



USAID
FROM THE AMERICAN PEOPLE



**CATHOLIC RELIEF SERVICES / BURKINA FASO
P.L. 480 TITLE II DEVELOPMENT ASSISTANCE PROGRAM
FY2004 – FY2009**

FINAL EVALUATION

MAY – JULY 2009



**Rupert Best and Simon Tohou, Agriculture and Natural Resources Management
Joan Hall, Microfinance
E.Y.G. Kumodzie, General Relief and Commodity Management
Catherine Robins, Team Leader and Education**

ACKNOWLEDGMENTS

The team gratefully acknowledges assistance provided during the evaluation by Debbie Shomberg, CRS Burkina Faso Country Director, M.M. Bangré, Deputy Country Director, Joseph Ilboudo, CRS/BF M&E Officer, Joseph Coulibaly, Luisa Kalmogo, Martin Gosso Drabo, Céline Compaore, and Mme. Clémence Sanou. In the field we were ably assisted by, among others, Justin Ilboudo, Richard Simbiri, Siaka Millogo and by our patient and accommodating drivers. In the community our work was assisted by staff of Federation Wend Yam, of OCADES Kaya and the Catholic Parish of Kaya, of Association Tin Tua, staff of the Ministry of Basic Education and Literacy, of the Ministry of Agriculture, service providers, traders, exporters, and by many community members who generously gave their time to answer our questions.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	II
ACRONYMS AND ABBREVIATIONS	VII
EXECUTIVE SUMMARY	1
BACKGROUND TO THE EVALUATION	3
A. BURKINA FASO	3
B. THE FY2004 – 2009 DEVELOPMENT ACTIVITIES PROGRAM.....	3
C. EVALUATION FRAMEWORK AND METHODS	5
SO1: AGRICULTURE AND NATURAL RESOURCE MANAGEMENT	7
A. METHODOLOGY	7
B. PROGRAM EFFECTIVENESS.....	8
<i>Strategic Objective 1: Improved value of off-season and staple crop production for resource poor farmers</i>	8
<i>Market gardening component</i>	11
<i>Impact of the market gardening component</i>	20
<i>Natural Resource Management component</i>	22
<i>School gardens and fields component</i>	32
<i>Implementation progress and achievement of results (effectiveness)</i>	33
C. PROGRAM QUALITY: IMPLEMENTATION OF SO1	35
<i>Targeting</i>	35
<i>Coverage</i>	36
<i>Appropriateness and relevance</i>	36
<i>Collaboration and cooperation</i>	38
<i>Sustainability and exit strategies</i>	40
<i>Efficiency of the Agricultural SO</i>	42
<i>Monitoring and evaluation</i>	42
D. RESPONSE TO THE RECOMMENDATIONS OF THE MID-TERM EVALUATION	44
E. GOOD PRACTICES AND LESSONS LEARNED	46
<i>Good practices</i>	46
<i>Lessons learned</i>	47
F. CROSS-CUTTING ISSUES	48
<i>SO integration</i>	48
<i>Gender</i>	48
<i>Environment</i>	48
G. SUMMARY OF RECOMMENDATIONS	49
<i>Market gardening</i>	49
<i>Natural Resource management</i>	50
<i>Pilot school gardens and fields</i>	52
<i>Cross-component</i>	52
SO2: EDUCATION	53
A. METHODOLOGY.....	53
B. PROGRAM EFFECTIVENESS.....	53
<i>Preparation for and Evolution of the Phaseout Process</i>	57
<i>IEC and Community Training for Phaseout</i>	58
<i>Management of CRS-supported Canteens</i>	60
<i>Capacity of phaseout communities to provide commodities to school canteens:</i>	62
<i>Capacity of phaseout communities to manage canteens:</i>	66

C.	PROGRAM QUALITY	79
	<i>Targeting:</i>	79
	<i>Coverage:</i>	80
	<i>Appropriateness and Relevance:</i>	80
	<i>Collaboration/ cooperation:</i>	81
	<i>Sustainability/ exit strategies:</i>	81
	<i>Monitoring and Evaluation:</i>	82
D.	RESPONSES TO MAJOR MIDTERM EVALUATION RECOMMENDATIONS	82
E.	LESSONS LEARNED AND BEST PRACTICES:	83
	<i>Lessons Learned</i>	83
	<i>Best Practices</i>	83
F.	CROSS CUTTING ISSUES	83
G.	SUMMARY OF RECOMMENDATIONS:	84
SO3: IMPROVED HEALTH AND NUTRITIONAL STATUS FOR PRIMARY SCHOOL CHILDREN IN BURKINA FASO		86
SO 4: MICROFINANCE		87
A.	METHODOLOGY	87
B.	PROGRAM EFFECTIVENESS.....	87
	<i>Program Impacts</i>	100
	<i>Impact at SO level</i>	100
	<i>Impacts beyond program beneficiaries</i>	100
	<i>Adequacy of population coverage among eligible beneficiaries</i>	101
C.	PROGRAM QUALITY	101
	<i>Targeting</i>	101
	<i>Coverage</i>	101
	<i>Appropriateness/ relevance</i>	101
	<i>Collaboration and cooperation</i>	102
	<i>Sustainability and exit strategies</i>	103
	<i>Monitoring and evaluation</i>	103
D.	RESPONSES TO RECOMMENDATIONS OF THE MID-TERM EVALUATION	103
E.	LESSONS LEARNED AND BEST PRACTICES.....	103
F.	CROSS CUTTING ISSUES	104
G.	SUMMARY OF MAJOR RECOMMENDATIONS TO CRS FOR FUTURE PROGRAMMING.....	104
SO5: GENERAL RELIEF		106
A.	METHODOLOGY	106
B.	PROGRAM EFFECTIVENESS.....	106
C.	PROGRAM QUALITY	109
	<i>Targeting</i>	109
	<i>Coverage:</i>	110
	<i>Appropriateness:</i>	110
	<i>Collaboration and cooperation:</i>	111
	<i>Sustainability and exit strategies:</i>	111
	<i>Program Impact:</i>	111
	<i>Program Integration:</i>	111
	<i>Gender effectiveness:</i>	111
D.	RECOMMENDATIONS FOR FUTURE PROGRAMMING:.....	111
GLOBAL RECOMMENDATIONS FOR FUTURE PROGRAMMING:.....		113

List of Tables

Table 1.	Estimated Commodity Requirements by Activity [MT]	3
Table 2.	Budget Summary by Sector [LOA]	3
Table 3.	Fieldwork Visits: May 5 – 20, 2009	5
Table SO1.1.	Overview of SO1 indicators, results and activities	8
Table SO1.2.	DAP 2004-2009 Cost of the Agriculture SO components	9
Table SO1.3	Market gardening sites	10
Table SO1.4	Farmers cultivating market gardens	11
Table SO1.5.	Changes in male and female market garden farmers	12
Table SO1.6.	Yields of tomato and onion. Silmidougou	15
Table SO1.7.	Silmidougou farmers experience in exporting vegetables	17
Table SO1.8.	Training, knowledge and use of NRM techniques, baseline	23
Table SO1.9.	Farmers using at least two relevant techniques, %	24
Table SO1.10.	% of beneficiary farmers using promoted practices, 2008	24
Table SO1.11.	Increase in use of NRM techniques	25
Table SO1.12.	Total area recuperated with selected NRM practices, May 2009	26
Table SO1.13.	% increase in yields of millet and sorghum: treated vs. non-treated plots, 2005-2009	28
Table SO1.14.	Distance of villages from the Silmidougou irrigation site	33
Table SO2.1.	Support to education activities, 2006-2008	52
Table SO2.2.	Canteens in Tiers 2 and 2 receiving community and/or Government support	54
Table SO2.3.	SFP Commodities Planned and Used 2004 – 2009	58
Table SO2.4.	FY2007 school provisioning: all sources	60
Table SO2.5.	FY2008 School provisioning: all sources	61
Table SO2.6.	Evolution of the gross enrollment rate in 6 DAP school feeding/ THR provinces, 2003 –2004 to 2007-2008 [% enrolled]	68
Table SO2.7.	Increases in gross enrollment by Tiers 2004 – 2008	70
Table SO2.8.	School attendance in SFP provinces, 2006-2008	72
Table SO2.9.	Increases in Girls enrollment in THR provinces, FY2004-2008	72
Table SO2.10.	Rates of enrollment, boys and girls, program provinces	73
Table SO2.11.	Commodity provision to pre-school canteens, 2006 – 2009	75
Table SO5.1.	General Relief: Commodity amounts distributed FY2005 – FY2008	104
Table SO5.2.	General Relief: Beneficiaries Served FY2005 – FY2008	104
Table SO5.3.	Training activities and Visits: planned vs. achievements, FY2005-FY2008	104
Table SO5.4.	Classification of partners by beneficiary numbers	107

List of Figures

Figure SO1.1.	Production at Silmidougou and Tougouri. 2005-09.	11
Figure SO1.2.	Use of market gardening practices, % of farmers using	13
Figure SO1.3.	Compost and manure use by women and men farmers, % applying	15
Figure SO1.4.	Average value of production per capita, men and women farmers. Silmidougou	19
Figure SO1.5.	Use of NRM practices by men and women farmers	26
Figure SO2.1.	FY04 – FY09 Planned Title II Contributions to SFP Provinces	55

as % of needs	
Figure SO2.2. FY04 – FY09 Actual Title II Contributions to SFP Provinces % Provinces covered	56
Figure SO2.3. Sources of SFP Commodities FY07-08, in MT	58
Figure SO2.4. Girls gross enrollment rates Tier 3 provinces and nationally	69
Figure SO2.5. Boys gross enrollment rates Tier 3 provinces and nationally	69
Figure SO2.6. Increases in Gross Enrollment 2004-06 and 2006-08	70
Figure SO2.7. Gross Enrollment Levels by Tier: 2004 vs. 2008	71
Figure SO2.9. Retention Rates, Boys and Girls, FY06 – FY08	

List of Photos [SO1]

Photo SO1.1. Recently constructed half-moons by a non-beneficiary farmer	21
Photo SO1.2. An earth bund combined with half-moons	22
Photo SO1.3. Zai pockets	22
Photo SO1.4. Farmers standing on a below ground compost pit	23

Acronyms and Abbreviations

ADAPA	Association pour le Développement Agropastoral en Afrique
ADPPAS	Association Développement Professionnel des Producteurs Agricoles de Samantenga
ADRA/CAFORMA	Adventist Development and Relief Agency/Centre ADRA de Formation Maraîcher
AG	Agriculture Sector
AGIRE	Agence d'Ingénierie de Réalisation et d'Etudes
AICB	Agence d'Ingénierie et de Construction du Burkina
AIDS	Acquired Immune Deficiency Syndrome
AME	<i>Association des Meres d'Élèves</i> (Students' Mothers Association)
APE	<i>Association des Parents d'Élèves</i> (Parent Teacher Association)
ATT	Association Tin Tua
ANR	Assisted Natural Regeneration
BF	Burkina Faso
BFL	Burkina Fruits et Légumes
BRIGHT	Burkinabé Response to Improve Girls' Chances to Succeed
CDF	Community Development Foundation
CEB	Circonscription d'Education de Base
CGAP	Consultative Group to Assist the Poorest
CIAL	<i>Comité de Investigación Agrícola Local</i> (Local Agricultural Research Committee)
CMC	Community Management Committee
CMO	Commodity Management Office
CNAPEP	<i>Conseils National des Parents d'Élèves du Primaire</i> (National Council of Parents of Primary Students)
CRS	Catholic Relief Services
CRS/BF	Catholic Relief Services/Burkina Faso
DAP	Development Assistance Program
DEC	Development Engineering's Services Co. Ltd
DIP	Detailed Implementation Plan
DREBA	<i>Direction Régionale de l'Enseignement de Base et de l'Alphabétisation.</i> (Regional Department of Basic Education and Literacy)
DPEBA	<i>Département Provincial de l'Éducation de Base et de l'Alphabétisation</i> (Provincial Department of Basic Education and Literacy)
DPASSN	<i>Direction Provinciale de l'Action Sociale et de Solidarité Nationale</i> (Provincial Department of Social Action and National Solidarity)
EMO	Entreprise Mahamoudou Ouedraogo
ESP	Education Support Program
EU	European Union
FANTA	Food and Nutritional Technical Assistance
FCFA	<i>Franc de la Communauté Financière Africaine</i>
FDC	Foundation for Community Development [affiliate of Save the Children]
FEWS	Famine Early Warning System
FFE	Food for Education
FFP	Food for Peace
FFW	Food for Work
FFS	Farmer Field School
FGM	Female Genital Mutilation
FJF	Foyers des Jeunes Filles
FSS	Financial self sufficiency
FWY	Federation Wend Yam
FY	Fiscal Year
GERTEC	Génie d'Etudes de Réalisations et d'Assistance Technique
GID	Général de l'Ingénierie pour le Développement
GoBF	Government of Burkina Faso
GREP	General Relief and Emergency Program
GRAINE	Groupe d'Accompagnement à l'Investissement et à l'Épargne

HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
HKI	Helen Keller International
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IEC	Information-Education-Communication
IFPRI	International Food Policy Research Institute
INERA	<i>Institut de l'Environnement et de Recherch Agricole</i> (Institute for the Environment and Agricultural Research)
IPTT	Indicator Performance Tracking Table
IR	Intermediate Result
LOA	Life of Activity
LOP	Life of Program
M&E	Monitoring and Evaluation
MCC	Millennium Challenge Corporation
MEBA	<i>Ministère de l'Education de Base et de l'Alphabétisation</i> (Ministry of Basic Education and Literacy)
MF	Microfinance
MFI	Microfinance Institution
MFU	Microfinance Unit
MSC	Most Significant Change
MTE	Midterm Evaluation
MYAP	Multi-Year Activity Program
NGO	Non-Governmental Organization
NRM	Natural Resource Management
OCADES	Catholic Organization for Development and Solidarity
OSS	Operational self sufficiency
PCD	Partnership for Children's Development
PDDEB	<i>Plan Décennal de Développement de l'Education de Base</i> (Ten-Year Basic Education Plan)
PLWHIV	People Living with HIV and AIDS
PMA	Minimum Package of Activities
PREP	Pipeline and Resource Request Proposal
RTA	Regional Technical Advisor
SFP	School Feeding Program
SO	Strategic Objective
SSI	Small-Scale Irrigation
SWC	Soil and Water Conservation
TB	Tuberculosis
THR	Take Home Ration
TOT	Training of Trainers
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
USD	United States Dollar
USG	United States Government
WFP	World Food Program

MT – metric ton

EXECUTIVE SUMMARY

Catholic Relief Services has been implementing the FY2004 – 2009 Development Assistance Program in Burkina Faso since 1 January 2003. This program, originally scheduled to run through FY2009, has been extended through May of 2010. In strengthening and extending activities in agriculture and natural resource management and in laying the foundation for an independent microfinance institution, the current DAP represents a continuation and consolidation of activities implemented by CRS through a DAP programmed for FY1997 – 2001 (extended through 2003). By preparing for and handing over part of a large-scale school feeding program to school communities with support from the Government, the current DAP has been transitional. Relationships with a large number of partners providing general commodity relief through CRS have also been scaled back.

In the course of this DAP, CRS has made impressive progress in the implementation and monitoring of activities and results set out in the proposal and IPTT. With few exceptions, targets have been met or exceeded. Working under adverse conditions, in an ethnically diverse, poor rural environment with limited infrastructure, CRS has made very good progress in creating permanent financial services for very poor women in Burkina Faso. There is evidence that access to both loans and savings has helped clients raise their revenues, diversify their income sources, build their savings, decrease their vulnerability to external shocks (food crises), improve their families' well being, and improve their own economic and social status in their communities.

Through the promotion of market gardening, CRS has helped to raise production levels and rural incomes, particularly among women. Improved land husbandry and natural resources management have been adopted by large number of farmers, increasing yields of staple foods in those areas where these are practiced. Efforts at expansion of agricultural marketing, while not always successful, have provided valuable lessons about planning and social organization of production.

