

# FINAL REPORT

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EVALUATION OF  
INTEGRATED MANAGEMENT OF ACUTE  
MALNUTRITION (IMAM)  
&  
INFANT AND YOUNG CHILD FEEDING (IYCF)  
PROGRAMS

21<sup>st</sup> to 29<sup>th</sup> of May 2013

Yvonne Grellety – Hélène Schwartz

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## LIST OF ACRONYMS

ACF	Action Contre la Faim
ACT	Artemisinin-based Combination Therapies
ARI	Acute Respiratory Infection
BCC	Behavioural Change Communication
BFHI	Baby-friendly Hospital Initiative
BMI	Body Mass Index
CHC	Community Health Center
CHO	Community Health Officer
CHP	Community Health Post
CHW	Community Health Worker
CI	Confidence Intervals
c-IYCF	Community-Infant and Young Child Feeding
CMAM	Community based Management of Acute Malnutrition
CMV	Combined Minerals and Vitamins
CSB	Corn Soya Blend
CUG	Close User Group
DHMT	District Health Management Team
DHS	District Health Sister
DLO	District Logistic Officer
DMO	District Medical Officer
DMS	District Management Store
DN	District Nutritionist
DSA	Daily Subsistence Allowance
EBF	Exclusive Breast Feeding
EPI	Expanded Programme on Immunization
F75	Therapeutic Milk for Phase 1
F100	Therapeutic Milk for Transition Phase
FP	Family Planning
GAM	Global Acute Malnutrition
HEDO	Human and Economic Development Organisation
HIV	Human Immuno-deficiency Virus
IEC	Information Education Communication
IMAM	Integrated Management of Acute Malnutrition
IMCI	Integrated Management of Childhood Illness
IMNCI	Integrated Management New-born and Childhood Illness
IP	International Partner
IPF	Inpatient Facility
IYCF	Infant and Young Child Feeding
LMIS	Logistics Management Information System
MAM	Moderate Acute Malnutrition
M&E	Monitoring and Evaluation
MCH	Mother and Child Health
MCHP	Maternal and Child Health Post

MICS	Multiple Indicator Cluster Survey
MoHS	Ministry of Health and Sanitation
MSG	Mother Support Group
MUAC	Mid-Upper Arm Circumference
NGO	Non-Governmental Organization
NU	Nutrition Unit
OJT	On-the Job Training
OTP	Outpatient Therapeutic Programme
PCA	Program Cooperation Agreement
PHU	Peripheral Health Unit
PWLM	Pregnant Women and Lactating Mother
PMTCT	Prevention of Maternal To Child Transmission
REACH	Reinforce efforts to address child malnutrition
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
SC	Stabilization Center
SECHN	State Enrolled Community Health Nursing
SFP	Supplementary Feeding Programme
SMART	Standardized Monitoring and Assessment of Relief and Transitions
SNAP	Sustainable Nutrition and Agriculture Promotion
SST	Supplemental Suckling Technique
SUN	Scaling-Up Nutrition
TB	Tuberculosis
TOC	Training of Counsellor
TOF	Training of Facilitator
TOT	Training of Trainer
UNICEF	The United Nations Children's Fund
WCARO	West and Central Africa Regional Office
WFP	World Food Programme
WH	Weight for Height
WHI	World Hope International
WHO	World Health Organisation
WHZ	Weight for Height Z-score

## I. INTRODUCTION

The Republic of Sierra Leone is divided into four administrative regions: the Northern Province, Eastern Province, Southern Province and the Western Area; which are subdivided into fourteen districts (including Western Area Urban and Western Area Rural); which are themselves divided into 149 chiefdoms.

UNICEF Sierra Leone has promoted the participation of NGOs in the implementation of development programmes in the country. Since 2009, UNICEF supported the Ministry of Health and Sanitation in Sierra Leone to scale-up high impact nutrition interventions in the country. Given the nature and constraints of governmental Human Resource the involvement of NGOs was crucial if the scale-up was to be a success. Since 2009, UNICEF has engaged 14 NGOs across the country and provided over USD 3,700,000 to partners to implement nutrition projects [1].

Since 2009, Infant and Young Child Feeding (IYCF) and Integrated Management of Acute Malnutrition activities (IMAM) activities are part of a **single package** promoted by UNICEF and partners in all districts.

An evaluation of the IMAM program was conducted in March 2010 [2] followed by a review of the existing comprehensive framework for large scale promotion of adequate IYCF practices in Sierra Leone in May 2010 [3]. These evaluation / review provided recommendations to improve both IMAM and IYCF programs, in terms of implementation and scaling-up.

The main purpose of the current evaluation is:

- To identify and understand the achievements and constraints of the UNICEF funded Nutrition programme including the challenges faced by the implementing partners
- To assess the quality, effectiveness and sustainability of the programmes funded by UNICEF and implemented by partners.

As the evaluation looked at the IMAM and IYCF programs separately, the findings are reported separately.

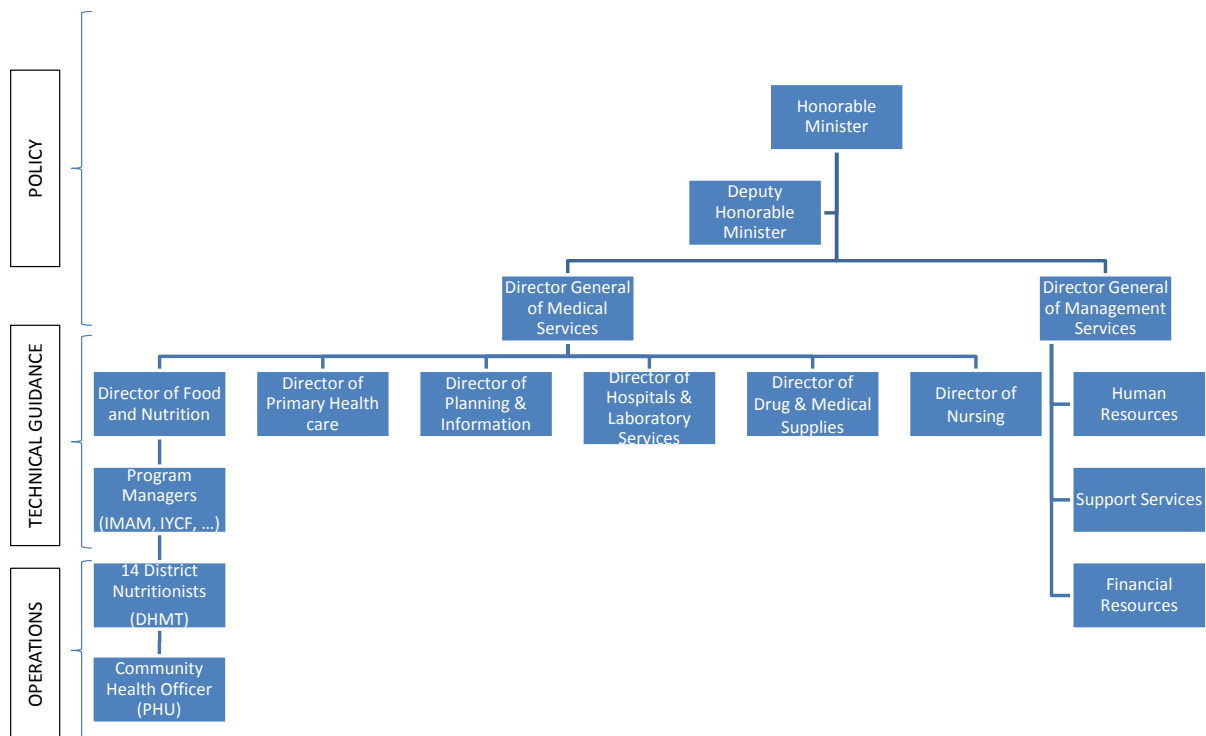
## II. BACKGROUND

### II.1 Organisation of the health sector

The health sector is based on a decentralized system, with representatives at national, regional, district and community level.

The ministry of Health and Sanitation is divided in to two wings: the professional wing headed by the Director General of Medical Services and the administrative wing headed by the Director General of Management Services. Under the Director General of Medical Services, there are five technical divisional directorates responsible of technical guidance. IMAM and IYCF programs are under the Primary Health Care Directorate as illustrated in the organogram below:

Figure 1 – Organogram of the Ministry of Health and Sanitation



The central level is responsible for development of health policy, strategic plans and formulation of guidelines. It is responsible for resource mobilization, supervision, monitoring and evaluation of health services.

There are 14 health districts in the country; each of them is run by a District Health Management Team (DHMT). The DHMT under the leadership of the District Medical Officer (DMO) is responsible for the planning, organization, management, implementation, monitoring and supervision of health programmes in the district (with the exception of hospital and laboratory services). The DHMT is composed of: 1 DMO, 1 District Health Sister, 1 District Nutritionist, 1 Environmental Health officer, 1 WASH officer, 1 M&E officer, 1 Disease Surveillance officer and 1 Community Mobilisation officer.

In each district hospital is a Hospital Management Committee headed by either the Medical Superintendent in the case of regional/provincial hospital or by the Medical Officer-in-charge in the case of a district hospital.

At the community level, Peripheral Health Units (PHU) such as Maternal and Child Health Posts (MCHPs), Community Health Posts (CHPs) and Community Health Centres (CHCs) are responsible for the delivery of primary health care in those communities. The CHCs are headed by Community Health Officers, who also supervise all health activities at the MCHPs and CHPs. In total there are 1,200 PHUs countrywide.



## II.2 Nutrition situation

A national nutrition survey was done from June to August 2010 based on SMART methodology and showing 7.6% GAM (7.0 to 8.1% CI) and 1.7% SAM (1.4 to 2% CI) for a population of 5,746,800 (17.7% represented by the less than 5yrs). If the survey is correct, this indicates between 71,000 and 82,000 children with GAM and 14,000 to 20,000 children with SAM.

A coverage survey was done by Valid International from February to April 2011. Only 3 out of the 14 districts surveyed achieved moderate coverage classification of point coverage: these were the districts of Kenema, Pujehun and Bo. For period coverage, half of the districts reached moderate coverage (Bombali, Kono, Kenema, Bonthe, Pujehun, Bo, Western Area Rural). However scaling up was the aim of the IMAM programme in Sierra Leone in order to respond to the call for rapid scaling up as the advocated way forward (see paragraph scaling up).

## II.3 IMAM Protocol

The first attempts to create a national protocol for Management of Acute Malnutrition started in 2006. At the end of 2007, the protocol was finally validated and an agreement to use ready to use product was undertaken by the Ministry of Health, for in and out-patient treatment. This protocol was then revised in 2010 in order to incorporate the new WHO growth standards. This version was reviewed by the evaluation team as part of the preparation of the evaluation. Here below are the main comments:

The topics are addressed in an appropriate order but the chapter on “monitoring and evaluation” is missing and Regional recommendations given in the Dakar Report [4] are ignored. Even though the chapters are well organised the protocol has been edited to introduce numerous contradictions and incoherencies throughout the protocol.

In terms of moderately malnourished children, it is recommended that they attend a Supplementary Feeding Programme in a health centre; however, this often overloads the work of the health team unnecessarily; the appetite test as well as a CMAM number should not be recommended for this group of children - it is not clear if both WHZ and MUAC criteria should be used or not for admission. BMI for MAM in adults is very difficult to take and MUAC should be preferably used. A weekly ration is recommended, which again overburdens staff, instead of fortnightly. Iron and folate is recommended to be given daily instead of weekly – there is already quite a high dose of both iron and folate in the CSB. The target weight-gain table as a criterion for discharge should not be used for SAM and was never used for MAM children. MAM children should not be referred to the SC but to the paediatric ward and the IMCI protocols should be used to treat these children. This section of the protocol needs to be completely revised.

