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FINAL EVALUATION OF DAP NO-COST EXTENSION (HEALTH AND NUTRITION)

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Growth Monitoring Voulunteers in Phalombe. (*Picture taken by CRS - 2005*)

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ACRONYMS

ARI	Acute Respiratory Infections
BCG	Bacilli Calmette-Guérin (TB vaccine)
CADECOM	Catholic Development Commission in Malawi
C-IMCI	Community Integrated Management of Childhood Illnesses
CMS	Central Medical Stores
CRS	Catholic Relief Services
CU2	Children Under 2
CU5	Children Under 5
DAP	Development Assistance Program
DHO	District Health Office
DPD	Director of Planning and Development
DPT	Diphtheria- Tetanus-Pertussis vaccine
DRF	Drug Revolving Fund
DRFV	Drug Revolving Fund Volunteer
EPA	Extension Planning Area
FACS	Food Assisted Child Survival
foCi	Facilitators of Change interventions
FY	Financial Year
GMV	Growth Monitoring Volunteer
HSA	Health Surveillance Assistant
HAZ	Height for Age Z-score
IEC	Information Education and Communication
IMCI	Integrated Management of Childhood Illnesses
IPTT	Indicator Performance Tracking Table
IR	Intermediate Result
ITN	Insecticide Treated Net
KPC	Knowledge, Practice and Coverage
M&E	Monitoring and Evaluation
MCHC	Maternal and Child Health Coordinator
MDHS	Malawi Demographic Health Survey
MoHP	Ministry of Health and Population
NEC	National Economic Council
NRM	Natural Resources Management
NSO	National Statistical Office
ORS	Oral Rehydration Salts
SO	Strategic Objective
SPSS	Statistical Package for Social Sciences
TEO	Tetracycline Eye Ointment
USAID	United States Agency for International Development
UNV	United Nations Volunteer
VAM	Vulnerability Assessment Mapping
VHC	Village Health Committee
WAZ	Weight-for-Age Z-score
WHZ	Weight-for-Height Z-score

EXECUTIVE SUMMARY

In line with USAID requirements, CRS was scheduled to conduct a final evaluation of the DAP No-Cost Extension of the Health and Nutrition sub-goal, between August and September 2005. The Development Assistance Program (DAP) was an integrated program funded by the United States Agency for International Development (USAID). It was initiated by the Catholic Relief Services (CRS) and its principal development partner in Malawi, the Catholic Development Commission in Malawi (CADECOM). In 2004, CRS and Blantyre CADECOM completed this DAP, which included agriculture, safety net, and health and nutrition programming. However, due to the Southern African food emergency of financial year 2002-2003, the health and nutrition component (which had started six months later than originally expected) had not operated long enough to produce an impact by the end of financial year 2004. Subsequently, CRS sought a one-year extension of this strategic objective and received permission to continue the health and nutrition activities using the remainder of the initial allocated funds.

The following is a summative evaluation of this project. It measured the degree of accomplishment of the strategic objective, intermediate results, positive and negative impacts, identified lessons learned, indicated the level of sustainability, and provided points of reflection for USAID, CRS, its partners and participating communities.

The goal of the project was "to enhance food security of vulnerable populations" in two of the most food insecure areas in Malawi which included Mpinda and Tamani Extension Planning Areas (EPA) in Phalombe district and Kalambo in Chikwawa district (which was later dropped due to partnership differences).

The purpose of the Health and Nutrition sub-goal was to attain improved food utilization. The Strategic Objective 1 (SO1) was improved nutritional health status of young children, with the following Intermediate Results (IR):

i. **IR1.1:** Improved recognition and management of malnutrition in children under five years of age.
ii. **IR1.2:** Improved recognition and management of sick children focusing on danger signs, diarrhea and malaria.
iii. **IR1.3:** Improved accessibility and usage of ITNs for malaria prevention in children under five years old.
iv. **IR1.4:** Increase potable water supply by providing 3 new water sources and rehabilitation of six faulty water sources.

Despite the unclear project baseline situation with some of the indicators, there is adequate basis to conclude that the project registered substantial success in relation to its objectives and targets. Within the Health and Nutrition Project, there was marked improvement in growth monitoring attendance at the end of the project as compared to the baseline situation. Based on the sampled population and confirmed with physical checking of growth monitoring cards, 59.0% of the children attended growth monitoring sessions consistently within the previous 4 months as compared to 53.3% at baseline. Focus group discussions with caretakers of under children conducted as part of the evaluation, hailed the introduction of community-based growth monitoring system introduced by the Health and Nutrition Project as a valuable service. The FGD's highly commended the improved accessibility of the services currently being provided through this scheme, although they wished the scope could be expanded to include vaccinations. Although there was provision for improved accessibility of vaccination services, closer to home through mobile clinics, other communities still had to make the long trip to the Health Centre in the hope of finding vaccines, which were at times in short supply during the project period.

Despite lack of shared understanding in handling of Growth Monitoring Volunteer (GMV) - health centre forms, the GMV-health centre referral system was fairly functional in the three health centers in the impact area and proved useful in helping to improve the health of CU2. Apart from Nambazo Health Centre, management of all health centers were informed and servicing the referral system. In Nambazo, there appeared to have been inadequate effort to publicize the system with management of the Health Centre, hence the system was not fully accepted and appreciated there.

In terms of capacity building; ITN, GMV and DRF received training in the areas of work and this resulted in enhanced work performance. Specifically, GMV's were able to recognize the signs of bilateral edema and severe malnutrition, which include swelling and pitting.

The proportion of caretakers giving their children more fluids than normal when they suffer from diarrhea surpassed the project target of 60.0%, thus reflecting substantial improvement over the baseline situation. In general, most caretakers gave more fluids and food than normal when the child suffered from diarrhea.

The provision starter-pack ITN through community-based distribution points improved accessibility and use of ITNs in the project area. Seventy-six percent (75.7%) of caretakers of CU2 had mosquito nets compared to only 19.2% at baseline. As result of health talks provided during growth monitoring sessions, a majority of caretakers (93.9%) were able to mention mosquito bites as the cause of malaria, surpassing the 80% project target. With respect to ITN use for CU2, majority of them slept under the net either alone, with the caretaker or caretaker along with the husband/partner.

The general emerging trend in terms of water supply is that majority of the households in the project area have access to potable water during both rainy and dry seasons, despite the inadequate potable water facilities in the area. Common protected water sources included public and yard/plot well, piped water (public tap) and piped water (dwelling/yard/plot). Unprotected sources included rain water, surface water (spring, river or stream) and water from open public well. Although a majority of households in the project area were accessing potable water, a number of households were still unable to access safe water, leaving them with water from surface streams and other unprotected sources as the only alternative.

The project has largely achieved is objectives, yet there were some challenges which undermined its potential as well as sustainability. One of the challenges was the inadequate integration and clarity on the role of community leaders. This is a big issue as the decentralization system is yet to fully function across the various sectors (including health) at assembly level. The ambiguity surrounding the role of traditional leaders in relation to the new structures at community level, such as village development committees (VDC's), will continue to be a potential recipe for role conflicts. At community leadership level, this may drastically undermine the success and sustainability of development initiatives. Omission on the provision for capacity building of health center personnel in the Integrated Management of Childhood Illnesses (IMCI) approach, by the project, may critically affect the DHO-structure's ability to provide effective long-term support of the GMV's, DRFV's and the referral system. Cash-flow problems (linked to administrative process) at the field level contributed to delays in implementing the project. This reduced the ability for field staff to implement more activities, given the short space of time allowed for completing the project. The high staff turnover at Health Coordinator level, may have also negatively contributed to the effectiveness in carrying out activities during the earlier phases of the project. However this situation stabilized in time for the project to register some significant success in achieving most of the project targets as shown in this report.

SECTION ONE: INTRODUCTION

1.1. Brief Description of the Development Assistance Program

The Development Assistance Program (DAP) is an integrated program that was initiated by the Catholic Relief Services (CRS) and its principal development partner in Malawi, the Catholic Development Commission in Malawi (CADECOM). The goal of the project was "to enhance food security of vulnerable populations" in two of the most food insecure areas in Malawi: Mpinda and Tamani Extension Planning Areas (EPA) in Phalombe district and Kalambo in Chikwawa district. Specifically, the three EPAs were selected based on the following criteria (i) unavailability of NGOs serving the communities (ii) high incidence of poverty (based on Vulnerability Assessment Mapping (VAM)) and (iii) accessibility through government district level operations and physical accessibility; and community receptiveness. The DAP aimed at achieving the following Strategic Objectives (SOs) and Sub-Goals (DAP 1999):

Sub-Goal One: Sustainable Increase in Food Availability

SO1: Increased agricultural production by smallholder farmers

SO2: Improved Natural Resource Management (NRM)

Sub-Goal Two: To Improve Food Utilization

SO3: Improved nutritional status of young children

Sub-Goal Three: Improved Access to Food

SO4: Improved safety net for destitute children and other vulnerable children

In order to achieve these Strategic Objectives, DAP covered 40 villages in Chikwawa and 44 villages in Phalombe. The project targeted 11, 400 households with an average landholding size of 0.5 ha or less and over 6, 000 orphans through community-based orphan care organizations.

In 2004, CRS and Blantyre CADECOM completed a five-year Development Activity Program (DAP) that included agriculture, safety nets, health and nutrition programming. Due to additional activities related to the Southern African food emergency of FY2002-2003, the health and nutrition component started six months later than originally planned. This component had not operated long enough to achieve objectives by the end of FY2004. Consequently, CRS requested and was granted permission for a one-year no-cost extension of this strategic component of the DAP.

The DAP No-Cost Extension for FY2005 modified the intermediate results based on a Knowledge Practice and Coverage (KPC) survey conducted in May 2003. The project strategy shifted away from the Food Assisted Child Survival (FACS) model to a Community-Based Child Survival model, focusing on combating malnutrition, diarrhea, danger signs, and malaria through interventions such as growth monitoring, community provision of basic medicines, promotion of insecticide-treated-nets (ITNs), and provision of potable water.

In line with USAID requirements, CRS was scheduled to conduct a final evaluation of the DAP No-Cost Extension between August and September 2005. This summative evaluation would measure the degree of accomplishment of the strategic objective, intermediate results, positive and negative impacts, identified lessons learned, indicate the level of sustainability, and provide recommendations for USAID, CRS, its partners and participating communities.

1.2. Project Goal and Strategic Objective

The purpose of the Health and Nutrition sub-goal was to attain improved food utilization. The Strategic Objective 3 (SO3) was improved nutritional health status of young children. The following were the Intermediate Results (IR):

i. **IR1.1:** Improved recognition and management of malnutrition in children under five years of age.
ii. **IR1.2:** Improved recognition and management of sick children focusing on danger signs, diarrhea and malaria.
iii. **IR1.3:** Improved accessibility and usage of ITNs for malaria prevention in children under five years old (CU5)[1].
iv. **IR1.4:** Increase potable water supply by providing 3 new water sources and rehabilitation of 6 faulty water sources.

1.3. Specific Roles and Responsibilities for the Evaluation Core Team

CRS, Blantyre CADECOM and facilitators of Change interventions (foCi) formed the evaluation core team with specific roles and responsibilities (see Annex 1) as follows:

1.4. Consultant - foCi

In collaboration with CRS/Malawi and the partner (including the evaluation team), foCi was responsible for:

- Giving regular feedback to CRS Malawi on progress.
- Conducting literature and secondary data review of relevant documents.
- Facilitation of an orientation session for the evaluation team.
- Finalization of data collection tools before the commencement of data collection
- Oversight of the initial data collection process to ensure effective management of data by evaluation team.
- Analysis of data and production of draft report on findings.
- Incorporation of feedback from CRS Malawi on the draft report in order to produce final report.

1.5. Catholic Relief Services Malawi

The role of CRS in this evaluation included:

- Selection and hiring of consultants (foCi) to carry out the final evaluation.
- Provision of guidance and management of all aspects of the consultants' work by ensuring that outputs are completed in a satisfactory and timely manner.
- Provision of access to all project files and data relevant to achieving the final evaluation objectives.
- Provision of logistical support for the evaluation team to be able to access the communities and data collection sites.
- Generate a budget for the evaluation and manage financial expenditures.

[1] Note that the indicators referred to Under 5 children but the evaluation, using the KPC methodology focused on under 2 children

1.6. Blantyre CADECOM

As the implementing partner for CRS, the role of Blantyre CADECOM was to:

- Provide access to project files and data relevant to the achievement of evaluation objectives.
- Participate in the gathering of existing information.
- Provide comments on the draft evaluation report before it is finalized.
- Inform all stakeholders about the results of the final evaluation.

1.7. Methodology and Approach

The Knowledge, Practices and Coverage (KPC) methodology used in this final evaluation was based on the following systematic process:

- **Assessing achievement or progress towards objectives:** Firstly, the evaluation approach emphasized on assessing whether objectives or set targets were achieved.
- **Demonstrating change:** Within the context of this KPC study, change has been demonstrated by comparing outcome indicators with baseline indicators, where the same were available. Alternatively, the demonstration of change was done by comparing with set targets, where the same was available.
- **Demonstrating causality:** In evaluation of this nature, demonstrating the causal role of an intervention in effecting an observed change requires that other (spurious) factors that could also have produced the change be accounted for in the study design. Ideally, results in a non-intervention area should have been compared with those in an intervention area for causality to be ascertained (Sarriot et.al., 1999). Due to unavailability of non-intervention area indicators, it was not possible to ascertain causality in this evaluation. However, efforts have been made to make comparisons with national statistics, where the same are available.

Overall, the following key framework questions were the primary guide:

- Were objectives reached in the project implementation area?
- Can the project demonstrate an improvement over time in knowledge, practices, or coverage, from the baseline levels?
- Can the program demonstrate its specific responsibility in an observed change between baseline and end-point evaluation?

1.8. The KPC Standard Sampling Format and Data Collection Methods

In its original format as developed by the Johns Hopkins University, School of Public Health, Department of International Health, the knowledge, practice and coverage cluster-survey approach was designed to cover 30 clusters of 10 households each.

