deviant fathers could be asked to give testimonials at these events and to talk about how they support their partners in getting at least 3 prenatal visits. Also, teaching husbands about the warning signs of a pregnancy complication and gaining their pre-approval for the mother to seek care if she experiences one of these signs, would address this barrier.

2. Koinadugu

- **Perceived Risk/Susceptibility:** Doers were 25 times more likely than Non-Doers to say "yes" to the question, "**Do you think you or your baby could get sick if you don't go in for at least 3 ANC visits?**" (p-value=.0001, OR=25, 43% point gap)
- **Perceived Severity:** There appears to be a significant association between this determinant and the behavior with respect to the response, "Yes". Doers were nearly 17 times more likely to respond "yes" than Non-Doers to the question: **Do you think you or your baby could die if you don't get at least 3 ANC visits during your pregnancy?** (p-value=.0001, OR=16.6, 47% point gap)
- **Perceived Negative Consequences:** Doers were 12.5 times more likely than Non-Doers to say that there are "**no disadvantages**" to making 3 ANC visits during their pregnancies (p-value=.004, 29% point gap).
- **Perceived Self Efficacy:** Three issues seem to play an significant role in the association of this determinant with the behavior: Non-Doers were 10 times more likely than Doers to state that "**money available**" would make it easier to make at least 3 ANC visits during their pregnancy (p-value=.001, OR=10, 36% point gap); whereas **short distance and free treatment** were key motivators for Doers, but not mentioned nearly as often by non-

Doers (i.e. Doers were 8 times more likely to mention "**short distance**" and 9 times more likely to mention "**free treatment**" than Non-Doers) (p-values= .0002 and .002, % point gaps of 47% and 34%, respectively).

- **Perceived Social Norms:** Strong association between "**nobody**" disapproving and the behavior (p-value=.001, OR=0, 29% point gap)
- **Perceived Action Efficacy:** This determinant also has a high association with the behavior for the "yes" response (p-value=.008, OR=0, 21% point gap).

->**Program Implications:** See recommendation above regarding establishing Mothers' Clubs/Support groups. For Koinadugu, however, in order to address the determinant areas of: **Perceived Risk and Perceived Severity, Perceived Negative Consequences, Perceived Social Norms, and Perceived Action Efficacy**, these groups should focus primarily on the potential risks of not going for ANC visits (to baby and mother), on the fact that many people don't see any inconveniences in making at least 3 visits during their pregnancy, on the fact that everyone would approve of the behavior being done, the high effectiveness of ANC visits in preparing mothers for safe and complication-free deliveries and health babies, and the fact that treatment is free for everyone. To address the significant determinant of **Perceived Self-Efficacy**, and in particular the issues of "money available" (presumably for transportation since clinic services are free) and "short distance", see the same recommendation for Kailahun regarding micro-credit schemes for this determinant, above.

D. Exclusive Breastfeeding

1. Kailahun

- **Perceived Severity:** Doers were 8 times more likely to say **that their baby could die from diarrhea if you DON'T give only breast milk during the first 6 months** (p-value= .004, 34% gap). **Perceived Risk/Susceptibility:** Nearly 96% of the Doers said that "yes", they thought **something bad could happen to their baby if they did not practice EBF** but nearly half of the Non-Doers said no, that nothing bad could happen (p-value=.0000012 & 64% gap for the yes response).
->**Program Implication:** Need to promote that without EBF some of the bad things that could happen are diarrhea, leading to severe diarrhea and possibly death & that EBF is effective in preventing these bad things from happening --can use **Positive Deviant Moms to show that their babies are healthy & free from severe diarrhea**). E.g. Positive Deviant moms bring their healthy babies to Prospective Mommies Clubs; they discuss EBF, its challenges and how they overcame them and focus on the effectiveness of EBF in preventing diarrhea, ARI and other diseases, the risks involved in non-exclusive BF.
- **Perceived Self Efficacy:** There is a high association between this determinant and the behavior of EBF, especially with respect to "**having enough food**" as a response to: what would make EBF easier? (p-value=.04 , OR =3.3, 25% point gap)
->**Program Implication: Food security issues** need to be addressed by the project (see **Complementary Feeding, Koinadugu, Program Implications**, above); in addition, pregnant and lactating women need to have good role models (e.g. Positive Deviant Moms) who can attest that your **body will always produce enough milk** if the

infant is encouraged to take only breast milk and to breastfeed often (the suckling stimulates milk production).

