Core CBN Packages Assessment Report

[*for Tanqua Abergele, Raya Azebo & Saesi Tsaeda Emba Woredas of Tigray Regional State*]

UNICEF Mekelle Field Office in collaboration with EWRFSS/RENCU and Woreda Health and Agriculture & Rural Development Offices

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Acronyms		Table of Contents	Page
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FHC	Family Health Card		
GMP	Growth Monitoring Promotion		
HH	Households		
ITN	Insecticide Treated Bed Net		
IYCF	Infant & Young Child Feeding		
KAP	Knowledge Attitude and Practice		
NNP	National Nutrition Programme		
PPS	Population Proportion to its Size		
RA	Raya Azebo		
STE	Saesi Tsaeda Emba		
TAG	Tanqua Abergele Woreda		
U5	Children Under Five		
UNICEF	United Nations Children Fund		

1. Introduction

Malnutrition is one of the major public health and development problems in the country affecting primarily children and women of the child bearing age. It is one of the main culprits causing high child mortality, accounting for 51 percent of all childhood deaths in Ethiopia. It has an enormous impact on health, wellbeing and productivity. The government of Ethiopia, in collaboration with key allies, has been committed to address the immediate and underlying cause of malnutrition (wasting, stunting and underweight) through preventive community based interventions by designing a standalone National Nutrition Strategy (NNS) and National Nutrition Program (NNP).

The NNS was designed and launched in 2008 which has paved a fertile ground to establish the NNP. The primary impact objective of the NNP is to improve nutritional and micronutrient status of the population especially mothers and children through cost effective and sustainable community based interventions. The first phase of NNP (NNP I) spanned for five years from July 2008 to June 2013. The document has been revised for the second time covering a period of two years from June 2013 to May 2015 taking into account the multi-sectoral and multidimensional nature of nutrition and focusing on the life cycle Aapproach to map key actions needed to improve the nutritional status of strategic target groups (women and children).

The government has already put in place programmes and initiatives with set targets that directly and indirectly contribute to the reduction of under-nutrition and Community Based Nutrition (CBN) is among them. The first phase UNICEF supported CBN program was initiated in 39 selected Woredas of Ethiopia in 2008. CBN program is currently implemented in XXX Woredas in the country.

Similarly, CBN program in Tigray was initiated in eight selected Woredas in 2008 and the program has been scaled up to cover 34 rural Woredas.

CBN aims to provide community-based nutrition and health services, fully utilizing existing HEP outreach and model household service provision, and seeking to build on these with additional community-based resources and activities in the most efficient and effective manner. The CBN package seeks to identify and address both the immediate and underlying causes of malnutrition.

The specific objectives of the CBN program were to:

- Build community capacity for assessment, analysis, and action specific to preventing child malnutrition (triple-A-approach—Assess, Analyze, and Action);
- Promote improved caring practices for children and women to prevent malnutrition;
- Improve referral linkages to relevant child health & nutrition services and other linkages for addressing non-health causes of child malnutrition;
- Develop and implement strong advocacy & communication/mobilization strategy to support all CBN activities;
- Enhance capacity for CBN implementation at Regional and Woreda levels

CBN commits to build up communities and families capacity and ownership to make informed decision on child feeding and caring practices at household and community level. CBN has been concentrating primarily on young children under the age of two and pregnant and lactating women, and the core CBN packages includes six sets of activities (Growth Monitoring and Promotion and pregnancy weight gain supported by individual counseling and community conversation, targeted food supplementation, micronutrient supplementation, parasitic control, hygiene and sanitation). CBN seeks effective linkage with related health and nutrition specific and nutrition sensitive interventions using multisectoral approach.

UNICEF Mekelle Field office, in collaboration with EWRFSS and Woreda Health and Agriculture and Rural Development offices, used the biannual nutrition survey as an opportunity to carry out assessments on progress and challenges of core CBN packages being implemented by the government in the three survey Woredas, namely Tanqua Abergele, Saesi Tseada Emba and Raya Azebo using the standard survey procedures, methods and tools.