Household questionnaire: A total of 30 villages (Annex 2) were sampled from the impact area. Based on pre-generated project performance indicators and in order to ensure representativeness, the villages were grouped into:

- *High project success* as defined by least cases of malnutrition (based on growth monitoring cards – weight-for-age), highest usage of ITNs and best access to potable water

- ☞ *Medium project success* as defined by moderate cases of malnutrition cases, moderate usage of ITNs and moderate access to potable water
- ☞ *Low project success* as defined by highest cases of malnutrition cases, minimal usage of ITNs and lowest access to potable water

Ten (10) CU2 from each village were randomly sampled using Growth Monitoring Volunteer (GMV) registers.

Focus Group Discussions (FGD): A total of 6 focus group discussions were carried out. Each health centre had 2 FGDs, one with caretakers of CU2, and the other comprising volunteers, committees and community leadership. These representative FGDs were constituted based on project success groupings[2].

Key Informant Interviews (KII): were conducted with volunteers (Growth Monitoring, Drug Revolving Fund, Insecticide Treated Nets and Village Health Committees), Health Centre personnel, District Health Office, community leaders, CADECOM staff, CRS Staff and local leaders (Village headmen and Traditional Authority). The list of people who were consulted is annexed (Annex 3).

Literature review: A review of key project documents of was carried out in order to get acquainted with the project design, progress and objectives[3].

1.9. Development of research tools

A questionnaire (English version) was drafted in consultation with core evaluation team members. An orientation session for data enumerators was organized during which the questionnaire was reviewed and pre-tested in villages around Old Airport in Lilongwe peri-urban. During the same orientation, the questionnaire was translated into Chichewa. The Chichewa version of the questionnaire was used for the household survey.

1.10. Data management

a. Field Data Collection

Data was collected using a questionnaire which comprised categorical and continuous variables. On average, each of the 10 enumerators interviewed 6 respondents per day[4]. Completed questionnaires were checked by supervisors on a daily basis for correctness, consistency and legibility. All questionnaires that were found to be incorrect, inconsistent or ineligible were referred back to particular enumerators for appropriate action. Other minor questionnaire or logistical issues were also resolved through daily meetings between CRS, CADECOM, enumerators and foCi consultants.

b. Data entry, cleaning and analysis

In preparation for the data entry, a database in SPSS Version 9.0 was created. As a way of identification, questionnaires were serially numbered. The data entry was done by two data entry clerks. Once data entry was finished, data cleaning followed. A random sample of 30 captured hard copy questionnaires was selected and checked against the electronic database, variable by variable. Out of range codes were picked and corrected accordingly. For the purposes of data

2 High, medium or low project success

3 See Key reference documents

4 Questionnaire had 12 sections and seventy-three (73) questions. Each questionnaire interview (including consent form) took from around 50-60 minutes

cleaning, all categorical variables were subjected to frequency analysis in order to pick out of range codes which were also corrected accordingly.

Prior to the data analysis, the SPSS base was converted into dBASE III for accessibility in Epi Info Version 3.2.2. Weight-for-height (WHZ), weight-for-age (WAZ) and height-for-age (HAZ) z-scores were generated using Epi Info, added to the file and exported to SPSS for further analysis. Some continuous variables such as z-scores were recoded into categorical variables. Multiple response variable sets such as sources of livelihood, water and medical assistance and means of disease transmission and prevention were defined in readiness for multiple response analysis. The bulk of the statistical analysis was carried out in SPSS Version 9.0. Consistent with evaluation objectives, descriptive statistics were extensively used for the evaluation.

1.11. Composition of the Core Evaluation Team

This end of project evaluation for the Health and Nutrition Project No-Cost Extension was conducted under the team leadership of Sam Matemba of facilitators of Change interventions (foCi). Other team members included Alfred Dzilankhulani of foCi, the CRS Health and Nutrition Program Manager – Kathryn Lockwood, CRS Child Survival Project Officer – Kwame Msapato, CRS M&E Technical Advisor – Jennifer Lentfer and Blantyre CADECOM (Partner) Technical Health Coordinators on site – Rosemary Mpetiwa and Patricia Kamba Chirombo

1.12. Issues, Challenges and Limitations

- **Problematic baseline data** – In order to be objective, this evaluation needed to reflect on the baseline situation. The baseline study that was carried out in 2003 with a view to benchmark indicators faced some challenges. Even though efforts were made to analyze the baseline data available and use the subsequent results in the evaluation process, there still remained serious gaps in the baseline information. The consultants would therefore like to share the following observations in relation to the baseline data:

  - Statistically, the chosen KPC baseline sample size of 73 was too small (even by KPC methodological standards). The ideal sample size should have been …… The small sample rendered itself tricky for sub-group comparisons in general and in the event of missing cases which are normal even in a small sample size.
  - Observations during review of the completed baseline questionnaires showed that, not all responses to relevant questions were recorded. This increased the number of missing cases resulting in fewer than 30 valid cases for analysis. Statistical data where sample size is fewer than 30, in this case, does not give conclusive results. Subsequently, no variable analysis was done on issues where N, for the baseline data available, was less than 30.
  - In consultation with the Core Evaluation Team, some questions that were used in the baseline survey questionnaire were considered not necessary. Consequently, relevant questions were kept or rephrased while those not considered relevant were dropped altogether in the evaluation study questionnaire. As a result of these changes, some of the data collected at baseline and end of project evaluation did not have direct comparators.

- **Information management** - birth, vaccinations and attendance records had problems:

  - Upon expiry of birth cards and acquiring new ones, transfer of information to new cards was erroneously done e.g. some cards indicated vaccinations to have been done earlier than the recorded birth date.
  - Contrary to Project Officers' advice for Growth Monitoring Volunteers (GMV) to maintain a register of all CU2 in the area (whether attending sessions or not), the scope of information recorded in growth monitoring registers that were checked, covered

only children who attended growth monitoring sessions. As a result, sampling frame had to be generated by the field evaluation teams, hence took some time.

SECTION TWO: FINDINGS

2.1. DEMOGRAPHIC DESCRIPTION OF SAMPLE POPULATION

A total of 300 CU2 years were sampled and their caretakers interviewed. The median and mean age (months) of the sampled children were 14.0 and 14.1 (SD=5.36), respectively. Overall, 15.6% of the sampled children were aged between 6-8 months, 20.7% were aged between 9-11 months while 63.6% were aged between 12-24 months. The majority of respondents (99.1%) were mothers to the children and the median caretaker age was 24.0 years (mean= 25.4, SD=6.26). Fifty eight percent (58.0%) of the children were female while the rest were male. Less than 1.0% of the children lost their mothers while 3.0% had lost their father while no child had lost both father and mother.

Table 1: Caretaker Education Level Details (N=300)

Highest Education Level Completed	*Percentage (%)*
1. Never been to school	8.7
2. Primary or adult literacy	7.7
3. Secondary	79.5
4. College or university	4.0

Education: Overall, majority (91.3%) of caretakers had completed at least primary level education. About eighty percent (79.5%) had completed some kind of secondary education, 4.0% college education while eight percent (7.7%) had completed primary level education. Only 8.7% had never been to school (Table 1). It is evident from this study that the caretaker education levels are higher than national literacy trends. Although this study was never meant to include a comparative analysis of growth caretakers who took their children (wards) for growth monitoring and those who didn't, it would appear that growth monitoring was more valued by educated caretakers, probably because they understood its importance more than the uneducated caretakers. This finding is unlikely though. The high completed education level among the sampled population could be attributed to inaccurate sampling procedure.

Table 2: Household Sources of Livelihood

Livelihood source	*Percentage (%)*
Farming	91.7
Ganyu (*piecework*)	71.3
Selling foods	26.0
Shop keeper/vendor	5.0
Fishing	4.7
Handicrafts	2.7
Salaried worker	1.0
Servant/house-worker	0.3
Remittance from relatives/friends	0.3

Sources of Livelihood: Sources of livelihood were assessed by asking respondents to mention their livelihood sources and a multiple response analysis was done on the responses.

The three most common sources of livelihood were farming (91.7%), ganyu (71.3%) and food selling. Other sources include shop-keeping/vending, fishing in Lake Chirwa and handicrafts (Table 2).

Table 3: Person Caring for CU2 children when Caretaker is Away from Home

Caretaker	*Percentage (%)*
Grandparents	40.7
Older siblings	18.7
Husband	16.0
None, mother	15.3
Other relatives	7.7

Care for CU2 when caretaker is away: Table 3 summarizes people who are entrusted to take care of the child when the caretaker is away from home.

Grand parents were commonly left with the child-caring task when the caretaker is away from home.

2.2. PROGRESS TOWARDS OBJECTIVES AND TARGETS

2.2.1. IR1.1: Recognition and Management of Malnutrition in CU2

2.2.1.1. Description of intermediate result 1.1 indicators and targets

Under the Health and Nutrition Project sub-goal to attain improved food utilization, the strategic objective 1 (SO1) of the Health and Nutrition Project was improved nutritional status of young children. The Intermediate Result 1.1 (IR1.1) was improved recognition and management of malnutrition in children under five years (CU5). Impact indicators for IR1.1 are annexed (Annex 6 – IPTT). However, impact areas for this intermediate result were as follows:

- Proportion (%) of mothers with CU2 who go to growth monitoring consistently in the last 4 months
- Proportion (%) of GMVs who recognize bilateral edema and wasting as severe malnutrition
- Proportion (%) of mothers with CU2 who when referred by GMV go to health centre

2.2.1.2. Project Achievements in relation to IR1.1

Consistency in growth monitoring attendance: Growth monitoring and promotion is a strategy of enabling caretakers to visualize growth or lack of growth, and to receive specific, relevant and practical guidance in ways in which the household and community can act to ensure health and continued growth of the child (IDRC, 1992 as quoted in I-Life Program Malawi Draft Baseline Report, 2005). Growth monitoring promotion is regarded as a preventive and promotional strategy aimed at taking specific action to avert poor physical and psychosocial development of a child.

Within the Health and Nutrition Project, there has been marked improvement in growth monitoring attendance at the end of the project as compared to the baseline situation. Within the sampled population and confirmed with physical checking of growth monitoring cards, 59.0% of the children attended growth monitoring sessions consistently within the previous 4 months as compared to 53.3% at baseline (Table 4). FGD with caretakers of CU2 conducted as part of the evaluation hailed the introduction of community-based growth monitoring system introduced by the Health and Nutrition Project. Caretakers and mothers found the system less burdening since it involved growth monitoring attendance within the community rather than walking to the nearest health centre, which generally took a minimum of 1 hour and maximum of 3 hours for those in the health centre catchment periphery. Although there may be other reasons for the project failure to accomplish the target, the Health and Nutrition Project faced operational problems such as cash flow problems, late start of project and field staff turn-over.

Table 4: Has the Child Been Weighed Consistently for the Past 4 Months?

	Proportion (%)	
	Baseline	*Evaluation*
No	45.0	41.0
Yes	53.3	59.0
Don't know or not sure	1.7	(did not measure)

Findings from FGDs with caretakers of CU2 indicated that growth monitoring sessions in the project greatly improved early identification of minor illnesses which were in most cases managed at home or referred health facility if serious. Further, through the growth monitoring sessions, GMVs were able to give health education to mothers or caretakers, particularly in relation to

symptoms and signs of malnutrition and bilateral edema, diarrhea, worm infestation and other danger signs.

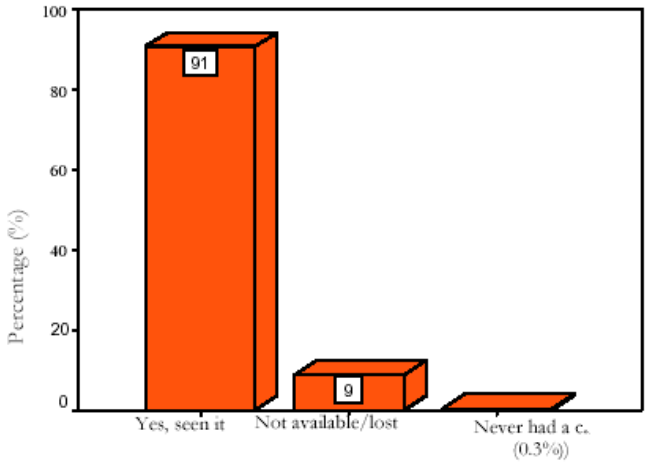
GMV's ability to recognize bilateral edema and severe malnutrition was assessed during KIIs with project volunteers. Majority of GMV's were able to recognize severe malnutrition and bilateral edema which include swollen legs or pitting.

GMV-Health Centre referral system: The role of Growth Monitoring Volunteers principally involves giving health talks to caretakers of CU2, growth monitoring, provision of appropriate advice based in relation to the child's health as per observatory assessments and referring the child to a Health Centre for serious illnesses or conditions. On the basis of discussions with Health Centre personnel and the caretakers or mothers, there has been improvement in caretakers complying with referral advice provided by the GMV. Over half of those who were referred to a Health Centre complied. For example, during the April-June 2005 Quarterly Report, out of the 195 children who were referred to a Health Centre, 109 complied, representing a fifty six percent (55.9%) compliance rate. The main cause of failure to comply with referral advice included inability to meet the cost of transport and the fear of financial implications, should the child be admitted at the health facility.

The GMV-Health Centre referral system was fairly functional in the three Health Centers in the impact area. For example, 231 CU2 in the project impact area were treated through the referral system. Apart from Nambazo Health Centre, management of all Health Centers were informed about the referral system. In Nambazo, there appeared to have been inadequate effort to introduce the approach to management, hence the system was not fully accepted or appreciated. Consequently, incidences were cited where referred CU2 were sent back untreated. Although the center had began accepting the referred CU2, management at Nambazo Health Centre were still bitter with the way the referral system was introduced.

Growth monitoring cards Most caretakers (90.7%) reported possession of growth monitoring card while 9.0% had either lost or misplaced the card (Fig. 2)

Fig 1: Possession of a Growth Monitoring Card or Health Passport – Evaluation Survey



Less than one-percent (0.3%) of CU2 did not have a growth monitoring card either because they were not consistent attendants of growth monitoring services, or they did not make an effort to get one.