In the chapter “OTP”, it seems that the protocol only admits children from 6 to 59 months of age; this should not be the case. SAM patients of all ages should be treated, it would be unethical to refuse treatment to a 6 year old child for example – This is in particularly the case for severely wasted HIV patients. The appetite test is not precise enough to check for failure to respond to treatment and the other criteria should be routinely checked. Two hundred kilocalories per kg per day is an excessively high daily ration to dispense, this encourages sharing and as the average gain of weight for the cured patients is only 4 to 5 g/kg /day we know that their intake is at most 125 kcal/kg/d (see chapter “Evaluation Findings”, p.25) which is not a lot compare to the number of sachets per week given. One hundred and seventy kcal per kg per day is perfectly adequate and will save a considerable amount of RUTF (see IMAM generic protocol,

version 2011) - this recommendation was made in 2010 during evaluation mission conducted by WCARO, but was either ignored or not accepted. The height should not be taken weekly. For routine treatment in OTP, very high dose of Vitamin A is no longer recommended for SAM children and should not be given for persistent diarrhoea – there is sufficient vitamin A incorporated in the RUTF, F75 and F100. Chloramphenicol should not be used as a second line antibiotic treatment in OTP. Indeed, children who need second or third-line antibiotics should be transferred to IPF (SC) and not kept in OTP. For the criteria of discharge, it is not clear if MUAC or WHZ or both are needed. Where MUAC is used a cut-off of  $\geq 115$ mm is far too low as a unique criteria of discharge and will result in large numbers of relapses.

In the IPF (SC) section of the 2011 protocol, it is recommended to take weight and height twice a day! This is absolutely wrong. Height should only be taken one during the whole of the admission and weight once per day. The MUAC criteria for admission of adults is inappropriately high (it is wrong). The number of feeds in Phase 1 is limited to 6 feeds per day however some children need more than six feeds (in particular patients with refeeding diarrhoea) and this needs to be added in the protocol. The Phase 2/rehabilitation phase section of the protocol can be put in the annex as it is now rarely used, the patient being transferred to the OTP at the end of transition phase. The recipes in the annexes for F75 & F100 are wrong in terms of scoops of CMV: this is very dangerous - it is not 2 but  $\frac{1}{2}$  scoop per litre of reconstituted milk. The section on “complications” is a straight “copy and paste of an outdated version of Pr. Michael Golden’s protocol”; this has been substantially revised and updated and made available to both UNICEF and the Government of Sierra Leone, this is not referenced and the concepts are omitted entirely. The antibiotic treatment needs to be totally revised and additional common complications added. The chapter on infections does not take into account the problem of SAM children. For the criteria of transfer from phase 1 to transition, the patient should not be still on treatment of complications. Children less than 6 months old chapter is again a straight copy-paste of an outdated version of Pr Michael Golden’s protocol and needs to be updated.

**Conclusion:** It is unclear why the protocol has been edited to introduce numerous mistakes, many of which are confusing and some dangerous. Clearly the protocol needs to be revised urgently, no more staff should be taught this protocol and scale-up should only be attempted after there is up-to-date protocol and clear, unequivocal teaching materials available. The criteria of discharge for SAM children are dangerously low and are far below all recommendations made by expert bodies (generic protocol and WHO); the treatment of SAM in the OTP should not be strictly reserved for 6 to 59 months old children but for all malnourished patients over 6 months of age. The antibiotics treatment in SC needs urgently to be revised<sup>1</sup>.

## II.4 Infant and Young Child Feeding (IYCF)

The IYCF programming guide [5] developed by the Nutrition Section of UNICEF New York in 2011 mentions that *a comprehensive approach to IYCF involves large-scale action at **national level, health system and community levels**, including various cross-cutting strategies such as communication and actions on infant feeding in the context of emergencies and HIV.*

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<sup>1</sup> In addition to the protocol, an abbreviated manual is used for the training of the OTP: this manual has many different versions with edits. I was not able to check which was the latest one. Changes were made several times. This only serves to cause confusion among the trainers and trainees. The existing manuals need to be revised and a single up-dated and correct manual distributed.

The government of Sierra Leone developed a National Guideline and Strategy on IYCF in 2009 that recognizes and adopts the key elements of the Global Strategy on IYCF, the World Health Assembly's Innocenti Declaration for the Protection, Promotion and Support of Breastfeeding, and the International Code of the Marketing of Breast Milk Substitutes (BMS) [6]. However, this document still needs to be completed, updated and an action plan developed to operationalize this strategy. IYCF is also mentioned in the Food and Nutrition Policy and Implementation Plan both documents developed in August 2009.

Regarding the health system level, lactation management training based on the Ten Steps of the Baby Friendly Hospital Initiative (BFHI) and on establishing breastfeeding has been conducted in hospital and PHU level; but, without a strong monitoring and evaluation system in place, this initiative has been barely sustained.

In parallel, IYCF has been strengthened at community level where mother support groups have been formed and trained first on BCC approaches and in a second time on c-IYCF counselling methods.

In 2010-2011, UNICEF New York conducted a comprehensive IYCF situation assessment in 65 countries [7] that focused on 7 areas: National level IYCF actions, Health services IYCF actions, Community level IYCF actions, Communication on IYCF, Complementary feeding interventions/components, IYCF in exceptionally difficult circumstances and IYCF monitoring and evaluation. Each action areas were scored based on performance and scores ranged from 0 to 10.

The scores for Sierra Leone are summarized in the table below:

**Table 1 – IYCF scores for Sierra Leone, 2010-2011**

Areas	Score (/10)	Qualitative results <sup>2</sup>
National level IYCF actions	6	Fair
Health services IYCF actions	2	Poor
Community level IYCF actions	6	Fair
Communication on IYCF	6	Fair
Complementary feeding interventions	2	Poor
IYCF in difficult circumstances	5	Fair
IYCF monitoring and evaluation	4	Fair

While most of the areas need to be strengthened, it was stated that a special attention should be put on the health services level and on complementary feeding interventions.

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<sup>2</sup> Colour scale interpreted as follows: **Red** = 0-3 ["Poor" – very low number of key IYCF actions implemented]; **Orange** = 4-6 ["Fair" – low number of key IYCF actions implemented]; **Green** = 7-8 ["Good" - average number of key IYCF actions implemented]; **Purple** = 9-10 ["Very good"– High number of key IYCF actions implemented].

### III. SCALE-UP

#### III.1 Integrated Management of Acute Malnutrition

Table 2 shows the scaling up by year since December 2007, beginning of the integration of IMAM in the health structures. In June 2013, 50% of the health structures were offering IMAM services.

**Table 2 – Number of health structures offering IMAM services (Scale up) by district and year, SL, the number of patients treated and the use of RUTF per patient steps of implementation (source UNICEF SL)**

Districts	PHUs	Dec 07	Dec 08	Dec 09	Dec 10	Dec 11	Dec 12	May 13	June 13	Coverage OTP/PHU
BO	117	0	5	12	21	21	21	21	58	49.57%
BOMBALI	101	5	5	11	21	21	21	21	51	50.5%
BONTHE	56	0	5	7	17	17	28	28	28	50%
KAILAHUN	79	0	5	7	7	14	14	14	40	50.635%
KAMBIA	65	5	5	7	10	10	34	34	34	52,5%
KENEMA	121	0	5	9	20	20	61	61	61	50.41%
KOINADUGU	68	0	5	7	15	15	34	34	34	50%
KONO	84	0	5	7	11	17	17	17	32	38.1%
MOYAMBA	94	0	5	7	15	15	40	40	49	52.13%
PORT LOKO	102	0	5	7	15	15	52	52	52	50.98%
PUDJEHUN	71	0	5	7	13	13	34	34	34	48%
TONKOLILI	96	5	5	10	16	16	16	16	48	50%
WESTERN AREA	105	5	5	7	33	41	53	53	53	50.48%
<b>TOTAL structures</b>	<b>1159</b>	<b>20</b>	<b>65</b>	<b>105</b>	<b>214</b>	<b>235</b>	<b>425</b>	<b>425</b>	<b>574</b>	<b>49.53%</b>
<b>TOTAL patients reported</b>					27,796	15,853*	33,753**			
<b>RUTF procurement in carton</b>					21,200	37,312	11,606			

\*program only functional for 6 months

\*\* monthly reports underreported

If the monthly reports database in 2010 was almost completed with the total number of treated patients, in 2011 the IMAM program was suspended for a period of 6 months. In 2012, the number of OTPs increased and also to scaling up; however the total number of patients<sup>3</sup> were underreported in the database due to missing monthly reports. Only the 2010 database can be used for further calculation. In 2010, about 0.76 carton of RUTF was used for each child treated, which is approximately the expected usage. For year 2011 and 2012, it is impossible to calculate the consumption of RUTF due to the incomplete

<sup>3</sup> database 2012

monthly reports' database. To be able to accurately be aware of monthly reports missing, columns within the database should be added: observed monthly reports - expected monthly reports - date of opening of the centre, RUTF stock in – RUTF stock out – RUTF balance.

A verification exercise followed by verification of OTP caseloads took place in 2012 – 2013 in order to improve the quality of the programme. Conducted by the MOH and UNICEF, it was done by students trained for a period of 2 days and supervised by higher grades colleagues. The students participated in the training with the field work and then took a test; each district had a different test. Surprisingly in Moyamba UNICEF requested ACF to conduct their own verification and they came up with 20% cases that were not supposed to be in the programme.

After this exercise in 2012, the amount delivered was cut by half due to the results of verification only in the month after the verification. For the other month it was based on report from DNs which indicated lower numbers than the request. This resulted in frequent stock-outs, due both to the reduction in numbers as a result of verification but break in supply pipeline, inappropriate allocation by health staff which lead providing small amounts to cases and late reporting. These interruptions of the program lead to a totally inadequate amount of RUTF dispensed per treatment.

A training of the District Nutritionists in 2012 was conducted by Valid International (Anne Walsh) in order to train them on how to make a projection of consumption. On-the-job training was recommended in 2012 except when new centres are opened (scaling up). The help of UNICEF for the scaling up training is of great help for the concerned districts.

## III.2 Infant and Young Child Feeding

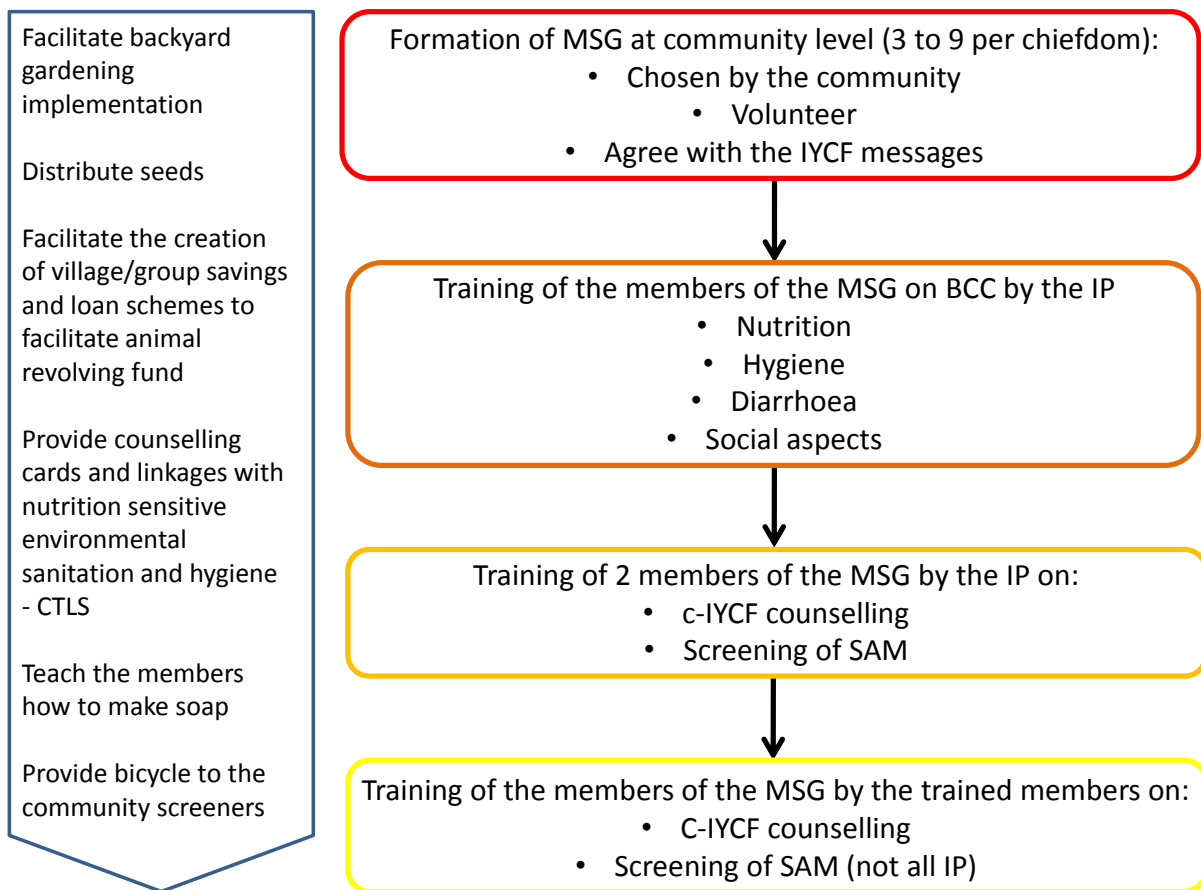
### a. Formation of the Mother Support Groups

Up to now, the way IYCF was implemented in Sierra Leone, do focus mainly on the community level and not so much on the health facility level, due to a training ban in 2012 from the Minister of Health putting on hold the training of the health workers. This is the reason why the steps described below are referring mainly to the community level.

