

CATHOLIC RELIEF SERVICES (CRS) GHANA  
Final Evaluation of Title II 2004-08 DAP

FINAL REPORT SUBMITTED BY:

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## **Executive Summary**

### **Introduction**

CRS/Ghana implemented a Development Assistance Programme (DAP) for the period FY 2004-2008. The Strategic long-term overall goal of the 2004-08 DAP was to improve food security of targeted rural populations in the three northern regions of Ghana and among extremely vulnerable populations in urban, peri-urban, and rural areas throughout the country. The programme consisted of three main components namely, education, health and safety net.

### **Methodology**

Cluster-sampling technique, which is a multi-stage sampling procedure, was used to select the study respondents. Quantitative data were collected through a 30-cluster using sampling methodology, while qualitative data was collected through focus group discussions and key informant interviews of project staff, school children and teachers, community leaders, district and sub-district health personnel and managers of safety net institutions.

### **Main Findings in the Health Sector**

The main achievements of the health and nutrition component included the following:

- a) The overall prevalence of stunted growth among children less than five years of age was reduced by 7.7 percentage points at the end of the project. The greatest reduction was made in the age group 12-23 months.
- b) Great improvement was made in key household health and nutrition behaviours/practices. For example, early initiation of breastfeeding and exclusive breastfeeding rates improved by 41.0 and 68.0 percentage points respectively.
- c) Management of common childhood illnesses improved. For example, there was a 20.3 percentage point increase (49.5%-29.2%) in the number of children under two who had experienced diarrhoea in the preceding two weeks and had received either the same or more fluids.
- d) Access to child and maternal health services increased significantly. For example, the proportion of mothers who received at least one tetanus toxoid injections (as recorded in maternal health card) increased from the 17.2% at the beginning of the programme to 68.0% by the closed of the programme.
- e) Though still low, skilled delivery (that is, delivery conducted by trained midwife/doctor/nurse) in the programme communities increased by 14.4 percentage points (that is, averagely from 18.5% to 32.9%). Most deliveries were conducted mainly by traditional birth attendants (TBA) especially in Saboba/Chereponi, and East Mamprusi districts. Overall however, TBA deliveries declined from 58.9% at baseline to 53.6% at end of project period.

- f) The proportion of children aged 12-23 months who received OPV3, DPT3, yellow fever and measles vaccines before their first birthday (that is, percentage of fully immunized children) was 91.4% at the end of the project period in the programme districts.
- g) Only a small proportion of households interviewed (about 32.6%) were consuming an adequate amount of iodine (that is, 15 ppm). The control of iodine deficiency disorders will be difficult if measures are not taken by the government and other partners to really enforce the bye-law on the consumption of iodated salt in the country.
- h) The implementation of the FACS strategy at the community levels contributed to improved utilization of health services as evidenced by the high (88.6%) regular attendance at growth monitoring sessions and increased childhood immunization rates.
- i) The training component of the programme helped develop skills in areas such as community mobilization, report writing, IMCI, data analysis, and store management.

### **Main Findings in the Education Sector**

- a) Enrolment figures of programme districts show that yearly enrolment targets set by CRS/Ghana between 2004 and 2007 have been exceeded by 25% and 64% respectively.
- b) The number of girls enrolled in ration schools increased from 44,919 in 2004 to 98,996 in 2008.
- c) Overall retention in programme schools increased from 46% in 2004 to 73% in 2008 with retention for girls being higher (87%) than boys (60%).
- d) An average of 155,244 school pupils was de-wormed bi-annually since 2004, with yearly coverage figures consistently surpassing annual set targets.
- e) The school feeding and health programmes revamped and built the capacity of school and community level structures who now participate in the development of their schools.
- f) Frequency of supervisory visits is reported to have increased from 27% in 2004 to 73% in 2007 and over 90% of teachers in programme schools use Teaching and Learning Materials to enhance teaching and learning in schools.
- g) The SHEP programme has not only increased awareness about healthy hygienic practices among school pupils and parents alike, it has also increased healthy hygienic practices. School programme teachers and head teachers reported improvements in the personal hygiene of school pupils over the years due to the adoption of sound hygienic practice.
- h) Instituted bi-annual de-worming exercises supported by CRS/Ghana since 2004 have greatly improved the health of school children by reducing cases of worm infestation which gave rise to a wide range of symptoms such as pale appearance, bloated stomachs and so on at the onset of the programme.

- i) The SHEP programme has also built the capacity of its partners: school health teachers, district and regional SHEP coordinators, members of school health clubs and school community health committee members, through its training programmes as well as other logistics support.

### **Sustainability of Achievements**

Prospects for sustaining the gains made in the area of child survival activities are promising, except that the phase-out of food assistance in Nutrition Rehabilitation Centres will negatively affect effective recuperation of severely malnourished children. Sustaining the gains in the education sector (for example, increased enrolment and attendance) and safety net institutions do not appear to be possible within the context of formulated exit strategies. Though exit plans have been made in schools and communities for a possible continuation of feeding and supporting services, no concrete evidence was seen during the evaluation that schools, communities and even DAs and District Directorates of education would be able to implement exit plans all alone. Furthermore, the physical and economic access to food is still a huge inhibiting factor in programme communities.

### **Recommendations**

- a) CRS/Ghana's integrated programme delivery using synergistic approaches optimises programme outcomes and interventions in its school feeding and health interventions and is worthy of emulation.
- b) Review meetings are important for soliciting the views of programme partners about planned interventions leading to programme ownership in the health sector. Programme officers in the education sector should learn from the successes of review meetings in the health sector and as a matter of urgency, dialogue with officials of GES on the modalities for reviewing the organisation of review meeting among partners of GES so as to elicit the desired programme input from review meetings.
- c) CRS/Ghana should establish modalities to sustain the animation of stakeholder on available opportunities to explore to implement their proposed exit interventions. As part of this arrangement, CRS/Ghana should dialogue with district directorates of GES and the assemblies on how to supervise and monitor interventions after the close down of the programme in September.
- d) District Assemblies are strategic partners in the development agenda of districts under the current decentralisation dispensation and CRS/Ghana must explore ways of engaging DAs formally in joint school feeding and health interventions through Memoranda of Understanding (MOU) as done with communities and Ministries Departments and Agencies.

- e) Bi-annual or quarterly review meetings organised by CRS/Ghana in the education sector are good mechanisms for engaging partners in school health and feeding issues, but they are not broad-based institutions of shared partnership responsibility. There is the need to build network coalition for shared partnership responsibility in the education sector.
- f) In as much as increase in enrolment, particularly of the girl child is one of the primary objectives of the CRS/Ghana's school feeding programme, surge in enrolment in programme schools was found to be impacting negatively on quality of education because infrastructure, teachers and textbooks are overstretched. This brings to the fore, the need to couple food support with investments in quality education in order to sustain the benefits of improved enrolment and attendance.
- g) Based on experiences of community supplementation in CRS/Ghana's programme schools during periods of food shortages, the evaluation team is convinced that no community will be in the position to shoulder the responsibility of feeding its school children all alone. School Management Committees and Parent-Teacher Associations in the few endowed communities that are currently in the position to provide food supplements, could help identify obstacles and opportunities in order to support and implement their exit plans.
- h) Unmet needs in water and sanitation are immense in many districts CRS/Ghana is supporting despite efforts by DAs and CRS/Ghana in SHEP districts. The lack of water and education facilities makes it difficult for schools and communities to optimise interventions carried out by CRS/Ghana's school feeding and health programmes.
- i) Future development assistance should consider removing some of the perpetual hindering factors that affect local production of food and support other income generation activities in areas (e.g. Lawra and Bongo districts) where meaningful agricultural activities are impossible.
- j) Future FACS programmes should clearly spell-out the roles and responsibilities of communities and insist that those responsibilities are complied with. Additionally, centre management committee members should be motivated to generate interest in the management of centre activities.
- k) Some kind of incentives was given to community volunteer workers. Interaction with these volunteers revealed they would like to be officially recognized as having worked with CRS (that is, through awards of certificate of recognition/participation) in community service. This, they claimed, will offer them greater future prospects in the job market.
- l) Proper plotting of growth curves need to be taken seriously. The GHS should train its staff to properly do that. This is because the growth curves serve as basis for counseling at growth monitoring sessions

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Our warmest compliments also go to all the women who participated in this study for their immense co-operation and understanding.

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Finally, we wish to acknowledge the contribution of the staff in CRS/Ghana Office and Ghana USAID Mission for their comments on the development of the evaluation protocol and the draft report. Comments and feedback received from them helped immensely in fine-tuning the content and layout of this report.

## List of Acronyms and Abbreviations

AIDS	Acquired Immunodeficiency Deficiency Syndrome
ARI	Acute Respiratory Infection
BCC	Behavior Change Communication
CHW	Community Health Worker
C-IMCI	Community IMCI
CRS	Catholic Relief Services
CS	Child Survival
CSP	Child Survival Project
DAP	Development Assistance Programme
DEPT	District Education Planning Team
DMIT	District Management Improvement Team
DHMT	District Health Management Team
DIP	Detailed Implementation Plan
DTST	District Teacher Support Teams
EBF	Exclusive Breastfeeding
EPI	Expanded Program on Immunization
FACS	Food Assisted Child Survival
FE	Final Evaluation
FFE	Food for Education
FFP	Food for Peace
FGD	Focus Group Discussion
GM	Growth Monitoring
GPRS	Ghana Poverty Reduction Strategy
GSFP	Government's School Feeding Programme
HIS	Health Information System
IEC	Information, Education, Communication
ICWSI	Integrated Community Water and Sanitation Improvement
ILT	Instructional Leadership Training
INSET	In-service Training
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
ITN	Insecticide-treated Net
IPTT	Indicator Performance Tracking Table

KPC	Knowledge, Practice and Coverage Survey
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MDA	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
MIS	Management Information System
MTE	Mid-Term Evaluation
MOH	Ministry of Health
MOU	Memorandum of Understanding
MTE	Midterm Evaluation
MTMSG	Mother-to-Mother Support Group
NGO	Non-Governmental Organization
NORWASP	Northern Region Water and Sanitation Programme
ORS	Oral Rehydration Solution
PLWHAs	Persons living with HIV/AIDS
PMT	Performance Monitoring Test
PTA	Parent Teacher Association
QEIP	Quality Education Improvement
SCHMC	School Community Health Management Committees
SHEP	School Health Programme (SHEP)
SMC	School Management Committees
SNI	Safety Net Initiatives
TBA	Traditional Birth Attendants
THR	Take Home Ration
TOT	Trainer of Trainers
TT	Tetanus Toxoid
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development
VHC	Village Health Committee
WATSAN	Water and Sanitation
WFP	World Food Programme
WHO	World Health Organization

# **SECTION 1 INTRODUCTION**

## **1.1 Programme Background**

Since 1958, Catholic Relief Services (CRS) has contributed to addressing food insecurity in Ghana especially in rural and peri-urban areas, using resources from USAID Bureau of Democracy, Conflict and Humanitarian /Office of Food for Peace (DCHA/FFP) as well as its own private resources. CRS/Ghana identified food insecurity as an entry point for its FY 2004-2008 Development Assistance Programme (DAP) in Ghana, particularly northern Ghana where the problem is more chronic. The Strategic long-term overall outcome for the 2004-08 DAP was an improvement in food security of targeted rural populations in the three northern regions of Ghana and among extremely vulnerable populations in urban, peri-urban, and rural areas throughout the country. The programme had three main components namely, education, health and safety net. The Safety Net Initiatives (SNI) had national coverage while the Education component covered all districts in northern Ghana. The Health component was however targeted some districts in the three northern regions. CRS/Ghana partners with the Ghana Health Service, Ghana Education Service, District Assemblies, Department of Social Welfare and Church Missions for programme implementation.

The approach used by CRS/Ghana to attain food security was integrated in nature targeting food insecure individuals and households, providing food rations to school children and child survival and school health programmes. Through these programmes, CRS sought to improve food availability, access and utilisation in programme communities and districts.

A final evaluation (FE) of the programme was invited in July 2008; details of the scope of work (SOW) are outlined in Appendix A.

## **1.2 Purpose and Objectives of the Evaluation**

The main aim of the FE was to assess the extent to which the program achieved its objectives. It was also designed to document key best practices as well as challenges with a view to guiding other cooperating sponsors in implementing similar DAPs. The FE sought to identify, assess and analyze the following issues:

- achievements of the programme against the original objectives, outputs and activities as detailed in the project document as well as unintended outcomes associated with the interventions;
- level of contribution and/or ownership of the projects by participating beneficiary communities and institutional partners;

- effectiveness of food as a resource and an incentive for children to attend school;
- commodity delivery issues/problems;
- management information systems;
- partnerships and collaborations among communities, government departments and NGOs;
- implementation strategies, challenges and lessons learned;
- phase-out/close-out processes and outcomes;
- relationships with, and appropriateness and capacity of partners to sustain the gains thus made over the DAP period and
- best practices and lessons learned to date that will benefit other USAID cooperating sponsors implementing Title II-funded development interventions.

### **1.3 Programme Description**

The programme description covers the components and the intended outcomes of the programme namely the relevance, targets, outcomes, activities, outputs and the relationship between activities and outcomes.

#### **1.3.1 Relevance**

Food insecurity resulting from vagaries of the weather, natural disasters such as droughts and floods continue to impede efforts at improving the nutritional status of children. In particular, poverty and little nutritional knowledge are other challenges that need to be addressed before significant improvement in child nutrition can be achieved. The 2004-08 DAP therefore was conceived to improve health and nutrition knowledge/practices at the household level. Reduction in infant and child growth retardation is essential conditions for achieving the Millennium Development Goals (MDGs) that are related to child survival and education (MDG 4), the eradication of extreme poverty and hunger (MDG 1) and promotion of universal basic education (MDG2) with special emphasis on gender and geographical equity (MDG3). These goals are also pursued by the Ghana Poverty Reduction Strategy (GPRS) which seeks to eradicate extreme poverty and to provide relevant education for all Ghanaians to enable them to acquire skills to be functionally literate and productive, and to facilitate poverty reduction and wealth creation.

#### **1.3.2 Target groups**

The beneficiaries of the 2004-08 DAP were primarily women and children living in food insecure households in rural farming communities. Focus communities are located in selected districts in the three northern regions of the country. In order to reduce inequalities, fighting against poverty and building a just and equitable society, the programme focused on these vulnerable groups in view of the fact that maternal and child malnutrition is responsible for more than one third of under-five mortality (Black et al., 2008).

### **1.3.3 Expected Outcomes in the Health Sector**

The intended changes that will result from the programme implementation were categorized as short-term, intermediate and long-term. The ultimate goal was to improve food security of the targeted population in the three regions of Northern Ghana. Food security, according to USAID, refers to physical and economic access to sufficient food by all people at all times in order to meet their dietary needs for a productive and healthy life (USAID, 1995). Going by this definition, the food security concept appears to be diverse and complex and so no single indicator can adequately measure it. However, CRS/Ghana had set some objectives in pursuance of improving household food security and so these program objectives formed the basis of the final evaluation. For simplicity, food security is seen to consist of three components namely, food availability, food access and food utilization.

Effective utilization of food (through knowledge and skills gained from health & nutrition education and improved access to health services) was expected to improve the health and nutritional status of beneficiary children. The determinants of food utilization include the quantity and quality of food intake, as well as child care including feeding practices. Consequently, the main focus of the FACS activities under the health and nutrition component of the 2004-08 DAP was to improve the health and nutritional status of children and key household health and nutrition behaviours in programme districts.

### **1.3.4 Expected Outcomes in the Education Sector**

In the area of education, the following outcomes are expected

- improvement in supervision by district and circuit level supervisors,
- increment in the number of teachers using improved teaching methodologies,
- community participation in education is improved,
- enrolment of children, especially girls is increased,
- increased in the consumption of micronutrients and de-worming medications; and
- key health behaviour in school among primary students are improved.

The strategic objectives are presented below:

#### **Sub-goal 1: Improved child survival in three northern regions of Ghana**

Direct measurement of child survival was not possible within the operations of the current DAP. However, some key intermediate outcomes that have a direct association with child survival rates in Ghana were measured. These included a decrease in chronic malnutrition (stunting) and an improvement in key household health and nutrition behaviour in programme districts.

### **Sub-goal 2: Improved educational attainment in Ghana's three northern regions**

The education component encompassed not only school feeding and quality education but also the school health programme, which later incorporated a water and sanitation component.

### **Sub-goal 3: Improved access to food for highly food insecure populations throughout Ghana**

A safety net component of the programme targeted orphanages, homes for street children, the disabled, people living with HIV/AIDS (PLWHAs), and homes for the aged across the country. The main outcome was the provision of food assistance to 15,000 beneficiaries annually.

#### **1.3.5 Activities**

CRS did not directly implement interventions in the community but rather supported and provided training, materials, and technical assistance to its partners. Programme activities were aimed at improving participation amongst targeted beneficiaries.

CRS reached the target populations with its planned activities through collaboration with the Ghana Health Service (GHS), Ghana Education Service (GES) and Department of Social Welfare (DSW).

Program activities included the following:

- Training and provision of technical assistance
- Supply of food assistance to schools, FACS communities and SNI centres
- Support for the construction of improved food storage facilities and growth monitoring centers
- Community education in nutrition and preventive health
- Provision of promotional materials, such as T-shirts and calendars, to the partners
- Provision of logistical support ( motorbikes and fuel)
- Rigorous and sustained monitoring of planned activities
- Supported community-level health promotion activities including supporting mothers' support groups and holding health campaigns, etc.
- Support for the creation and running of more outreach points (e.g. building of FACS centres), community-based health planning and Services (CHPS) compounds, integrated management of childhood illnesses (IMCI)
- School health education including de-worming, hand washing

#### **1.3.6 Outputs**

##### **Health Sector:**

The following intermediate results were expected from the health sector interventions which sought to improve the health and nutrition of children under-five years of age in Ghana.

- improved key household health and nutrition behaviours among mothers in programme districts,
- improved accessibility of health services in programme districts,
- improved quality of health services in programme districts and;
- increased utilisation of health services by mothers in programme districts.

Two-pronged activities were proposed in the health sector towards achieving the above results. These are comprehensive behavioural change interventions to address sub-optimal household health and nutritional behaviour. In the case of poor utilisation of key health and nutrition services, interventions focused on the promotion of improved care seeking behaviour, accessibility of health services and improved quality of health services. These interventions are broadly referred to as the Food Assisted Child Survival (FACS) Programme.

### **Education Sector Programme:**

Improving educational attainment in the Ghana's three northern regions was pursued through three sub-objectives by CRS/Ghana:

- improved quality primary education,
- increased educational opportunities of Ghanaian children, especially girls; and
- improved health and nutritional status of pre and primary school pupils in selected schools.

In seeking to improve quality in primary education CRS/Ghana pursued the following interventions: improving the frequency and quality of supervision, use of improved teaching methodologies by teachers and through community participation in educational management. The above three prong interventions are pursued by CRS under the Quality Education Improvement (QEIP) Programme. Furthermore, interventions that sought to improve the health and nutritional status of pre and primary school pupils in selected schools included increased consumption of micro-nutrients and de-worming medications and improvement among primary pupils. These interventions are pursued under the Food for Education (FFE) and School health (SHEP) programmes.

### **Safety-Net Initiative:**

SNI, which is the traditional programme of CRS/Ghana, was incorporated into the DAP 2004-2008 so as to improve access to food by 15,000 highly vulnerable individuals per year by 2008. This programme targeted the poor and marginalised groups such as people affected with HIV/AIDS, TB patients, severely malnourished children and other extremely vulnerable persons such as physically or mentally disabled persons and orphans.

### **1.3.7 Stage of Development and Geographical Scope of the programme**

The programme was in the maintenance stage when the final evaluation was conducted. The three sectoral components of the 2004-08 DAP had a varied geographical coverage. Whereas the SNI covers the entire country, FFE, SHEP and FACS components were concentrated in the three northern regions of Ghana, namely; Upper East, Upper West and Northern Region. However, considering the northern sector programmes, the FFE programme together with its rations component is the most extensive, spanning a total of thirty four (34) districts: 8 districts in the Upper East, 8 in the Upper West and 18 in the Northern Region. Next to the School Feeding programme was the FACS programme, covering a total of eight districts, although with much programme intensity in the Upper West Region, where four programme districts are located. SHEP was strategically integrated into 4 FACS districts namely Lawra, East Mamprusi, Bongo and Bunkpurugu Yunyoo districts.

In terms of programme coverage by school and health communities, FFE covers 963 nurseries and primary schools. About 48.9% of the school are in the northern region alone. The FACS programme, which is next to the FFE in terms of coverage, had 221 beneficiary communities including 26 phased-out communities. Forty-two (42 percent) of the communities are in the Upper West Region. In the case of SHEP, there are 114 beneficiary schools and communities in the Bongo, East Mamprusi, Bunkprugu Yunyoo and Lawra districts. In fact, about one-half of the schools in Lawra (50%) and Bongo (49%) districts are covered by the SHEP programme. In the case of Bunkprugu/Yunyoo and East Mamprusi districts, The SNI programme has 227 centres spread across 84 districts in all the ten regions of Ghana. Thus, the DAP FY2004-08 could be described as a national programme.

### **1.3.8 Programme Design and Implementation**

CRS/Ghana's Title II activities were not implemented in isolation. CRS/Ghana pursued a strategy of both sectoral and geographic integration. Even in some cases, CRS/Ghana solicited non-Title II project funds in order to deliver programmes according to the integrated logic it pursued.

Within the sectoral integration model, the education component of the programme did not only pursue school feeding and quality education programmes but also school health programme, which later incorporated a water and sanitation component. Both the quality education and the water and sanitation programmes were funded with resources privately raised by CRS/Ghana to ensure synergy of programmes. In terms of geographic integration, CRS/Ghana targeted the same districts and communities for its health interventions not only to optimize the efficiency and effectiveness of

programmes but it also ensured a life cycle targeting of beneficiaries from pregnancy through to school going- age.

The problem statement, goal, objectives and sub-objectives of the DAP addressed crucial unmet needs of northern Ghana which faces limited availability of food, inadequate economic access to food and poor utilisation of food. Furthermore, the unmet needs assessment done by CRS/Ghana sector by sector, as well as its capacity audit in food security programmes implemented in northern Ghana resulted in a proper intervention mesh devoid of duplications in the targeted sectors.

In spite of the above, stated programme objectives and sub-objectives in the proposal document fail to lend themselves to precise measurement. For example, the document proposes improved teaching methodologies, improved supervision of schools, increased community participation in education etc without indicating in measurable terms the margins of intended improvements (that is, the magnitude of expected change were not specified).

Knowledge Practice and Coverage (KPC) and anthropometric surveys were carried out prior to programme implementation to collect baseline data for measuring project impact in the health sector. Although similar baseline surveys were conducted on FFE, SHEP and QEIP at the onset of their implementation, there are still baseline gaps making it difficult to track progress in attendance and retention in programme districts.

The school feeding programme works with the logistics department. The Department is charged with the responsibility of food distribution to recipient partners. Beneficiary levels and periods of commodity distribution are set and communicated to partners. Food is transported directly to recipient organisations or communities. The Logistics Department monitors receipt of food and condition under which it was received to ensure compliance. Once the food has been received it is monitored periodically by the Compliance Department and programme officers to ensure that storage conditions and regulations for use are upheld. Supervision also provides backstopping support in cases of lapses and deficiencies. Assessment and checks conducted on commodity records and tally cards during the evaluation show that records were well kept. It also revealed that the monitoring process has minimised commodity theft and pilfering. Only few isolated cases of food theft and pilfering were reported in three sample communities.

CRS/Ghana operates an elaborate Management and Information System with data-gathering responsibility in the hands of sectoral supervisors at the school/centre and district levels using an Indicator Performance Tracking Table (IPTT) and an Indicator Monitoring Plan which specifies

each indicator, the frequency of data collection, tools for data collection and personnel responsible. The system is supported by a team composed of a program manager and monitoring and evaluation officers, responsible for implementing periodic surveys on programme implementation, data analysis and utilisation at the office in Tamale.

The system is fed with information from the other departments and has proved worthwhile in generating periodic programme input requirements and building trend data for tracking programme performance over the years.

### **1.3.9 Stake-Holders and Collaborators**

In complementing the efforts of GOG's Poverty Reduction Strategy and the specific sectoral strategies of Ministries, Departments and Agencies (MDA) operating in the health, education and social welfare, CRS/Ghana forged elaborate partnerships ( to the extent of signing MOUs with the MDA) with the respective departments, ministries and agencies for programme implementation. Appropriate and elaborate structures for programme implementation and monitoring as well as decision making, have been established. Partner supervisors are appointed at the regional, district and sub-district or circuit levels for oversight responsibilities and purposes of problem solving. School or health-centre structures have also been established in all schools and FACS centres. Partner supervisors are properly screened to ensure that qualified and reliable personnel are appointed.

Community level structures have also been institutionalised at each school/health community. Food and Community School Health Management Committees have been established and Parent Teacher Associations (PTAs) and School Management Committees (SMCs) revamped in all schools to play oversight roles in ensuring that food is cooked and a child-friendly school environment is cultivated. Similarly, two community volunteers, male and female, are selected in each FACS community to assist health staff in community mobilisation.

