



## **Title II**

### **The Consortium for Rehabilitation and Development (CORAD)**

#### **Developmental Relief Program (DRP) March 2004 – February 2007**

#### **Final Consolidated Results Report**

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## **I. TABLE OF CONTENTS**

II. GLOSARY	3
III. INTRODUCTION	4
IV. CONTEXT MONITORING/RISK & ASSUMPTIONS TRACKING	7
V. GENERAL PROGRAM PERFORMANCE	12
VI. OBSERVED IMPACT RELATIVE TO PROGRAM OBJECTIVES	19
VII. LESSONS LEARNED DURING THE REPORTING PERIOD	33
VIII. ENVIRONMENTAL MONITORING	39
IX. COORDINATION ISSUES	42
X. MONITORING & EVALUATIONS, AUDITS AND STUDIES	43
XI. ADMINISTRATION AND OPERATIONAL INFORMATION	46
<b><u>ANNEXES</u></b>	
Annex 1: IPTT	46
Annex 2: Success Story	47
Annex 3: Photographs	53
Annex 4: DRP Impact Assessment	54

## II. GLOSSARY

Acronyms/Abbreviation	Meaning
ARI	Acute Respiratory Infection
CORAD	Consortium for Rehabilitation and Development
CHV	Community Health Volunteers
CCP	Community Clinic Point
CF	Contact Farmers
CAP	Action Plans
CBO	Community Based Organization
CCU	Coordination and Compliance Unit
CHP	Community Health Post
CRS	Catholic Relief Services
COFA	Community Farm Establishment
CHC	Community Health Club
CSP	Child Survival Project
CBGP	Community Based Growth Promotion
DHMT	District Health Management Team
DRP	Developmental Relief Program
DMO	District Medical Officer
DPT	Diphtheria Pertusis Tetanus
EPI	Expanded Program of Immunization
EBF	Exclusive Breastfeeding
FFS	Farmer Field School
FFW	Food For Work
FFP	Food For Peace
GMP	Growth Monitoring Program
HC	Health Clubs
HAPP	Condom Social Marketing Programme
ITN	Insecticide Treated Nets
IPM	Integrated Pest Management
IVS	Inland Valley Swamp
IPTT	Indicator Performance Tracking Table
LINKS	Linkages for Livelihood Opportunities and Economic Development
LOA	Life of Activities
MAFS	Ministry of Agriculture and Food Security
MCH	Maternal and Child Health
MCHP	Maternal Child Health Post
MOHS	Ministry of Health and Sanitation
MYDA	Motahun Youth Development Association
NPRDI	Northern Province Rehabilitation and Development Initiative
PHU	Primary Health Unit
PNC	Prenatal Clinics
PD	Positive Deviant
SL	Sierra Leone
SGBV	Sexual Gender Base Violence
TBA	Traditional Birth Attendant
TB	Tuberculosis
TOT	Training of trainers
TT	Tetanus Toxoid
VGf	Vulnerable Group Feeding
VDC	Village Development Committee
VDC/HC	Village Development Committee / Health Committee
VHW	Village Health Worker
VS&L	Village Savings and Loans
WVSL	World Vision Sierra Leone

### III. INTRODUCTION

The Consortium for Rehabilitation and Development (CORAD) commenced implementation of a three year Developmental Relief Program (DRP). The program goal was to support Sierra Leone's recovery from the war by focusing on restoring livelihoods for rural households in 30 chiefdoms in some of the most ravaged districts in the country. Over its 3-year life, the DRP sought to reestablish livelihoods in ways that facilitated transition to development activities that improved access, availability, and utilization as well as a targeted food assistance strategy. These actions stimulated social and economic conditions that enabled individuals to gain access to food, either through household production and / or increased incomes.

This report describes the results achieved by the CORAD Developmental Relief Program (DRP), to achieve the following goal: *Contribute to the restoration of livelihoods and food security for rural households in 30 focal chiefdoms in the five districts of Koinadugu, Kono, Kailahun, Tonkolili and Bonthe.* The program had two objectives, improving health status and reestablishing livelihood activities associated with agriculture. From March 2004 to February 2007, CORAD partner agencies worked with approximately 15,800 rural food insecure households under Objective One, and 37,400 households under Objective Two. CORAD was able to meet or exceed most IR-level targets; underperformance was only noted with regards to the area planted in vegetables (39% of planned targets) and market construction (37% of planned targets achieved).

Ten intermediate results were associated with these two broad objectives:

- 1 Improving access to health services
- 2 Increasing knowledge and skills related to improved health and nutrition practices
- 3 Building village-level capacities to address health issues and capitalize on opportunities to improve health status at the village level
- 4 Linking village-based health groups to wider decision-making structures
- 5 Restoring productivity of inland valley lowland rice farms, tree farms and upland farms
- 6 Rebuilding storage and processing capacities
- 7 Reestablishing access to local markets
- 8 Building village-level capacities to address agricultural problems and capitalize on agricultural opportunities
- 9 Linking village-based agricultural groups to wider decision-making structures
- 10 Maintaining a safety net

Using US Government funds, monetization proceeds, Government of Sierra Leone contributions plus CORAD member contributions, the four consortium members (CRS, CARE, World Vision and Africare) undertook activities to restore agricultural livelihoods, reestablish health services and build capacities of groups and individuals at the village level. Key target groups for the program were the extremely vulnerable and food insecure such as poor farmers, women-headed households, and mothers and children. The DRP used Food-For-Work (FFW) and Food-For-Agriculture (FFAg) to support program activities

*“To rebuild communities that do not revert to conflict and violence, minimal living conditions must be obtained – water, health, clinics and schools, and economic opportunities- and their war-affected populations need to be engaged, socially and economically so they can contribute to rebuilding and serving their communities”*

*USAID/Sierra Leone  
Transitional Strategy  
FY 2004-2006*

such as the rehabilitation of food processing facilities, storage and marketing facilities and the restoration of seed stocks. The project also included Vulnerable Group Feeding (VGF) safety net distributions targeted at the most vulnerable households

Baseline Survey: The DRP began in March 2004 and the baseline survey was conducted in May of the same year. On the health side, results indicated extremely poor health and nutrition status and practices, specifically low immunization rates, high rates of childhood illness, and low rates of exclusive breastfeeding, among others. On the agriculture and food availability side, results indicated very low production levels due to the loss of productive assets such as tools, seeds and related infrastructure, including farm to market roads, storage and market facilities.

Budget realignment: In the course of implementation, CORAD requested and received authorization from USAID/FFP for budget realignment for the purchase of building materials for the construction and rehabilitation of community infrastructure. As a result, construction of drying floors and market structures, both of which were much needed by target populations, was made possible.

Final Evaluation: During January 2006, CORAD conducted the final program evaluation, which consisted of a quantitative survey and a qualitative assessment. This evaluation was designed to provide: (1) an independent and external assessment of the relevance, effectiveness, efficiency, impact and sustainability of DRP operations to date and; (2) guidance to CORAD on strategic areas of focus for the follow-on Multi-Year Assistance Program (MYAP) that was submitted in May. The final evaluation results showed not only that the DRP was on track to achieve most of its targets, but also that after only two years, positive impact had been achieved, especially with regard to health seeking behavior and, agricultural production.

Close-out: In the final few months of the program, staff focused on supporting participants in their efforts to ensure the sustainability of their hard-won achievements. In addition, official close-out ceremonies were held at the District and Chiefdom level to allow for the opportunity to recognize the success of specific activities as well as the dedication and hard work of specific individuals and entire communities.

Impact Assessment: As a follow up on the Final Evaluation conducted in FY 06, the CORAD partner agencies undertook an Impact Assessment in the final months of the project. The Impact Assessment sought to validate the earlier and more comprehensive Final Evaluation through gathering additional data regarding the perceptions and opinions of community members and governmental stakeholders. On the whole, DRP stakeholders expressed favorable opinions and were able to provide specific information regarding the perceived impacts of the DRP. This information was used by CORAD partners as a part of the planning for the start-up of the LEAD program.

### Major Achievements

Although CORAD has achieved many successes in the course of the DRP, the following are particularly worthy of note:

- 92 percent of births in target communities are attended by a skilled birth attendant (up from 32 percent at the baseline)
- 17140 HA of land brought back into cultivation of targeted crops (rice, cassava, ground nuts, vegetables, coffee, cacao, & oil palm)
- 93 percent of household are able to meet their seed needs
- 130 public structures (including wells and latrines) have been rehabilitated
- 4,185 houses have been rehabilitated

It is important to note that the original framework for performance against which CORAD was reporting did not include monitoring indicators. These indicators were added subsequently, with the partners beginning to report against these indicators in FY 06. For this reason, certain data is not available prior to FY 06, particularly data related to targets set. Where possible, CORAD has collected this data to provide a comprehensive final report.

## **IV. CONTEXT MONITORING/RISK & ASSUMPTIONS TRACKING**

### **3.1 Incidents of Localized Insecurity**

UNAMSIL (United Nations Mission in Sierra Leone) was on the 1<sup>st</sup> of January 2006 replaced with UNIOSIL (United Nations Independent Observers in Sierra Leone). This resulted in a considerable reduction in the number of international staff based in Sierra Leone, but particularly upcountry. The phase out of UNAMSIL had been gradual with military personnel upcountry being phased out over an eighteen-month period. One of the last areas to reduce military personnel was Bombali District (a CARE sub-office site), due to its heavy involvement in the war. In addition the extradition of Charles Taylor, former president of Liberia and one of the major Sierra Leone War Criminals occurred during the three years of the DRP. Charles Taylor was initially brought to Sierra Leone to face trial in the Special Court. He was later moved for security reasons to The International Criminal Court in De Hague, Netherlands. This period of time was characterized by a heightened sense of security in country and the deployment of Irish Soldiers normally stationed in Liberia. Despite this and other events over the past three years, including the deaths of Hinga Norman (ex leader of the Kamajors in Sierra Leone), and Foday Sankoh (ex leader of the RUF) security has remained stable in country, with only a few isolated incidents of civil unrest. These have been as a result of tribal conflicts (for example between the Fulla's and Limba's in Koinadugu District), youth dissatisfaction (due to unemployment) or government interference in the election of chiefs (Tonkolili District).

Some incidents of petty thefts and localized incidents of unrest were noted, but did not affect the implementation of the DRP.

### **3.2 Threats from Regional Turbulence**

The past three years have been characterized by major upheavals in the surrounding countries. In 2004, Liberia was still experiencing considerable civil unrest with large areas of the country inaccessible due to heavy fighting. Later that year an interim government was installed and disarmament began. In 2005 Monrovia erupted with violent clashes between warring parties, which led to the burning and looting of churches and mosques in the capital. Elections were held twice due to no clear successor being appointed in the first round. In late 2005 the presidential candidate was won and in January 2006 Ellen Johnson-Surleaf was sworn in as president of Liberia.

Liberia now has an 18,000 UN personnel presence. Repatriation of Liberian Refugees based in Sierra Leone by UNHCR commenced in 2006 and will be completed by the middle of 2007. These camps within Sierra Leone had the potential to harbor instability as it was thought that former ex rebels were also part of these refugees.

The situation in Guinea has remained more volatile with considerable problems being experienced in that country over the past three years. In early 2005, an attempted coup resulted in considerable unrest within the country and the closure of the border for a period of time. In mid 2006, major political upheaval ensued due to the non-payment of salaries to civil servants. This results in extensive rioting in the capital Conakry, with security forces responding violently, killing and injuring scores of people. In 2007, Guinea once more erupted with trade unions calling for the resignation of Lansana Conteh (Guinea's president for the last 23 years) and the appointment of a prime minister. The security forces responded with force, killing more than 100 people nationwide and imposing Martial Law. The Guinea Authorities closed the border into neighboring countries thus blocking the exportation of goods, particularly agricultural production into Sierra Leone. This resulted in a significant increase in the prices of various goods, particularly palm oil and vegetables and the scarcity of others such as meat.

CORAD responded to this by establishing security committees in their two base offices to monitor the potential flow of refugees from Guinea into Sierra Leone as well as to identify trigger mechanisms that would help monitor the security situation in Guinea. These security meetings compile information received from the field and are submitted to Freetown. CORAD has also developed an Emergency Preparedness Plan with specific actions to be taken in the event of a major influx of refugees from neighboring countries. One of the components of this plan has been to identify assets available or accessible to the organization and to establish a communication network on the ground between CARE, CORAD and other organizations, including other INGO's, local security forces and line ministries.

### 3.3 Challenges Due to Absence of Government Stakeholders

Collaboration between CORAD and the implementing line ministries has for the most part remained cordial with both MAFS and MOHS regularly attending events implemented by CORAD partners. However, this collaboration has been hampered over the three years by a number of factors. One of the main problems experienced in Koinadugu was the lack of logistics available to extension personnel from the ministry of Health, thus barring them from working in many of the outreach areas accessed by CORAD. This situation was exacerbated by the MOH having great difficulty in recruiting staff for many of their more isolated locations in Koinadugu District, putting a further strain on the existing structures. This has resulted in the permanent closure of several PHU structures. In addition MOH staff are consistently absent from their duty stations for long periods of time as a result of workshops undertaken by the District Health Management Team in Kabala Town in particular, resulting in the cancellation of several joint workshops and training over the three years. In Tonkolili, while the number of trainings has been fewer, government staff are still constrained by an inability to access transport and other services thus limiting the scope of their outreach.

Collaboration with MAFS has been more successful, although problems relating to mobility remain similar. However CORAD has actively been collaborating with extension workers in the field and helping to mainstream strategies developed. In addition MAFS has been providing considerable technical assistance to DRP over the past three years.

While issues around absenteeism have been problematic and difficult to solve, CORAD was nonetheless committed to working with both line ministries. Subsequently, CARE consulted with line ministries in Koinadugu, the district council and established a timetable for regular review meetings on program activities. While this is not always working well, it has helped to reduce problems encountered in the field. In addition, CORAD continues to provide logistical and financial support to both line ministries when required.

### 3.4 Challenges Due to Absence of Donors

CORAD has not had any specific problems relating to a lack of absence or support from USAID or other donors although initially when designed it was assumed that other participating agencies in the operational chiefdoms would support specific food for work activities such as market construction. This did not occur and CORAD members were required to request that some monetization proceeds could be used to procure construction materials for these markets. Food for Peace approved this request very promptly and procurement for construction materials commenced in March 2006.

### 3.5 Loss of Opportunity among Youth Due to Regulation of Mining

CARE has not been implementing the DRP in any diamond mining area. However in late 2004, diamonds were discovered in North Bombali District. This resulted in a considerable influx of persons into Kamakwie initially. This situation had stabilized by early 2005. Within CARE's operational area, seasonal migration by youths to diamond mining areas, such as Kono have been observed. However

communities have benefited through the sending of remittances by these youth who normally return during the farming season. The deregulation of this mining has not had a significant impact on their status.