Education support, focusing on school canteens, has seen major changes during the life of this DAP, with school feeding in over half of the formerly supported provinces now turned over to local endogenous canteens. The Education Support Program has been effective in achieving the short-term goals of increasing rates of enrollment, especially of girls, and ensuring high levels of attendance and retention of all pupils. There is evidence of success in changing attitudes toward girls' participation in school; every administrator, teacher and parent spoke positively of the increases in numbers of girls in school. These changes are the result of the combined efforts of CRS, the Ministry of Basic Education and Literacy, and other programs. The changes it represents appear to be durable. This transition has brought new challenges. The school canteen program is popular and communities are aware of the need to assume greater responsibility for its management. In the medium term, however, schools are experiencing major constraints in meeting the needs of pupils for school meals throughout the year. There is an increasing awareness of the need for possible changes, as resources are not expanding, and the country has already experienced one food crisis in response to rising food prices in the international market.

The evaluation included 2-3 weeks in country, with fieldwork in all major program areas. Sectoral programs, which are largely independent of each other, were reviewed separately, and this report presents findings and recommendations for each. Major recommendations are summarized and a small number of broad recommendations relevant to the entire program are presented at the end of the report.

The strength of this program - its focus on its defined objectives and results areas – limited innovation, particularly in the area of program integration. With the exception of a program to promote school gardens as sources of food for provisioning newly independent school canteens, inter-sectoral interventions have been very limited in this DAP. This may have reduced the impact of the program, and has probably limited the possibility of achieving or measuring food security impacts at household or community level. A follow on program will need to plan for a greater extent of program integration. At the same time, the expansion of activities in agriculture and continued support to microfinance will be accompanied by changes in the uses of commodities in a new food security

program. As school feeding phases down and general relief activities are consolidated and simplified, CRS will need to move to a more developmentally focused use of food resources. This report provides suggestions of possible directions, but it does not attempt to chart that course.

BACKGROUND TO THE EVALUATION

A. BURKINA FASO

Burkina Faso is a chronically food insecure country. The central region, which includes several provinces forming part of the CRS Develop Activities Program area, is now considered the most food insecure zone in the country. An estimated 90% of Burkina Faso's working population is engaged in agriculture. Major crops include cotton, groundnuts, millet, sorghum, sesame, corn and rice. In the more sparsely populated eastern and northern zones, where rainfall varies from a low of 300 – 500 mm per year in the north to 600 – 800 mm/yr in the east, livestock are a mainstay of the rural economy. Rainfall is irregular and unreliable and irrigated agriculture is very limited. Nationally, only 17.7% of the land is arable and large numbers of Burkinabè farmers have historically resorted to labor migration to neighboring countries and Europe to supplement household incomes.

While making impressive progress on key indicators of social development in education, literacy and health, the country continues to struggle against structural factors that limit economic growth. These include high rates of population growth, a young population, and continuing high rates of infant mortality. 38.7% of children under five are moderately stunted.¹

It is in the area of education where Burkina Faso still lags furthest behind most Sub-Saharan countries, and this has formed a major focus of CRS activity over the past forty years. In 2005, gross primary enrollment figures were just 57%; these grew rapidly, to over 70% in 2007. Net enrollments² were much lower, estimated at less than 50% in 2007. Girls' enrollment rates and numbers have risen, but the ratio of girls to boys in school is still only about 80%. Adult literacy, especially of women, remains very low, estimated at 24% or lower, compared with 59% for Sub-Saharan Africa as a whole. Youth literacy among those 15-24 is better, at 33%, but young women still lag behind, at 26.5%.

Food insecurity in Burkina Faso reflects deficiencies in **availability**, with low agricultural production and unstable climatic conditions; in **access**, limited by low incomes - an estimated 72% of the population living below \$2/ day in the period from 1990 – 2005, of whom over one third were living below \$1/day - in the face of rising food prices; and in **utilization**, limited by poor health and low levels of education. Vulnerability, a further factor of importance in Burkina Faso, has undoubtedly contributed to food insecurity as conflicts in the region, climate change and worldwide instability, affecting commodity prices, continue.

B. THE FY2004 – 2009 DEVELOPMENT ACTIVITIES PROGRAM

In late 2002, CRS submitted a proposal for a five year Development Activities Program (DAP) for FY2004-2009, with a total budget of \$ 62.8 million in commodities and cash, over that period.³ The goal of the program is:

Improved food security of targeted rural populations in Burkina Faso and extremely vulnerable populations in urban, peri-urban and rural areas throughout the country.

This DAP, funded through May of 2010, represents a continuation and consolidation of activities implemented by CRS through a DAP programmed for FY1997 – 2001, (extended through 2003). CRS has been responding to food security needs in Burkina Faso through interventions in four major areas: agriculture and natural resource management; education, including school feeding and

¹ *Enquête Démographique et de Santé, 2003*, Institut National de la Statistique et de la Démographie, Ministère de l'Économie et du Développement, Ouagadougou, Burkina Faso, ORC Macro Calverton, Maryland, USA
Septembre 2004.

² Gross enrollment is based on the total number of children enrolled, including those under and over-age, divided by the age appropriate population (7-12 year olds), while net enrollment represents the proportion of school aged children (7-12) enrolled in school.

³ Catholic Relief Services/Burkina Faso. 2002. *P.L. 480 Title II FY2004-FY2009: Development Assistance Program Proposal*.

health; micro-finance; and general relief to vulnerable groups. Resources requested under the FY04 - 09 DAP are shown below.

Table 1. Estimated Commodity Requirements by Activity [MT]

Activity	FY04 (9m.)	FY05	FY06	FY07	FY08	FY09	LOA
School feeding	8023	10,200	9613	8935	8164	6990	51,925
THR	337	463	477	490	504	517	2788
Preschool feeding	64	136	136	136	136	136	744
School infrastructure [FFW]	42	42	42	42	42	42	252
General Relief	938	1249	1249	1249	1249	1249	7183
Total	9410	12,100	11,520	10,860	10,100	8,940	62,930

Source: DAP Proposal

Table 2. Budget Summary by Sector [LOA]

Sector	Sect. 202(e)	Monetization	ITSH	Total Resources	% of DAP Total
Agriculture	342,430	357,639		\$700,069	4.2%
Education	1,630,642	4,221,452	1,777,980	\$7,630,074	45.9%
Microfinance	757,671	5,871,014		\$6,628,685	39.8%
Gen Relief	325,025	925,287	427,208	\$1,677,520	10.1%
Total	3,055,768	11,375,392	2205188	\$16,636,348	100.0%

Source: DAP Proposal

Educational and relief support had formed a major part of CRS's work from the 1960s. Activities in agriculture originated in 1985, while micro finance began with loans to a small number of women in 1992. By 2002, CRS was distributing commodities to all schools in 23 provinces, and had over 160 relief partners. A major objective of the current program has been to reduce the scale of these activities, handing over school feeding to locally managed canteens, supported by parents and the Ministry of Education (MEBA) and focusing on fewer relief partners. Between 2000 and 2002, CRS carried out several re-targeting exercises, assessing levels of need and food insecurity at provincial level across all 23 provinces where school canteens were supported. This assessment was essential to the designation of areas scheduled for phaseout.

The FY2004-2009 program was also designed to strengthen and extend work in agriculture and to promote the skills and organizational structures which would enable the locally established micro finance institution, Groupe d'Accompagnement à l'Investissement et à l'Epargne [GRAINE], to become fully independent. In education and general relief, the new DAP was intended to consolidate and strengthen ongoing activities while reducing the scale of program coverage and preparing beneficiaries, particularly at school level, for full self-sufficiency.

The program, as implemented, achieved several broad objectives, phasing school feeding out of 17 provinces and reducing the number of relief partners from 160 TO 90. Program integration, was very limited. Only a small proportion of program participants were able to benefit from linked activities in more than one sector. The assessment of program impacts and effectiveness has been largely restricted to direct beneficiaries of separate sectoral interventions. Objectives, intermediate results and major activities are summarized below.⁴

⁴ This table is adapted from the Mid-Term Evaluation, Aker, Jenny C., Amy David-Kruize, E.Y.G. Kumodzie, Fernand Sanou, and Anne Sellers. 2006. *Catholic Relief Services/Burkina Faso P.L. 480 Title II Development Assistance Program. FY2004–FY2009 Midterm Evaluation*. (MTE), p. 12.

Goal: <i>Improved food security of targeted rural populations in Burkina Faso and extremely vulnerable populations in urban, per-urban and rural areas throughout the country.</i>					
Strategic Objectives	SO1: Improved value of off-season and staple crop production for resource-poor farmers in Burkina Faso. [Agric/ NRM]	SO2: Increased educational opportunities for Burkinabè children, especially girls. [Education]	SO3: Improved health and nutritional status of primary school children in Burkina Faso ⁵ . [School health]	SO4: Increased incomes from microenterprises for poor rural women (MF). [Micro-finance]	SO5: Increased food availability to highly food insecure people in Burkina Faso. [General Relief]
Intermediate Results	Increased number of farmers cultivating market gardens Increased use of improved production and marketing techniques Pilot school gardens and fields established	National school canteen program achieves greater sustainability More children enroll in and attend school	Key health behaviors are improved among school children Consumption of micronutrients and deworming medication increased	<i>Poor rural women have permanent access to financial services.</i> <i>Voluntary savings have increased</i> Professional quality of microenterprises strengthened.	Increased food distribution to targeted groups of highly food insecure Burkinabè
Outputs	Improved capacity and knowledge in agricultural techniques, literacy and management Creation of sustainable seed and tool systems Improved access to agricultural inputs	Enhanced capacity of MEBA and communities to manage school canteens Increased knowledge about the role of education Decreased distance to schools	Improved knowledge of parents, students and teachers about health behaviors Increased access to sanitation services at schools Increased access to deworming medication and micronutrients	Burkinabè MFI created, increased efficiency of branch offices, savings systems strengthened, increased capacity in microenterprise, new credit services adapted	Beneficiaries have minimum adequate food.
Activities	Trainings, input provision, financial and technical support, exchange visits, capacity-building for village-level organizations, agricultural extension services	Trainings, food aid (canteens and THR), meetings with PTAs, capacity-building for MEBA and PTAs	Training on hygiene and sanitation, distribution of Vit A, iron, deworming medications	Trainings, credit provided, new product development, exchange visits, MAGI assessments, development of business plan	Food distribution, commodity management training

C. EVALUATION FRAMEWORK AND METHODS

Goal and Objectives of the Evaluation

This evaluation was intended to review progress made in the implementation of the program and achievement of planned results and to try to assess the program's larger impact on the food security of targeted population groups targeted through this program. These were the major stated objectives:⁶

⁵ The World Bank was intended to fund the school health program. Due to late disbursement of funds, this SO was only partially implemented. The evaluation will focus on the other SOs.

⁶ The Scope of Work is attached as Annex I.

- ii. To assess the relevance, effectiveness and efficiency of the program interventions
- iii. To assess the results achieved by the program (at strategic objectives level)
- iv. To assess the sustainability of the program
 - v. To document lessons learned and provide recommendations for future programming
 - vi. To assess the impacts of the program's major interventions on food security, utilizing available data on target populations.

The evaluation of sectoral achievements has been discussed in terms of four broad areas: Program Effectiveness, Program Quality and Program Impacts. Responses to recommendations of the MTE, lessons learned and examples of best practices are documented in separate sections. Findings and recommendations are presented throughout the report.

Preparation

Given the existence of a comprehensive monitoring and evaluation system, and the relative independence of four of the program's objectives: agriculture and natural resources management; micro-finance; general relief and commodity management; and education (encompassing two Strategic Objectives [SOs], including school health), field programs and data collection methodologies were developed by each lead consultant independently. Key program documents were sent to all consultants before departure for the field; additional documents and materials were made available during and following the field exercise.

Fieldwork

Given the spread of program activities over a large number of provinces, the consultant team developed and followed sector-specific fieldwork programs. These averaged 8-9 days each, and included travel to a total of 7 provinces. They are summarized below.

Table 3. Fieldwork Visits: May 5 - 20, 2009

	SO1	SO2	SO4	SO5
Regions	2	4	2	4
Provinces	4	6	6	7
Sites	8	15	9	23
Days	8	8	9	8

In order to maximize the learning possible from areas where program activities overlapped, two field visits allowed for joint observation and interviews. One covered two schools with school gardens established as part of the school canteen phaseout program, visited jointly by the Education and Agriculture evaluation teams. The second site, a school receiving and utilizing CRS commodities, was visited jointly by the Education and Commodities/ General Relief teams. Details of fieldwork and preparation are provided in the discussion of each SO. Fieldwork schedules are attached. [See Annexes for SOs 1, 2, 4, 5.]

De-Brief and Feedback

Three de-briefings were held for CRS staff and partners in Ouagadougou. Comments and feedback were incorporated into the final report.

SO1: AGRICULTURE AND NATURAL RESOURCE MANAGEMENT

A. METHODOLOGY

Planning

Rupert Best, specialist in agroenterprise development, and Simon Tohou, specialist in agriculture and market gardening undertook the evaluation of the Agriculture and Natural Resource Management (NRM) SO. Preliminary desk work followed the procedures recommended for evaluation preparation, including review of key documents that were sent to the evaluation team prior to their arrival in Burkina Faso. A list of the documents consulted is attached as Annex SO1.1.

On arrival in Ouagadougou, meetings were held with key staff of the CRS' Agricultural and Monitoring and Evaluation (M&E) Departments for an overall briefing on the evolution of the agricultural components of the DAP, including background, major interventions, key results and principal challenges. Together with the staff of the Agricultural Department team, sources of information were identified for the questions of the Scope of Work (Annex SO1.2) and a plan of meetings and visits was developed. Meetings were convened with the principal stakeholders and key resource persons in each of the components of the Agriculture SO and visits scheduled to view the work in the field. The stakeholders included:

- CRS Agricultural Department and M&E staff
- CRS' partners, including management, technical and field staff
- Members of the Community Management Committees
- Men and women farmers, beneficiaries of the DAP and where possible non-beneficiaries
- School headmasters, teachers and members of the respective Parent Teacher Associations (PTA) and Parent Mothers' Association (PMA)
- Collaborating institutions
- Agricultural service providers
- Traders and exporters
- Regional Ministry of Agriculture

A total of three days were used in briefing at CRS and organizing and planning for the field visits. The full schedule of meetings and visits, and the persons met is provided in Annex SO1.3.

Fieldwork

A total of eight days was spent in the field. Two of the three market garden sites were visited, four of twenty five natural resource management (NRM) villages and two of the 10 schools where pilot gardens and fields have been established. Information was collected through:

- One-on-one interviews with ministry officials, service providers, collaborators and traders
- Meetings with management and technical teams of the partner institutions
- Focus group meetings with Community Management Committees and farmers on specific topics
- Larger group meetings with beneficiary and non-beneficiary farmers and, followed by field visits to plots for observation and clarification.

On occasions the two members of the evaluation team separated to cover a larger number of beneficiaries or meet with women and men farmers separately. During the visits, the evaluators were accompanied by a member of CRS' Agricultural Department and the Manager of CRS' Management Information System (MIS).

Drafting, feedback and finalization of report

Following the fieldwork, the information collected was synthesized and preliminary findings were presented first to CRS/BF management and technical staff, and then to partners. The ensuing discussions helped to clarify certain points and provide additional important information. During the drafting of the first version of the final report, intensive communication was maintained with CRS Agricultural and M&E staff for the filling in of gaps in information and further clarification on

important topics. The draft report was submitted for comment to CRS management and staff and then finalized following reception of their feedback.

B. PROGRAM EFFECTIVENESS

Strategic Objective 1: Improved value of off-season and staple crop production for resource poor farmers

The CRS/BF DAP 2004-2009 has sought to improve the value of off-season and staple crop production for resource poor farmers through the implementation of three components strategies: Market Gardening, Natural Resource Management and Pilot School Gardens and Fields (see Table SO1.1)⁷.