- **Perceived Action Efficacy:** There appears to be a strong association between this determinant and the behavior: 100% of the Doers stated that **yes**, they felt that **EBF was effective in preventing diarrhea and other sickness in their baby**, while only 58% of the Non-Doers believed this (p-value=.0002, OR=0 and a 42% gap).
->**Program Implication:** see above recommendation for **Perceived severity & susceptibility**.
- **Perceived negative consequence:** Non-Doers are more likely to not be able to cite a single advantage of EBF (p-value=.01, 23% gap), whereas 100% of the Doers mentioned "**Good health for the baby**" (p-value=.006, 26% gap)
->**Program Implication:** In promoting the behavior, we need to ensure that key messages describe EBF's multiple advantages, and emphasize "good health for baby".
- **Cues for Action:** Almost one in five of the Non-Doers said that there was nothing that helped them to remember the action, but 96% of the Doers said that **yes, there was something that helped them remember** (p-value=.01 and a 19% gap).
->**Program Implication:** Via focus group discussions or individual interviews, need to find out what helps those mothers remember & promote this with the other mothers during Mothers Support Groups.

2. Koinadugu

- **Perceived Risk/Susceptibility:** 100% of the Doers said that **yes, they thought something bad could happen to their baby if they did not practice EBF** but just over half of the Non-Doers said no, that nothing bad could happen (p-value=.0000088 & 58% gap for the yes response, OR=0).
->**Program Implication:** See recommendation above for the same determinant in Kailahun.
- **Perceived Self Efficacy:** Doers were 12.5 times more likely than Non-Doers to say that "**milk is readily available**" as one of the things that makes it easier to EBF (p-value=.0006, 46% point gap). Also, Doers were 4 times more likely than Non-Doers to state that "**enough food**" was one of the things that makes it easy to EBF (p-value=.02, 33% point gap). Related to this was the response "**breast milk not enough**" for the things that make it more difficult (p-value=.03, 17% point gap).
->**Program Implication:** See recommendation above for the same determinant in Kailahun; also emphasize the "enabler" that milk is a resource that is "readily available".
- **Perceived positive consequences:** Both responses "**prevents illness**" and "**makes children walk earlier**" were significant in terms of advantages of the behavior. Doers were nearly 4 times more likely to cite "**prevents illness**" than Non-Doers (29% gap) whereas Doers whereas 1 in 6 Doers mentioned "**makes children walk earlier**", but 0 Non-Doers mentioned this (17% gap) (p-values=.03 and .04 respectively).
->**Program Implication:** In promoting the behavior, we need to ensure that key messages describe EBF's multiple advantages, and emphasize that EBF "prevents illness"

and helps promote children's mental and physical growth, thus "helping children walk earlier".

- **Perceived Action Efficacy:** Doers were 11 times more likely to respond "yes" to the question, "**would EBF prevent your child from getting diarrhea or other sicknesses?**" (p-value=.009, 29% point gap)
->**Program Implication:** As recommended for Kailahun, the project can use Positive Deviant Moms to show that their babies are healthy & free from diarrhea and other sicknesses.
- **Cues for Action:** There was a high association between this determinant and the behavior for the response "yes" (p-value=.04, 17% point gap).
->**Program Implication:** Via focus group discussions or individual interviews, need to find out what helps those mothers remember & promote this with the other mothers during Mothers Support Groups.