This finding shows improvement from the baseline situation at which 88.6% reported possession of growth monitoring card while 5.7% never had a card and 5.7% were not sure whether the under 2 child had card or not.

Infant and child care and feeding practices - Appropriate infant and child care and feeding practices are necessary for health, nutritional status and overall wellbeing of children. The provision of adequate energy and nutrients in a child's diet allows for proper growth and development. Furthermore, children that are fed appropriately are equipped with the required protection from infection and disease. In Malawi, the Ministry of Health and Population (MoHP) guidelines recommend initiation of breastfeeding within 1 hour of birth. Majority of the children (98.7%) were breastfed on the day of

birth. Overall, 93.3% of mothers breastfed their children for the first time within 1 hour of delivery, 0.3% did not breastfeed at all while 6.3% breastfed after 1 hour of delivery. Compared with the baseline situation, this proportion reflects improvement in initiation of breastfeeding in the project area among the sampled children over the project's period (Table 5).

Table 5: Self-reported Time of First Breastfeeding after Child's Birth

Timing of First Breastfeeding	*Proportion (%)*	
	Baseline	*Evaluation*
1. Did not breastfeed	0	0.3
2. Breastfeed for the first time within 1 hour of delivery	76.4	93.3
3. After 1 hour of birth	23.6	6.3

According to International Infant Feeding Guidelines from World Health Organization (WHO), and Malawi National Infant Feeding Policy from the Ministry of Health, breastfeeding should be initiated within one hour of delivery and nutrient-rich colostrum should be fed to the infant. In this evaluation study, the proportion of mothers that initiated breastfeeding within 1 hour reported in this survey is higher than the national estimates as reported by the Malawi Demographic and Health Survey (MDHS, 2000). Accordingly, the MDHS reported that 72% of mothers in Malawi initiated breastfeeding within 1 hour of delivery.

Contrary to cultural practices that promotes throwing away of first colostrum, about ninety one percent (90.7%) of caretakers reported giving the colostrum to the children on the day of birth while 9.0% threw away the colostrum, thus depriving the child of the nutrient rich substance. The cultural practice of throwing away colostrum was investigated during FGDs with caretakers of CU2. The caretakers reported the of late, the practice was becoming rare. However, some elements of the community still believed in the practice and were therefore still practicing it.

Breast and complementary feeding: International guidelines recommend that children should be exclusively breastfed from birth until 6 months of age. Exclusive breastfeeding is recommended up to 6 months after which complementary feeding of appropriate foods can initiated (I-Life Program Malawi Draft Baseline Report, 2005). The Ministry of Health and Population recommends breastfeeding of children up to 24 months. Approximately, eighty-eight percent (87.9%) of the children in this survey were still breast feeding while 12.1% had already stopped. In terms of exclusive breastfeeding, all caretakers of children under 6 months reported feeding or having fed their children with food and drinks in addition to breastmilk, implying that majority were not practicing exclusive breastfeeding. The most common foods given to children under 6 months included cereals and sugar, salt and othe condiments. Other foods included tubers, legumes and vegetables. In addition to breastmilk, 47.8% of caretakers reported giving under 2 children water.

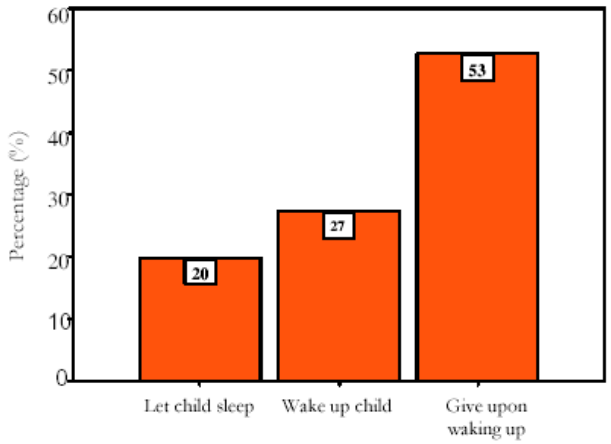
Mothers who had already stopped breastfeeding, had on average breastfed their children for approximately thirteen months (median=13.0 months), thus indicating that breastfeeding generally stops earlier than the recommended 24 months. Although quantitatively, the baseline breastfeeding duration could not be established, focus group discussions with caretakers of CU2 and key informant interviews with project volunteers and selected health centre personnel established that mothers were breastfeeding their children longer than before the project, thus indicative of progress made in terms of promoting breast feeding best practices in the project impact area.

Table 6: Initiation of Complementary Feeding to Under 2 Children			
	Not Yet Started		Median age Started (Months)
Food Type	*Proportion (%)*	*Median Age (Months)*	*Evaluation*
Fats and oils	26.0	10.0	**8.0**
Formula	94.0	14.0	**6.0**
Tubers	37.5	10.0	**9.0**
Milk products	87.6	13.5	**9.0**
Milk from animals	87.9	14.0	**8.0**
Cereals	7.0	12.0	**6.0**
Vit.A rich vegetables	9.7	6.0	**8.0**
Other vegetables	11.7	7.0	**8.0**
Non-milk liquids	17.3	10.0	**6.0**
Legumes	18.3	7.0	**8.0**
Animal foods	23.7	8.0	8.0

As indicated in Table 6, mothers or caretakers in the project area initiated complementary feeding of various food groups at different ages.

For those mothers who had already introduced complementary feeding at the time of conducting the evaluation survey, some of the food groups that were introduced earliest included formula, cereals, and liquids other than milk (all introduced at median age of 6 months). Overall, the minimum median age of complementary feeding initiation among the sampled population was 6 months, thus implying that of those who had already initiated complementary feeding, 50% did not exclusively breastfeed up to 6 months.

Fig 2: What do you do when the child is sleeping and its time for feeding?



***Nutritional and feeding practices*:** A question was asked to check on what the caretaker does when child is sleeping. Fig. 3 shows that 52.7% of the mothers will give food when the child wakes up, and 27.4% will wake up the child to feed while 19.9% left the child to sleep and did not feed after waking up later.

Good complementary feeding involves continued breastfeeding, appropriate frequency of feeding and adequate nutritional quality of complementary feeds. If the child does not wake up, it means the child will not feed and therefore the frequency of feeding and quantity of food taken by the child is reduced, hence unhealthy for the child. Table 7 below summarizes the United Nations Children Fund (UNICEF) guidelines on complementary feeding that are widely promoted in Malawi.

In order to determine the types of food being given as supplementary feeding, the survey sought to verify what types of foods children had been given a day prior to the survey as listed in Table 8 below.

Table 7: Type of Food Given to CU2 the Previous Night	
Food Type	*Proportion (%) of Cases*
1. **Cereals**	95.9
2. Sugar, salt, other condiments	69.3
3. Vitamin A rich vegetables*[5]	47.6
4. Other vegetables	42.1
5. Meat*	29.0
6. Legumes*	26.2
7. Fats, oils, avocado pears	18.6
8. Tea, coffee, soda, other beverages	13.1
9. Vitamin A rich fruits*	7.2
10. Other fruits	6.2
11. Tubers	4.8
12. Milk, yoghurt, cheese*	2.1
TOTAL	362.1

Table 8: Type of Liquid Given to CU2 During the Previous Day and Night	
Type of Drink	*Proportion (%) of Cases*
Water	91.3
Breast milk	86.6
Other liquids (sweet water, tea, coffee)	8.0
Fruit juice	2.3
Formula milk	1.0
Any other type of milk (powder, animal)	0.7
TOTAL	**190.0**

Nutritional and feeding guidelines for in relation to children under 2 recommend legumes, Vitamin A rich vegetables, Vitamin A rich fruits, milk products (milk, yoghurt and cheese). However, the table shows most children were given food types that are not recommended, such as cereals, sugar, salt, and other condiments and other vegetables (non-Vitamin A).

Cereals are among the most common food types in Malawi because, *inter alia*, maize is the staple food and is mostly grown by every household. From Table 7, only 29.0% and 26.2% were given meat and legumes respectively. Very few children (7.2%) were given Vitamin A rich fruits. Given the high poverty levels in Malawi (MEPD, 2003); most households may not afford to buy the foods that are not readily available. The most common fluids given were water and breast milk (Table 8).

Admission to nutrition programs: Only 6.1% of children in the evaluation survey were admitted to a nutrition program within the previous 6 months, while 93.9% of the children were not admitted over the same period.

This result is supported by FGD findings which hailed good nutritional feeding practices promoted through growth monitoring sessions by the project in the area. Despite heralding the value of growth monitoring in all FGDs, they lamented over shortages and discontinuation of safety nets, they find themselves helpless to do much. Some of the health centers e.g. Mwanga did not have the resources for supplementary feeding for malnourished children either.

Table 9: Prevalence of Wasting, Underweight and Stunting Among CU2 – Evaluation Survey			
	Proportion (%)		
Category	*Wasted (WHZ)*	*Underweight (WAZ)*	*Stunted (HAZ)*
Normal (z-score =-1.00 and above)	82.0	52.3	38.3
Mild (z-score = -1.01 to -2.00)	14.7	33.7	36.7
Moderate (z-score = -2.01 to -3.00)	2.3	11.0	16.7
Severe (z-score = -3.00)	1.0	3.0	8.3

Prevalence of Wasting, underweight and stunting: Weight and height measurements for the CU2 were used to derive anthropometric indicators: HAZ, WAZ, WHZ. The EPINUT anthropometry facility in EPINFO was used to derive the z- scores which compare the child's

5 *Recommended foods

anthropometric measurements to the WHO reference standards. Anthropometric data (age, gender, height and weight) was collected from the sample population. Wasting, underweight and stunting were measured by weight-for-height-z-score (WHZ), weight-for-age-z-score (WAZ) and height-for-age z-score (HAZ), respectively (Table 9).

Wasting (or weight-for-height z-score) is used to measure current levels of malnutrition in individuals and populations and is especially useful in emergencies. Using appropriate and widely known categorization, 82.0% were normal, while 14.7%, 2.3% and 1.0% were mildly, moderately and severely wasted, respectively (Table 9). When compared with baseline situation, there is a reduction in the prevalence of wasting (higher proportion of normal and reduction in prevalence of severe wasting) the project area at the end of the project.

Underweight (WAZ) is used as a summary measure of nutritional status of individuals or populations. It is also used to measure nutritional status and has been found to be useful indicator for monitoring of nutritional interventions. Comparison with the baseline shows a relatively constant trend in the prevalence of the normal and severely underweight. However, it would appear that over the period of project implementation, there has been graduation from the moderate to mild underweight category

Table 10: Prevalence of Wasting, Underweight and Stunting Among CU2 – Baseline Survey

Category	Proportion (%)		
	Wasted(WHZ)	*Underweight (WAZ)*	*Stunted (HAZ)*
Normal (z-score =-1.00 and above)	75.0	52.8	13.9
Mild (z-score = -1.01 to -2.00)	19.4	22.2	19.4
Moderate (z-score = -2.01 to -3.00)	0.0	22.2	44.4
Severe (z-score = -3.00 and below)	5.6	2.8	22.2

Stunting (HAZ) is used to measure levels of accumulated under nutrition in individuals or populations. Just like underweight, there appears to have been reduction in the prevalence of severe and moderate stunting (Table 10).

The prevalence of wasting, stunting and underweight during the final evaluation are very different and higher than any other data in Malawi. However, analysis of selected variables intended to establish causes of this scenario did not yield conclusive results.

2.2.1.3. Challenges and Limitations in Relation to IR1.1

The following challenges and limitations in relation to IR1.1 are mainly based on FGDs and KIIs, which were conducted as part of this evaluation:

- Caretakers expressed the desire to combine vaccinations and growth monitoring. However, when the District Maternal and Child Health Coordinator and relevant Health Centre personnel were asked about the feasibility of the suggested combination, they cited equipment and staffing limitations as major challenges. For example, GMVs were not trained and the need for maintenance of the cold chain requires more equipment.
- There was no shared understanding on use and purpose of referral forms, particularly at Chitekesa and Nambazo Health Centers. Management at the two Health Centers cited lack of orientation for key stakeholders as major cause for the lack of shared understanding.
- Health Center personnel felt left out of the project, hence cooperation was generally limited.

- According to KIIs with community leadership, there were incidences of misuse of weighing scales, particularly in Nambazo Health Center. The misuse included using the scales for weighing maize and other substances.

- No mechanisms for replacement of weighing and other scales were reported.

2.2.1.4. Lessons Learnt in Relation to IR1.1

- No clear mechanisms for managing and supervising Health Surveillance Assistants (HSAs) in the absence of adequate staffing levels at health centers
- Although there has been reduction in the prevalence of wasting, underweight and stunting over the project duration, prospects in the area appeared bad, particularly with the onset of hunger and the looming food crisis in Malawi, exacerbated by poor rains during 2004-05 rainy season. At the time of the evaluation survey, most households had already run out of food. It is likely that the nutritional status of children in the area will worsen as a result of this.

2.2.2. IR1.2: Recognition and Management of Sick Children.

2.2.2.1. Description of Intermediate Result 1.2 Indicators and Targets

Through improved health education provided during growth monitoring sessions, the Health and Nutrition Project aimed to promote best practices in recognition and management of sick CU2. Impact indicators for IR1.2 are annexed (Annex 6 – IPTT). However, impact areas for this intermediate result were as follows:

- Proportion (%) of caretakers who give more than usual fluids to children under if they fall ill
- Proportion (%) of caretakers who give more than usual food to a child over 6 months old if they fall ill
- Proportion (%) of caretakers who give more than usual breast milk to a child if they fall ill

2.2.2.2. Project Achievements in Relation to IR1.2

Table 11: Food and Fluids Given (would be given) When Child Suffers from Diarrhea

Levels given	*Baseline (%)*	*Evaluation (%)*
FLUIDS		
Less than normal	30.0	20.7
More than normal	46.7	70.1
About the same as normal	20.0	8.8
Don't know	3.3	0.3
FOODS		
Less than normal	59.3	41.5
More than normal	25.9	42.9
About the same as normal	7.4	13.6

Quantity of fluids and food given when the child suffers from diarrhea: In general, most caretakers gave more fluids and food than normal when the child suffered from diarrhea. As illustrated in Table 11, 70.1% and 42.9% of caretakers reported giving the children more fluids and food, respectively. The proportion of caretakers giving their children more fluids than normal when they suffer from diarrhea surpassed the project target of 60.0% and reflects a marked improvement over the baseline situation.