Each of the components contributes to the Strategic Objective in the following manner:

- Market gardening by increasing men and women farmers' incomes through the sale of off-season vegetables
- Natural resource management by raising the production of the staple food crops, millet and sorghum, both for household food consumption and sale
- Pilot school gardens and fields by teaching parents, teachers and students market gardening and agricultural techniques.

The Intermediate Results for each component with their corresponding indicators and major activities are shown in Table SO1.1.

⁷ Sources of information provided in each of the tables is provided in Annex SO1.4

Table S01.1. Overview of SO1 indicators, results and activities

Strategic Objective	Strategy	Impact Indicator	Intermediate results		Major activities
			Result	Indicator	
Improved value of off-season and staple crops for resource-poor farmers in Burkina Faso	Market gardening	1.1a. By mid-FY09, the income available from market gardening to 249 women at Site 1 has risen by an average of \$83.7 per woman over the FY05 baseline of \$ 4.44 per woman	1.1. Increased number of farmers cultivating market gardens	By beginning FY08, 800 farmers are cultivating market gardens	Feasibility studies and workplans for sites; preparation of sites; allocation of plots
				By mid FY09 at least 70% of farmers apply at least three of the relevant techniques promoted by the project	Hire and train CRS/BF project and partner staff; conduct RRA in targeted communities; develop marketing strategy; train participating farmers in production techniques; train participating farmers in marketing techniques
		1.1b. By mid-FY09, the income available from market gardening to 302 men at Site 1 has risen by an average of \$103.7 per man over the FY05 baseline of \$51.85 per man	1.2. Resource-poor farmers are using improved market gardening techniques	Revised: a. By mid FY09 at least 70% of male farmers produce and apply 500 kg of compost to their market garden plot	Selection of Community Management Committee members (CMC); training of CMC members in required tasks; support CMCs in establishment of systems for maintenance of the irrigation system, the collection of recurrent costs and marketing.
				Revised: b. By mid FY09 at least 70% of female farmers produce and apply 400 kg of compost to their market garden plot	
Natural resource management		1.2. By end of FY09, the yields of millet and sorghum among farmers using staple food crop production practices has risen by an average of at least 30% in treated plots as compared to non-treated plots	1.3. Resource-poor farmers are using improved staple food crop production techniques	By end of FY09 at least 70% of farmers apply at least two of the relevant techniques promoted by the project	Hire and train CRS/BF project and partner staff; select target villages; conduct initial RRA; identify and train farmers in SWC techniques, provide extension services
					Identify model farmers for demonstration plots; identify and test drought-resistant varieties
Pilot school gardens and fields			1.4. Pilot school gardens are established	By mid FY07 at least ten pilot school gardens and/or field sites are established	Hire and train project staff; select school communities; train APE/AME committee members; train teachers, students and parents in gardening and farming techniques; facilitate an APE/AME forum

The market gardening and natural resource management components constituted the major thrusts of the SO, representing 46 and 27% of the total Agriculture SO budget respectively, with 5% of the budget assigned to the school gardens and fields component. CRS operating cost and staff training made up 22% of the budget (Table SO1.2).

Table SO1.2. DAP 2004-2009 Cost of the Agriculture SO components, as of April 2009

Component	Amount (US\$)	%
1. Market gardening	936,479	46
2. Natural Resource Management (Tin Tua)	540,097	27
3. School Gardens and fields (DREBA)	110,729	5
4. CRS operating cost and staff training	436,678	22
Total	2,023,983	100

The results and performance of each component will be analyzed in turn. The Indicator Performance Tracking Table presented with the Annual Report for FY08, which shows impact and monitoring indicators for each intermediate result, is provided in Annex SO 1.5.

Market gardening component

The implementation of the market gardening component is based on providing plots of irrigated land to smallholder farmers for the production of cash crops, principally vegetables. It is being implemented in three sites:

- a) Silmidougou in Sanmatenga Province, with partner Federation Wend Yam (FWY)⁸
- b) Tougouri in Namentenga Province, with partner the Catholic Organization for Development and Solidarity (OCADES Kaya)
- c) Zeguedeguin in Namentenga Province, also with partner OCADES Kaya

In each site an irrigation structure has been built following the realization of a feasibility study. Water is pumped from existing reservoirs through a system of primary, secondary and tertiary canals to the plots which are laid out in a uniform grid. Annex SO1.6 shows a plan of the distribution of plots and canals for the Zeguedeguin site which is typical of the other two sites.

The Silmidougou site with 27 irrigated hectares was completed in January 2006 and has 550 plots of 500 m². The Tougouri site with 7.7 irrigated hectares was completed in January 2008 and has 170 plots of 450 m². The Zeguedeguin site is still under construction. It will have 8 ha of irrigated land divided into 160 plots of 500 m² and is due to commence production in October 2009. The total irrigated area available is 42.7 ha divided into 880 plots (Table SO1.3). Construction of the sites was undertaken by commercial companies following a tendering process. Annex SO1.7 provides details of the firms that have been employed to design, construct and supervise the irrigation works. In Silmidougou and Tougouri, potential farmer beneficiaries participated in clearing the site making them ready for construction.

⁸ Federation Wend Yam is an NGO active in all aspects of development (agriculture, health, potable water, literacy etc.). Wend Yam means "God wills" in the Mòoré language.

Table SO1.3 Market gardening sites

Sites	Implementing partners	Area of site	Area irrigated	Number of plots	Plot size	Start of cropping
		ha	ha		sq.m	month/year
Silmidougou	FWY	31.0	27.0	550	500	Jan. 2006
Tougouri	OCADES	8.5	7.7	170	450	Jan. 2008
Zeguedeguin	OCADES	9.7	8.0	160	500	Oct. 2009
Total		49.2	42.7	880		

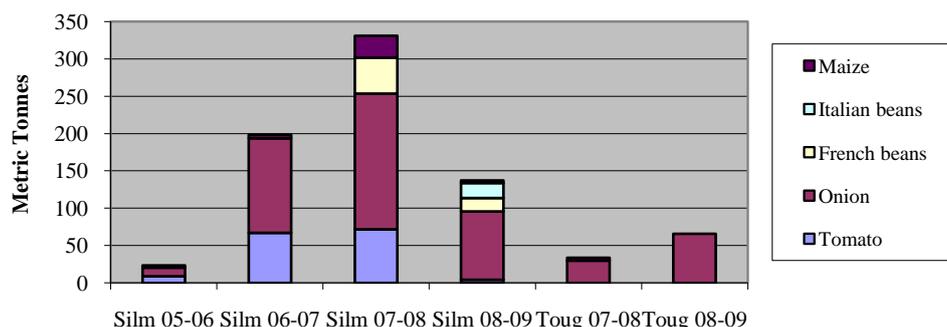
In each site a Community Management Committee has been established whose function is to manage and administer site maintenance, the supply and control of water, the planning and organization of production, and provide support for collective marketing.

Following the selection of beneficiaries and allocation of plots, farmers were trained in market gardening techniques and initiated production. In Silmidougou, farmers are in their fourth season of production (2005-06, 2006-07, 2007-08, 2008-09); in Tougouri farmers have just completed their second season of production (2007-08, 2008-09). Training in different aspects of market gardening is undertaken by project staff and by personnel from institutions specialized in market gardening, such as the Adventist Development and Relief Agency's Centre ADRA de Formation Maraîcher (ADRA-CAFORM).

Off-season planting can commence in October and continue until April. Winter (rainy season) use of the plots, with supplementary irrigation when necessary, occurs from July to September. Farmers at Silmidougou have cropped tomato and onions for the domestic and regional⁹ market and French bean (*haricot vert*) and Italian cannellini beans (*fagioli cannellini*) for export. Tougouri farmers have produced onions for the domestic and regional market. At both sites maize is grown in the rainy season. Around the edges of the plots it is common for farmers to plant okra, hibiscus (*bissap*), and maize for own consumption and local sale. Figure SO1.1 shows the evolution of production of the main crops at the Silmidougou and Tougouri. The volumes for the 2008-09 season are subject to revision as reports are not yet complete, and have yet to include winter use of the sites. Silmidougou shows good evolution from the 2005-06 until the 2007-08 season, but a considerable drop in production in the 2008-09 off-season.

⁹ The regional market includes Ghana, Togo, Benin and Côte d'Ivoire. Export refers to export of produce to overseas markets in Europe.

Figure SO1.1. Production at Silmidougou and Tougouri. 2005-09.



1. Intermediate Result 1.1. Increased number of farmers cultivating market gardens

Monitoring Indicator 1.1.1: By beginning FY08, 800 farmers are cultivating market gardens.

At the time of the Final Evaluation, the CMCs of Silmidougou and Tougouri reported a total of 507 farmers using the irrigation sites, 261 men and 246 women. This number of farmers represents 63% of the FY08 target of 800 farmers (Table SO1.4). Next season, once the Zeguedeguin site has initiated production and technical constraints to water distribution at Silmidougou and Tougouri have been resolved, the number of farmers active in the three sites will increase and likely approach the target of 800 farmers by the close of the program in May 2010.

The lower than expected number of farmers using the sites can be attributed to the following reasons:

- In Silmidougou, poor water supply in one of the eight blocks (block 8) into which the site is divided has caused abandonment by farmers. Others have ceased producing because of disillusionment with poor returns. The distance between some of the villages and the irrigation site is also a factor that discourages use.
- In Tougouri, during the 2008-09 season 14 of the 170 plots could not be used as soil levels were too high for irrigation. This problem has been resolved and the plots will become operational next season.
- The fact that the Zeguedeguin site has yet to be brought into production.

Table SO1.4. Farmers cultivating market gardens

Site	Site capacity		Situation May 2009				
	Plots	No. of farmers			No. of plots used	% site occupancy	% of target beneficiaries
		Men	Women	Total			
Simidougou	550	165	186	351	375	68	44
Tougouri	170	96	60	156	156	92	20
Zeguedeguin	160	0	0	0	0	0	0
Total	880	261	246	507	531	60	63

% site occupancy = (no. of plots used at a site/total number of plots available at a site) x 100

% of target beneficiaries = (no. of farmers using site/LOA target no. of farmers) x 100, where the LOA target is 800 farmers

At Silmidougou, vacant plots are distributed to new farmers and 15 farmers are now cultivating multiple plots.¹⁰ This gives a site occupancy of 68%, with 175 plots not being cultivated. The relatively low occupation rate is cause for preoccupation.

Table SO1.5 shows the breakdown of men and women farmers at Silmidougou and Tougouri, comparing the situation when the sites became operational and at the time of the evaluation. The change in the balance between men and women farmers indicates that there has been a greater dropout of men than women (some of the reasons for abandonment are poor water distribution, low returns and the distance of the site from the village). The percentage of women using the irrigation sites has risen from 42 to 49%. The evaluators were told that women market gardeners are on the whole more diligent and persevering than their male counterparts. This is born out by what has happened at Silmidougou, where women farmers now exceed men farmers.

Table SO1.5. Changes in male and female market garden farmers

Sites	Beneficiary farmers							
	At site start up				In May 2009			
	Total	Male	Female	% female	Total	Male	Female	% female
Silmidougou	550	301	249	45	351	165	186	53
Tougouri	170	116	54	32	156	96	60	38
Total	720	417	303	42	507	261	246	49

Indicator quality: Since the Impact Indicators for the market gardening component are disaggregated by gender, and attention to paid to the participation of women, this indicator could also have made explicit how many male and female farmers were to be targeted in the three irrigation sites.

Recommendation:

- ▶ In future programming, be cautious of trying to develop sites with large numbers of farmers. Developing a greater number of smaller sites with fewer farmers may result in fewer technical problems, in greater opportunities for farmers to be involved in the design and construction of the infrastructure, and be easier to manage and organize.

2. Intermediate Result 1.2. Resource-poor farmers are using improved market gardening techniques

Monitoring Indicator 1.2.1: By mid FY09 at least 70% of farmers apply at least three of the relevant techniques promoted by the project.

The market gardening component has promoted the following good practices: the use of improved seed varieties, planting in lines, organic pest control, composting, crop rotation, intercropping and sound water management. In FY08, at the Silmidougou site, 93% of farmers report using at least three of these practices, therefore amply exceeding the FY09 target.¹¹

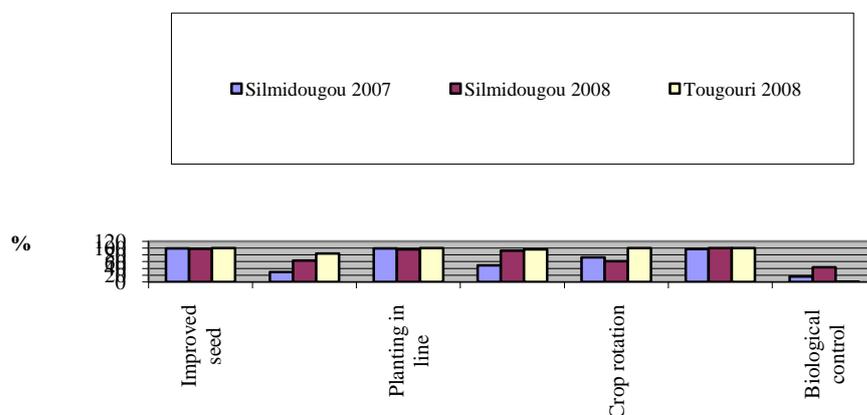
Figure SO1.2 show the percentage of farmers using each of the recommended practices at Silmidougou and Tougouri. The use of improved seed, planting in line and sound water management are all close to 100% use at both sites.

¹⁰ 6 farmers (3 men and 3 women) are cultivating 2 plots and 9 farmers (5 men and 4 women) are cultivating 3 plots.

¹¹ This data is taken from the M&E study for the seasons 2006-07 and 2007-08 for Silmidougou and 2007-08 for Tougouri. Sample sizes were: Silmidougou 2006-2007 100 farmers (54 men and 46 women); Silmidougou 2007-08 121 farmers (56 men and 65 women); Tougouri 2007-08 80 farmers (50 men and 30 women).

The production and use of compost and organic manure has increased at Silmidougou from 2007 to 2008 to over 60 and 80% of farmers respectively. At Tougouri both compost and organic manure was used by over 80% of farmers in 2008, the first year of cropping. The use of this practice is further discussed below.

Figure SO1.2. Use of market gardening practices, % of farmers using



Over 70 % and 100% of farmers report using crop rotation at Silmidougou and Tougouri respectively in 2008. Crop rotation is the sequencing of different crops under irrigation during the dry season, called ‘double cropping’, and/or the planting of maize and other crops for household consumption in the wet season. Both are important practices for managing the incidence of pests and diseases and preventing soil depletion. Some of the most dynamic farmers are reported to have double cropped at Silmidougou, planting French beans followed by onion or tomato in the 2007-08 season. At Tougouri, where dry season cropping has focused exclusively on onions, the small amount of maize (3.8 MT) and other crops (hibiscus, beans and okra sold for a value of 50,000 FCFA) produced in the 2007-08 winter season suggest that the use of crop rotation may not have occurred over the entirety of the irrigated area, despite the fact that all farmers reported using the practice.

The use of biological control for managing pests is the practice with least adoption by farmers. Training before the 2007-2008 season at Silmidougou has increased the use of biological control from 16% in 2007 to 43% of farmers in 2008; whereas only 1% of farmers reported using biological control to manage pests at the Tougouri site in 2008, which was their first year of cropping. Training therefore appears to be an effective means of increasing the use of this practice.

Indicator quality: The indicator could have stated ‘at least three of the seven techniques promoted by the project’. Explanation of the choice of three techniques as an acceptable level of use for meeting the Impact Indicator on income increase should be provided.