E. Health-seeking Behavior

1. Kailahun

- **Perceived Positive Consequences:** Non-Doers were nearly 19 times more likely to respond "**Child Recovers**" than Doers to the question, "**What do you see as advantages (good things) of taking (first name of child) to the health center when s/he has fever, diarrhea more than 3 times a day, or fast breathing/cough before the second day?**" (p-value=.0009, OR 18.86, 40% point gap).
->**Program Implication:** In program activities, the project team can emphasize that "your child will "recover quickly and fully if" which Non-Doers already consider to be a strong "enabler".
- **Perceived Self Efficacy:** Non-Doers were more than 5 times more likely to respond "**no money**" than Non-Doers to the question, "**What makes it difficult to take your child to the clinic when s/he has fever, diarrhea more than 3 times a day, or fast breathing/cough before the second day ...?**" (p-value=.004, OR=5.4, 40% point gap).
->**Program Implication:** Project team may need to investigate if this means "no money" for transportation (most likely the case) or that women do not know that services are free. In the latter case, project team can emphasize that everyone is eligible for "free treatment" and in the former case, see the recommendations made under **Perceived Self Efficacy for ANC Kailahun, Program Implications.**
- **Perceived Social Norms-** There appears to be a high association between this determinant in terms of "**husband approving**" and the behavior (p-value =.07, OR =0, 12% point gap). This is substantiated if we look again at **Perceived Self Efficacy** and in particular, the second most common response to the question, "What makes it easier to? For the response, "**support from husband**", Doers were nearly 4 times more likely to state this response than Non-Doers (p-value=S, 28% point gap).
->**Program Implication:** For this barrier, the project team may also need to investigate if this means financial "support from husband" for transportation (most likely

the case) which is probably to pay for transportation to the health facility. If this is the case, we can work with a local micro-credit group to set-up credit schemes which promote the development of small business ventures in which a portion of the revenue is placed in a revolving fund to enable women whose children present one of the warning signs, such as fever, fast breathing/cough, or diarrhea more than 3x/a day to access money for their transportation to the health unit. If the "support from husband" and "husband approving" means moral support rather than financial support, then a specific set of activities for the fathers should be planned. These might be Men's Support Group meetings or monthly community events that village leaders hold especially for men with young children. Positive Deviant fathers could be asked to give testimonials at these events and to talk about how they support their partners in taking their children to the health clinic immediately when any of above warning signs appear.

Also, **teaching husbands danger signs, and gaining their pre-approval for the mother seeking care if the child has a danger sign.**¹

- **Cues for Action-** Doers were almost 8 times more likely than Non-Doers to respond "Yes" to the question, **"Is there anything that reminds you to take your baby to the health center when s/he has fever, diarrhea more than 3 times a day, or fast breathing/cough before the second day?"** (p-value=.04, 20% point gap)
->**Program Implication:** Via focus group discussions or individual interviews, the project team may need to find out what helps those mothers remember & promote this with the other mothers during Mothers Support Groups.

2. Koinadugu

- **Perceived Self Efficacy:** Doers were nearly 6 times more likely to respond "free treatment" than Non-Doers to the question, **"What makes it easy to take your child to the clinic when s/he has fever, diarrhea more than 3 times a day, or fast breathing/cough before the second day ...?"** (p-value=.003, 34% point gap).
->**Program Implication:** Project team can emphasize that everyone is eligible for "free treatment" which Doers consider to be a strong "enabler" in program activities.
- **Perceived Negative Consequences:** There appears to be a high association of this determinant with the behavior for the response **"nothing"** (p-value=.009, 19% point gap, OR=0)
->**Program Implication:** Project team can incorporate messages reinforcing the "enabler" that most mothers see "no disadvantages" (and conversely only advantages) of taking their child to the health center before the second day when fever, diarrhea more than 3x a day, or fast breathing/cough appear in the child.