However, the project target of 45.0% coverage in the proportion of caretakers giving their children more food than normal was not reached. Although the target missed by 2.1 percentage points, the end of project indicators show an improvement over the baseline situation.

In addition to milk for those who were still breastfeeding, over eighty percent of the children (81.8%) who suffered from diarrhea were given Oral Rehydration Salts (ORS).

Table 12: Types of Treatment Sought for Diarrhea

Treatment	*Proportion (%)* Evaluation
Fluids from ORS packet	81.8
Pill or syrup	9.3
Nothing	4.3
Home made fluids	2.5
Tetracycline	1.4
Home made remedies/herbal medicines	0.7

Having learnt how to make home-made fluids[6] for treatment of diarrhea, three percent (2.5%) of the children in the survey were given home-made fluids while 4.3% of the children were given nothing (Table 12).

Health seeking practices: Table 12 shows the various vaccines recommended by the Ministry of Health and Population. Broadly speaking, vaccines are given to the children as part of helping to develop their immunity to various diseases.

In this evaluation, the vaccination recordings in the birth card were compared with recommended dates for the baby to receive each vaccine[7]. Using the guidelines and the specific date on which each vaccine was administered, enumerators were able to indicate appropriate responses to the question on the timing of the vaccines.

Table 13: Timeliness in Vaccine Reception Among CU2

Vaccine	% Responding			
	Not Given	*Not Given Timely*	*Given Timely*	*Given-Date unknown*
BCG	6.1	74.0	7.8	12.2
Polio 0	69.6	5.8	8.2	16.4
Polio 1	2.1	66.1	20.9	11.0
Polio 2	10.2	42.7	36.3	10.8
Polio 3	19.7	40.0	32.9	7.5
DPT1/ Pentavalent	1.7	60.9	25.2	12.2
DPT2/ Pentavalent	12.2	43.6	33.1	11.1
DPT3/ Pentavalent	26.2	37.2	29.0	7.6
Measles	44.3	24.9	22.1	8.3
Vitamin A	47.9	11.9	5.2	35.0

From the findings (Table 13), the following registered that highest non-recipients included polio 0, vitamin A, measles and DPT3/Pentavalent. Many caretakers also reported late vaccinations in BCG (74.0%), Polio 1 (66.1%), Polio 2 (42.7%), Polio 3 (40.0%) and DPT1/Pentavalent (60.9%). According to consultations with Ministry of Health and Population personnel at District Health Office and Health Centre levels, vaccines were in short supply in the district due to under-supply by the Central Medical Stores (CMS). The CMS vaccine supplies were inadequate because the quantity supplied was based on National Statistical Office (NSO) census figures, which were lower than physical head counts of CU2 in Phalombe district in general and the project impact area in particular. Consequently, there have been persistent vaccine shortages, further exacerbated by increased border use of the vaccines by children from Mozambique, Phalombe being a border district.

Table 14: Guidelines on Recommended Dates for Administering

BCG	At birth
DPT 1/ Pentavalent	At 6 weeks of age or later
DPT 2/ Pentavalent	One month after first injection
DPT 3/ Pentavalent	One month after 2nd injection
POLIO (0)	Polio given at birth
POLIO 1	At 6 weeks of age or later
POLIO 2	one month after first dose
POLIO 3	One month after 2nd dose
Measles	Not before 9 months
Vitamin A	Every 6 months

6 Home-made ORS type solutions: made using boiled water, sugar and salt. These are used in the absence of the standard ORS

7 Only children who had reached the proper age for vaccination were evaluated for each vaccine.

Morbidity within the previous 2 weeks: 63.3% of the children suffered from fever (malaria), 62.1% from diarrhea while 48.4% suffered from cough.

Table 15: Morbidity Among CU2 Within the Previous 2 Weeks

Illness	*Proportion (%) ill*	
	Baseline	Evaluation
Fever (malaria)	83.1	63.3
Diarrhea	94.3	62.1
Cough	80.6	48.4

As Table 15 shows, there were less children suffering from malaria, diarrhea and cough within the previous 2 weeks at the end of the project than at baseline. Malaria is transmitted through mosquito bites while diarrhea is caused by, among others, drinking water from unprotected sources. The Health and Nutrition Project is likely to have contributed towards this improvement through promotion of insecticide treated nets (ITNs) and drilling of boreholes in selected villages in the impact area. Most children who fell sick for one or another illness sought treatment or advice outside the home. Approximately, 94.0% sought treatment outside the home while only 6.0% did not do so.

Table 16: Source of Advice or Treatment When the Child Fell Sick

Source of advice or treatment	*Proportion of Cases*	
	%	N
Health centre	54.9	128
Community health services (e.g. HSAs)	22.3	52
Private health clinic	13.7	32
Shops or market	9.4	22
Hospital	3.4	8
Health post or station	1.3	3
Traditional healer	1.3	3
TBA	0.4	1
Holy water, church or mosque	0.4	1

The most common source of advice or treatment was health centre (54.9%). Others included community health services, private health clinics and shops or markets (Table 16). The decision about taking the child to a health facility is mostly made by the mother and father together. About thirty percent (29.6%) of respondents mentioned the father as the decision maker in terms of taking the child to a health facility. As illustrated in Table 17, grandmothers and aunts seem to play very little role in deciding to take the child to a health facility.

Table 17: Decision Maker About Taking the Child to a Health Facility

Decision maker	*Proportion (%) of Cases*
Mother and father	42.4
Father	29.6
Mother	24.6
Grand-mother	2.7
Aunt	0.7

Knowledge of signs of child's sickness: The caretakers' ability to know signs of illness among children under 2 is very important because it will help the caretaker to seek medical advice or treatment as soon as possible.

Table 18: Signs of Illnesses as Reported by Caretakers of CU2 – Evaluation Survey

Signs of child's illness	*Proportion responded (%)*
High fever	30.1
Looks unwell/not playing normally	20.6
Not eating or drinking	17.4
Lethargic or difficult to wake up	11.7
Vomits everything	8.6
Persistent crying	3.7
Diarrhea	2.7
Difficult breathing (Kubanika)	2.4
Fast breathing (Phuma)	1.2
Convulsions (Linjirinjiri)	1.2
Don't know	0.2
Coughing	0.2

Some of the common signs of illnesses as reported by the caretakers of children under 2 included high fever, lethargy, persistent crying and excessive vomiting (Table 18).

Table 19: Type of Medicine Sought for Coughs Within the Previous 2 Weeks	
Type of medicine	*Proportion (%)*
Aspirin	37.3
Panado	20.0
Bacterium	10.9
Amoxicillin	7.4
Cough syrup	6.4
Don't know	6.4
Nothing	4.5
Cafinol	4.5

Acute respiratory infections (ARI): About forty two percent (41.7%) of the children suffered from some kind of cough within the previous 2 weeks. Of those who suffered the cough, 66.7% reported problems difficulties breathing while the rest did not have any difficulties breathing. The majority (87.9%) of children who suffered cough within the 2 weeks prior to the survey sought treatment for the cough. About 37.3% of the children received Aspirin for the cough while 20.0% received paracetamol (Table 19).

Prevalence of Malaria and time lapse to seeking treatment or advice: Due to the difficulty in diagnosing malaria in most rual areas in Malawi, reported high fever in this evaluation was presumed to be malaria. Within 2 weeks prior to conducting survey, 53.7% of the children suffered from high fever. As at the time of administering the evaluation survey, 13.0% still had the fever. Most children who suffered from fever sought medical assistance (93.1%). Fifty two percent looked for assistance the same day, 34.7% the next day, while 13.3% sought treatment after two days or later (Table 20).

Table 20: Period for Seeking Medical Assistance When Child had high Fever		
Period to seeking medical assistance	*Baseline (%)*	*Evaluation (%)*
Same day	2.8	52.0
Next day	83.3	34.7
Two days later	5.6	9.3
Three or more days later	8.3	4.0

Table 21: Medicine Given for High Fever	
Medicine given for fever or malaria	*Evaluation (%)*
Fansidar	38.2
Aspirin	30.6
Panado	9.7
Quinine	8.3
Cafinol	5.6
Don't know	3.5
Cotrimoxazole	2.1
Injection	1.4
Non drugs available	0.7

Comparatively, more caretakers at the end of project sought medical assistance earlier than at baseline. There may be other reasons for this outcome but one possible explanation is the Drug Revolving Fund (DRF) initiative introduced by the project in the area, which improved accessibility and therefore time lapse before reaching the health center (which at the time may have been the only source of treatment).

Under the DRF initiative, each village has DRF kit which comprises basic drugs including Fansidar, Aspirin, ORS and Tetracycline Eye Ointment (TEO). These drugs which are provided through the DRF were also mentioned by the caretaker mothers as having been given for treatment for cough (Table 19) and high fever (Table 21). As findings from FGDs with caretakers of under children suggested, the drugs from the DRF were cheaper than most of the outlets in the project area and a register of buyers of the DRF drugs indicated that the community was accessing the service. It is therefore highly likely that the DRF stocked drugs which were mentioned in Tables 19 and 21 were bought from the DRF.

2.2.2.3. Challenges and Limitation in Relation to IR1.2

- KIIs with community leadership revealed some sporadic cases of misuse of DRF funds in Nambazo Health Center. Although there were efforts to recover the funds, such incidences could potentially harm the future success of the DRF initiative in the area.
- Although all DRF centers in the project area never ran out of their drug stocks, the specific modalities of replenishment in case of stocks running out were not commonly

understood e.g. some DRF volunteers were not sure whether they would replenish the DRF from the Health Center or from the District Health Office.

- The capacity of government Health Centers to credibly manage re-stocking of DRF is questionable given the expressed dis-satisfaction over inadequate involvement of management at the health centers.

2.2.2.4. Lessons Learnt in Relation to IR1.2

- Current health messages mostly target women as the primary caretakers. However, there is strong evidence that the fathers do play an important role in deciding whether to seek assistance (when the child falls ill) through the established health service facilities at community or area level. Consequently consideration should be made when designing projects of this nature to include fathers as part of the target for the health messages.

2.2.3. IR1.3: Accessibility and Usage of ITNs for Malaria Prevention in CU2.

2.2.3.1. Description of Intermediate Result 1.3 Indicators and Targets

One of the key focus areas of Health and Nutrition Project was to improve accessibility and usage of insecticide treated nets (ITNs) in the area. In addition to health education on usage of ITNs, the project established ITNs selling units in almost in each village. The units were given "starter-pack" mosquito nets, which were sold to community members at MK100 per net. The units were designed to operate on revolving fund basis. Impact indicators for IR1.3 are annexed (Annex 6 – IPTT). However, impact areas for this intermediate result were as follows:

- Proportion (%)caretakers of CU5 who are able to specify mosquito bites as the way malaria is transmitted to humans
- Proportion (%) of CU5 who sleep under insecticides treated nets
- Proportion (%) of caretakers who have ITNs

2.2.3.2. Project Achievements in Relation to IR1.3

Transmission and Prevention of Malaria: A multiple response question was posed on the causes of malaria among the caretakers of CU2. Table 22 is a summary of the multiple-response analysis results. This shows that 93.9% identified mosquito bites as the cause of malaria, reflecting an improvement on the baseline situation. The indicator surpasses the project target of 80% by end of the project.

Table 22: Causes of Malaria as Reported by Caretakers of CU2

Cause of malaria	*Evaluation (%)*
Mosquitoes	93.9
Witchcraft	0.7
Stagnant water	6.8
Cold	12.1
Don't know	6.5

Table 23: Means of Malaria Prevention as Responded by CU2 caretakers in the Project Area

Malaria prevention method	*Baseline (%)*	*Evaluation (%)*
Use mosquito net	70.7	64.8
Use treated mosquito net	6.9	49.1
Slashing surrounding area	6.9	13.2
Cleaning stagnant water	1.7	22.6
House spraying	1	3.1
Receiving malaria prevention	3.4	2.1
Coil	-	1.4
Cow dung	-	1.4
Don't know	10.3	0.0

Similarly, a multiple response question was also used to assess knowledge of caretakers on means of malaria prevention. Results in Table 23 show that a larger proportion of respondents at baseline mentioned "use mosquito nets" than at the end of the project. Interestingly, there appears to be better emphasis on use of treated nets at the end of the project than at baseline.

This difference is profound because scientific evidence suggests ITNs have been shown to decrease severe malaria by 45% and cut all-cause child mortality by 17-63% and for every 1000 ITNs distributed, 5.5 children's lives are saved.

Forty ITN distribution points were established through the project. These community-based ITN selling units seem to have contributed to the promotion of ITN access and usage in two ways (i) the ITNs sold are cheaper than the market price as quoted by grocery shops in the area (ii) being stationed within the community, members do not incur extra travel costs to buy the materials.

Possession of Mosquito Nets: Seventy-six percent (75.7%) of CU2 caretakers had treated mosquito nets (Table 24). Compared with the baseline situation, this represents a massive project achievement in improving the access and usage of ITNs. It also surpasses the 50% project target.

Table 24: Possession of Treated Mosquito Nets

Do you have a mosquito net?	*Proportion (%)*	
	Baseline	Evaluation
Yes	19.2	75.7
No	80.8	24.3

A question asked to assess if under 2 children were actually sleeping under treated mosquito net, findings in Table 25 show that majority of children either slept under the net alone, with the mother/caretaker or husband/partner and mother/caretaker. Either way, most under 2 children were sleeping under treated mosquito nets.