Original Monitoring Indicator 1.2.2: *By mid FY09 at least 70% of farmers produce and apply 1 MT of compost to their garden plot.*

Revised indicators:

- a) *By mid FY09 at least 70% of male farmers produce and apply 500kg of compost to their market garden plot*
- b) *By mid FY09 at least 70% of female farmers produce and apply 400 kg of compost to their market gardening plot.*

The production and use of compost is considered to be a key practice for achieving good market garden yields. An application rate of 20 MT per hectare is recommended, or 1 MT per 500 m² market

garden plot. Following the MTE, the indicator was adjusted downward as shown in the revised indicators.

The M&E studies undertaken at Silmidougou in FY06, FY07 and FY08 indicated that fewer than 4% of farmers are achieving applications of 1MT. In FY08 37.6% of male farmers applied 500 kg of compost and 40.4% of women farmers are applying 400 kg. This suggests that it may be possible to reach close to the LOA target of 70% for both men and women farmers by the close of the program.

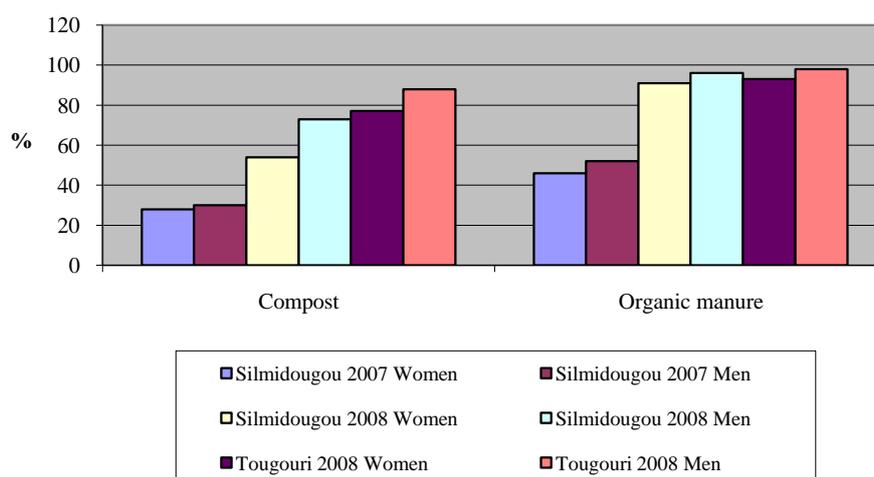
Compost is produced principally by farmers on their farms. Since many of the farmers live at considerable distance from the Silmidougou irrigation site (see Table SO1.16), it is likely that transport availability and transport costs are one impediment in achieving high levels of compost use.¹² The availability of organic materials for making compost and competition between use for staple crop production and market gardening may be among other factors limiting compost use. It is important that obstacles to the production and use of compost are well understood. If availability and access to compost is a key determinant for achieving sustainable and profitable vegetable yields, then this may need to be a criterion to be taken into account when selecting farmers to participate in the market gardening schemes.

Information collected in the FY07 and FY08 M&E exercise shows that the use of compost and organic manure by men farmers is higher than by women farmers, Figure SO1.3. In general the difference is not large. The greatest gap between men and women is larger for compost at Silmidougou, where 73% of men reported using compost against only 54% of women in 2008. In our meeting with women farmers, when asked about their disadvantages with respect to their male colleagues, women stated that men have priority use of the carts and this limits the access of women to transport (the cost of hire of the carts is the same for men and women, so this suggests that the demand for transport is higher than the availability of carts and/or women have less access to carts belonging to their households). This situation could in part account for the lower use of compost by women, although it might be expected that women's use of organic manure might show a similar large difference compared to men which it does not. In contrast, at the Tougouri site the use of compost and organic manure has initiated at high levels for both men and women. Could this be because farmers live closer to the site and transport represents less of an obstacle?

Indicator quality: The revised levels of compost application are more attainable. To maintain coherence, thought should be given to whether the new target will be sufficient to achieve the increased income levels of the Impact Indicator.

¹² A women farmer at Tougouri explained that she applied 7 cart loads of manure on her plot for onion production and that the charge for hiring the cart is 250 FCFA per trip. Farmers have observed that without sufficient compost or manure the size of the onions is small and they fetch a lower price.

Figure SO1.3. Compost and manure use by women and men farmers, % applying



Training indicator

Investment in training has been substantial and a wide range of training events have been held. The FY08 Annual Report to USAID reports that the target activity indicator: ‘By end of FY08, 800 farmers trained in production, post-harvest and marketing techniques’ has been achieved. It should be noted that in addition to the technical areas mentioned in the indicator, the CMCs have received training in leadership, management and administration, marketing strategy elaboration, commercial action planning and implementation, market access and price negotiating. The annual reports of FWY do however mention low attendance levels by farmers at demonstration type events, but higher participation levels for training in specific technical topics. The attendance rates of CMC members at events specifically targeted at them are described as ‘weak’.

Yield indicators

Yield is not a selected indicator of progress for the market gardening component. However, it can provide a guide to the effectiveness of the investment in promoting good marketing garden techniques through training, exchange visits etc. At Silmidougou, the production and area cultivated by a sub-sample of 10 tomato and 10 onion farmers has been recorded in the seasons 2006-07 and 2007-08. The results are shown Table SO1.6.

Table SO1.6. Yields of tomato and onion. Silmidougou.

Season	Tomato				Onion			
	Maximum	Minimum	Average	% change	Maximum	Minimum	Average	% change
	MT/ha				MT/ha			
2006-07	18.3	0.0	10.4		20.6	9.4	14.8	
2007-08	33.8	7.2	18.0	73	22.2	7.1	16.2	9

Both crops produced higher average yields in the second year, with tomato increasing by 73%, and onion 9%. This suggests that the investment in training and technical assistance is paying off. To provide a benchmark, the market study undertaken for the Silmidougou site calculates the net income for tomato and onion production using an average yield of 22 TM/ha for both crops.¹³ Therefore, there is further room for yield improvement, especially for onions. The identification of the major limiting

¹³ In Annex III of the same market study, which provides information on a range of crops grown in Burkina Faso, gives higher values of expected yields, with tomato at 25 MT/ha and onion at 30 MT/ha.

factors for increasing yield, and the subsequent modification of production practices to overcome those limitations, is a typical task that could be undertaken by a Farmer Field School or Local Agricultural Research Committee (this is further discussed below).

Marketing indicators

Performance in marketing was limited to an indicator at the activity level: *A marketing strategy for each site is completed according to the following schedule: site 1: beginning of FY05; site 2: beginning of FY06; site 3: beginning of FY07.* A market study for the Sanmatenga Province was conducted in 2004 by a consultant that includes a set of generic recommendations with respect to product selection, pricing, product promotion and distribution. This has provided the basis for taking marketing-related decisions at the Silmidougou and the Tougouri sites.

Silmidougou CMC does develop a marketing strategy specific to the site's needs that is a simple matrix with brief details of the product to be produced, how the price will be set, what promotion will be carried out and how the products will be distributed. The information (e.g. contained in the FWY report for FY08) is summarized and tomato and onion are dealt with in the same matrix. There is no quantitative information about the amounts to be produced, the quality (variety, sizes for different markets, etc.), costs of production as a guide to acceptable price, etc. In the case of FY08, the strategy makes no mention of producing French beans which suggests that the decision to produce French beans was not contemplated at the time the marketing strategy was elaborated. As yet the development of the marketing strategy and plan has not lead to the preparation of a business plan. These activities should become standard practice, and developed in close consultation with all the site's users. These plans do not need to be sophisticated.¹⁴

Since marketing is a critical and key activity in achieving the SO level targets of increased income, it would have been appropriate to have included indicators at the Intermediate Result level that cover marketing and enterprise performance.

Fundamental in selecting market-related indicators at the Intermediate Result level will be the degree to which collective or bulk selling, as against individual selling, is seen as the most advantageous strategy for farmers. The experience to date is that only the onion market provides farmers with the alternative of selling either individually or collectively. Whereas the markets for tomato, French and Italian beans need farmers to be organized for collective or bulk sale. It is reasonable to assume that in the medium- to long-term, farmers will receive better returns from producing and marketing vegetables of higher value that require organization into groups to meet more demanding purchase conditions. Therefore marketing performance indicators should be directed at measuring the capacity of marketing groups to establish a marketing and business plan, identify markets, enter into agreements with buyers, and deliver products that meet with buyers' purchase conditions (volume, quality, packaging, frequency of delivery, etc). This capacity is so far incipient and will require significant attention in future programming.

Farmers, partner and CRS staff all mentioned marketing as being a major bottleneck. Onion production has proved to be the least risky among the vegetables. Onions have the advantage that they are less perishable and can be stored for short periods, and they have a local market.¹⁵ Tomatoes are susceptible to a soil borne disease (bacterial wilt), they are highly perishable and prices fluctuate significantly.¹⁶ However, tomatoes from Burkina Faso are highly appreciated in neighboring Ghana where there is a large demand:

¹⁴ CRS' recent publication 'Getting to Market' provides examples of what is required of a simple market and business plan.

¹⁵ Farmers have been trained in onion storage and visited onion storage structures. Lack of resources has constrained the construction of infrastructure. As a start, farmers could build simple structures at their homes made out of local materials to gain experience.

¹⁶ The recommendations received from INERA Kamboincé research station scientists to manage the disease include a) production of tomatoes in the cool period of the year, b) the application of manure in sufficient quantities (20 MT/ha), c) the use of resistant varieties and d) crop rotation.

"Burkina tomatoes are bigger, harder, far superior in taste and last longer in storage," says Mme Dufie, vendor at Abeka Market in the Ghana's capital Accra, "Burkina tomatoes are of higher quality and sell more quickly than local varieties".

The Intelligence Daily, 18 April 2009. <http://www.inteldaily.com/news/>

With respect to producing for export, Silmidougou farmers have had three experiences, two with French beans and one with Italian beans (Table SO1.6). Results have been mixed.

Table SO1.7. Silmidougou farmers experience in exporting vegetables

Exporter	Crop/season	Contracted volume or area		Volume delivered MT	Price FCFA/kg	Market	Result
		ha	MT				
SOBFEL	French bean 2007-08	5.4		36.2	300	Export	SOBFEL went bankrupt, farmers expect compensation from government.
				9.1	100	Local	
ADAPA	Italian bean 2008-09	8.5	65	5.0	268	Export	1st consignment lost due to poor post-harvest handling, no further purchase made.
BFL	French bean 2008-09	3	18	9.1	325	Export	Unable to meet contracted amount because of insect attack; payment due May 2009.
				1.2	175	Local	
				0.4	150	Local	

In the 2007-08 season, with support from a private service provider, Association Développement Professionnel des Producteurs Agricoles de Sanmatenga, ADPPA, 108 farmers planted French beans for sale to the Société Burkinabé de Fruits et Légumes, SOBFEL S. A. a government-owned exporting company. Yields were excellent at 8,853 kg/ha (the total production was 47.8 MT of which 2.5 MT were consumed at home or given away). 9.1 MT (20%) were classified as 2nd class quality and sold in the local market at 100 FCFA/kg; 36.2 MT were bought at 300 FCFA/kg and exported. Regrettably, SOBFEL went bankrupt and farmers have not been paid. The government may compensate farmers for the lost income.

In the 2008-09 season, again with technical support from ADPPA, farmers planted Italian beans for sale to the Association pour le Développement Agropastoral en Afrique, ADAPA. It is believed to have been the first time that this variety of bean has been cultivated in Burkina Faso. Seed was imported from Italy by ADAPA. A yield of about 6.9 MT/ha was expected. According to the ADAPA exporter, Mr. Saïdou Ouedrago, the first consignment of beans delivered by the Silmidougou farmers experienced transport delays and reached Ouagadougou with too little time for cooling to an adequate temperature before air freighting to Europe. On arrival the beans were of unacceptable quality and had to be burnt. Based on that experience, ADAPA declined to buy any further Italian beans from the farmers. This type of bean is unknown in Burkina Faso and there is no local market.

Also in the 2008-09 season, farmers produced French bean for sale to Burkina Fruits et Légumes, BFL. 18 MT were expected from 3 ha, but yields of marketable grade were low and only 10.7 MT could be delivered.¹⁷ 15% of this total was sold as 2nd class quality on the local market. Under normal circumstances BFL would dock 25 FCFA/kg from the agreed price for not delivering the volume contracted. Mr. Paul Soalla, General Manager of BFL, said that as this is the first contract with Silmidougou farmers he will not make any deduction from the 325 FCFA/kg that was agreed. Payment by BFL is made about 1 month after delivery, and was due shortly after our meeting with Mr. Paul Soalla.

¹⁷ Farmers and field agents did not detect the infestation of insects on time, and an appropriate insecticide was not immediately available. The yield of marketable product was therefore reduced.

While these experiences have been disheartening, the farmers, FWY, OCADES and CRS can learn a lot from them. The result should be better decision-making with respect to choice of market, and in particular a better understanding of the level of risk that can be expected in each. The choice of Italian bean was a particularly risky one. The crop is new to Burkina Faso, the service provider, ADPPA, had no previous experience, and considered that it to be similar to French bean¹⁸, and ADAPA gave the impression of having little experience as an exporter (compared to BFL whose General Manager spent 6 years working with Dole Food Company before forming BFL in 2003).

Recommendations:

- ▶ In future programming of market gardening components, ensure a balance between investment in building the capacity of farmers in production, with investment in their capacity to organize collectively, build business acumen and ability to engage with markets.
- ▶ As a rule of thumb, at the outset, start with the production of vegetables that are least risky to produce and market. New crops should be produced and marketed on a pilot scale before committing to larger scale production.

Impact of the market gardening component

1. Impact indicators

1.1a. By mid-FY09, the income available from market gardening to 249 women at Site 1 (Silmidougou) has risen by an average of \$83.7 per woman over the FY05 baseline of \$ 4.44 per woman.

1.1b. By mid-FY09, the income available from market gardening to 302 men at Site 1 (Silmidougou) has risen by an average of \$103.7 per man over the FY05 baseline of \$ 51.85 per man.

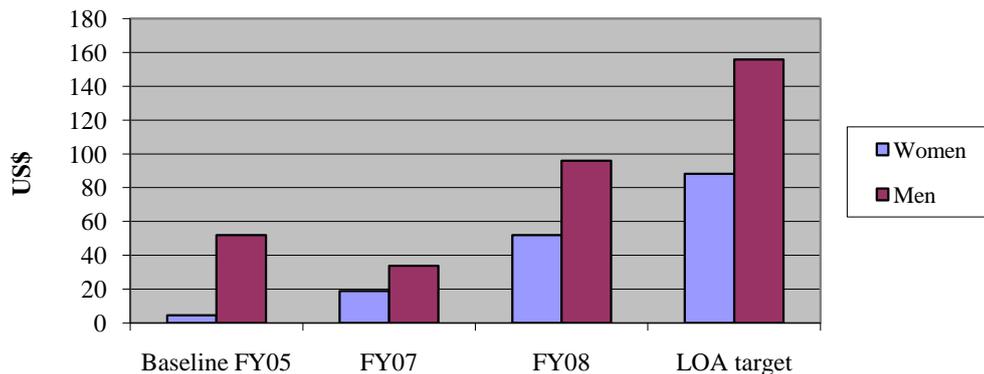
These two indicators, for women and men respectively, are measured by interviewing a sub-sample of farmers at the Silmidougou and Tougouri. Gross income of farmers is assessed each year by asking farmers how much of each vegetable crop they sold, how much they used for home consumption, how much they gave away and to estimate how much was lost. A value is placed on each of these uses, except for the amount lost. The costs are estimated by asking farmers to recall the amount and monetary value of all inputs used in production. Net income is calculated as gross income minus monetary costs. If hired labor is used it is included, otherwise household labor is not accounted for.

In reality, what is being measured is ‘gross value of production’ not ‘available income’. However, the data collected by the M&E Department can be disaggregated to provide a value of the cash income that is generated from the sale of produce. This should be done.