¹ From Tom Davis: this showed a change in the Freedom from Hunger Care Group project in Mozambique. Before, mothers would want to seek care but had to wait for the husband's approval -- and sometimes they were out from home for 3-4 days! The Leader Mothers and sometimes Promoters spoke to husbands who would not change, and convinced them that for these set of dangerous symptoms, they needed to give pre-approval for the mother to take the child to the clinic, or the child could very well be dead by the time they gave they returned home. A child with pneumonia can die in a few short hours if they do not get antibiotics, so sometimes we used that example. Mothers cited this as a big change at final evaluation. Husbands gave pre-approval. They would still sometimes wait to ask for more simple cases (e.g., skin rash, cold) but not danger signs].

Challenges/Lessons Learned from the Field Work

- **Refresher or On-the-Job training could greatly improve interviewing and data collection skills**
 - Some questionnaires were incomplete (e.g. 3-4 questions left blank) or interviewers forgot to record certain responses (such as the number of times a mother had gone for an ANC visit)
 - Probing needed to deepen responses and ensure that all of the answers were gleaned for each person and each open-ended question (“Why? What else?”)
 - It was sometimes difficult to know how to classify Doers and Non-doers (especially for HWWS) and at least in the case of Koinadugu, it was necessary to soften the criteria for "Doers" to those who mentioned at least 2 of the 4 critical moments
 - Some responses were vague or unrelated to the question (e.g. "Poor coping" as a response to the question, "Do you think that it's God's will that your child gets diarrhea?")
 - Some responses contradicted themselves, for example, for EBF- Kailahun, "Who would approve and disapprove of you EBFing your baby during the first 6 months?" 24 Doers and 26 Non-Doers that said their "husband" would approve, and then in the next question, 18 Doers and 12 Non-Doers also said that it was their "husband" who would disapprove.

- **More time needed for field work (for a team of 6, 3 full days of data collection are the minimum needed for 5 behaviors)**
 - Pretest questionnaire to avoid having some questions missed or misunderstood
 - Communities and sometimes, households are far apart; terrain is difficult even during relatively dry season (!)
 - Finding Non-doers proved especially time-consuming in some places; for Doers can use health center, but need to ensure that women are interviewed as they leave the clinic so as not to influence other potential respondents; for non-doers, need to go to homes which takes more time
 - Conduct compilation & analysis with data collectors (clarify vague responses)
 - If the entire day is spent in the field, interviewers may be too tired to do daily compilation; thus it may be better to do compilation on the morning of the day following final data collection
 - Maximum is approximately 10-15 interviews per team/day
 - Adding additional behaviors for respondents takes more time
 - Need to allow time to discuss challenges & strategize for the following day

- **Minimize bias and maximize probability that Doers are true “Doers”**
 - For HWWS, need to observe soap in the households, if possible

- **When using the spread sheet to confirm the most powerful determinants:**
 - Important ones have a p-value < 0.05. The MOST important ones have a p-value < 0.05 AND have the higher Odds Ratio (OR). There is more association between the determinant and the behavior **the further the OR is from ONE**. In fact, the closer to zero, the higher the association. So responses that have an OR = 0.8, 0.9, 1.1, 1.2 are a lot less significant than

when the OR is 0.2, 0.1, 5.0, 6.0. The one caveat is that you cannot calculate an OR when one of the cells is zero, so for those, look at the gap to decide how important it is assuming that they have a p-value < 0.05.

Conclusions

During the consultancy, 12 individuals from the SNAP/MYAP team completed the training in Designing for Behavior Change. These individuals learned to follow a step-wise, systematic process which includes: 1) Formulation of the well-defined behavior statement; 2) Five ways to define the priority group; 3) Identification of the most powerful determinants for the behavior based on the results from a Barrier Analysis; 4) Writing of key factors; and 5) Selection of activities which are designed specifically to address the key factors. Several of the participants felt that with assistance, they would be able to adapt the training topics to replicate them for their colleagues.