CRS/Ghana has built the capacity of its chain of regional, district, sub-district/circuit, centre or school structures in the FFE, FACS and Safety-net programmes in their various oversight and problem-solving roles. Partner-supervisors at the regional, district and sub-district levels have received training in aspects of community mobilisation, data collection, reporting, monitoring and supervision while structure at the centre and school community levels have been trained on how to receive and manage food supplies.

Furthermore, to enhance the mobility of partner-supervisors at the regional and district levels, motor-bikes /vehicles, fuel and allowances are provided while FACS centre volunteers at the community level have been provided bicycles.

CRS/Ghana has also forged partnership and collaboration with other non-governmental organisations and multi-lateral organisations operating in the health, education and safety-net sectors in the three northern regions. CRS/Ghana signed agreements with Opportunities Industrialisation Centres International (OICI), Water AID/UK and Northern Region Water and Sanitation Programme (NORWASP) for the provision of boreholes and household latrines in 2005. Financial support was also received for the same project from parishioners of St. John Vianney and Mary of Queen of Peace in Seattle.

Multilateral agencies CRS/Ghana Collaborates with in the school feeding programme include USAID Ghana mission and USAID FFP office in Washington (which provided funding for the DAP Title II programme FY2004-08), World Food Programme (WFP) and UNICEF. UNICEF provides drugs for the de-worming of schools under SHEP since 2005. UNICEF also provides funding for the Integrated Nutrition Action against Malnutrition project currently piloted in the Lawra, Wa Municipal, Wa East and Wa West districts.

Although the working relationships between CRS/Ghana and all its collaborative agencies could not be assessed during the final evaluation mission, its relationship with sectoral partners in the health, education and safety-net at the district, school and community levels was perceived to be challenging but very cordial. For instance, a partner supervisor noted that “CRS/Ghana’s relationship requires partners to be on their toes always, and delivering the goods” CRS/Ghana has also been perceived to be very responsive to beneficiary needs.

### **1.3.10 Participation and Decision Making**

Interactions between the evaluation team and programme staff and management revealed that programme partners and stakeholders participate in decision making. CRS/Ghana solicits the views of partners on the selection of project schools, outreach centres, appointment of partner supervisors, safety-net beneficiaries, programme teachers, and village level structures and volunteers. In fact, partners have a final word in some of these issues.

One important avenue for decision making by sectoral partners in health and education, instituted by CRS/Ghana, is Bi-annual Review Meetings (BRMs). They engage sectoral partners in dialogue and are meant to review programme implementation by evaluating the successes and constraints over a

defined period. Review meetings are also meant to synthesize proposed activities and plans for the ensuing year. Although joint bi-annual review meetings among CRS/Ghana programme partners have undergone changes over the years to become sectoral/district specific or annual and quarterly review meeting, interactions with programme management staff of CRS/Ghana revealed they have proved to be successful, particularly in the health sector. In the health sector, review meetings “help to weed out duplications in interventions between Ghana Health Service (GHS) and partners and enable partners to situate their activities for an ensuing period within the overall activity plan of the district or sub-district concerned”, as noted by one programme manager. Review meetings have also increased awareness among key health officers on the nature of interventions pursued by CRS/Ghana. However, in the education sector things were different. The meetings in the Education Sector were less proactive and often called at the instance of CRS/Ghana.

#### **1.4 Focus of the Final Evaluation**

The 2004-08 DAP was in its maintenance stage when the final evaluation was commissioned. Therefore, the effectiveness/outcome evaluation focused on (1) the capacity building processes used in implementing the programme (2) logistical support (3) the outputs produced by the programme (4) the intermediate outcomes resulting from the outputs (for example, changes in health and nutrition behaviours (5) the beneficiaries of program interventions and (6) ownership and sustainability issues in the communities and schools.

## **SECTION 2 METHODOLOGY**

### **2.1 Evaluation Design**

The evaluation design was non-experimental/observational. Comparison of food security indicators at baseline and at end of project gave an indication of changes that have taken place with time.

Cross-sectional data of children under five years were also collected.

### **2.2 Sampling and Selection of Subjects**

Sample size for the final evaluation was informed by the results of the baseline survey and the mid-term evaluation. Various indicators are specified in the DAP document. In selecting an indicator to calculate sample size, the most demanding indicator in terms of sample size is given preference. Sample size calculated on this basis is most likely to suffice for judging the effect on all other assessment indicators. The sample size can also be calculated based on a set of indicators considered to be the most important in the intervention. One of the important indicators for measuring the impact of the DAP is reduced prevalence of stunted and underweight children under five years.

In stating the specific strategic objectives for the DAP, the direction of change was specified but the magnitude of such expected changes were, however, lacking. This, in a way, prevented a meaningful estimation of sample size for the final evaluation.

The final evaluation was thus limited to a simple pre-test/post-test design. This type of evaluation does not allow for attribution since no control group was included and changes may have occurred even in the absence of program activities. However, this type of evaluation design appears to be suitable for USAID sponsored projects as it does not require that evaluations attribute effects to the project (Bergeron et al., 2006).

#### **2.2.1 Sample size Calculation**

The mid-term evaluation of DAP showed a 4.4% overall reduction in the prevalence of stunting among children under three years of age. It was, therefore, inferred that approximately 8.8% reduction in the prevalence of stunted growth will be achieved by end of the program period. Therefore, assuming an effect size of 10.0% and a baseline prevalence of 22.0% with 90% power and Type I (false positive)  $\alpha = 0.05$ , the sample size (n) was 428 subjects estimated from the formula:

$$n = D [(Z\alpha + Z\beta)^2 * (P1 (1 - P1) + P2 (1 - P2))] / (P2 - P1)^2]$$

**where:**

n = required minimum sample size per survey round or comparison group

D = design effect (assumed in the following equations to be the default value of 2)

$P_1$  = the estimated level of an indicator measured as a proportion at the time of the first survey or for the control area.

$P_2$  = the expected level of the indicator either at some future date or for the project area such that the quantity ( $P_2 - P_1$ ) is the size of the magnitude of change it is desired to be able to detect.

$Z_\alpha$  = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size ( $P_2 - P_1$ ) would not have occurred by chance ( $\alpha$  - the level of statistical significance), and

$Z_\beta$  = the z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size ( $P_2 - P_1$ ) if one actually occurred ( $\beta$  - statistical power).

Allowing for a 10% non-response (that is, 43), then the sample was adjusted to 471.

### **2.2.2 Selection of Sample Districts**

The selection of sample districts was influenced by the geographical and sectoral integration model adopted by the Title II 2004-08 DAP. The four main interventions (that is, FFE, SHEP, FACS, and SNI) of the programme were carried out in a large number of districts based on geographical and sectoral integration. Thus in selecting sample districts, all the four SHEP districts (Lawra, Bongo, East Mamprussi and Bunkprugu/Yunyoo), which also have FACS, were initially selected. Two other districts namely, Saboba Cheriponi and Wa Municipality participating in FFE & FACS but not SHEP were then selected. Bawku West was left out because the district was thought to be unsafe as of ethnic conflict in the neighbouring Bawku East.

### **2.2.3 Selection of Sample Clusters**

In follow-up surveys, it is generally recommended to retain the same clusters used in the baseline survey whilst choosing a new sample of households in each cluster (Food and Nutrition Technical Assistance Project (FANTA), 1997). This approach allows for sampling efficiency and provides the opportunity of detecting real programme impact. Most of the current beneficiary communities were however, not part of the base-line survey. The sampling frame for the selection of clusters in the final evaluation, therefore, included both old and new FACS communities; totally 115. The estimated sample size of 471 required a total of 47 clusters if ten interviews were to be conducted in each cluster. In view of the logistical/resource implication of visiting 47 clusters, the evaluation team selected 30 clusters and 16 interviews were conducted in each cluster in order to meet the sample size requirements. The 30 clusters were selected based on probability-proportionate-to-size (PPS), a type of systematic sampling. In order to ensure adequate numbers for assessing exclusive breast feeding, six interviews were conducted with mothers whose children are less than six months and ten for mothers whose children are aged more than six months but less than or equal 36 months.

It has been estimated that the minimum sample size for the KPC survey of 300 will yield an approximate  $\pm 10\%$  level of precision for most variables and also produce average sub-sample sizes around 120 for 12-23 months children, and 60 for the age-group 0-6 months (Eric Sarriot et al., 1999).

The evaluation team was aware that the magnitude of design effect depends on similarity or homogeneity among people that live together in a cluster and the number of measurement units to be taken from each cluster. For the sake of sampling efficiency, smaller clusters are usually preferred over large clusters since increasing the cluster size will, in a way, increase design effect. However, the practical implication of this on the precision of point estimates of variables is unclear. The maximum number respondents that can be interviewed in a cluster without significantly affecting precision has been estimated to be in the range of 40- 50 (Magnani, 1997) and so the 16 interviews that were conducted in each cluster was considered to be safe and appropriate in this circumstance. In addition, selection of households in each cluster was done in such a way as to reduce design effect.

#### **2.2.4 Selecting the Starting Household Using the EPI Method**

The first household was selected from the centre of each cluster. In each cluster, the supervisor together with the interviewer chose a starting location by going to a central location in the cluster. At the centre of the cluster, a travel direction is selected at random by spinning a pen. The team then moved in a straight line in chosen direction and counting all of the households until the end of the cluster was reached. The team then randomly chose a number between 1 and the number of houses counted as the starting point for the survey. The number randomly chosen therefore corresponded to the starting house.

#### **2.2. 5 Selection of Subsequent Households**

The random-walk procedure was followed until such time that the required number of households had been interviewed. Every third household from the previously selected household formed the basis of selecting respondents for interview. This approach to selecting households has been reported to reduce similarity in responses by the interviewees (that is, reduced homogeneity) (Bennett et al., 1994).

#### **2.2.6 Procedure for selecting individual survey subjects**

Women of children 0-36 months found within sample households were included in the sample (that is, eligible for interview). Only one eligible mother was randomly selected for interview in any particular sample household.

### **2.2.7 Selection of FFE Schools**

The sample size for the FFE schools for the final evaluation was guided by the number of schools selected in the mid-term evaluation. Systematic random sampling was used to select a convenience sample of 60 (that is, 6%) out of the 963 participating schools (as indicated by the list of participating schools provided by CRS). The schools were selected from the sample districts. All the selected FFE schools, which also participate in SHEP, constituted the sample population for evaluating the SHEP component of DAP. In selecting the schools, the following steps were followed:

- (1) Prepare a numbered list of schools arranged according to sample districts.
- (2) Calculate the sampling interval (SI) by dividing the total number of schools (T) by the number of schools (n) to be selected.
- (3) Select a random number (random start or RS) between 1 and SI. The school on the numbered list corresponding to this number will be the first sample school.
- (4) Subsequent sample units are chosen by adding the SI to the number identified in step (3); that is  $RS + SI$ ,  $RS + SI * 2$ ,  $RS + SI * 3$ , etc.
- (5) This procedure is followed until the required sample size of 60 is reached.

### **2.2.8 Selection of Safety Net Initiatives (SNI) Centres**

This component of the DAP had a national coverage. There was therefore the need to cover some centres outside the three northern regions. All centres located in the sample districts for the evaluation of the FACS program were covered. Considering the geographical spread of the SNI programme in the southern sector, two cluster sites (that is, Kumasi Metropolitan Assembly area in the Ashanti Region and Shama Ahanta East in the Western Region) together with those selected from the three northern regions would ensure better coverage of programme activities.

### **2.3 Data Collection**

The final evaluation which was conducted from 22 July to August 18, 2008, included quantitative and qualitative assessments. Quantitative data were collected through a 30-cluster using sampling methodology, while qualitative data was collected through focus group discussions and key informant interviews of project staff, school children and teachers, community leaders, district and sub-district health personnel and managers of safety net institutions. Existing data at health facilities and project document from CRS office in Tamale were also consulted.

### **2.4 Training of Data Collectors**

In order to ensure reliability and validity of data collected, all data enumerators were given training. The content of the training included standard measurement procedures, data recording, recruitment, administration of questionnaires and supervision.

## **2.5 Level of Evaluation**

There are three different levels of measuring the impact of an intervention (that is, adequacy, plausibility, and probability (Habicht, Victora and Vaughan, 1995). Generally, the stronger evidence of impact attributable to a program, the more costly the study design and data collection methods that must be used. Given the design of the present DAP, it was only possible to assess the program at the level of adequacy (that is, to determine whether the direction of expected changes specified in the DAP document did take place. It was not possible to attribute changes observed to the interventions that were carried out (that is, at the level of plausibility).

## **2.6 Measurement Procedures**

The basic procedures followed in assessing the outcome measures are briefly outlined below:

### **2.6.1 Anthropometric Measurements**

Anthropometric measurements including weight and height of children less than five years were taken by trained survey personnel using standard methods. To assess the nutritional status of preschool children, both weight and height (length or stature) were measured alongside the administration of household health and nutrition questionnaires. In each household, one eligible respondent was randomly selected for interview and for anthropometric assessment of all children less than five years in the house. The assessment data of the selected eligible children (6-36 months) were recorded in the questionnaire that were administered whilst that of other children aged less than five years were separately recorded on a different pre-designed form. The term length is used for children who cannot walk yet. Their height is measured lying down. One generally refers to stature from when children can and will stand alone, i.e. around 2 years of age onward.

**Weight:** The weight of children was measured with Seca electronic scales. Weight was measured to the nearest gram.

**Height:** The heights of children less than two years of age (i.e., up to and including 23 months) were measured in a lying position. For length measurements, a specialized wooden device (that is, an infantometer) was used. The child is placed on its back between the slanting sides. The head was placed so that it is against the top end. The knees were gently pushed down by a helper. The foot-piece is then moved toward the child until it presses softly against the soles of the child's feet and the feet are at right angles to the legs. The length is then read to the nearest 0.1cm.

If the child was over two years of age, stature was measured in a standing position. The child stood without shoes on a level floor. The legs were placed against each other, as also were the heels. The buttocks, shoulder blades and head rested against the measuring board. The child looked straight

ahead so that an imaginary plane that would connect the eyes and ears were parallel to the floor and the arms hanged loosely by the sides.

The anthropometric indicators used in assessing the nutritional status in the study population included height-for-age (HA), weight-for-age (WA), weight-for-height (WH). Z-scores for weight and height [weight-for-age (WAZ), height-for-age (HAZ), and weight-for-height (WHZ)] were calculated by using EPI-INFO (version 3.5.1; Centers for Disease Control and Prevention, Atlanta) with the use of World Health Organization recommended growth curves (CDC & WHO, 1978).

Though there are several ways of expressing the distribution of these indices at the population level, the WHO favours the use of Z-scores in assessing the level of malnutrition (WHO working group, 1986; Gorstein et al., 1994). The Z-score cut-off point recommended by WHO, Centre for Disease Control (CDC), to classify low anthropometric levels is two standard deviation (SD) units below the reference median for the three indices. At the population level, the prevalence of low or high anthropometric indices can be assessed by determining the proportion of the population that falls below a cut-off value in a reference population. The proportion of the population that falls below a Z-score of -2 is generally compared with the reference population in which 2.3% fall below this cutoff. The cut-off for very low anthropometric levels is usually more than 3 SD units below the median.

The three basic anthropometric indicators as shown below measure different aspects of nutritional status:

- Height-for-age: HAZ (referred to as “stunting” – chronic malnutrition).
- Weight-for-height: WHZ (referred to as “wasting” – acute malnutrition).
- Weight-for-age: WAZ (referred to as “underweight” – composite of HAZ & WHZ).

Since stunting is a reflection of chronic malnutrition, it is one often used as an impact indicator by Title II projects.

The weight-for-height (WHZ), height-for-age (HAZ), Weight-for-age (WAZ) –z scores are used to classify the children according to their nutritional status. The basic formula for calculating z-scores is as follows:

$$\text{Z-score (SD-score)} = \frac{\text{Observed value} - \text{median reference value}}{\text{Standard deviation of the reference population}}$$

The reference data of the National Center for Health Statistics (NCHS) are used world-wide and promoted by WHO or UNICEF for comparison of the nutritional status between regions or countries.

## **2.7 Data Management and Analysis**

A number of measures were employed throughout the mission to ensure that accurate and reliable data were collected and analysed. These included the recruitment of research assistants who hail from the area for the community level data. Other data quality measures included the training of research assistants, pre-testing of tools and editing. Editing of data was on daily basis during data collection and processing and conducting daily review meetings of the team to share ideas and solve problems during data collection exercise. A field manual was developed to guide in data collection and processing. Data were checked for completeness and consistency by field supervisors in the field and during data entry in order to ensure good quality.

All data were carefully checked and cleaned before entry into a computer for analysis. The data were coded for statistical analysis using SPSS for windows 11.5 (SPSS Inc, Chicago). Z-scores of height-for-age, weight-for-age and weight-for-height were calculated with EPI-INFO software. The calculated Z-scores were checked for implausible values before being categorized. For example WHZ less than -5 or more than +3 were removed from the data set.

## **2.8 Limitations of the Study**

It is difficult to associate the changes observed to the programme because of lack of control for external factors. For example, some of the changes observed are season dependent (e.g. incidence of diarrhoea, malaria); baseline studies were conducted in the dry season and the final evaluation was in the rainy season. The ethnic conflict in Bawku East and adjoining districts also had implementations for the selection of sample districts.

## SECTION 3

### ASSESSMENT OF HEALTH AND NUTRITION COMPONENT OUTCOMES

#### 3.1 Introduction

The programme had short-term, intermediate and long-term expected outcomes. These outcomes were assessed in the three main components of the programme as previously outlined in Section 1.4.3. The information presented in this section includes intermediate health and nutrition outcomes that have direct bearing on the long term programme goal of improving food security in Northern Ghana. In particular, the characteristics of the 30-cluster study sample, descriptive and inferential statistics of the data collected are presented. The results for the health and nutrition sector are presented as follows:

- a) Characteristics of the study sample
- b) Nutritional status of children
- c) Breastfeeding and infant feeding practices
- d) Management of common childhood diseases
- e) Maternal and Newborn care
- f) Childhood immunization and growth monitoring
- g) Availability and utilization of iodated salt

The data are presented firstly, comparing the outcomes at baseline, mid-term and end of project. Analyses of the data according to programme districts are also reported. The other information presented includes sustainability issues.

#### 3.2 Sample Characteristics

The mean age of the 480 mothers interviewed was 29±6.4 years. Table 3.1 summarizes the age distribution of children whose mothers constituted the study sample. A total of 258 (53.8%) of the children were males and 222 (46.3%) being females.

Table 3.1 Age distribution of selected children

Age Group (months)	Frequency n (%)
Less than 6	179 (37.3)
6-11	88 (18.3)
12-23	124 (25.8)
24-36	89 (18.5)
Total	480 (100.0)

Most of the participants, 228(47.5%) earn their living through engagement in farming activities (Table 3.2).The majority 451 (94.0%) of respondents were married whilst the rest were either single or widowed. With respect to education, 405 (84.4%) had no formal education whilst only 28 (5.8%) had attained middle or junior secondary level education (Table 3.3).

Table 3.2 Main source of income

Source of Income	Frequency (n)	Percent (%)
Nothing	32	6.7
Farming	228	47.5
Trades in agricultural products	39	8.1
Trades in finished manufactured goods	7	1.5
Salary worker	3	.6
Pito brewing	70	14.6
Cooking oil extraction	14	2.9
Service provider (e.g. hair dressers, dress-making)	36	7.5
Other (e.g. sale of fire-wood, cooked food)	23	4.8
Handicraft production (e.g. basket weaving)	28	5.8
Total	480	100.0

Table 3.3 Educational levels of respondents

Educational level	Frequency (n)	Percent
None	405	84.4
Primary	42	8.8
JSS/Middle	28	5.8
Secondary	5	1.0
Total	480	100.0

### 3.3 Nutritional Status of Children 0-36 Months

The prevalence of stunting among children aged 0- 36 months was estimated to be 13.5% at end of the project period (Table 3.4). According to the WHO (1995), less than 10-19% prevalence of stunting in any given population or sub-group of children can be described as medium. Figure 3.1 illustrates how well the study sample z-scores compare with the distribution of z-scores in the reference population. A critical examination of the shapes of the graphs shows the WAZ and WHZ scores appear to deviate slightly from that of the reference population (that is, shifted to the left). This explains the higher prevalence of underweight and wasted children in the study sample. The z-score distribution (bell-shape) also suggests the anthropometric data were of good quality. The WHZ is not a good indicator of the nutritional impact of intervention since it reflects short-term changes. It may be the consequence of starvation or severe disease (in particular, diarrhea). On the other hand, height-for-age (H/A) reflects cumulative linear growth. H/A deficits indicate past or chronic inadequacies of nutrition and/or chronic or frequent illness. Approximately 2.3% of “healthy” children would usually be classified as having an abnormal deficit in any particular anthropometric indicator.

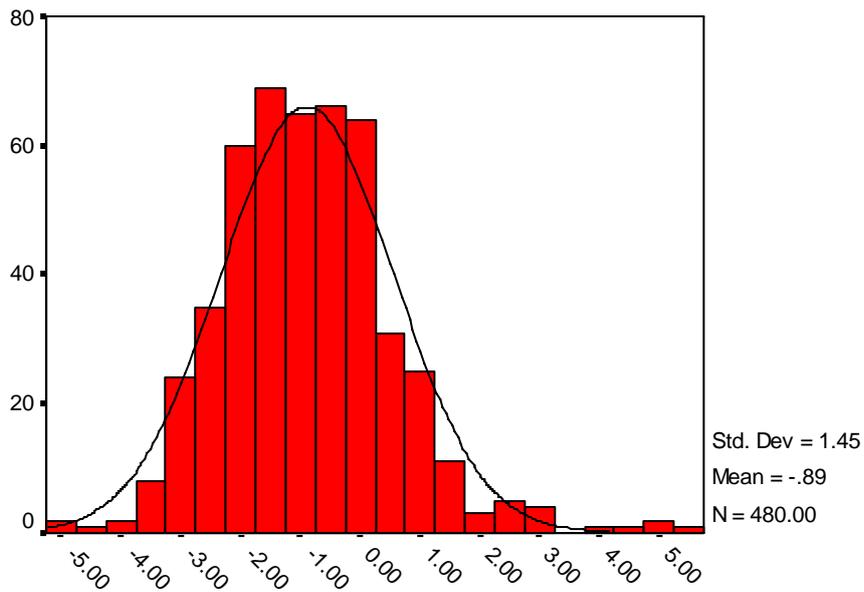
Table 3.4 Prevalence of underweight, wasting and stunting among children aged 36 months in programme communities

	WAZ	WHZ	HAZ
Mean	-1.03	-0.77	-0.68
SD	±1.389	±1.289	±1.247
% below -2 SD	23.7	14.2	13.5
% below -3 SD	5.7	2.9	2.9
No. examined (n)	917	902	904

Table 3.5 Prevalence of underweight, wasting and stunting among children aged 60 months in programme communities

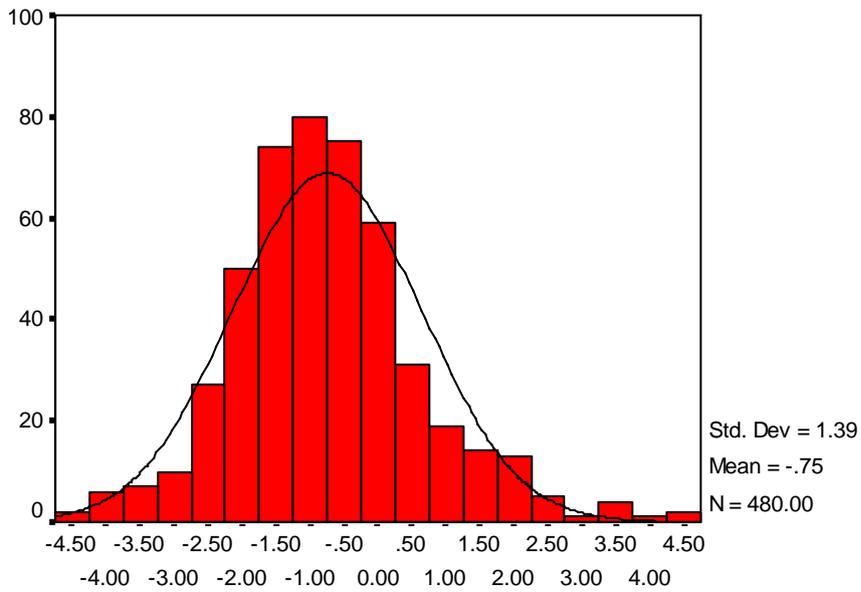
	WAZ	WHZ	HAZ
Mean	-1.07	-0.76	-0.74
SD	±1.326	±1.231	±1.221
% below -2 SD	22.6	12.7	14.3
% below -3 SD	5.2	2.4	2.9
No. examined (n)	1095	1080	1080

### Distribution of WAZ Scores



Weight-for-age z-score

### Distribution of WHZ Scores



Weight-for-height z-score

## Distribution of HAZ Scores

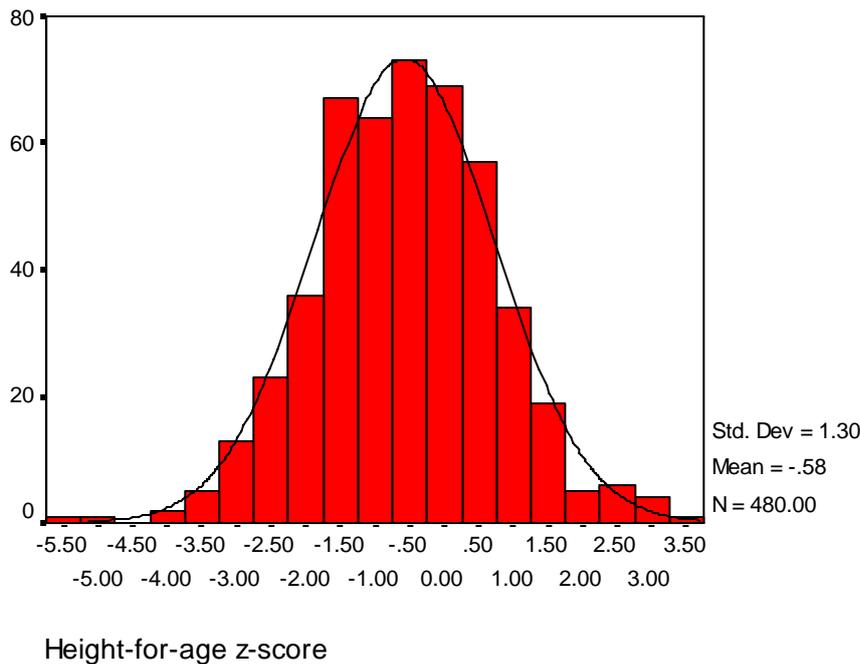


Figure 3.1 Distribution of z-scores in study sample

The magnitude of change in childhood nutrition indicators varied over the life-span of the project as demonstrated by the baseline, midterm, and final data (Tables 3.6 and 3.7). Height-for-age (H/A) reflects cumulative linear growth and deficits indicate past or chronic inadequacies of nutrition and/or chronic or frequent illness. There was virtually no change in nutritional status among children under three years. It however, needs to be stated that the baseline prevalence figures for children under three years appear to have been underestimated. In calculating the baseline prevalence figures, a wrong denominator was used (that is, the number of children 0-59 months). The correct denominator should have been the number of children aged 0-36 months examined. The larger denominator used rendered the baseline figures lower than what really pertained at the time. This explains why there was no change in the nutritional status in the age group. The mid-term evaluation presented the prevalence of stunted growth among children less than five years as that of 0-36 months. Anthropometric data were also collected on children from 0-59 months in the final evaluation even though the programme targeted children up to 36 months. Data on this age group formed the basis of comparing the changes in the nutritional status of children who were beneficiaries of the programme.