### 3.6 Challenges in Nutrition Due to Insufficient “Positive Deviants”

CRS had no difficulty encountering positive deviant mothers for Exclusive Breast Feeding (EBF) activities in both Koinadugu and Kailahun Districts, and positive deviant children for the Hearth Model in Kailahun. However, it was not possible to identify positive deviant children (defined as well-nourished children from poor families) for the Hearth model in Koinadugu, despite repeated attempts throughout the DRP. As a result, CRS only carried out Hearth activities in Kailahun District. In Koinadugu, CRS focused on identifying children with severe acute malnutrition and referring them to appropriate therapeutic feeding centers whenever possible. Other nutrition activities, including growth monitoring and promotion, exclusive breastfeeding support groups and baby friendly farms, were carried out in both districts.

During the analysis of the baseline conducted in May 2004, it was noted that no mother in CARE’s implementation area exclusively breastfed their child. Similarly there was little understanding about the importance of nutrition to support healthy growth. This resulted in many cases of children fed highly inappropriate foodstuffs such as high concentrations of palm oil, palm wine and water from unsafe sources. Initially, despite considerable sensitization that was conducted by the program through village meetings and the established community health groups, it was difficult to persuade mothers to fully implement the program and act as positive deviant mothers. However, once children had reached the six-month stage it was apparent to the participating mothers that their child was different from previous children in terms of their health and general growth patterns. More women followed suit until eventually almost every community had several positive deviant mothers. However, while women clearly saw the benefits of exclusive breastfeeding and the advantages proper utilization of other foodstuffs had, they also felt initially that CORAD should be providing additional incentives to them to practice this method of feeding. CORAD partners responded with more sensitization meetings to discuss the issue. On certification of graduates from CHC’s, CARE presented women participating in exclusive breastfeeding with a certificate to register their success. The program has therefore been very instrumental in changing the attitudes and behavior of women in both districts. The presence of another CARE program (Child Survival) has also led to substantive increases in nutritive practices in Koinadugu. Observations and data collected from the field indicate that while exclusive breastfeeding still remains low, it is increasing. However, despite these successes, adoption of this practice as an overall percentage of the population remains low.

The consortium plans to develop a more concerted and dynamic strategy under the LEAD Program to change this present situation.

### 3.7 Governmental Support

Problems have persisted throughout the implementation of the DRP in CARE’s two intervention areas. Initially the District Medical Officer (DMO) in Koinadugu District created considerable program disharmony by refusing to work with CARE or CRS unless very specific per diem rates were paid. This eventuality culminated in a standoff between the DMO and the two organizations, which resulted in a suspension of support by the MOH. This was resolved only through the intervention of senior staff of CARE, CRS with the district council. The problem was then further resolved when the DMO was transferred to another district. These problems have remained in Tonkolili throughout the three years of the DRP. Initially collaboration between the MOH and CARE was very cordial, with CARE providing considerable support both within the district and more specifically at chiefdom level to MOH extension

staff. In 2006, the DMO called a meeting with the international NGOs operating in the district and gave them a list of the payments that were to be made for involvement by any MOH staff in any NGO health training. These rates were found to be very high and were queried by CARE. CARE initiated a number of meetings between themselves, the DMO and other international organizations in order to reach a compromise on the rates. CARE also involved local council and other members of the MOH on the issue. However, the DMO refused to accept rates proposed by CARE or the other NGOs. This resulted in a suspension of all trainings proposed for this district during the middle of 2006. While orientation meetings with communities have continued and CARE has continued to provide logistical support to staff from the MOH, this problem remains.

CARE has involved the district council as of 2005 to act as an intermediary in this problem. However council have experienced a number of upheavals in the district over the past eighteen months with the suspension of all its members as a result of fraud proving to be a significant setback in resolving this issue. To date the problem is still ongoing although an end is in sight.

The decentralization of local government has not been without problems in CORAD's implementation area. A series of scandals resulted in the suspension two times of the district council in Tonkolili District. In Koinadugu while the transition from centralized to a decentralized government has proved easier, problems have still occurred between organizations and the council. Many of these problems have stemmed from issues of coordination. However there have also been problems around the politicizing of certain events. A good example of this occurred in November 2005 in Tonkolili District when the opening of a market facility that had been supported through a food for work initiative was turned into a political rally on behalf of the SLPP. Later in the year, a meeting held in the district was characterized by raised tensions between CORAD and a ward councilor. It appears that prior to CORAD's intervention many of these councilors had been influential persons in their community and now wanted to take credit for a lot of the activity being implemented jointly by the community and CORAD.

The local authorities fully support the project activities; however, the collection of local materials especially sand by the communities has been a very serious constraint due to distances to sources of good quality sand. CORAD members met with respective communities on several occasions and also requested support from MAFS with tractors to haul materials.

### 3.8 Challenges with DRP Strategy

Certain components of the DRP were difficult to implement over the three years. In some cases this resulted in the revision or transfer of targets (for example the conversion of vegetable hectares into community farms establishment) or in the case of markets to a request to Food for Peace to allow the procurement of construction materials from monetization proceeds. Part of this problem stemmed from the fact that on inception of the program it was assumed that the DRP would be able to liaise with external organizations and donors who would provide the necessary material support and who would welcome a chance to link with CORAD through food for work initiatives. Monitoring trips undertaken by the CCU recognized these as problems being experienced by all CORAD members and responded by raising these issues in monthly steering committee meetings. This resulted in modifying the design of the program with the approval of the donor.

While it has been easy to implement most of the activities over the last three years using food as a resource, this in itself has also created a lot of expectation among communities. The LEAD program while also undertaking food for work activities will ensure that communities are more actively involved in food distribution as well as the building up of assets to ensure less reliance on food for work initiatives.

### 3.9 Challenges with Food Commodity Pipeline

Late arrival of requested food has been a problem throughout the DRP. This resulted in a huge backlog of unmet activities and distribution of food often during the rainy season, which proved problematic logistically. In addition, there were numerous times where food stocks in country were low for specific commodity items, for example lentils. This resulted in organizations having to make the choice between deliveries of two items (vegetable oil and bulgur) or storing all the commodities in the warehouse until the additional commodity arrived. This in itself created problems of storage capacities of the warehouses. The late arrival of food resulted in a disruption of community participation caused by high expectations. This was particularly true in areas where CARE had been operating for some time such as Tonkolili District. CORAD responded by prioritizing projects to ensure all three commodities could be distributed at any one time.

CRS, who handles food logistics for CORAD, experienced and continues to experience significant problems at the port. This has resulted in the loss of significant amounts of food. The lot sales of rice for monetization purposes have shifted the burden of clearance from the port from the responsibility of CORAD to the responsibility of the vendor.

CORAD is examining the possibilities of establishing a door-to-door delivery with food commodities. This would result in the agency being liable only when losses occurred from food under their direct control and not from the port. This will be one of the main focus areas for the next Food Working Group for LEAD.

### 3.10 Other Factors Affecting Performance

The grasshopper *Zonocerus variegatus* caused considerable damage to crops in 2004, 05, and 06. The Farmer Field School Methodology failed to provide a solution to the problem. CORAD using contacts made at a Food Commodity Management Workshop held in Dakar, Senegal in 2006 established a linkage with the International Institute of Tropical Agriculture based in Benin. This resulted in a three weeklong consultancy to test a specific fungus 'Green Muscle' developed specifically to tackle this problem. The consultancy has resulted in a change in MAFS policies regarding the importation of expensive and less effective insecticides that are not specific against this pest and potentially cause long-term damage to the environment. CORAD now regularly liaises with MAFS at national level and will help to distribute this fungus procured by the ministry at national level.

The late commencement of the program in 2004 resulted in a revision of the targets set for the first year, particularly those relating to infrastructure. This revision had an impact on the following years as CORAD worked to re-establish the balance caused by this late start.

Due to terrible roads in Kono District, there have been constraints in getting transporters to convey supplies such as construction materials, agricultural inputs and medical supplies to the communities. The roads are barely passable during the rainy season and even during the dry season in some areas. Even where transporters agree to convey needed supplies, the cost is usually prohibitive and affects the program by reduces available to resources to implement some key activities.

## V. GENERAL PROGRAM PERFORMANCE

### **Program Objective One: *2,160 rural food insecure households achieve improved health status***

#### Increasing Access to Health Care Services

While there are still profound gaps in Sierra Leone's public health infrastructure, CORAD substantially improved access to maternal and child health services in operational areas during the life of the DRP. Community clinic points provided direct access to immunizations, antenatal care, growth monitoring and promotion and health education. Data from the final evaluation showed that 38.7 percent of children were fully immunized by 12 months, up from 22.6 percent at baseline. In addition to the uptake of key services, community clinic points provided consistent contact between MCH Aides and community members. These monthly sessions helped develop a linkage between peripheral health units and their target communities. This linkage, combined with ongoing community-based health education activities, resulted in a significant increase in health-seeking behavior during the DRP. Final evaluation data show that more than 80 percent of those households experiencing cough in the two weeks prior to the survey reported seeking care at a local health facility, a marked increase from 46 percent at baseline. Three-quarters of those households experiencing fever in the two weeks prior to the survey reported seeking care at a local health facility, a substantial increase from 52 percent at baseline. More than 75 percent of those households experiencing diarrhea in the two weeks prior to the survey reported seeking care at a local health facility, a substantial increase from less than 50 percent at baseline. Finally, the proportion of women who reported delivering with a trained health attendant (including trained traditional birth attendants) increased four-fold from the baseline value of 20.8 percent to the final evaluation figure of 92 percent. This substantial increase in the use of local public health services demonstrates that DRP beneficiaries have indeed obtained better access to maternal and child health care services.

In addition to the technical, health-related knowledge developed during the DRP, beneficiaries also developed a better understanding of their rights to basic services. CORAD staff worked to sensitize beneficiaries of their rights to free immunization, under five cards, antenatal care and insecticide treated bed nets. Where there were incidents of charging for free services, CORAD facilitated meetings and worked with communities and the DHMT to resolve or reduce the problem wherever possible. While corruption remains a key issue challenging Sierra Leone's public health system, as a result of the DRP, beneficiaries in CORAD operational areas have begun to advocate for themselves and their communities.

#### Increasing Health-Related Knowledge and Skills

The behavior change activities implemented throughout the DRP increased understanding of health and nutrition concepts and resulted in improved practices. Data from the final evaluation show that more than 75 percent of children under five in DRP villages participated regularly (at least two out of the previous three months) in growth monitoring and promotion, up from 33.8 percent at baseline. The introduction of the colored beads (part of the color-coded system mentioned above) helped women quickly understand the nutritional status of their children. Frequent field visits found that the majority of women could explain the significance of each color and the necessary feeding changes to improve a child's nutritional status.

Other behavior change activities, including baby friendly farms (implemented by CRS) and exclusive breastfeeding support groups, have resulted in an impressive increase in the number of women practicing exclusive breastfeeding in DRP communities: 24.8 percent of women reported practicing exclusive breastfeeding in the final evaluation, up from 0 percent at baseline survey. Women practicing exclusive breastfeeding have observed a notable decrease in illness in their infants, especially with regard to diarrhea, and attitudes among community members indicate an increasing acceptance of this practice.

Beneficiaries also acquired important health-related knowledge during the DRP, with 85.7 percent able to explain prevention and treatment concepts around diarrhea, malaria, and cough management at final evaluation, compared to 47 percent at baseline survey. There is also evidence that DRP health activities resulted in significant behavior change with regard to treatment for diarrhea, with 66.5 percent of caregivers reporting using oral re-hydration solution (ORS) at final evaluation, up from 28 percent at baseline survey.

According to the Impact Assessment, not only have trainings and other capacity building increased knowledge and skills, but also they have contributed towards raising the confidence level of participating mothers and TBAs/VHWs.

### Strengthening Capacities and Linkages

Two of the key weaknesses identified by the CORAD agencies in the area of health were the capacity of local health practitioners and the linkages between health practitioners and the Ministry of Health. To address these weaknesses in the area of health service delivery, CORAD worked with community groups and/or formed new groups (CARE's CHCs, CRS's Village Development Health Committees, and WVSL's Village Health Committees). Throughout the area of operation, the capacity of members of the health groups increased throughout the life of the DRP. In many communities, group members, particularly VHWs and TBAs, played an active and visible role in community health activities. For example, during monthly growth monitoring sessions, VHWs weighed children while TBAs counseled caregivers on appropriate nutritional support. In communities implementing the Hearth Model, VHWs assisted during initial sessions and some TBAs served as volunteer mothers. Health group (see groups above) generally did best where interventions were concrete and specific; they had difficulty addressing more abstract or multi-layered problems.

Village Health Workers, Traditional Birth Attendants, and members of targeted health groups participated in a variety of trainings during the DRP. In addition to a broad training on primary health care, focusing on the 16 key household/community-integrated management of childhood illness (HH/C-IMCI) concepts, health groups also learned the basic concepts of project management and resource mobilization. VHWs and TBAs went on to receive more specialized training in behavior change and communication, nutrition, malaria, pneumonia, diarrhea and hygiene. These training were periodic and highly participatory, so as to be appropriate given the very low literacy level of the population. As a result of such training, local health group members are now more knowledgeable about general health issues and are better positioned to advocate for themselves and their communities.

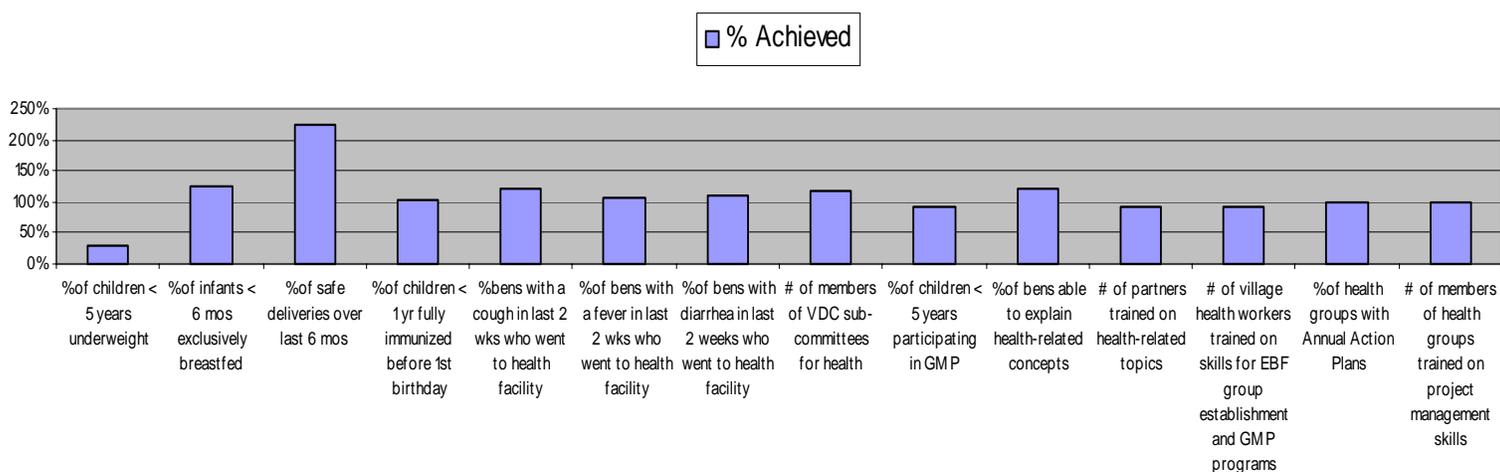
Establishing linkages between local health groups and health sector institutions was the most challenging area for health-related activities associated with the DRP. The primary point of contact with the formal health sector continues to be the health overseer, a position which, in practice, is infrequently supervised by the DHMT. Thus, while health overseers provided an important service in terms of improving community sanitation and environmental hygiene, they were not able to provide a reliable communication link between DRP communities and DHMT members. As such, CORAD concentrated efforts on facilitating meetings at the local level to improve immediate relationships with accessible members of the public health structure. The majority of meetings called have included local health group members and primary public health personnel, principally health overseers or MCH Aides.