In October 2009, the implementation of IYCF activities started in 12 districts. These activities focused mainly on the **community level** with the training of at least three mother support groups per chiefdom. The training package included training on BCC approaches and training on BCC for various topics related to nutrition, hygiene, diarrhoea and social aspects such as gender but did not include the IYCF counselling package.

The training has then been expended to all districts in Sierra Leone and by December 2010 a total of 9 mother support groups per chiefdom were formed [3]. In 2012, the IYCF counselling package was introduced to all MSG. In 2013, the plan is to scale-up the MSG nationally by having one MSG per villages. This has already started in Moyamba district where 1429 MSG were trained. The steps followed to form and train the mother support groups are summarized in the figure below:

Figure 2 – Steps followed to form and train the mother support groups



### b. Community-IYCF training

In 2011, 4 UNICEF staff and 2 MoHS staff participated to a Master training on c-IYCF counselling in Nigeria and Zimbabwe and formed a group of Master Trainers for Sierra Leone. Following this training, the group organized a Training of Trainers for 24 participants (1 nutritionist and 1 supervisor per NGO and 1 MOHS IYCF focal person) in Freetown.

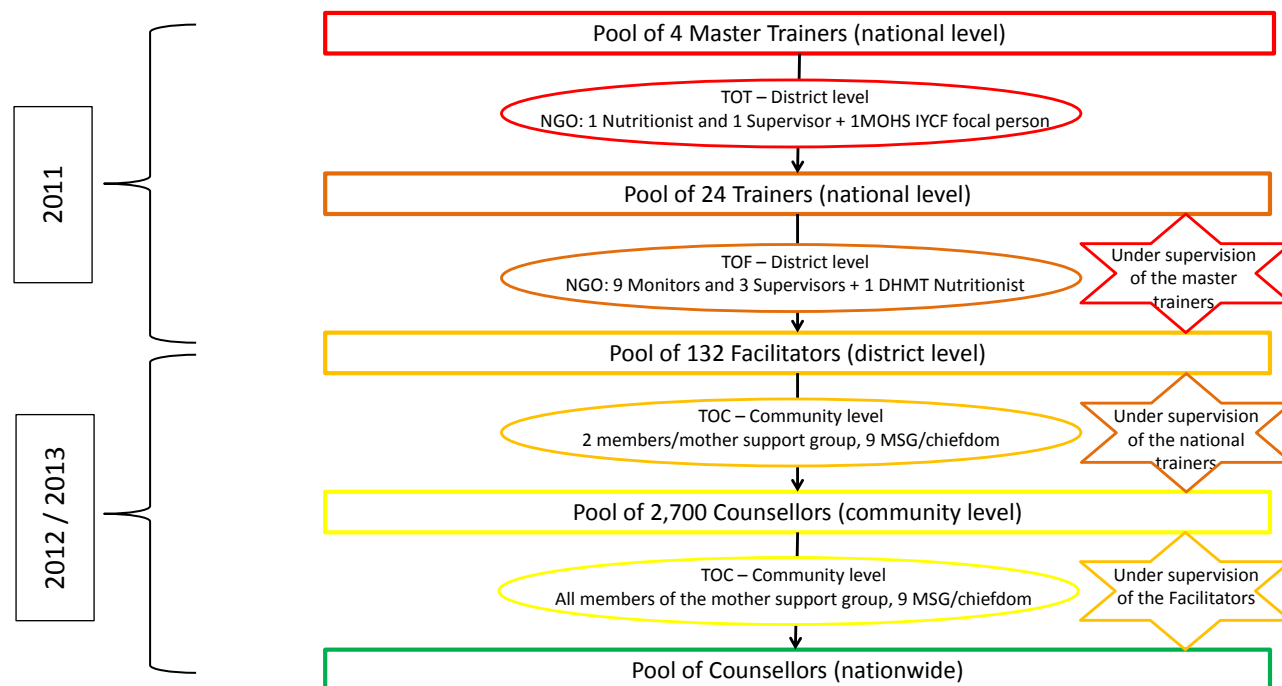
In 2012, these trainers, after having exercised their counselling skills during field practice have trained 132 facilitators (9 monitors and 3 supervisors per NGO and 1 DHMT nutritionist per district) under the supervision of the master trainers. In August 2012, the facilitators trained 18 members of the mother support groups on c-IYCF counselling skills in each of the following districts: Kono, Kenema, Kambia and Bombali. Another session of training took place in September in the remaining districts except in Bo and Bonthe districts.

By end of October 2013, all formed mother support groups should have at least 2 members trained on c-IYCF counselling package, meaning 2,700 counsellors in total for the country.

The trained members of the mother support groups have to realise 10 counselling sessions under the supervision of the monitor/facilitator before being able to train the rest of the group on c-IYCF counselling package. The counselling cards are distributed only to trained members.

The IYCF cascade training is illustrated below:

Figure 3 – IYCF cascade training



In addition, CHW and the members of the MSG (in certain districts) have been trained to conduct active screening of malnourished children in the community, either by organizing a screening session or during home visits.

UNICEF and implementing partners are also planning in the coming months to train the health workers of each PHU on the c-IYCF counselling package.

As mentioned earlier, lactation management training based on the Ten Steps of the Baby Friendly Hospital Initiative (BFHI) and on establishing breastfeeding has been conducted in PHU level in 2009 but was not sustained, mainly because of the vertical approach of this activity, UNICEF leading the process. Consequently, this activity was not recognized by the MoHS as such and as soon as UNICEF stopped its monitoring, the activity ceased.

To revive this part of the IYCF comprehensive strategy, plans have been set up to train graduated nurses on IYCF and deploy them to the hospitals, with their main task (60%) being to focus on BFHI.

## IV. METHODOLOGY

### IV.1 Methods used

The UNICEF Sierra Leone office requested the support of WCARO to conduct an evaluation of the IMAM and IYCF programs. The evaluation used a combination of methods, detailed in the table below:

Table 3 – Methods used for data collection

Qualitative methods	Quantitative methods
Literature review Individual interview Mother Support Group interview Observation	Analysis of existing quantitative data (database)

The literature review included national documents including the nutrition policy, strategy and implementation plans and documents held by the UNICEF Country Office. The interviews and observations were done directly in the field and allowed us to triangulate these data with those obtained from the literature review and the analysis of the quantitative data.

## IV.2 Execution of the mission

### a. Selection of the districts for evaluation

The districts were selected by UNICEF Sierra Leone, based on the level of scale-up for both IMAM and IYCF activities, the presence or not of an implementing partner with a signed PCA with UNICEF and community activities on-going until April 2013.

In addition to the health facilities included in this evaluation, one SC and one OTP were also visited in Freetown.

The table 4 present the IMAM and IYCF characteristics of the districts visited.

**Table 4 – IMAM and IYCF Characteristics of the districts visited**

IMAM	Number of chiefdoms	Number of PHU	Number of OTP	Number of SC	Number of SFP	OTP Geographical Coverage
Moyamba	14	98	40	1	49	50%
Kenema	16	121	61	2	121	50%
Bombali	13	101	23	3	0	20%
Kono	14	84	17	1	5	20%
IYCF	Number of chiefdoms	Number of MSG trained	Number of Community Screeners	Number of supervisors	Number of field monitors	IYCF Scale-up (MSG)
Moyamba	14	1429	400	4	28	100%
Kenema	16	144	1120	4	16	<20%
Bombali	13	130	500	3	10	<20%
Kono	14	144	560	5	16	<20%

Both IMAM and IYCF activities started in 2008-2009 with the support of an implementing partner. Each implementing partner covers an entire district and implements both activities, with an exception for Moyamba district.

The table below gathered the implementing partners involved in this evaluation and give information on the starting and ending date of the PCA with UNICEF:

**Table 5 – Implementing partners supporting the IMAM and IYCF activities in the 4 districts visited**



IP	Supporting IMAM	Supporting IYCF	Started	End of PCA with UNICEF
Moyamba	ACF	CAUSE-Canada	2008	Dec 2013
Kenema	HEDO	HEDO	2009	Apr 2013
Bombali	WHI	WHI	2009	Apr 2013
Kono	SILPA	SILPA	2009	Apr 2013

### b. Selection of the health facilities

The selection of the health facilities was done by UNICEF together with the district nutritionists and implementing partners, depending on the day of evaluation visit and days which OTP was operational. If no OTP was working in the district on the day of the visit, the evaluation team focused on checking the charts, the knowledge of the officer-in-charge or nurse-aid and the stock of the nutrition products and materials. We particularly visited PHU and MSG in both hard to reach areas and easy to reach areas.

The number of health centres with OTP activities, Stabilisation Centres (SC) and community members visited is summarized in the table below:

**Table 6 – Number of health facilities and community members visited**

	Number of OTP visited	OTP activities the day of the visit	Number of SC visited	Number of MSG interviewed	Number of Community Screeners interviewed	Number of community members interviewed
Moyamba	4	4	1	6	1	0
Kenema	4	4	2	4	1	1
Bombali	4	4	3	2	2	0
Kono	1	0	1	7	0	0

### c. Organization of the mission

The mission lasted 14 days, from the 19<sup>th</sup> of May to the 1<sup>st</sup> of June. The two first days were dedicated to the literature review and briefing sessions with UNICEF staff and partners supporting the four selected districts. The evaluation team met with ACF, CAUSE-Canada, HEDO and WHI; SILPA was not present. The meeting focused mainly on activities, opportunities, challenges and constraints faced by the implementing partner.

The **field visit** lasted 9 days, starting on the 21<sup>st</sup> of May. In each district visited, the evaluation team first met with the DMO and/or the District Nutritionist to collect general information on the implementation of the activities and the constraints and challenges faced by the district level.

Due to the short period of time allocated for the field visit and the specific expertise of the evaluation team members, it was decided to split the evaluation team into two, each team focusing on one component of the evaluation:

- Team 1 composed of Yvonne Grellety (Nutrition Consultant, expert in IMAM), Arika Nagata (Nutrition Specialist – UNICEF Sierra Leone) and Joseph Senesie (Nutrition Officer – UNICEF Sierra Leone) focused on the **IMAM activities**

- Team 2 composed of H el ene Schwartz (Nutrition Specialist – IYCF Regional Focal Point UNICEF WCARO) and Hamjatu Daian Khazali (Nutrition officer – UNICEF Sierra Leone) focused on the **IYCF activities** and in particular the community component.

However, in order to cover the four districts and bearing in mind that the link between the two activities is crucial, the evaluation team visited two districts together (Moyamba and Kenema) and then split so the team 1 went to Bombali while the team 2 went to Kono. The calendar of the mission is detailed in Annex 1.

In each district, the evaluation team was accompanied by the District Nutritionist and the IP.