2. Objectives

2.1. General Objectives: The overarching goal of conducting the CBN assessment was to determine the progress or achievements of UNICEF supported core CBN packages being implemented by the government in the three survey Woredas and identify key challenges or bottlenecks hindering from bringing maximum impact or from moving the CBN programme forward.

2.2. Specific Objectives: The assessment has the following specific objectives

- To estimate Growth Monitoring and Promotion (GMP) participation rate among children under two years of age
- To estimate the availability and proper use of Family Health Card (FHC) (Child weight plotted on GMP of the FHC to determine nutritional status of the child and follow the trends and changes through time)
- To estimate availability and appropriate use of iodized salt at household level
- To determine the CHD screening coverage of children under five conducted in Megabit 2006
- To determine the status of exclusive breastfeeding practices of mothers with a child/ren under two years of age
- To determine the status of initiation of complementary food practices of mothers with child/ren under two years of age
- To determine the status of mothers providing acceptable dietary mix of complementary food to the child
- To determine the coverage and proper utilization of insecticide treated bed-net (ITN) at household level
- To estimate latrine coverage and proper utilization at household level
- To determine the percentage of households who managed to separate animal barn and

feeding place from their residential houses or areas

- To determine the coverage, access and treatment of water for human drinking
- To carry out periodic monitoring and evaluation on nutrition situation and triangulate with other early warning and nutrition assessment & survey data
- To make recommendations based on the key findings

3. Methodology

3.1 Study Design: The assessment was a cross sectional in nature where data and information is collected at particular point and time. A two-stage random cluster sampling method using Emergency Nutrition Assessment (ENA) SMART methodology was employed. The sample sizes were calculated using ENA for SMART software (November 2011 version).

3.2 Study Area: the survey was conducted in 42, 48 and 60 rural Kushet (Villages) of Raya Azebo, Saesi Tsaeda Emba and Tanqua Abergele Woreda respectively.

3.3 Study Period: The survey was conducted between 15 April and 14 May 2014

3.4 Study Population: All children under two (for GMP, EBF, initiation of CF, Dietary mix of CF and Immunization), children under five (for Immunization, CHD screening) and all household members (for use of Iodized salt, ITN, Latrine, Separation of human from animal dwelling, and use of safe water) were included in the assessment

3.5 Sample Size: Emergency Nutrition Assessment (ENA) for SMART software November 2011 is used for sample size calculation.

Table 1: Summary of Sample Size & Number of Clusters for CBN

Woreda	Tanqua Abergele	Saesi T. Emba	Raya Azebo
Population Size	107,109	166,337	164,135
Number of Tabias / Kebeles	27	28	20
Number of Selected Tabias / Kebeles	**18**	**24**	**19**
Number of Kushets / Clusters	112	79	72
Number of Selected Clusters or Kushets	**60**	**48**	**42**
Number of Households (Sample Size)	**996**	**921**	**818**
Number of children under two	**327**	**341**	**288**
Number of children under five	**849**	**679**	**594**
Survey teams per Woreda	6	6	6
Sample Size per cluster per day	17/18	18	18
Actual number of survey dates	11	9	8

3.6 Sampling Method

3.6.1 Random Selection of Cluster (First Stage Sampling): Each ***Village/Gotte*** locally known as ***Kushet*** in each Woreda were used as cluster sampling frame, and the clusters to be sampled

were selected with Probability Proportional to Size (PPS). All rural Kushet of the survey Woreda with their respective population size has been entered in to the ENA software; the software then did automatically select the clusters to be sampled in each ***Kebeles*** locally known as ***Tabias.***The lowest geographical units called ***Kushet*** were randomly selected from each Tabias of the survey Woredas. As reflected in Table 1 a total of 42, 48 and 60 clusters were selected from Raya Azebo, Saesi Tsaeda Emba and Tanqua Abergele Woredas respectively.