The progress toward achieving the market gardening impact indicators is shown in Figure SO1.4. The indicator has been set only for the Silmidougou site, which has now completed 4 off-season cropping cycles. Both men and women’s average per capita value of production from their market gardening activities has risen since the baseline studies were undertaken. Before the marketing gardening intervention at Silmidougou, it was predominantly men that engaged in growing vegetables for sale, and this accounts for their considerably higher earnings from this activity compared to women in FY05.

¹⁸ The Italian bean (fagioli cannellini) is a white bean that is harvested and exported in the pod. The time to maturity and point of harvest is therefore different from French bean and critical for achieving the accepted ‘fresh’ quality.

Figure SO1.4. Average value of production per capita, men and women farmers. Silmidougou



Since the baseline in FY05, men’s income dipped in FY07 and recuperated in FY08. Per capita income is a function of the vegetable or mix of vegetables grown and the price received for each. Prices of vegetables fluctuate year-on-year and month-on-month, and could account for the drop in men’s income in FY07 (alternatively, the baseline figure for men was overestimated). A record of monthly and yearly price fluctuations of vegetables should be maintained to help interpret the M&E information on incomes and help decision-making on what to produce and when to sell.

While the mid-FY09 target has not been achieved for either women or men, it is encouraging that women’s income has increased by a factor of nearly 12 and men’s 85%. There is significant potential for further increases in income through more intensive use of the irrigation site (by double or triple cropping in each dry season, and fuller use of the sites in the winter season).

The initial results at the Tougouri site were less promising. The M&E study undertaken in November 2008 recorded women farmers earning 91% less and men farmers earning 19% less than what they earned at the time the baseline study was undertaken a year earlier. The M&E study for the 2008-09 season, which will tell us if that trend has been reversed, has yet to be undertaken. During the evaluators visit to the Tougouri site the farmers gave no indication that the 2008-09 season had been unsuccessful. Farmers have focused exclusively on the production of onions.

At both sites visited we were told by farmers that they use the cash income from the exploitation of their market gardening plots to buy food grains and livestock, and to pay for school fees, clothes and medicines. The plots also provide crops such as maize, okra and hibiscus for home consumption; before these food items had to be purchased.

Women farmers manifested that the opportunity to participate in market gardening has enabled them:

- a) To get to know each other better
- b) To be occupied all the year round, instead of just in the rainy season-3-4 MONTHS
- c) To learn about market gardening that was previously mainly practiced by men
- d) To save money in the credit union (Caisse Populaire).

Indicator quality: the Impact Indicators are specific to the Silmidougou site and are based on information generated by the baseline study of the target villages for that site. Indicators could therefore have been established for the Tougouri site following the completion of the corresponding baseline. The M&E Department recognizes that the LOA target for Silmidougou was ambitious.

2. Impacts beyond program beneficiaries

The nature of the market gardening intervention, with its high level of investment in infrastructure (see Annex SO1.8 for infrastructure costs of sites), means that impacts on non-beneficiary farmers that do not have access to irrigated land is likely to be small. In Silmidougou, there was insufficient time to explore with non-beneficiary farmers of the 22 villages from which farmers were selected about the impact the program may have had on their activities or lives. One might suppose that they may have benefited through, for example, opportunities for work at the Silmidougou site or an increased local availability of vegetables. Conversely, farmers that were or are using the banks of the reservoirs for their own market gardening activities could have been negatively affected if they were not allocated plots, by reduced access to land or water.¹⁹ A meeting scheduled with the Chief of the Rural Commune in Silmidougou, which might have shed some light on these aspects, could not take place.

The positive or negative impacts that the projects are having – or might have in the future - on the immediate environment are not being addressed. Environmental considerations were included in the feasibility studies and initially attempts were made to engage the Local Water Committees that have responsibility for the water catchments around the respective reservoirs. We were informed that these committees are non-functional. Regulations with respect land use around the reservoirs do exist but are not enforced and many local administrations are unaware of their existence. As a result attempts at entering into a dialogue with the appropriate authorities on matters related to longer-term water conservation and management have lapsed.

Both CRS' partners FWY and OCADES manifested the importance of the DAP for building their capacity for providing support to market gardening projects. FWY in particular believes that the experience has increased the organization's visibility and opportunities for mobilizing resources for agricultural development projects in support of their members. FWY had partnered with CRS in the establishment of an irrigation site in Lélègse in the late nineties that ten years after establishment continues to operate successfully. Their aim is to ensure that Silmidougou becomes another model of success.

Recommendation:

- ▶ Assess the potential threats to the sustainability of the irrigation sites through lack of attention to how the water catchment area is being managed upstream. In future programming, ensure that concrete steps are taken as part of the program to catalyze action by the local authorities and Local Water Committees aimed at motivating conservation and the enforcement of regulations.

Natural Resource Management component

The natural resource management (NRM) component is being executed in two departments, Manni and Coalla, of Gnagna Province. CRS' partner is the Association Tin Tua, ATT.²⁰ A total of 1,522 farmers were selected from 25 villages to participate as direct beneficiaries. 24% of the farmers selected are women. Of the 25 villages, implementation of the project was staged, with 10 villages starting in 2004 and the remaining 15 villages in 2005.

In each village NRM activities are organized through a Community Management Committee (CMC) made up of 5 members and two advisors. The role of the CMC is to schedule the work, organize working groups, which are headed up by a member of the committee, and to manage the use and hiring of the equipment provided by the program.

¹⁹ Those farmers that previously farmed on the land now occupied by the irrigation schemes and were allocated plots will have benefited, but those that were not allocated plots may have been disadvantaged. For environmental reasons (agrochemical contamination and silting-up of the reservoir), it is illegal to farm on the banks of the reservoirs, up to a distance of 100m, but this is not enforced and this practice continues around the Silmidougou and Tougouri sites.

²⁰ Association Tin Tua is a nongovernmental organization (NGO) founded in 1989 with the aim of promoting sustainable development through literacy and training in the eastern region of Burkina called Gulmu. In the local Gulmancema language, Tin Tua means "Let's develop ourselves for ourselves".

The principal aim of the NRM component is to increase the yields of sorghum and millet, the two principal staple food crops, by introducing a menu of improved production practices, with special attention given to practices that help capture water, improve water infiltration, and concentrate and conserve nutrients.

The production techniques that have been the focus of the activities are:

- Construction of half moons. Half moons are shallow, 20 cm deep, depressions made in the soil in the form of a half moon whose aim is to act as catchments for water. Compost is placed in the depression. In each half moon 25 to 30 planting holes can be accommodated.
- Planting using zai holes.²¹ Zai holes are 20 cm diameter by 20 cm deep ‘pockets’ placed at a distance of 80 cm between holes and 80 cm between lines, each pocket offset from that in the next line. Compost is mixed with the soil in the hole and planting takes place after the second rain.
- Production and use of compost. The recommended practice is to dig compost pits measuring 3m x 3m x 1.2m deep. Crop residues, animal dung and ash are layered in the pit, water is added and then periodically during decomposition. Compost can also be made in heaps above the ground.
- Stone bunds. Stones are collected from on or off the farm and placed along the contour to slow water runoff and increase infiltration.
- Grass strips. These are used in conjunction with stone bunds or, where stones are scarce, are used alone with the grass sown on earth ridges. The grass *Andropogon gayanus* is commonly used.
- The use of improved varieties of sorghum and millet. Basic seed of 5 varieties were provided by INERA.
- Assisted natural regeneration (ARN) of trees found in production fields. This consists of cutting out non-useful branches, digging a small trench around the base of the tree to catch water, and filling the trench with compost.

Photo SO1.1. Recently constructed half-moons by a non-beneficiary farmer



²¹ Half moons and zai pockets are alternative technologies for soil preparation. If you use one on a plot, you do not use the other. Both techniques can be used in combination with all the other techniques listed.

Photo SO1.2. An earth bund combined with half-moons



Photo SO1.3. Zai pockets



Photo SO1.4. Farmers standing on a below-ground compost pit that has been filled with organic material



1. Intermediate Result 1.3. Resource-poor farmers are using improved food crop production techniques.

Monitoring Indicator: By end FY09 at least 70% of farmers apply at least two of the relevant techniques promoted by the project.

Prior to the NRM project, the use of, knowledge about, and previous training received by farmers on the practices to be promoted was at a low level. Table SO1.8 summarizes the results of the baseline study conducted with the selected farmers. Overall, 88% of farmers had received no previous training, 78% had a low level of knowledge about the techniques, and only 15% were practicing at least two of them. A higher percentage of women participants had lower levels of knowledge of and no previous training on the practices.

**Table SO1.8. Training, knowledge and use of NRM techniques.
Baseline**

		Overall	Men	Women
% of farmers that had no previous training		88	86	93
% of farmers with good, average or low levels of knowledge	Good	0	0	0
	Average	22	25	14
	Low	78	75	86
% of farmers practicing at least two, one or none of the techniques	At least two	15	n/a	n/a
	One	29	n/a	n/a
	None	55	n/a	n/a

The progress made toward reaching the program’s target of at least 70% of farmers applying at least two of the proposed techniques is shown in Table SO1.9. By FY07 had met the LOA target and in FY09 81% of farmers were using at least two practices.

Table SO1.9. Farmers using at least two relevant techniques, %

Baseline		Achieved, %			LOA target
FY05	FY06	FY07	FY08	FY09	
15	54	70	72	81	70

Indicator quality: The indicator could have stated ‘at least two of the seven techniques promoted by the project’. Explanation of the choice of two techniques as an acceptable level of use for meeting the Impact Indicator on yield increase should be provided.

Disaggregation of the data by gender (Table SO1.10) shows that a lower percentage of women (63%) are using at least two relevant techniques than men (84%). Also, 26% of the beneficiary women and 11% of the beneficiary men are using none of the practices promoted by the project. This suggests that there are some intrinsic barriers for the adoption of the techniques and these are more accentuated for some women farmers; time availability to undertake the tasks and the relative effort required may be factors that constrain women from adopting. On the positive side, relatively more women (37%) are employing at least 5 techniques than men (25%). As in the case of market gardening, this might imply that women are more ‘perfectionist’ in their farming than men.

Table SO1.10. % of beneficiary farmers using promoted practices, 2008

Practices used	Total n=115	Men n=96	Women n=19
6 practices	9	8	11
At least 5	27	25	37
At least 4	50	51	42
At least 3	70	72	58
At least 2	81	84	63
At least 1	86	89	74
None	14	11	26

Table SO1.11 compares the evolution in use of the techniques over the period 2006 to 2008. By 2006 all beneficiaries were active in the project and had received training. There was relatively high usage – over 60% of farmers - of compost pits, compost application and stone bunds. Zai pockets were being used by 22% of farmers, improved seed by 15% and half moon by just 6%. After two years of further training, exchange visits and consolidation of the CMCs there have been some important evolutions.

Table SO1.11. Increase in use of NRM techniques

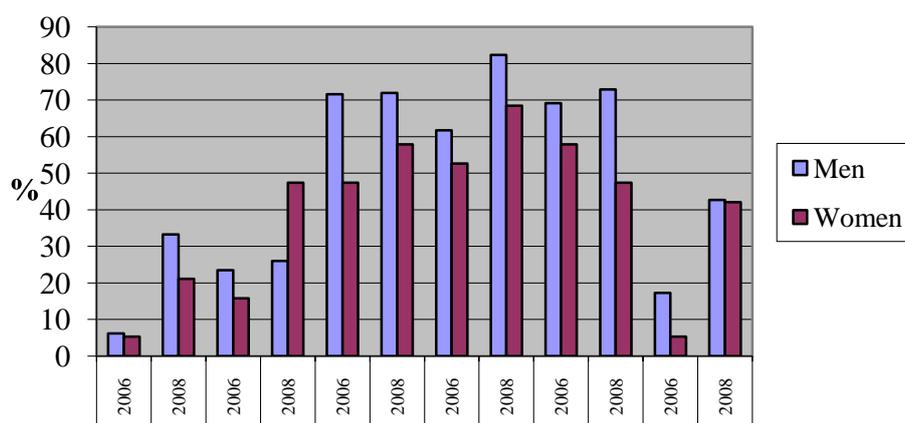
Technique	% using the technique		% increase
	2006	2008	
Half moon	6	31	422
Zai	22	30	35
Compost pits	67	70	4
Compost application	60	80	33
Stone bunds	67	69	3
Improved seeds	15	43	184

In 2008 we find that the use of compost pits and stone bunds is at a level similar to that in 2006. Both these techniques are investments in infrastructure, and once built should require only periodic maintenance. The stagnation in use of stone bunds could be due to various factors, among them: a) the scarcity of stone or the increased cost in acquiring stone once the readily available stone has been used up, or b) the need to organize work groups to help build the bunds and the difficulty that was expressed during our meetings in providing food for work group members. With respect to compost pits, these have the tendency to collapse after heavy rainfall if they are not built with cement. Cement is scarce and costly and so few farmers are using it. We observed compost being made in heaps above-ground, but no data is collected on the extent to which this practice is replacing the use of pits. However the fact that compost application has increased by 33% suggests that farmers are adopting this technique in preference to the pits.

The percentage of farmers using zai pockets has risen from 22% to 30%. This technique is particularly popular amongst women (Figure SO1.5) as it does not require the hard physical labor associated with the construction of half moons. The use of half moons, a technique favored by a greater percentage of men (Figure SO1.5), has seen the largest jump in adoption. Farmers told us that yields of sorghum and millet produced in half moons are double those produced in zai pockets. Women farmers therefore do appear to be disadvantaged with respect to the use of the better half-moon technique and commonly hire labor to construct them. A comparison of the labor and equipment required for each of the practices is presented in Annex SO1.9.

The use of improved seed has increased, with little difference in levels of adoption between men and women farmers (Figure SO1.5). However, given the investment in testing and production of sorghum and millet varieties, the fact that only 43% of beneficiaries are using improved seed may mean that in reality the introduced varieties are not meeting the expectations of farmers in terms of agronomic performance or other traits such as eating or straw quality.

Figure SO1.5. Use of NRM practices by men and women farmers



The total area that has been restored using half moon, zai and stone bunds is shown in Table SO1.12. Each farmer using half moon or zai have an average of around 2,000 and 2,500 m² that have been treated. An impressive total of 1,834 ha, or nearly 1.8 ha per farmer has been protected using stone bunds.

Table SO1.12. Total area recuperated with selected NRM practices. May 2009.

	Area established ha	No. farmers using practice	Area in sq.m. per farmer using practice
Half moon	99	476	2,078
Zai	112	451	2,486
Stone bunds	1,834	1,046	17,540

Recommendation:

- Find out why 11% of men and 26% of women beneficiaries have not adopted any of the proposed NRM practices. Propose technological or organizational options for integrating these farmers more fully, or replace them with other farmers that are able or want to benefit from the interventions of the program.

Testing and production of improved seed

Seed of three improved sorghum varieties and two improved varieties of millet were obtained from the Institut de l'Environnement et de Recherche Agricole (INERA) and tested in trials on farmers' fields. The objective of these trials was to compare the improved varieties' earliness and tolerance/resistance to drought and pests and diseases to those of the local varieties.

A summary of the results are presented in Annex SO1.10. Both improved millet varieties and one of the sorghum varieties performed less well than the local varieties and were discarded. The sorghum varieties Sariasso 11 and Kanfiagui performed well and are being multiplied for distribution.

The report on the trial mentions as a difficulty the less than perfect command by the field agents and the farmers of the protocol and of how to undertake the trial.²² This would explain what appears to be a strange design (see Annex SO1.10). Beyond the design, there are a number of other observations that can be made about the trial.