For the **interview**, the evaluation team completed specific questionnaires for each activity assessed (see Annex 2), as described below:

- DHMT: Programme questionnaire for the District Nutritionist
- IMAM<sup>4</sup>: 1) OTP questionnaire for the out patients’ management, 2) SC questionnaire for in-patient care,
- IYCF: 1) Mother support groups questionnaire, 2) Community Screener questionnaire.

Due to logistic and organizational reasons, the health facilities, the mother support groups and community members were informed in advance of the evaluation visit.

For the interviews at community level, questions were asked in English and translated in the local language by the UNICEF Nutrition Officer. Answers were written directly onto the questionnaire forms.

### IV.3 Constraints

The short period of time in the fields and the lack of prepared documents concerning the IMAM<sup>5</sup> programme slowed down the whole process.

The evaluation took place in 2 of the 3 districts visited in 2010; Moyamba had not been evaluated before. One OTP and three SCs were previously visited in Kenema district and Freetown.

The OTPs were chosen because of the day they were open. This allowed us to see them functioning but it was also difficult to question the supervisors who were busy with patients; this slowed the evaluation process.

The SFP programme had to be limited to the ex-SAM follow-up in 2 of the 3 districts and it was never the SFP day during our visit. There was no SFP in Bombali.

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<sup>4</sup> The IMAM questionnaires used were based on the supervision checklists developed in the IMAM generic protocol. This was done on purpose in order to field test these checklists

<sup>5</sup> The 2 verification reports, the audit report, the training material for the District Nutritionist, the latest edition of the IMAM abbreviated manual

## V. EVALUATION FINDINGS

Since 2009, UNICEF supported the Ministry of Health and Sanitation in Sierra Leone to scale-up high impact nutrition interventions in the country. Implementing partners were involved in the scaling-up of IMAM and IYCF activities since the beginning but due to funding constraints, UNICEF Sierra Leone stopped the partnership with most of the NGOs in April 2013. This will certainly have a significant impact on the programs, but it is too early now to assess the magnitude of this impact.

In this part of the report, we will try to answer the questions raised in the ToR namely achievements, constraints and challenges faced by the IP on one hand and quality, effectiveness and sustainability of these activities on the other hand.

### V.1 Implementing partners

The implementing partners in the 4 districts visited are namely: ACF and CAUSE-Canada (Moyamba district), HEDO (Kenema district), WHI (Bombali district) and SILPA (Kono district).

As mentioned earlier, each partner covers an entire district for both IMAM and IYCF activities with an exception in Moyamba district where two implementing partners are working together. Up to December 2012, ACF was in charge of the IMAM activities and CAUSE-Canada of the IYCF activities including the community screening. However, following a SQUEAC survey showing low coverage rate of the IMAM, CAUSE-Canada handed over the screening activities to ACF.

#### a. Activities

The five implementing partners for IMAM and IYCF (ACF, CAUSE-Canada, HEDO, SILPA and WHI) started their support to the nutrition activities in 2009.

The expected results of the cooperation stated in the last PCA are:

1. Increased coverage of community mobilization activities with special emphasis on hard to reach communities
2. Increased quality of OTP services as per national standards in XX PHUs with OTPs in the targeted district
3. Increased MSG capacity of IYCF counselling for mothers with children under two years
4. Increased community involvement in the promotion of exclusive breastfeeding and appropriate complementary feeding practices
5. Support to the MOHS routine MCH week campaigns and world breastfeeding week activities

To reach these goals, the IP implemented several activities both at community and health facility level. The table below lists the principal activities implemented.

**Table 7 – Activities implemented by each partner**

	ACF	CAUSE-Canada	HEDO	WHI	SILPA
OTP supervision	✓		✓	✓	✓
Transport/voucher for transfer	✓			✓	✓
End-user monitoring of RUTF	✓	✓	✓	✓	✓

Organize and facilitate training for the MSG (2 members by group)		✓	✓	✓	✓
Facilitate MSG meeting		✓	✓	✓	✓
Monitor counselling sessions during home-visits		✓	✓	✓	✓
Food demonstration		✓	✓	✓	✓
Backyard gardening		✓	✓	✓	✓
Provision of seeds		✓	✓	✓	✓
Village or group saving loans		✓	✓	✓	✓
Monitoring of the community screeners	✓		✓	✓	✓
Screening of SAM done by the MSG members			✓	✓	✓
Soap making					✓
Provide IYCF counselling during school visits		✓			✓

From this table, we can notice three main differences between the 5 implementing partners' strategy:

- As mentioned previously, CAUSE-Canada is not involved in the IMAM activities. The monitoring of the OTPs and the community screeners is done by the IMAM implementing partner (ACF).
- SILPA has started to train some MSG on income generating activities like soap making which allows the MSG members to sell the soap and/or use it for hygiene sensitisation sessions.
- Both CAUSE-Canada and SILPA are involved in school sensitisation sessions on IYCF targeting the teenage mothers and fathers in the secondary schools.

In term of community screening, each implementing partner supervises several hundred of community screeners. Those are all volunteers and are asked to conduct active screening on a quarterly basis. Except in Moyamba district, most of the community screeners are part of the MSG (in communities where there is a MSG) and therefore benefit from the activities in place in the group.

From the interviews conducted in the field, it appeared that having one partner supervising the community screening and another one supporting the MSG is not ideal in term of strengthening the link between the community and the health facilities. Four MSG out of six interviewed in Moyamba district did not know the existence of the community screeners while in the other districts the community screeners if not part of the MSG were at least known by the MSG members. The role of the community screener is fundamental to ensure that malnourished children detected in the community are referred to the nearest PHU and followed by the MSG.

To extend the sensitisation on adequate nutrition practices in the secondary schools is a huge opportunity to **sensitize adolescents** on the importance of good feeding, especially in districts where teenage pregnancy is high (Moyamba and Kono district are one of them). This strategy should certainly be extended to all districts.

In term of **monitoring**, each partner has a nutritionist dedicated on monitoring and supportive training of the health staff responsible of the OTP activities. One of their roles is also to supervise the supply chain, making sure that the requested quantity of RUTF and drugs are delivered at the district level and on to the health facility level. They also have 1 IYCF monitor per chiefdom based at community level and at least 1 IYCF supervisor covering 4 chiefdoms. Apart from collecting the community screeners' report, the monitors are reporting on 11 indicators on a monthly basis. The indicators are listed in the Annex 3.

The monitors are responsible of participating to the MSG meeting at least once a month, facilitating group sessions and supervising the community screeners' activity. The number of the MSG meetings varies from one to four meetings per month, depending entirely on group's decision. This close monitoring which seems heavy for the IP is **key** for the success of the MSG activities. When looking at the MSG formed in 2009 in Kono district (these MSG were the most advanced in term of group management) intensive monitoring activities are needed on at least 4 to 5 years before the MSG starts to be autonomous.

Besides the monitoring done by the IP, UNICEF Sierra Leone has started to implement decentralized monitoring for nutrition activities by conducting a baseline (beginning of the UNICEF PCA) and an endline (end of the UNICEF PCA) survey using rapid evaluation methodology [8]. It allows following the IMAM and IYCF indicators' evolution on a yearly basis and having an estimate of the program's coverage. This tool was elaborated and used for the first time in 2012, it is therefore a bit early to evaluate it but it can certainly be used to re-orientate the activities if needed privileging those that do not positively evolve. It is an interesting tool that would deserve to be evaluated after a longer period of use.

#### **Recommendations for UNICEF and IP:**

- Community screeners should be part of the MSG and monitored by the IYCF implementing partner
- Extend the IYCF sensitization to secondary schools in all districts
- Exploit further the decentralized monitoring tool

#### **Recommendations for IP:**

- Keep doing intensive monitoring of the MSG and community screeners
- Decrease the intensity of the monitoring for those who acquired good group management skills and train new ones (based on demand)

#### **b. Constraints**

When interviewing the implementing partners, the main constrain for them is the **lack of transport** especially for the IYCF monitors. On average a monitor is responsible of 9 MSG and even more in districts where the IYCF activities were scaled-up. Some of them were provided with motorcycles but not all of them which do not facilitate their tasks especially in hard-to-reach areas.

The lack of transport is also a challenge for the community screeners as they are covering several communities/villages. Some of them received bicycles but the maintenance of those seems to be a real challenge. All the community screeners interviewed reported that their bicycle was out of use.

The **lack of proper funds** is equally a constraint. Most of the implementing partners entirely depend on UNICEF fund to run the IMAM and IYCF activities which represents a major obstacle to the sustainability of these activities. As long as IMAM and IYCF will not be included in the pre-service curricula, monitoring and supportive supervision are essential to ensure a minimum quality service. The district nutritionists having no transport from the district (only the region has vehicle) rely almost entirely on the IP for supervising activities. Without UNICEF fund, the monitoring and supervision of the nutrition activities will stop which will be detrimental for the nutrition program.

### c. Challenges

One of the main challenges faced by the implementing partners is how to monitor the nutrition activities and ensure good quality services when scale-up at district level. For instance, in Moyamba district, CAUSE-Canada has to monitor 1429 functional MSG, while HEDO in Kenema has to monitor 1120 community screeners.

Long distances are also a major challenge knowing that in some district it could take more than 3 hours' drive to reach a PHU from the main town. The existing OTP facilities are insufficient to cover an entire district particularly in remote areas resulting in high defaulting of caregivers. In addition, during the rainy season, some hospitals, PHU and communities are completely isolated due to roadblock.

Incentives seem to create problems especially where there is a partner giving monetary incentive. Apart from the MSG interviewed, one of the IP reported that some members are leaving the MSG to join another community group where they receive monetary incentive.

The government is about to endorse a CHW strategy that would probably help to regulate the incentives given to the community workers. However, if this strategy is endorsed as it is actually, it will still let room for discrepancy.

Extract from the CHW strategy [9]:

Motivations for Community Health Workers are **both monetary and non-monetary**. CHWs are Volunteers. However, MoHS recommends that they ALL receive a standard minimum motivation package. The MoHS has defined this minimum motivation package to include, for purposes of identity, standardised T-shirt, badge, caps; and for cultivating a sense of achievement, certificates/awards and letters of recognition.

#### Recommendations for UNICEF:

- Keep supporting (financially and technically) the IP for the nutrition activities (IMAM and IYCF)
- Provide motorbikes to IP monitors especially in districts where IYCF are planned to be scaled-up
- Advocate with the MoH to ensure that district nutritionists can get a transport for monitoring and supervision visits
- Organize exchange visits between partners to allow knowledge sharing

## V.2 The District Health Management Team

We visited the DMO and the DN in each district; in Kenema and Bombali districts, we met the same DN in 2010. The DN's job description is in the Ministry of Health and Sanitation National Operational Handbook for Primary health care 2004. In Kenema and Makeni, the DN had their own vehicle because they are regional/ district towns. As only the DN of the region is supplied with a vehicle, the DN of Moyamba and Kono districts had no dedicated transport. They all had one or two focal points according to the size of the district. The 4 DNs were trained on IMAM and two of them (in Moyamba and in Kono) were trained on IYCF. Supervisions are made with or without the help of the International Partner (IP) and because of the proximity of the SC, the DNs regularly do supervision visits to the SC.

The high rotation of staff is a real concern for each district for both the SC and the OTP. This is the concern of several DHMTs - but there is a large variation between districts. For example the DMO of Bombali stated that in the coming year 40 MCH aids will leave to join the SECHN school of nursing, and there will be attrition of staff for other reasons as well. Transfer to the nursing school is so attractive that the DMO considers that it will paralyse the health system of Bombali and not only prevent further scaling up of nutrition services but may jeopardise all the programs offered by the health system. If undue emphasis is given to scaling up nutrition then this has the potential for all the other functions of the health service to be scaled down due to lack of human resources. However, he stated that it would only last for this coming year<sup>6</sup>. There is a real urgency to integrate nutrition in general and the protocol in particular into both the school of nursing and the curricula of the doctors. It is partly done but not adequately or totally. If this is done, then when the newly trained graduates will augment the system and at that stage make scaling up, whilst maintaining quality, feasible. Scaling up has to take into account the availability of trained staff to understand and implement the program without compromising all the other equally essential services (eg vaccination, IMCI, Maternal health, etc.). The new assigned staff have to be trained on-the job by the DN with the help of the IP nutritionist.