Finally, in developing community action plans that span beyond the end of the DRP, local health group members have shown that the activities carried out during the DRP are valued and that they feel capable of carrying on selected activities. This prioritization of community health issues is evidence of the lasting capacity of rural community members trained and supported during the DRP.

To summarize, the following progress was noted toward the main programmatic indicators for Program Objective One:

Indicator	Target	Achieved	% Met
Percent of children under 5 years who are underweight (Underweight = Z-score <- 2 sd)	0%	27%	-30%
Percent of infants under 6 months who are exclusively breastfed (child breastfed only - not even given water)	20%	25%	124%
Percent of safe deliveries over last 6 months ( safe deliveries = births conducted by a skilled birth attendant - doctor, nurse, midwife, MCH aide, or trained TBA)	41%	92%	225%
Percent of children under 1 year fully immunized before first birthday ( fully immunized = received BCG, DPT, Measles, Polio, Yellow Fever & Vit A)	38%	39%	103%
Percent of target beneficiaries with a cough in the last 2 weeks who sought consultation from a health facility	67%	80%	120%
Percent of target beneficiaries with a fever in the last 2 weeks who sought consultation from a health facility	72%	76%	106%
Percent of target beneficiaries with diarrhea in the last 2 weeks who sought consultation from a health facility	69%	76%	110%
# and membership of VDC sub-committees for health created (or reestablished)	2746.0	3260	119%
Percent of children under 5 years participating in growth promotion programs	77%	84%	92%
Percent of beneficiaries from targeted beneficiaries able to explain health-related concepts (prevention & mgt of diarrhea & malaria + cough mgt)	71%	86%	122%
# of partners (members of VDC health sub-committees, health and nutrition clubs, village health workers and TBAs) trained on early referrals, diarrhea prevention and management, hygiene and safe water, and malaria prevention	5673	5209	92%
# of village health workers trained on skills necessary to : (1) establish breastfeeding and/or weaning support groups; and (2) implement monthly growth monitoring programs	1586	1463	92%
Percent of health groups(VDC Sub-communities for Health and Nutrition/Health clubs) with Annual Action Plans	100%	100%	100%
# of VDC Health sub-committees (and membership) trained on basic strategic planning, activity design, awareness raising and resource mobilization	77	76	99%

### Objective One: Percent Achieved



## **Program Objective 2: 12,565 rural food insecure households have improved supply and access to food**

### Production Restoration

The DRP has contributed towards increasing beneficiary food security through improved access to and availability of food supply. CORAD assisted food insecure households to reestablish production through rehabilitation of plantation crops and extended training in agricultural best practices including the FFS approach. The DRP Final Evaluation found that by the end of FY 2005 more than 70 percent of FFS participants were practicing improved agronomic practices and had registered more than 40 percent increases in the productivity levels of basic food staples.

The DRP final evaluation results indicate that households in DRP villages planted 71 Kg of upland rice and 76.6 Kg of IVS rice. Both of these figures surpass the GoSL recommendation of 50 Kg as a minimum size for a viable commercial farm (both for upland and IVS). Farmer participants also learned that the introduction of row planting and different planting densities present several advantages with respect to the traditional random planting techniques. For example, new methods resulted in a more efficient use of planting material and higher yields (from 1.5 to 5 times higher than the national average as reported by FAO/MAF in the last National Crop Survey). It is expected that this knowledge and experience will continue to spread as farmers see the positive impact (increased production and income) of using these techniques. In addition, the increased number of farmers with the skills to train other farmers will multiply the number of beneficiaries able to access best practices in agricultural production, even beyond the end of the program.

Finally, increased cassava availability has prompted high interest in agro-processing as an alternative to increase post harvest storage and food availability, as well as to increase income. CORAD has conducted field tests and training in the use of a prototype *garri* processing machine in collaboration with Njala University's School of Technology. It is expected that the opportunity for local value-adding activities, coupled with business and processing skills, will allow participant communities to capitalize on the increased cassava production levels.

### Rehabilitation/Construction of Storage, Drying and Processing Facilities

The rehabilitation of drying floors and storage facilities was one of the less successful activities of the DRP in terms of target achievement. As mentioned previously, it was expected that communities would be able to mobilize resources for construction materials, but it was soon realized that this was not feasible. However, the approval by USAID/FFP of a budget re-alignment in the latter part of FY 2006 solved this problem by allowing CORAD to use monetization proceeds to purchase these expensive but necessary materials (ie. cement, roofing sheets). Once that approval was given, significant progress was made in the construction of drying floors, and intensive trainings targeting main end-users (women) were conducted in the participating communities. The estimated post-harvest losses incurred for rice (of both ecologies) in DRP communities ranged between 26 and 28 percent in the 2004. By the end of the DRP, CORAD and community participants had completed 414 community-owned drying and storage facilities, accomplishing 90 percent of the 462 proposed restorations. Though it was not possible to measure the impact of these floors in reducing post harvest losses (to do so would require an ex-poste evaluation at least one harvest after the end of the DRP), it is expected that in the future, post-harvest losses will be reduced among beneficiaries with improved access to the drying floors, appropriate agro-processing technology and improved knowledge and skills.

### Rehabilitation of Roads and Infrastructure

During this period, the changes in the project implementation strategy prompted a more active participation of FFW beneficiaries. Communities were able to quickly and efficiently mobilize local

resources to complete market centers and rehabilitate roads. This demonstrates that project participants are transitioning from passive aid recipients to active agents of social change in their communities. Additionally, the rehabilitation of market centers and farm to market roads are improving the lives and livelihood opportunities of beneficiaries. Based on the results obtained by the LINKS program baseline survey, the value of farm-production per household of selected crops in DRP and non-DRP villages over the last 12 months indicates that the mean market value per household of selected crops is higher in DRP villages. These are signs of a restoration of human dignity among the communities served by CORAD. Moreover, the presence of an improved road network with a total of 435 km of farm-to-market roads, and a total of 19 rehabilitated market facilities and 49 reestablished weekly markets are improving the quality of life through better access to services and economic activities at the local level. CORAD also worked to ensure sustained impact of the markets through the development of management agreements, in which the communities outlined and agreed on user fees, rules, and maintenance.

### Strengthening of Agriculture-Related Capacities

CORAD capitalized on the early success and wide acceptance of the FFS approach, which uses local capacities and fosters self-reliance as the basis for sustainable agro-enterprise formation. As a result of this focus, a number of FFS groups or clusters have prepared by-laws and have working executive bodies with clearly defined responsibilities. This has strengthened their capacity to address agricultural problems and to identify and take advantage of opportunities. These groups have been meeting regularly and have produced action plans to guide their activities in the future.

The Impact Assessment results show that farmers are very satisfied with both the way in which their capacities have been enhanced through the FFS, and that they have been able to enhance the capacities of their fellow farmers. Farmers stated that they believe that the FFS have brought farmers together to address common challenges and problems.

### Establishment and Strengthening of Linkages

VDCs and other formal and informal village-level institutions have been the primary entry point for the implementation of agricultural activities. Many of the FFS groups and clusters have become part of the informal political structure in the villages, and have gained acceptance and a degree of power within the local decision making bodies. In the future, VDCs and other community-based organizations should become even more important as the government decentralization process continues to progress. As a result of the relationships established or strengthened under the DRP, they should be well placed to fully and more effectively participate in the planning and implementation of development-oriented activities in their communities—a point that was highlighted by community members and government officials alike during the Impact Assessment, when many people stated that they felt there was a higher ability to mobilize to solve development problems. The implementation of meetings with chieftdom and district level authorities has strengthened linkages between decision makers and the beneficiary communities, allowing for the discussion of problems and facilitating cooperation among different actors. Specific examples include the mobilization of youths and the pooling of local materials in the construction of community assets.

### Assistance to Vulnerable Households

The provision of safety net food and material assistance to highly vulnerable households, particularly to those communities with very few assets, strengthened their existing social support mechanisms. The material support helped increase access to basic services for the most vulnerable segments of the population, including the rehabilitation of 4,185 houses and the construction of 130 wells and latrines (as well as other public structures such as schools and barriers).

Likewise, 17,231 individuals categorized as the most vulnerable (including the elderly, sick and families with severely malnourished children) were provided with direct food distribution, which created a temporary lifeline during the worst part of the hunger season, allowing households to direct existing resources to productive activities. The local safety networks were also strengthened through seed distribution to victims of natural disasters, restoring their capacity to regain food self-sufficiency. Without this assistance, these communities would have become even more vulnerable to hunger and disease.

### Improving Peace and Unity

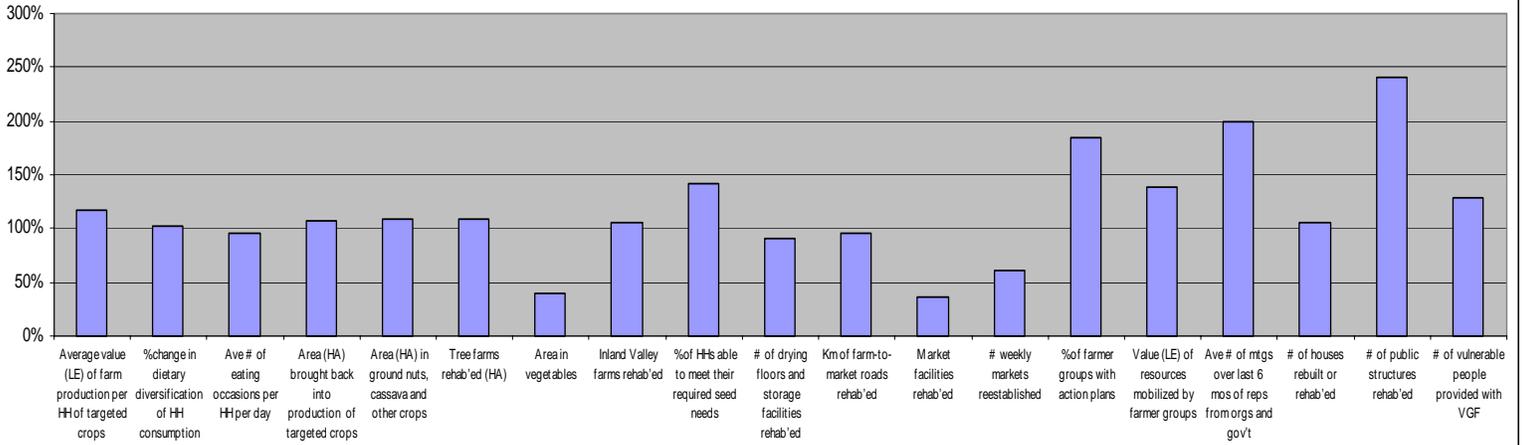
Although improving peace and unity was not a stated objective of the DRP project, the Impact Assessment illustrated that an overwhelming number of project participants feel that the project has had a positive impact in this area. Project participants articulated that such diverse activities as the Farmer Field Schools and Food for Work activities have brought community members and leaders together to work for the future of their communities. Community members stated that people were able to focus on common goals and interests.

To summarize, the following progress was noted toward the main programmatic indicators for Program Objective Two:

Indicator	Target	Achieved	% Met
Average value (LE) of farm production per HH of targeted crops	360179	419986	117%
% change in dietary diversification of HH consumption (average # of food groups consumed by HHs)	5%	5.1%	102%
Ave # of eating occasions per HH per day	2.2	2.1	96%
Area (HA) brought back into production of targeted crops	15968	17140	107%
Area (HA) in ground nuts, cassava and other crops	6500	7021	108%
Tree farms rehab'ed (HA)	5160	5600	109%
Area in vegetables	960	383	39%
Inland Valley farms rehab'ed	3348	3506	105%
% of HHs able to meet their required seed needs	66%	93.80%	142%
# of drying floors and storage facilities rehab'ed	462	414	90%
Km of farm-to-market roads rehab'ed	427	408	96%
Market facilities rehab'ed	51	19	37%
# weekly markets reestablished	80	49	61%
% of farmer groups with action plans	50%	92%	184%
Value (LE) of resources mobilized by farmer groups	10 m	13.9 m	139%
Ave # of mtgs over last 6 mos of reps from orgs and gov't	5	10	200%
# of houses rebuilt or rehab'ed	4000	4185	105%
# of public structures rehab'ed	54	130	241%
# of vulnerable people provided with VGF	13463	17231	128%

## Objective Two: Percent Achieved

■ % Achieved



## VI. OBSERVED IMPACT RELATIVE TO PROGRAM OBJECTIVES

This report covers the life of the project March 2004 - February, 2007 and shows progress made towards implementation of the project activities that complete the LOA targets of the DRP project. The focus continued to be on achieving increased household access to improved health facilities and increased food production.

### 6.1 Program Objective One

**RURAL FOOD INSECURE HOUSEHOLDS ACHIEVE IMPROVED HEALTH STATUS  
OVER THE 3-YEAR LIFE OF THE DRP**

Under this Program Objective, CORAD implemented activities that contributed to the restoration of the functional relationships between rural populations and basic health services by raising awareness on the availability of health services and facilitating, in some cases, the provision of services at the village through outreach clinics. Complemented by repair and construction activities (under IR 1.4 below), IR 1.1 activities are necessary to restore comprehensive basic health care services that were disrupted by the decade-long civil war.

Activities undertaken during the life of the project aimed at improving the health status of 15,800 food insecure households. CORAD focused on improving access to basic health services to achieve IR 1.1. Other activities included those that targeted beneficiaries with increased knowledge and skills through the maternal and child health (MCH) focused activities; building village-level capacities for effective planning and decision-making on health issues and linking strengthened village-level organizations with the wider governance structure. The extent to which key program outputs and targets have been to produce the anticipated impact (outcomes and effects) under each intermediate result are discussed in the ensuing sections under their specific program objective and intermediate results. These results are based on evaluations, field and on-going monitoring activities.

### 6.2 Intermediate Result 1.1

**Increasing access to comprehensive maternal and child health care**

Given the widespread destruction of health infrastructure during Sierra Leone's civil war, access to basic health services was very poor in rural areas at the beginning of the DRP. Even with the reconstruction of selected health facilities, a large number of communities remained many miles from a peripheral health unit (PHU). Even for those close to a health facility, the availability of health staff was extremely limited and the uptake of services was very low. Furthermore, PHU staff who were tasked with the responsibility to conduct outreach clinics in communities within the surrounding catchment areas lacked the logistical support to do so.