- An objective of the trial was to assess the improved varieties' tolerance/resistance to drought and pests and diseases. The presentation of the trial data and its analysis (March 2006) states that rainfall was good in 2005. If this is the case, then the trials should have been repeated in a year with less good rainfall. According to Tin Tua reports, trials were undertaken in 2006, but the results have not been documented.
- The diversity of improved varieties tested was reduced. The scientist with whom we spoke in INERA manifested that they hold a much wider range of diversity for the conditions in Gnagna Province, and that this could have been put at the disposition of the project.
- INERA's participation in this activity was limited to supplying the seed for the trial. Their scientists did not visit the trial, nor were they provided with any feedback on the results obtained. The reason given for the scarce collaboration with INERA was lack of budget.
- INERA, which collaborates closely with the International Crops Research Institute for the Semi-arid Tropics, ICRISAT, could have provided know-how and support for the realization of participatory selection trials involving a much greater diversity of germplasm. This could have led to the identification of millet varieties that meet the requirements of farmers, and other potentially acceptable sorghum varieties.

To complement the work on variety selection, a network of 10 farmer producers of certified seed has been established. They are producing seed of sorghum, sesame and cowpea. It appears that the principal market for these seeds is NGOs and development projects. While it is commendable that the project has coached these farmers in the rigor and discipline of meeting the standards for producing certified seed - the regional agriculture office seed inspector inspects the crops periodically during the growing season - it is questionable whether this 'institutional' market is in fact sustainable over the medium-term. In terms of the local market, unless farmers can be convinced of the benefit - through improved yields - of purchasing certified seed every three years, they will continue to store and use their own seed of open pollinated varieties. The long-term commitment of the government or other agencies to source seed from producers such as these, the formalization of the 10 producers into a seed producers' group and incorporation into the provincial seed producers union are steps that need to be taken.

Recommendation:

- ▶ View the seed producers' group as a business that provides an essential input for crop production. Assess the true market potential for their products. Only consider further support if a clear market opportunity exists.

Literacy

One of the important strengths of the NRM component is the competence and capacity of Tin Tua in adult literacy. Farmer beneficiaries are encouraged to enroll at the Tin Tua literacy centers. As of FY08, 560 farmer beneficiaries have participated in literacy courses. Once literate, farmers can self-organize into what are called Tin Tua groups. These groups, whose members have experience of working together, can become legally recognized and open a bank account; they can access a credit line held with the Caisse Populaire. These opportunities will contribute positively to the sustainability over time of the NRM activities.

Impact of the NRM gardening component

1. Impact Indicator

²² ATT; CRS. 2006. Resultats des Tests Varietaux et Demonstrations - Analyse et Traitement. Mars 2006.

Impact Indicator 1.2: *By end of FY09, the yields of millet and sorghum among farmers using improved staple food crop-production practices has risen by an average of at least 30% in treated plots as compared to non-treated plots*

Indicator quality: This indicator is fine, although experience has shown that the target of a 30% increase in yield was an underestimate of what has been achieved.

The M&E data for this indicator is collected using the crop cutting method, and surveying is undertaken by independent enumerators from the Ministry of Agriculture. The evolution in the improvement in yields is impressive. In FY09, % increases have exceeded by 5 fold the LOA target (Table SO1.13). In the 2008-09 season, farmers that had used two or more of the promoted practices obtained yields of 1,551 kg sorghum/ha and 1,138 kg millet/ha, compared to 620 kg sorghum/ha and 437 kg millet/ha on plots where none of the practices had been used.

Table SO1.13. % increase in yields of millet and sorghum. Treated versus non-treated plots. 2005-2009

FY05	FY07	FY08	FY09		LOA target
			Sorghum	Millet	
15	87	63	150	160	30

The magnitude of the increases was corroborated by farmers during our field visit, with testimonies of doubling of yields or more by using stone bunds, half moons, zai pockets and compost.

As with the case of income for market gardeners, yields can be affected by environmental factors such as the rainfall and pest and disease attacks. The annual reports of Tin Tua provide a brief overview of the food security situation in the area of influence of the NRM interventions.²³ This helps place the gains made by the program in perspective. It would be useful to be able complement this background information by quantifying changes in beneficiaries' food security situation compared with non-beneficiaries, in order to fully understand the extent to which the interventions have made a difference. A measure that is widely understood by the population could be chosen, for example the number of hunger months, or the number of meals taken per day.

There is anecdotal evidence that the higher production of sorghum and millet have made families more food secure, both by meeting household food needs and by having surplus for sale. The additional income is used for purchasing small livestock, clothes for the family, pay school fees, etc.

“Before we all had our eyes closed. Now it is as if in one day we have had them opened”. A women farmer in Siedougou village, Gnagna Province, referring to the fact that farmers can produce more on less land.

Another important but non quantified impact of the NRM interventions mentioned by farmers has been the restoration of lands that previously were considered too degraded for agricultural production. There are several implications of this result. Among the most important are a) reduction in tree clearance for production in the lowlands, b) less need to leave the village to look for land to cultivate, c) husbands can now make land available for their wives to cultivate cash crops (the example of groundnuts was given).

2. Adequacy of population coverage among eligible beneficiaries

²³ The short summary of the food and nutrition situation includes information about the prices of food staples, staple food production and the extent to which production is meeting local food needs.

It is estimated that the direct beneficiaries represent 18% of the total population of the 25 villages selected to take part in the NRM component.

The fact that in each village there is a group of between 40 and 60 beneficiaries, together with an associated CMC, around which interventions are implemented, should be a good catalyst for spill-over to take effect.

It was evident that the nature of the interventions and the form in which they have been conducted has meant that a very large number of non-beneficiaries have become aware of the positive results obtained. In our meetings in the villages there were at times as many non-beneficiaries as beneficiaries. We were told that there is no restriction in attendance in these types of meetings. Non-beneficiaries can hire the tools and equipment that are managed by the CMC in the same way that beneficiaries but paying a higher fee (mention was made of twice the amount payable by members).

We heard that there is much demand and a lack of field agents. However, several farmer beneficiaries said that they felt capable to help others learn the techniques but that they had not been trained to play this role. Here is an opportunity for local service provision that could be further developed in any future program. Attention would need to be paid on building the knowledge and skills of 'community field agents', assuring a system that can provide periodic mentoring and up-grading of their skills when necessary. The experience – successful or otherwise - of using community agents to promote the formation of Savings and Internal Lending Communities (SILC) in Tanzania and other countries would be worth examining. A factor to take into account is the motivation or incentives there might be for community field agent to support others. There are cases where clients, or groups of clients, are prepared to pay a fee for advice and support. In other cases, the field agents are motivated to work voluntarily by their increased standing in the community, the opportunity to be trained and learn new skills, their desire to help the development of others and their village, etc. Sometimes the provision of a means of transport, such as a bicycle, is sufficient incentive.

An impediment to the scale up in the use of the techniques to other farmers in the selected villages would likely be the lack of sufficient tools and equipment. This was mentioned by the CMCs. At the villages we visited, the procedures for managing and maintaining the tools and equipment appeared to be functioning adequately.²⁴ Although farmers are not accustomed to paying for this type of service, it appears to have worked – no doubt because tangible results are almost immediately obtained through higher yields, more food and income.

Similarly, the hire of tools and equipment – and the apparent demand for this service because of the positive results achieved – could be the basis for small village operated hire-service run as enterprises. Tin Tua manages a credit component with the Caisse Populaire that might be used to finance economic activities such as these. Because of the relatively large amounts of capital required for a complete set of tools and equipment, it might be necessary for different 'enterprises' to specialize in certain items.

Recommendations:

- ▶ Investigate the feasibility of creating 'community field agents' as a means of extending the use of the NRM technologies over a wider area, along the lines of the community agents that promote the formation of, train and mentor Savings and Internal Lending Community groups.
- ▶ Undertake a simple study on the feasibility of spinning-off the equipment and tool hire service as a small business.

3. Impacts beyond program beneficiaries

²⁴ Each CMC has an account with the Caisse Populaire where they deposit the money earned to cover the cost of maintenance of tools and equipment. The average end of year balance for the 25 CMC has increased from 6,019 FCFA in FY05 to 22,412 FCFA in FY08. This suggests that hire fees are covering maintenance costs but may not be generating sufficient resources for the eventual replacement of some of the larger items of equipment (e.g. carts). The full set of equipment and tools cost 3,539,360 FCFA.

The spill-over, or spontaneous adoption of techniques by non-beneficiaries of the program is occurring. In addition, CMC members are often approached by farmers for help in other villages. This they do, conditioning their help on the mobilization of a group of farmers with which to interact and 'guide' the process.

The extent to which spontaneous or guided replication in the use of the NRM techniques is having an impact among these farmers is not being measured (numbers practicing techniques, land restored, etc.). To be able to confidently design a new phase of this component, with a view to consolidating what has been achieved and reaching an audience of farmers say 10 larger, requires a better understanding about the spontaneous spread and uptake of the technologies. For example, is their more spontaneous or guided uptake in some villages than others? If so, how and why is this occurring? Do you need a nucleus of beneficiaries, with a CMC, in each village, or can a nucleus in one village be used to guide the uptake of NRM techniques in neighboring villages? What role might there be for the use of other media (information leaflets, radio, etc.) in extending knowledge about NRM techniques to a much wider audience?

Recommendation:

- ▶ Quantify and qualify the extent to which spontaneous uptake of NRM technologies has occurred and use the information to guide a future phase aimed at reaching a much large number of farmers.

School gardens and fields component

The school gardens and fields pilot project, beyond contributing to the overarching Agricultural SO has the following complementary objectives:

- To allow PTAs, teachers and students to contribute to the school canteens
- To provide sustainable access to school lunches without reliance on aid
- Teach PTAs, teachers and students agricultural techniques not only for use of the school gardens and fields, but for their own personal agricultural needs.

The pilot project is being executed in 10 schools in the Kourwéogo and Oubritenga provinces. In 2007, the 10 schools had 3,153 pupils. Each school was provided with a set of equipment and tools and draught animals (in most cases two donkeys and two oxen) to plough and to draw the carts. Fields are used during the rainy season (June to December) to grow sesame, sorghum, maize, millet, cowpeas and groundnuts. Gardens are operated during the school year from November to March to grow vegetables such as cabbage, eggplant, cucumbers, carrots and onions. Parents only work in the fields, while parents and children organize themselves into groups to tend the gardens. Formal training is provided for parents and teachers on agricultural and market gardening techniques. They receive on-going guidance from the project manager who also establishes demonstration plots on biological control of pests and improved varieties.

The school canteens have the challenge of providing lunches for 140 days a year. Sorghum, millet and cowpeas are the major staples used in food preparation. The school fields are a means of reducing the quantity of cereals and cowpea that the schools need to collect from parents or obtain from other sources. The vegetables grown in the market garden are either sold on the market and the income used to buy condiments (salt, hot pepper, *soumbala*²⁵, dried fish, and leaves and vegetables, etc.) or used to diversify the canteen diet.

The schools component initiated in 2006 and has experienced three complete years of operation: 2006-07, 2007-08 and 2008-09. In March 2008 a survey was undertaken of all schools to monitor

²⁵ A local condiment.

progress and to evaluate what improvements or alterations needed to be made in the project, and to see what is needed to allow for this project to continue in the schools once CRS withdraws.²⁶

Implementation progress and achievement of results (effectiveness)

1. Intermediate Result 1.4. Pilot school gardens and/or fields are established

Monitoring Indicator 1.4.1. By mid FY07 at least ten pilot school gardens and/or field sites are established

Indicator quality: A target of production or % contribution to school food needs would have been a more appropriate indicator.

Annex SO1.11 provides an overview of the evolution and performance of the pilot project. The major conclusions are summarized here based on the seven questions set out in the DAP proposal.

1. What needs (e.g. condiments, cash, or cereal) are best met through school gardens/fields?

The gardens have been used principally as source of cash for purchases. What this income represents in terms of total value of food needs has not been recorded. The contribution of gardens to a varied diet has been low and decreasing. If the nutritional aspects are important, then more emphasis needs to be put on educating parents and teachers on the importance of vegetables in the diet and how best to prepare them.

The school fields are supplying both cereals (millet and sorghum) and cowpea for the canteens. From our visit to two schools, we got the impression that parents would rather contribute staple foods through collections than through cultivating school fields. However, this attitude might be reversed if the school fields yielded better and therefore reduced the amount of staples that has to be collected from each family. Families with many children have to contribute large quantities of grain and find this difficult.

2. What percentage of school canteen needs can be met through school-based agricultural activities?

2008-09 was a good year in terms of rainfall, and overall 9% of the 10 school canteens' needs were covered by production and collection of food. Of this percentage, 4.1% was sourced from the school fields. However, there is a large variation between schools. Two schools met over 40% of their cereal and cowpea requirements through field production and collection from parents. The production from school fields depends on the weather and the amount of land available. Grain yield levels are low (358 kg/ha), even in a season that is considered good (2008-09). Assuming that there is limited opportunity for increasing the area cultivated (1.6 ha per school in 2008-09), increased supply will have to be obtained through higher grain yields. Doubling of yields should not be beyond the bounds of possibility given the results obtained in the NRM component (over 1,000 kg/ha). A reasonable target for contribution might therefore 10% of a school canteen's food requirement, with well performing schools capable of doubling this figure.

3. What amount of time is realistic for parents, teachers, and students to spend on school-based agricultural activities?

We heard complaints that a lot of onus being put on a few conscientious parents that do most of the work, and there is significant absenteeism or low rates of participation. Comments were also made that for children who have perhaps had no breakfast and no lunch, the work in the garden can be arduous, especially during the heat of the day, and one more factor that could lessen their academic ability due to tiredness. The fact that the overall area dedicated to gardens has decreased by 58% over the three seasons suggests that time and other constraints (e.g. ease of watering, see Annex SO1.11) are likely to be a factor. For the fields, we estimated that typically you need to

²⁶ See: Hogan, C. 2008. A Study on the School Gardens and Fields Pilot Project. CRS/BF. Ouagadougou.

mobilize 100 parents to work on a 1.25 ha field, with each parent contributing 5 part-time days in a season. This amount of time does not appear unrealistic. To address the question about time adequately will require a closer assessment of the schools that are functioning well (neither of the two best performing schools in 2008-09 were visited during the evaluation) in terms of organization and motivation of parents.

4. *Are school gardens/fields a viable strategy for addressing school canteen needs?*

The performance to date suggests that gardens and fields are a means by which schools can complement other sources of food for their canteens, either through production and sale of vegetables to earn cash with which to buy condiments, or through field production of food staples. For developing a strategy for further promotion of school gardens and fields requires more information about what makes a particular school successful in achieving higher levels of production or collection. If it is possible to identify a set of favorable conditions or factors, then school gardens and fields could be promoted among those schools that best meet the desired conditions. Although the relatively new project manager was not able to pinpoint these conditions or factors, he did mention that in some schools the 'rules' concerning participation are enforced more rigorously than others. Mobilization/motivation and organization of parents are clearly two very important factors that are critical for success.

5. *Would MEBA support the incorporation of school gardens into the curriculum of schools as a way to enhance the learning experiences for students/future farmers? If so, what is the best way to get teachers excited about using gardens as a teaching tool?*

Agriculture is already integrated in the curriculum as Practical Production Activities. There was unanimous agreement among those we talked to that the gardens play an important pedagogical role, not only to support agricultural in the curriculum, but also to support other subjects such as mathematics, since the pupils can put into practice geometry and arithmetic by marking out plots and measuring yields etc.

'Before we had to use pictures to illustrate crops and production practices, now the pupils can use the garden to see them for real.'

Headmaster of Gonsin School, Kourwéogo Province.

6. *Is there a difference in school contributions to school garden and/or field sites as compared to program integration sites in Sanmatenga and Gnagna?*

Contrary to what was planned, there was no sectoral integration of education and agriculture in the integration sites of the DAP. In places where there was overlap of programs, the evaluators did not assess, whether, for example, the establishment of the irrigation site in Sanmatenga Province or the promotion of NRM practices in Gnagna Province have had any indirect benefits in terms of production or collection of food for the local schools in these two locations. In all our meetings, farmers manifested that additional income generated either through market gardening or increased production of staple crops was often used to pay school fees.