The transport of the patients from the OTP to the SC is facilitated by travel voucher given by the IP<sup>7</sup>. Free communication is implemented by the NGO MRC for Bombali district and by CUG (Close User Group) for Kenema.

A problem is that the SAM number is changed at each step of the treatment if the child goes from OTP to SC and then back to OTP. It is not clear how many times he/she is counted as a new admission; it is certainly minimized due to the supervision of the DN and the IP but this point should be addressed.

The monthly reports are usually submitted on time at district level according to the DN. However the database of 2011 and 2012 are incomplete and impossible to verify because the date of opening of the OTP/SC as well as the expected and the observed monthly reports are not recorded. There are often stock-outs of RUTF and this information is also missing in the database.

A list of the materials that need to be replaced was prepared and the material is to be distributed according to the Food and Nutrition Directorate and UNICEF-Freetown.

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<sup>6</sup> The MoHS will stop the aid nurse to join the SECHN school in 2014.

<sup>7</sup> Except in Kenema where the PCA with HEDO stopped.

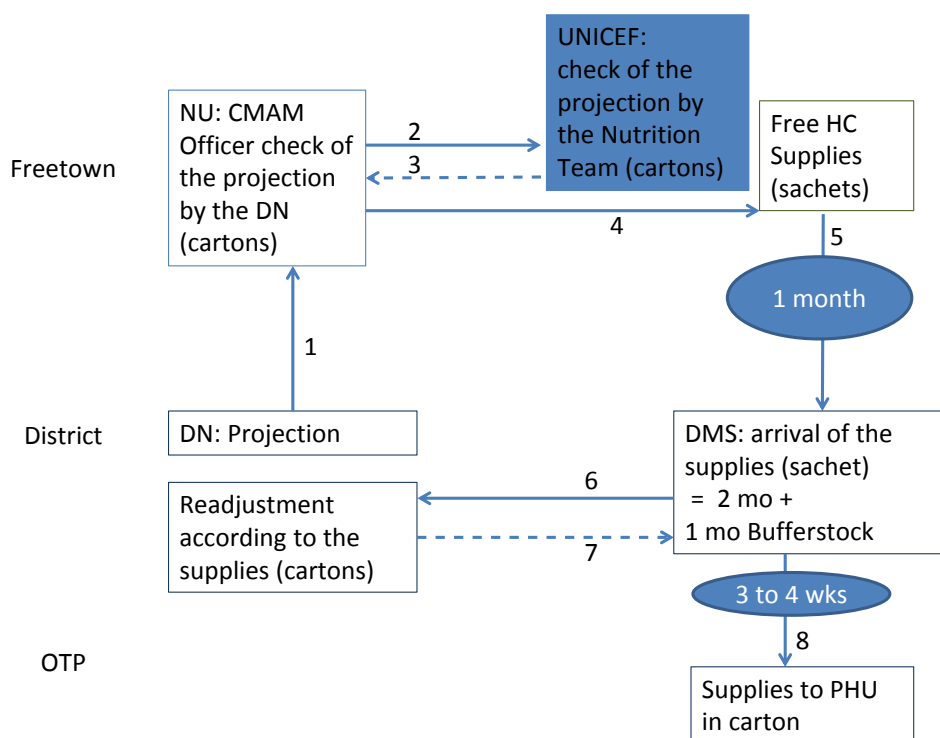
The Supplementary feeding programme was implemented in Moyamba, Kenema and Kono but not in Bombali because of the SNAP programme. Surprisingly, the programme is rationed by limiting it to admit 20 children per month whatever the magnitude of the needs or numbers of patients. The SF program only uses the WH chart; there were frequent stock-outs of products in 2012 (despite the ethically questionable decision to ration the program irrespective of needs).

### District monitoring and supervision and the RUTF consumption

The “Free health care” initiative is in charge of the transport and delivery of the RUTF from the central to the district level; the DMS is in charge with the DN and the DLO to deliver the RUTF to each PHU since 2010. But at the moment the responsibility is still under the responsibility of the FHCI.

The projection of RUTF needs is made by the DN who contacts the Food and Nutrition Programme MoHS (CMAM officer for OTP) if there is a problem of shortage. She is supposed to transmit the information immediately to the UNICEF team in Freetown (see figure 4).

Figure 4 – Flow of RUTF from the order to the delivery at PHU level



Everywhere we went stock-outs were a major problem. The DN and the IP were very well aware of the situation; however UNICEF and National Food and Nutrition Programme MoHS was often not informed (for example in Kenema and Moyamba districts). UNICEF thought that there was a one month buffer stock in the District Management Store (DMS) whereas in reality there was no buffer stock in Moyamba and only a few cartons of RUTF in Kenema (and no F100 in stock). According to UNICEF, the DN and the IP were supposed to immediately remake a new projection of supplies when they found out that there was no buffer supply in the DMS. This was not the case and remained unsolved. The DN had sent an e-mail to the person in charge in the National Food and Nutrition Programme MoHS in Freetown but no action had been taken.



The DN did inform her senior advisor at the National Food and Nutrition Programme MoHS by email. However, connection, communication problems, mismanagement of the email inbox, overwhelming work load or other problems handicapped the whole programme and brought it into disrepute with the beneficiaries. It would be inappropriate if all relied upon one functionary – and the program would halt if this person was ill, on leave, attending meetings or absent for any other reason. Exchange of information between UNICEF, the Nutrition Unit and the concerned partners (IP) for stock-out should be a priority – and a “hot line” should be established. A surveillance system of the stock out as well as the flow of patients has to be reinforced: Free health care – MoHS – UNICEF.

Confusion, difficulties and disagreement also arose between the different partners because of the software used: the software of the MoHS calculated the delivery of RUTF in sachets and the projections made by UNICEF and MoHS were in sachets and then rounded to cartons. This created problem of readjustment: “Free health care” had to readjust quantities in sachets to cartons and the central store had to open cartons of RUTF to adjust the quantities back to sachets. Then the District Logistic Officer and the DN had to readjust the projections made by the DN, UNICEF and the NU for the delivery when it reaches the DMS and afterwards the PHU.

Due to previous excessive use of RUTF, a verification exercises was undertaken in all the districts and consequently a decision was made to decrease the deliveries by up to one half (it is unclear who was responsible for this decision with the potential for destroying the program). A lot of centres had their supply suddenly reduced by 50% as a penalty. This step mainly impacted the patients and their families within the districts. For example, the consumption was calculated as 80 sachets per month per child. If the caseload at the end of the month was 20 according to the monthly report, the new consumption was  $80 \text{ sachets} * 20 \text{ patients} * 3 \text{ mo.} = 32 \text{ cartons}$ , and this was then reduced by half if the “verification report” showed 50% less caseload during the verification exercises done by the students. The quality of the students’ data does not appear to have been assessed<sup>8</sup>.

We were asked if it is not possible to extrapolated survey results to calculate the caseload. However, according to experts, this is very inaccurate, nearly always overestimates the caseload and does not take into account changing circumstances since the precise time of the survey – for example the effect of seasonal changes in caseload. Thus, the only way should be by close supervision, verification that there are no “ghost-patients” or double registration and on job training.

## **Conclusion**

The DNs are the key persons for supervision and on job training; without this cadre of staff the program will not succeed. In each of the 4 districts visited fuel or vehicle problems were frequent impeding their ability to undertake supervisions visits; in particular for isolated OTPs or SCs.

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<sup>8</sup> The students were trained for 2 days with one day practical session; a test was administered and only 10-15 out of 30 who performed well were selected to participate. 2-3 top candidates were selected as supervisors. UNICEF staff provided spot check in most places including Moyamba.

Scaling up presented an opportunity to retrain the newly allocated staff within the structures and the new OTPs.

To minimize the detrimental effect of rotation of staff the only way is to integrate the IMAM protocol and the pathophysiology of severe malnutrition into the curricula of all the health professionals involved: nutritionists, nurses, aid nurses and doctors.

It should be recognised at every level from the Minister of Health to the most peripheral worker that a stock-out dramatically affects defaulting, enrolment and coverage detrimentally, but it also disrupts the treatment of the most vulnerable children and will cause death.

#### **Recommendations for UNICEF:**

- Keep the support of the IP to help the DN to supervise the opening of the new OTPs and conduct OJT until the scaling up and the rotation of new untrained staff is established.
- Add to the monthly report database the expected and received monthly reports, the date of opening of the centres and the RUTF consumption (Stock-in, stock-out, balance)
- The RUTF delivery should be for a 3-month period in the PHU: each delivery has a cost particularly during the rainy season and the length of time for delivery is increased.
- The stock should be calculated taking into account the variable used by the MoHS software “challenge” (in sachet) after calculation of consumption in sachet rounded into cartons to avoid opening of cartons before dispatch from Freetown.
- A “one month buffer-stock” is an absolute necessity in the district and the PHU. The different steps of the logistic channel have to be taken into account: it takes at least one month from ordering from a PHU to receipt of the delivery. If it is ever decided again to reduce by 50% the quantity according to the verification exercises, first there should be total transparency of these exercises conducted by the students after a 2 days training, second, the student data should be checked independently and third the penal reduction should be removed as soon as the monthly reports become realistic and the consumption becomes approximately 0.75cartons per child treated and lastly the problem should be corrected at the concerned level and not applied as a blanket penalty upon the whole program<sup>9</sup>.
- OTPs with bad performance should be clearly identified and OJT and supervision visits intensified

#### **Recommendations for the MoHS**

- Elimination of dysfunctions including stock-outs, delayed replacement of materials, failure to allocate fuel for supervision, inadequate training and replacement of trained staff with

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<sup>9</sup> For example, the consequence of the verification report was 50% reduction in the districts of Kenema and Bombali.

inexperienced and poorly trained staff (rotation) should be the key priorities that the DN should focus on with the DHMT and the higher authorities<sup>10</sup>;

- Allocate a vehicle for each DN with allocated fuel as long as inadequate pre-service training is in place according to the turn-over of staff and the scale up of the OTP and SC.
- Implement monthly standardised report for the DN's achievements to improve the coordination between national and district level.
- Need of a specific strategy when there is a stock-out of therapeutic products at district level but also at SC and OTP. There is no point to scale up and then to have increased frequency of stock-outs in the districts because of an increased strain on the logistics.
- The supplies of the material should be distributed as soon as possible: poor quality materials increase mistakes.
- Scale up should not be attempted when there is a high rate of rotation of staff with replacement by inexperienced and untrained persons.
- To minimize the detrimental effect of rotation of staff the only way is to integrate the IMAM protocol and the pathophysiology of severe malnutrition into the curricula of all the health professionals involved: nutritionists, nurses, aid nurses and doctors.

#### **Recommendations for PHU and hospitals**

- Attribute a SAM number on ALL the tools including the growth monitoring chart of the child after clear definition of the SAM N° - Do not change every year to 01 again without adding the last 2 numbers of the year for the registration number ex: 024-12 for year 2012 if the registration number is 024.

### **V.3 IMAM activities**

#### **a. Active screening**

The community screening is done by volunteers called “community screeners”. They are not receiving any incentives but some were given bicycles from the IP depending on the distance they have to cover to reach the villages they are responsible for. Their main task is to conduct active screening at community level once quarterly. Most of them do report on screening activities to the implementing partner, consisting mainly on communicating the number of children screened and among them the number of children moderately and severely malnourished. When detecting children with acute malnutrition (moderate or severe), they refer them to the nearest PHU. Unfortunately, except in Moyamba district, they do not fill any referral form

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<sup>10</sup> Without this being on a firm footing it will not be possible to roll out or scale up the programme without considerable help from several International/implementing Partners who have the necessary expertise

when they refer a child. It is therefore extremely difficult to evaluate their work as we do not have any data on the number of children referred who effectively reach the PHU and the number of children correctly diagnose as malnourished.

Active screening is also done by some members of the MSG but there is no report nor referral slips used.