Table 25: Usage of Treated Mosquito Nets One Day Prior to the Evaluation Survey

Who slept under the mosquito last night?	*Proportion (%)*
The child	78.2
Caretaker and the child	68.2
Husband/partner, mother and the child	41.4
Do not sleep under nets this time of the year	22.7

However, 22.7% of respondents "did not use the nets at that time" because they believed there are no mosquitoes during dry season, which also happened to be the time the survey was conducted. This belief or perception of caretakers puts the children at risk of being infected with malaria. Recommendations on use of mosquito net require that the net be treated with insecticide[8] at least every 6 months because pyrethroid, the key ingredient in the insecticide reduces mosquito's ability to feed through the net fabric and penetrate small holes by inhibiting certain behaviors of the mosquito. In general, most caretakers (97.8%) dip their mosquito nets in *"Mbwezera"*. However, about forty eight percent (48.4%) dipped the mosquito net within the recommended 6 months while 50.7% did so after 6 months while 0.9% could not remember. The availability of treatment kits in the area was assessed. As usual, the initial ITN package included mosquito nets and treatment kits. At some point dring the project duration, kits were available from the Health Hentre, particularly in Mwanga. Since the previous supply of kits ran out in Chitekesa, no more kits were supplied hence the general community and caretakers were not able to easily access the kits for re-treatment of the nets for a period of between 3 to 12 months. Some had to buy the kits from Phalombe trading centre, an average of 40 kilometres from the project impact area . A spot check in various shops in Chitekesa also revealed that they did not stock treatment kits because they were not marketable in the area and they were largely perceived to be distributed by government health facilities. Although caretakers might have failed to re-treat the nets for other reasons, it appears that the kits were not readily available, particularly in Chitekesa. The unavailability of the treatment kits was confirmed during KIIs with Health Centre personnel and FGDs with caretakers of CU2.

2.2.3.3. Challenges and Limitations in Relation to IR1.3

CRS, through the Health and Nutrition Project has contributed towards access and usage of ITNs in the project area over the project's implementation duration. However:

8 Currently, only Pyrethroid insecticides are approved for use on ITNs.

- Restocking of ITNs in general and treatment kits proved a challenge that could threaten project sustainability in these particular areas. As with all ITN selling units, most of them had ran out of the materials for between 3 and 12 months. Cross-examinations with CRS and CADECOM established that selling units had been advised to bank all funds realized from the sale of ITN starter pack. They were further advised that CADECOM would procure ITNs which would be sold to the community ITN selling units[9]. However, neither CADECOM nor CRS were able to timely procure the ITNs from Population Services International (PSI) because of supply shortages with the company. The ITN selling unit committees were not informed of the procurement problems CRS and CADECOM were facing, thus prompting second-guesses.
- Despite the insistence on maintaining more than one signatory to the ITN funds account, there were reported sporadic mismanagement the ITN funds by an ITN volunteer in Nambazo Health Center (Mumbuwa village).

2.2.3.4. Lessons Learnt in Relation to IR1.3

- The idea to have CRS and CADECOM help with procurement of the ITNs on behalf of the selling units is good as it helps in ensuring that those responsible for purchase of the ITN at the ITN selling units do not get duped by unscrupulous businessmen. It is understood that as the project ends, the ITNs will be procured by the DHO on behalf of the selling units. However, given that the major procurement challenge was the inability of the sole supplier (PSI) to meet the order demands, it is anticipated that these problems will continue, even if the DHO will handle the procurement, unless other long-term alternative solutions to current problems are identified and implemented.
- Scarcity of re-treatment kits has been crucially evident in the project area. With DRF already in place and stocking basic drugs, consideration should be made to include the re-treatment kits as part of the DRF list of essential drugs.

9 ITN selling units would bank funds realized from the sale of ITN starter packs.

2.2.4. IR1.4: Potable Water Supply

2.2.4.1. Brief Description of Intermediate Result 1.4 Indicators and Targets

Water and sanitation activities under the no-cost extension were included following a recommendation during the DAP final evaluation, which was carried out in 2004. During the evaluation, it was observed that water and sanitation activities were planned in the original DAP but due to other developments at that time the activities were dropped. However, the need for safe water and good sanitation still remained. Thus, the no-cost extension included water and sanitation component aimed at reducing morbidity and mortality among CU5 resulting from the lack of access to safe water, poor hygiene and sanitation practices.

The intermediate results of the no-cost waster and sanitation introduction were (i) improved water sources in selected communities and (ii) increase potable water supply by providing 6 new water sources and rehabilitating 9 non-functional sources. Impact indicators for IR1.4 are annexed (Annex 6 – IPTT). However, impact areas for this intermediate result were as follows:

2.2.4.2. Project Achievements in relation to IR1.4

Among others, this section endeavors to assess the prevailing water situation in the impact area rather than being assessment of project achievement in relation to potable water supply because, due to other reasons, drilling of 6 boreholes in the area had just been completed and therefore impact could not be captured under the this evaluation.

Table 26: Sources of Drinking Water During Rainy Season

Water Source	*Proportion (%)*	
	Rainy season	*Dry season*
Protected well – public well	77.3	75.0
Piped water – public tap	17.3	16.0
Surface water – spring/river/stream	17.3	14.3
Water from open well – public well	13.3	11.7
Protected well - dwelling/yard/plot	5.3	4.7
Rainwater	4.3	-
Piped water -dwelling/yard/plot	1.7	0.7
Water from open well - dwelling,/yard/plot	1.0	0.3
Surface water – pond/lake/dam	0.7	0.3

Water sources: Table 26 shows the various sources of water during the rainy season. By the end of the project, 77.3% were drawing water from protected public wells during the rainy season while 75.0% were drawing from the same source during the dry season (Table 26). For the purposes of this evaluation potable water sources included protected public wells, piped water (public taps), protected wells (dwelling/yard/plot) and piped water (dwelling/yard/plot) while unprotected sources included rain water, surface water (spring, river or stream) and water from open public wells. Due to the way the multiple question was asked for this purpose, it has not been possible to establish proportion of the population with access to potable water. The results in Table 26 reflect proportion of sample population access to particular types of potable and non-potable water sources. However, the general trend that emerges is that majority of households have access to potable water both during rainy and dry season. Caretakers who participated in FGDs testified that they had a better access to potable water by the end of the project as compared to the pre-project period. Particularly disturbing stories in the quest for water related to early 1990's when there were mud slides that washed an entire community in Phalombe, including washing down and burying down of dead bodies down some of the river streams that pass through the impact area and yet the community had to continue to draw water from the same rivers for there were no alternatives. While access to potable water has greatly improved, FGDs with caretakers indicated that there were inadequate potable water sources in most of the villages in the impact area. Due to the inadequate potable water sources, women have to go to the nearby

villages[10] to draw potable water. In certain cases, they have to wake up very early in the morning in order to be among the first in the queue to draw water.

Water hygiene: In terms of water hygiene in the home, 79.0% of caretakers kept the water covered while the rest just left it uncovered. However, only 34.1% use the recommended 2-cup system where one cup for dipping only and the other one for drinking. Over half (58.8%) use single cup for drinking while 7.1% use any available container.

Table 27: Drawing of Drinking Water in the Home

How do you draw water in the home?	*Proportion (%)*
Single cup for dipping only and another for drinking	34.1
Single cup for dipping and drinking	58.8
Any available container	7.1

Table 28: Condition of Observed Pit Latrines

Condition of pit latrine	*Evaluation (%)*
Clear signs of current use but dirty	**55.1**
Clear signs of current use and clean	**37.5**
Not currently used	**6.9**
Could not observe	0.5

Access and usage of pit latrines: The proportion of households owning a pit latrine has remained constant over the duration of project, with 75.3% of households owning a pit latrine at baseline compared to 74.6% owning the toilets at the end of the project. However, usage of the toilets seems to be a problem as evidenced by 55.1% whose toilets were generally in dirty condition (Table 28).

In this case, in spite of ownership of a toilet facility, the households whose pit latrines were in bad condition stood a risk of contracting relevant waterborne diseases and other sicknesses.

Table 29: Means of Disposing Child's Stool

Disposal means	*Evaluation (%)*
Thrown in toilet/latrine	77.6
Buried in yard	7.5
Thrown in rubbish	5.1
Not disposed of/left on the ground	4.1
Wash the napkin in water and throw the water away	7.5

Child's stool disposal practices: The most common stool disposal practice was "throwing the stool in the toilet" (Table 29).

However, apart from disposal of stool by burying in yard (7.5%), the practices of "throwing in rubbish", "left on the ground" and washing napkin in water and throwing the water away are health hazards.

Hand washing practices: A question was asked to assess caretakers' knowledge in hand washing practices. Only 18.8% of households had a special hand washing place. However, only 10.0% of the special hand washing places had soap while the majority had washing basin only (Table 30). Hand washing (with soap) is one of the recommended sanitary practices. Hand washing with soap is more effective in reduction of diseases causing micro-organisms than just washing hands.

Table 30: Things Found at Special Washing Place

Things found at special washing place	*Proportion (%)*
Water tap	*2.0*
Soap	*10.0*
Washing basin	*96.0*

10 Some villages have more boreholes than others

Table 31: When do you wash your hands with soap?	
When do you wash your hands with soap?	*Proportion (%)*
	Evaluation
After visiting the toilet	**61.0**
After attending to child's feces	**40.8**
Never	**22.6**
Before food preparation	**19.5**
Before feeding the child	**12.5**
After work	**5.2**
Before eating	2.1

The most common time when caretakers washed hands with soap was immediately after visiting the toilet (Table 31). In general, there appears to be low practice of hand washing with soap in the area, probably due to "lack of soap" as noted from the small proportion with soap at the special hand washing place. The other explanation could be poverty related and therefore, soap may be viewed as a pricey commodity.

In general, most households in the area were accustomed to using soap for bathing and washing clothes rather than using it for washing hands only, unless the hands were so dirty or they had touched some sticky stuff that would only be cleaned by hand washing with soap.

Table 32: Garbage Disposal Mechanisms	
Garbage disposal mechanism	*Proportion (%)*
Rubbish pile	37.8
Rubbish pit	30.3
Indiscriminate (disorderly)	18.4
Burning	7.8
Compost manure	5.8

Garbage disposal practices: The most common garbage disposal mechanism in the project area is rubbish pile (Table 32)

2.2.4.3. Challenges and Limitations in Relation to IR1.4

- Although water supply was not as extensive as other components, water still remained a priority in the area. It is anticipated however, that the COMWASH Project currently being implemented in the project area will address this gap.

2.3. CONSULTANTS' OBSERVATIONS AND KEY ISSUES

The following observations or points of reflection are shared with great humility and awareness of our own limitations. Even though we had extensive consultations and contributions by key stakeholder representatives, in this project evaluation, we recognize that the limited exposure to the data and project (though intensive) does not suddenly make us "experts" on the project challenges and possible solutions. It is inevitable that there will be some gaps to our understanding of the explanations behind the project successes and challenges. However, we sincerely believe that sharing our thoughts can contribute perspectives that may stimulate further critical analysis and broaden CRS and key project stakeholders' collective wisdom as they consider future steps, in response to the lessons learned through this experience. Some of our key observations during the final evaluation in relation to the Health and Nutrition Project were:

- **Community Integrated Management of Childhood Illnesses (C-IMCI): C-IMCI** was successful in incorporating volunteers and other relevant community-based organizations (CBOs). However, the C-IMCI left out Health Center personnel and traditional leadership. Health Center management expressed the challenge they faced in having to supervise and work effectively with the team that was responsible for implementing the C-IMCI at community level. They were not fully knowledgeable in C-IMCI, it being a relatively new concept. In terms of local community leadership, the current decentralization structure is not clear on the role of chiefs in development in relation to the other pluralistic decision making structures such as VDCs and the VHCs. The C-IMCI left out chiefs in its design and therefore they were not adequately equipped or empowered with respect to their specific role in relation to the project. One traditional leader contended, *"How do we supervise volunteers on best practices when in the first place were never involved in the orientation process so that we would be equipped with the necessary knowledge of the project and thus be able to notice malpractices?. It's just not possible".* The inadequate involvement of health centre personnel and traditional leadership in the fundamental project design as well as inclusion in some of the key capacity-building training programs, was a serious omission as this could pose a serious threat to the effective continuity and sustainability of key activities beyond the project tenure.

- The project implementation structure in Mwanga health center left out the Parish CADECOM Committee. Being closer to the community, CADECOM Phalombe field office might have benefited from involvement of the committee.

- **Caretaker Illiteracy and Growth Monitoring**: Findings from this evaluation have shown that that most growth monitoring attendants were literate, probably because they understand the importance of growth monitoring. For future similar projects in the area, an inclusive strategy to deliberately encourage participation of the illiterate caretakers in growth monitoring would be desirable.

- **Health Center Capacity:** capacities at all health centers in the project area were heavily undermined by shortage of staff and transfers. Staff turn-over undermined continuity because replacements were often not sensitized and as a result appeared to lack commitment, understanding and appreciation of the project. This was evident in Chitekesa and Nambazo health centers.

- Improved clarity and shared understanding of institutional roles and accountabilities among the partners within the Catholic structures, could improve the general project performance and sustainability, in light of some overlapping roles (e.g. CADECOM, Diocese, CRS, Episcopal Conference of Malawi (ECM) Health Commission, Parish, etc.).

Some inconsistencies around expectations of each others roles were picked up during the evaluation. If not addressed these could fester and undermine the collaborative potential, which is one of the greatest assets the system. The role ambiguities may also generate incongruent expectations regarding communication channels.

- Inadequate Performance Management as well as M&E systems were compounded with poor capacity at CADECOM Blantyre office level. This observation is based on the quality of the reports produced by the office for the joint quarterly review meetings. It is understood that part of the partnership obligations include capacity building. There was no clear evidence that capacity gaps were identified prioritized and planned for. Unless deliberate steps are taken this may remained largely an expression of interest within the partnership.
- Cash flow problems affected implementation and effectively reduced project implementation period to 4 months
- The CRS/CADECOM partnership agreement (in relation to the no-cost extension) signed in October 2004 took too long to conclude. Practically, work started January 2005. Although formally, the Bishop is the custodian of each CADECOM project, there may be a gap between that role and capacity to single-handedly provide leadership support and accountability to project management. It is understood that solutions to this gap are being explored through the possible establishment of boards with a diverse representation of skills needed at policy and strategic direction level
- It is understood that the project would be handed over to DHO, specifically, the Maternal and Child Health Coordinator (MCHC). However, key informant interviews showed that he was not quite aware of the project set-up and specific roles after the CRS-funded period.
- Completion of some of the DAP and continuance of the health component on its own (during the no-cost extension) without support of the safety nets component (which originally complemented strategies for addressing mulnutrition amoung children), as this part of the project had been completed, was not viewed positively by the community.