It can be argued that since the project was of five-year duration, the present cohort of children under five years may have been beneficiaries at some stage of the programme. Table 3.7 shows the prevalence of malnutrition of children aged five years as of the end of the programme. Among

children aged 0-59 months, the prevalence of underweight remained unchanged, wasting increased by 2.5% points whilst overall rate of stunted growth reduced by 7.7% points.

Table 3.6 Comparison of malnutrition rate among children aged 0-36 months at baseline, mid-term, and final evaluation

Indicator	Phase of Evaluation		
	Baseline n (%)	Mid-term n (%)	Final n (%)
Underweight (WAZ < -2 SD)	?(22.9)	87 (17.8)	217 (23.7)
Acute malnutrition (WHZ < -2 SD)	129 (8.3)	51 (10.7)	128 (14.2)
Chronic malnutrition (HAZ < -2 SD)	218 (14.0)	66 (13.6)	122 (13.5)

Table 3.7 Comparison of malnutrition rate among children aged 0-59 months at baseline, mid-term, and final evaluation

Indicator	Phase of Evaluation		
	Baseline n (%)	Mid-term n (%)	Final n (%)
Underweight (WAZ < -2 SD)	?( 22.9)	117 (17.5)	248 (22.6)
Acute malnutrition (WHZ < -2 SD)	158 (10.2)	57 (8.7)	139 (12.7)
Chronic malnutrition (HAZ < -2 SD)	342 (22.0)	96 (17.6)	154 (14.3)

### 3.4 Prevalence of Stunting by Age Grouping of Children

Change in nutritional status is influenced by age of child. Table 3.8 shows the prevalence of chronic malnutrition (stunting) in age categories from baseline to end of project. The prevalence was highest in the age group 12-23) and it was in this age group the greatest reduction (9.4%) in the prevalence of stunting occurred by the end of the project life. It may be implied children aged 12-23 months are more responsive to the programme. The margin of reduction could have been higher if the actual baseline prevalence in that age group was known. Again the prevalence data presented in the baseline survey were lower because a higher and wrong denominator was used. Usually, in calculating the prevalence in specific age groups, the actual number of children examined in that age group constitutes the denominator but that was not the case in the previous evaluation.

The other age groups especially 36-59 months did not appear to have experienced a reduction in the prevalence of stunting. The prevalence rather increased in that sub-group of children. This may be explained by the fact that this group of children was not a current beneficiary of the programme as of the time of the final evaluation. The discrepancy may also be attributed to determinants of stunting other than those addressed by the programme. It is also possible that such group of children have a perpetual nutritional and health stress that is not amenable.

There was also a significant difference in the mean height-for-age z-scores in the age groups  $F(4, 1082) = 45.55, p = 0.001$ . The mean z-score was lowest in the age group 12-23 as depicted in figure 3.2 at end of project though that sub-group was more responsive to the programme activities. Children in this particular age appear to be the most vulnerable as they tend to explore their environment and come into contact with all sort of contaminants. For instance, of the 122 children who had diarrhoea in the two weeks preceding the final evaluation, the highest proportion 32.8% was in the 12-23 months age group. In terms of responsiveness and vulnerability, children in the 12-23 age groups should receive priority when it comes to targeting in child survival programmes.

Table 3.8 Prevalence of stunted growth among children less than five years in programme communities by age grouping and stage of evaluation

Age Group (months)	HAZ < -2 n (%)	
	Baseline	Final
0-5	8 (2.3)	7 (3.5)
6-11	32 (9.4)	18 (10.3)
12-23	100 (29.2)	57 (19.8)
24-35	78 (22.8)	40 (16.8)
36-59	124 (8.0)	32 (18.1)
Total	342 (22.0)	154 (14.3)

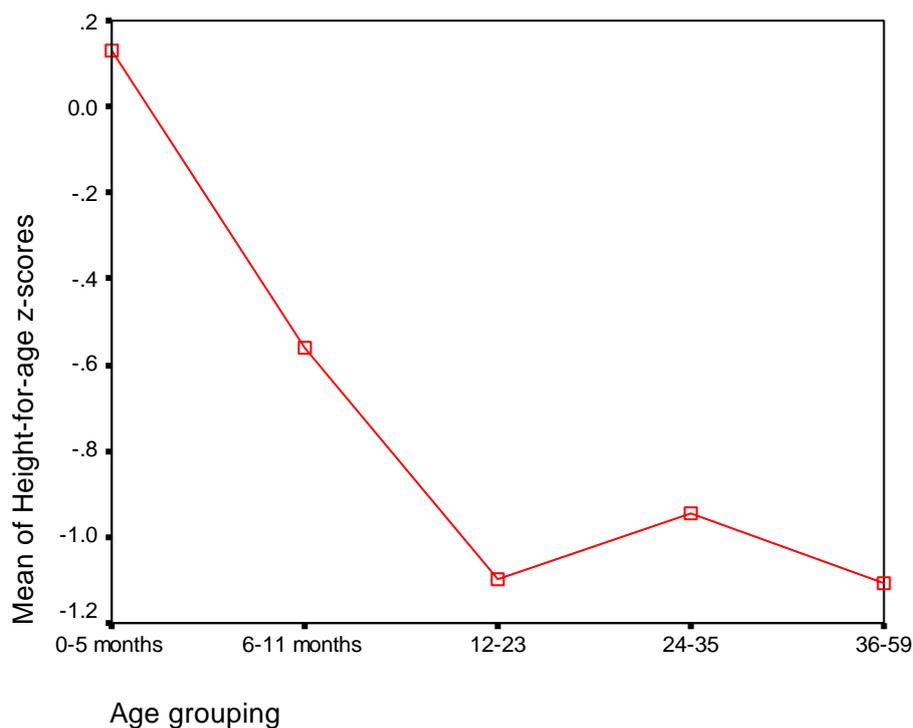


Figure 3.2 Line graph showing the relationship of mean height-for age z-scores and age groupings

### 3.5 Prevalence of chronic malnutrition (stunting) in Programme Districts

The overall prevalence of stunted growth among children less than five years was reduced by 7.7 percentage points. The highest reduction was realized in Bongo district whilst the least was in Saboba/Chereponi district (Table 3.9).

Table 3.9 Prevalence of chronic child malnutrition by districts

District	Evaluation Phase			
	Baseline (2003) n (%)	Mid-term (2006) %	Final (2008) n (%)	% Reductive Change
Bunkpurugu/Yunyoo	76 (21.8)	12 ( 15.6)-	22 (13.4)	8.4
Bongo	80 (24.8)	17 (15.9)	31 (12.4)	12.4
Lawra	67 (19.6)	30 ( 11.2)	23 (13.1)	6.5
East Mamprusi	76 (21.8)	28 (19.7)	22 (16.7)	5.1
Saboba/Chereponi	48 (25.3)	4 ( 15.4)	27 (21.6)	3.7
Wa East	38 (20.9)	5 (8.5)	14 (16.9)	4.0
Wa West	38 (20.9)	5 ( 8.5)	5 (8.6)	12.3
Wa Municipal	38 (20.9)	5 ( 8.5)	10 (10.8)	10.1
Total	342 (22.0)	96 ( 17.6)	154 (14.3)	7.7

### 3.6 Infant Feeding Practices

The programme was successful in impacting positive infant feeding practices including early initiation of breastfeeding within one hour of birth, exclusive breastfeeding of children under 6 months of age and timely complementary feeding (Table 3.10). Of 38 children sampled who were 20 to 23 months of age, 34 (89.5%) were still being breastfed.

Table 3.10 Comparison of key household health and nutrition behaviours/practices at baseline, midterm, and final evaluation

Indicator	Description/Definition	Baseline	Mid-term	Final	% change
Initiation of Breastfeeding	Proportion of children aged 0-23 months who were breastfed within the first hour of birth	43.2	-	84.7	+41.5
Exclusive Breastfeeding Rate	Proportion of infants less than 6 months who were fed breast milk only (no water) in the preceding 24 hours	16.6	72.5	84.9	+68.3
Continued Breast-feeding Rate (2 years)	Proportion of children aged 20-23 months who are still breast-feeding	70.2	-	89.5	+19.3
Timely Complementary Feeding Rate	Proportion of infants aged 6-9 months who received breast milk and solid foods in the preceding 24 hours		-	100.0	-

#### 3.6.1 Changes in Infant and Young Child Feeding Practices in Intervention Districts

No baseline data were available on the proportion of infants 6-11 months receiving semi-solid or solid foods in addition to breast milk in the past 24 hours in the programme districts. However, the timely initiation of breastfeeding (TIBF) rates in the districts was impressive, ranging from 100.0% in the Wa West District to 71.4% in the Saboba/Chereponi District. There was a significant difference in the proportion of infants under six months exclusively breastfed in the past 24 hours (%) in the programme districts (Chi = 33.615, p = 0.040).

Other indicators that reflect the current infant and child feeding practices in the districts is shown in Tables 3.11 and 3.12. It is a well known fact that the suckling reflex of a newborn is at its height 20 to 30 minutes after birth.

Table 3.11 Early initiation of breastfeeding

Name of District	Timeliness of initiation of breastfeeding (putting the child to the breast)				Total
	Within first 30 minutes after breast birth	Within first hour after breast	After the first hour of delivery	Don't know	
Bunkpurugu/Yunyoo	42	12	9	0	63
	66.7%	19.0%	14.3%	0.0	100.0%
Bongo	65	24	22	1	112
	58.0%	21.4%	19.6%	.9%	100.0%
Lawra	67	32	12	1	112
	59.8%	28.6%	10.7%	0.9%	100.0%
East Manprusi	27	11	8	2	48
	56.3%	22.9%	16.7%	4.2%	100.0%
Saboba/Chereponi	39	6	4	0	49
	79.6%	12.2%	8.2%	0.0	100.0%
Wa East	24	5	3	0	32
	75.0%	15.6%	9.4%	0.0	100.0%
Wa Municipal	21	7	4	0	32
	65.6%	21.9%	12.5%	0.0	100.0%
Wa West	16	7	9	0	32
	50.0%	21.9%	28.1%	0.0	100.0%
Total	301	104	71	4	480
	62.7%	21.7%	14.8%	0.8%	100.0%

Table 3.12 Exclusive breastfeeding (EBF) rate of infants less than 6 months of age

District	Evaluation Phase			
	Baseline (2003) n (%)	Mid-term (2006) n (%)	Final (2008) n (%)	% Change
Bunkpurugu/Yunyoo	? (22.4)	NA(52.4)	23 (95.8)	73.4
Bongo	? (16.2)	NA(85.7)	27 (64.3)	48.1
Lawra	? (16.2)	NA (64.0)	33 (82.5)	66.3
East Mamprusi	? (22.4)	NA (52.4)	16 (88.9)	66.5
Saboba/Chereponi	? (12.0)	NA (85.7)	16 (88.9)	76.9
Wa East	? (17.0)	NA(25.0)	12 (100.0)	83.0
Wa West	? (17.0)	NA(25.0)	12 (100.0)	83.0
Wa Municipal	? (17.0)	NA(25.0)	13 (100.0)	83.0
Total	? (16.6)	NA(52.2)	152 (84.9)	68.9

### 3.7 Management of Common Childhood Diseases

The incidence of diarrhoea among children under three years increased from 20.7% at baseline to 25.4% at end of programme period (Table 10). There was, however, a 20.3 percentage point increase (49.5%-29.2%) in the number of children under two who had experienced diarrhoea in the preceding two weeks and had received either the same or more fluids. Additionally, few mothers gave less fluid at the end of the programme (20.0%) compared to what pertained at baseline

(35.3%). Furthermore, a relatively few mothers (an average of 19.5%) reported they will breastfeed their children more during a diarrhoea episode. At end of the project, 41.0% (43/105) said they breastfed their children more when they had diarrhoea.

Of the 53 children aged 0-23 months who reported to have cough and rapid/difficult breathing (ARI) during the preceding two weeks of the final evaluation, 38 (71.7%) were taken to a health facility for treatment. This is a positive health seeking behaviour especially in the Wa District in view of the fact that at baseline, majority of respondents (66.4%) said they will not seek any treatment outside home for such illness. However, 71.4% of ARI cases during the preceding two weeks of the final evaluation in the Wa East and West Districts were treated in a hospital facility.

The prevalence of malaria (fever) among children 0-36 months in the last two weeks preceding the final evaluation was 188 (39.2%). This was higher, compared to that of the baseline survey. This may be attributed to seasonal differences as the two assessments were made in the dry and rainy seasons respectively. The proportion of households in the intervention areas who have at least one ITN was 92.9% (446/480). Of children 0-36 months who possessed mosquito nets, 97.3% (434/446) slept under ITN the night preceding the survey.

Though at baseline, most respondents indicated they will go to the health centre in the event of their children having malaria, in reality; the preferred place for advice/treatment of malarial cases by the respondents was the drug store. About 46.5% (79/170) sought treatment/advice for their malaria children from drug stores whilst 36.5% (62/170) did so at a government hospital/health centre. Self-medication is still common in the programme communities.

Table 3.13 Case Management of Diarrhoea and ARI

Indicator	Description/Definition	Baseline	Mid-term	Final Evaluation
Incidence of diarrhoea (%)	Proportion of children under three years with diarrhoea in the preceding two weeks	20.7	18.8	25.4
Diarrhoea Treatment (%)	Proportion of children <2 with diarrhoea in the preceding two weeks who received more or same fluids	29.2	NA	49.5
Fluid giving during diarrhoea	Proportion of children <2 with diarrhoea in the preceding two weeks who received less fluids	35.3	NA	20.0
Health-seeking behaviour for Diarrhoea	Proportion of children aged 0-23 months with diarrhea in the preceding two weeks whose mothers sought outside advice or treatment for the illness	NA	NA	14.3
Use of ORS	Proportion of children under 2 years with diarrhoea who received oral rehydration therapy (ORT)	44.4	46.3	33.3
ARI Care-seeking	Proportion of children aged 0-23 months with cough and rapid/difficult breathing during the preceding two weeks who were taken to a health facility or received antibiotics from an alternative source	68.8	NA	71.7

### 3.8 Maternal and Newborn Care

Out of 480 women interviewed, 222 (46.3%) possessed an antenatal care (ANC) card that was sighted by the interviewer. It was reported some health institutions retained the ANC card; the reason for this was unclear. Of 219 antenatal cards examined at the household level, 149 (68.0%) received at least one tetanus toxoid injection, whilst 41 (18.7%) never received any injection for the

last pregnancy. The proportion of mothers who received at least one tetanus toxoid injections (as recorded in maternal health card) therefore increased from the 17.2% at the beginning of the programme to 68.0% by the closed of the programme.

Evidence from mothers who possessed ANC cards showed 76.1% attended ANC at least four times. It is a recommendation by the World Health Organization (WHO) that pregnant women attend ANC at least four times. Supervised delivery is also a necessary service required to ensure safe delivery and avoid unnecessary peri- and neo-natal deaths. Unfortunately, however, it was only in Bongo and Wa West districts that deliveries by nurse/midwife/doctor exceeded 50%. In the other districts, deliveries were conducted mainly by traditional birth attendants (TBA). This is contrary to the high patronage for ANC. Skilled supervised delivery (that is, delivery conducted by trained midwife/doctor/nurse) in the programme communities was still very low (32.9%) as shown in Table 3.14.

Table 3.14 Persons who assisted with delivery

Name of District	Person who assisted with delivery					Total
	Doctor	Nurse/midwife	TBA	Mother-in-law/other relative	Self-delivery	
Bunkpurugu/Yunyoo	0	2	14	0	0	16
	0.0%	12.5%	87.5%	0.0%	0.0%	100.0%
Bongo	0	22	8	9	3	42
	0.0%	52.4%	19.0%	21.4%	7.1%	100.0%
Lawra	2	26	26	8	2	64
	3.1%	40.6%	40.6%	12.5%	3.1%	100.0%
East Manprusi	1	3	14	1	0	19
	5.3%	15.8%	73.7%	5.3%	0.0%	100.0%
Saboba/Cheriponi	0	1	19	0	0	20
	0.0%	5.0%	95.0%	0.0	0.0%	100.0%
Wa East	0	1	17	0	2	20
	0.0%	5.0%	85.0%	0.0%	10.0%	100.0%
Wa Municipal	2	3	15	1	2	23
	8.7%	13.0%	65.2%	4.3%	8.7%	100.0%
Wa West	1	9	6	2	0	18
	5.6%	50.0%	33.3%	11.1%	0.0%	100.0%
Totals	6	67	119	21	9	222
	2.7%	30.2%	53.6%	9.5%	4.1%	100.0%

### 3.9 Childhood Immunization and Growth Monitoring Coverage

Though no baseline data on childhood immunization were collected from the programme communities, the overall impact indicator for the Expanded Programme on Immunization (EPI)

activities (that is, percentage of fully immunized children) showed the coverage of immunization at the end of the project period in the programme districts was high (Table 3.15).

Table 3.15 Childhood immunization and growth monitoring coverage in programme districts

Indicator	Description/Definition	National Targets (%)	Coverage in Final Evaluation	
			N	%
Possession of Child Health records booklet	Proportion of children 0-23 months with health records card	100.0	367	93.9
Receipt of schedule antigens	Proportion of children who received all the required scheduled immunizations	100.0	357	79.0
Fully Immunized Children	Proportion of children aged 12-23 months who received OPV3, DPT3, yellow fever and measles vaccines before their first birthday	100.0	367	91.9
Attendance at growth monitoring sessions	Proportion of children 12-23 months who were weighed at least 3 times in the preceding four months	100.0	109	88.6

The regular measurement, charting and interpretation of a child's growth change in order to counsel, act and follow up results is called growth monitoring. Table 3.16 shows the proportion of children 12-23 months who were weighed at least 3 times in the preceding four months.

Table 3.16 Proportion of children 12-23 months who were weighed at least 3 times in the preceding four months

Name of District	Number of times child was weighed in the last 4 months				Total
	1-2 times	3-4	More than 4 times	Not applicable (less than one month)	
Bunkpurugu/Yunyoo		19	0	0	19
		100.0%	0.0	0.0	100.0%
Bongo	5	21	0	0	26
	19.2%	80.8%	0.0	0.0	100.0%
Lawra		15	1	4	20
		75.0%	5.0%	20.0%	100.0%
East Manprusi	1	13	0	0	14
	7.1%	92.9%	0.0%	0.0%	100.0%
Saboba/Cheriponi	0	14	0	0	14
	0.0%	100.0%	0.0%	0.0%	100.0%
Wa East	2	7	0	0	9
	22.2%	77.8%	0.0%	0.0%	100.0%
Wa Municipal	0	6	1	0	7
	0.0%	85.7%	14.3%	0.0%	100.0%
Wa West	0	14	0	0	14
	0.0%	100.0%	0.0	0.0%	100.0%
Totals	8	109	2	4	123
	6.5%	88.6%	1.6%	3.3%	100.0%

Growth monitoring becomes useful only if the weight of the child is used to counsel the mother/caretaker. Correct measurement, recording and interpretation of growth by health promoters are some essential ingredients of growth monitoring. Table 3.17 shows how plotting was done in the programme communities.

Table 3.17 Plotting Child's Growth Curve

	Frequency	%
All points were joined by a line	175	36.5
Not all points were joined together	109	22.7
None of the dots were joined	67	14.0
Weighed but not plotted	77	16.0
Not applicable (less than two months)	52	10.8
Total	480	100.0

The highest coverage of children who had all the required immunization at the right time was 87.5% in the Wa East and West districts and the lowest was 56.3% recorded in the East Mamprusi District (Table 3.18). There were indeed, significant differences in regular attendance at growth monitoring sessions in the programme districts ( $\chi^2 = 46.617$ ,  $p = 0.001$ ) and the achievement of full immunization ( $\chi^2 = 27.752$ ,  $p = 0.015$ ). The extent of full childhood immunization coverage by districts is shown in Table 3.19.

Table 3.18 Proportion of all children who received all the required scheduled immunizations.

Name of District	Child had all the required immunization at the right time			Total
	Yes	No	Not applicable	
Bunkpurugu/Yunyoo	48	10	5	63
	76.2%	15.9%	7.9%	100.0%
Bongo	89	21	2	112
	79.5%	18.8%	1.8%	100.0%
Lawra	77	22	13	112
	68.8%	19.6%	11.6%	100.0%
East Mamprusi	27	17	4	48
	56.3%	35.4%	8.3%	100.0%
Saboba/Chereponi	33	13	3	49
	67.3%	26.5%	6.1%	100.0%
Wa East	28	4	0	32
	87.5%	12.5%	0.0	100.0%
Wa Municipal	27	5	0	32
	84.4%	15.6%	0.0	100.0%
Wa West	28	3	1	32
	87.5%	9.4%	3.1%	100.0%
Total	357	95	28	480
	74.4%	19.8%	5.8%	100.0%

Table 3.19 Full childhood immunization coverage by districts

Name of District	Child was fully immunized by 12 months			Total
	Yes	No	Not applicable	
Bunkpurugu/Yunyoo	19	0	0	19
	100.0%	0.0	0.0	100.0%
Bongo	25	1	0	26
	96.2%	3.8%	0.0	100.0%
Lawra	16	0	4	20
	80.0%	0.0	20.0%	100.0%
East Manprusi	12	2	0	14
	85.7%	14.3%	0.0	100.0%
Saboba/Cheriponi	13	1	0	14
	92.9%	7.1%	0.0	100.0%
Wa East	9	0	0	9
	100.0%	0.0	0.0	100.0%
Wa Municipal	6	1	0	7
	85.7%	14.3%	0.0	100.0%
Wa West	13	1	0	14
	92.9%	7.1%	0.0	100.0%
Totals	113	6	4	123
	91.9%	4.9%	3.3%	100.0%

### 3.10 Availability and Utilization and Iodated Salt

The prevalence iodine deficiency disorders (IDD) is high in the programme districts (for example, goiter. About 426 (88.8%) of households in which interviews were conducted had heard of iodated salt but only 102 (32.6%) of the 313 salt samples tested had adequate amount of iodine (that is, 15 ppm) whilst 50.8% were without any iodine at all.

## **SECTION 4**

### **DISCUSSION ON THE HEALTH AND NUTRITION OUTCOMES**

#### **4.1 Introduction**

CRS/Ghana's FY 2004-2008 DAP invested in children in their early years, pregnant and lactating women. This was an efficient way of reducing inequalities, fighting against poverty and building a just and equitable society. The focus on these vulnerable groups was timely in view of the fact that maternal and child malnutrition is responsible for more than one third of under-five mortality (Black et al., 2008). Reduction in infant and child growth retardation is essential conditions for achieving the Millennium Development Goals (MDGs) that are related to child survival (MDG 4) and even in the eradication of extreme poverty and hunger (MDG 1).