3.6.2 Random Selection of Households (Second Stage Sampling): As depicted in the Table 1 above, the 996, 921 and 818 sampled households in the survey Woreda were selected using systematic random sampling. In each sampled cluster the total number of households was identified through the support of local administration office to calculate the sampling interval and determine the number of houses to be included in the survey. The total number of households sampled for day in each cluster for each team was decided to be 17 or 18. The total number of households was divided by the sample size (in our case 17 or 18) for that particular Kushet or Village to determine the sampling interval. Using Table of random number, the first sample was identified from the sampling interval. The survey teams usually started the work from the first randomly selected house and then continue by adding the value of the sampling interval to the first, second, third etc and continued until the survey team reached the required sample size (17/18 HHs) per day per cluster per team.

3.7. Data Collection Methods and Tools

CBN questionnaire was developed (please refer to Annex I) and enough copies printed to collect the following information from the randomly sampled households using household interviews

- Age of the child/children under five years of age
- GMP participation and weight of child plotted on GMP of the FHC
- CHD screening coverage and vaccination information of children under five (such as measles, BCG)
- Exclusive breastfeeding practices
- Initiation of complementary feeding and acceptable dietary mix of the diet
- Availability and appropriate use of Iodized salt at household
- ITN availability and utilization
- Latrine availability and utilization
- Separation of animal housing out of human housing area
- Access and availability of water for human consumption

3.8. Survey Team Recruitment and Training: Six teams of four people each, one team leader, one interviewer and two enumerators or measurers were recruited from Woreda Health and Agriculture & Rural Development offices and employed to conduct the nutrition survey as well as CBN data collection. The survey teams were selected based on their academic achievement, technical skill, health status and previous work history. Prior to the data collection, four days training (three theoretical classes and one practical) were provided to the survey team. Technical experts from UNICEF Mekelle Field Office and Regional ENCU took the responsibility of training the survey team. One nutritionist from UNICEF and one Information Analyst from RENCU were assigned and responsible to train survey teams, coordinate and closely monitor and

supervise the field work and data collection, entry and analysis activities.

3.9 Ethical Considerations: All relevant stakeholders were informed of the study objectives, methods and their roles. Verbal consent was also sought from all concerned regional and Woreda authorities prior to the survey and the study subjects on the day of survey and they were requested to participate in the study. The identity of the participants was kept anonymous. Those who do not wish to participate in the survey were respected for their self-determination / decisions. In survey areas, the interviewers usually started by introducing themselves and establish rapport. All the information collected was treated as strictly confidential.

3.10. Data Quality Check, Entry and Analysis: Daily checking was conducted on each questionnaire and data sheet prior to the data entry which was done every night. CBN data entry and analysis was done using SPSS software. Feedback was also given every day by the the survey coordinators.

4. Summary of Key Findings

Result of the assessment is summarized and presented in the table below

Table 2: Summary of Core CBN package activities assessment result

Key CBN Indicators	Name of Survey Woredas								
	TAG			RA			STE		
	No %	Partial %	Yes %	No %	Partial %	Yes %	No %	Partial %	Yes %
1. Monthly GMP participation coverage of Children under two	60	9	**31**	77	2	**21**	72	4	**24**
2. Child weight plotted on GMP of the FHC on monthly basis	72	20	**8**	93	0.3	**6.4**	90	4	**7**
3. Availability of Iodized Salt at HH level	80		**20**	25		**75**	18		**82**
4. Appropriate use of Iodized Salt at HH level	8	49	**44**	25	19	**56**	25	23	**52**
5. CHD Screening result of Children U5 for Megabit 2006	36		**64**	52		**48**	51		**49**
6. Child fully immunized for his/her age	5	19	**77**	6	2	**92**	6	3	**91**
7. EBF practices of the child for the first 6 months	38		**62**	20		**80**	17		**83**
8. Introduction of CF to child at 6 months age	38		**62**	26	16	**58**	21		**79**
9. Acceptable dietary mix of CF given to the child	32	46	**22**	36	34	**29**	34	36	**31**
10. ITN availability and utilization at HH level	42	31	**28**	62	7	**31**	51	10	**39**