7. *How can CRS/BF improve integration between education and agriculture?*

Providing children with food at school through canteens helps assure the health and nutrition of the children, and enhances their learning ability through better concentration. The technical aspects of production of vegetables and staple food crops at the schools, while an important means for meeting these objectives, might be better achieved in a support role to what are essentially health, nutrition and education objectives. In the present DAP, the placing of the school gardens and fields pilot project under the Agriculture SO has led to emphasis on the technical (production) and with less attention being paid to the health/nutrition or pedagogical advantages that the interventions can provide. For improved integration, education, health and agriculture would be better linked in an area-based program with each sector contributing to a specific common programmatic objective. In programs of this nature, as much attention must be paid to getting the management and organizational aspects of establishing school gardens and fields right, as to achieving efficient production of vegetables and crops.

Recommendation:

- ▶ Undertaken an in-depth evaluation of the schools that have consistently managed to produce significant amounts of staple crops for their canteens and vegetables for sale or consumption. Make a definitive decision about the feasibility of further promotion of school gardens and fields based on the analysis of the information collected.

C. PROGRAM QUALITY: IMPLEMENTATION OF SO1**Targeting**

The overall goal of the DAP is to improve food security of targeted rural populations and extremely vulnerable populations in urban, peri-urban and rural areas. For the Agriculture SO, the target population is 'resource-poor' farmers in Burkina Faso.

Vulnerable populations are usually considered to be those households with high levels of food insecurity, lactating women and children under five, the aged, and those with problems of health, particularly HIV/AIDS. Female headed households and, in certain circumstances, women in general are also considered to be vulnerable and resource poor.

Gnanga (NRM component) and Namentenga (second market gardening site) are highly food insecure provinces. Sanmatenga province (first market gardening site) is categorized as food insecure.

All of the beneficiaries of the market gardening and NRM components are rural and come from provinces that are food insecure. Burkina Faso is among the poorest countries in the world, and food insecurity was until the food price crisis in 2008 more of a rural phenomenon than an urban one. Therefore, it is likely that all beneficiaries are resource-poor and come from households with varying degrees of food insecurity. Baseline information on levels of food insecurity of beneficiary farmers was not gathered.

Annex SO1.13 provides a summary of how beneficiaries were selected for the market gardening and NRM components. While vulnerability was not a criterion used to select beneficiaries of the market gardening sites, there was an explicit attempt to ensure equitable allocation of irrigated plots among women and men.

In the case of Silmidougou, the 22 villages from which the beneficiaries were selected are widely dispersed (Table SO1.14). 14 of the 22 villages are over 10 km from the irrigation perimeter. Farmers working the irrigated plots therefore have the means and time for moving regularly between their homes and the plots. Those that do not have these resources are therefore unlikely to be using the site. As mentioned above, distance from the site has been a cause for some farmers abandoning their plots. In the two subsequent sites participating farmers are selected from fewer villages closer to the respective perimeters.

Table SO1.14 Distance of villages from the Silmidougou irrigation site

Distance of village from the Silmidougou irrigation site, km	No. of participating villages
0-5	3
6-10	5
11-15	6
16-20	4
21-25	3

Baseline levels of food insecurity were not measured for the beneficiaries of the NRM component. While not all of the farmers who have participated will have come from the most food insecure households all those who have adopted two or more practices are likely to have improved their food security status as a result of their participation. Participation of women is 24% which suggests that the NRM component did not seek equity in selection of beneficiaries. What does need to be clarified is why 26% of the women and 11% of the men beneficiaries do not use any of the promoted practices. Is it because they are too resource-poor to participate fully, or because they have other means by which to ensure their food security and higher staple crop yields are not their highest priority? For example, rearing livestock is an important income generating activity in Gnagna Province that could influence negatively some farmers' motivation to adopt soil and water conservation practices. And, the time and effort required to adopt some of the practices are likely in part to be responsible for the high proportion of women that do not use any of them.

In summary, the Agriculture and NRM SO has operated in food insecure provinces and strived, in the market gardening component, to have 50% of women participate. The recommendation of the MTE is still pertinent today (this is referred to again later under the section on 'Responses to the MTE recommendations').

Recommendation:

- ▶ Future beneficiary targeting criteria should try to include levels of food insecurity, vulnerability or poverty, in addition to current criteria.

Coverage

The coverage of the market gardening component is relatively small. Taking the example of Silmidougou, the 49 villages that make up the rural commune of Mane have a total population of 45,757. Assuming that 6 persons live in each household, this represents 7,636 households. There are potentially 550 beneficiaries, which represents approximately 7% of the total number of households. At the present there are 351 beneficiaries, or 5% of the total number of households. The beneficiaries of Tougouri and Zeguedeguïn sites come from fewer villages and therefore the percentage coverage is likely be higher (this information was not collected by the evaluators).

In the Central North Region of Burkina Faso that includes Sanmatenga, Namantenga and Bam provinces there are 642 ha of reservoir and pumped water distribution systems similar to that used in the DAP sites. The 42.7 ha of the Silmidougou, Tougouri and Zeguedeguïn sites therefore represents almost 7% of the area under irrigation in the Central North Region. A further variable area of about 1,500 ha can be irrigated, which varies from year-to-year depending on rainfall and the number of farmers producing. We did not find out whether the Ministry of Agriculture has a study that estimates the area of potentially irrigable land in the Central North Region, so as to be able to set the investment made by the DAP in that perspective.

The high investment in infrastructure per plot for market gardening (over US\$ 900) does place a restriction to the scalability of the intervention.²⁷ Targeting and selection of those beneficiaries that the program most wants to help therefore becomes all the more important.

As mentioned above under the section on the NRM component, the beneficiaries of the NRM component represent 18% of the total population of the 25 villages where the activities are taking place. Compared to market gardening, the potential for going to scale at a reasonable cost per beneficiary is much higher.

Appropriateness and relevance

1. Market gardening component

The relevance of the market gardening component cannot be argued. Achieving a sustainable access to water for agriculture and the ability that this provides farmers for producing more and earning

²⁷ Annex SO1.8 shows a comparison of the infrastructure costs of the three present DAP irrigation sites and compares with the cost of the Lélègse site.

income takes them out of the poorest of the poor category. The M&E data shows that both men and women beneficiaries have increased the value of the production from market gardening at the Silmidougou site in the three seasons since it became operational. Mention has already been made to what farmers invest the additional income in, and the non-income benefits that have accrued to both men and women.

Are the approach and the technology employed appropriate? One might suppose that the approach taken to developing the Silmidougou site followed closely the experience that CRS and FWY had when they partnered in the development of the Lélègse site in Oubritenga Province over the period 1994-1999. By all accounts, the Lélègse project is considered to be a success and a model for interventions in other parts of Burkina Faso. When you visit Silmidougou and compare it, all-be-it superficially, with Lélègse, there are a number of major differences that become apparent in terms of size, plot size and how the sites are operated (see Annex SO1.8 for further details).

That it may have been an error to diverge so much from the Lélègse model has occurred to CRS and adjustments have been made at Tougouri and Zeguedeguin as already mentioned.

With respect to the selection of irrigation technology, the type used in the present DAP is similar to that employed at Lélègse. Water is pumped from a reservoir and distributed to plots through primary, secondary and tertiary canals. It is understood that the Lélègse site was constructed by locally contracted artisans without a tendering process, while for the present DAP, the construction firms were selected using a tendering process. The difference in cost per plot between Lélègse and the other sites is very wide – US\$ 131 versus US\$ 919 (Annex SO1.8). This does not call into question the appropriateness of the technology but rather the way in which the sites were constructed. For future programs, means of reducing costs should be looked into, with the community that will benefit from the irrigation site participating fully in design and construction.

For the DAP different firms were selected for the design, the construction and the site supervision. The process in all three sites has experienced problems. Water distribution at Silmidougou and Tougouri continues to be deficient in some sectors and work is underway to correct the problems. Annex SO1.7 shows the different companies and institutions that have intervened at different stages and provides a commentary on the lessons learned from the experience.

There is always the fear that irrigation systems in the hands of smallholder farmers that rely on maintaining a diesel motor and the canal infrastructure will not be sustainable. The fact that Lélègse is still operational 10 years after support from CRS and FWY ceased is proof that this need not be the case. It would be well worthwhile to understand more fully how well Lélègse is working in terms of costs and returns to the farmers using the site, how it is managed and what the elements are that make the site operate successfully. CRS plans to undertake this study.²⁸ CRS has experience in developing irrigations structures in other countries (e.g. Malawi, and probably others). If CRS/BF is to continue promoting irrigated agriculture, it would be advisable to compare experiences with respect to the technology used and costs incurred.²⁹

Farmers have shown that they are capable of learning and applying market garden production technology. The yields of the crops grown are increasing. The likely cost of inputs, especially seeds, mineral fertilizers and possibly the running costs associated with water distribution, will be a recurring challenge. In this respect it is imperative that the farmer organizations, around which the sites are managed, build their capacity to experiment and innovate in all aspects of the market

²⁸ Farmers from Silmidougou have made visits to learn from farmers in Lélègse about production and marketing.

²⁹ The Malawi I-LIFE program, established 118 small irrigation schemes, with a total of 563 ha of irrigated land, for 3,385 farmers at a total cost of US\$ 1.5 million (US\$ 443 per farmer) over a period of two and a half years. The technology used was river diversion with gravity distribution and river/shallow well with treadle pump distribution. No mechanical pumps were used. This cost includes design and construction costs, technical supervision and assistance, staff and farmer training and the project's administrative overhead. The technology and cost figures are therefore not directly comparable to the costs presented for this DAP in Annex SO1.8. However, this example does illustrate that there are different technologies and lower cost alternatives.

gardening business with the objective of reducing costs and ensuring that competitiveness is maintained. Farmers should question whether advice provided from service providers is sound or not. They should be confident to run their own trials to adapt and improve cropping systems to the conditions of the irrigation sites.³⁰

Recommendation:

- ▶ Evaluate the performance of the Lélègse irrigation site in terms of: production (crops produced, occupancy rate, volumes of production per year, yields, production practices, production costs, etc.), marketing (volumes sold, quality, destination, post-production handling, costs, marketing costs, and income, etc.), enterprise organization (how production and marketing is organized, use of good business practices in management and administration, access to services in support of production, etc.). If the performance is considered adequate and site users are benefiting financially, use the information to set benchmark standards for the present DAP sites.
- ▶ For future investment in irrigation, review available irrigation technologies, scales of operation, and approaches to implementation from cases within and outside Burkina Faso. Evaluate and select the most suitable options against a set of criteria based on beneficiary needs and on their actual and expected future asset endowment.
- ▶ Review available methods and processes for enhancing the capacity of farmers and their organizations to experiment with and improve their production and organizational practices (e.g. FFS, CIAL or others). Adopt and put into practice the method/process that best fit the needs of the target populations and the competence of CRS and its partners.

2. NRM component

The relevance of the NRM component is also undisputable, as illustrated by the results obtained in terms of restoration of degraded land and increased yields of basic food crops. A certain level, as yet not quantified, of spontaneous adoption of the promoted techniques also attests to the appropriateness of the technology employed. Given that the techniques do require certain tools and equipment, the provision of these has made the technology accessible to the target farmers. The way that the tools are being managed and hired out to cover costs of repair and replacement are also important elements of the approach that are proving to be successful.

Until we have a better idea of why a high proportion of beneficiaries, particularly women (26%) are not using any of the proposed techniques, it is too early to say whether or not the technologies are inappropriate for a certain sector of the rural population. Labor (time and effort required) appears to be an issue in the case of adoption of half-moon and compost pit practices (see Annex SO1.9). If the techniques are indeed difficult to adopt for some beneficiaries, there will be a need to look at alternative options for achieving the same results, which might be either technological (alternative techniques) or organizational (how to organize the community to support those unable to use the proposed techniques).

Collaboration and cooperation

1. Partners

Federation Wend Yam. Relationships between CRS and FWY appear to have been an issue ever since the collaboration between the two organizations in the Lélègse project.³¹ FWY was not originally identified as the partner for the marketing gardening component of the present DAP. They were brought in once the program was underway because the chosen partner, OCADES Kaya, was not in a position to initiate the marketing garden component. This happened even though an institutional audit confirmed CRS' management doubts about the convenience of partnering again with FWY.

³⁰ For example, the technology package that is recommended by service providers to farmers to grow French and Italian bean include application of both balanced NPK and urea. Knowledgeable farmers might question why beans, which fix nitrogen, should require additional N, especially in the form of urea. It would not be difficult for farmers to set up their own trial to observe how French beans perform with or without urea application.

³¹ See CRS/USCC. 2000. *Projet de Production Maraichère dans la Province d'Oubritenga*. 612- 93 – 004 / et AF – 1092 (5955), Rapport Final d'Exécution. Octobre 1996 – Avril 2000. Burkina Faso Program. Juin.

The MTE also observed difficulties with the relationship and recommended that CRS and FWY hold a partnership reflection to discuss partnership principles, decision making authority and how the midterm recommendations will affect project implementation at the first and second sites. This reflection was held in September 2006, facilitated by an external expert, and a plan of action elaborated to overcome the weaknesses identified.

At the time of this final evaluation, there continues to be a less than perfect relationship between the two organizations, manifested in different ways by each of the parties. One important facet of the problem is related to the frustration on part of CRS' management that the Silmidougou site is not progressing to a satisfactory level of independence and that it represents a seemingly relentless drain on resources. From the FWY side, there is recurring dissatisfaction in the way the Silmidougou site was designed and constructed with low levels of participation by FWY and the farmers themselves. They also argue that the program should be more integrated in nature, with greater emphasis on literacy, and on livestock production as a source of manure. And finally, they feel that where farmers have little experience in market-oriented agriculture and they are in a process of learning, you cannot expect to have immediate success. They would like to see further investment in support of the Silmidougou beneficiaries.

'Un accompagnement est toujours nécessaire pour espérer un changement de mentalité des producteurs qui manquent de solidarité d'esprit communautaire et de prise de décision.'
FWY Annual Activity Report. September 2008.

From the foregoing, there appear to be philosophical differences in approaches to community-based development (integrated versus activity focused, process versus results orientation), and also concerns on operational matters, such as use of resources that are channeled through FWY for the Silmidougou operations. An attempt to document fully the areas of the relationship which are not working well and why goes beyond the scope of the present evaluation.

The options open to CRS and FWY are:

- a) To try again to identify the strengths and weaknesses and the misunderstandings of the partnership arrangement. Then, the misunderstandings need to be clarified and solutions found for the weaknesses. These solutions would then become the basis for developing a sound and agreed upon disengagement strategy for Silmidougou;
- b) Both sides come to an agreement that they have tried to accommodate each others points of view and failed, and agree to disengage at the end of the present DAP.

Option b) requires that there is an agreement about how to continue to provide facilitation services to the farmers at Silmidougou. This could be FWY, as both the women beneficiaries and the men beneficiaries are in the process of becoming 'groupement' of FWY. This will enable them to access certain services from the Federation. Alternatively, CRS could identify a new local partner, with a handover of responsibilities from FWY to the new partner. Uppermost in considering these or other options, should be the well-being of the farmers of the Silmidougou irrigation site.

OCADES Kaya and ATT. Partnership with OCADES Kaya and ATT have run smoothly. Annual reports of ATT highlight areas where difficulties have been observed. The management of ATT however commended CRS on its openness and transparency in trying to resolve any problem that arises in the shortest time possible. At the technical level there is mutual satisfaction as to the progress made and the ease of working together.

2. Other collaborators

Regional Direction of the Ministry of Agriculture for the Centre North Region. The establishment of an appropriate relationship with the government sector is often overlooked and considered not important for achieving the immediate targets of development programs. It was therefore heartening to observe a fluid relationship with the Regional Direction of the Ministry of Agriculture. The

Director acknowledged that the Ministry's participation in the M&E process is important for them, and that they can capitalize on the data collected. CRS and its partners should think more about how the Ministry of Agriculture might play an important role in strategies for achieving sustainability and scaling-up of the gains made, while minimizing negative effects of policies or regulations that impinge on commercial smallholder agriculture. Cases in point are the plant the government is building for processing tomatoes in Ziniaré, the formation of the federation of market garden producers at the provincial level to support them in the marketing of their produce, and issues related to watershed management at the irrigation sites.