There is strong empirical evidence that suggests childhood malnutrition, especially stunted growth declines as levels of maternal education increase (de Onis, 2003). This evidence means that long-term investment to improve maternal education and empowerment of women is required to eradicate stunting amongst children. It is against this backdrop that the educational component of the CRS DAP in Northern Ghana was particularly relevant since its main aim was to provide the opportunity for school enrolment, retention and completion especially for girls. How would that contribute to food security? Improvement in reducing the prevalence of stunting will help the future generation of girls in particular learn better and have better opportunities in the job market. Secured jobs will provide a reliable source of income for families and that can contribute towards the long-term economic access to food (that is, food security). The three-pronged strategy used in executing the DAP lent support to the well established fact that multi-sectoral nature of malnutrition requires a set of multiple strategies to addressing it. Access to nutritional and safe and adequate food are pre-requisites for achieving adequate nutritional status of children.

The ultimate long-term goal of the programme was to improve food security in the northern sector of Ghana – an area beset with both transitory and chronic food insecurity. Sustained production, availability, biological utilization and economic access to high quality food are the ideal components of food security. It is difficult to measure food security in totality and so to what extent were these components attained? Through the child survival activities it was anticipated that care of the child will improve and this will enhance food utilization. The health and nutrition component, therefore, focused on improving and maintaining child health and nutrition through child survival (CS) activities including the following:

- (1) Promoting infant feeding practices (for example, exclusive breastfeeding, appropriate complementary feeding practices, and micronutrient supplementation

(2) Promoting health-seeking behaviors at the community level and enhancing the quality of care through the training of health workers (for example, midwives, community health nurses) and community health volunteers.

(3) Effective case management of common childhood illnesses including diarrhoea and pneumonia through strengthening the ability of caregivers to prevent, recognize, and treat or seek care especially for diarrhoea, dehydration and pneumonia through health and nutrition education.

(4) Expanded Program in Immunization (EPI), with an emphasis on providing transport support and other logistics for district-level staff to deliver quality EPI services and mobilizing communities to participate in childhood immunization exercises.

5. Improving geographical access to health services through supporting the creation of outreach points (for example CHPS compounds, FACS centre)

6. Community growth monitoring of children.

The programme also promoted an agenda of food and nutrition security of the vulnerable groups in society. The main achievements of the programme are discussed in the following sections.

#### **4.2 Childhood Nutritional Status**

The rate of stunted growth dropped from 22.0% in 2004 to 14.3% at the end of the programme in 2008. This represents 7.7 percentage points in the reduction in stunting among children aged five years in the programme areas. Though there was improvement in child nutritional status, the level of reduction is an indication of the difficulty of eradicating malnutrition world-wide. The nutrition related Millennium Development Goals (MDGs) aim at reducing child malnutrition rates to less than 20% by 2010 and to less than 15% by 2015. The rate of malnutrition in the programme districts as of the end was in the range of 8.6%-21.6% with an average of 14.3%. This implies that if the similar DAP activities were to continue, the MDGs could be met. It is therefore important that we keep a watch over these achievements and maintain the strategies and activities that will ensure continuous progress.

The provision of food aid to target groups in the communities and institutions did help mitigate the effects of household food insecurity, though it could not completely eliminate household food insecurity: interaction with community members showed that all communities experience some household food insecurity during the lean season; normally from March through early September.

It would be prudent if future food aid programmes target the households during this critical period. Ironically, the lean season usually coincides with preparation of the land and other energy demanding farm activities that require adequate food intake. Perhaps limiting food assistance for the short critical period may prove more beneficial.

Improvement in household food security was greatly hampered by factors, some of which were beyond the control of individual families (e.g. poor rainfall patterns and soil infertility). Associated with these, were large family sizes and high prices of agricultural inputs e.g. fertilizers, land preparation etc.

The health component of the programme appeared to have impacted significantly on child health indicators. This achievement was possible through improved accessibility to child health and ante-natal services. One area that needs to improve significantly to enhance household food security is economic access to food through increases in household incomes – this to a large extent depended on the general socio-economic status of the country. Poverty in the programme communities continues to persist. Of course, poverty could not have been reduced in the lifetime of the project. However, it built the foundation for a long-term reduction of poverty through efforts at reducing childhood malnutrition, school enrolment and retention, especially of the girl-child. Promotion and support for families to increase household incomes through soft loans/credits has a potential to enhance economic access to food. Though the FACS communities depended on agriculture for their livelihood, focused group discussion revealed that it may be possible to diversify their sources of income via livestock, poultry rearing.

#### **4.3 Changes in health and Nutrition Behaviours/Practices**

The health and nutrition component was successful in changing behaviors in the community relating to infant feeding practices and management of common childhood illnesses including diarrhoea. The health and nutrition components main achievements were in the following areas: caregiver awareness of the importance of adopting appropriate infant feeding practices.

Colostrum (the first yellowish milk coming from the breast) is often not given to infants because of its colour and the traditional wrong perception that it could be harmful to the baby. Colostrum, which is particularly rich in nutrients including vitamins A & K, zinc and essential fatty and amino acids that are necessary for brain development, was given to 84.9% of the infants in the study sample. Colostrum is also rich in antibodies that helps protect the child against infections and may therefore promote child survival. This health behaviour is one of the achievements in the programme communities.

It is a well known fact that the suckling reflex of a newborn is at its height 20 to 30 minutes after birth. If the infant is not fed at this time, the reflex diminishes rapidly to reappear adequately 40 hours later. Nursing soon after delivery also has a laxative effect on the meconium. The early

evacuation of meconium tends to decrease the reabsorption of bilirubin (the yellow pigment responsible for jaundice). This pigment is liberated by the breakdown of cast-off red blood cells present in the intestines. Decreased re-absorption of bilirubin reduces the appearance of jaundice. Even if the jaundice does appear, effective evacuation of meconium reduces its severity.

#### **4.4 Immunization and Growth Monitoring**

There were significant differences in regular attendance at growth monitoring sessions in the programme districts ( $\chi^2 = 46.617$ ,  $p = 0.001$ ) and the achievement of full immunization ( $\chi^2 = 27.752$ ,  $p = 0.015$ ). All the children covered in the evaluation had an immunization card. The availability (physical access) of immunization services in programme communities was high as 455 (94.8%) of children in the study sample possessed vaccination cards. Several key factors may have contributed to the impressive outcomes achieved. The first was that food aid assistance attracted a high patronage of child health promotion activities. Secondly, the positive results may also be attributed to an increased awareness on the importance of child growth by mothers brought about through the delivery of targeted health messages to programme communities. Third, all project districts were supported with transport and other logistics that facilitated sustained outreach services to these communities. CRS also supported community health mobilization and capacity-building through community volunteers.

Data on the immunization status of children were collected from the immunization record cards. Being fully immunized required that each of the following vaccinations were received: BCG, Measles, three DPT and three doses of polio. The proportion of children aged 12-23 months who received oral polio vaccine dose three (OPV3), diphtheria dose three (DPT3), yellow fever and measles vaccines before their first birthday was 91.4%. Children receiving these vaccinations (according to the recommended immunization schedule) are able to achieve full immunization by one year of age.

The important ingredients of effective growth monitoring in any catchment area include the following:

- a. Good registration level of the target group e.g. children 0-24 months
- b. High attendance rate of mothers at GMP sessions
- c. Regularity of attendance (that is, monthly attendance)
- d. Correct measurement, recording and interpretation of growth by health promoters

Most of these conditions were adequately met except that correct plotting of the growth curve needs to be improved. Proper plotting of growth curves need to be taken seriously. This is because the growth curves serve as basis for counseling at growth monitoring sessions. Correct plotting of the

growth curve is vital for mothers to understand the growth of their children. Unfortunately, only 175 (36.5%) of the 480 growth curves examined were properly plotted (that is, all points were joined with a curve). The GHS should train its staff to properly do that.

#### **4.5 Diarrhoea Management**

The incidence of diarrhoea among children under three years increased from 20.7% at baseline to 25.4% at end of programme period. This may be explained by the fact that baseline survey was conducted in the dry season (that is November) whilst the final evaluation was conducted during the rainy season (July/August). Diarrhoea disease is usually more common in the rainy season.

Diarrhoea can cause the growth of a child to falter, due to the child's impaired ability to absorb and utilize nutrients. This makes it very important that mothers are able to manage diarrhoea effectively. Analysis on diarrhoea management was focused on only children who had had diarrhoea during the last two weeks. The recommended treatment for diarrhoea involves three aspects namely: providing ORS for the child during diarrhea, providing increased fluids to the child during diarrhea and providing the same or more quantity of food to the child during diarrhoea.

The 20.3 percentage point increase in the number of children under two who had experienced diarrhoea in the preceding two weeks and had received either the same or more fluids is therefore a positive development. Additionally, few mothers gave less fluid at the end of the programme (20.0%) compared to what pertained at baseline (35.3%). Furthermore, relatively few mothers (an average of 19.5%) reported they will breastfeed their children more during diarrhoea episode.

Of the 105 under-five children who had diarrhoea in the preceding two weeks of the final evaluation, ORS was used in treating 35 (33.3%) of them. Compared to the reported 44.4% and 46.3% use of ORS in the baseline and mid-term evaluations, one may tend to suggest a decline in the use of ORS in the treatment of diarrhoea. The discrepancy may be attributed to the fact that the figure obtained in the final evaluation reflected the actual use of ORS in treating diarrhoea whilst those at baseline and mid-term reflected an expectation of the mother as to whether she will use ORS if the child gets diarrhoea.

The availability of ORS at the household level was low and this could have influenced the use of ORS in treating diarrhoea. Only 38 (9.4%) of the 403 respondents who have heard of ORS had this valuable medicine at home and 270 (67.0%) could correctly describe its preparation. Easy access to ORS will help in the effective management of diarrhoea.

At baseline, a high proportion of respondents (82.1%) indicated they will seek treatment for their children having diarrhoea but only 14.3% of the 105 diarrhoea cases sought outside advice or treatment in hospital and 32.4% resorted to self-medication during the final evaluation.

#### **4.6 Maternal and Newborn Care**

Peri-natal, and neo-natal deaths, and poor pregnancy outcomes can be prevented with an improvement in access and use of pre- and postnatal care. The high ante-natal coverage figures are therefore a source of hope in achieving child survival. Ante-natal care provides health workers an opportunity to identify and treat illness, communicates health messages, and allows for early detection of potential pregnancy complications.

#### **4.7 Quality and Access to Child and Maternal Health Services**

There were gains made in health services utilization at the community and health facility levels; quality of health services (including staff training and availability of appropriate equipment/logistics); and improvement in health services delivery. This was accomplished through effective community mobilization (FACS), rigorous field supervision, and strengthened collaboration and partnership in the planning and implementation of activities.

Improved access to health services was not successful in attaining targets in some service areas (e.g. skilled supervised delivery). Mention must be made that utilization of health services does not only depend on availability of services, but also on factors such as client attitudes, perceptions, and past experiences with those services. In some areas, there was the perception that a woman who delivers by herself is seen as 'brave'. This kind of attitude will discourage women from seeking assistance during delivery.

On the average, TBA deliveries declined from 58.9% at baseline to 53.6% in the final evaluation. However, in Saboba/Chereponi and East Mamprusi districts, TBAs contributed greatly to supervised deliveries. On the other hand, TBA deliveries reduced from 55.8% at baseline to 19.0% in Bongo District. At the same time, skilled supervised deliveries increased from 17.7% at baseline to 52.4% at end of programme in Bongo. TBA deliveries declined in the Wa district (47.2% to 31.9%) but skilled supervised deliveries increased in the Wa district which has now been split into Wa East, Wa West and Wa Municipal (4.2% to 26.0%). Increased accessibility to health services may explain these trends in those districts.

#### **4.8 Infrastructural Assistance**

Project implementation in the communities would not have been as effective without the proper support for community structures. Most of programme communities were remote and deprived in

terms of infrastructure. Some of the programme areas (for example Saboba/Chereponi, Wa East) district were also characterized by poverty, and difficult geographical access to health. The provision of community-based food assisted child survival centres/structures were, therefore, sources for community mobilization for health, capacity building, and empowerment. A total of 44 of such structures were constructed at the beginning of the programme and increased to 212 by the end of the programme. The centres served as leverage points for the mobilization of mothers for health services (for example, child immunization, ante-natal services, delivery of health and nutrition messages). As a result, access to health services was no longer a problem. The use of the FACS centres as outreach points made physical access to health services within easy reach. The services provided contributed to disease prevention and survival of children.

#### **4.9 Availability and Utilization and Iodated Salt**

The prevalence iodine deficiency disorders (IDD) is high in the programme districts (for example, goiter). The nation-wide survey conducted in 1994 showed high total goiter prevalence in 33% of the sample districts (Asibey-Berko & Orroca-Tetteh, 1994). For instance Bongo District had the highest prevalence (56.5%) and in East Mamprusi, the prevalence was 38.3%. Iodated salt is being promoted by the Ghana Health Service to control these disorders. However, it appears progress in this area is at a slow pace. Only a small proportion of households were using salt of adequate amount of iodine (that is, 15 ppm). This is a problem which needs to be addressed seriously and urgently too. The law on the utilization of iodated salt needs to be enforced vigorously.

## **SECTION 5**

### **SUSTAINABILITY ISSUES IN THE HEALTH SECTOR**

#### **5.1 Areas of Sustainability**

Sustainability of the project was evaluated in the following areas.

- Capacity of health workers to provide quality health care
- Capacity of health committees and community-based management teams to operate effectively when CRS finally withdraws
- Promotion and adoption of desirable health behaviours and practices
- Community capacity to develop and manage health activities through community-based mechanisms such as Centre management committees (CMC)
- Out reach health services provision

The following were the findings:

#### **5.2 Strengthening Health Facilities**

Some health facilities benefited from supplies and equipment needed for quality service delivery. Under the 2004-08 DAP, CRS supplied materials and equipment to the health centres. These supplies were aimed at improving services at the health facility level. The evaluation team saw documentation of these supplies in the beneficiary institutions and they will be used to run health and education services. For example, the motor-bikes and vehicles will continue to be used for monitoring/supervision of scheduled activities.

#### **5.3 Training**

A number of trainings were carried out in order to improve health worker performance at the district, sub-district and community levels. The project's training program has helped develop skills in areas such as community mobilization, report writing, nutrition behaviour change communication, growth monitoring and promotion, IMCI, data analysis and its uses, and store management. The evaluation team realized a high attrition of the staff trained with funds from the project. Frequent posting of staff in the partner organization to other areas where CRS programmes were not being run deprived the project of the maximum benefits. It is hoped, however, that partners will continue to make use of the skills and knowledge transferred to their staff, especially the community health nurses.

#### **5.4 Ownership and sustainability of Community-based Services and Management**

With logistical support from CRS, the FACS communities mobilized labour and put up structures where child health related services were provided. Beyond putting up those structures, the ownership of the FACS programme rested heavily on the community volunteers who together with health staff from the sub-districts provided the needed health services in the communities. Though

the communities were supposed to have centre management committees (CMC) that would oversee the smooth implementation of the FACS, these committees were virtually inactive in most places. There was no evidence of meetings of these CMC. Support of the centre volunteers was virtually zero. The community's role in this direction was unclear in some places. In others, community members knew they were to support the centre volunteers but they woefully failed to do so. As reported from some of these communities, there was little motivation for the committee members to carry out their roles. It appears voluntary spirit alone was insufficient to galvanize/stir them actively into organizing activities in the FACS centres. In most cases, the committee members had expected to benefit in one way or the other from the food aid. Unfortunately, this was not permissible by CRS. The centre volunteers, however, managed to hold on to the activities of the FACS, perhaps due to the inclination to help their communities and little motivation they received e.g. bicycles, T-shirts, and participation in workshops. It pre-supposes the sustainability of the FACS activities in the communities will depend on the willingness of these volunteers to continue with their services. The continued provision of health services in these communities is not in doubt. It is the patronage which is likely to decline because of the withdrawal of food assistance. As evidence from the phased-out communities, coverage in childhood immunization, growth monitoring etc. is relatively lower, compared to that from the communities that were still benefiting from the food aid. It was not possible to compare coverage in programme and control communities.

### **5.5 Supplementary Feeding at Community**

Though CRS partners acknowledge and highly appreciate the meaningful support and assistance received under 2004-08 DAP, it was not clear whether they will be able to duplicate and sustain the strategies and activities that were implemented in the five-year period. This is perhaps due to the fact that it is not possible to provide the kind of food aid to these vulnerable communities.

Though some respondents felt CRS cannot continue to provide food aid, some were also of the opinion that if the conditions in the country are such that the government continues to receive other forms of foreign assistance e.g. credits and loans, and then what prevents the continuous supply of food aid to the most vulnerable groups? They argue food aid is just another form of foreign support for the growth and development of the economy. This group of respondents was fast to add that they will be willing to provide their own food if and only if assistance in the form of irrigation facilities, improved seeds, fertilizers, farm inputs such as tractors, 'soft' loans are guaranteed. It is these constraints that impede local food production. The evaluation team came to the conclusion after interacting with these key informants that future development assistance should consider removing some of the perpetual hindering factors as listed above.

## **5.6 Adoption of healthy behaviours/practices**

The 2004-08 DAP was conceived to improve health and nutrition knowledge/practices at the household level. This was achieved to some extent. The GHS will continue with health and nutrition education. In order to test whether withdrawal of food assistance will negatively affect health seeking behaviour in affected communities, the evaluation team compared some performance indicators between phased out communities and current beneficiary communities. Table 5.1 shows the differences in health seeking behaviour between these communities. The prevalence of wasting was lower in the current beneficiary communities (chi = 6.450, p = 0.092). Exclusive breastfeeding rates were higher in the phased-out communities (chi = 11.750, p = 0.008) whilst ANC attendance was significantly lower in the phased-out communities (chi = 20.229, p = 0.001). From these results, it is unclear as to whether food withdrawal will have any impact on child health and nutritional indicators. It needs to be mentioned that, though the phased out communities were no longer receiving food rations, all other health services were going on there. It can be stated that with sustained health services in the FACS communities, adoption of healthy behaviours/practices will continue.

Table 5.1 Comparison of selected health performance indicators between phased-out and current FACS communities

Indicator	Community Type		% Points Difference
	Phased-out	Current Beneficiary	
Children 12-23 months weighed at least three times in the past four months n (%)	9 (90.0)	100 (88.5)	1.5
Full immunization	9 (90.0)	104 (92.0)	2.0
Stunting prevalence	16 (14.3)	138 (14.3)	0.0
Wasting prevalence	21 (18.8)	118 (12.2)	6.6
Underweight prevalence	27 (23.7)	221 (22.5)	1.2
Exclusive breastfeeding	18 (100.0)	134 (83.8)	16.2
Earliness in putting the baby to the breast	26(54.2)	275 (63.7)	9.5
Feeding colostrums	44 (91.7)	399 (92.4)	0.7
ANC attendance at least four times	10 (43.5)	159 (79.9)	36.4
Age complementary food was introduced	24 (50.0)	206 (47.7)	2.3

## **SECTION 6**

### **CONCLUSIONS, RECOMMENDATIONS AND LESSONS LEARNT IN THE HEALTH SECTOR**

#### **6.1 Main Findings**

The main findings in the health sector are summarized below:

- a) The overall prevalence of stunted growth among children less than five years was reduced by 7.7 percentage points at the end of the project. The greatest reduction was made in the age group 12-23 months.
- b) The prevalence of chronic child malnutrition was differently distributed across age groups. The prevalence was highest in the age group 12-23) and it was in this age group the greatest reduction (9.4%) in the prevalence of stunting occurred by the end of the project life. It may be implied children aged 12-23 months were more responsive to the child survival activities.
- c) In terms of responsiveness and vulnerability, children in the 12-23 age groups should receive priority when it comes to targeting in child survival programmes.
- d) Great improvement in key household health and nutrition behaviours/practices: early initiation of breastfeeding, exclusive breastfeeding rate improved by 41.0 and 68.0 percentage points respectively.
- e) Management of common childhood illnesses improved. For example, there was a 20.3 percentage point increase (49.5%-29.2%) in the number of children under two who had experienced diarrhoea in the preceding two weeks and had received either the same or more fluids. Additionally, few mothers gave less fluid at the end of the programme (20.0%) compared to what pertained at baseline (35.3%). At end of the project, 41.0% (43/105) said they breastfed their children more when they had diarrhoea. This is a positive health practice.
- f) Self-medication was still common in the programme communities. For instance, about 46.5% (79/170) mothers sought treatment/advice for their malaria children from drug stores whilst 36.5% (62/170) did so at a government hospital/health centre.
- g) Access to child and maternal health services increased significantly. For example, the proportion of mothers who received at least one tetanus toxoid injections (as recorded in maternal health card) increased from the 17.2% at the beginning of the programme to 68.0% by the closed of the programme.
- h) Supervised delivery (that is, delivery conducted by trained midwife/doctor/nurse) in the programme communities was still very low (32.1%). Most deliveries were conducted mainly

by traditional birth attendants (TBA). This is in conflict with the high patronage for ante-natal care recorded in the programme communities.

- i) Food assistance was a strong input for attracting and mobilizing communities for maternal and child health services.
- j) The overall impact indicator for the Expanded Programme on Immunization (EPI) activities (that is, percentage of fully immunized children) showed the coverage of immunization at the end of the project period in the programme districts was high.
- k) The project supported with transport and other incentives that facilitated a sustained outreach services to communities.
- l) Through training and other motivation, community volunteers can be a rallying force behind community health mobilization and capacity-building.
- m) Only a small proportion of households interviewed were consuming (about 32.6%) with adequate amount of iodine (that is, 15 ppm). The control of iodine deficiency disorders will be difficult if measures are not taken by the government and other partners to really enforce the bye-law on the consumption of iodated salt in the country.
- n) The implementation of the FACS strategy at the community levels contributed to improved utilization of health services as evidenced by the high attendance at growth monitoring sessions and increased childhood immunization rates.
- o) Correct plotting of the growth curve is vital for mothers to understand the growth of their children. Unfortunately, only 175 (36.5%) of the 480 growth curves examined were properly plotted (that is, all points were joined with a curve).
- p) Though partner organizations (e.g. GHS, GES) greatly appreciated the input made by CRS, there was no systematic documentation of the contribution made by the programme to the overall achievements in these sectors. Data collected from the implementation of activities were invariably submitted to CRS office in Tamale without making use of the data at the institutional level. In some cases, copies of monthly reports were not kept. For instance, the evaluation team found it difficult to get evidence at the district and sub-district to quantify the contribution of CRS-sponsored activities. For example, what percentage of immunizations, growth monitoring coverage came from the CRS supported communities? Availability of this kind of analysis would have informed partners/managers to learn from the strategies that were used by CRS and also to fully appreciate the effort of CRS/Ghana in their endeavors. Currently the partners could not easily quantify the contribution from the CRS programme communities. Partners acknowledge more patronage was from the CRS communities but 'how much' is what needs to be improved upon in future programme. It is true CRS supported the kind of programmes/activities the partners were already carrying out

but strategies adopted were slightly different. Despite this fact, there was a tendency for some partners to see the DAP activities as ‘CRS’. This attitude cannot be deemed as healthy collaboration.

## **6.2 Best Practices**

- a) The provision of community-based food assisted child survival centres were sources for community mobilization for health, capacity building, and empowerment especially in deprived environments. It must be mentioned that though the FACS centres were GHS outreach-points, services in these points were not as effective as when the structures were put up. Without the structures, it was not possible to carry out ante-natal services since palpation for example was not possible. Additionally, the centres were seen by community members as clinic/health centres and were therefore psychologically inclined to visit there for services. Furthermore, the FACS centres provided shelter for health staff in times rainfall etc.
- b) The concurrent implementation of health and education interventions approach to finding solutions to food insecurity problem was relevant and appropriate because of the potential synergistic effect on child growth. The set of activities/interventions covered by the programme provided fertile ground to the long-term improvement in food security in the programme catchments’ areas.
- c) In selecting beneficiary communities for the FACS activities, due cognizance was given to communities where the GHS was already running out-reach services. This approach ensured uniformity and so CRS phase-out from those will not disrupt health service delivery in those areas.

## **6.3 Recommendations**

- a) Future development assistance should consider removing some of the perpetual hindering factors that affect local production of food and support other income generation activities in areas (e.g. Lawra and Bongo districts) where meaningful agricultural activities are impossible.
- b) Partners should endeavour to make use of data generated from donor supported project areas. Analysis of this kind of data will informed partners/managers to learn from the strategies that are used by CRS and also to fully appreciate the effort of CRS in their endeavours.
- c) Future FACS programmes should clearly spell out the roles and responsibilities of communities and insist that those responsibilities are complied with. Additionally, centre

management committee members should be motivated to generate interest in the management of centre activities.

- d) Future programmatic interventions should include a memorandum of understanding to take care of staff attrition. For instance, an agreement could be reached with partner organizations to allow staff to remain for a certain minimum period of time in order to ensure uninterrupted implementation of activities and for the programme to reap the investment made through training expenses.
- e) Some kind of incentives was given to community volunteer workers. Interaction with these volunteers revealed they would like to be officially recognized as having worked with CRS (that is, through awards of certificate of recognition/participation) in community service. This, they claimed will offer them greater future prospects in the job market.
- f) Proper plotting of growth curves need to be taken seriously. The GHS should train its staff to properly do that. This is because the growth curves serve as basis for counseling at growth monitoring sessions.