11. Latrine availability and utilization at HH level	28	17	**56**	34	2	**64**	27	4	**69**
12. Animal barn separated from human house area	52	22	**22**	65	2	**33**	81	2	**17**
13. Access and use of clean water at HH level	23	4.5	**73**	24	12	**64**	24	12	**66**

Key		**TAG**	**RA**	**STE**
Good (> = 60%)		**5**	**5**	**6**
Acceptable (40 – 59%)		**2**	**3**	**2**
Low (< 40%)		**6**	**5**	**5**
Rank		**3**	**2**	**1**

Well performed CBN activities in all Woredas :

- ✓ Immunization
- ✓ Exclusive breastfeeding (EBF) practices
- ✓ Introduction of Complementary Food
- ✓ Access and use of clean water
- ✓ Latrine availability and utilization

Poorly performed CBN activities in all Woredas:

- ✓ Growth Monitoring and Promotion (GMP)
- ✓ Acceptable dietary mix of Complementary Food
- ✓ Appropriate use of Iodized Salt
- ✓ Insecticide Treated Bed Net (ITN)
- ✓ Separation of animal barn form human housing area
- ✓ CHD screening coverage

5. Discussion

GMP participation: Monthly GMP participation for children under two and plotting of child's weight on GMP chart of the FHC on monthly basis in all the three assessed Woredas were very low. Due attention and the system to support and monitor such an important activity is not put in place.

Iodized Salt: Availability of Iodized Salt at household level in STE and RA is good with 85 and 75 per cent coverage while in TAG is very low (20%). However, appropriate use of the Iodized Salt in all Woredas is still a concern; more than half of the surveyed households are putting the salt when roasting the onions and/or while the soup or "Wet" is boiling (or on fire) as opposed to the recommended practice i.e. putting the salt immediately after take the soup off from fire.

CHD Screening: Quarterly CHD screening exercise result of Children under five for Megabit 2006 were also assessed and the result showed all Woredas did perform below the recommended threshold level. Screening coverage for TAG w (60%) was relatively better. Screening coverage for STE and RA scored below 50 per cent, respondents were asked as to why they did not participate in the event, majority responded that they were not aware of such an important event indicating there was a very poor community sensitization and mobilization activity before and during the event.

Immunization: Immunization coverage of the children under five for their age in all the three Woredas were assessed and result of the assessment were very encouraging with over 90 per cent coverage for RA and STE while coverage for TAG was 77 per cent which is a bit lower than expected.

Exclusive Breastfeeding Practices: Exclusive breastfeeding practice of the child for the first 6 months in RA and STE was good both scored above 80 per cent while TAG hit 62.

Complementary Feeding Practices: Introduction of CF to child at 6 months age in RA and TAG was relatively good reaching coverage of 79 and 62 per cent respectively, while RA is still on half way scored 58 per cent. However, making an acceptable dietary mix of CF to feed the child to meet energy and nutrient requirement demand were by far very low. In all the surveyed Woredas, only a quarter of the surveyed households are currently meeting the energy and nutrient requirement demands by preparing the acceptable dietary mix of complementary food to feed their children.

Insecticide Treated Bed Net: ITN availability at the same time proper and regular utilization at household level in all the surveyed Woreda was not promising, Availability and proper use of ITN for STE and RA was below 40 while for TAG below 30 per cent.

Latrine Availability and Use: More than half of the surveyed population in all the surveyed Woredas had pit latrine and were using properly when conducting the assessment. Coverage for STE and RA were 69 & 64 while for TAG was 56 per cent.