To increase access to critical preventive maternal and child health services and strengthen linkages between community members and PHU staff, CORAD worked with local health authorities to establish community clinic points (CCPs) during the DRP. CCPs are simple outreach posts set up in communities located more than three miles from the nearest PHU, and CORAD equipped the sites with basic furniture

and equipment, provided logistical support, conducted social mobilization, and assisted with growth monitoring and promotion. PHU staff provided immunizations, health education, and antenatal care; while village health workers and traditional birth attendants assisted with the growth monitoring and promotion and ensured high community turnout. During the DRP, some 3,170 consultations for pregnant women and 16,110 consultations for children under five were provided at community clinic points. In the area of operation, a total of 6,129 individuals participated in clinic sessions, representing 117 percent of the planned LOA target of 5,233. A lactating mother in Kornia village commented that the health care provision through outreach clinic in her village has helped reduce the time and energy spent previously to access this service which was several miles away from her home.

The discrepancy between the target and the result is due to two factors. First, MCH Aides, the primary staff at PHUs, were not always available. This was particularly true during the first year of implementation when health staff were still returning to rural posts after the war. When public health staff were not available, either because of absenteeism or a conflicting activity, it was impossible to conduct the CCPs, which require medical personnel. CORAD worked to improve the consistent participation of MCH Aides through meetings with community members, with the MCH Aides themselves, as well as with the District Medical Officer in charge of the personnel in question. These efforts, together with key staff changes at the district level, resulted in a significant improvement in the participation of MCH Aides over the life of the program. By the end of the DRP, virtually all PHU staff in CORAD operational areas were conducting regular CCPs; in fact, over 100 percent of the FY07 target was achieved. Second, the extremely poor road network in rural areas, especially Koinadugu, made it very difficult to reach certain communities during the rainy season. After learning from this experience during the first year of implementation, subsequent targets were lowered during the months of July, August, and September, when rains and flooding are most acute.

Also under this IR, CORAD worked with public health staff to conduct supportive supervision visits, which are a joint endeavor of Health Overseers, CORAD partner health staff and VDHC members. The objective of these visits was to educate communities about maintaining an acceptable level of environmental sanitation and to increase linkages between village and public health authorities. During these visits, CORAD health staff and health overseers followed a checklist to assess environmental sanitation, prevalence of major health problems and any other health concerns or problems that a given village may be experiencing. This checklist includes the following:

- Availability of a protected water source;
- Distance to water source;
- Water treatment;
- Latrines – availability, distance, and maintenance;
- Community refuse management;
- Prevalence of diarrhea, acute respiratory infections, and malaria in the past month; and
- Existence and use of referral system.

During the third year of project implementation, CORAD revised the supervisory checklist form to collect information on whether deliveries are done by trained or untrained TBAs, the outcome of the birth (to capture maternal or infant death), referral and other vital events. This new checklist complemented the DRP-sponsored refresher training for traditional birth attendants (TBAs) and served to promote the monitoring of TBAs. CORAD worked with health overseers to conduct 590 supervisory visits, accomplishing 98 percent of the 600 proposed visits.

CORAD partner CARE enjoyed success with reforming health and nutrition clubs in selected villages that had initially been established under previous projects. Using baseline results and discussions held with line ministries and other organizations CARE worked to identify specifically vulnerable communities within the operational areas that could benefit from the reformation of these clubs. Typical clubs consisted of 20 to 30 members, although many in Koinadugu had initially double this number. In 2005, a toolkit specific to the Sierra Leonean context was created, with 25 topics ranging from health and nutrition to family planning, to malarial control and focused on providing practical information on the control and minimization of the effects of poor practices on rural communities. Practical demonstrations on the construction of compost pits (to improve rubbish disposal) and cloth lines (to reduce flies on clothes) were initiated and within six months, every community with a CHC was showing marked improvements in the health status of its population. The CHC's were also used as a means of introducing exclusive breastfeeding to pregnant and lactating mothers as a means of reducing illness and mortality among children under six months of age. Children who have been exclusively breastfed are clearly healthier and stronger than those who have received supplementary feeding.

The program also selected individual members of the club to receive further training as Village Health Workers. These participants were trained on community based growth promotion as well as raising awareness on the importance and availability of maternal and child health services. Both the members of the health/nutrition clubs and the village health workers received orientations on the availability of services and were trained to be key points of contact in the participating villages for health care services.

### [6.3 Intermediate Result 1.2](#)

#### Increasing understanding and skills related to health and nutrition practices

Throughout the DRP, CORAD health staff, village health workers and TBAs worked together to firmly institute the practice of monthly growth monitoring and promotion. Village Health Workers and TBAs participated actively in these sessions, resulting in a very high degree of community engagement on nutrition issues. CORAD staff, village health workers and TBAs worked together to conduct over weighings for growth monitoring and promotion (GMP) and hearth activities for children under five in all 60 DRP communities. This outstanding achievement is due to the extraordinary level of community participation in this activity, which increased dramatically over the course of the program, in large part due to staff innovation.



Women displaying monitoring charts and pots for food demonstration

Literacy remains very limited in rural Sierra Leone, and it was challenging to develop health education and training materials appropriate for low-literacy village health workers. To help overcome this challenge, CORAD partner CRS developed a color-coded growth monitoring and promotion (GMP) system, which includes the use a color-coded under five card, a color-coded counseling card and a colored bracelet. After the weight of a child is plotted on a colored under five card, it becomes immediately evident under which category the child belongs and what their nutritional status is. For example, if a

child's weight on the card puts them in the red category, this means that the child is severely underweight. The volunteer places a red bracelet on the child's wrist and consults the counseling sheet (the reverse side of the under five card). The red face on the counseling sheet is a sad face. Volunteers have learned in training that red is severe (or "danger"), meaning that caregivers need to take this child to the nearest health facility for assessment, feed this child more frequently and include more foods like fish, beans, and green leaves. For moderately underweight children, the counseling sheet shows an orange, flat-lined face, with corresponding counseling. For normal weight children, the counseling sheet shows a green, happy face, encouraging the caregiver to continue to feed the child in the same way, though with attention to frequency and food quality. Children wear their bracelets at all times as a cue to action for caregivers, and to remind village health volunteers to follow up with the families of children with red or orange bracelets. With the help of the color-coded system, many VHVs and TBAs have developed the skills to correctly assess the nutritional status of children under five and counsel families appropriately, according to the child's bracelet color. Community members have proven enthusiastic to practice these new skills and they have mobilized larger groups to participate, resulting in the over-achievement of this target.

Exclusive breastfeeding (EBF) is an essential nutrition intervention and its practice has markedly increased in DRP communities thanks to concerted behavior change programming. Results from a barrier analysis conducted by CORAD in 2005 showed that women were interested in practicing EBF, and men, grandmothers, and elders were very supportive of the practice. Indeed, women and grandmothers recognized that EBF was the best feeding practice available. There were, however, two major factors preventing women from practicing EBF. First, mothers and infants are generally separated each day as babies are left in the village with a family member while the mothers go to work on their farms. When infants grow hungry, the care-givers often give them warm water or porridge. Second, communities are still struggling to recover from the effects of the war and food insecurity is high: women are often struggling to eat enough calories to sustain themselves and are simply too hungry to breastfeed exclusively.

To help overcome these barriers, CORAD introduced several activities. Exclusive breastfeeding (EBF) support groups were established in May 2006 and began meeting on a monthly basis. CORAD trained EBF support group facilitators, who are responsible for convening EBF support groups in their communities. The training focused on the benefits of exclusive breastfeeding, common problems in breastfeeding and techniques for successful transition to complementary feeding at six months. By the end of the DRP, EBF support groups had been successfully established in ten villages and a total of 237 women had participated.

In another activity to promote exclusive breastfeeding, TBAs were trained and supported to give newborn babies a white beaded necklace at birth. This white necklace symbolizes breast milk and serves as a cue for action to remind mothers and caregivers that newborn babies should be given breast milk exclusively up to six months of age. Once the child has reached six months, the TBA removes the white necklace and replaces it with a blue and white one, symbolizing that the baby can now consume water and other foods in addition to breast milk. Over the course of the DRP, 1,463 TBAs were trained in forming EBF groups and conducting growth promotion weighing (92 percent of the planned target of 1,586).

Finally, to address the issues of distance and access to food for mothers, CORAD piloted baby-friendly farms – plots very close to the village where pregnant women and women with children under three are welcome. Infants may either be kept in a crèche at the farm itself or the women may walk quickly back the village to breastfeed their infants. All women with infants six months and under are encouraged to practice exclusive breastfeeding, and the crops grown are rich in iron and protein such as beans, groundnut, sesame and potato and cassava leaves. These are ideal foods for complementary feeding as

well as nutritious supplements for pregnant and lactating women. By the end of the DRP, thirteen baby friendly farms benefiting 330 women had been established in Kondibu, Batiama, Konia, Gbangeima, Madina, Bombohun and Gborebu in Kailahun, and in Liroh, Funubakura, Foria, Gbenikoro, Kombili and Kerifaia in Koinadugu. The crop yields from these plots enabled mothers to feed their children and themselves nutritious foods as well as to sell small quantities. In some areas where yields were particularly high, women used the proceeds of sales to create a small emergency fund to pay for medical assistance such as malaria treatment for children.

CORAD also participated in the World Food Day event in Koidu during which 63 lactating women, 100 children between 8 and 12 years were educated on the importance of ITNs. On the same day, an HIV/AIDS life skills video show was watched by over 1,000 viewers. Safe sex messages were disseminated and during the show 1,860 condoms were distributed to adults including youths. Similarly, during the FFS graduation and field day held in Kono, 2,880 condoms were distributed during the HIV/AIDS/STI sensitization sessions.

During the DRP, CRS also piloted the Positive Deviance/Hearth Model for the first time in Sierra Leone. PD/Hearth is a methodology for the rehabilitation of malnourished children at community level. The model calls for a profound behavior change that not only remedies existing malnutrition but also helps prevent future cases by changing health-seeking, feeding, caring and hygiene practices at the individual, household and community levels. CORAD sponsored a training on the methodology for CORAD staff by two international consultants in February 2005 and began implementation in April. After conducting a nutritional baseline and positive deviance inquiries, volunteer mother were trained in the PD/Hearth methodology. CORAD also included the village health workers (VHWs) in these trainings to ensure their continuing capacity building in the area of infant and young child feeding. After the training, the first Hearth session was conducted for two weeks, during which malnourished children and their caregivers came together for at least twelve days (of the fourteen). During these sessions, caregivers practiced good hygiene, caring, health-seeking and feeding practices, particularly focusing on the preparation of a special, rehabilitative meal. These sessions were then followed by two weeks at home during which families practiced the new behaviors learned at Hearth. Following this two week home session, caregivers and children returned to participate in another two week, structured Hearth Session. Children were followed for at least six weeks to monitor weight gain and retention. The goal is for children to gain 50 to 100 grams per week, depending on the age of the child.

Children under five who were found to be severely or moderately malnourished (using weight for age standards) were eligible for Hearth sessions, with a special focus on children ages three and under. CORAD staff advised all caretakers of malnourished children to attend clinics to treat any underlying health problems. Looking at the results of CORAD partner CRS, of the 133 participant children available for follow up weighing at six weeks, 90 percent had gained weight, and the average weight gain was 863 grams, somewhat higher than the recommended 600 gram target.

In Koinadugu District, insufficient availability of food prohibited the implementation of PD/Hearth. Multiple nutritional baseline and positive deviance inquiries showed that the Hearth Model was not feasible in these areas due to ongoing, acute food insecurity. Severely wasted (mid-upper arm circumference less than 110 mm) children were identified and referred with their caretakers to the nearest therapeutic feeding center for rehabilitation. CORAD health staff worked with village health workers and TBAs to identify severely wasted children during monthly GMP sessions and increased the intensity of nutritional counseling.

Production or gathering of minor crops such as groundnuts, okra, local leaf vegetables and tubers, has been severely disrupted by the war. Stressing the importance of these sources of micronutrients in health education sessions is important to ensure that households give attention to production of these crops. As a result of nutrition education, there has been a marked increase in the nutritive composition of children's food baskets. In the past many foods high in nutritive value such as fruits would have been left to rot on the trees. Crop diversification and fish cultivation has led to healthier food intake at community level. Thirty communities have also been trained on processing techniques that will allow foodstuffs to be kept for longer periods of time and therefore available throughout the year.

#### [6.4 Intermediate Results 1.3 and 1.4](#)

**Strengthening village development health committees' capacity to address health and nutrition problems/Establishing linkages between village-level organizations and other health sector institutions**

During the DRP, CORAD staff worked to develop the capacity of Village Development Health Committee (VDHC) members. First, committees were either established for the first time or re-established in all of the DRP communities. Generally, each committee had seven members, including two village health workers, two TBAs, a chairperson, vice chairperson, a secretary, treasurer and a financial secretary. Using participatory rural appraisal tools such as social mapping, transect walk, and wealth ranking, CORAD assisted VDHCs in all DRP villages to develop basic community action plans. Some 5,209 VDHC members participated in training on community health issues such as diarrhea prevention and management, community hygiene and sanitation, malaria prevention and management and early referral. CORAD also trained all VDHC members in basic project management, including resource mobilization, to aide them in implementing community action plans.

In a first step toward strengthening linkages between VDHCs and health sector institutions, an initial assessment was conducted that revealed there were virtually no existing relationships or mechanisms for discussing health concerns. Distances between the District Headquarter towns and DRP communities are significant, and the DHMTs have limited logistical support and many demands on their time. Offers by CORAD to conduct joint supervision visits to minimize logistical constraints were well received initially but rarely accepted. DHMT personnel in fact seemed reluctant to work with village-level organizations. Additional complications included the illegal charging for services by many PHU staff. Efforts by CORAD to affect this situation included participating in monthly DHMT meetings, convening several meetings with DHMT staff to address these issues and in some cases bringing the issues to the attention of the Ministry of Health and Sanitation.

Given the difficulty in arranging direct interaction between the DHMT and village-level committees, CORAD worked with VDHCs to strengthen local relationships. Meetings were held that generally involved VDHC members and health overseers or MCH Aides. Such encounters served as a forum for VDHC members to discuss health issues in the community and propose ideas for improving health status. During the life of the DRP, CORAD exceeded its target by facilitating an average of 78.6 meetings over a six month period with Village Development Health Committee (VDHC) members. This represents 102 percent of the LOA target. During the phase out of the DRP, extra meetings were held to work on community action plans, resulting in the target being exceeded.

CORAD assisted all Village Development Health Committees to develop community action plans that will guide their work over the next year. VDHC members clarified which interventions were most useful and developed strategies to sustain them beyond the DRP.