#### **6.4 Limiting Programmatic Factors in the Health Sector**

- a) Volunteer staff attrition: Frequent changes of counterparts/collaborators to other non-programme areas after being trained by the project affected the smooth running of planned activities. Annual re-posting of nurses to other health centres out of the programme catchments' areas could not be controlled by the programme.
- b) Some District Health Management Teams (DHMT) felt they were not always informed of what logistics and materials were sent to the FACS communities and that made monitoring of such items rather difficult. In particular, the construction of some the FACS centres was poorly done because there was no effective supervision.
- c) The food assistance in the communities often attracted many women from outside the programme catchments' areas and this influx led to negative drop-out rates in some districts. Additionally, a lot of time was spent by the health staff in running out-reach services because of the large numbers.
- d) Some community volunteers become enemies to persons who demand for some food and they are refused.
- e) Food contractors and drivers often default in discharging their obligations. For instance, some drivers who cart food to the districts (for example East Mamprusi) on some occasions demanded the DHMT to assist in transporting the food to the communities because the lorry cannot go such communities.
- f) There were reports that sometimes the food arrived in the communities already spoiled.

## **SECTION 7**

### **ASSESSMENT OF EDUCATION SECTOR OUTCOMES**

#### **7.1 Improving Quality Education in three Northern Regions**

CRS/Ghana sought to improve quality education in northern Ghana through in-service training for selected teachers on pupil-focused instructional practices, circuit supervisors and assistant directors in charge of supervision on supervision and instructional leadership and School Management Committees/ Parent Teacher Association (SMCs/PTAs) on their roles and responsibilities and aspects of education planning, such as the development of school performance improvement plans and community mobilization.

In addition, CRS/Ghana sought to increase the frequency and quality of district and circuit level supervisors through the provision of logistics. CRS/Ghana also sought to pursue a vigorous social marketing campaign incorporating radio drama and talks shows in order to raise the awareness of school communities about the importance of education and their responsibilities as well as their involvement in the promotion of education.

As a means to attaining the goals set in quality education improvement and to sustain the benefits of an earlier Quality Improvement in Primary School (QUIPS) programme, which closed in 2004. CRS-Ghana implemented the Quality Education Improvement Programme (QEIP) in 2005 through CRS/Ghana's private funds in order to ensure programme synergy in the education sector. The programme, which initially started in eight districts in northern Ghana, roped in fourteen others, and built on the lessons of QUIPS.

QEIP contributed to revamping school level community structures such as School Management Committees (SMCs) and Parent Teacher Associations (PTAs) through a series of training on their roles and responsibilities. The data on the Final Evaluation Mission show that, with the exception of the Wa Municipality with 16 % of schools without SMCs, almost all CRS/Ghana's programme districts can now boast of trained and functioning PTAs and SMCs. About 90 percent of these structures have developed School Performance Improvement Plans (SPIP) and are actively engaged in development programmes of their schools. The monitoring data of FY2007 show that more than 80% of Parent Teacher Associations implemented actions on their SPIP as a demonstration of increasing community participation in school management in CRS/Ghana programme schools. Interactions with SMCs/PTAs during the Final Evaluation field visits show that SMCs/PTAs were at the centre of school development programmes in such areas as enrolment and retention drives, problem-solving, and social mobilization for constructional projects.

QEIPs has also designed and supported the implementation of series of school based in-service training workshops for teaches and staff of GES. The training programmes, which were modeled on

TOTs, utilized GES District Education Planning Teams (DEPTs), District Management Improvement Teams (DMITs) and District Teacher Support Teams (DTST) to, in turn, deliver the training to teachers, head teachers, circuit supervisors and SMC/PTA executive. About 144 GES officials received TOT training in PMT administration and 144 on Instructional Leadership Training (ILT).

In all, 857 teachers received training in INSET over a series of training in three cohorts, 946 teachers and circuit supervisors were trained in clinical supervision and 291 head teachers, circuit supervisors and assistant directors of education trained in Instructional Leadership Managements. These programmes have imparted to teachers instructional skills and methodologies and skills in the development of instructional aids using locally produced materials.

CRS/Ghana also provided teaching and learning materials such as training manuals, exercise books, pens, pencils and card boards for the preparation of teaching and learning materials under QEIPS. Teaching manuals and pictures for the teaching of English and Mathematics were also supplied to participating schools.

These capacity building programmes have impacted positively on teaching and learning in programme schools. Available monitoring data indicate that frequency of supervision visits had increased from 27% in 2004 to 73% in 2007 as a result of programme support. There is also available monitoring data to show that by 2007, 90% of teachers in programme schools use TLM to enhance teaching and learning in schools.

## **7.2 School Feeding Programme**

The school feeding programme was designed to increase enrolment and attendance and improve retention, especially for girls in preschool and primary levels through the provision of early morning snacks and meals at noon (ED/PSCF) to preschool children and mid morning meal (ED/SF) to primary school pupils. The meals would address the short term hunger in children as most of them go to schools without eating breakfast.

The commodities selected were found to be suitable and known locally. They were also found to be fortified with nutrients that provide important sources of concentrated calories.

A widely acclaimed benefit of the school feeding programme at schools, districts and communities the evaluation team visited was that it had brought about a general increase in enrolment and retention in programme schools. Table 7.1 shows a summary of available data on enrolment in 803 CRS/Ghana programme schools from FY 2004 to 2008. The figures show excess of yearly enrolment targets set by CRS/Ghana between 2004 and 2008. For instance, whereas 153,146 and 137,253 pupils were targeted in 2004 and 2008, actual enrolment was 192,049 and 226,026, showing an increase in 25% and 64% respectively. Even without enrolment figures of two large

districts such as Bawku Municipality and Garu/Tempene, enrolment figures for the remaining districts stood at 205, 616 in 2008.

Table 7. 1 Enrolment in CRS/Ghana Programme Schools by Districts Fy2004-2008

District	2004			2005			2006			2007			2008		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Bawku Municipal	5387	4433	9820	5667	4818	10485	6494	5773	12267	8108	6298	14406	**	**	**
Bawku West	4187	3776	7963	4556	4267	8823	4654	4494	9148	4850	4687	9537	4938	4652	9590
Bole	1353	1224	2577	1439	1302	2741	1670	1557	3227	1755	1719	3474	1952	1829	3781
Bolga	3476	3385	6861	3687	3653	7340	4030	4043	8073	4300	4225	8525	4178	4156	8334
Bongo	7254	7154	14408	7554	7501	15055	8202	8250	16452	8551	8557	17108	8799	8423	17222
Builsa	3466	4327	7793	3383	4399	7782	3908	4770	8678	4102	4911	9013	4300	4856	9156
Bunkurugu/ Yunyoo	6010	4953	10963	6308	5258	11566	6790	5889	12679	7106	6451	13557	7309	6828	14137
Central Gonja	821	751	1572	812	780	1592	981	971	1952	947	906	1853	1028	985	2013
East Gonja	3087	2921	6008	3370	3362	6732	3757	3783	7540	4101	3740	7841	4180	3873	8053
East Mamprusi	2171	1695	3866	2346	1913	4259	2520	2115	4635	3056	2577	5633	3260	2864	6124
Garu/ Tempene	3120	2416	5536	3222	2755	5977	3790	3411	7201	3988	3546	7534	**	**	**
Gusheigu	917	499	1416	886	545	1431	928	544	1472	1030	732	1762	1089	710	1799
Jirapa/ Lambussie	6888	6527	13415	4792	4859	9651	5330	5593	10923	5911	5879	11790	5658	5812	11470
Karaga	1577	1029	2606	1526	965	2491	1659	1113	2772	1704	1150	2854	1753	1210	2963
Kassena/ Nankana	6308	6015	12323	6587	6475	13062	7024	6894	13918	7026	6859	13885	7120	6838	13958
Lawra	5220	4802	10022	4714	4664	9378	5140	5092	10232	5832	5587	11419	5950	5597	11547
Nadowli	5185	5592	10777	3662	4843	8505	3890	4333	8223	4115	4594	8709	4147	4580	8727
Nanumba North	2976	1696	4672	2491	1811	4302	2749	2070	4819	3047	2489	5536	3190	2657	5847
Nanumba South	1740	1276	3016	1806	1484	3290	1835	1636	3471	1970	1772	3742	1988	1755	3743
Saboba/ Chereponi	2598	2597	5195	2727	2707	5434	3064	3122	6186	3072	3301	6373	3194	3425	6619
Savelugu/ Nanton	2137	1568	3705	2136	1620	3756	2226	1788	4014	2262	1834	4096	2265	1812	4077
Sawla-Tuna- kalba	661	459	1120	673	519	1192	864	768	1632	868	805	1673	989	845	1834
Sissala East	1318	1638	2956	1132	1781	2913	1233	1898	3131	1379	1941	3320	1600	1951	3551
Sissala West	1630	1902	3532	1104	1212	2316	1283	1382	2665	1313	1411	2724	1447	1474	2921
Talensi/ Nabdram	4376	4002	8378	4729	4474	9203	4955	4817	9772	5188	4964	10152	5624	5188	10812
Tamale	1998	1409	3407	2060	1548	3608	2268	1660	3928	2353	1748	4101	2488	1816	4304
Tolon/ Kumbungu	2193	1603	3796	2115	1734	3849	2144	1814	3958	2357	1990	4347	2460	1961	4421
Wa	1439	1345	2784	1717	1463	3180	1823	1579	3402	1815	1650	3465	321	326	647
Wa East	1624	1672	3296	1931	1782	3713	2176	2076	4252	2222	2180	4402	2101	2069	4170
Wa West	1625	1427	3052	1916	1422	3338	2386	1842	4228	2298	1866	4164	2603	2285	4888
West Gonja	879	903	1782	863	884	1747	927	951	1878	1048	1077	2125	889	818	1707
West Mamprusi	3056	2978	6034	3227	3224	6451	3690	3899	7589	4034	3989	8023	3823	3620	7443
Yendi	2212	1720	3932	2253	1765	4018	2353	1982	4335	2360	2078	4438	2485	2196	4681
Zabzugu /Tatale	1804	1662	3466	1795	1755	3550	2032	2016	4048	2184	2261	4445	2357	2430	4787
Grand Total	10069 3	91356 9	19204 9	9918 6	9354 4	19273 0	108 775	10392 5	21270 0	11625 2	10977 4	22602 6	10548 5	998 41	20532 6

Source: CRS/Ghana

\*\* No data for 2008 due to conflict in Bawku East and neighbouring districts

On the issue of enrolment by gender, whereas the enrolment of boys increased from 100,693 in 2004 to 116,252 in 2007 that for girls' increased from 91,356 in 2004 to 109,774 in 2007 representing an increase of 15% and 20% respectively. The proportional increase of girls' enrolment over boys narrowed the gender parity in programme schools from 0.90 in 2004 to 0.95 in 2008, with the number of programme districts attaining a gender parity of 1:1 increasing from 4 in 2004 to 9 in 2008. The fact that gender parity gaps exist in many CRS/Ghana FFE districts means that school feeding must be pursued alongside other strategies before universal basic education can be attained. Take home rations have a potential of stimulating enrolment, specifically for the girl child. As illustrated by Table 7.2, average enrolment of girls in ration schools was overall higher than that of girls in non-ration ones between 2004 and 2008. Average enrolment figures for girls were also higher than boys in the same schools between 2004 and 2007. In terms of actual number of girls enrolled in ration schools, the data show that the figure went up from 44,919 in 2004 to 54,707 in 2007 but was overtaken by the number of boys in 2008. Whereas the enrolment for boys increased from 51,869 in 2007 to 105,625 in 2008 that for girls increased from 54,707 to 99,991 for the same period as indicated in Appendix I.

In school after school and community after community, the evaluation team was reminded about the fact that a good number of children attend school without breakfast because the family lacks resources to provide one and school children travel long distances to school and get to schools already hungry and it is the food provided at school that sustains these children. The issue of lack of resources by families to provide a meal to children before school was a critical factor in districts such as Lawra and Bongo and some pockets of communities in the other six districts particularly during the "lean" season when food stocks run-out. Providing school children a meal at school a day in these communities is a substantial incentive to parents to enrol their children.

Considering the enrolment dynamics in CRS/Ghana FFE and ration schools, the evaluation team is convinced that a sharp withdrawal of food from programme schools will affect enrolment and retention, particularly those of the girl child and children in lower primary in general.

Table 7.2 Average Enrolment of Girls in Ration and Non Ration CRS/Ghana Schools from 2004-2008

District	2004		2005		2006		2007		2008	
	Ration	Non-Ration								
Bole	108	78	117	83	140	99	159	108	180	118
Bunkpurugu/yunyoo	111	86	113	95	127	107	146	110	144	129
Central Gonja	76	53	81	54	105	65	94	63	113	72
East Gonja	109	66	122	81	134	97	128	101	89	124
East Mamprusi	108	81	118	95	122	114	151	136	156	161
Gushiegu	49	42	50	50	52	47	67	67	49	66
Karaga	70	42	68	36	72	50	74	52	100	65
Nanumba North	134	71	141	77	155	93	189	109	114	159
Nanumba South	112	90	131	104	142	116	146	131	96	138
Saboba/Chereponi	101	71	108	71	121	86	132	85	107	115
Savelugu/Nanton	70	65	72	67	79	74	74	78	76	75
Sawla-Tuna-Kalba*	-	-	-	-	-	-	-	-	-	-
Tamale	65	51	73	56	79	59	85	60	76	72
Tolon/Kumbungu	105	64	116	69	121	81	129	80	154	83
West Gonja	65	104	87	97	70	107	77	104	**	**
West Mamprusi	114	82	123	89	155	102	153	110	121	126
Yendi	69	61	76	60	82	69	87	72	70	82
Zabzugu/Tatale	88	68	90	73	101	86	110	99	87	113
Bawku Municipal	144	128	151	143	176	175	190	193	**	**
Bawku West	132	130	152	144	173	143	182	148	171	125
Bolga	180	148	190	163	214	177	220	188	246	204
Bongo	249	168	270	166	300	179	309	189	210	261
Builsa	118	117	120	119	128	124	128	131	124	129
Garu-Tempane	129	127	149	142	182	178	186	188	**	**
Kassena/Nankana	182	145	194	158	211	164	212	170	180	187
Talensi-Nabdram	134	159	157	172	179	179	183	185	187	194
Jirapa/Lambussie	125	127	124	92	140	108	149	112	124	127
Lawra	132	151	121	139	134	150	150	161	142	166
Nadowli	164	139	128	152	139	114	147	113	111	148
Sissala East	131	145	146	151	154	163	152	173	128	166
Sissala West	123	174	148	104	171	117	179	117	226	139
Wa East	117	143	133	83	143	102	157	104	175	115
Wa Municipal	191	117	211	119	245	121	228	138	210	173
Wa West	127	133	122	87	150	119	167	124	155	165
Total	3932	3426	4202	3391	4696	3765	4940	3999	4121	3997

SOURCE: CRS/Ghana

\* There were no Ration schools in this area, now called the Sawla –Tuna-Kalba district since 2004. This is a new district and used to be part of the Bole district.

\*\* Enrolment data for 2008 not available

Take home rations also have the potential of increasing attendance. Comparing average attendance of girls in ration and non-ration schools, one finds that attendance was overall higher in ration than in non-ration schools between 2004 and 2008.

Table 7.3 Average Attendance of Girls by Ration and Non-Ration Schools from 2004-2008

District	2004		2005		2006		2007		2008		Total	
	Ration	Non-Ration										
Bole	17663	10238	19124	12288	22193	14718	23326	14774	31240	16362	113546	68380
Bunkpurugu/Yunyoo	14989	11372	17595	13495	18970	15564	18830	14393	21957	18221	92341	73045
Central Gonja	11861	7922	11550	8060	12832	10524	12912	9887	19593	10647	68748	47040
East Gonja	17207	9665	16143	12386	18122	15370	16071	15655	14925	20178	82468	73254
East Mamprusi	17344	11360	19470	12896	18352	18197	22474	19134	24372	23407	102012	84994
Gushiegu	8150	4843	12516	6041	12934	5828	12093	8118	8044	9800	53737	34630
Karaga	10855	6107	16269	5623	16462	7160	13990	6665	15328	9903	72904	35458
Nanumba North	21675	11183	26514	12218	29461	14726	26778	13715	19803	25751	124231	77593
Nanumba South	16479	14960	18954	16364	19115	18846	16202	15261	15226	22932	85976	88363
Saboba/Chereponi	13959	10088	14432	10343	15700	11824	14797	10325	17975	17493	76863	60073
Savelugu/Nanton	11342	9304	14154	10065	14774	11223	9869	9025	13322	11154	63461	50771
Sawla-Tuna-Kalba*	-	-	-	-	-	-	-	-	-	-	-	-
Tamale	10002	7421	13170	7574	14755	8667	12857	7406	10969	10013	61753	41081
Tolon/Kumbungu	15759	9553	20266	10340	20285	11518	18248	9783	24013	12683	98571	53877
West Gonja	9922	15731	8318	15692	9504	16042	9255	13267	**	12820	36999	73552
West Mamprusi	16964	11178	16227	13751	18278	15258	14947	11508	21811	20149	88227	71844
Yendi	10364	8322	12459	8782	12693	10686	10672	9041	11563	12932	57751	49763
Zabzugu/Tatale	14051	9557	11034	10549	12080	12851	10162	13771	13294	16616	60621	63344
Bawku Municipal**	19600	16953	20053	20123	22637	24916	18784	21225	-	-	-	-
Bawku West	21670	18801	20355	20632	22546	21464	20787	18591	25974	22340	111332	101828
Bolga	27371	21946	26381	24866	27514	26829	24359	21755	38713	30968	144338	126364
Bongo	28081	18278	31478	22448	34321	24519	26756	19617	32679	34944	153315	119806
Builsa	16394	15429	10602	16670	12352	16909	11432	15377	17756	18245	68536	82630
Garu-Tempene**	19153	16006	21477	21060	23839	25236	19106	21300	-	-	-	-
Kassena/Nankana	23500	17087	20586	19577	23634	20812	17439	16649	27099	23483	112258	97608
Talensi-Nabdam	19914	23173	20380	25853	23354	26095	19747	19841	27546	27548	110941	122510
Jirapa/Lambussie	16046	14436	13999	12603	15816	14614	14892	12518	18050	18211	78803	72382
Lawra	15794	18093	19268	20340	20953	22848	20383	19361	22270	23839	98668	104481
Nadowli	18064	16633	15729	14391	17210	15972	14682	11155	16590	22802	82275	80953
Sissala East	15091	15047	11808	25655	12681	27017	10009	21235	21712	26327	71301	115281
Sissala West	13630	20530	10797	16402	12350	17623	10989	14187	37012	20691	84778	89433
Wa East	16671	17611	17701	13040	15710	15397	14275	11022	24218	17314	88575	74384
Wa Municipal	27998	14892	25317	16149	28780	18838	14304	14765	29927	28073	126326	92717
Wa West	15021	17177	22854	12850	31749	16747	24063	14737	22256	26384	115943	87895

Source: CRS/Ghana

\* There were no ration schools in this area now Sawla-Tuna-Kalba District since 2004.

\*\* No data for 2008 due to conflict in Bawku East and neighbouring districts

Attendance was noted not only to be higher in ration schools but also retention, as girls who attain at least 90% attendance enjoy take home in addition to the hot lunch. Table 7.4 shows that on the whole, the average number of pupils per school who attain 90% attendance per term is higher for girls than boys. Whereas the average number of pupils who attained 90% attendance was 46 in 2004, the number for boys was 41 compared to 50 for girls. In 2008, the average number of pupils was 73: 60 for boys and 87 for girls.

Table 7.4 Average number of pupils obtaining at least 90% attendance per term by gender and District

DISTRICT	2004		2007		2008		Total		
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	2004	2007	2008
BAWKU MUNICIPAL	37	50	43	65	**	**	44	54	**
BAWKU WEST	41	58	48	64	41	83	50	56	62
BOLE	44	43	62	59	168	150	44	61	159
BOLGA	38	74	43	77	49	152	56	55	100
BONGO	34	68	41	80	33	104	51	61	68
BUILSA	19	47	20	47	30	71	33	34	51
BUNKURUGU/YUNYOO	23	31	29	43	43	80	27	36	62
CENTRAL GONJA	44	40	55	55	61	92	42	55	77
EAST GONJA	59	62	78	82	72	63	61	80	67
EAST MAMPRUSI	58	51	74	70	81	99	55	72	90
GARU/TEMPANE	24	50	29	68	**	**	37	49	**
GUSHEIGU	49	30	56	39	27	38	40	48	33
JIRAPA/LAMBUSSIE	27	39	37	51	28	59	33	44	43
KARAGA	53	38	56	37	55	50	46	47	52
KASSENA/NANKANA	17	41	25	54	43	98	29	40	70
LAWRA	41	70	50	76	50	83	56	63	67
NADOWLI	39	57	49	72	35	63	48	61	49
NANUMBA NORTH	86	63	94	87	91	92	75	91	92
NANUMBA SOUTH	94	77	84	83	69	78	86	84	73
SABOBA/CHEREPONI	34	43	43	60	51	85	39	52	68
SAVELUGU/NANTON	45	31	52	42	51	63	38	47	57
SAWLA-TUNA-KALBA	41	25	60	52	**	**	33	56	**
SISSALA EAST	50	102	67	115	64	127	76	91	95
SISSALA WEST	47	67	62	87	77	152	57	75	115
TALENSI/NABDAM	42	75	53	83	50	104	54	68	77
TAMALE	44	37	55	43	60	59	41	49	60
TOLON/KUMBUNGU	53	41	59	52	94	100	47	56	97
WA	74	66	103	98	122	136	70	111	129
WA EAST	63	63	72	74	74	110	63	73	92
WA WEST	57	44	77	69	46	48	51	73	47
WEST GONJA	42	49	54	59	**	**	46	57	**
WEST MAMPRUSI	37	48	49	64	52	69	43	57	60
YENDI	44	33	57	51	36	44	39	54	40
ZABZUGU/TATALE	40	41	56	57	36	63	41	57	49
Overall Average	41	50	51	63	60	87	46	57	73

Source: CRS/Ghana

\*\* No data for 2008 due to conflict in Bawku East and neighbouring districts

Looking at the distribution by district, 79 % of districts had more girls attaining enrolment of at least 90% than boys. Respondents the team interacted with in the field were of the view that take home rations for girls serve as food relief to parents and as a result, parents encourage their enrolled girls not to default.

Providing school children meals was also noted to have cognitive benefits. Respondents during the field survey observed that meals provided at school have not only reduced hunger of pupils during school time but also improved the general health condition. At several places, attention was drawn to the fact that the school hot lunch may be ‘the only meal taken by pupils with balanced diet and prepared under hygienic conditions’ compared to other meals given to the pupils at home.

Community food management structures have been established in all programme school communities and their capacities built in the receipt, storage and cooking of food. These structures together with school management committees have shown remarkable interest in programme schools the team visited. Food management committees now issue food in many schools and supervise the cooking and distribution of meals. The daily presence of members of these structures on school compounds has put teachers on the alert.

As a result of interventions by CRS/Ghana, programme schools are required to keep data not only on the food inputs received and how it is used but also data on enrolment, attendance and retention that can be exploited for planning purposes. Teachers and head teachers reported that the data generated and kept at school facilitate school planning mainly in the area of input requests by the District Education Directorates.

### **7.2.1 Challenges in the FFE**

- The CRS/Ghana’s school feeding programme and changes in the national education policy, such as the capitation grant and the inclusion of pre-schools in GES portfolio have led to a surge of enrolment throughout the districts the evaluation team visited. This has had adverse effects on the quality of education because infrastructure, teachers and supplies are overstretched. It must be acknowledged that one important barrier to education has been low competences due to poor quality education and lack of job opportunities for school leavers.
- GES officials were divided over their level of involvement in the short to medium term planning of programme activities. There was one group that felt they were not adequately involved in the medium term planning of the school feeding interventions while the other thought the contrary. The view of the former is that CRS/Ghana releases its planned activities in “bits and pieces on an ad hoc basis” sometimes resulting in clashes between CRS/Ghana’s planned activities and those of GES’. In the case of the latter, quarterly plans

of CRS/Ghana are agreed upon during review meetings and distributed well ahead of schedule to all partners”. Whatever the case may be, the above illustration is an indication that there is a group of GES officials and partner supervisors that feel less involved in decision making processes or are less aware of CRS/Ghana’s school feeding interventions to be able to assert their districts plans on the programme. This group may well be newly posted directors and partner supervisors within GES that are not adequately oriented on the programme. The problem also exists in a few schools the team visited during the evaluation mission.