2.4. Project Relevance

- Overall, the Health and Nutrition Project was highly relevant and largely addressed the nutrition needs of the children. The project also met its portable water provision targets, The evaluation established that the need for portable water was higher than what was provided for through the project. FGDs and KIIs conducted in the area established that the need for safe water still remained a top priority. However, in light of current COMWASH project activities the portable water provision gaps may be reduced.
- From the community view point, there is good community project ownership and the will to sustain the project. Findings from FGDs with caretakers and KIIs showed that the community viewed the project positively because it was addressing relevant child health issues

2.5. Project Sustainability

- Overall, the community should be able to sustain the project activities because they have witnessed and enjoyed direct benefits. Despite other project challenges experienced and reported elsewhere in this document, there was high commitment and resolve among community members to sustain the growth monitoring, Drug Revolving Fund, ITN and

application of health education. However, the inadequate involvement and consideration of relevant health centers and traditional leadership, coupled with restocking challenges (particularly in terms of ITNs and possibly DRF) may affect volunteer morale and subsequently, continuity of the project activities.

- On several occasions when the project was experiencing cash flow problems and project staff could not go to the area to supervise project activities for (in certain case, up to three months), activities continued to run reasonably well. Although future sustainability may not be assessed on this basis, this is a good indicator of the community potential to sustain the project.

- The current on-going hunger in the country in general and in Phalombe in particular is likely to offset the improvement in nutritional status of the children and dilute project impact and future sustainability.

- The Office of the Maternal and Child Health (MCH) Coordinator sounded committed to take over follow-up and supervision of the project after CRS-funded period. Specifically, the it was reported by the MCH Coordinator that the district's Malaria Coordinator would work with the community in sourcing mosquito nets. However, the office is poorly resourced to the extent that they were not able to conduct their own routine work. It is therefore unlikely that this role would be carried out efficiently.

2.6. Project Staffing

- The Health and Nutrition Project experienced high staff-turn-over at Health Coordinator level. Within the space of 2 years (since 2003), there were four changes in staffing at that level.

2.7. Baseline Data Problems

- The success of this final evaluation has been partially affected by lack of a properly established baseline situation due to problematic baseline data that was collected but was never analyzed at that time reportedly because services with the concerned consultant were prematurely discontinued. When foCi was requested to carry out the analysis[11], it was evident that the baseline data was problematic. A clear lesson learnt here is that while pre-mature discontinuation of services as carried out in this case might have been necessary, there has to be proper mechanisms to prevent disruptions.

- Judging by the questions in the baseline, quite a number of them seemed irrelevant towards establishing the baseline situation in line with project process and impact indicators. Stating the obvious, data costs money to collect and therefore only relevant data should be collected.

11 To produce analysis tables only, without narrative

KEY REFERENCES DOCUMENTS

1. Quarterly Reports (January-March 2005, April-June 2005, Jul-Sept.2005)
2. DAP Final Evaluation, 2004
3. Health and Nutrition No-Cost Extension Concept Paper
4. IPTT SO3 201204
5. Revised DIP 20-12-04
6. Meeting Minutes
7. Knowledge, Coverage and Practices (KPC) Methodology Notes, John Hopkins University, School of Public Health, Department of International Health.

ANNEXES

Annex 1: Specific Roles and Responsibilities for the Core Team

1. Consultant

In collaboration with CRS Malawi and the partner (including the evaluation team), the consultant will undertake the following:

- Give regular feedback to CRS Malawi on progress.
- Conduct literature and secondary data review of relevant documents.
- Provide training materials for the evaluation team.
- Facilitate an orientation for the evaluation team.
- Provide the finalized data collection tools before data collection begins.
- Oversee initial data collection process to ensure effective management of data collection by evaluation team.
- Analyze data and produce draft report on findings.
- Incorporate comments from CRS Malawi on the draft report.
- Produce final report.

2. Catholic Relief Services Malawi

- Select and hire a consultant(s) to carry out the final evaluation.
- Guide and manage consultant in all aspects of their work. Ensure that outputs from the consultant are completed in a satisfactory and timely manner.
- Provide access to all project files and data relevant to achieving the evaluation objectives.
- Provide logistical support for the evaluation team to be able to access the communities and data collection sites.
    - ☞ This will include devising a timeline for the evaluation and making time, staff, and resources available.
    - ☞ This will also include ensuring that all "community protocols" are followed before data collection begins.
- Devise a budget for the evaluation and manage financial expenditures.

3. Blantyre CADECOM

- Provide access to all project files and data relevant to achieving the evaluation objectives.
- Participate in the gathering of existing information.
- Provide comments on the draft evaluation report before it is finalized.
- Inform all stakeholders about the results of the final evaluation.

4. Deliverables

The consultant was expected to deliver the following:

- Perform background research.
- Document detailed evaluation tools in collaboration with evaluation team and submit to CRS.
- Perform and lead data collection in collaboration with evaluation team.
- Compile evaluation results and submit to CRS cleaned data files.
- Present evaluation findings to CRS and Blantyre CADECOM at project review meeting.
- Document lessons learned and recommendations for next steps.
- Submit final evaluation report (hard copy and electronic in English) to CRS per agreed upon Table of Contents and report structure.

Annex 2: List of Selected Villages and Sample Sizes- 30-Cluster KPC Survey Methodology

Area	Number of CU2	Sample size CU2
Chitekesa Health Centre		
1. Zadwaza	48	10
2. Bona I	18	10
3. Chitekesa	150	10
4. Nkomera	46	10
5. M'mala	36	10
6. Sekakhomo	25	10
7. Namatikha	105	10
8. Nankhonya	25	10
9. Dzanjo	134	10
10. Nayuma	20	10
SUB-TOTAL	-	**100**
Mwanga Health Centre		
1. Mumbuwa	32	14
2. Paulo I	6	6
3. Mwambeni	11	10
4. Komihera	14	10
5. Ndundunya II	67	10
6. Maluwa	208	10
7. Selenje	25	10
8. Ndungunya I	66	10
9. Mulomba	24	10
10. Khancha	37	10
SUB-TOTAL	-	**100**
Nambazo Health Centre		
1. Katolozwe	30	10
2. Namikalo	25	10
3. Godize	22	10
4. Nahipa	25	10
5. Phelere	10	10
6. Godo	51	10
7. Nachopwa	14	10
8. Chimbalanga	143	10
9. Henere	32	10
10. Biziweki	10	10
SUB-TOTAL	-	**100**
TOTAL		**300**

Annex 3: Names of people consulted

Focus Group Discussions with CU2 Mothers (High project success–Mwanga Health Center)

1. Fatsanao Moffat – Mulombwa Village
2. Chrissie Edward – Mulombwa Village
3. Veronica Magombo _ Ndungunya II Village
4. Ayesu Yusumani _ Ndungunya II Village
5. Harriet Chiways _ Ndungunya II Village
6. Janet Misoya _ Mulombwa Village
7. Rinnie Masamba _ Mulombwa Village
8. Belita Nang'oma _ Maluwa Village
9. Theresa Chiyembekezo _ Mulombwa Village
10. Elida Guluni _ Maluwa Village
11. Rosina Moses _ Maluwa Village
12. Estere Yohane _ Maluwa Village
13. Fanny Kayenda _ Mulombwa Village
14. Anne Maloya _ Mulombwa Village

Focus Group Discussions with CU2 Mothers (Moderate project success–Nambazo Health Center)

1. Lydia Manyowa – Namikalo Village
2. Felista Mukuna – Namikalo Village
3. Theresa Amos _ Godo Village
4. Gladys Mlatho _ Katolozwe Village
5. Agnes Molande _ Nahipa Village
6. Fagesi Chinthunga _ Nahipa Village
7. Edith Namalima _ Namikalo Village

Focus Group Discussions with CU2 Mothers (Minimal project success–Chitekesa Health Center)

1. Estere Khanincha – Zadwaza Village
2. Joyce Kamphepo – Tsekakhomo Village
3. Agnes Masautso _ Chitekesa Village
4. Mary Misoya _ Chitekesa Village
5. Fanny Mapanga _ Namatikha Village
6. Mary Mukhuna _ Zadwaza Village
7. Estere Labani _ Tsekakhomo Village
8. Agnes Lihonga _ Namatika Village

9. Mary Bandawe _ Bona Village
10. Magaret Kapito _ Bona Village

Key Informant Interviews (High project success held at Mlombwa Village)

1. Liston Kambenje – Growth Monitoring Volunteer
2. Catherine Zuze – Growth Monitoring Volunteer
3. Kaunda Chimbalanga – ITN Volunteer
4. Nixon Misoya – Village Health Committee (VHC) Volunteer
5. Masautso Chapola – DRF Volunteer

Focus Group Discussions with volunteers held at Ndungunya II

1. Enelesi Nandolo – GMV
2. Mercy Chiwaya – DRF Committee Member
3. Austin Mpaya _ VHC Volunteer
4. Ben Yekha _ DRF Distributor
5. Rose Phonyani _ Life Committee Member (Safety Nets)
6. Fanny Faifi _ Life Committee Member (Safety Nets)
7. Cecilia Gawani _ Life Committee Member (Safety Nets)

Focus Group Discussions with volunteers (Moderate project success–Nambazo Health Center) held at Katolozwe

1. Kamboni Godo – ITN Volunteer, Godo Village
2. Alice Chiwaya – ITN Volunteer, Katolozwe Village
3. Eliza Kapwiti – VHC Chairperson, Katolozwe Village
4. V.H. Katolozwe – VH, Katolozwe Village
5. Emma Makholo – GMV, Katolozwe Village
6. Getrude Chilombo _ GMV, Godo Village
7. Fanny Mlakala _ GMV, Katolozwe Village
8. Rose Chilombo _ DRFV – Treasurer Katolozwe Village
9. Fanny Chidima _ GMV, Katolozwe Village
10. Bertha Makalaundi _ DRFV –Katolozwe Village

Focus Group Discussions with volunteers (Minimal project success–Chitekesa Health Center) held at GVH Bona I

1. John Madziakatenga – VHC Treasurer, Chitekesa village
2. John Malemba – VHC Chair, Chitekesa Village
3. Martin Kambwiri – VHC Committee Member, Chitekesa, Village
4. Noah Clement – ITN Volunteer, Chitekesa Village
5. Loveness Makupete – GMV, Bona II Village
6. Chrissie Chiwanda – GMV, Chitekesa Village
7. Mary Master – DRF, Bona II Village
8. Pilirani Chikwesele – GMV, Bona I Village
9. Fanny Chikhosa – VHC Chair, Bona I Village
10. Chrissie Mangulama – GMV, Bona II Village
11. Jessie Khoma – VHC Treasurer, Bona I Village
12. Maxwell Salima _ VHC Treasurer, Bona I Village

Mwanga Health Center

1. Sister Kamalo – In-Charge, Mwanga Health Center
2. Aaron Kadzuwa – Senior HSA, Mwanga Health Center
3. Yamikani Chinyanga – Medical Assistant, Chitekesa Health Center

Key Informant Interview with Nambazo Health Center personnel

1. L. Kalawire _ Nurse Technician (In-charge)
2. Myson Kameta _ Senior HSA
3. Fanny Nantharo _ Senior Enrolled Nurse

Traditional Leadership

1. TA Chiwalo

Mwanga Health Center Parish Committee

1. Montfort Makamu _ Secretary, Church Council and Vice Secretary of Parish Council
2. Josephy Nyimbiri – Chairperson of Church Council and Vice Chairperson of Parish Council
3. Francis Mandawala – Vice Secretary of Church Council and Chairperson of Parish Executive of CADECOM

MCH Coordinator's Office

1. James Beni _ Phalombe District Maternal and Child Health Coordinator

Phalombe Assembly DPD's Office

1. Obed Mwalughali _ UNV Planner (in place of DPD who was attending a funeral)

Phalombe CADECOM Office

1. Rosemary Mpetiwa – Health Coordinator
2. Patricia Kamba Chirombo _ IEC officer

Blantyre CADECOM Office

1. Francis Ugeni – Finance and Administration Officer
2. Stiveria Ndala – Programs Coordinator
3. Norah Kamba _ Diocesan CADECOM Secretary

ECM Offices

1. Carstens Mulume _ CADECOM National Secretary
2. Melia Mgawa Zulu _ ECM Health Commission National Secretary

Lilongwe CRS Office

1. Kwame Msapato – Child Survival Project Officer
2. Kathryn Lockwood _ Health and Nutrition Program Manager

Participants to Dissemination Meeting conducted on 29th November 2005 at Superior Hotel in Blantyre

1. Martin Mtika – Deputy Head of Programming, Lilongwe CRS Office
2. Kathryn Lockwood _ Health and Nutrition Program Manager, Lilongwe CRS Office
3. Kwame Msapato _ Lilongwe CRS Office
4. Norah Kamba – Diocesan CADECOM Secretary, Blantyre CADECOM
5. Steveria Ndala – Blantyre CADECOM Office
6. Fidelis – Blantyre CADEOM Office
7. Raphael Piringu – DHO Phalombe
8. MCH Coordinator – Phalombe
9. Patricia Chirombo – formerly of Phalombe CADECOM Office
10. Sam Matemba – facilitators of Change interventions (foCi)
11. Alfred Dzilankhulani – facilitators of Change interventions (foCi)

Annex 4: Evaluation Objectives and Key questions

Key questions will be finalized in a participative manner by the core team at the beginning of the evaluation. The following is a list of potential key questions related to the evaluation objectives:

Objective 1: Measure the achievement of project goals and objectives (impact)

- To what degree have the project Strategic Objectives and expected outputs been met? Why or why not?
- Were indicators realistic and relevant?
- What has been the value added of integration at the community level?
- Where the objectives realistic and relevant to priority needs of the target population?
- What have been the unintended positive and negative effects of project?

Objective 2: Draw out the major lessons learned

- What limitations and hindrances have been encountered?
- Have basic assumptions and potential for solutions changed since project formulation?
- Have strategies been appropriately designed and effectively carried out?
- How have initial strategies been adapted given changing situations?