One of the main visible outputs of this approach has been the strengthening of woman's involvement in the whole process of decision-making. Prior to CORAD's intervention, women were placed in an inferior role, usually not contributing to discussions or agreements. Trainings and discussions on representation, inclusion and human rights have reversed this situation in many of our communities. While women clearly still have problems to integrate themselves fully into the decision-making process, their participation at these meetings has led to some substantial gains being made in their overall status. This can be seen in meetings where women now openly challenge opinions and advice proposed by men.

In addition, linkages established early on between community health clubs and governmental institutions have been strengthened over the past three years with MOH representatives making joint visits with CORAD to the operational communities. This has been facilitated mainly through the provision of logistical support.

## 6.5 Program Objective Two

### **RURAL FOOD INSECURE HOUSEHOLDS HAVE IMPROVED SUPPLY AND ACCESS TO FOOD OVER THE 3-YEAR LIFE OF THE DRP**

The DRP agricultural objectives focused on activities that improve access to food and availability to food for food insecure households over a 3-year period through increased agricultural production. To achieve this objective, CORAD implemented activities that restored agricultural production (IR 2.1); rehabilitated post harvest facilities (stores and drying floors) to reduce pre and post harvest losses (IR 2.2); rehabilitated market infrastructure and restored market linkages (IR 2.3); built village level capacities for effective planning and decision making associated with agricultural issues and opportunities (IR 2.4); link strengthened community organizations and organizations that serve them with the wider governance structure (IR 2.5); and support immediate food and physical infrastructure rebuilding needs for vulnerable households (IR 2.6).

## 6.6 Intermediate Result 2.1

### **Production resorted on inland valley low land rice farms, tree farms, or upland farms for households through restoration of seed stocks and rehabilitation of field infrastructure**

The destruction to infrastructure resulting from the war still impacts a good proportion of the farming communities in the CORAD operational chiefdom. Extensive productive lands (food and tree crop lands) were abandoned during the carnage and one of the objectives of the DRP is to bring back into production these lands thereby stabilizing these food insecure household and then increase their productive capacity to make them sustainable households. Tree crop plantations (coffee, cocoa, oil palm) and other arable lands that were abandoned such as inland valley swamps were targeted for rehabilitation. Rehabilitation of inland valley swamps involved repairing of bonds (head and internal), main drains, and peripheral canals. All beneficiary farmers received training on improved agronomic and farm management practices including effective pre and post harvest handling practices.

During the DRP, CORAD strove to increase productivity in food insecure household introduced the NERICA (New Rice for Africa) varieties. Over 50 percent of the FFS established used Nerica in the experiments to compare yield and production characteristics with the traditional farmers' variety in the various communities. A farm for staff trainers was established to provide staff and farmers a performance benchmark for yield and other productivity characteristics. Production results influenced farmers in the multiplication of the Nerica seeds for distribution to other FFS.



The area brought into vegetable production was a major issue in the first two years of the project because unrealistic LOA targets were set for this activity. Commercial vegetables are cultivated in only 2 out of the 30 DRP focal Chiefdoms. LOA targets were set on the assumption that the DRP could increase the scale of commercial vegetable operations in the 2 Chiefdoms of Koinadugu (CARE Operational District)

and stimulate the adoption and production levels in the other focal DRP Chiefdoms. Most importantly, commercial vegetable production is not a major production activity in Kono District because of the distance from the market and the weak input and output markets. The LOA targets for this activity were converted to food crop equivalent after a decision was arrived at by the CORAD Steering Committee.

CORAD also addressed seed stock restoration through direct distribution of input packages, including improved planting materials of IVS rice, groundnuts, palm oil, garden vegetables and others. CORAD also distributed seed and tool start-up kits to FFS subgroups (consisting of FFS graduates), as incentives to continue their own FFS back in their communities, as well as to contact farmers (consisting of FFS graduates trained to lead new groups) to compensate for the time invested in training other farmers and finally, to vulnerable families in communities with very high infant malnutrition rates or stricken by fire disasters. The tool kits distributed included a shovel, cutlass, hoe, garden line and metric tape (contact farmers only). In total some 894 start-up kits were distributed.

In the first year of the project in recognition of the fact that material inputs were low, CORAD undertook food for agriculture activities in order to protect valuable seed stocks from consumption. In subsequent years, CARE implemented a number of different activities including food for work and the provision of planting materials and tools to help support increased production.

CORAD facilitated the construction of ten fishponds during the last three years. These were constructed on abandoned inland valley swamps and have had a very positive impact on nutrition availability with the participating communities. Fish produced have been used for nutritive and income purposes thus improving the assets available at community level. Several communities have used monies generated from this activity for the procurement of industrial materials for the construction of drying floors.

According to the DRP Final Evaluation, 17,140 HA were brought back into the production of rice, cassava, ground nuts, vegetables, coffee, cacao, and oil palm—107 percent of the LOA target. CORAD achieved 108 percent of the LOA target for the area (in HA) planted in groundnuts, cassava, and other crops (7,021 HA total). A total of 93.8 percent of households were able to meet their required seed needs, which represents 142 percent of their LOA target.

## [6.7 Intermediate Result 2.2](#)

### Community managed storage, drying and processing facilities rehabilitated in villages

There is a lack of scientific drying of both food and export crops in the operational communities and storage facilities – private or community managed are meager or lacking. Post harvest losses of 30 percent or more are associated with poor handling of crops after harvest and the lack of proper and adequate storage. In addition, product quantity deteriorates due to insect infestations and rodent pests as well as through contamination because of poor drying or processing.

The action under this IR was to rehabilitate and construct drying floors and stores to enhance value-addition rationalizing that social benefit will accrue in terms of



Newly constructed drying floor in Jong chiefdom

lessened post-harvest losses, better grain quality and self-sufficiency in the staple the targeted crops. In this regard CORAD focused on making the production and field harvest and post-harvest operations of threshing, handling and transport more efficient through the provision of better drying and storage infrastructures.

In some cases, storage facilities were not rehabilitated as hardware such as corrugated iron sheets and nails were not budgeted for in the technical document. This activity was designed on assumption that recipient communities will contribute all the necessary inputs for rehabilitation (including locally available materials and imported materials e.g., cement, CI sheets and nails). However, there was no budget line to support the action and as it turned out the communities just resettling after the war could not provide the imported inputs. During the last quarter of FY 2006, USAID/FFP approved a budget realignment that allowed for the use of monetization proceeds to purchase these materials. However, given the lateness in the project period, compounded by the prolonged rainy season, it was not possible to fully achieve the original targets. Furthermore, because there were low food stocks at the time of the budget realignment approval, CORAD decided to proceed with a final construction phase without including the provision of FFW. It was agreed with the selected communities that they would provide the necessary unskilled labor.

Trials conducted at Farmer Field Schools have further helped reduce pre and post harvest losses. Techniques have included better agronomic practices leading to better handling and the use of local varieties of crops and decoys to confuse pests. Farmers have also been able to learn the difference between harmful and beneficial insects and this information has been used to ensure their farms attract beneficial pests rather than harmful ones.

CORAD maintains cooperation linkages with national research institutions with regard to the use of improved technologies for preservation and processing. Training events were held for staff and project participants in post harvest losses, yield measurement and the use of intermediate technologies for drying and processing. The training included practical demonstrations and field trials of manual rice threshers, groundnut decorticators and oil palm processors. The use of improved indigenous technologies was also promoted, such as common botanicals (neem tree) and other materials (wood ash, paddy husk ash) for rice seed protection during storage.

Problems associated with rat infestations have been partially reduced as a result of trainings conducted on the manufacture of simple, cheap traps by blacksmiths. However despite this and other traditional methods used, this remains a significant problem.

Damage caused in particular to cassava farms by insects has been very noticeable particularly in Tonkolili over the past three years. This has resulted in a substantial loss of green leaves for vegetables as well as a reduction in the size of the root tuber, thereby affecting productivity. CORAD has helped effect a change in policy on the use of pesticides to combat infestations of insects particularly the grasshopper *Zonocerus variegatus*. In February 2006, CORAD established contact with the International Institute of Tropical Agriculture in Benin on the use of alternative and more effective control mechanisms for this pest. This resulted in a consultant visiting Sierra Leone during May 2006 and establishing trials on the use of Green Muscle (a fungus developed specifically for the control of this pest). This visit was conducted in collaboration with the Ministry of Agriculture in Freetown and Tonkolili District. In late May 2005, demonstrations on the effective use of Green Muscle were conducted. Due to Green Muscle being specific to one pest, having to be applied only one time on infected crops, as well as the low costs involved, the Ministry of Agriculture has decided to import this control mechanism, thereby reducing its dependency on other more environmentally toxic substitutes previously imported.

## 6.8 Intermediate Result 2.3

Access to local markets established through rehabilitation of roads and infrastructure in villages

Information gathered prior to the commencement of the DRP painted a bleak picture. Because the levels of production had declined so severely in the geographic areas in which the DRP was to be implemented, the marketing systems that used to exist to provide opportunities for commercial exchange had virtually disappeared. Farm to market roads had not been maintained and were even impassable in some areas because culverts and bridges had been washed out. Other market infrastructure had also disappeared. In the past, every village had access to one or more weekly markets where agricultural surplus could be sold, but on commencement of DRP operations, none of these markets were functioning.



View of market complex in Mattru

The DRP undertook a number of activities relating to the restoration of market systems. This included the rehabilitation of farm to market roads and the construction of markets geared to enhancing the market chain activities such as product bulking and transportation. Food-for-work was used to rebuild 435 km of strategic farm-to-market roads. Communities in consultation with the district council who draw up annual work plans identified these roads. Rehabilitation work on these roads included brushing, filling of pot-holes, drainage construction and trimming tree branches. These rehabilitated roads have greatly facilitated transportation of surplus commodities to markets and have led to tangible benefits being felt by community members. This action also improves the marketing links between traders and rural marketing groups through periodic agricultural fairs. In one example from Sengbeh Chiefdom, community members spoke of receiving three times the usual amount for 50kg bags of citrus as a result of their community being accessible to vehicles.

The project facilitated the re-establishment of 49 weekly markets and 19 permanent markets through dissemination of information on these markets. Through participatory meetings, CORAD identified inaccessible areas producing a surplus of cassava and other crops. These markets have provided a valuable outlay site for the procurement and sale of materials (both agricultural and non-agricultural). Booths constructed in these markets provide valuable income for trading community members and the council has benefited through the collection of taxes from operating traders. Many of these markets are now attracting vendors from as far away as Freetown who regularly trade with local farmers. While this may not have in all cases resulted in higher prices being offered to rural communities it has significantly reduced the amount of spoilage farmers faced in the past.

## 6.9 Intermediate Result 2.4

The capacities of participants and community-based groups strengthened to enable them to address agricultural problems and capitalize on agricultural opportunities

Capitalizing on the successes of the FFS implementation CORAD was able to build the capacities of these FFS groups for sustainable agricultural production and enterprise development. These groups meet on a regular basis – twice weekly for capacity building and development of action plans. FFS meetings are geared towards the development of innovative solutions to the groups' agricultural problems which are identified in a systematic manner using participatory methods. Experiments are then designed to address the identified problems. This has resulted in increased commercial cultivation of crops of economic importance, bringing additional income for group members. FFS groups embarked on the cultivation of large acreages of cassava to improve household food security in their various communities and others embarked on rice cultivation. As a result of the project, 70 percent of these groups have formed clusters, combining the efforts of two or three FFS groups to develop collective agro-enterprise projects. Due to distances and road conditions, other groups have remained single entities, but often have brought in additional members from their own communities to achieve economies of scale. All of these FFS groups or clusters in both districts have prepared by-laws and have working executive bodies with clearly defined responsibilities.

Some of the FFS graduates currently facilitate farmer-led groups. These contact farmers have received a two-week intensive training in the development of IVS and now act as community motivators, helping to identify agricultural problems and their solutions at the local level. A small incentives package (described under IR 2.1) was developed to compensate for their time and efforts.

CORAD staff conducted regular follow-up visits to determine agricultural yields and to assess how proceeds were shared. The average value of resources mobilized by FFS groups is estimated at Le 13.9 million and represents 139 percent of the LOA target. Although farmer groups have been able to mobilize some resources, the target for this indicator may have been set too high for farmer groups that are just returning to normality and are still coping with restoring basic needs of food, shelter and health.



The introduction of exchange visits at chiefdom and district levels has been quite successful in many ways. For example, it allowed for the exchange of ideas and sharing of knowledge among the farmer facilitators, and gave them more confidence in their efforts. In addition, the visits served to strengthen their morale and enthusiasm for their work.

## 6.10 Intermediate Result 2.5

Linkages established between village-level organizations and other agricultural sector institutions to support effective governance and promote social cohesion

During the program period an average of slightly less than two (1.67) meetings per month were held between Farmer Field School groups and other agricultural sector institutions, especially government authorities at the village, chiefdom and district levels. One such meeting facilitated by the MAFS was geared towards improving cocoa and coffee production. In another, the Eastern Farmers Multi Purpose Corporative Union encouraged tree crop (cocoa and coffee) farmers in Kono district to join their cooperative to improve produce marketing. Other meetings included those with the VDC and the MOHS to discuss health related issues. Meeting of the market cluster in Sogbini, Bonthe marked a turning point for the group as they held discussions with the community bank to explore the possibility of securing a Le8 million loan facility to enhance production activities and provide credit for the membership. The implementation of these meetings strengthened linkages between decision makers at the chiefdom and district headquarters and the beneficiary communities.

CORAD has worked to develop functional linkages with decision-makers who are responsible for allocating resources and solving problems, such as MAFS, the local council and the village development committee. It also involved other decision-makers working elsewhere but whose decisions impacted the village, including the chiefdom leadership structure and the government departments in the chiefdom and district headquarters. The program facilitated the development of effective working relationships between these decision-makers and representatives of the farmers groups working in the DRP. Meetings were facilitated between the district agricultural office and the field.

Other collaborative efforts engaged community members with MAFS and the Kono District in planning and celebrating the World Food Day. The show was attended by dignitaries from the government and the UN system, private sector participants, and farmers from other districts. This provided farmers the opportunity to interact with key stakeholders in agriculture from both the public and private sector that attended the event.

In addition to these meetings, CORAD took advantage of special project events, such as the opening sessions of contact farmers' refresher training in Massao (Peje West Chiefdom in Kailahun District), or the launching ceremony of the FFS chiefdom network in Alkalia (Neini chiefdom in Koinaigu District) to inform and sensitize Section Chiefs, Local Councils and other opinion leaders about the work of the FFS groups. As a result, relationships were further strengthened between these groups and local authorities at Chiefdom and District levels.

To internalise transparency and accountability, material management committees for market construction were established and training conducted on tracking and managing resources (industrial materials). These committees are a sub-group of the VDC and ensured that materials received from the project were accompanied with relevant documents. They also ensured that materials released to the construction technicians were appropriately tracked on a daily basis and judiciously used solely for these construction activities. VDCs were linked up with the district council representatives for their community to ensure transparent and fair decision-making on land ownership and legal transfers.