#### **Recommendations for the IP:**

- Provide referral slips to the community screeners and ask the officer in charge in the PHU to collect and keep them
- Periodically analyse the screening data against the referral slips

#### **b. Passive screening**

The passive screening information is recorded in the U5 clinic registration book; weight and height are measured for each child less than 5 years of age and then WHZ is calculated, however this last step is often not completed because of the workload, time constraints and also because of the lack of training or/and rotation of staff: in 2 of 4 PHUs visited the column in the register was blank and the WHZ was not calculated or calculated later. Also the MUAC was not part of the routine screening and if taken was not written in the register because of lack of space.

Often drugs were prescribed without taking into account that this child was a SAM child and that some standard treatments and dosages were harmful for these patients. The SAM screened child sometimes was not automatically referred to the IMAM programme and recorded in the OTP register. There also was no link between the community screeners' referral and the passive screening register.

#### **Recommendations:**

- MUAC should be the PRIMARY method used for passive screening; only children with a MUAC less than 125mm should have their Weight and Height taken and their Z-score calculated<sup>11</sup>.
- All the staff should have personal MUAC tapes supplied to them
- The link between the community screeners and the passive screening and the IMAM programme should be established and documented;
- The administration of drugs for SAM children should not be addressed in the U5 register but the child should be referred to the OTP programme immediately.
- The register should be adapted to a more efficient screening strategy.

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<sup>11</sup> This is particularly important for children going to the U5 clinic at hospital level and sent as SAM in the Paediatric Ward (see the generic protocol version 2011).

### c. OTP

The summary of the evaluation for Moyamba, Kenema and Bombali districts is presented in table 8 and 9. Kono district was not included because the team in this district concentrated mainly on IYCF activities. The OTPs were visited during their day of operation where possible: we were then able to verify the number of patients and estimate the caseload at this time of the month and to compare it with the previous monthly report. The interviews were done during the consultation which was sometimes not easy for the staff or the supervisor of the OTP because of their workload.

**Table 8 – Summary of the evaluation of the OTP**

<i>Staff running the OTP</i>	MCH aid or SECHN with CHW/Community Screeners
<i>Training</i>	All trained in the last 2 years
<i>Protocol</i>	In Moyamba = 4/4 – Kenema: 3/4 – Bombali: only posters or abbreviated manual
<i>Tools</i>	In almost all the OTP, some materials had to be replaced (length board - old MUAC.)
<i>Referral</i>	No information on how the child came to the OTP
<i>Flow of patients - organisation</i>	Lack of organisation in particular for some centres: taking the weight using pans – note the weight on a piece of paper and then mixed with other: mistakes were found in 6 of 11 OTPs visited.
<i>Criteria of admission</i>	No major error in the calculation: 4/193 error which is very good;
<i>Admission MUAC average</i>	MUAC: 108mm
<i>Admission WHZ average</i>	WHZ: -3.1
<i>Number of oedema cases</i>	10/193 = 5% with a higher number in Bombali and after Moyamba
<i>Appetite Test (AT)</i>	The AT is often qualified as “Good” on the charts even if children died the next day or went to the SC. The AT needs more explanation. And was inadequately administered.
<i>Respiration rate</i>	Difficult to check in healthy patients.
<i>Frequency of the measurements</i>	The height/length was only taken when it was highlighted on the OTP charts, even if the length of time between one visit and the next one was longer than a month.
<i>Examination written</i>	Yes
<i>Routine drugs</i>	Given if present – If stock out of amoxicillin, sometimes replaced by cotrimoxazol
<i>Outcomes</i>	Often written as “good” or “SFP”; but in fact the child was not admitted in the SFP because of the restriction of caseloads by WFP: Bombali: 6 MAM & 20 SAM over 41 – Kenema: 11 MAM & 15 SAM over 57 – Moyamba: 13 MAM & 39 SAM over 75. Often written cured in the register: for 25% of them, no information
<i>Absence</i>	50% have an episode of absence due to stock out in Bombali and Kenema districts with no space left on the charts for almost all of the patients. Almost never any space left on the OTP charts for Kenema and Bombali districts.
<i>Home Visit</i>	None were documented or written on the chart.
<i>Stock card</i>	Updated but some errors in 2/3 OTP centres. RUTF are written on the stock carton and sachet; not easy to check your stock. Need to be revised.
<i>Internal transfer to the SC</i>	Changes of SAM N° which makes traceability of the children impossible from Active to Passive screening – Passive screening to OTP - OTP to SC – SC to OTP – OTP to SFP
<i>Monthly report</i>	Error of addition in some OTPs – often corrected by the DN and signed (the

	most common error was the n° beginning of the month which did not correspond to the number at the end of the previous month)
<i>Archive of the charts</i>	Classified by type and month of discharge and not by SAM N°. This did not simplify the evaluation. It took times to put them by registration/SAM N° and some charts were missing.
<i>Regular meeting</i>	With the community teams: HCD - CHW – Community screeners – MSG - etc.
<i>District meeting</i>	Every month or 2 month according to the distance of the centre
<i>Stock out</i>	Even during a stock out, the records showed that some children increased weight and even lost oedema! The question arises whether these are recording errors or real “cures” with no treatment.
<i>Weight during stock out</i>	Bombali: 14/16cases increase weight - 5 increased by >=400g Kenema: 35/44 increase weight and 6 >= 600g
<i>Weight gain during absence</i>	Moyamba: 19/23 increase weight (absence without stock out).
<i>Amount of RUTF given one or more time</i>	Bombali: (n= 40) 20=ok; 3 were given more; 17 were given less; Kenema: (n=60) 41 ok; 16 more; 11 less; Moyamba: (=76) 56 ok; 8 more (2 give F100); 12 less.
<i>Remarks</i>	A lot of charts had a massive weight and/or MUAC gain after a week (even up to 2kg) or after stock out with no action taken or remarks made

194 discharged OTP charts from the last months were entered on excel and analysed using SPSS and Excel. Table 9 shows some results. It was impossible to triage the charts by SAM number and the results are only for indication.

**Table 9 – Some nutrition indicators, district of Bombali – Kenema – Moyamba, May 2013**

<b>Indicators</b>	<b>Bombali (n=43)</b>	<b>Kenema (73)</b>	<b>Moyamba (77)</b>	<b>All (193)</b>
Admission weight average	6.8kg	7kg	6.5	6.7
Discharge MUAC average for the cured (mm)	120mm (+/-5)	120mm (+/-6)	122.5mm (+/-13)	121mm (+/-9)
Discharge WHZ average for the cured (Z)	-1.7Z (+/-1.5)	-1.5Z (+/-1.7)	-1.5Z	-1.5Z (+/-1.5)
Discharged cured (n)	14	41	47	102
Length of stay for the cured (days) <sup>12</sup>	27days (+/-15)	112days (+/-60)	42days (+/-26)	68days (+/-55)
Rate of weight gain for the cured (g/kg/d)	5g/kg/d (+/-3)	4.5g/kg/d (+/-7.5)	5.2g/kg/d (+/-2.5)	5g/kg/d (+/-2.9)

The gain of weight is around 5g/kg/day. However, we know that for each 5 kcal/kg/d above maintenance the gain will increase by 1g/kg/day using RUTF or F100. If you have an average of 5g/kg/d of weight gain, this means that the total intake will be 100kcal/kg/d to maintain body weight and an additional then 5kcal/g/d for each gram/kg/d of weight gained thus these children have taken 100kcal/kg/d plus (5kcal\*5g/kg/d) = 25kcal/kg/d: thus the total energy intake of the children was 125kcal/kg/d of RUTF plus any family food consumed by the children. This means that a minimum of 37.5% of the RUTF that is dispensed is being used for other purposes – particularly sharing within the family. If we decrease the

<sup>12</sup> Consequence of the previous stock out.

ration to 170kcal instead of 200kcal, this should not change the rate of weight gain but will decrease the number of sachets given to each child and hopefully reduce the intra & extra household sharing<sup>13</sup>. If the child has an average of 6.7kg, his/her consumption is 2sachets per day \* 30 = 60 sachets per child per month: this represents for the whole year of 2012: 60sachets\*33000=1,980,000/150 cartons = 13,200 cartons – if you used 80sachets per month, this will be: 80sachets\*33000=17,600 cartons, this means 4,400sachets less. Ethiopia – Niger – Ivory Coast – etc. have since the beginning of their IMAM program used 170kcal/kg/d per SAM out patients. Ethiopia did a study in 2007 to compare both 200 and 170kcal table and did not find any difference of gain of weight.

If the IMAM programme was using both WH or MUAC admission and discharge criteria for SAM children, the Supplementary Feeding Programs (SFP) was only using WH; the ex-SAM cured children were supposed to be followed after discharged in the SFP for 3 months. However to check if all the supposed children were in the SFP programme was not easy first because the SFP register was not easy to use for its format, the column allocated was very small and good eyes were required to read the names and the date of consultation; weight was only written once a month and apart from the name, there was no link between both programmes. Because the SFP programmes were limited to of a fixed number of children (and Pregnant/Lactating Women), few ex-SAM children were admitted to the programme; if they were admitted, the numerous stock-outs of Supercereal (CSB+) or RUSF were so frequent and unpredictable that it made the follow-up of SAM children completely inadequate.

The SFP ration was of 2.8 KG for 15 days for a daily ration of 250g of Supercereal and 20g of oil. The day of SFP was different to the OTP day so it was impossible to see and evaluate this program in depth. This means that the discharged children were often discharged with a MUAC less than 125mm from the SAM programme.

However with all the stock-outs rationing and restrictions the programme was still working after a fashion for a small number of patients – the staff reported that the community had a system (“bush telegraph”) to know if there were or not a stock out.

#### **Recommendations:**

- Improve the organisation of the OTP (anthropometric measurements, shelves for the different registers, table and chairs)
- When using Salter scale, basin should be used instead of hanging pants
- WHZ should only be calculated at admission and then the target weight should be used (see generic protocol version 2011). This would decrease the workload and the errors.
- Appetite test is only needed if the child is not gaining weight same for the respiration rate
- Admit the child in the health structure where the first SAM diagnose is made (see generic protocol version 2011)

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<sup>13</sup> the Valid/Fanta calculations are excessive, wasteful and encourage sharing

- OTP chart should be revised adding the SAM and registration N° - the referral from – the number of sachets given and the number of empty sachet given back – the health education – home visit – transfer to the SC and back – failure to respond to treatment
- Link with the SFP should be made and documented if any follow up of the cured ex SAM patients.
- There should be more accuracy of the reporting: monthly report should have the stock for the main drugs and RUTF consumption
- Archiving of the charts should be by SAM N°
- OTP/PHU supervisor far from the district town should be compensated for travelling to attend regular monthly meeting at district level.
- A “user friendly summary guide” including a list of drugs that should not be given to the SAM children should be available in all OTPs.
- Amoxicillin should be given/order in tablets or syrup but not in capsule
- The amount of RUTF to give per class of weight should be decreased to 170kcal/kg/day

It was impossible to do a deeper analysis of the discharged children and the consequence of the numerous stock outs that happen during year 2012 but it certainly should be done.

#### d. Stabilisation centre

We saw 5 MoHS Stabilisation Centres and 3 private ones. It is certainly the private ones which needed attention with exception of Ola During SC which had a lot of problems. The multi-charts have some problems like twice the surveillance – nothing to indicate the phases – no graph for the weight. Register are used in each facility for admission and discharge. However the SAM number is not respected and changed for each facility: it is more a registration number. Four SC over 8 had the protocol; one SC had the 1999 WHO modules and Magbente was using their own revised version of the protocol (2007). Only one structure did not have drinkable water for the mothers: they had to buy water. One SC was using the old High Energy Milk (HEM) but was incorrectly calling it F100. Six of the 8 SC had updated stock cards. Five over 8 SC run out of F100 and were lacking of an accurate scale of 10 to 20g precision. The Supplemental Suckling Technique for the less than 6 months was rarely accurately done: training and demonstration centre is needed. Toys were not seen during our mission. The SC information collected during the evaluation is summarized in Annex 4.