Objective 3: Determine how well needs of different groups (divided by gender, age, socio-economic status) have been met by the project

- Has the project responded to the felt needs of the participants?
- Did the project reach the intended target groups?
- Did the target groups effectively take part in the project? How?
- Which group(s) most benefited from the project? How?
- What have been the factors that have hindered participation?
- Has CRS' institution building efforts with its partners been effective?
- Were any local advocacy issues identified or acted upon over the course of the program?

Objective 4: Determine the effectiveness of project organization and processes

- Have the activities and methodology been effective in attaining project strategic objectives both in quantitative and qualitative terms?
- Is the resource input reasonable in relation to results (cost-benefit)?
- Has the project management and organizational structure been effective in carrying out the project?
- Are the interventions and activities appropriate in terms of cost and given the local conditions (socio-economic and environmental)?
- Have the community organization efforts been appropriate, effective and are they sustainable?
- Has CRS adequately networked with other institutions and organizations in order to ensure meeting project objectives?
- Has the project's M&E system collected appropriate, timely and accurate information? Has that information been used for project decision-making?

Objective 5: Project the level of project sustainability

- What processes/activities will most likely continue after project closure?
- Are there follow-on activities that should be funded after this project closes?
- What processes/activities will most likely cease after project closure?
- What are the constraints to increased viability and local control and continuation of (activities, approaches) post-project?

Objective 6: Assess the accuracy of the child survival technical inputs

- Were the implemented activities appropriate for the needs of the targeted area in regards to child survival?
- Have the inputs of the project significantly contributed to the improved health of CU5 within the targeted area?
- Have the inputs of the project effectively improved the health of CU5 within the targeted area?

Annex 5: Field Activity Scheduling DAP– No-Cost Extension EOP Evaluation (Health & Nutrition)		
DATE	**MORNING**	**AFTERNOON**
Sep 11th	Leave Lilongwe for Phalombe	Arrive Phalombe Meeting with CADECOM project personnel – explain process, involvement of stakeholders etc. **(18.00 – 19.00)**
Sep 12th	Lead Consultant assisting with enumerator settling down, including initial supervision e.g. measurements KII – Local leaders, VHCs Structured questionnaire data collection in **CHITEKESA HC** villages	Community FGD in **CHITEKESA HC (14.00 – 16.00)** Structured questionnaire data collection in CHITEKESA HC villages KII with CRS/CADECOM project personnel ***(Evening 17.00 – 19.00)***
Sep 13th	**FGD in CHITEKESA HC** – mothers and caretakers (**08.00 – 10.00)** Key Informant Interviews with CHITEKESA Health Centre personnel : *10.00 – 12.00 HRS* Completion of structured questionnaire data collection in **CHITEKESA HC** villages KII with VHCs	KII with growth monitoring volunteers (GMV) in **CHITEKESA HC** area project villages KII with growth monitoring volunteers (GMV) in **MWANGA HC** area project villages Structured questionnaire data collection in **MWANGA HC** villages
Sep 14th	Community FGDs in **MWANGA HC (08.00 – 10.00)** Structured questionnaire data collection in **MWANGA HC** villages KII – DPD, Parish Committees	**FGD in MWANGA HC** – mothers and caretakers **(14.00 – 16.00)** Key informant interviews with **MWANGA Health Centre** personnel Structured questionnaire data collection in MWANGA HC villages
Sep 15th	FGDs in **NAMBAZO HC (08.00 – 10.00)** KII with DHO Structured questionnaire data collection in NAMBAZO villages	**FGD in NAMBAZO HC** – mothers and caretakers **(14.00 – 16.00)** Structured questionnaire data collection in **NAMBAZO HC** villages
Sep 16th	Key Informant Interviews with **MWANGA Health Centre** personnel KII with growth monitoring volunteers (GMV) in **NAMBAZO HC** area project villages	**Key Informant Interviews**
Sep 17th	**Leave Phalombe for Lilongwe**	

Annex 6: Annex Revised IPTT for SO3 (Health and Nutrition) Activities

Indicator[12]	Baseline	LOA[13] Target	LOA Achieved	LOA % (Achieved vs. Target)
SO3. Indicator 3.1. % mothers with CU2 who have been to growth monitoring consistently in the last four months	53.3%	80%	59.0%	74%
SO3 Indicator 3.2. % of GMVs who recognize bilateral edema and wasting as severe malnutrition	TBD	80%	TBD	
S03 Indicator 3.3. % of mothers with CU2 who when referred by GMV go to health centre	4..5%	15%	55.9%	373%
S03 Indicator 3.4. % of caretakers who give more than usual fluids to a CU5 if they are ill	33%	60%	70.1%	117%
SO3. Indicator 3.5. % of caretakers who give more than usual food to a child 6-59 months old if they are ill	21%	45%	42.9%	95%
SO3 Indicator 3.6. % of caretakers who give more than usual breast milk to a CU2 if they are ill	45%	60%	TBD	-
SO3 Indicator 3.7. % of caretakers with CU5 who are able to specify mosquito bites as the way malaria is transmitted to humans	53%	80%	93.9%	117%
SO3 Indicator 3.8. % of CU5 who sleep under ITNs	9%	30%	78.2%	261%
SO3. Indicator 3.9. % of caretakers who have ITNs	18%	50%	75.7%	151%
SO3 Indicator 3.10. % target population with access to potable water for drinking	16.7%	33%	Not measured	
SO3 Indicator 3.11. % water facilities with established management system being used	13	13	Not measured	

12 Indicators for SO3 were not in the original DAP but were developed soon after the KPC was conducted in 2003 with technical assistance from CRS Headquarters, CRS/Malawi and consultative meetings with CADECOM and Ministry of Health and Population.

13 LOA is from April 2004 to September 2005.

Annex 7: Sample of Questionnaire Used for the Evaluation Survey

DAP No-Cost Extension (Health & Nutrition Component)– Final Evaluation Survey 2005

Knowledge, Practice, Coverage

District (name): _____ CODE: |____|____|

Traditional Authority (name): _____ CODE: |____|____|

Group Village Headman (name): _____

Village name: _____ CODE: |____|____|

Questionnaire Number |____|____| |____|____|

Date of interview D D M M Y Y Y Y
|____|____| |____|____| |____|____|____|____|

Enumerator (name) _____ CODE: |____|____|

To be completed after interview has been done

Supervisor (name):_____ Survey reviewed: Y N

Data entry clerk_____

Date of data entry _____

Informed Consent:

My name is…… and I am working with CRS/CADECOM. We are conducting a survey on the health status of children under 24 months old. I would like to ask you some question about your child as part of the evaluation of the project. The results from the evaluation of the project will assist CRS/CADECOM to assess the achievements and challenges of the project which has been implemented over the past year and thus be able to plan health interventions in the future. The information you will provide will be treated confidentially. The interview will take about 45 minutes and at the end I shall weigh and take the height of the child.

I hope you will accept to respond to the interview questions.

At this time, do you want to ask me anything about the survey?

➡ **IMPORTANT NOTE TO ENUMERATOR:** Please get consent BEFORE you start filling in the questionnaire

Consent granted	**00.** No **01.** Yes

01.	Named of mother or caregiver:	
02.	Age of mother in years:	
03.	Name of youngest child <24 months:	
04.	Sex of Child:	**00**. male **01**. female
05.	Date of Birth:	
06.	Age in months:	

RESPONDENTS' BACKGROUND CHARACTERISTICS

07.	(Is the respondent the mother of this child?)	**00.** No **01.** Yes
08.	(What was the highest education level you attained?)	**01.** None **02.** Primary **03.** Secondary **04.** College or University

09.	(Does (Name) biological father live in this household?)	**01** = No **02** = Yes **96** = Don't Know
010.	(Do you work outside of the home to earn money? How do you earn a living?) *Multiple answers possible, please circle all mentioned*	**01.** No outside work **02.** Handcraft **03.** Farming **04.** Selling Foods **05.** Shopkeeper/ Vendor **06.** Servant House-worker **07.** Salaried worker **96.** Other (specify)
011.	(Who takes care of (Name) when you are away from home?) *Multiple answers possible, please Circle all mentioned.*	**01.** None, Mother (respondent) **02.** Husband **03.** Older children **04.** Other relatives (specify) **05.** Neighbors/ Friends **06.** Maid **07.** Nursery school **96.** Other (specify)

MODULE A: ACCESS TO WATER AND SANITARY PRACTICES

012. Madzi akumwa a banja lanu mumatenga kuti? (Sources of drinking water for the household)?

Nthawi ya mvula (Rainy season)	**Nthawi ya mwamvu (Dry season)**
Kodi madzi ambiri amene mumagwiritsa ntchito amachokera kuti? (Sources you are getting the majority of your water most used)	
Source Code	Source Code
()	()
1.	1.
2.	2.
3	3

Source codes:

Piped water
- Piped into dwelling/Yard/plot 11
- Public tap 12

Water from covered well or borehole
- protected well in dwelling/Yard/plot 21
- Protected public well 22

Water from open well
- Open well in dwelling/Yard/plot 31
- Open public well 32

Surface water
- Spring/river/stream 41
- Pond/lake/dam 42

Rainwater 51

Other (specify) _____ 96

013.	Mukabweretsa madzi kunyumba mumawasunga bwanji? (When you bring the water home, how do you store it)? *Pemphani kuti muone kumene madzi amasungidwa kutsimikiza yankho* *(Ask to see where the water is kept to verify response.)*	**01.** With cover **02.** Without cover **96.** Other (specify) _____
014.	Mukafuna kumwa madzi mumatani? (How do you dispense your drinking water)? (How do you dispense your drinking water)? *Zunguzani yankho limodzi* *Circle one response*	**01.** Single cup for dipping only and another for drinking **02.** Single cup for dipping and drinking **03.** Any available container **96.** Other *specify* _____
015.	Kodi banja lanu lili ndi chimbudzi? (Does your HH have access to toilet facilities)?	**01.** No **02.** Yes
	Kodi banja lanu lili ndi chimbudzi cha mtundu wanji? (What kind of toilet facility does your household use)?	**01.** Uncovered pit latrine **02.** Covered pit latrine **03.** Flush toilet **04.** No facility/bush/ field/lake
016.	(Do you share this facility with another household or households)?	**01. No** **02. Yes**
017.	*Direct observation of latrine*	**01.** Not currently used **02.** Clear signs of current usage but dirty **03.** Clear signs of current usage and clean **04.** Could not observe

018.	Mumanga chiani ndi chimbudzi cha makanda ndi ana ang'onoang'ono mu banja mwanu amene sakugwiritsa ntchito chimbudzi? (What do you do with the stools of babies and young children in your household who do not use the toilet facility)?	**01.** Thrown in toilet/latrine **02.** Buried in yard **03.**Not disposed of/left/On the ground **96** Other (specify)_____
019.	Zinyalala zanu mumapanga nazo chiani? (What do you do with your garbage)?	**01.** Open pit **02.** Anywhere **03.** Burning **04.** Garbage collector **96** Other(specify)_____
020.	(Does your household have a special place for hand washing?)	**00.** No **01.** Yes
021.	Ask to see the place used most often for hand washing and observe if the following items are available.	**01.** Water tap **02.** Soap **03.** Wash basin **96.** Other(specify)_____
022.	(When do you wash your hands with soap?) *Multiple answers possible, please circle all mentioned*	**01.** Never **02.** Before food preparation **03.** Before feeding children **04.** After attending to child faeces **96.** Other(specify)_____

MODULE B: INFANT AND CHILD CARE AND FEEDING

023.	Kodi munampatsa chiani <NAME> patsiku lakubadwa? (What did you give to <NAME> on the day of birth)? *(more than one answer can be given)* China chilli chonse? (Anything else)? *Multiple answers possible, please circle all mentioned*		Code
		Breast milk	**01.**
		Milk (other than breast milk	**02.**
		Plain water	**03.**
		glucose water	**04.**
		Gripe water	**05.**
		Sugar-salt-water solution	**06.**
		Fruit juice	**07.**
		Infant formula	**08.**
		Watery porridge	**09.**
		Infusions	**010.**
		Traditional herbal solutions	**011.**
		Other (specify) _____	**96.**
		Do not remember	**98.**
024.	Kodi ndi maola angati<NAME> atabadwa pamene munampatsa mkaka wam'mawere kwa nthawi yoyamba? (How many hours after birth did you give breast milk to <NAME> for the first time)?	**01.** Did not feed **02.** Within one hour of birth **03.** Between 1 & 8 hours after birth **04.** More than 8 hours after birth **05.** Don't remember	
025.	Kodi mwana munampatsa mkaka wachikasu woyambilira kutuluka pa tsiku lobadwa kapena munataya? (Did you give the colostrum to the child on the day of birth or did you throw it away)?	**00.** No, threw it away **01.** Yes, gave it to the child **98.** Don't know/don't remember	
026.	Kodi <NAME> akuyamwitsidwabe? (Is <NAME> still being breast fed)?	**00.** No **01.** Yes	

027.	Munamuyamwitsa kwa nthawi yayitali bwanji(**miyezi ingati**) <NAME> (For how many months did you breastfeed <NAME>)? *(If respondent does not remember put 99 in box)*	MONTHS ☐☐ *Write 00 if the child did not breast feed.*
028.	Kodi <NAME> munampatsa botolo lamkaka dzulo kapena usiku watha? (Did you give a bottle to <NAME> during the day yesterday, or during last night)?	**01.** No **02.** Yes **96.** Don't Know

029. Ndi pa zaka ziti pamene munayamba kupereka zakudya kapena zakumwa zotsatirazi pambali pa mkaka wa m'mawere kwa <NAME>
(At what age did you start giving the following food or drinks apart from breast milk to <NAME>)? **Questions on the age when the mother started giving the following foods to <NAME> (approximate age in months)**

	After : **OR** # Days	**OR** # Weeks	**OR** # Months	**OR** Not Yet 97	**OR** Don't know 98
1. Zamadzi kupatulako mkaka (Liquids other than milk) *Ngati tiyi, madzi otsekemera, etc (like tea, sweet water, etc…)*					
2. Formula (*like lactogen*)					
3. Mkaka wochokera ku ziweto(Milk from animals)					
4. *Zakudya* zina zopangidwa kuchokera ku mkaka(Other food made from milk) (cheese, yoghurt)					
5. *Cereals* (chimanga(maize), mapira(sorghum),mawere(millet), mpunga(rice),zina(other)					
6. Legumes (nyemba(beans), soya, *mtedza*(groundnuts), mtedza wa m'mtengo(tree nuts), nthangala(seeds), other)					
7. Tubers (chinangwa(cassava), mbatata(*potatoes*), masimbi(yam), other)					
8. Vitamin A rich vegetables (masamba wobiliwira(green leafy vegetables), mbatata ya kholowa ya chikasu(yellow sweet potato), carrot, maungu(pumpkin), other) and Vitamin A rich fruits (mango, papaya, malambe, masoko, other)					
9. Masamba ena(Other vegetables) (tomato, minkhaka(cucumber), anyezi(onion), other) ndi zipatso zina(and Other fruits) (nthochi(banana), apple, nanazi(pineapple), other)					
10. Animal foods – Nyama(Meat) (ng'ombe(beef), nkhumba(pork), nkhosa(lamb), *game*), nsomba(fish), nkhuku/abakha/nkhunda/nkhanga etc(poultry),makoswe(rodents),tizilombo ting'onoting'ono(insects), mazira(eggs),mbewa(mice) and insects					
11. Mafuta(Fats, oils), mapeyala(avocado pears)					

030.	Kodi mumatani ngati <NAME> akugona ndipo ndi nthawi yakudya? (What do you do if <NAME> is sleeping and it is time to eat)?	**01.** Nothing (let child sleep) **02.** Wake <NAME> up **03.** Still gives upon waking up **04.** <NAME > still not eating (not yet started eating) **96.** Other (specify) _____.