## 6.11 Intermediate Result 2.6

Immediate food and physical infrastructure rebuilding needs of 4,560 vulnerable households  
(27,360 people) are addressed

Farm families, particularly those returning to re-establish their farms with few assets, remain highly vulnerable to stress on and shocks to their livelihoods from unexpected events, such as storms, fires, wind, floods, and so on. The most vulnerable of these, such as orphans, the disabled and the infirm, need basic support just to be able to survive. The GoSL has not yet established formal safety net programs. For this reason, the DRP provided safety net food distributions and material assistance to vulnerable individuals during the last three years.

Strengthening the community safety net was a key activity to support highly vulnerable households with few or no assets. This support ensured access to water and sanitation facilities. CORAD focused on the rehabilitation of shelters and public structures such as latrines and wells. During the DRP, 4,185 houses were rehabilitated (105 percent of the LOA target). Support to natural disasters victims (fires) was provided to enable victims recover and restore their productive capacity again.

Additionally, targeted communities were able to build and/or rehabilitate a total of 130 public structures using FFW. This represents 241 percent the LOA target and is the result of an effort to increase access to health, potable water and sanitation facilities in vulnerable communities with extremely poor access.

Finally, a total of 17,254 individuals classified as highly vulnerable were supported with VGF monthly rations consisting of 12 kg of bulgur, 0.96 kg of oil, and 3.3 kg of lentils. These cases included family members identified by health staff as particularly vulnerable, for example families of severely malnourished children, and also the victims of disasters, such as fires.

However while the presence of a safety net has for the most part been beneficial to those targeted, it has in some cases also had some negative effects. Specifically targeted community members often felt that due to the low amount of food distributed under VGF, the community perceived them as receiving special treatment from CORAD and subsequently tended to exclude them from certain activities. This resulted in disharmony being created in some instances. For this reason, under LEAD, individuals will no longer be targeted but instead emphasis will be placed on the identification of households with vulnerable populations within. This and the emphasis on the development of community safety nets should provide a more sustainable approach leading to better community involvement, harmony and overall unity.

## VII. LESSONS LEARNED DURING THE REPORTING PERIOD

### 7.1 What is working

CORAD found that the decentralized nature of the public health delivery system in Sierra Leone necessitated close collaboration at multiple levels. COARD shared monthly reports with the District Health Management Teams and participated in monthly health sector meetings at the district level. At the national level, CORAD prepared monthly updates on health activities and participated in national Health Task Force meetings, National Nutrition Coordination meetings and various other public health coordination meetings and national campaigns. Such close coordination helped ensure that DRP health activities were always implemented in accordance with MoHS policy and also afforded CORAD the opportunity to participate in key public health policy review and planning.

While CORAD partner CRS had very promising results in piloting the Hearth Model in Sierra Leone, there were some important limitations in terms of sustaining and bringing the model to scale. First, the time required of the volunteer mothers is significant, approximately three hours per day. Given the very heavy workload of women in rural Sierra Leonean villages, it will be necessary to develop a rotational system or another mechanism to ensure that Hearth responsibilities do not become burdensome for volunteer mothers. Second, the extremely high burden of malaria and other childhood illnesses and the poor access to affordable treatment mean that many Hearth participant children are battling active illness during Hearth sessions. Concurrent illness limits the impact of the methodology. Promoting home management of illnesses, especially malaria, would facilitate the nutritional rehabilitation of these children.

Information dissemination through community health clubs was extremely successful and has led to significant improvement in the health status of women and children at community level. The participatory approach taken by the CHC was one of the contributing factors of this. In addition, tangible benefits could be observed and demonstrated early on in the CHC. This was important for community members, as CORAD provided no incentives for participating in this club. Some of these benefits have included more comprehensive knowledge by participating communities on basic health and nutritive practices.

DRP has been supporting the FFS after completion of agricultural learning cycles in order to promote the creation of opportunities for agro-enterprise development. Seed distributions are contributing to food security, as communities are able to use multiplication sites. On the other hand, FFS interactions have positive impact on community participation in answering their own field problems as far as crop cultivation is concern.

Production restoration efforts have improved food and seed security in CORAD intervention areas. Both the restoration of community-owned production assets and the shift from direct seed distributions to the creation of multiplication and dissemination sites of improved varieties have facilitated a return to self-sufficiency.

The transfer of funds for the provision of funds for construction materials worked very well in the last six months of the project and greatly facilitated the achievement of targets relating to permanent market construction and drying floors.

All of the activities that involved an income generation component proved to be very successful in the internal development of the community. Trainings and material distribution for the blacksmith and *gari*-processing activities have resulted in an injection of cash into the local economies.

Specific activities undertaken in Tonkolili have provided significant benefits to participating communities such as income generated through community farms and fishponds that have then been used to procure industrial materials and fish for more ponds. However these benefits have not been felt as positively in other districts where the inability initially to access high amounts of revenue as a result of poor markets led to an unequal distribution of assets, with participating communities in Koinadugu, for example, being unable to access cash for the procurement of industrial materials.

Social change is also observed in the increased levels of community participation and contributions in infrastructure rehabilitation projects. Proper sensitization and mobilization have prompted the rehabilitation and construction of community assets with decreased levels of external support.

Participation by women in all project activities continues to increase and they have become more vocal in meetings, particularly those relating to internal development processes. In the past many women would have been excluded from decision-making processes, their opinions ignored or derided. While women continue to be marginalized in communities, more women are now being integrated into the process.

## 7.2 What is not working

With regard to less successful strategies or difficulties encountered during implementation, the widespread, endemic corruption that plagues all levels of Sierra Leonean society presented several challenges to program efficacy. Despite repeated, coordinated attempts to ensure access to free services for children under five and pregnant women, government public health staff continue in many cases to charge for services mandated free by law, particularly under five cards and immunizations. In some cases the fees for services are prohibitively high, preventing many DRP community residents from accessing care, even when a patient's condition is critical. These fees are a significant barrier to accessing treatment for malnutrition, malaria, respiratory infections, diarrhea and obstetric emergencies. This issue has been widely acknowledged by the Ministry of Health and Sanitation and is not unique to Sierra Leone. On the positive side, CORAD was able to reduce charges in operational areas through ongoing advocacy and careful follow up.

Finally, due to the limited human resources and logistical capacity of the district health management teams, there is little direct contact with communities. The ongoing decentralization process seems to have complicated matters, and this lack of clarity in local governance structure, combined with the formal health sector's continuing low regard for community institutions, has made it very difficult for VDHCs to establish meaningful linkages with the DHMTs. It is widely hoped that the ongoing decentralization process will ultimately introduce some level of local accountability for health care services for rural communities, but it is clear that this process will require a longer timeline than that of the DRP.

The low levels of market functionality in most DRP villages still hinder the required economic growth necessary to sustain increased productivity. CORAD is making efforts to link producers to local traders and buyers at the local or district levels to compensate for the lack of weekly markets.

It has proved difficult for many communities to access certain local materials such as sand throughout the year. This puts an unfair advantage to communities close to rivers and penalizes other communities that are willing to work but unable to access the necessary raw materials.

Problems still exist with the CBGP volunteers. Despite having received extensive training on record keeping, weights of children are still often being recorded inaccurately. This has necessitated the presence

of PHU or project staff during their recording. During the reporting period, PHU staff were largely absent from their bases due to internal trainings. This has led to difficulties in verifying some of the information received from the field.

The provision of food as a resource was a motivating factor behind community participation in project activities. Where food support is lacking or limited, participation is often limited. It is therefore clear that while CORAD has been successful in motivating communities to undertake development activities, the use of food and the means of sensitizing communities will need to be examined as the present system is not always sustainable.

While Farmer Field Schools have been successful in integrating farmers and providing support networks for the exchange of information, it has frequently been observed that farmers are often reluctant to adopt practices demonstrated at these schools. Of the reasons behind this could be that these practices are often very labour intensive and don't take into account the limited labour available to farmers when farming their individual plots. In addition, there has been a tendency for some Farmer Field Schools to be organisationally driven rather than farmer driven, thus resulting in impractical solutions being developed to address problems being experienced by farmers.

### 7.3 Outstanding Successes and Publicity for Successes

CORAD implemented several nutrition interventions in addition to growth monitoring and promotion (GMP). GMP alone has not proved very effective in improving the nutrition status of children under five in Sierra Leone. However, GMP provides an important entry point for more intensive and creative nutrition interventions such as the Hearth Model, baby-friendly farms, and exclusive breastfeeding support groups. These interventions generated substantial results and sustainable improvements in the nutritional status of children in DRP villages.

In addition, community clinic points (CCPs) and supportive supervision visits established a linkage between peripheral health units (PHU) and the communities they serve. The ongoing, consistent contact between PHU staff and community members, especially TBAs, has resulted in the development of more positive relationships. CCPs also provided a valuable outreach network for special activities as well as routine sessions. For example, during the National Micronutrient Week, CCPs were used as distribution points to ensure that targeted beneficiaries received services. The ongoing sensitization on the right to free health services and the presence of CORAD partner staff helped reduce illegal charging, enabling more people to access critical health services.

Community Health Clubs remain consistently the component with the highest rates of success. Part of this success has been as a result of the broad range of topics covered by the toolkit but also the relevance of these to the rural communities. The participatory nature of the toolkit also allows beneficiaries to become involved in the process and promotes the taking of ownership by them through engagement and development of songs, practical demonstrations and discussions. The success of the CHC implementation strategy has also been adopted by a number of other organisations, and this method is recognised by the MOH as being an effective and participatory means of sensitising large sections of the population on general health issues.

All communities participating in CHC's received a certificate on completion of the module. These were presented during a formal ceremony attended by representatives from council, line ministries and other organizations. Positive deviant mothers identified through community health club participation were also awarded certificates.

The creation of agro-enterprises with the FFS groups and clusters has registered a high level of local interest and participation. Availability of agro-processing technologies in the farmer field school groups create opportunities for the rural food insecure to have improved supply and access to food and income. Cassava, oil palm and groundnut processing alternatives, together with better skills and increased access to drying facilities, are prompting a decrease in post harvest losses.

In general, the FFS methodology encouraged farmers to conduct trials by themselves using the existing knowledge systems in beneficiary communities. In one case, two new varieties of cassava were introduced to the Wusikongor community from another community for testing on their own cassava farms and compared with their existing varieties. Outcome of the trials were convincing enough as yield and performance results were better than the varieties that are typically in use, and this group went on to cultivate 50 acres of cassava using varieties from their trails. Results from such experiments resulted in the adoption of two cassava varieties tested by farmers all based on their own judgment of the performance of the varieties and the planting method. The community has positioned itself to supply Koidu town with fresh cassava and *gari*.

CORAD has shared the promising results of its nutrition interventions with other non-governmental and government personnel at National Nutrition Coordination Meetings. In addition, CORAD partner CRS presented its nutrition activities at the National Nutrition Symposium conducted in January 2007, which was widely attended by government, non-governmental, and UN agencies. Other successes have been promoted through local media outlets, and regular reports to USAID/FFP.

#### 7.4 Least Successful Elements

It has proved difficult over the last three years to collect accurate data from the MOH in both Koinadugu and Tonkolili Districts. This coupled with working with the MOH to deliver certain outputs has proved to be challenging as a result of the often-difficult relationship between CORAD and the MOH in Tonkolili. This has partially been precipitated by no common standardization of per diem rates paid by CORAD members for facilitation and coordination fees to the ministry. Tools initially designed by CORAD for the collection of information proved cumbersome and were quickly abandoned by many organizations in favor of simpler methods of collection.

One of the trainings for Village Development Health Committee members focused on project cycle management and resource mobilization. The content was poorly understood as these topics were quite abstract and not very relevant given the extremely poor environment and minimal formal education level of participants.

The increase in vegetable production was extremely difficult due to the unfavorable agro-ecological conditions in many operational areas, as well as the inadequate availability of labor, inputs and transportation which limit the feasibility and viability of large-scale commercial vegetable production. In addition, road access to certain intervention areas was restricted nearly half of the year, making transport of building materials and commodities problematic.

The component that has been most challenging in Kono district was with the market construction. Communities are constrained by transportation. Moving local materials from the point of collection to the construction sites due to lack of transport to move the materials. It has been an uphill task convincing project participants to head load materials about 5 kilometers to the construction sites. The road condition

is so bad that private sector transporters are not willing to offer their service to communities along impassable roads.

There have relatively been some lapses in the rehabilitation of community-managed structures, grain stores and market stalls. This was caused by a delay in procurement of construction materials and tools. Tools improvised by community participants were both inadequate and insufficient to undertake the targeted work. This issue has been resolved and the fast tracking of activities is in progress.

### 7.5 Other Lessons Learned

As mentioned previously, the barrier analysis that CORAD partner CRS conducted showed that one of the main reasons women do not exclusively breastfeed in Sierra Leone is that it is not practical—women need to walk long distances to their farms and it is difficult to take their infants with them. The baby-friendly farms, on a pilot basis, appear to be achieving their intended purpose: women are able to bring their babies with them or walk quickly back to their homes, thus facilitating exclusive breastfeeding. Moreover, women are learning to keep some of their crops to be used to improve the nutritional status of their families, as opposed to selling all as has been done in past.

With the scarcity of diamonds nowadays in the Kono district, life has become difficult as inflation in the prices of basic commodities is on the increase, thus leading to high cost of living for the farmers.

The establishment of FFS groups should include one or two villages per group. Further organizational processes are hampered when participants are from many communities, for example: the decision making processes risk becoming closed, and cooperation is more difficult.

Given the current post-resettlement situation, the use of FFS groups as the basis for agro-enterprise development seems to require as long as one to two years to develop the kind of cohesiveness necessary to allow the groups to function successfully as collective units. Furthermore, development interventions of this type must emphasize organizational development.

The use of contact farmers as trainers has a high acceptance rate in participating communities. Contact farmers have proven very able to conduct farmer field school sessions, and this local component has contributed both to groups obtaining political recognition, and more efficient delivery of the extension messages.

The use of dry ration payments of FFW has proven more effective than wet ration. Communities have adapted to the use of a dry ration payment and this has contributed to more effective food programming in general.

The current national Country Food Agreement (CFA) FFW norms do not necessarily reflect the labor requirements for the different types of activities. Project participants have expressed concern over the limitations of the food payments involved, especially for agricultural restoration works. In the future it will be important to review and revise these norms.

One of the main issues of contention continues to be the rate of per diem to be paid to collaborating partners. In the example of CORAD partner CARE, there is a discrepancy between what is paid in Koinadugu and what is acceptable in Tonkolili. This has proved a hindrance to trainings planned in Tonkolili District between community members and the MOH. While CORAD has been active in trying to negotiate with the MOH and has reached a consensus with other NGOs on the rate of per diem to be

paid, this problem highlights the need to approach some of these problems at a higher level, namely in Freetown, particularly as under LEAD health interventions will increase in Tonkolili District.

## VIII. ENVIRONMENTAL MONITORING

DRP has had a strong emphasis on environmental monitoring over the past three years. During the development of tools relating to environmental compliance, the Monitoring and Evaluation Team examined the potentially negative environmental impacts of undertaking some of the food for work activities. Some training was provided to staff on limiting negative environmental impacts.