- Officials of GES in well about one–half (50%) of the districts visited raised problems about misunderstanding between GES staff and CRS/Ghana over roles they play on the programme concerning data collection responsibilities, reporting and deadlines. The personnel contacted from the same districts also raised communication constraints in their relationship with CRS/Ghana. According to them, letters about impending programmes are received either very close to the programme or shortly after the programme.
- Programme supervisors and focus persons at the district and regional levels expressed dissatisfaction with fuel and allowances paid them on programme assignments. They complained that the kilometric rate paid as reimbursement for fuel by CRS/Ghana was no longer realistic as a result of increased fuel prices. Although CRS/Ghana was well aware of the situation nothing was being done to address it and wondered why CRS/Ghana was not responsive to the plight of its partner GES/staff. Similarly there were also complaints about disparity in allowance paid by CRS/Ghana to GES and GHS staff on the DAP FY04-08. However, programme staff of CRS/Ghana maintain that any such disparities in allowance between what is paid to GES and GHS staff is based on the policies of the two organisations.
- Although communities were expected to provide food supplementation when schools run out of food, many school communities are not able to. The few communities that are able to support, reported they were overstretched after a week or two. In the Saboba Cheriponi and East Mamprusi districts, three in ten school communities reported to have been able to provide supplementary feeding to schools on a short term basis. In Bongo and Lawra, parents are not in the position to provide any supplementary feeding. Similarly, payment of tokens (about 20 Ghana pesewas per month) as canteen fees initiated by communities to support the purchase of ingredients and plates is a problem in many school communities. The evaluation mission observed that there was no school where parents of pupils were in the position to pay up to 60% of pupils enrolled. In about 45% of the school communities

visited where payment of canteen fees was reported to be satisfactory, only about one-half of parents of pupils were estimated to be paying on regular basis.

- There were also reported cases of food shortages in almost all the districts visited by the final evaluation team. In some districts such as Bongo, Bunkpurugu/Yunyoo and Wa West, food shortages were wide spread. In the other districts, the problem was intermittent. Whereas no food was received in schools in Bunkpuru/Yunyoo districts for the first quarter of 2007/08, Bongo received no food for the third quarter of the same year. Intermittent food shortages mainly due to differences between approved beneficiary levels and prevailing school enrolment figures were reported across all districts in over one-half (54%) of the schools visited by the team. There were also reported cases of unwholesome food, particularly the soya blend received during the second quarter of 2007/08.
- There are quite a number of international and local non-governmental organisations pursuing school based interventions in the three northern regions of Ghana. CRS/Ghana has no formal working relationship for purposes of complementarily and avoiding duplications and competition. Some of these NGOs include World Vision International, ACTION AID Ghana, Plan International and SNV.
- It was observed that although district assemblies are the hub through which local development efforts revolve under the decentralisation programme, CRS/Ghana failed to engage DAs formally, and as strategic partners in its districts of operation, even though some DAs, particularly Wa East and Wa West, have provided complementary funding to CRS/Ghana's interventions in Community Health Planning and Services (CHPS) and other projects, and programme personnel of CRS/Ghana worked closely with lower level district structures such as assembly persons, WATSAN and unit committees at the community levels. CRS/Ghana has now realised its initial mistake and has placed DAs at the forefront of its exit strategy as revealed by findings of the evaluation mission.
- Motivational problems were also reported at the school and community levels. For instance teachers at programme schools think they are overburdened with extra responsibilities for which no material or pecuniary motivation is given. Similarly, community level structures such as food management committees and cooks complained to be overburdened with work for which no motivation was provided. Even though communities agreed to support their structures on the programme, very few are in the position to offer meaningful support.

### **7.2.2 Lessons**

- The school feeding programme ought to be called school feeding and nutrition programme so as to articulate the marriage between the feeding and nutrition components of the programme. This is because the programme demonstrates a perfect mesh between feeding, micro-nutrients supplementation, and health and hygiene interventions to address the primary nutrition and health problems of school age children.
- The CRS/Ghana's programme demonstrates a complex school feeding targeting mechanism based on economic, geographic, nutritional status and gender so as to reach families that lack resources to adequately provide for their school children or those that need to be motivated to enrol their children and have them attend regularly. Our interactions with school pupils to find out those that fail to attend school when food is not available reveal the cohort with which the practice is common – are pupils in the lower primary (class 1-3). This therefore adds the level of primary education as another targeting criterion.
- An effective monitoring and supervision system has the advantage of reducing not only theft and pilfering of food commodities but also spoilage.

### **7.3 School Health Education Programme (SHEP)**

In addition to improving the quality and availability of education, CRS/Ghana sought to improve the health and nutritional status of school children through the school health education programme (SHEP) because of the realisation of the link between poor health of school children and school attendance and education attainment, so as to ensure that children benefit fully from their educational opportunities.

Unmet needs in the government's SHEP programme prior to CRS/Ghana's support included poor coordination, the lack of clear national health policy, funding shortages, low capacity of school health teachers due to a lack of training and training materials, and a lack of basic health services such as de-worming drugs, iron and or iodine supplementation.

Through the SHEP programme, CRS/Ghana sought to support the GOG to improve the overall management and implementation of the SHEP in selected programme districts. CRS/Ghana also sought to improve collaboration between GES and MOH in the SHEP programme through support for joint monitoring and supervision and regular planning meetings involving the MOH, GES and District Assemblies (DAs). CRS/Ghana provided logistical support for programme coordination.

Through the programme interventions CRS/Ghana strengthened and built the capacity of school health teachers and district and regional co-ordinators of SHEP in the districts of its operation. In collaboration with GHS and GES, CRS/Ghana developed a manual for the guidance of school

health teachers in the teaching of Information, Education and Communication (IE&C) in hygiene and sanitation activities in 2005. The manual covers topical issues on behavioural change strategies for school children. Three hundred (300) head teachers and health teachers were later trained in the use of the health guide. Similarly, 228 head teachers, school health teachers and 7 health education co-ordinators were trained in the use of variety of IE&C strategies in 2007.

CRS/Ghana utilised school health teachers, SHEP co-ordinators at the school, district and regional levels of the GES for programme implementation. It also established networks among school pupils and communities by establishing school health clubs (SHCs) and community school health management committees (CSHMC) of 9 members each, in all 114 SHEP schools and communities. Over 1,026 community school health management committee members participated in training sessions on their roles and responsibilities. SHEP teachers, club members and Community School Health Management Committees have been supported with health promotional games, handbooks, picture cards and calendars.

To facilitate the translation of awareness of health hygiene and sanitation issues into practice and ensure programme synergy, CRS/Ghana provided each programme school with hand washing materials, boreholes and hand-dug wells to 5000 community members and 6000 school children under the Integrated Community Water and Sanitation Improvement (ICOWSIP) project. In addition CRS/Ghana provided latrines to about 500 households in 15 communities through collaboration with local and international partners since 2005.

CRS/Ghana adopted interactive, activity based, and flexible skilled-based education approaches that uses school based health teachers, community health nurses, school pupils and community health management committees to address a wide range of health and environmental issues including malaria, diarrhoea, HIV/AIDS, hygiene and sanitation, nutrition, tree planting and other cross-cutting issues.

The second component of the SHEP programme sought to reduce cases of intestinal helminth infestations in pre-and primary school pupils in all programme schools. In pursuit of this, CRS/Ghana collaborated with regional directorates of Health Services and the MOH Parasitic Disease Research Centre, to conduct mass community sensitisation and to deliver mass de-worming exercises twice yearly to schools in programme communities. CRS provided funding for transportation costs of key MOH personnel and IEC campaigns.

CRS/Ghana supported biyearly de-worming exercises in programme communities since 2004 using SHEP teachers, co-ordinators, staff of the GHS and school health management committees (CSHMC). Despite few reported delivery deficits and initial resistance by parents and pupils, CRS/Ghana has supported de-worming exercises since 2004. 198,500 out of 254,953 pupils in project schools were provided de-wormers in 2004. 190,400 school children out of 198,500; 190,065 out of 219,851 and 126,153 out of 156,173 received de-wormers in 2005, 2006 and 2007 respectively. A total of 71,099 out of 75,322 school pupils were de-wormed<sup>1</sup> in a sample of eight districts in 2008. These coverage figures consistently surpass annual targets set by CRS/Ghana since 2004.

Some of the perceived benefits of the SHEP programme reported by stakeholders include the following:

- Information Education & Communication (IE&C) interventions as well as personal hygienic practices pursued under the SHEP have not only increased awareness about healthy hygienic practices among school pupils and parents alike, they have also increased healthy hygienic practices. School programme teachers and head teachers reported improvements in the personal hygiene of school pupils over the years, as a result of the adoption of sound hygienic practices. There were reported cases of school pupils now keeping their hair low because of frequent haircutting which has gone a long way to reduce the number of school pupils harbouring head lice. Similarly, adhering to recommended hand washing practices by pupils, cutting of finger nails and wearing of sandals in SHEP schools were reported favourable healthy and hygienic practices by teachers. These reports are corroborated by FFE performance monitoring indicators which show that 79% of school pupils in targeted programme schools demonstrate and practice hygiene in 2006.
- A survey of eight programme districts in 2008 shows although 85% of pupils in programme schools were targeted for de-worming, actual achievement was 94.4%. School teachers and parents of schools surveyed indicated that cases of worm infestation among school children which gave rise to a wide range of symptoms such as pale appearance, bloated stomachs and so on at the onset of the programme have reduced drastically, and this has impacted positively on the health of school children.
- The combined effect of the health, hygiene and de-worming activities pursued under the SHEP has led to improved health and nutritional status of children, which has led to increased retention and educational outcomes in some schools. It was frequently remarked

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<sup>1</sup> There was only one round of de-worming of pupils in 2008.

by school teachers that pupils “no longer fall sick as they used to do”. This is an indication that absenteeism among pupils has reduced.

- The programme has also built the capacity of its partners: school health teachers, district and regional SHEP coordinators, members of school health clubs and school community health management committee members, through its training programmes as well as with other logistics support.

### **7.3.1 Challenges of the SHEP**

SHEP programme challenges were found to vary by the actors involved. At the school level, challenges that came up during the evaluation mission had to do with the lack of synergistic intervention such as water and sanitation facilities in some schools and school communities. School teachers and pupils in SHEP schools particularly in Bunkpurugu Yunyoo and East Mamprusi lamented about how the lack of water and sanitation facilities on school compounds posed impediments to recommended hygienic and sanitation practices such as hand washing and the use of toilet facilities. In the East Mamprusi district for instance, 32.7% of schools have toilets, 22 % in Bunkpurugu Yunyoo and 54 % in Wa Municipality. Similarly, the majority of schools in Bunkpurugu Yunyoo (86 %), and in Lawra (57%), are without water. Open defecation was still practiced in schools without toilets while those without water faced intense difficulties in implementing recommended hand washing and other hygienic practices.

One other challenge raised at the school level, was the attrition of trained programme teachers due to yearly transfers. The problem cut across programme districts and in some districts, it was perceived to have reached a scale of worry. Transfer of school based programme teachers was found to affect the continuity and sustenance of programme activities.

There was also the issue of insufficient quantities of tools and equipment to support environmental health programmes at the school and community levels. Many schools were of the view that the two wheel barrows and supporting equipment provided by CRS are highly inadequate.

### **7.3.2 Lessons**

The integrated approach to programme delivery using synergistic intervention optimises outcomes and efficiency. The integration of the FFE, SHEP and FACs programmes provided a life cycle approach starting in uterus and continuing through child development as a basis of ensuring good health and effective growth and development at school age. This approach covered a sequence of programmes to promote maternal and reproductive health, management of childhood illness, and

childhood care and development. It also covered the provision of good health and nutrition before and during school age.

The findings also show that the use of pre-existing school infrastructure is a more cost-effective route for the delivery of simple health promotion interventions than can the structure of health system support. This is because the educational structure is more extensive and there are typically more teachers than nurses and more schools than clinics.

In pursuing the goal of universal basic and gender equality in education access and making sure that the poorest children who suffer the most malnutrition and ill health are able to attend and stay in school and learn effectively, there is the need to balance between opportunities for access and ingredients for quality education, expressed in the calibre of teachers, textbooks and child-friendly school environments.

The success of SHEP, FACs and FFEs programmes emanates from the fact that they were built on strategic partnership. Partnerships were well forged between stakeholders and gatekeepers in the health, education and social welfare sectors.

The CRS/Ghana's strategy of social mobilisation built around a well defined framework for partner participation and appropriate empowering and capacity building mechanisms to ensure programme sustainability is worthy of recommendation.

#### **7.4 Sustainability and Exit Strategy/Challenges in the Education Sector**

CRS/Ghana expanded its traditional exit strategy of beneficiary graduation after six to eight years of receiving support to include a gradual phase down of DAP 2004 -2008 Title II funded interventions. As part of this strategy, CRS/Ghana was to develop pilot programmes introducing complementary activities in graduated communities and explore alternative sources of funding to support school feeding where it is found expedient. Integral to the exit strategy is a graduated and elaborate sensitisation programme targeting programmes stakeholders and gatekeepers in order to create awareness on it and build consensus on complementary pilot interventions prior to exit.

CRS/Ghana was to pursue its gradual phase down strategy by pulling out of schools within 5-kilometre radius of major urban centres and gradually cut overall beneficiary level by 22 percent by FY 2009. Interaction with programme managers and officers revealed that this strategy informed CRS/Ghana's current school feeding beneficiary recruitment policy. Available monitoring data suggest that CRS/Ghana pulled out of a total of 540 schools, comprising 252 school lunch, 224 take home ration schools and 44 preschools. In all, 100,531 school children were affected. However, field visits to schools and studies conducted on beneficiary lists show that the strategy may have

been pursued partially or used to pull out of defaulting schools. This is because no conscious assessment of the pull-out effect on enrolment, retention or performance of community level structures, has been conducted in affected communities.

CRS/Ghana has embarked on its sensitisation programme. Interactions with CRS/Ghana programme beneficiaries and partners show that it embarked on an extensive sensitisation dialogue to exit from school feeding. Programme officers and managers within CRS/Ghana contacted by the evaluation team indicated, sensitisation campaigns on programme exit started prior to the implementation of the programme and took a high gear in 2007 and 2008. This was corroborated by programme beneficiaries consulted during field visits. As a result, beneficiary level of awareness about CRS/Ghana's exit strategy is high in the education sector. In the educational sector for example, almost all regional, district and school level partner-supervisors indicated to be aware of CRS/Ghana's exit from school feeding and related programmes by September 2008. Even school pupils and community level structures indicated to be aware, except that the precise time of exit was not known by some groups or individuals.

Although the level of awareness of the exit of CRS/Ghana from Title II Development Assistance school interventions is high overall, the same cannot be said about the number of beneficiaries who understand the timing. The question beneficiaries ask then is why the pull out after so many years of school feeding in northern Ghana. A related question often asked is why now, when the GSFP is incapable of supporting all needy schools? In the absence of satisfactory answers to the above questions, some stakeholders, even highly placed ones, appear to be emotional about the exit. One of such partners had this to say. 'The exit will drastically reduce enrolment in schools in the north' 'It is ill informed and a ploy to widen the educational gap between the north and the south' 'People of northern descent should resist it fully and squarely'.

The few programme beneficiaries who seem to understand the exit logic argue, it was time this mass feeding programme was dismembered. In the view of one of such group – 'CRS/Ghana fed us when we were school children, is feeding our children currently and we still want CRS/Ghana to feed our grand children in the future'. How can this mass feeding thing go for ever'? He asks. This perhaps is an expression of frustration and the need for CRS/Ghana and beneficiaries to sort out a sustainable exit strategy from its present mass feeding system. Many well placed beneficiaries and partners think it was time people in the north set their priorities right and stop blaming every problem on poverty.

Despite the emotions and sensations about the exit, beneficiaries are not folding their hands. Beneficiary partners supervisors', schools and communities have designed exit plans. Ninety (90%) percent of the school communities surveyed by the evaluation team have prepared 'exit-strategy plans'. In the Bongo district, plans drawn by schools and communities focus on income generation activities such as collection of sheanut and stones for sale to raise money to fund school feeding and establishment of community and school farms to produce food stuff and vegetables. In the East Mamprusi and Saboba/Cheriponi districts, community and school farms in addition to food stuff contribution after harvest are proposed. In Bunkpurugu/Yunyoo, the majority of school communities intend to contribute food stuff after harvest and establish community farms in the subsequent years. Those communities without exit plans indicated they were still planning to meet to build consensus on what should be done.

GES officials and partners supervisors plan to continue to facilitate the preparation and implementation of school and community exit plans but are sceptical about the ability of schools and communities to generate enough foodstuff and resources to feed school children on a sustainable basis. The general perception within GES is that considering the magnitude of resources required for feeding a school - foodstuff, vehicles, logistics and personnel- the programme cannot be sustained after the pull out of CRS/Ghana without donor support. This perception was echoed thus by a well placed GES official when asked how they thought gains of CRS/Ghana's school feeding interventions could be sustained. 'We are looking up to the government and donors to fill the void that CRS/Ghana's exit creates'. This response apparently is in references to the government's school feeding programme which targets two schools per district and school feeding interventions pursued by NGOs and multilateral donors such as Wold Vision, SNV and the World Food Programme which operate in some of the districts in northern Ghana.

Based on past experiences of community supplementations to CRS/Ghana's school feeding programme, a GES official perceives exit-strategy-plans pursued by communities as 'enhanced supplementary intervention plans' because they cannot stand entirely on their own. This view brings to the fore the need for a 'major donor-cum enhanced community supplementation' approach to school feeding in the future.

The evaluation team also shares the above view. Assuming, the exit strategy requires school communities to shoulder the entire food requirements for feeding their pupils for the three terms in the school year, then no school community, whether located in relatively endowed districts such as

Wa East, Bunkprugu/Yunyoo and Saboba/Cheriponi or in less endowed districts as Lawra and Bongo, would be in the position to cater for food needs of its school pupils entirely.

CRS/Ghana also believes that the benefits of increased enrolment and retention can be sustained through its capacity building interventions for GES official, circuit supervisors, head teachers and teachers. However, the surge in enrolment in primary schools across the districts survey coupled with increased attrition of teachers from programmes schools through transfers, capacity building efforts embarked by CRS/Ghana is being eroded in programme districts and schools. And this was observed by the team to be impacting negatively on teaching and learning outcome of pupils and could wane parents' motivation to send children to school if the situation is not arrested.

Interactions with the various stakeholders seem to suggest that the phase-out or exit- strategy of CRS/Ghana is not well understood by a majority of beneficiaries and stakeholders: communities, partner supervisors, GES officials and assembly members. It is the view of this group that sustaining the gains of CRS/Ghana's interventions during phase down or exit in some cases, means ensuring that food is available for school feeding or rations. Sustainability is interpreted to exclude social mobilisation and community participation efforts geared towards enrolment and retention drives, and interventions touching on sustaining education quality. This narrow perception or in some cases, misunderstanding of the exit-strategy pursued, blurs the search for credible but simple interventions that communities could pursue with little external support.

Government's recent school feeding interventions as well as interventions pursued by NGOs and multilateral agencies in selected districts in northern Ghana in particular, confuse issues concerning the phase down of CRS/Ghana's school feeding interventions.

## **7.5 Recommendations**

- Integrated programme delivery using a package of synergistic interventions optimises programme outcome and efficiency as revealed by the school feeding and health programmes and is worthy of emulation.
- Review meetings are important for soliciting the views of programme partners about planned interventions leading to programme ownership in the health sector. Programme officers in the education sector should learn from the successes of review meetings in the health sector and as a matter of urgency dialogue with officials of GES on the modalities for reviewing the organisation of review meeting among partners of GES so as to elicit the desired programme input from review meetings.

- Unmet needs in water and sanitation are still immense in many districts CRS/Ghana is supporting despite intervention in WATSAN facilities by DAs and CRS/Ghana. The lack of water and education facilities makes it difficult for schools and communities to optimise interventions carried out by CRS/Ghana's school feeding and health programmes.
- CRS/Ghana should establish modalities to sustain the animation of stakeholder on available opportunities to explore as they implement their proposed exit interventions. As part of this arrangement, CRS/Ghana should dialogue with district directorates of GES and the assemblies on how to supervise and monitor interventions after the close down of the programme in September.
- DAs are strategic partners in the development agenda of districts under the current decentralisation dispensation and CRS/Ghana must explore ways of engaging DAs formally through Memoranda of Understanding (MOU) as done with communities and MDAs. Forging formal partnership with DAs will not only empower them to jointly fund projects with CRS/Ghana but also mandate DAs to allocate supplementary resources to interventions agreed between them and CRS/Ghana.
- Bi-annual or quarterly review meetings organised by CRS/Ghana in the education sector are good mechanisms for engaging partners in school health and feeding issues, but they are not broad-based institutions of shared partnership responsibility. This brings to the fore the idea of network coalitions such as food security and water coalitions in the agriculture and water sectors. There are a good number of NGOs engaged in school feeding and quality interventions without a mouthpiece for lobbying or an institutional framework for partnering government in its school feeding programme. There is no way government alone will be able to implement the NEPAD's school feeding programme successfully and NGOs in the sector must come together as a coalition body to share their experiences with government on the way forward. CRS/Ghana has wealth of experience and resources to share and ought to lead the process.
- Since it will be counter productive to recommend that partner supervisors and teachers on CRS/Ghana's school health and feeding programmes should not go on transfers, what may be prudent is to suggest that CRS/Ghana and GES officials should jointly design and enforce modalities of acquainting new partners about CRS/Ghana's programmes on regular basis. Some of the modalities should include the preparation of detailed handing over notes, debriefing sessions and proper handing over of programme records and data to incoming officers.
- Complaints about motivational issues are widespread and cut across various programme stakeholders. At the community level, members of school management committees, cooks

and school health management committees are not supported by their communities for the roles they perform. Similarly teachers and head teachers complain they carry out extra duties under the school feeding and health programme. Partner supervisors were not left out on complaints for lack of adequate motivation for the roles they to play on the school feeding and health programmes. There is the need for agreeing on blue print on how to motivate stakeholders for the input they make on programmes and CRS/Ghana should facilitate the process at the various levels. The problem is particularly serious at the community level and may explain why many committees are virtually run by individuals.

- In as much as increase in enrolment, particularly of the girl child is one of the primary objectives of the CRS/Ghana's school feeding programme, the surge of enrolment in CRS/Ghana's programme schools was found to be impacting negatively on quality of education because infrastructure, teachers and textbooks are overstretched. In order to sustain the benefits of improved enrolment and attendance, especially of girls, it is important to couple food support with investments in quality education.
- Based on experiences of community supplementation in CRS/Ghana's programme school during periods of food shortages, the evaluation team is convinced that no community will be in the position to shoulder the responsibility of feeding its school all alone. Those relatively endowed communities that are currently in the position to provide supplementation, need to be supported to implement their exit plans to enable them to share feeding responsibilities with CRS/Ghana. Under this arrangement communities could be assigned to the feeding of their schools during the second term, normally after harvest.

## **SECTION 8**

### **ASSESSMENT OF SAFETY NET INITIATIVE OUTPUTS**

#### **8.1 Introduction**

The Safety Net Initiative (SNI) component of the 2004-08 DAP main goal was to improve access to food for 15,000 highly vulnerable individuals per year by 2008. This programme targeted the poor and marginalised groups such as people living with HIV/AIDS (PLWHAs), TB patients, severely malnourished children and other extremely vulnerable persons such as physically or mentally disabled and orphans. The SNI component covered the entire country with as many as 227 centres taking care of them.

One common characteristic of these people is that they are all less endowed with resources and in some cases they remain stigmatized and discriminated in society. This assertion is reflected in the lack of a sustainable source of support for their up-keep. Invariably, they depend on the benevolence of religious organizations and sympathetic NGOs such as CRS. The evaluation team selected a convenient sample of 60 SNI centres for evaluation. The areas of the evaluation included food supply and store management practices, perceived benefits of the food assistance, training and the plans/challenges for CRS phase out. The managers/administrators of the beneficiary institutions were the sources of information collected. The main findings are presented below.

#### **8.2 Food Supply**

CRS had a quarterly food supply schedule for these institutions. Food receipts and issues were properly documented. CRS carried out sustained monitoring visits to these centres to ensure food was used as planned; evidence of this was seen in the tally sheets. In most cases, CRS even provided the institutions with storage files, tally sheets etc. There were occasional delays in delivering food to the centres especially in the second quarter of 2008 (that is, April –June).

#### **8.3 Beneficiary Levels**

The total beneficiary level increased from 9,208 to 12,372 as of 2007. This is an expansion of 3164 (34.4%). The targeted beneficiary level was 15,000. This means 82.5% of the target was met. In most of the SNI institutions, the number of eligible persons usually exceeded the approved recipient levels. In such circumstances, the food received was usually equally distributed among members.

#### **8.4 Benefits of the Food Assistance**

The benefits of the food assistance as mentioned by the managers of the SNI centres were:

- a) In the absence of government food subsidy, the food from CRS had been the main support (about 80%) in most of these institutions.

- b) With the food, financial burden of both parents and the institutions was reduced. This was more so in the handicapped training schools and orphanages (for example, Jachie Training Centre, King Jesus Charity Home).
- c) The food assistance also helped keep trainees in school as they had something to eat. It therefore supported enrolment drives in the schools.
- d) Food aid supported the proper growth and development of children.
- e) Facilitated the speedy rehabilitation of severely malnourished children. The wheat-soy-blend (WSB) and sorghum are liked by children
- f) Motivated clients (e.g. TB patients, HIV, malnourished children) to access services and comply with treatment regimen. For instance the availability of the food avoided the situation of HIV patients taking their drugs on an empty stomach.