While working in pairs during the training, participants drafted the DBC frameworks for 6 behaviors, 3 of these plus an additional 2 behaviors were selected as priority behaviors for which to conduct the Barrier Analysis in Kailahun and Koinadugu, notably:

- EBF
- HWWS
- Pre-natal visits/care
- Immediate care-seeking behavior
- Complementary Feeding

Participants also drafted DBC frameworks (see Annex 5) for other key behaviors which will contribute to other program objectives. These behaviors include:

- Improved farming/weeding techniques
- Getting prophylaxis, counseling & other appropriate services after being raped

Since it was not feasible to include all of the behaviors in the field work (because of the time needed to develop the questionnaires, administer the interviews, compile and analyze the data), the consultant and co-facilitator prioritized certain behaviors which would have a multiple effect on maternal and child health and which the project could address immediately.

In the week following the training, the consultant, co-facilitators, and most of the SNAP/MYAP team members contributed to the following activities: finalizing the questionnaires, completing the 437 interviews as part of a Barrier Analysis in Kailahun and Koinadugu on 5 behaviors, compiled data, and conducted a preliminary analysis of some of the results. As previously mentioned since time in the field was limited, additional field work to complete 140 more interviews for ANC visits, Care-seeking and Complementary Feeding behaviors were conducted during the week following the consultant's departure by the co-facilitators, Ms. Orengo and Mr. Juana and the SNAP/MYAP team members in Koinadugu.

In addition, during the weeks following her departure, Ms. Morales updated each of the five questionnaires (see Annex 6), completed the analysis of the research results, checked these results, their p-values and odds ratios utilizing the data analysis spread sheet (see Annex 7), and ensured that her final analysis for each data set was verified/confirmed by another Barrier Analysis expert from The CORE Group. The consultant then made programmatic

recommendations based on these results. Some of the activities recommended were selected as a result of a brainstorming session which took place on the consultant's final day in-country. Final recommendations on the activities were based on the potential for them to address the most powerful determinants as identified during the final analysis of BA data.

During the final days of the consultancy, Ms. Morales incorporated these results into the corresponding previously developed DBC frameworks. Ms. Morales also updated the determinant column, wrote new key factors, and updated and refined the activities to ensure that they would respond to the most powerful determinants as indicated through the research. A draft trip report was shared with the SNAP Team Leader-Wes Wrightson, the Nutritionist- Claire Orenge, and the Nutrition Officer-Joseph Juana. Ms. Morales then, incorporated all comments received into the report.

Recommendations/Next Steps

- 1) Project staff should review and discuss the feasibility of recommended activities in the BC Strategy- (see Program Implications, above for recommendations for activities for Health Seeking behaviors, HWWS, and Complementary Feeding; see Annex 5, DBC Frameworks, for recommendations for activities for EBF and ANC visits). Staff should incorporate these activities into their work plan and begin implementing the activities ASAP.
- 2) When possible, the SNAP/MYAP team members should conduct BAs on the priority behaviors in the remaining districts (Bomboli and Tonkolili) to ensure that planned activities are the most appropriate to address the most powerful determinants.
- 3) When possible, the SNAP/MYAP team members should conduct BAs to confirm, update, and complete the draft DBC frameworks developed by team members during the workshop for the behaviors of: post-prophylaxis for women who have been raped, improved weeding techniques, and continued breastfeeding with complementary foods for children 6-24 months old.
- 4) The same team should complete DBC frameworks according to the results from these BAs indicated in steps 2 and 3 above (send to consultant for review and technical assistance) and prepare implementation plans.
- 5) Depending on activities selected to reduce malnutrition and ensure age-appropriate infant and young child feeding, the team should facilitate an adapted Positive Deviance/Hearth training (see suggestions above and Annex 5, p. 2).