### 8.1 Rehabilitation of Key Wells/Water Points and Sanitary Pit Latrines (FFW)

In construction, recipients have contributed local materials such as sand, stones and bush posts. Participants were sensitized to avoid digging pits that would hold water and hence breed mosquitoes or cause accidents. The sensitization included the preservation of protected trees and to remove only necessary vegetations.

The minimum distance between wells and potential sources of water contamination such as latrines, cemeteries, roads, animal installations was strictly observed. Water analysis was performed before the commissioning of the water point and also six months later. This was done in collaboration with Water and Sanitation Department of the Ministry of Health and Sanitation. Considering that human beings are the most important element of environment, special attention is given to social and culture aspects of the communities by involving the Village Development Committees on planning, construction and operation of water points and sanitary pits. A Water and Sanitation subcommittee was therefore created under VDC.

### 8.2 Using FFW to Support Additional labor for Vulnerable HH (Clearing Rice Fields and Tree Crop Plantations)

For the tree crop rehabilitation, the staff had sensitized farmers to ensure that unnecessary tree cutting is avoided and that protected trees are preserved. However, some overgrown and barren tree crops (coffee and cocoa) were cut down and replaced by seedlings.

Field staff were made aware of elements with potential negative effect under this activity, such as removal of trees of endangered species, removal of vegetation on steep slopes, use of pesticides, etc. Farmers were trained in integrated pest management, contour planting and soil conservation techniques.

In a specific case all bush sticks were cut from pioneer tree species such as *Compretum spp.* In a couple of cases, the tree *Gmelina arborea*, was also used to provide sticks. This is an exotic tree species found throughout Sierra Leone.

The wood used for *gari* processing comes from typical firewood species. Due to the nature of the roasting trays and the necessity of having a very hot fire, charcoal is not and will not be used in the production of *gari*.

No large trees were cut during IVS rehabilitation activities. The clearing of canals and the stabilization of bunds were carried out without the removal of large amounts of soil or tree species. Blocked canals were cleared of weeds and small bushes only. Where swamps border fishponds, CORAD promoted the planting of multi-purpose trees such as *Moringa oleifera*. This tree which will be coppiced on a regular basis for fish food will provide additional benefits to the community and surrounding ecosystem, including animal forage, green manure from the leaves, honey clarifier, rope making from the bark and foliar nutrients, which are capable of increasing crop yields by up to 30%. This tree will also provide shade and help to bind soil particles together, thus reducing the dangers of soil erosion in the surrounding areas. The

original planted trees have not done well perhaps as a result of extensive rains (they are more commonly found in drier areas of Africa and the Middle East).

### [8.3 Rehabilitation of Lowland Rice Fields](#)

In addition to restoring agricultural production, the program also promoted sustainable approach to farming. Farmers were trained on proper techniques related to environmental protection and sound natural resource management, in terms of biosphere protection, soil and water conservation. The natural resources management component included the Ministry of Agriculture and Food Security – Land and Water Division. From the beginning, an Engineer from Land and Water Division was involved as facilitator for Training of Trained for IVL development to incorporate sustainable approaches on agro-ecology.

A sensitization session on water diseases prevention (Schistosomias, a very common water disease among farmers participating in swamp rice production in Kailahun district) was conducted in the Training Workshop on “In valley Lowland Rehabilitation and Cultivation”.

Special attention is given to the drainage works in order to minimize soil losses from erosion. Focus includes water control measures to minimize risks of iron toxicity during cultivation.

### [8.4 Promotion of Vegetable and Seed Germplasm Gardens](#)

Extension Agents ensured that Women’s Groups promoting vegetable cultivations (gardens) preserved protected trees and removed only necessary vegetation. In the event of burning the dry bush after brushing, staff ensured that the fire is guarded or supervised so that it is confined to the field only. Staff also supervised farmers in the layout of plots so as to keep abreast with soil erosion mitigation measures.

Beneficiaries and agriculture field agents were made aware of environmental and health related costs associated with the misuse of chemicals in vegetable garden production. Use of pesticides was not a part of project activities.

### [8.5 Distribution of Farm Tools Directly & Supporting Local Artisans to Fabricate Tools](#)

Farm tools distributed were bought directly from shop vendors and there is no direct impact for the environment. DRP supported the fabrication of locally made tools on a small scale; the use of recycled metal has been promoted and considered as a positive impact.

### [8.6 Rehabilitation of Crop Drying Floors](#)

All drying floors were rehabilitated using procured industrial materials. Communities collected sand and gravel from nearby riverbeds. However this was done in collaboration with DRP field agents to ensure that full donor compliance was adhered to. Ministry of Agriculture Extension Agents provided additional technical assistance.

CORAD staff monitored removal of any vegetation, sand, earth or stones that could have created open pits to avoid potential sources of stagnant water. These issues were discussed with participant communities and potential solutions were agreed to. CORAD is also working with Njala University to identify indigenous, environmentally friendly drying technologies.

### [8.7 Training in Grain Bin Construction to Improve Crop Storage and IPM Measures to Protect Against Pests](#)

Use of IPM control was recommended in the case of locust damage. Staff participated in the workshop on Integrated Pest Management and use of the bio-pesticide Green Muscle. Mechanical and biological control measures have proved effective, and the use of pesticides is minimal. Some experience is being developed with use of botanicals (neem tree) and other inorganic materials (ash, sand).

### 8.8 Using FFW to Rehabilitate Feeder Roads to Open Market Routes

All roads were approved prior to any work commencing. All of these were roads that had once been operational but as a result of the war had fallen into disuse. The rehabilitation exercise is taking into consideration appropriate mitigation measures ensuring that unnecessary vegetation is not removed. Gravel or soil (earth moving) is collected from sites away from residential areas to avoid creating pits that would hold water to breed mosquitoes away from villages or towns. However one of the problems experienced by the program was the lack of forestry personnel on the ground who could identify protected and valuable tree species, thus posing potential problems for communities wishing to cut medium sized trees.

### 8.9 Environmental Monitoring of Other Activities

#### **House Construction**

Houses were constructed using local material (mud, sticks and timber). Field Agents ensured as much as possible that primary forests were not selected for clearing purposes and that mud extraction did not lead to significant development of holes of stagnant water at rivers, potentially increasing the risk of malaria.

#### **Community Farm Establishment**

Problems associated with community farm establishment are two-fold. Communities can potentially deforest an area of forest to make way for a community farm. In addition the most common form of clearing in Sierra Leone is through fire, which if not managed properly has the potential to cause significant damage to regeneration, other forests and communities themselves. CORAD partner staff guided the process of community farm development ensuring that burning took place early in the morning or late in the evening and where the grass was still green to ensure a cold fire. In addition, the Farmer Field School was used as a venue to discuss appropriate land conservation practices suitable for Sierra Leone.

#### **Market Construction and Rehabilitation**

This involved the use of both local and industrial materials thus potentially creating the opportunity for pollution, erosion and a build up of mosquitoes as a result of sand extraction from rivers and large and/or protected species being cut for roofing purposes. CORAD purposely procured all materials for the markets in Freetown. Face masks were supplied to communities prior to the varnishing of wood and a safe disposal site was identified in each community for safe disposal of all potentially hazardous materials.

#### **Fishponds and Vegetable Production**

While there are some potentially negative environmental affects associated with fishponds such as providing a breeding ground for mosquitoes, CORAD ensured as much as possible that ponds were located a safe distance from communities. In addition, CORAD undertook a pilot on the integration of *Moringa oleifera* (a tree species) on land adjacent to three fishponds.

## IX. COORDINATION ISSUES

Forums established by the CCU including the Steering Committee have been able to solve cross-ranging issues being experienced in the field and these forums have also been useful to link these issues with wider governmental bodies. As a result of these committees, CORAD has been able to strengthen their relationship to the GOSL. Agencies operating in the same districts (such as Koinadugu and Kailahun) have established very strong coordination linkages. This is primarily to ensure consistency of approach. However in addition to this it has allowed for cross visits between the various agencies to occur, for example CARE staff and participants have visited CRS projects in Koinadugu District including farmer field schools, community farms and market sites.

Within CORAD, technical coordination was ensured through the Working Groups (such as Health, Agriculture, Food, M&E, and Finance). Each Working Group determined the frequency to meet, with some working groups meeting as frequently as monthly, and others meeting as necessary. One of the many advantages associated with the consortium has been its ability to share ideas and transfer skills between the participating organizations. Notable examples of this included CRS's experience on food management being shared with Africare to facilitate a successful commodity management system; World Vision who devised appropriate monitoring tools for all agencies and CARE who have been responsible for channeling issues at field level to a wider forum. In addition, the various subgroups that have met on a regular basis have helped to standardize various approaches across all four agencies. An example of this would be the CHC component developed by CARE but also shared with the other CORAD members, initially through the monthly health meetings.

CORAD partners also participated in meetings with Ministries and related task forces, such as the Health Task Force Meetings and the National FFS Steering Committee, in which some CORAD members participated regularly. CORAD member CRS was one of the key agencies in organizing the National Micronutrient Week in 2006. Partners also participated in periodic events when invited, such as the Measles and Malaria Campaign, and the Cholera Task Force. Selected staff has also visited the Republic of Guinea to observe the work of the Helen Keller Institute there. CORAD have successfully integrated the Helen Keller Institute into their monthly health meetings. CORAD also developed working relationships with local partners such as The Saint Joseph Fathers in Lunsar, Caritas-Kenema and Christian Extension Services in Koinadugu. These strategic alliances have facilitated access to distant communities and a better understanding of local conditions. CORAD has contributed to building their local capacities during the period with training opportunities and organizational development support.

Despite continued efforts by CORAD partners, some gaps were noted in government coordination at the District level. Coordination with District Health officials was noted as an area of success, particularly given that governmental health officers were integral to the successful implementation of health officials. Coordination with District Development Officers was an area of challenge—although they were regularly invited to meetings and updated as to progress, some were not willing to participate unless they received seating fees and per diems. Additionally, CORAD partners have regularly consulted with the Transport Authority staff for technical advice on the rehabilitation of trunk and feeder roads.

Through the FFS, CORAD implemented farmer exchange visits among project locations. These visits were very much appreciated both by farmers and field staff, as they allowed for the comparing of experiences and exchanging of ideas.

## **X. MONITORING & EVALUATIONS, AUDITS AND STUDIES**

During FY 2004, the CORAD M&E Unit led the partners in conducting the baseline survey. This process not only provided concrete information to CORAD partner agencies regarding the situation within the area of operation, but also served to build the capacity of CORAD staff in the area of conducting surveys. This information was compiled into a report that served as the basis for the M&E system and assisted partners to refine program impact indicators and targets.

The Final Evaluation took place in January 2006, which consisted of a quantitative survey and a qualitative assessment. This evaluation was designed to provide: (1) an independent and external assessment of the relevance, effectiveness, efficiency, impact and sustainability of DRP operations to date and; (2) guidance to CORAD on strategic areas of focus for the follow-on Multi-Year Assistance Program (MYAP) that was submitted in May. The outstanding achievements and Impacts according to the Evaluation study are:

1. The proportion of births conducted by a skilled health worker increased by more than 70% (from 20.8 % at baseline to 92%). On this activity, the DRP has already exceeded its LOA target by more than 100%.
2. The program has significantly contributed towards the 25% increase in the proportion of children under six months who are exclusively breastfed among target communities.
3. The prevalence levels of cough and diarrhea have decreased greatly (from 43% to 35% for cough and from 41% to 25% for diarrhea).
4. The percentage of mothers/caregivers who, sought treatment for their child, during cough episode increased by more than 38% (from 42% to 80%). Similarly, the proportion of mothers/caregivers who, sought treatment for their child during malaria episode increased by 20% (from 56% at baseline to 76%). Finally, 76% of respondents whose child had suffered from diarrhea in the last two weeks prior to the survey sought treatment for their child diarrhea compared to 49% at baseline.
5. Over the last two years of implementing DRP interventions, the proportion of children who are fully immunized by their first birth day has increased from 23% to 39%.
6. DRP assisted food insecure households to reestablishing production on 9,954 hectares of farmland that was planted to basic food staples (cassava, rice, groundnuts and vegetables).
7. By the end of FY 2005 more than 70% of FFS participants were practicing improved agronomic practices and had registered more than 40% increases in the productivity levels of basic food staples.
8. Over the last two years DRP communities have registered a 23% increase (from 1.7 to 2.1) in the average daily number of meals consumed per household and 34% increase in dietary diversification
9. The DRP has contributed towards improving access by participating households towards markets through rehabilitation of more than 418 kilometers of farm-to-market roads, five market facilities and 17 weekly markets. Lastly, under the agricultural objective, the DRP has initiated the process of building capacity for community-based agricultural groups among target communities.
10. The DRP has organized/supported training for all VDCs and community-based groups in basic strategic planning and management.

Given that the Final Evaluation was conducted approximately one year before the end of the DRP, CORAD conducted a qualitative Impact Assessment at the conclusion of the project. The main purpose of the assessment was to gather additional information regarding the opinions and perceptions of project stakeholders, and to confirm the results of the more comprehensive Final Evaluation. The Impact Assessment utilized the Most Significant Change approach to ascertain the perceptions and opinions about significant changes that had taken place, and conducted 128 interviews and focus groups. The Impact Assessment was done internally by CORAD partners staff, and was overseen by the M&E Unit.

Data was analyzed by developing frequency charts for common responses, and then discussing the implications of the most frequent responses and notable outliers.

Impact Assessment participants were able to provide specific information about how particular DRP activities had impacted their health and economic situation. Participants noted that health trainings had not only contributed to a decrease in disease outbreaks and deaths through raising knowledge and awareness, but also had increased the confidence of trainees (most notably TBAs and VHWs). Health trainings had also resulted in improved behaviours in practice by women in targeted communities. The DRP's objectives related to health related to establishing linkages with the formal health sector, and so it is not only important to ascertain the most effective methodology for teaching health topics, but also to look at how the groups tie into the Village Development Committee and the formal health sector. From the perspective of the communities, the CHCs have been particularly visible in health activities, including training. All health groups (i.e. CARE's CHCs, CRS's Village Development Health Committees, WVSL's Village Health Committees) were viewed by health authorities as positively impacting the health situation in the village, which indicates positive relationships with the formal health sector (a point that would perhaps not have been readily evident to community members not directly engaged with formal health activities). Some organizations were forming the CHCs with greater success than others; it is recommended to share best practices in this area across the four CORAD partners.

Growth promotion weighings and FFW together resulted in the perception from the communities that the rates of malnutrition were decreasing. The HEARTH model employed by some agencies was particularly effective in that women in focus groups could clearly articulate how HEARTH assisted them in knowing when their children were malnourished. Vulnerable Group Feeding was not mentioned often by community members as a high impact activity—although this might seem at face value to be a weakness, it might also suggest the success of the very specific targeting of the VGF. This also may be a semantic issue, as the forms and procedures for food for work and VGF were extremely similar, and many communities used the term FFW in place of VGF.