### **8.5 Training**

The managers of the institutions received training in food management including storage procedures and food rationing, report writing. The type of training were tallied to the knowledge and skills required to run the safety net programme. Other logistical support was provided to some institutions to assist in their training. Some of the SNI institutions (for example, Cheshire Home) received other logistics including dye materials for batik tie & die, glue, etc. This was in support of the cottage industry.

### **8.6 Phase-out Plans/Sustainability Challenges**

All the institutions visited were aware of the exact date the food assistance will cease. Exit plans differed in the various institutions. Some of the plans mentioned included the following:

- a) Appeal to the government to re-instate the feeding subsidy in training institutions,
- b) Approach other benevolent organizations and the 'Get-Fund' for support.
- c) All day students will have to be brought to the boarding house so as to reduce daily transport of such students (for example, in Garden City Special School).
- d) Establishment of farms to produce crops e.g. yam, cassava, maize, and pepper.

However, the general appeal from all the institutions was for CRS to continue supporting because of the implications of the withdrawal of the food. Responses received indicated that funding from the government in support of these institutions is very little and often comes late. For instance, the allocation for the first quarter of 2008 was not yet received as of August 2008. Some of the statements made by the respondents were as follows:

- a) "If the food is stopped, then you are killing the children"
- b) "If the food is in, we are always relieved"

- c) “It will be a big blow as this will affect the school terms (that is, learning period will be reduced)”
- d) “Even if it becomes necessary, I will lie on the ground, if that will bring the food”.
- e) ‘Considering the perpetual high levels of poverty in this Northern Ghana, it will be impossible to obtain sustainable community level support in this area’

Some of the consequences the beneficiaries mentioned as likely to be faced when the food is withdrawn included the following:

- a) The training institutions will now have to bear the full cost of feeding. Student intake may adversely be affected.
- b) Quality of services in the rehabilitation centres will be affected since inadequate trainees will be passed out to manage the centres. When the rehabilitation centres become incapacitated to take care of their inmates/trainees, then street begging is likely to increase.
- c) The health of inmates will deteriorate as feeding will be reduced drastically.
- d) The vacuum that will be created is not likely to be filled by the Department of Social Welfare in the near future. The general public is also not sympathetic in donating to the institutions because of bias towards some of the social groups (for example, the mental retarded).

### **8.7 Nutrition Rehabilitation Centres**

The food supplied to the nutrition rehabilitation centres was the only source of nourishment for recuperating the severely malnourished children. The food also enables care-takers of the malnourished to visit the centres for routine examination in areas where the nutrition rehabilitation centres are run on daily basis. The day-care type of nutrition rehabilitation was common in southern part of the country whilst the residential type were being run in the north.

The GHS does not appear to have a reliable source of support for the day-to-day management of the rehabilitation centres. There is a general problem getting funding from government sources to run the nutrition rehabilitation centres. Money allocated to budget management centres (BMC) often does not get to the rehabilitation centres even though the centres budget every year. The LI 1313 that guarantees free treatment of the malnourished child has become ineffective and most managers in the health institutions are not even aware of such a provision. In most hospitals where rehabilitation centres are located, the managers complained of inadequate funding and that the National Health Insurance Scheme is de-capitalizing the little funds available.

## **8.8 Conclusions/Recommendations**

There was evidence to show that the safety net institutions acquired strong capacity for managing food commodities. Observations made during a random sample of these institutions showed the food stores were all well-kept with up to date stock tally cards. The beneficiaries of the Safety Net institutions admitted the training programmes for commodity management were useful and effective. Information on food distribution was always readily at hand. These institutions however, still lack the ability to be able to become self-sufficient without external support.

CRS food assistance to the safety net institutions was a major contributor to meeting the food security needs of their inmates and also an important input into the efficient running of these institutions. The following exit strategies may have to be factored into future safety net programming:

- Gradual reduction in the amount of food provided by the programme with a concurrent substantial expansion in capacity building activities for safety net institutions in ways that capitalize on the resources and opportunities unique to each institution in order to enable them to become more self-reliant. Some of the adult disabled persons have skills in shoe-making, weaving, shea-butter extraction but they lack the resources to work with. CRS may help make such acquired skills be put to good use by granting financial support to procure inputs/tools for the various vocations.
- It is the function of government to manage the social safety net of its people. It would be helpful if CRS could intensify its exit strategy with key government officials and the heads of safety net institutions at the national level to drive home the message of ending food assistance.
- Provision of tri-cycles can also make the disabled mobile and thereby enhance their chances of acquiring livelihood skills.

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## **APPENDICES**

### **Appendix A: Final Evaluation Scope of Work (SOW)**

#### **Background**

Since 1958, Catholic Relief Services (CRS) has contributed to addressing food insecurity in Ghana especially in rural and peri-urban areas, using resources from USAID Bureau of Democracy, Conflict and Humanitarian /Office of Food for Peace (DCHA/FFP) as well as its own private resources. In Ghana, chronic, seasonal and transitory food insecurity has been problematic as a result of poor physical and economic access to food and the inability to use food properly. CRS' food security problem analysis for Ghana has revealed agriculture, education, and health as the key leverage points to address food insecurity in the three northern regions of Ghana.

The goal of CRS/Ghana's FY 2004-2008 Development Assistance Program (DAP) is 'improved food security of targeted rural populations in the three northern regions and extremely vulnerable populations in urban, peri-urban and rural areas throughout the country'. CRS/Ghana uses a three-pronged, integrated approach to address food security in Ghana in the short, medium and long-term. In the short-term, CRS/Ghana meets the needs of food insecure individuals and households by providing food aid rations in its Education, Health and Safety Net programs. In the medium-term, CRS/Ghana increases the utilization of food for households and school aged children by implementing child survival and school health education programs. In the long-term, CRS/Ghana works to improve all three components of food security – availability, access and utilization – by focusing on improved educational achievement for primary school children.

**Geographical Coverage:** The Education component of CRS/Ghana's DAP covers all the districts in the three northern regions of Ghana whilst the Safety Net initiative (SNI) reaches out to all regions in Ghana. The Child Survival interventions cover 8 districts in the three northern regions.

**Key Partners:** Ghana Health Services, Ghana Education Service, District Assemblies, Department of Social Welfare, Church Missions.

A mid-term evaluation (MTE) of CRS/Ghana's DAP was carried out between July and August 2006 with a view to addressing the current status of the DAP results achieved as of August 2006 and providing an analysis of the reasons for the status, including an analysis of achievements at the activity level. A copy of the MTE report is available at CRS/Ghana.

#### **Issues to be addressed**

The purpose of this final evaluation is to assess the impact of the various interventions carried out to date with the program participants. It is also intended to highlight key best practices as well as challenges with a view to guiding other cooperating sponsors (within and outside Ghana) who will

continue to receive support from DCHA/FFP to implement development assistance projects and programs. A copy of the DAP proposal is available at CRS/Ghana.

The final evaluation seeks to identify, assess and analyze the following issues:

- achievements of the program against the original objectives, outputs and activities as detailed in the project document as well as unintended outcomes associated with the programs
- level of contribution and/or ownership of the projects by participating (beneficiary) communities and institutional partners
- effectiveness of food as a resource as an incentive for children to attend school and parents to willingly send their children to school
- commodity delivery issues/problems
- Management Information Systems
- partnership and collaboration among communities, government departments and NGOs
- implementation strategies, challenges and lessons learned
- phase-out/Close-out processes and outcomes
- relationships with, and appropriateness and capacity of, partners to sustain the gains thus far made over the DAP period
- best practices and lessons learned to date that will benefit other USAID cooperating sponsors implementing Title 11-funded development interventions.

### **Deliverables**

The following items constitute the deliverables associated with the Final Evaluation:

- Technical proposal, proposed methodology and budget
- Report outline, highlighting major sections and themes to be covered
- Presentation of key findings to CRS/Ghana staff
- Sectoral reports for Education, Health and Safety Net
- Draft Final Evaluation report
- Final Evaluation report
- Debriefing with USAID representative (s), CRS/Ghana Management and Partners

### **Timeframe**

The final evaluation will take place between early May and mid June 2008. It is scheduled to commence on May 5. Duration of the evaluation is estimated to be approximately 25 days in country, including 5 working days for compiling and analyzing data and drafting the final report.

### **Composition of the Evaluation Team**

The evaluation team will be composed of USAID Representatives, a CRS staff member and the external consultant (s). All team members should have basic technical competencies in health and education in addition to M&E expertise.

Below are minimum qualifications for the Lead Consultant:

- PhD in International Development or the Social Sciences
- Substantial experience in conducting terminal evaluations, especially Title 11 programs or other UDAID-funded development programs
- Familiarity with participatory evaluation techniques
- Fluency in English and excellent writing skills
- Ability to work in a team
- Willingness to travel to remote areas

The following are the minimum qualifications of the other consultant:

- PhD in Public Health or MPH (PhD preferred)
- Considerable experience in evaluating health programmes
- Fluency in English and excellent writing skills
- Familiarity with participatory evaluation techniques
- Fluency in English and excellent writing skills
- Willingness to travel to remote areas

## Appendix B: Evaluation Team Members

Name	Qualification	Role
Dr. Sylevester Galaa	PhD	Consultant
Dr. Mahama Saaka	PhD (Public Health)	Consultant
Mr. Dari Chrisantus	BSc (Community Nutrition)	Data collector
Miss Azuna Abigail	BSc (Community Nutrition)	Data collector
Mr. Prosper Tang	BA (Sociology)	Data collector
Mr. Clement Domolaara	BSc (Community Nutrition)	Data collector
Miss Juliana Tindana	BSc (Community Nutrition)	Data collector
Miss Joan Duubon Yinpaab	BSc (Community Nutrition)	Data collector
Miss Rashida Ibrahim	BSc (Community Nutrition)	Data collector
Miss Jawol Vera Magan	BA (Integrated Development Studies)	Data collector
Fauzia A Haruna	BSc (Community Nutrition)	Data collector
Richard Apini	BSc (Community Nutrition)	Data collector

**Appendix C: Health and Nutrition Assessment Protocol**

**CATHOLIC RELIEF SERVICES (CRS) GHANA  
Final Evaluation of Title II 2004-08 DAP  
Health and Nutrition Questionnaire**

Region.....District.....  
Cluster Name.....Cluster Number.....  
Interview Date..... Interview #.....  
House Number/Name .....

Respondent’s Name.....

**INFORMED CONSENT**

Good morning/afternoon/evening. My name is \_\_\_\_\_ and I am working with (University for Development Studies/ Ghana Health Services).We are conducting an evaluation of the services provided by the Catholic Relief Services (CRS). We would like to ask you a few questions about how you take care of your children and would very much appreciate your participation. The information you provide will help CRS, Ghana to plan and improve upon health services. The survey usually takes between 10 and 20 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be disclosed to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important. At this time, do you want to ask me anything about the survey?

May I begin the interview now?

**Section 1: Background Information of Respondents**

1.Name of Respondent.....Age.....(years).

2. What is the highest educational level you attained?

- i. None ..... [ ]
- ii Primary.....[ ]
- iii JSS/Middle.....[ ]
- iv Secondary ..... [ ]
- v. Tertiary ..... [ ]
- vi. Other (Specify).....

3. What is your marital status?

- i. Single..... [ ]
- ii. Married.....[ ]
- iii. Widowed..... [ ]
- iv. Divorced/separated..... [ ]

4. Do you work away from home?

- i. Yes..... [ ]
- ii. No ..... [ ] Skip to Q 6

5. Who primarily takes care of (name of child) while you are away from home?

- i. Mother takes child with her.....[ ]
- ii. Husband/partner.....[ ]
- iii. Older siblings.....[ ]
- iv Grandmother.....[ ]
- v. Other (specify).....[ ]

6. What is your main income generating activity?

- i. Nothing.....[ ]
- ii. Farming.....[ ]
- iii. Trades in Agricultural products.....[ ]
- iv.. Trades in finished manufactured products.....[ ]
- v. Salary worker.....[ ]
- vi. Pito brewing.....[ ]
- vii. Cooking oil extraction (e.g. shea-butter, groundnut).....[ ]
- viii. Service provider (e.g. dress-maker, barber).....[ ]
- ix. Other (specify).....

**Section 2: Anthropometric Assessment**

**(All children less than 59 months)**

Name of Child.....

7. Gender of Child

- i. Male.....[ ]
- ii. Female.....[ ]

8. Date of birth.....

9. Age (completed months) .....

10. Weight (Kg).....

11. Height (cm).....

### Section 3: Breast-feeding Practices

(All questions in this section are directed to only mothers with a child less than 36 months)

12. Are you breastfeeding (name of child)?

i. Yes.....[ ] If Yes, skip to 15

ii. No..... [ ]

13. Have you ever breast-fed (Name of child)?

i. Yes..... [ ]

ii. No..... [ ]

14. If your child is not currently breast-feeding, how long did you breast-feed him/her?

i. Less than 6 months..... [ ]

ii. 6-12 months.....[ ]

iii. 13-24 months.....[ ]

iv. More than 24 months.....[ ]

15. Have you breast-fed your child during the last 24 hours?

i. Yes .....[ ]

ii. No .....[ ]

iii. Not applicable..... [ ]

16. Within the last 24 hours has your child drunk anything in addition to breast milk?

i. Yes.....[ ]

ii. No.....[ ]

iii. Don't know..... [ ]

iv. Not applicable..... [ ]

17. How soon after delivery did you put (name of child) to the breast?

i. Within first 30 minutes after birth ..... [ ]

ii. Within first hour after birth ..... [ ]

iii. After the first hour after birth..... [ ]

iv. Don't know..... [ ]

18. When you delivered (name of child), what did you do with the first yellowish breast milk?

i. Give it to the baby.....[ ]

ii. Discard/spill it..... [ ]

iii. Don't know..... [ ]

iv. Other (specify).....[ ]

### Section 4: Complementary Feeding

**(Administer these questions to mothers whose children are aged 6-36 months)**

19. At what age did you first give solid or semisolid food to (Name of child)?

- i. Before 6 months..... [ ]
- ii. At Six months..... [ ]
- iii. Seven to nine months..... [ ]
- iv. After nine months..... [ ]
- v. Yet to start..... [ ]

20. How many times did (NAME) eat solid or semi-solid food in the last 24 hours?

- i. Nothing..... [ ]
- ii. Once..... [ ]
- iii. Twice..... [ ]
- iv. Three..... [ ]
- v. More than three..... [ ]
- vi. Don't know..... [ ]

**Section 5 Childhood immunization and Growth Monitoring**

21. Do you have a card where (name of child) vaccinations are written down?

- i. Yes, seen by interviewer..... [ ]
- ii. Not available/lost/misplaced..... [ ] **Skip to Q.23**
- iii. Never had a card..... [ ] **Skip to Q.23**

22. Copy vaccination date for each vaccine from the (name's) card.

Vaccines	Day	Month	Year
BCG			
Polio 0			
Polio 1			
Polio 2			
Polio 3			
Penta 1			
Penta 2			
Penta 3			
Measles			
Yellow Fever			

23. At what age should (name of child) receive measles vaccine?

- i. Specify in months.....
- ii. Can't tell..... [ ]

24. Check from the card, the number of times in the last 4 months (name of child) was weighed.

.....

25. Check from the card whether the points on the growth curve were **all** joined by a line

- i. Yes, all points (dots) were joined by a line..... [ ]
- ii. Yes, but not all the points were joined together..... [ ]
- iii. No, none of the dots were joined..... [ ]
- iv. Weighed but not plotted..... [ ]

**Section 6: Management of Common Childhood Diseases**

26. During the last 14 days did your child have more than four watery stools?

- i. Yes.....[ ]
- ii. No.....[ ] **skip to 31**
- iii. Don't know.....[ ] **skip to 31**

27. During (name of child)'s diarrhoea, how often did you breastfeed him/her?

**(Read choices to the mother)**

- i. More than usual..... [ ]
- ii. Same as usual..... [ ]
- iii. Less than usual..... [ ]
- iv. Other (Specify).....

28. During (name of child)'s diarrhoea, how often did you provide him/her with fluids other than breast milk?

**(Read choices to the mother)**

- i. More than usual..... [ ]
- ii. Same as usual..... [ ]
- iii. Less than usual..... [ ]
- iv. Stopped completely..... [ ]
- v. Exclusively breastfeeding.....[ ]

29. During (name of child)'s diarrhoea, how often did you continue to provide him with solid/semi-solid foods?

**(Read choices to the mother)**

- i. More than usual..... [ ]
- ii. Same as usual..... [ ]
- iii. Less than usual..... [ ]
- iv. Stopped completely..... [ ]
- v. Exclusively breastfeeding.....[ ]

30. When (name of child) had diarrhoea, what treatment, if any, did you give?

- i. Nothing.....[ ]
- ii. ORS.....[ ] **Skip to 33**
  - iii. Sugar-salt solution.....[ ]
  - iv. Infusion at the hospital.....[ ]
  - v. Other (specify).....[ ]

31. Have you heard of ORS?

- i. Yes.....[ ]
- ii. No.....[ ] **Skip to 35**

32. Have you ever used ORS?

- i. Yes.....[ ]
- ii. No.....[ ]

33. Do you have ORS in your household?

- i. Yes, and seen by the interviewer.....[ ]
- ii. No.....[ ]

34. Kindly ask the respondent to describe how to prepare ORS and record whether her description is correct or not. The criteria for judging include mention of 600 **mls** of clean drinking water (that is, 2 **mineral** bottles), use the entire packet, and dissolve the powder fully.

- i. Described correctly.....[ ]
- ii. Described incorrectly..... [ ]

35. Has (Name of child) had an illness with a cough that comes from the chest at any time in the last two weeks?

- i. Yes .....[ ]
- ii. No.....[ ] **Skip to 36**
- iii. Don't know.....[ ] **Skip to 36**

35 a. When (Name) had an illness with a cough, did he/she have trouble breathing or breathe faster than usual with short, fast breaths?

- i. Yes .....[ ]
- ii. No.....[ ] **Skip to 36**
- iii. Don't know.....[ ] **Skip to 36**

35 b. Did you seek advice or treatment for the cough/fast breathing?

- i. Yes .....[ ]

ii. No.....[ ] Skip to 36

35c. Who gave you advice or treatment? (Multiple answers possible)

i. Doctor..... [ ]

ii. Nurse..... [ ]

iii Auxiliary Nurse.....[ ]

iv. Trained Community Health Worker.....[ ]

v. Other (specify)..... [ ]

36. Has (name of child) had fever (local term for malaria) since the last two weeks?

i. Yes .....[ ]

ii. No.....[ ] Skip to 39

37. How many days after the fever began did you first seek treatment for (name of child)?

i. Up to a day.....[ ]

ii. 2-3 days.....[ ]

iii. More than three days.....[ ]

iv. Never sought treatment.....[ ] Skip to Q 39

38. Where did you seek advice or treatment?

i. Government Hospital/Health Center.....[ ]

ii. Private hospital/clinic..... [ ]

iii. Pharmacy/Drug store.....[ ]

iv. Traditional Medical Practitioner/Herbalist.....[ ]

v. Other (specify).....[ ]

**Section 7: Utilization of ITN and Iodated Salt**

39. Does your household currently have any bed net?

i. Yes.....[ ]

ii. No..... [ ] **Skip to 45**

40. How many bed nets does your household have?..... [ ]

41. Did you sleep under a bed net last night?

i. Yes.....[ ]

ii. No.....[ ] **Skip to 44**

42. Did (NAME) sleep under a bed net last night?

i. Yes.....[ ]

ii. No.....[ ]

**IF EITHER MOTHER OR CHILD SLEPT INSIDE THE HOUSE YOU WILL NEED TO ENTER THE ROOM TO OBSERVE THE BEDNETS. YOU MAY NOT BE PERMITTED TO ENTER THE SLEEPING AREA. – ASK THE HOUSEHOLD HEAD TO APPOINT A LOCAL PERSON TO ACCOMPANY YOU (IF NEEDED) SO THAT HE/SHE MAY ENTER THE HOUSE WITH YOU OR FOR YOU TO OBSERVE THE BEDNET.**

43. Did you observe any bed net in the room?

i. Yes, bed net hanging..... [ ]

ii. Yes, but bed-net was not hanging.....[ ]

iii. No bed net hanging ..... [ ]

iv. Could not observe .....[ ]

44. Why did you not sleep under a bed net last night?

i. No reason.....[ ]

ii. Weather is hot.....[ ]

iii. No mosquitoes.....[ ]

iv. Cannot hang the net.....[ ]

v. Other (specify).....[ ]

45. Have you heard of iodated salt?

i. Yes.....[ ]

ii. No.....[ ]

46. Request the respondent to provide salt used for cooking in the household and use the salt test kit to test a pinch of salt and report the result.

i. Nil.....[ ]

ii. Less than 15 ppm. ....[ ]

iii. Equal to or greater than 15 ppm.....[ ]

iv. No salt available.....[ ]

**Section 8: Maternal and Newborn Care**

47. When you were pregnant with (name of child), did you see anyone for antenatal care?

i. Yes.....[ ]

ii. No.....[ ]

skip to Q 51

48. How many times did you see someone for antenatal care when you were pregnant with (name of child)?

- i. Never ..... [ ]
- ii. Once..... [ ]
- iii. Twice..... [ ]
- iii. Three..... [ ]
- iv. At least four times..... [ ]

49. Do you have the Maternal Health Card that you used when you were pregnant with (name of child)?

- i. Yes, seen by interviewer..... [ ]
- ii. Not available/lost/misplaced..... [ ] Skip to Q 51
- iii. Never had a card..... [ ] Skip to Q 51

50. If yes, then ask for the card and record the number of antenatal care visits and the number of tetanus injections (TT) listed on the maternal card when pregnant with (name of child)

Number of antenatal visits..... [ ]  
 Number of TT injections..... [ ]

51. Who assisted with the delivery of (name of child)?

- i. Doctor..... [ ]
- ii. Nurse/Midwife..... [ ]
- iii Auxiliary Nurse..... [ ]
- iv. Trained Traditional Birth Attendant (TBA) ..... [ ]
- v. Other (specify)..... [ ]
- vi. None..... [ ]

**THANK YOU! END OF QUESTIONNAIRE**

Name of Interviewer..... Date.....

Name of Supervisor..... Date.....

## Appendix D: Sustainability Issues Assessment Questionnaire

### Sustainability Issues on Health and Nutrition

Region..... District.....

Community Name.....

Sub-District Name.....

Interview Date.....

#### Section 1: Community ownership of Food Assisted Child Survival Centres (FACS): Sustainability Issues

(Administer these questions to Centre Management Committee)

1. Do you know when the Catholic Relief Services (CRS) will withdraw food support to your community?

- i. September, 2008..... [ ]
- ii. December, 2008..... [ ]
- iii. Other (specify)..... [ ]
- iv. Don't know..... [ ]

1. How does the community plan to manage, maintain, replace old facilities when CRS is no more in the community?

2. What would you continue to do when CRS is no more in your community?

3. What would you say has been the contribution of CRS in this community?

.....  
.....

4. Is there anything that you would like CRS to do differently? What would that be?

5. If CRS were to continue with its services in this community, what would you want CRS to do?

.....  
.....

6. Could you please mention one main problem CRS food supply to your community has created.....

.....

**Section 2: Quality, Access and Utilization of Health Services**

(Administer to sub-district head)

1. What is the number of mother – to – mother support groups functioning in the sub-district as of last

month?.....

2. Which organization facilitated the formation of the mother – to – mother support groups in your sub-district?

- i. Ghana Health Service..... [ ]
- ii. World Vision..... [ ]
- iii. UNICEF..... [ ]
- iv. CRS..... [ ]
- v. Other (specify)..... [ ]

3. Number of staff in the sub-district that have been trained in integrated management of childhood illness (IMCI)

4. Number of CHPS zones in the sub-district that are supported by CRS

.....  
 .....

5. Types of training for health staff that were initiated or supported by CRS

.....

6. What is the contribution of FACS outreach points to the sub-district coverage in the following service areas?

	Total for Sub-district (2008)	Contribution from FACS Communities ( 2008 )	Remarks / Comments
ANC Registrants			
Supervised deliveries			
TBA deliveries			
CWC			
TT 2			
PNC registrants			
Family Planning acceptors			

7. Target population of children under two years in the sub-district.....
8. Number of children under two years who attended growth monitoring session last month.....
9. The percentage coverage (%) of children under two years weighed last month.....
10. Target population of children under five years in the sub-district.....
11. Number of children under five years who attended growth monitoring session last month.....
12. The percentage coverage (%) of children under five years weighed last month.....
13. How do you hope to continue running outreach services in the FACS communities after CRS has left?  
.....  
.....  
.....

**Section 3: Sustainability Issues on Child Survival Strategy**  
(Administer to District Director of Health Services)

Region..... District.....

Name of Interviewee.....

Interviewer Name.....

Interview Date.....

1. How much money is allocated to supervisory visits to Food Assisted Child Survival (FACS) communities in your district every quarter?