Separation of Animals Housing from Humans Living Area: Coverage of households who managed to separate animal barn from human housing area were very low with 33, 22 and 17 for RA, TAG and STE respectively. Less than a quarter of the surveyed household have managed to practice the recommended way of living i.e. separating human dwelling from animal barn and feeding areas.

Availability and Access to Safe Drinking Water: Availability and access to safe drinking water in TAG was 73, in STE was 66 and in RA was 64 per cent. It showed promising results but still needs further coordinated efforts of the government and key allies to increase coverage of safe water to target communities.

6. Recommendation

The government in collaboration with its key allies should employ the following short and long term recommendations to improve the nutrition situation of the vulnerable segment (children and pregnant and lactating mothers) of the surveyed communities.

- ✓ Health bureau should give more emphasis and take action oriented steps towards strengthening the implementation, monitoring and reporting of core CBN packages at community, Primary Health Care Unit (PHCU) and Woreda and Regional Offices. (e.g. incorporate CBN into joint monitoring and supportive supervision checklist to see the progress and challenges as well as provide on-site technical support)

- ✓ Awareness creation and advocacy for higher level decision making authorities at all level (Tabia to regional) to consider CBN as one of the top government priority agenda (e.g. maternal delivery at health facilities) which will contribute to the reduction of stunting prevalence in children.

- ✓ Leverage NNP strategies and speed up the roll out process of NNP from region to Woreda and Tabia levels and invite key stakeholders to come on board to play their parts.

- ✓ Strengthen coordination and partnership with key allies to plan and implement nutrition specific and nutrition sensitive interventions to work on food and nutrition security issues by addressing immediate and underlying cause of malnutrition using multisectoral approach.

- ✓ Strengthen community sensitization and mobilization activities to implement and follow through preventative nutrition and health interventions (e.g. Immunization, deworming, periodic and regular screening of children and pregnant and lactating mothers, promote optimal IYCF and maternal feeding and caring practices) to improve coverage and quality of CBN program.

- ✓ Improve health & nutrition education through Behavior Change Communication (BCC) by identifying and addressing Knowledge, Attitude and Practice (KAP) gap of the household and communities.

- ✓ Build the capacity (competency based trainings focusing on knowledge, skill and motivation) of front-line workers (supervisors, health officers, health extension workers, development agents & community based volunteers)

- ✓ Identify few Woredas to conduct similar assessment to determine the status of CBN program in the region

7. Annex

Core CBN Packages Assessment Questionnaire

Date: _____ Woreda_____ Tabia_____

Kushet_____ Cluster Number_____Team Number_____

1.Household number	_____
2. Name of the Child	_____
3. Child age in months	_____
4. Child attending GMP on monthly basis?	1. Yes 2. Partial 3. No
5.Child given FHC & weight plotted on GMC of FHC? (please observe)	1. Yes 2. Partial 3. No
6. Availability of Iodized Salt at home? (please observe)	1. Yes 2. No
7. Appropriate utilization of Iodized Salt (i.e after takeoff from fire)?	1. Yes 2. Partial 3. No
8. Child attended CHD screening in Megabit 2006?	1. Yes 2. No
9. Child fully immunized for his/her age?	1. Yes 2. Partial 3. No
10. Exclusive breastfeeding practice of Child under 6 months?	1. Yes 2. No
11.Complementary food started at 6 months of child age?	1. Yes 2. No 3. Not applicable
12. Acceptable dietary mix of child's complementary food?	1. Yes 2. Partial 3. No 4. Not applicable
13. ITN availability and proper utilization? (please observe)	1. Yes 2. Partial 3. No 4. Not applicable
14. Latrine availability and proper utilization? (please observe)	1. Yes 2. Partial 3. No 4. Not applicable
15. Separation of animal house from human housing area? (pls observe)	1. Yes 2. Partial 3. No 4. Not applicable
16. Access and use of clean water?	1. Yes 2. Partial 3. No