#### **Recommandations for the SC (when needed):**

##### Makeni governmental SC:

- Dr Kamara trained in 2007 worked for MSF – needs refresher training;
- Nurses should not rotate every 6 months – a rapid solution should be found.
- Passive screening in the U5 clinic should be improved;
- Material: Urgent needs of a good accurate scale (10 to 20g precision) for the follow up of the complicated cases and less than 6 month babies.

##### Kenema governmental SC:

- CHO needs to be retrained – good potential



- Posters need to be updated and as well as a user friendly summary guide
- Supplemental Suckling Technique should be introduced

#### Freetown Ola During governmental SC

- Intensive OJT supervision for the whole staff including doctors has to be done;
- Nursing aids should stop using reconstituted High Energy Milk and should not confuse this with F100 on the charts;
- The centre should NOT be used to teach students in its present state – it must be upgraded before receiving students.

#### Magbente SC – Panguma SC – Kamakea SC:

- The private SCs are not free; there is no need to do routine laboratory exam: they should be limited to the absolute essential ones; the use of expensive and not free drugs should be examined.
- For Panguma, the new doctor should be urgently trained with particular attention to the less than 6 months SAM protocol.

#### Overall Recommendations for the SC:

- The IPF tools and protocol need to be revised, in particular the sections on antibiotics and on complications.
- Posters and user-friendly summary guide should be available
- Proper scale with 10g precision has to be available in each SC as soon as possible;
- The rotation of staff should be kept to an absolute minimum – and the only reason for “rotation” should be the person leaving that centre;
- The SS Technique should be introduced in all the SC, with the help of Dr Kamara
- Stock out of any therapeutic products (F75 – F100 – RUTF) in the SC should not happen.
- There is NO need to do routine lab exam and then charge the patients in the private SC.

## V.4 IYCF activities

In total 18 mother support groups were interviewed in 4 districts. The number varies from one district to the other depending on the time available, the distance to reach the community and the number of person in the team. For instance, in Bombali district, team 1 was concentrating on IMAM activities and had time to interview only two MSG and two community screeners. The detailed is presented in the table below:

**Table 10 – Number of Mother Support Groups interviewed**

	Number of interviewed	MSG	Number of members present / Total number of members in the MSG						
			1	2	3	4	5	6	7
Moyamba	6		7/15	8/15	7/15	3/10	2/10	1/10	
Kenema	4		14/23	7/19	8/18	10/27			
Bombali	2		8/15	8/18					
Kono	6		16/25	14/15	23/31	30/30	29/30	30/30	28/30

### a. Operating mode of the Mother Support Group

The evaluation of the MSG did not focus on the quality of their activities as such. The aim was more to understand what work and what need to be improved.

The interviewed MSG were not formed at the same time; some were formed in 2009 while others were formed in 2012. However, the interviews with the MSG members revealed that the income generating activities, the benefits they get from the group (vegetables from the backyard garden, group loan, etc.), animal revolving funds and the recognition by the community were the major components to maintain members together in the group and make the group operational.

On the 18 interviewed MSG, the majority of them welcomed new members and only 4 MSG said that members left the group. The main reasons were that they were unable to pay the contribution for the group saving loan (3 MSG) or marriage (1 MSG). This information shows that the groups were working pretty well and that each member found a self-motivation to stay in the group. The new members joined the group because of its good reputation in the community. In some communities where there was no MSG, people were asking the implementing partners to come and help them to form one. When asking them why they want to form a MSG the main answer was “because this group is good for the community and it helps the members with income generating activities”.

Some interviewed MSG were very impressive. These particular groups can probably function with a less intensive monitoring which could allow the implementing partners to support new MSG in the district. These new groups should be formed **based on the demand** of the community.

The counselling cards were perceived as a **reward** within the MSG. However, in most of the MSG met, new members have been trained but the counselling cards were not distributed to all of them mainly because the IP did not make a request to UNICEF for a new set of cards. Members had therefore found a way to overpass this problem. They exchanged the cards between themselves, depending on the counselling session’s schedule.

We were not able to participate to any individual counselling or group counselling sessions but most of the members were able to explain the messages delivered by the counselling cards. They recognize the added-value of the group to solve problems together with the monitor from the implementing partner. The majority of the members mentioned that they have learnt a lot during the training about breastfeeding and complementary feeding but also about the importance of hygiene and sanitation. However, most of them recognized having difficulties to convince the community members to change their behaviour, especially men.

#### **Recommendations for the IP:**

- Propose various income generating activities to all MSG
- Distribute counselling cards to all trained members who practised at least 10 counselling sessions successfully
- Train the health facilities staff on c-IYCF to increase their involvement in this activity

## **b. Activities of the Mother Support Groups**

The selection of the MSG members is a key factor to ensure that IYCF messages reach the right persons and have an impact on the behavioural comporment change. The Sierra Leone's program has taken this into consideration when forming the MSG. Indeed, each group interviewed was composed of 10 to 31 members, including lactating women, pregnant mother, teenage girls, TBA, men and even religious leaders and PHU in charge in some communities. Each member has been selected based on volunteering and willingness to help the community to develop itself.

In big catchment areas, MSG members were coming from different villages in order to have at least one delegate by village of the catchment area.

The main tasks of the MSG members are community sensitization, house-to-house counselling and group counselling sessions. However, the majority of them said that house-to-house counselling was more efficient mainly because in the group session, not all the invited participants came and it was easier to speak and convince women and household members in face-to-face discussions. However, not all women accept to be part of an individual counselling session, the main reason being the lack of time.

In the best MSG counselling could be extended to other skills such as Care for Child Development. There are several studies that prove that Care for Child development improves the cognitive and psychomotor development of young children and accelerates the healing of those who are ill. IYCF counselling does already include responsive feeding as part of care for child development approach. It would therefore be interesting to reinforce this component in MSG ready for that.

Most of the members of the MSG are producing vegetables thanks to the backyard garden and seeds provided by the IP but most of them admitted that they were using the vegetables for selling. . However, in some of the groups changes were starting to happen and they were saying that they were keeping now some vegetables to feed their children and sell the rest.

When the decentralized monitoring for nutrition activities will be done in each district, we will be able to follow on a regular basis the evolution of the changes of the behaviour. This will be very helpful to redesign the activities and focus on the most needed ones. Up to now, baseline and endline surveys have been carried out only in Bombali district.

### **Recommendations for UNICEF & IP:**

- Introduce Care for Child Development (CCD) counselling in MSG ready for it
- Keep monitoring IYCF activities
- Carry out decentralized monitoring (baseline and endline) in every district

## **c. Sustainability of the Mother Support Groups**

When asking the MSG members on what can be improved in term of IYCF, they all had more or less the same requirements however surprisingly few of them asked for direct incentives (3 MSG out of 18). The list below shows the priorities in order from the highest to the lowest:

- Agricultural tools
- Micro-credit

- Seeds
- Income Generating Activities including machine to produce oil or gari, sewing machine, soap making
- Identification for recognition by the community: badge, cap, t-shirt, etc.
- Rain gear, umbrella, boots, torch light
- Life stock
- Financial support to buy some tools, seeds, etc.
- Counselling cards for those who do not have a set / Training of more MSG / Refresher training / Incentive / Motorbike
- Room to meet

In one of the best interviewed MSG there was at least one literate person keeping record for the group saving loan, writing notes for the record at each meeting, etc. They were able to save an impressive amount of money and were able to buy a goat to each member with the money saved. This group was very advance in term of autonomy compared to the other ones and the only difference we could notice is the literacy of some members.

When asking the implementing partners about the problem they have encountered with the MSG, the main one was the problem of leadership within the group. This was felt also during the evaluation. Some of the MSG leaders needed to be advised and coached by the IP's monitor to manage the group effectively.

The problem of different incentives given by different NGO was also raised as some members of the MSG moved from one group to another one according to the incentives provided.

#### **Recommendations for UNICEF & IP:**

- Link the MSG with agricultural partners (FAO, UNIDO, etc.) to enhance the agricultural activities within the MSG
- Link the MSG with education partners to propose literacy classes for the interested members and introduce of the MSG to care for child development activities
- Link the MSG with protection partners especially for teenage mothers
- Provide ID (badge, cap, t-shirt, etc.) to the members of the MSG
- Provide rain gear to the members of the MSG

## **VI. CONCLUSION**

This report is not a verification report, but also not a detailed in-depth evaluation of each centre visited due to the short time - but it gives an overview of the IMAM programme, its strength and weaknesses and gives specific recommendations.

The IMAM activities are now well accepted by the community and health professionals, even though the frequent stock-outs that occurred during these last 2 years have severely disrupted the program. It is extraordinary to see the small effect that a stock-out has on the recorded gains of weight of the SAM children. This is completely unexpected – but given the gross unrealistic variation of the recorded weights

(up to 2kg gains and losses each week!) it is impossible to tell whether these are real figures or the result of poor measurements/recording.

The other bottleneck is the leakage of RUTF which has detrimental effect on the moral of the nutrition team at national level as well as within the partners and the donor; the direct consequence is a stock out of the different nutrition products and drugs at district level; it is almost happening every 2 months in the visited districts. This can really be the failure of a programme like this.

In term of IYCF, a lot of work has been done since 2009 and the strategy designed for the MSG seems to be the right one. Even if these groups still need to be empowered to become sustainable and autonomous, it seems that they could make a difference in term of prevention of malnutrition. However, for this to happen an equal focus should to be put on PHU and hospitals to ensure that all levels disseminate the same messages to the community.

## **VII. OVERALL RECOMMENDATIONS**

- Revision of the IMAM protocol
- Scale-up will only be successful if the problems identified in this report are first addressed
- Retrain all the staff involved in IMAM to the revised protocol and the use of the tools
- Revise the method of verification involving all levels
- Revise and finalize the IYCF national strategy
- Train health workers on IYCF. The training should start with health workers already engaged in IYCF activities
- In districts with high micronutrients deficiencies, IYCF activities must be coupled with distribution of micronutrients powders (MNPs)
- Continue supporting the IP for implementation of the IYCF strategy

## REFERENCES

1. Terms of Reference for Evaluation of Partner Implemented Nutrition Projects in Sierra Leone
2. Evaluation Report, March 2010. Independent Evaluation of Management of Acute Malnutrition. Yvonne Grellety and Hélène Schwartz
3. UNICEF, May 2010. Trip Report, “review the existing comprehensive framework for large scale promotion of adequate IYCF practices in Sierra Leone”. Christiane Rudert
4. Report of a meeting to harmonise the criteria for monitoring and evaluation of the treatment of acute malnutrition in West and Central Africa, Dakar, December 2010. M Golden, Y Grellety, F Tchibindat, H Schwartz
5. UNICEF, 2011. Programming guide: Infant and young child feeding. UNICEF: New York.
6. MoHS, 2009. IYCF National Guideline and Strategy
7. UNICEF, 2010-2011. Results of 2010-2011 assessment of key actions for comprehensive infant and young child feeding programmes in 65 countries. UNICEF: New York.
8. UNICEF Sierra Leone, 2012. Level 3 Core Indicators Handbook - Tools and indicators for monitoring and evaluation of IYCF & CMAM programs
9. MoHS Sierra Leone, June 2012. Policy for Community Health Workers in Sierra Leone