Participation in the FFS had also increased farmers' knowledge on agricultural methods, and had improved several practices. Community participants and governmental officials alike affirmed that CORAD had contributed to an increase in agricultural production and crop yields, which would logically result in an increase in income. Some communities in which CORAD had been working in agriculture were able to clearly articulate the way in which additional income that they had received as a result of CORAD interventions was being used. Others affirmed that they had received additional income, but did not provide specific answers to how they were utilizing this money. Introduction to improved methods of agro-processing was another contributing factor to enhanced income. The FFS also provided an opportunity for farmers to teach other farmers, which encouraged cooperation and working together on common issues.

A number of FFW activities were conducted, which makes it somewhat difficult doing this type of Impact Assessment to ascertain the impact of such interventions. Nevertheless, it is clear that FFW activities contributed to a widespread perception among community members and government officials that people are more organized to think about and act upon their development needs, and that there is a greater degree of peace and unity in communities. It may be worthwhile under the LEAD to further define the priorities that CORAD has for FFW, and to document further the contributions made to reducing conflict in post-war Sierra Leone.

Women involved in the DRP were not only empowered with enhanced knowledge through participation in health and agricultural activities, but also used their greater economic potential to play a greater role in

financial decision-making in their homes. There are; however, still questions remaining whether the greater role in decision making translates into an ability to prioritize children's nutritional needs in times of food scarcity.

On the whole, government officials at the District, Chiefdom, and local levels were very satisfied with the work of the DRP, although some District level officials felt that they did not have sufficient information about the project to comment.

On the whole, the Impact Assessment confirmed the positive findings from the Final Evaluation from 2006, and provided the CORAD agencies with an opportunity to review their experiences to date as lessons learned to be applied to the upcoming LEAD program.

## **XI. ADMINISTRATION AND OPERATIONAL INFORMATION**

The CORAD Steering Committee proved an effective mechanism to coordinating the administration and operation of DRP activities. Although some issues did affect the ability of CORAD partners to implement, the strong results achieved over the life of project provide evidence of successful implementation.

Food pre-positioning and transportation of construction materials (local and imported) to operational communities have been the main challenges because of poor roads and the unwillingness of transport owners to allow their vehicles to ply these routes.

During the second half of the project CORAD designed and began implementation of a revised system for FFW and VGF projects, based on CRS best practices for food aid. The revised system includes step by step guidelines, beginning with the identification of projects and ending with the distribution of food (dry rations only) and the completion of final reports. A training was held for relevant staff and was followed by increased monitoring and supervision by the program managers, food officers and area managers. CORAD did not experience any major difficulties in adjusting to the new system, as field staff successfully sensitized participating communities on the changes.

## **XII. ANNEXES**

### [11.1 Final Indicators of Performance Tracking Table \(IPTT\)](#)

*Please refer to attached Excel file.*

## 11.2 Success Stories

### **FORIA'S BABY FRIENDLY FARM**

Foria is a DRP village in Diang chiefdom, Koinadugu district. Plagued by a particularly high level of malnutrition, CORAD health staff suggested that Foria be the first community in Diang chiefdom to pilot a Baby Friendly Farm.

The Baby Friendly Farm (BFF) is a methodology that CORAD staff developed after conducting a barrier analysis in 2005 that showed that a primary obstacle to practicing exclusive breastfeeding was the need for women to travel



Two of the original members of Foria's BFF.

long distances to their farms. Under the BFF methodology, the community designates a plot of land that is close to town for use by an exclusive breastfeeding (EBF) support group, which is open to pregnant women and lactating mothers. Men and youth provide the necessary hard labor, while CORAD provides improved seeds and basic tools including watering cans, cutlasses, hoes, shovels and wheelbarrows. The members of the group work the land communally and have the option of either keeping their babies with them or walking the short distance back to their homes to breastfeed.

In March 2006, CORAD selected and trained Finah Yanka, a TBA from Foria village. With support from the local health center nurse and the CORAD field agent, Finah invited 20 women to participate, including 13 pregnant women and seven lactating mothers. As facilitator, Finah's role was to teach women in the group breastfeeding techniques, the advantages of breastfeeding, dealing with common problems in breastfeeding, and introduction of complementary foods at six months.



Foria BFF members at support group meeting

After clearing the land in May, the Foria BFF planted seeds in June. Some of the shorter varieties were ready for harvest in August, including groundnut, maize, okra, potato, sesame and eggplant. Cassava was harvested in December and leaves were available on an ongoing basis. Yield was high enough that group members were able to keep a part of their crops for consumption while also selling a part to raise funds. With the sales proceeds, participants created an emergency fund to pay for medical care for sick children. The farm also generated enough yield to store seeds for the next planting season. Most importantly, the baby friendly farm has shown the women of Foria that exclusive breastfeeding is feasible for mothers and worthwhile for babies, resulting in better nourished and healthier children.



An exclusively breastfed baby from Foria

## SOWEIVA'S STORY

Soweiva Lahai, a mother of three, was one of the many women in Tentihun village, Yawei chiefdom, who felt that babies would die of thirst if they weren't given water during their first months of life. During the third trimester with her last child, Soweiva, a CORAD health field agent approached Soweiva and talked with her about exclusive breastfeeding (EBF). The agent also targeted traditional birth attendants (TBAs) in Tentihun and trained them to teach mothers about the benefits of EBF.



Soweiva and Baby Lahai



Women in Tentihun had been skeptical about EBF.

In April 2006, Soweiva gave birth to a healthy baby girl, whom she named Baby. Immediately after delivery, Soweiva initiated EBF with support from the TBAs and her husband. After three months, Soweiva was still practicing EBF and had not given Baby water or any other liquids or foods. During one of the support visits, Soweiva expressed relief to the health field agent and other mothers, and shared that since she had started practicing EBF, Baby had never had fever, diarrhea or ARI. Soweiva observed that the infants of fellow mothers who didn't practice EBF often suffered from diarrhea, coughs, and fever. Soweiva thanked CORAD staff for helping her practice EBF and recognized that having a healthy baby, in addition to bringing great happiness to the family, also saves money that would otherwise go to buying medicines and paying for medical care.

As Baby grew quickly and remained healthy, Soweiva became the role model in this village, and she volunteered to teach other mothers about the importance of exclusive breastfeeding. Soweiva's experience changed the behavior of many women in her own village, as well as those in neighboring ones who learned of EBF during community clinic point activities.



Soweiva and Baby at a GMP session.

When her child reached six months of age, Soweiva began adding complementary foods to Baby's diet. Soweiva also continued practicing frequent breastfeeding on demand. As a result, Baby remained healthy. At a growth monitoring and promotion session conducted in January 2007, Baby was found to be very well nourished and continues to be a source of joy and pride for her family.



Now other women in the village have started practicing EBF.

## COLOR-CODED BEAD SYSTEM



This child's red bracelet indicates that he is severely underweight for his age.



This child's orange bracelet indicates that she is moderately underweight for her age.



This child's green bracelet indicates that he is normally nourished for his age.

Literacy remains very limited in rural Sierra Leone, and it has been challenging to develop health education and training materials appropriate for low-literacy village health workers. To help overcome this challenge, CORAD partner CRS developed a color-coded growth monitoring and promotion (GMP) system. Village health volunteers and traditional birth attendants are the lead community members in a GMP session. These village health workers use a color-coded under five card, a color-coded counseling card, and a colored bracelet.

For example, a health worker weighs a baby, and by plotting on a colored under five card, sees that the child is in the red (or severely underweight) category. The volunteer places a red bracelet on the child's wrist and consults the counseling sheet (the reverse side of the under five card). The red face on the counseling sheet is a sad face. Volunteers have learned in training that red is severe – caregivers need to take this child to the nearest health facility for assessment, feed this child more frequently and feed this child more foods like green leaves, beans, and fish.

For moderately underweight children, the counseling sheet shows an orange, flat-lined face, with corresponding counseling. For normal weight children, the counseling sheet shows a green, happy face, encouraging the caregiver to continue to feed the child similarly with attention to frequency and food quality. Children wear their bracelets at all times as a cue for action for caregivers and to remind village health volunteers to follow up with families of children with red or orange bracelets. CORAD has found that the bead system has motivated families to bring their children for GMP sessions and that it is now easier for caregivers to understand their children's nutritional status and take appropriate action.

## MARKET CONSTRUCTION

Like many other rural communities in Mongo District in north-eastern Sierra Leone, Seria village went through difficult times during the decade-long civil conflict. This community was abandoned as the inhabitants fled to neighboring Guinea to seek refuge. Since the end of the war in early 2002, the community members have been struggling to reestablish themselves. The end of the last rainy season brought new harvests and also new reasons for hope.



Construction is well under way.

Seria is a rural community with a population of about 1000 inhabitants. It is located barely five miles from the Guinea border, 136 km south-east of Kabala, the Koinadugu District headquarter town, and 14.4 km from Bendugu, the chiefdom headquarter town. It is a strategically located community surrounded by more than 20 smaller villages. Agriculture and petty trading are the primary economic activities.

Before the war, this community hosted the largest periodic market in the chiefdom, a market to which all the surrounding villages converged for business. As a result, Seria was targeted for the construction of a new market.

There was no hesitation on the part of the community to accept the challenge of providing labor and local construction materials (such as sand and stones), even in the middle of the busy harvest season. Men and women, especially those likely to establish their petty trade businesses in the finished market, were extremely motivated and hard-working. CORAD complemented their activities with construction materials purchased with monetization proceeds.



Putting on the finishing touches.



Getting ready to move in.

Upon completion of the market in January 2007, the people of Seria and its environs had many reasons to celebrate. Seria is now slowly regaining its past glory. In a recent community meeting, leaders noted that farmers throughout the chiefdom now have a fixed place to sell their produce, and that traders from Guinea are already attending the market. The market itself, with its sturdy concrete pillars and glittering corrugated iron sheets, stands out as a strong and durable asset for this community.

## ROAD CONSTRUCTION

At first glance, the village of Gbokoroma looks like any other community in Koinadugu District. However, significant changes have occurred lately thanks to the opening of a new road, which has allowed inhabitants to raise their expectations for the future.



The village is a small community of about 60 households, located some 22 km from Kabala town, the district headquarters. Despite the economic potential and relative proximity to Kabala, Gbokoroma has been isolated from most private and public development efforts by the lack of a road linking their village to the rest of the district. Selling produce or purchasing goods at the nearest market normally involved a two-hour walk on a difficult footpath; women and children had limited access to basic health services, as the nearest peripheral health unit (PHU) is six km away.

In 2006, CORAD staff and village representatives held a series of meetings during which they agreed on the need for a motorable road, conducted a joint assessment of the resources needed to complete this task and established a plan of action. CORAD conducted a feasibility analysis and collaborated with the district National Road Authority representative, who provided technical backstopping in the design and implementation of the project.



Simple bridges were also required.



One of the easier stretches.

Over the course of two months, community members organized themselves to provide continuous labor for the completion of the 6 km road. As a complement to the community-supplied labor, CORAD provided technical assistance, basic construction tools and close supervision. In January 2007, CORAD staff became local heroes after becoming the first visitors ever to arrive in Gbokoroma in a car!

## **NEW HOPE TO VULNERABLE AND MARGINALIZED YOUTH**

CORAD is giving new hope and economic sustainability to the most vulnerable and marginalized youth in partnership with Motehun Youth Development (MYDA), at Daru Village, Kailahun District. MYDA requested for the sum of Le:1,543,000 from CORAD to construct 50 store pallets for sale. The sum of Le 753,350 micro-loan was given to kick start the project in November, 2006. Out of this, 40 pallets have already been produced and sold at Le70, 000 totaling Le2, 800,000. The cost of producing one store pallet is Le: 30,860 showing unit profit margin of Le39, 140. MYDA present production capacity is 6 store pallets per day which corresponds to daily profit of Le273,980 (\$92.9) implying a veritable fortune for a group of 15 disabled (amputees, blinds, polio victims, etc.) considering that 74.5% of the population in Sierra Leone live below poverty line with less than \$2 dollar a day. CORAD partner Africare is delighted to partner with MYDA and the present challenge is to use this example of innovation and drive to inspire thousands of youths in similar conditions.

## **THE CASE FOR POSITIVE DEVIANT MOTHERS**

Fatumatu Kargbo (37) is the wife of the teacher in Mapaythor Village, Kholifa Rowalla. She has a number of children. Fatumatu is a farmer as well as being a housewife. Before CORAD's entry into the village, no child was exclusively breastfed and rates of diarrhoea were high among children under 6 months. The reasons for this were primarily that infants were given additional liquids from unsafe sources and hand feeding was carried out. Fatumatu was identified in the late stages of pregnancy and provided with information on the benefits of breastfeeding. Fatumatu, after some initial hesitation agreed to initiate exclusive breastfeeding following the birth of her child. When her daughter Marie was born, CORAD's field agents and members of the community worked together to follow Marie's progress and provide support to Fatumata. Fatumatu was very pleased with Marie's progress and pointed to the fact that Marie was never sick in contrast to her other children, who regularly had diarrhoea. CORAD worked with Fatumata to ensure that Marie regularly attended the outreach clinic where her growth chart was monitored on a monthly basis. Marie was a very bright, alert baby. As a result of this success, many other mothers have followed Fatumatu's example and rates of diarrhoea in the village have significantly reduced. Marie graduated in April 2005 and was presented with a 6-month exclusive breastfeeding certificate.

## **INCOME GENERATION THROUGH AGRO-PROCESSING**

The village of Mayatha lies in Kholifa Rowalla Chiefdom. The community developed a very large cassava farm in collaboration with a number of youth groups from the area. By 2006, the group had managed to cultivate over 60 acres. However while production was high, the group was constrained in the lack of processing equipment, resulting in the sale and consumption of raw cassava. In 2006, CORAD undertook *gari*-processing training and provided the group with a processing machine. The group quickly began to produce significant quantities of *gari* and *foo foo*. Members of the group went out and sourced potential new markets. In this they were facilitated by CORAD's re-establishment of periodic markets that attracted buyers from as far a way as Koidu. Four months after the training had been completed the group had more than Le 600,000 saved. This proved to be a very empowering experience for the group particularly for the women. Many were able to use money generated from this activity to further increase the size of the farm, pay school fees and become involved in petty trading. One woman claimed, "Before [CORAD partner] CARE it was difficult to send my child to school. As a result of this project, I am now able to send my children to school and I have money left over to buy other thing."



Over the last three years, CORAD had to deal with difficulties caused by poor road conditions. Accidents fortunately were rare and losses few. A collapsing bridge, Tonkolili 2005, caused this one.



Women being trained on construction of a seed box as part of a training on vegetable production. Note the school behind was built with contributions raised from Food for Work activities, Gbonkelenke Chiefdom, 2006



Fire damaged houses, Kholifa Rowalla Chiefdom, 2004. Effected populations were provided with emergency food rations under VGF

#### [11.4 CORAD DRP Impact Assessment Report](#)

*Please refer to attached \*.pdf file.*