- i. Less than GH¢50.00..... [ ]
- ii. GH¢50.00-GH¢100.00..... [ ]
- iii. GH¢200.00-GH¢300.00..... [ ]
- iv. GH¢400-GH¢500.00..... [ ]
- v. More than GH¢500.00..... [ ]

2. What other support (that is, logistics, equipment) is given to the FACS communities?.....  
.....  
.....

3. Do you know when the Catholic Relief Services (CRS) will withdraw food support to the FACS communities?

- v. September, 2008..... [ ]
- vi. December, 2008..... [ ]
- vii. Other (specify)..... [ ]
- viii. Don't know..... [ ]

4. What plans do you have to continue providing services to the FACS communities when CRS finally stops supplying food?

.....

.....

.....

How do you hope of sustaining patronage for health services (for example growth monitoring, immunization) when food support is withdrawn?

.....

.....

.....

6. Could you please mention one main problem CRS food supply to your district has created.....

.....

7. Could you please, mention one major contribution to health service delivery in your district?

.....

.....

8. In your own view, mention one major thing CRS could have contributed better to health service delivery in your district?

.....

.....

.....

9. What comments do you have regarding the partnership between the DHMT and CRS?

.....

.....

.....

.....

.....

**Appendix E: Education Sector Assessment Protocol**

**A SCHOOL LEVEL BASIC DATA 2007/08 (Target Head of School)**

- 1. District-----
- 2. Circuit -----
- 3. School Name-----

**SCHOOL ACCESS (COMMUNITY)**

- 4. School Enrolment Number: Total -----Male -----Female-----
- 5. Gross Enrolment Rate: Total-----Male-----Female-----
- 6. Net Enrolment Rate: Total-----Male-----Female-----
- 7. Gender Parity: Total-----Male-----Female-----

**SCHOOL ATTENDANCE (Primary)**

- 8. Enrolment Rate: Total ----- Boys ----- Girls -----
- 9. Attendance Rate: Total ----- Boys ----- Girls -----
- 10. Completion Rate: Total ----- Boys ----- Girls -----
- 11. Drop-Out Rate: Total ----- Boys ----- Girls -----

**TEACHERS**

- 12. Total number of teachers: Total-----Male -----Female-----
- 13. Total number of trained Teacher: Total -----Male -----Female -----
- 14. Total number of untrained Teacher: Total -----Male -----Female -----
- 15. Teacher pupil ratio -----
- 16. Trained teacher pupil ratio -----

**TEXT BOOKS AND FACILITIES**

- 17. Pupil English Textbook ratio -----
- 18. Pupil Math Textbook ratio -----
- 19. Has school a library YES [ ] NO [ ]

**STUDENT ACHIEVEMENT**

- 20. Averages in nation-wide achievement tests
  - English: Total ----- Boys ----- Girls -----
  - Maths: Total ----- Boys ----- Girls -----
- 21. Performance Monitoring Test (PMT) -----

**I. SCHOOL HEALTH AND EDUCATION PROGRAMME (SHEP)**

- 22. Has the school got a Health Education Programme (SHEP)? YES [ ] NO [ ]
- 23. Has the school got a Health Teacher? YES [ ] NO [ ]
- 24. If yes is the school Health Teacher trained? YES [ ] NO [ ]
- 25. How often has the School Health Teacher organized health education programmes this term? -----
- 26. What kind of health education activities are been organized by health teacher this term? -----  
-----
- 27. What are some of the benefits of the School Health Education Programme to the pupils? -----  
-----  
-----
- 28. What are some of the benefits of the School Health Education Programme to the parents of pupils? -----
- 29. What challenges confront the SHEP in your school? -----  
-----  
-----
- 30. Will you continue to implement the health programme when CRS pulls out? YES [ ] NO [ ]
- 31. How will you continue to support the programme after the exit of CRS? -----  
-----

**DE-WORMING AND MICRO-NUTRIENTS**

- 32. Is the school covered by CRS de-worming and micro-nutrients programme? YES [ ] NO [ ]
- 33. If yes, how often are de-worming drugs supplied to pupils each term? Have pupils received de-worming drugs for the yearly supplies YES [ ] NO [ ]
- 34. If no, why not -----
- 35. What are the benefits of the de-worming programme to the pupils? -----  
-----  
-----  
What challenges are confronting the de-worming programme?-----  
-----  
-----
- 36. How can the challenges be remedied?-----  
-----



- 55 What are the benefits of the school feeding programme? -----  
-----  
-----
- 56 How is the community involved in the school feeding programme? -----  
-----  
-----
- 57 What challenges confront the programme in your school? -----  
-----  
-----
- 58 In your opinion, how can the challenges be solved? -----  
-----  
-----
- 59 Will you continue to implement the school feeding programme when CRS pulls out?  
YES [ ] NO [ ]
- 60 How will you continue to implement the programme after the exit of CRS? -----  
-----  
-----

**TEACHER NEEDS**

- 61 Is CRS supporting your school teachers in teaching and learning methodologies?  
YES [ ] NO [ ]
- 62 If yes, what is the content of these training programmes? -----  
-----  
-----
- 63 How many teachers have benefited from such training? Male ----- Female -----  
Total-----
- 64 How satisfied are you with the programme? -----  
-----  
-----
- 65 How is the training utilized in your teaching activities? -----  
-----  
-----

**WATSAN FACILITIES AT SCHHOL**

- 66 Has school got a toilet/latrine YES [ ] NO [ ]
- 67 Has school got a urinal YES [ ] NO [ ]
- 68 Is there water on school compound YES [ ] NO [ ]
- 69 If yes what is the source of drinking water on school compound-----  
-----  
-----

**COLLABORATION AND PARTNERHIP**

- 70 Do you have a formal MOU governing your collaboration with CRS? YES [ ] NO [ ]
- 71 IF yes, what are the key issues in the MOU? -----  
-----  
-----

- 72 If no, how is the collaboration formalized with GES/school? -----  
-----
- 73 What is the relationship between CRS and GES staff? -----  
-----
- 74 What are the benefits accruing from your relationship with CRS? -----  
-----
- 75 What would you say were some of the challenges you faced working with CRS and partners?  
-----
- 76 How could these be solved, in your opinion? -----

**EXIT ISSUES**

- 77 Are you aware of CRS exit strategy from the school feeding programme? YES [ ] NO [ ]
- 78 What preparation are been made in order to sustain the benefits of CRS' programme when it pull out? -----

**NGO INVOLVEMENT**

79 Which NGOs are supporting your school?

Name of NGO	What is being done

**PTA/SMC/ FOOD MANGEMENT COMMITTEE/ SCHOOL HEALTH MANAGEMENT COMMITTEE**

**School Feeding Programme (FFE)**

**A SCHOOL LEVEL BASIC DATA 2007/08 (Target Head of School)**

1. How was the community selected for the school feeding programme?
2. What structures are in place to support the implementation of the programme? -----  
-----
3. Has the community got a Food Management Committee? YES [ ] NO [ ]
4. If yes, is the committee trained? YES [ ] NO [ ]
5. What work does the Food Management Committee do? -----  
-----  
-----
6. How does the community contribute towards the School Feeding Programme? -----  
-----
7. What are the benefits of the school feeding programme?-----  
-----  
-----
8. How satisfied are you with the implementation of the feeding programme? -----  
-----  
-----  
-----
9. What are some of the key challenges facing the programme? -----  
-----
10. How can the challenges be solved, in your opinion?-----  
-----
11. How will you continue with the School Feeding Programme when CRS withdraws? -----  
-----

**II School Health Education Programme (SHEP)**

1. Has the community a school health education programme? YES [ ] NO [ ]
2. What kinds of structures are put in place in your community for programme implementation? -----  
-----
3. Is the School Health Education Management Team in place? YES [ ] NO [ ]

4. Is the team trained? YES [ ] NO [ ]
5. What is membership of the committee/team? Total-----Men-----  
-----Women-----
6. What has the committee done for this year (2007/08)?-----  
-----
7. What are some of the benefits of the School Health Education programme to the community? -----
8. What are some of the challenges of the School Health Education programme? -----  
-----
9. How can the challenges be solved in your considered judgment? -----  
-----
10. Will you continue to implement the programme when CRS pulls out? YES [ ] NO [ ]
11. How will you continue to implement the programme after the exit of CRS? -----  
-----

IE&C on Hygiene Education

1. Has your school got a hygiene education programme? YES [ ] NO [ ]
2. What activities are carried out under the programme?-----  
-----
3. What structures/organs exist in the community for the implementation of the hygiene education? -----  
-----
4. What are the benefits of the programme to the pupils?-----  
-----  
-----
5. What are the benefits of the programme to their families and the larger community? -----  
-----
6. What is the contribution of the community to the programme? -----
7. What are the key challenges of the programme? -----  
-----
8. How can these challenges be remedied? -----  
-----
9. Are you aware of CRS exit strategy from the school feeding programme?  
YES [ ] NO [ ]

**10.** If yes, what measures have you put in place to sustain the benefits of the programmes implemented with support from CRS ?-----

-----



Region..... District.....  
 Name of Institution .....  
 Name of Respondent.....  
 Name of Interviewer.....  
 Interview Date.....

**Section 1: Food Supply to Beneficiary Institutions**

2. How often does the centre receive food from the Catholic Relief Services?
  - i. Monthly..... [ ]
  - ii. Quarterly..... [ ]
  - iii. Yearly..... [ ]
  - iv. Other (specify)..... [ ]
3. Since 2004, has the centre ever run out of food?
  - i. Yes..... [ ]
  - ii. No..... [ ]
4. Check for documentation of receipt and issue of food received for the past six months
  - i. Evidence seen with proper documentation.....[ ]
  - ii. Evidence seen with poor documentation.....[ ]
  - iii. No evidence seen .....[ ]
5. What is the beneficiary level for your institution?

.....  
 .....

5. Could you please mention one main benefit of CRS food supply to your clients.....  
 .....  
 .....

6. Have you received training in food management, preparation and hygiene in the past four years?
 

Yes..... [ ]  
 No..... [ ]

7. Types of training received that were initiated or supported by CRS  
 .....  
 .....

**CATHOLIC RELIEF SERVICES (CRS) GHANA**  
**Final Evaluation of Title II 2004-08 DAP**  
**Safety Net Questionnaire (Nutrition Rehabilitation & Health Institutions)**

Region..... District.....  
 Institution Name.....  
 Name of Interviewer.....  
 Interview Date.....

**Section 1: Food Supply to Beneficiary Institutions**

1. How often does the centre receive food from the Catholic Relief Services?

- Monthly..... [ ]
- Quarterly..... [ ]
- Yearly..... [ ]
- Other (specify)..... [ ]

2. Since 2004, has the centre ever run out of food?

- i. Yes..... [ ]
- ii. No..... [ ]

3. Check for documentation of receipt and issue of food received for the past six months

- i. Evidence seen with proper documentation.....[ ]
- ii. Evidence seen with poor documentation.....[ ]
- iii. No evidence seen .....[ ]

4. What is the beneficiary level for your institution?

.....  
 .....  
 .....

5. Could you please mention one main benefit of CRS food supply to your

clients.....  
 .....  
 .....

**Section 2: Effective Management and Cleanliness of Nutrition Rehabilitation Centres**

(Administer these questions to the supervisor of the centre)

6. Have you received training in food management, preparation and hygiene in the past four years?

- i. Yes..... [ ]
- ii. No..... [ ]

7. Types of training received that were supported by CRS

.....  
 .....

8. Observe the store, kitchen, toilets and the immediate environment and comment on its cleanliness?

.....  
 .....

9. Request for the centre reports file and provide the following information

	2004	2007	2008	Remarks
Case fatality (Death rate)				
Default rate				
Rehabilitation Rate (Recovery)				
Average length of stay				

**CATHOLIC RELIEF SERVICES (CRS) GHANA**  
**Final Evaluation of Title II 2004-08 DAP**  
**Safety Net Questionnaire (Nutrition Rehab. & Health Institutions)**

Region..... District.....

Institution Name.....

Name of Respondent.....

Interview Date.....

Name of Interviewer.....

## Sustainability Issues on Nutrition and Health Rehabilitation Institutions

(Administer these questions to District Directors, Hospital Administrators etc)

1. How much money is allocated to the running of the Nutrition Rehabilitation Centre every quarter?

- i. Nil..... [ ]
- ii. Less than GH¢50.00..... [ ]
- iii. GH¢50.00-GH¢100.00..... [ ]
- iv. GH¢200.00-GH¢300.00..... [ ]
- v. GH¢400-GH¢500.00..... [ ]
- vi. More than GH¢500.00..... [ ]

2. What other support (that is, logistics, equipment) is given to the Nutrition Rehabilitation Centre?.....

.....

3. Do you know when the Catholic Relief Services (CRS) will withdraw food support to your clients?

- ix. September, 2008..... [ ]
- x. December, 2008..... [ ]
- xi. Other (specify)..... [ ]
- xii. Don't know..... [ ]

4. What plans do you have to continue feeding your clients when CRS finally stops supplying food to your institution?

.....

5. Is there evidence that Nutrition Rehabilitation/client feeding activities reflected in the annual action plans for the current year?

- i. Yes, nutrition rehabilitation activities are captured in the current action plans..... [ ]
- ii. No evidence..... [ ]

6. Could you please mention one main problem CRS food supply to your institution has created.....

.....  
.....  
7. In your own view, mention one major thing CRS could have contributed better to the care of your clients?  
.....  
.....

### Appendix G: List of Selected Communities and Schools

Cluster	Community	District	Category
1	Mangor	Bunkpurugu/Yunyoo	Old
2	Feo	Bongo	Old
3	Baapare	Lawra	Old
4	Bombilla	Bunkpurugu/Yunyoo	New
5	Suanvusi	Bunkpurugu/Yunyoo	New
6	Nanpoutbawk	Bunkpurugu/Yunyoo	New
7	Dindani	East Mamprusi	New
8	Miembena	East Mamprusi	New
9	Samini	East Mamprusi	New
10	Ugando	Saboba/Cheriponi	New
11	Kudani	Saboba/Cheriponi	New
12	Wonjuga	Saboba/Cheriponi	New
13	Akunduo	Bongo	New
14	Awaa	Bongo	New
15	Azosilga	Bongo	New
16	Goo-Awaa	Bongo	New
17	Namoo Central	Bongo	New
18	Ve-a-Kulpelga	Bongo	New
19	Brifo-Ngmangbil	Lawra	New
20	Furo	Lawra	New
21	Kokoligu	Lawra	New
22	Naburnye	Lawra	New
23	Tanchara-Ko	Lawra	New
24	Yaghra	Lawra	New
25	Jeyeri	Wa East	New
26	Tendoma	Wa East	New
27	Jonga	Wa Municipal	New
28	Sing	Wa Municipal	New
29	Cheribile	Wa West	New
30	Nyoli	Wa West	New

DISTRIBUTION BY DISTRICTS

District Name	No. of Clusters
LAWRA	7
EAST MAMPRUSI	3
BONGO	7
SABOBA/CHERIPONI	3
BUNKPURUGU/YUNYOO	4
WA MUNICIPAL	2
WA EAST	2
WA WEST	2
TOTAL	30

**SHEP and FFE Schools in Sample Districts**

S/N	School	Category	District
1	Babile L/A Primary	SHEP/FFE	Lawra
2	Bapula L/A Primary	FFE	Lawra
3	Boo Cath Primary	SHEP/FFE	Lawra
4	Donwine L/A Primary	SHEP/FFE	Lawra
5	Gengenkpe Cath Primary	SHEP/FFE	Lawra
6	Kandemegagn Primary	FFE	Lawra
7	Kogle Cath Primary	SHEP/FFE	Lawra
8	Monyupelle L/A Primary	SHEP/FFE	Lawra
9	Tanchara/Koro L/A Primary	SHEP/FFE	Lawra
10	Vapuo L/A Primary	SHEP/FFE	Lawra
11	Asaria E/A Primary	SHEP/FFE	East Mamprusi
12	Bowku L/A Primary	SHEP/FFE	East Mamprusi
13	Kasape Primary	SHEP/FFE	East Mamprusi
14	Nagbo E/A Primary	SHEP/FFE	East Mamprusi
15	Nanori Primary, Gambaga	SHEP/FFE	East Mamprusi
16	Sakogu R/C Primary	SHEP/FFE	East Mamprusi
17	Adaboya L/A Prim	SHEP/FFE	Bongo
18	Atampintin L/A Primary	FFE	Bongo
19	Bogriogo Primary	SHEP/FFE	Bongo
20	Bongo Balungu Primary	SHEP/FFE	Bongo
21	Bongo soe prim 'b'	SHEP/FFE	Bongo
22	Feo EA/LA Primary	SHEP/FFE	Bongo
23	Goo Primary	SHEP/FFE	Bongo
24	Kanga Primary	SHEP/FFE	Bongo
25	Namoo Primary EA/LA	SHEP/FFE	Bongo
26	Tarongo Prim	SHEP/FFE	Bongo
27	Bimbagu L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
28	Boaterigu L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
29	Bunkpurugu L/A Primary	FFE	Bunkpurugu/Yunyoo

30	Duklutuk Primary	SHEP/FFE	Bunkpurugu/Yunyoo
31	Bunkpurugu Zongo Primary	SHEP/FFE	Bunkpurugu/Yunyoo
32	Gbetmunpaak L/A Primary	FFE	Bunkpurugu/Yunyoo
33	Jagoog L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
34	Kambagu L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
35	Kinkangu L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
36	Mangor Primary	SHEP/FFE	Bunkpurugu/Yunyoo
37	Nagboar L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
38	Najong #2 Primary	SHEP/FFE	Bunkpurugu/Yunyoo
39	Nanpontbauk Primary	SHEP/FFE	Bunkpurugu/Yunyoo
40	Pagnatik L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
41	Tusugu L/A Primary	SHEP/FFE	Bunkpurugu/Yunyoo
42	Yunyoo Primary	SHEP/FFE	Bunkpurugu/Yunyoo
43	Temaa prim	SHEP	Bunkpurugu/Yunyoo
44	Gbangbanpon R/C Primary	FFE	Saboba/Cheriponi
45	Yankazia SDA Primary	FFE	Saboba/Cheriponi
46	Kontili R/C Primary	FFE	Saboba/Cheriponi
47	Kungnani R/C Primary	FFE	Saboba/Cheriponi
48	Namungbani L/A Primary	FFE	Saboba/Cheriponi
49	Buegmal E/P Primary	FFE	Saboba/Cheriponi
50	Nasoni R/C Primary	FFE	Saboba/Cheriponi
51	Chansa L/A Primary	FFE	Wa Municipal
52	Nyagli L/A Primary	FFE	Wa Municipal
53	Kperisi R/C Primary	FFE	Wa Municipal
54	Chaggu L/A Primary	FFE	Wa East
55	Bonaa Primary	FFE	Wa East
56	Loggu-Kparisaga Primary	FFE	Wa East
57	Guopie TI Ahamadiya Primary	FFE	Wa East
58	Piisie Primary	FFE	Wa West
59	Gbache Meth Primary	FFE	Wa West
60	Buli R/C Primary	FFE	Wa West

**DISTRIBUTION BY**

**DISTRICTS**

**DISTRICT NAME**

**NO. OF SCHOOLS**

LAWRA	10
EAST MAMPRUSI	6
BONGO	10
SABOBA/CHEREPONI	7
BUNKPURUGU/YUNYOO	17
WA MUNICIPAL	3
WA EAST	4
WA WEST	3
TOTAL	60

**Appendix H: Change in Enrolment in CRS/Ghana Programme Schools by Gender and Districts for FY2004-2008**

DISTRICT	2004	2008	Change		2004	2008	Change	
	BOYS	BOYS	Number	Percentage	GIRLS	GIRLS	Number	Percentage
Bawku Municipal	-	-	-		-	-	-	
Bawku West	4187	4938	751	15	3776	4652	876	19
Bole	1353	1952	599	31	1224	1829	605	33
Bolga	3476	4178	702	17	3385	4156	771	19
Bongo	7254	8799	1545	18	7154	8423	1269	15
Builsa	3466	4300	834	19	4327	4856	529	11
Bunpkurugu/Yunyoo	6010	7309	1299	18	4953	6828	1875	27
Central Gonja	821	1028	207	20	751	985	234	24
East Gonja	3087	4180	1093	26	2921	3873	952	25
East Mamprusi	2171	3260	1089	33	1695	2864	1169	41
Garu/Tempene	-	-	-	-	-	-	-	-
Gushiegu	917	1089	172	16	499	710	211	30
Jirapa/Lambussie	6888	5658	-1230	-22	6527	5812	-715	-12
Karaga	1577	1753	176	10	1029	1210	181	15
Kasena/Nankana	6308	7120	812	11	6015	6838	823	12
Lawra	5220	5950	730	12	4802	5597	795	14
Nadowli	5185	4147	-1038	-25	5592	4580	-1012	-22
Nanumba North	2976	3190	214	7	1696	2657	961	36
Nanumba South	1740	1988	248	12	1276	1755	479	27
Saboba/Chereponi	2598	3194	596	19	2597	3425	828	24
Savelugu/Nanton	2137	2265	128	6	1568	1812	244	13
Sawla-Tuna-Kalba	661	989	328	33	459	845	386	46
Sissala East	1318	1600	282	18	1638	1951	313	16
Sissala West	1630	1447	-183	-13	1902	1474	-428	-29
Talensi/Nabdram	4376	5624	1248	22	4002	5188	1186	23
Tamale	1998	2488	490	20	1409	1816	407	22
Tolon/Kunbungu	2193	2460	267	11	1603	1961	358	18
Wa Muncipal	1439	321	-1118	-348	1345	326	-1019	-313*
Wa East	1624	2101	477	23	1672	2069	397	19
Wa West	1625	2603	978	38	1427	2285	858	38
West Gonja	879	889	10	1	903	818	-85	-10
West Mamprusi	3056	3823	767	20	2978	3620	642	18
Yendi	2212	2485	273	11	1720	2196	476	22
Zabzugu/Tatale	1804	2357	553	23	1662	2430	768	32
Total	92186	105485	13299	13	84507	99841	15334	15

**Appendix I: Enrolment in CRS/Ghana Ration Schools by Gender and Districts for FY2004-2008**

DISTRICT	2004		2005		2006		2007		2008	
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS
BAWKU MUNICIPAL	2059	2005	2143	2103	2380	2456	2617	2649	**	**
BAWKU WEST	1549	1574	1742	1821	1872	2076	2096	2180	4938	4652
BOLE	207	216	234	233	293	280	319	317	1952	1829
BOLGA	1492	1613	1660	1706	1826	1924	1938	1976	4178	4156
BONGO	4128	4470	4382	4860	4809	5394	5071	5547	8799	8423
BUILSA	1664	2115	1582	2144	1759	2303	1824	2295	4300	4856
BUNKURUGU/YUNYOO	2943	2653	3067	2711	3258	3025	3496	3502	7309	6828
CENTRAL GONJA	375	380	365	402	478	521	414	466	1028	985
EAST GONJA	1898	2071	1934	2309	2110	2528	2426	2427	4180	3873
EAST MAMPRUSI	1110	966	1142	1061	1163	1094	1472	1359	3260	2864
GARU/TEMPANE	1351	1153	1440	1339	1627	1637	1723	1666	**	**
GUSHEIGU	465	292	452	298	459	312	529	400	1089	710
JIRAPA/LAMBUSSIE	2818	2610	2166	2467	2401	2797	2566	2979	5658	5812
KARAGA	1021	698	1003	679	1030	720	1013	734	1753	1210
KASSENA/NANKANA	3085	3267	3131	3483	3454	3793	3517	3804	7120	6838
LAWRA	2093	2097	2323	2164	2512	2409	2756	2700	5950	5597
NADOWLI	2594	3102	2099	2417	2284	2629	2422	2791	4147	4580
NANUMBA NORTH	1695	1065	1393	1122	1480	1237	1674	1510	3190	2657
NANUMBASOUTH	542	557	592	653	573	709	600	730	1988	1755
SABOBA/CHEREPONI	1399	1604	1562	1716	1749	1931	1827	2112	3194	3425
SAVELUGU/NANTON	448	348	445	359	458	393	439	367	2265	1812
SAWLA/TUNA/KALBA	-	-	-	-	-	-	-	-	-	-
SISSALA EAST	737	914	516	875	548	920	588	907	1600	1951
SISSALA WEST	773	858	479	589	620	683	600	713	1447	1474
TALENSI/NABDAM	1441	1466	1659	1726	1846	1960	1958	2012	5624	5188
TAMALE	845	650	861	722	945	786	1003	848	2488	1816
TOLON/KUMBUNGU	694	524	658	576	651	601	663	642	2460	1961
WA	794	754	612	633	675	735	577	684	321	326
WA EAST	869	816	804	794	812	858	844	938	2101	2069
WA WEST	695	633	802	728	1026	896	1075	1002	2603	2285
WEST GONJA	332	386	354	401	366	420	430	461	889	818
WEST MAMPRUSI	1448	1586	1514	1712	1723	2169	1906	2134	3823	3620
YENDI	826	689	821	757	839	818	814	869	2485	2196
ZABZUGU/TATALE	673	787	625	806	686	906	672	986	2357	2430
<b>GRAND TOTAL</b>	<b>45063</b>	<b>44919</b>	<b>44562</b>	<b>46366</b>	<b>48712</b>	<b>51920</b>	<b>51869</b>	<b>54707</b>	<b>105625</b>	<b>98996</b>