## ANNEX 1 – Calendar of the evaluation mission

Date	Time	Activities	Venue
Saturday 18, May 2013	19:15	Arrival (Pick up and Accommodation for Helene Schwartz)	Aberdeen Bridge to SIMPLE GOAL GUEST HOUSE
Saturday 18, May 2013	21:10	Arrival (Pick up and Accommodation for Yvonne Grellety)	Aberdeen Bridge to SIMPLE GOAL GUEST HOUSE
Sunday 19, May 2013	11:00 am	Preparation with programme staff	UNICEF Office
Monday 20, May 2013	07:30 am	Pick-up from hotel	SIMPLE GOAL GUEST HOUSE
	8:00 – 8:30	Meeting with Chief of CSD	Chief CSD office
	10:00 –11:00	Meeting with the Representative and Deputy Representative	The Representative's office
	11:00 –12:30	Meeting with partners	UNICEF conference room
	14:30 –17:00	Meeting with the Food and Nutrition Programme MoHS	MoHS
Tuesday 21, May 2013	07:30	Pick up from hotel	SIMPLE GOAL GUEST HOUSE
	09:00 –10:30	Meeting with Nutrition Unit	UNICEF conference room
	11:00 –12:00	Visit Ola-During Hospital	
	14:00	Travel to Moyamba for 2 teams	
Field Trip			
Date	Team 1 CMAM		Team 2 IYCF
Wednesday 22, May 2013	Visits of the District Nutritionist and the DHMT		
	Visit of the District Management Store and DLO		
	Bauya OTP and MSG		
	Static OTP and MSG		
	Gandorhun SC	Moyamba MSG	
Thursday 23 May 2013	ACF team visit		
	Sunbehun OTP and MSG		
	Moyamba Junction OTP and MSG		
	Travel to Kenema and stay in Paloma Hotel		
Friday 24 May 2013	Visit of the DHMT and the DMO		
	Giema OTP and MSG		
	Torkpomdu OTP and MSG		
	Majihun OTP and MSG		
Saturday 25 May 2013	Visit of the DMS and DLO		
	Kenema SC and MSG		

		Panguma SC and MSG	
		Travel to Makeni	Travel to Kono
			Visit of the DN + Kono SC
Sunday 26 May 2013		Magbente SC	Literature review
		Makeni SC	
Monday 27 May 2013		Kamakae SC	Kono OTP
			Bumpeh MSG
			Njala MSG
			Bongenna MSG
Tuesday 28 May 2013		Makeni Lol OTP	Betema MSG
		Kalangba OTP	Konbayendeh MSG
		Visit to the Manager in Charge of Magbente SC	
Wednesday 29 May 2013		Visit to the U5 clinic of the Gvt Hospital and Dr Kamara in charge of the SC	Tomemburg MSG
		Visit to the DMS and the DMO of Bombali	Kangama MSG
		Makama OTP	Kangama OTP
		Travel to Freetown	
Date	Time	Activities	Venue
Monday 30, May 2013	08:00	Pick-up from the hotel	SIMPLE GOAL GUEST HOUSE
	08:30 –13:30	Field visit Western Area OTP	Field Visit
	14: 00–16:00	Meeting with the nutrition unit to discuss the findings and recommendations	Conference room
	16:00 –17:00	Debriefing with Regional Advisor Nutrition Felicite Tchibindat	Chief CSD office
Tuesday 31, May 2013	08:00	Pick up from Hotel	SIMPLE GOAL GUEST HOUSE
	09:00 –10:00	Meeting with the Chief CSD	UNICEF Office
	10:00 –17:00	Report writing	
Wednesday 01, June 2013	09:00	Pick up from Hotel	SIMPLE GOAL GUEST HOUSE
	10:00 –12:00	Discussion with the nutrition unit on how to best improve adherence to protocol and rational utilization of RUTF	UNICEF conference room



## ANNEX 2 – IYCF interview questionnaires

### QUESTIONNAIRE MOTHERS SUPPORT GROUP

Date : \_\_\_\_/\_\_\_\_/\_\_\_\_ District : \_\_\_\_\_ Village : \_\_\_\_\_

Referral OTP : \_\_\_\_\_

Personne/s interviewed and position within the MSG:

- \_\_\_\_\_ -  
- \_\_\_\_\_ -  
- \_\_\_\_\_ -  
- \_\_\_\_\_ -

When did you join the Mother Support Group? \_\_\_\_\_

How were you selected?

\_\_\_\_\_  
\_\_\_\_\_

What are the advantages for you to be part of a MSG?

\_\_\_\_\_  
\_\_\_\_\_

What are the disadvantages for you to be part of a MSG?

\_\_\_\_\_  
\_\_\_\_\_

How many times per month do you meet with the MSG? \_\_\_\_\_

Apart from this meeting, what is your role in term of IYCF? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

How long does a meeting last (on average)? \_\_\_\_\_

What do you think about the MSG meeting? (duration/efficacy/learning/...)

\_\_\_\_\_  
\_\_\_\_\_

How much time does this activity take you per month ? \_\_\_\_\_

What do you think about it (too long, would be happy to spend more time on it)?

\_\_\_\_\_  
\_\_\_\_\_

According to you, how can the MSG/IYCF be improved?

\_\_\_\_\_  
\_\_\_\_\_

What are your expectations?

\_\_\_\_\_  
\_\_\_\_\_

Are there some IYCF points that you have difficulty to explain to other/to understand?

\_\_\_\_\_  
\_\_\_\_\_

Do you have any tools for IYCF activities? YES NO

If yes, what kind of tools?

\_\_\_\_\_  
\_\_\_\_\_

Do you screen children for malnutrition? YES NO

If yes, how do you do?

\_\_\_\_\_

If the child is malnourished, what do you do?

\_\_\_\_\_

If the mother does not want to go to the SFP or OTP, what do you do?

\_\_\_\_\_

Do you do any report for this activity? YES NO

If yes, to whom do you send the report?

\_\_\_\_\_

Do you have a mobile phone ? YES NO

Do you know the community screener in your village? YES NO

What do you think of the MAM/SAM treatment?

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What do you think about RUTF and CSB?

RUTF \_\_\_\_\_ CSB

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Any complain from the mothers about these programs?

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How do you do to involve father and mother-in-law in the sensitization?

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Do you have a Village Saving Loan in your village?      YES      NO

If yes, what do you think about it?

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Do you receive any compensation from the community for the work you do related to IYCF?

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## QUESTIONNAIRE COMMUNITY SCREENERS

When have you been trained on screening? \_\_\_\_\_ By whom? \_\_\_\_\_

Do you have a supervisor? YES NO

If yes, who is he/she? \_\_\_\_\_ How often are you supervised? \_\_\_\_\_

Do you receive any motivation/remuneration? YES NO If yes, by whom? \_\_\_\_\_

If yes (money), how much? \_\_\_\_\_ If yes (in kind), what? \_\_\_\_\_

Do you have a bicycle? YES NO From whom did you get it? \_\_\_\_\_

How many screening do you do per month? \_\_\_\_\_

How many children do you screen on average per month? \_\_\_\_\_

Do you fill a screening report? YES NO

If yes, to whom do you send it? \_\_\_\_\_ How? \_\_\_\_\_

How often? \_\_\_\_\_

What do you do when you detect a severely malnourished child?

\_\_\_\_\_  
\_\_\_\_\_

What do you do when you detect a moderately malnourished child?

\_\_\_\_\_  
\_\_\_\_\_

If the mother refuses to go to the OTP or SFP, what do you do?

\_\_\_\_\_  
\_\_\_\_\_

Do you communicate with the PHU when referring children? YES NO

If yes, what mean of communication do you use? \_\_\_\_\_

After referring a child to the OTP, do you have any feedback about the admission of the child? YES NO

If yes, by whom are you informed? \_\_\_\_\_

If the OTP did not admit the child, what do you do? \_\_\_\_\_

Have you already encountered a child who has abandoned the program? YES NO

If yes, how did you know that the child abandoned?

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Do you do some home visiting? YES NO

If yes, what is the reason for the home visit?

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Do you write any home visit report? YES NO

When a child has been discharged from the OTP, do you still have a role to play?

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What is your relationship with the MSG in the community?

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What do you think of this program?

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Do you have any suggestions to improve the program?

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## Annex 3 – List of the IYCF monthly indicators

1. % of villages in CMAM catchment area with at least one active volunteer screener and referral of SAM cases per chiefdom
2. % of children in CMAM catchment areas screened at least 3 times a year for acute malnutrition
3. % of SAM children referred for treatment who actually attend SC and OTP
4. % of MSG with at least 2 members trained on IYCF counselling and active group facilitation skills
5. % of women with children less than 6 months that report at least one contact with MSG
6. % of women with children 6 – 24 month reporting to have 2 contacts with MSG
7. % of women with children less than 24 months reporting to have sex during breastfeeding
8. % of MSG with active participation of men in MSG activities
9. % of MSG with at least one trained male IYCF counsellor as member
10. % of MSG with at least one unmarried teenage mother as member
11. % of communities in the target communities that have a MSG / chiefdom

## ANNEX 4 – Summary of the SC evaluation

SC'Name	Makeni MoHS SC	Kamakwea Private SC	Magbente Private SC	Kenema MoHS SC	Panguma Private SC	Moyamba MoHS SC	Freetown Ola During MoHS SC
<b>Staff</b>	6 SECHN – 4 nursing aids – 1 doctor -	1 CHO 5 nurse aids	1 nurse 2 senior nurses 5 nursing aids	1 CHO 9 nurses 3 nursing aids	3 SECHN 1 untrained doctor 2 nursing aids	3 SECHN	9 nurses 3 nursing aids 2 cleaners
<b>Rotation</b>	Every 6 months	Change of the trained nurse	No	?		New nurse	
<b>Training</b>	1/6 nurses Doctor trained in 2007	OJT only Needs at least 4 days OJT	2007	2010	2009 – 2010	OJT only by the IP and DN	2/9 trained staff Dr not trained
<b>Structure</b>	Service next to the Paediatric Ward (PW) Needs cleaning		Service far from the PW	Good	Part of the PW	Ok	Ok
<b>Passive screening</b>	In the Under 5 clinic but no length board – no WHZ & MUAC done - no oedema check <sup>14</sup>	They do not know how to assess the degree of oedema	From the OTP or admit spontaneous ly	?	?	In U5 clinic	Dr (OPD) used the old NCHS Z- score table in the IMCI book for hospital
<b>Look up tables</b>	No RUTF feeding table in Transition Phase (TP)	F100 in TP with 8 and 6 and 5 feeds	F100 look up table - No RUTF feeding table in TP	Yes	Ok	Ok	F100 written but in fact it is not F100
<b>Posters</b>	Nothing on <6mo babies & complications - mix with old posters	Old poster on F100	Old ones to prepare the F75 with the scoops	Yes	Ok	Ok	Not the right ones
<b>Multi-chart</b>	Filled	Run out – so made charts Then got the right ones, however still using their own old ones	Filled	Yes	Ok	OK	Yes but use also the PW files for each patient.
<b>Laboratory test</b>		Routinely	Routinely done stools – WBC – Malaria test	Yes	Systematic lab test: expense on the mother bill	No	Routinely
<b>Products</b>	F100 – F75 – RUTF	F75 – RUTF No resomal No F100	F75 – RUTF No F100: use of powder milk bought in the market	No F100: use of RUTF	F75 - F100 – RUTF	F75 - F100 – RUTF	No F100
<b>Routine drugs</b>	Sometimes no artesunate for	Free drugs given: patients	All used without	Amoxicilline	Nothing is free -	Ok	Use everything -

<sup>14</sup> According to Dr in charge, some SAM children admitted in PW instead of SC

	cerebral malaria – give quinine – 2 <sup>nd</sup> line antibiotic: gentamicin	buy in the drugstore & WHI reimburse them	taking into account the protocol – Amoxicilline is free				Doctor not trained
<b>Other drugs</b>	Becovit - zinc paracetamol metronidazole – chloramphenicol – cotrimoxazole - ceftriaxone		Paracetamol - zinc metronidazol e-becovit – zinc –	Chloramphenicol gentamicine ceftriaxone phenobarbitone metronidazole quinine- vitamine C	Promethazine zinc ketoconazole praziquantel metronidazole Paracetamol	Becovit	All the different drugs that should not be used
<b>Preparation of the feeds</b>	Ok but use the scoops and water too hot			Ok	Ok except water too hot	Ok	No
<b>Feeding</b>	Use spoons	Give porridge & family meal from Phase 1 to discharge	Use of spoons	Use of spoons – Introduce F100 in TP and then RUTF	Use of spoons	Need feeding table of 8 feeds for small babies	
<b>P1</b>	Only 6 feeds				Only 6 feeds	Should be able to switch from 6 to 8 feeds if needed	?
<b>TP</b>	Use always F100 for 1 to 2 days No table for TP for PPN				Use of F100		Use of HEM but write F100 on the multicharts
<b>Type of exit</b>	Not written on the chart			Often not written Missing nformation		Ok but a lot of deaths in May	