MODULE C: NUTRITION AND FEEDING PRACTICES

031.	**Kodi dzulo masana kapena usiku watha, ndi mtundu wanji wa zakudya munampatsa? During the day yesterday or last night, what type of food did you give to <NAME>** (*Read the list of foods consumed in the last 24 hours)* **Recommended foods are identified for analysis purposes only* **(1105a)**	Responses **00.** No **01.** Yes **98**. Don't Know
	1. Cereals (maize, sorghum, millet, rice, other)	

	2. *Legumes (beans, soya, groundnuts, tree nuts, seeds, other)	
	3. Tubers (cassava, potatoes, yam, other)	
	4. *Vitamin A rich vegetables (green leafy vegetables, yellow sweet potato, carrot, pumpkin, other)	
	5. Other vegetables (tomato, cucumber, onion, other)	
	6. *Vitamin A rich fruits (mango, papaya, malambe, masoko, other)	
	7. Other fruits (banana, apple, pineapple, other)	
	8. *Meat (beef, pork, lamb, game), fish, poultry, rodents, insects, eggs, mice and insects	
	9. *Milk, yoghurt, cheese	
	10. Fats, oils, avocado pears	
	11. Sugar, salt, other condiments	
	12. Tea, coffee, soda, other beverages	
	96. Other foods, please specify _____	

Kodi dzulo masana kapena usiku watha, ndi chakudya cha madzi cha mtundu wanji chomwe munampatsa? During the day yesterday or last night, what type of liquid did you give to <NAME>?

		00. No **01.** Yes **98.** Don't Know
	()	()
032.	1. Water?	
	2. Formula milk?	
	3. Any other type of milk (powder, animal, in carton)?	
	4. Fruit juice?	
	5. Other liquid (sweet water, tea, coffee, soda, etc)?	
	6. Breast milk?	
033.	How many times did (NAME) eat semi-solid (mashed) foods yesterday during the day or at night?	**01.** None **02.** Number **96** Not yet eating **98** Do not know

MODULE D: GROWTH MONITORING AND ADMISSION TO FEEDING PROGRAMS

	Kodi <NAME> ali ndi card yowonetsa m'mene akukulira/kapena kabuku kakuchipatala? (Does <NAME> have a growth monitoring card/health passport)? Ngati inde: chonde ndingaone nawo? (IF YES: May I see it please)?	**01.** Yes, seen **02.** Not available/lost/misplaced **03.** Never had a card **98** Don't know
034.	Look at <NAME'S> growth monitoring card and see if (name) has been weighed consistently in the last four months.	**00.**No **01.** Yes **98** Don't know
035.	Kodi <NAME>wagonekedwako kumagulu la zakudya mu miyezi isanu ndi umodzi yapitayi? (Has <NAME> been admitted to a nutrition program in the last 6 months)?	**00.** No **01.** Yes **98.** Don't know
036.	**(Was (NAME) weighed at birth?)**	**00.** No **01.** Yes **98.** Don't know

MODULE E: IMMUNIZATIONS

037.	Do you have a card where (NAME) vaccinations are written down?	**01.** Yes, seen **02.** Not available/lost/misplaced **03.** Never had a card **98.** Don't know

038. Copy vaccination date for each vaccine from the card.

Write "44" in "DAY" column if card shows that a vaccination was given, but no date is recorded.

VACCINATIONS	VACCINATION RATES		
	PAY	MONTH	YEAR
BCG			
POLIO (Polio given at birth)			
POLIO 1			
POLIO 2			
POLIO 3			
DPT 1/ Pentavalent			
DPT 2/ Pentavalent			
DPT 3/ Pentavalent			
Measles			
Vitamin A (Most recent			

MODULE F: CHILDHOOD ILLNESSES AND THEIR MANAGEMENT

039.	Pa masabata awiri apitawo kodi <DZINA> anadwala kwambiri matenda ena aliwonse oti anafuna chithandizo? (In the last two weeks, did <NAME> suffer from any of the following illnesses that was severe enough to need some treatment?)	Illness	**00.** No **01.** Yes **98.** Don't know
		()	()
		1. Fever/Malaria	
		2. Cough	
		3. Diarrhoea	
		96.Other Specify_____	
040.	Ngati <DZINA> anadwala, munafuna malangizo kapena chithandizo kunja kwa nyumba? (If <NAME> was sick, did you seek advice or look for treatment outside the home?)	**00.** No **01.** Yes	

041.	Ngati munafuna malangizo kapena chithandizo, munapita kuti? (If you sought advice or treatment, where did you go?) (*Circle everything that is mentioned)*	**Public or private medical sector (1203a)** **01.** Hospital **02.** Health centre **03.** Private health clinic **04.** Health post/station (pa level) **Intermediate (1203b)** **01.** Community health services (village)) **02.** Health agent **03.** Pharmacy/drugstore **96.** Other trained medical staff (specify) _____ **Traditional (1203c)** **01.** TBA **02.** Traditional healers **03.** Shops/market **04.** Village doctor (untrained **05.** Holy water/church/ mosque **96** Other traditional (specify) _____
042.	Ndindani ali ndilamulo lopanga chiganizo chomutengela mwana ku chipatala? (Who makes the decision about taking the child to the hospital?)	**01.** Mother **02.** Father **03.** Mother and father together **04.** Grand-mother **05.** Aunt **06.** Sister **07.** Brother **08.** Aunt **09.** Uncle **010.** Guardian **011.** Maid **012.** Grand father **96.** Other (Specify) _____
043.	SICK CHILD (Now I am going to ask you questions on management of sick child). Sometimes children get sick and need to receive care or treatment for illness. What are the signs and illness that would indicate your child needs treatment? **PROBE:** *Multiple answers possible, circle all mentioned.*	**01.** Don't know **02.** Looks unwell or not playing normally **03.** Not eating or drinking **04.** Lethargic or difficult to wake **05.** High fever **06.** Fast breathing **07.** Difficult breathing **08.** Vomits everything **09.** Convulsions **96.** Other (specify)_____

MODULE G: MANAGEMENT OF DIARRHOEA

044.	Panthawi imene<DZINA> anatsegula m'mimba munapatsa mulingo wa zakumwa wotani, pang'ono, kwambiri kapena chimodzimodzi kuyerekeza ndi m'mene zimakhalira nthawi zonse. (During the time <NAME> had diarrhoea, how much fluids did you give, was the quantity less, much or the same compared to the usual.)	**01.** Less **02.** More **03.** About the same **04.** Stopped giving fluid **98** Don't know
045.	Panthawi imene <DZINA> anatsegula m'mimba ndi mulingo wotani wa zakudya umene munampatsa pofananiza ndi nthawi zones. (During the time <NAME> had diarrhoea, what quantity of food did you give compared to usual.)	**01.** Less **02.** More **03.** About the same **04.** Stopped giving food **98** Don't know
046.	What was given to treat the diarrhoea? PROBE: *multiple answers possible, circle all mentioned.*	**01.** Nothing **02.** Fluid from ORS packet **03.** Home – made fluid **04.** Pill or syrup **05.** injection **06.** (IV) intravenous **07.** Home remedies/ herbal medicines **08.** Other (specify
047.	Have you heard of Thanzi (ORS)	**00.** No **01.** Yes

048.	.If Yes, Ask the mother to describe ORS preparation for you Once mother has provided the description, record whether she described ORS/ Thanzi preparation correctly or incorrectly. Circle 1 (correctly) If the mother mentioned **ALL** the following: 1. Use 1 litre (3 empty bottles of fanta) filled with clean drinking water. 2. Use the entire packet of Thanzi ORS. 3. Dissolve the powder fully.	**01.** Described correctly **02.** Described incorrectly

MODULE H: ACUTE RESPIRATORY INFECTIONS

049.	Has (Name) had an illness with a cough at anytime in the last two weeks?	**00.** No **01.** Yes **98.** Don't know
050.	Has(Name)had an illness with a cough, did she/he have difficult breathing or breath faster than usual with short fast breaths?	**00.** No **01.** Yes **98.** Don't know
051.	Did you seek advice or treatment for the cough fast breathing?	**00.** No **01.** Yes **98.** Don't know
052.	How long after you noticed (NAME) cough did you seek treatment?	**01.** Same day **02.** Next day **03.** Two days **04.** Three or more
053.	Which medicines were given to (Name)? *Multiple answers possible, Circle all mentioned*	**01.** Nothing **02.** Aspirin **03.** Panado **04.** Cough Syrup **05.** Amoxicillin **06.** Ethroymycin **07.** Bacterium **96**. Other (specify)_____ 98. Don't know

MODULE I: MALARIA CASE MANAGEMENT

054.	Has (Name) been ill with fever in the last two weeks?	**00.** No **01.** Yes **98.** Don't know
055.	Does (NAME) have fever now?	**00.** No **01.** Yes **98.** Don't know
056.	Did you ask advice or treatment for (NAME) fever?	**00.** No **01.** Yes **98.** Don't know
057.	How long after you noticed (NAME) fever did you seek for treatment?	**01.** Same day **02.** Next day **03.** Two days **04.** Three or more
058.	Which medicines were given to (NAME) for his/her fever? Circle all the medicines that were given.	**01.** Fansidar **02.** Quinine **03.** Aspirin **04.** Panado **05.** Cotrimoxazole (Bacterium) **96**. Other (specify)_____ **98**. Do not know
059.	How long after the fever started did (NAME) start taking the medicine?	**01.** Same day **02.** Next day after the fever **03.** Two days after the fever **04.** Three or more days after the fever **98**. Do not know

060.	What causes malaria? *Multiple answers possible, Circle all mentioned*	**01.** Mosquitoes **02.** Witchcraft **03.** Intravenous drug use **04.** Blood transfusions **05.** Injections **06.** Sharing razor blades **07.** Kissing **08.** Stagnant water **96.** Other (specify)_____ **98.** Do not know
061.	Is there any way to prevent malaria? *Multiple answers possible, Circle all mentioned*	**01.** Use of mosquito bednets **02.** Use of treated mosquito bednets **03.** Clearing bushes **04.** Draining stagnant water **05.** House spraying **06.** Malaria prophylaxis **96.** Other (specify)_____ **98.** Do not know

MOSQUITO BEDNET USE (KUGWIRITSA NTCHITO MA SIKITO A UDZUDZU)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
062.	**Muli ndi masikito munyumba mwanu**? (Do you have any bednets in your house?)	**00.** No **01.** Yes **98.** Don't know	
063.	Ndindani anagona mu masikito usiku wathawu? (If Yes, who slept under a bednet last night?) *Multiple answers possible, Circle all mentioned*	**01** Child <NAME>(Reference child) **02** Myself **03** Husband/Partner **04.** We do not use the net this time **96.** Other (specify)_____ **98.** Don't know	
064.	How often do you use the bednet?	**01.** Everyday **02.** Once in a while **03.** Rainy season **96.** Other (specify)_____	
065.	Was the bed net ever soaked or dipped in a liquid to repel mosquitoes?	**00.** No **01.** Yes **98.** Don't know	
066.	How long ago was the bednet last soaked? **RECORD ANSWER IN MONTHS.**	**01.** Less than 1 month **02.** Months **03.** Do not know	
067.	Have you or someone else in your house ever washed the bednet? IF NO RECORD 00 IF YES, RECORD NUMBER OF TIMES.	Number of times	

MODULE J: ANTHROPOMETRY - HEIGHT AND WEIGHT MEASUREMENTS

CHILD 6-23.99 MONTHS			
BIRTH DATE OF CHILD 6-23.99MO	AGE	HEIGHT	WEIGHT
0	0	0	0
DAY MO YEAR	MONTHS	CM	KG
__ __ __ __ __ __ __ __	__	___ . __	___ . __

068.	Source of Birth Date ()	**01.** Birth certificate **02.** Baptismal record **03.** Clinic card **04.** Home record **05.** Calendar of events **06.** Mother/caregiver recall **96.** Other (specify)_____	
069.	Clothes worn by child during weight (1603)	**01.** No clothes **02.** Light clothing **03.** Mid-weight clothing **04.** Heavy clothing	
070.	Measurements	**01.** Completed **02.** Partially completed **03.** Mother/caregiver refused **04.** Child uncooperative/refused	

Comments about the situations of the child at the time of this measurement

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THANK THE MOTHER FOR HER TIME AND PARTICIPATION IN THE SURVEY.