INERA. Mention has already been made about the collaboration with INERA in relation to variety testing and selection. Despite there being an MOU between the CRS and INERA, greater use of INERA's expertise would have been beneficial for identifying useful germplasm and building capacity and confidence of farmers in using improved technology, such as seed.

Sustainability and exit strategies

The sustainability strategy for the agriculture SO, outlined in the DAP proposal, hinges on putting into place the following elements:

- a) A sound marketing strategy for market gardening farmers
- b) Strong Community Management Committees that have systems in place to manage irrigation sites, organize production and marketing of crops, manage equipment and tools, purchase of inputs, etc.
- c) Market gardening and NRM techniques and technologies that are tried and tested
- d) Strong collaboration with local service providers, such as INERA
- e) Model farmers that can serve as local experts, along with field agents.

Although not explicit in the DAP proposal, it is assumed that if these elements are in place then the progress achieved during the project's execution should sustain themselves over time.

All of the elements mentioned above are important and the situation of most of them has been commented on in the above text. Significant progress has been made with some elements; with others there is further work to do. On the other hand, the proposal for identifying and building the capacity of 'model farmers' was never considered and no alternative mechanism has been put in their place.

Beyond these elements, it is CRS' strategy to work through and strengthen local executing partners that holds the key to sustainability and to designing exit strategies that have a reasonable probability of success. So, the fact that the partnership with FWY has not gelled has negative implications for the sustainability of the investments made and therefore does need to be addressed.

A one and a half-page document outlines the exit strategy, and is based principally on further capacity building of the CMCs and farmers in areas that are considered weakest. Exit strategies are not explicitly dealt with in the FY08 annual reports of the partners. In the FY08 report to USAID, there is one mention of the exit strategy involving refresher training for market gardening farmers. For an exit strategy to be successful, a much clearer definition of the desired end-of-project situation with respect to the elements that were outlined in the DAP proposal (see above), and the actions that are being taken to reach the desired level in each of them, is required. Many of the partner staff we spoke to give the impression that an 'extension' to the present DAP activities would be desirable.

Market gardening. In the market gardening component it is evident that there is unfinished business: Silmidougou is not yet run as a solid business and changes in the way the site is organized and managed are needed to improve performance. Tougouri requires further capacity building and mentoring, and Zeguedeguin has yet to become operational.

Recommendations:

Among the most important challenges for achieving sustainability are:

- ▶ The reaching an understanding with FWY on how to consolidate what has been achieved at Silmidougou, with the purpose of correcting and strengthening areas of weakness.
- ▶ A review and overhaul of the constitution, organization and management of the CMC, particularly in Silmidougou. The impression is given that at the irrigation sites, the top of the pyramid (the CMC) has been established before a strong and cohesive base of participating farmers is in place. A threat to sustainability is ‘elite capture’ of the organization by a few persons. Lessons may be learned from how Lélègse is managed, or there may be other ‘models’ in Burkina Faso or West Africa that should be investigated.
- ▶ Further building of capacity in the area of market and business skills for those responsible for collective marketing. Facilitation of linkages between farmers and markets (access to information on prices, market opportunities, contacts with buyers, etc.) is a service that market garden farmers will continue to need. CRS, FWY and OCADES need to decide how best this service can be provided in the medium term. For example, the provincial level federation of market garden producers proposed by the Ministry of Agriculture is likely to have market linkage as one of its primary functions and could therefore be an opportunity to explore. Alternatively, FWY and/or OCADES could strengthen their competence in this area. Should this alternative be considered, from the outset it must be approached as a business service that farmers will pay have to pay for – if not immediately, then once it has been shown that the farmers are deriving benefits from the service.
- ▶ The instigation of savings and lending communities or other means by which market garden farmers can improve their financial management skills and access cash to purchase the required inputs (seed, fertilizer). Lessons and techniques on building financial management and business skills may be available from microfinance and SILC projects in Burkina Faso or other West African countries.
- ▶ The selection and establishment of a model for building the capacity of farmers to experiment and innovate with their cropping systems, so that they do not become exclusively reliant on technological packages introduced by extension agents.
- ▶ A more proactive engagement with local authorities on environmental issues to ensure the long term availability of water.

Natural resource management. In the NRM component, there has been a successful roll out, over an appreciable geographic area, of practices and technologies, together with an associated management scheme through the CMC, that now need to reach a significantly higher number of farmers at a lower cost. In the 25 villages, a good base has been established on which to continue to build and integrate other components, such as agroenterprise development and watershed management that will enhance the sustainability of the gains made in improving food security.

Recommendations:

Issues and challenges that need to be addressed for sustainability and scale-up:

- ▶ The transformation of the CMC from their focused attention on the promotion of NRM techniques to a more multifaceted vision for the development of their community, which includes agroenterprise development and watershed management. The CMCs are described as an *‘informal umbrella structure established to coordinate and manage project activities and tools provided to participant villages’*. Decisions therefore need to be made as to their formalization and incorporation into existing ATT village structures so that their existence will not be jeopardized once the DAP is phased-out.
- ▶ The instigation of savings and lending communities or other means by which farmers involved in the agroenterprise activities can improve their financial management skills and access cash to purchase the required inputs (seed, fertilizer, etc.). This would also build a strong and cohesive base from which to grow the enterprise development activities. If sufficient local growth in SILC groups occurs, eventually the CMC could be converted into a second order organization.
- ▶ The establishment of a local service provision capacity (such as community field agents), for extending the use of NRM practices and other improved agricultural technologies. If the SILC

model is adopted, this would be an opportunity to complement and extend the SILC community agent model to technical areas.

- ▶ The close observation of the performance of the seed producers' group and the evaluation of the real opportunities for growth of the seed business.
- ▶ The use of the ATT organizational, learning and communications infrastructure to reach a wider number of farmers with information and training on NRM and other production practices.

Efficiency of the Agricultural SO

The MTE evaluated the efficiency of the market gardening and NRM components in terms of their cost-effectiveness and cost-benefit³². Neither of the evaluators felt comfortable in using either of the approaches to assess or compare the efficiency of the market gardening and NRM interventions for lack of experience in their use and in the subsequent interpretation of the results obtained from the analysis.

The analysis undertaken by the MTE can help us in pinpointing certain critical parameters that affect the efficiency of the interventions, and as a consequence where actions need to be targeted to ensure that improvements in efficiency will be achieved. Among the critical parameters are:

- **Cost per participant.** The investment has been made and therefore the cost is now fixed. Efficiency interventions require meeting targets with respect to the number of beneficiaries. If the benefits of the interventions can be extended to many non-beneficiaries then efficiency will increase, as in the case of the NRM component. For the market gardening component, efficiency will be affected if occupancy of the sites is less than 100% and if many farmers use multiple plots.
- **Use of new techniques per beneficiary.** Raising the average number of new techniques used per beneficiary improves cost-effectiveness. Understanding and, where possible, removing the constraints to the adoption of techniques with low adoption rates is therefore important.
- **Production per beneficiary.** Raising production per beneficiary also increases cost-effectiveness. Here, it is important to assess clearly which of the proposed practices, or which combination of practices, have most influence on production increases.
- **Increase in income per beneficiary.** Raising income improves cost-benefit. However, efficiency is highly dependent on the prices received for the crops produced. For the market gardening component, farmers' choice of crop and which market to sell into are therefore critical decisions that will affect efficiency. For both components, costs of production need to be optimized. Analysis of the cost structure will help identify where costs can be lowered. Savings may be achieved either through introduction of improved technology, use of better practices and access to information, or better organization.

Monitoring and evaluation

The monitoring and evaluation of the Agriculture SO activities, results and impact are undertaken at different levels:

1. Quarterly and annual activity reports are prepared by each partner and sent to CRS. The evaluators reviewed only the annual reports for this evaluation. These present the progress made in activities within each intermediate result using the Proframe established at the beginning of the program. There is a limited narrative describing the process by which the most important results and outcomes have been achieved, and a discussion of challenges or difficulties encountered.
2. CRS' M&E Department undertakes an annual study to evaluate the progress in achieving the targets set in the DAP proposal. This is carried out by independent enumerators from the Ministry of Agriculture. A formal questionnaire is applied to a sub-sample of beneficiaries for evaluating income and costs of market gardening, and use of practices in market gardening and NRM. The yield of sorghum and millet crop is measured using the crop cutting method. The evaluators got the impression that these surveys were being carried out professionally with due attention to rigor.

³² Cost-effectiveness analysis is a comparison of total costs to a non-monetary measure of a program result, such as the production gain or the number of new techniques used per beneficiary. Cost-benefit analysis compares total costs to a monetary measure of program economic impact.

There is no formal annual M&E study undertaken for the pilot school gardens and fields component.

3. Annual reports to USAID that synthesize the progress toward meeting the target indicators at the intermediate result and impact level, using the data collected by the M&E Department and analyzed by the respective project manager.
4. Occasional internal studies on progress in a particular component. The only one that was undertaken during the lifetime in the Agricultural SO of the DAP looked at the pilot schools gardens and fields component (referred to above).
5. Workshops to review particular aspects of the DAP implementation process, e.g. partnership between FWY and CRS, Lessons learned and Good practices, etc.
6. Mid-Term and Final evaluations by external consultants.

Recommendations:

In general, the processes and procedure put in place for monitoring and evaluating the Agricultural SO have been satisfactory. The following observations are made:

- ▶ Beyond the very succinct and summarized report presented to USAID, there is no consolidation of the information on the processes used to obtain results that are presented by different partners working on the same component in their annual report, e.g. FWY and OCADES-Kaya for market gardening. Neither is this information integrated with a more thorough analysis of the information generated by the M&E Department. This means that much useful information is not being analyzed and the results being used for decision-making.
- ▶ Good information is being collected by partners, but this is not being systematized and placed in a data-base for easy access to all project partners and external evaluators. Examples that the evaluators became aware of during the field visits are: a) the gender balance and positions held by women in the 25 CMC of the NRM component. We were advised that ATT records this information, but because of a change in the ATT project coordinator it was not easily accessible and therefore could not be provided to the evaluators; b) systematized data on the performance of the irrigation sites, by beneficiary, and consolidated data on volumes sold, value, costs of production etc. The DAP proposal states that the CRS/BF MIS manager will work with partners to establish a functional system for data collection and decision-making. This has yet to be achieved.
- ▶ Cost balance sheets for crop production are being prepared without taking into account the amount of family labor used. This may be appropriate for measuring net cash income or value of production per beneficiary. However, it does not help farmers and the field agents take decisions about the most appropriate crops to grow taking into account the opportunity cost of the farmer's labor. Basically it is assuming that each crop requires a similar amount of labor, and this is definitely not the case (e.g. tomato and onion need nurseries, French beans do not, onions are transported to the home, tomato is not, etc.). Estimates of relative labor usage can be obtained by using small focus groups of farmers. Women are particularly adept at calculating how much time they use for different tasks.
- ▶ The practice of undertaking internal studies or reviews of component parts or specific topics is good and one that should be used more generally. These can be done using interns, CRS staff or partners from other programs in Burkina Faso or from the region that have the specific skills and expertise required to provide an in-depth analysis of the topic. Alternatively they can be used as learning exercises for staff of the project, where a team is established made up of project staff and one or two external experts. These internally-commissioned reviews or studies on particular topics or themes are particularly important in integrated programs that cut across many disciplines.
- ▶ CRS operates a large number of agricultural development projects, some of which are likely to have experienced or be experiencing similar challenges to those encountered in the DAP (for example in irrigation techniques or market gardening practices, organization smallholders for marketing, seed production, soil and water conservation, etc.). CRS also has regional and global agricultural technical advisors who themselves have networks of persons with expertise in

different areas. With the exception of the participation of two staff of the Agricultural Department in the cycle of workshops on agroenterprise development that took place in West Africa in 2005-2007, there has been no use of this valuable resource, neither for helping to solve particular bottlenecks nor for internal review and evaluation processes.

D. RESPONSE TO THE RECOMMENDATIONS OF THE MID-TERM EVALUATION

The Mid-Term Evaluation (MTE) was undertaken in May-June 2006, 29 months after the initiation of the DAP. At the time of the MTE, in the market gardening component the Silmidougou site had experienced its first full season of off-season cropping and work on the second site had not yet commenced; in the NRM component all 25 villages had been incorporated into the program. The pilot school gardens and fields component had not yet initiated.

The MTE made an exhaustive analysis of progress as measured against activity, output and intermediate result indicators and targets. It used the findings of the field visits to explain situations where progress to targets had been slower than planned. A total of 37 recommendations were made on areas related to impact, effectiveness, relevancy, partnership, sustainability, gender, M&E and unintended positive or negative effects.

The CRS agricultural team prepared a detailed commentary for this evaluation on the response made to each of the recommendations. We have complemented this document with observations on the actions taken - or not taken, as the case might be. An abridged set of the complete recommendations, CRS' responses and our observations can be viewed in Annex SO1.12.

The evaluators consider that the great majority of the recommendations have been acted upon appropriately. The critical recommendations of the MTE on which action have been taken, and where the preliminary results are positive include:

- **Selection of sites and partner.** MTE recommendation '*Consider either only preparing two irrigated market gardening sites, or consider a third site with another partner*'.

The development of the two subsequent irrigation sites, Tougouri and Zeguedeguine, with OCADES where attention has been paid to some of the lessons learned from the Silmidougou experience in terms of size of site (e.g. smaller) and the selection of beneficiaries (e.g. focus on fewer villages and selection of women heads of household), among others.

- **Income generation and gender in the NRM component.** MTE recommendation '*.....since the overall SO of the agriculture program is to increase households' incomes, introducing techniques and seeds for other varieties (such as peanuts, niébé and sesame)... could improve women's incomes*'; and '*In expanding or building upon NRM activities, consider opportunities to introduce varieties and techniques related to women-specific crops, such as sesame or peanuts*'.

Private CRS funds have been used to initiate agroenterprise activities in the 25 villages participating in the NRM component. Using a participatory market opportunity identification methodology, sesame and cowpea have been selected for promotion. These crops should favor women's participation and income generation.

The critical recommendations of the MTE that still present issues that will need addressing in future agricultural development programs include:

- **Indicators.** MTE recommendation '*Modify the current SO-level indicators to reflect on-the-ground realities*' and '*Based upon specific recommendations for each indicator, carefully reconsider the formulation of the current indicators and their targets*'.

The indicators while satisfactory in terms of quantitatively measuring progress against a set of targets are a rather 'blunt' instrument for understanding the quality of the gains achieved. At the

SO level, there are factors beyond the control of the program that can and do affect the achievement of targets. For example, fluctuations in market prices will influence the income generated from market gardening; or rainfall will determine relative increases or decreases in yields of staple crops. To be able to more closely assess the contribution that the program is making to increased incomes or yields, complementary information on yearly and monthly fluctuations of critical parameters needs to be collected so as to better explain the results that the DAP is reporting.

Likewise, at the Intermediate Result level, indicators such as “*at least x% of farmers apply at least y of the relevant techniques promoted by the project*” measures quantitative results but do not describe qualitative gains. Among the techniques promoted there may be some of much greater importance than others – and those that are more important may be the most difficult to adopt. In cases such as these, the measurement of an indicator must be accompanied by a brief analysis of what elements of a set of practices are working and why, and conversely what elements are not working and why they are not working.

- **Targeting.** MTE recommendation ‘*...future beneficiary targeting criteria should try to include levels of food insecurity, vulnerability or poverty, in addition to current criteria*’.

In order to satisfactorily assess whether the goal of “improving the food security of rural and extremely vulnerable populations” is being met, a greater understanding of the socio-economic status of target beneficiaries is required, as well as of those that for one reason or other are excluded from the program. This is particularly important for capital intensive and spatially focused interventions such as market gardening that are not easily scalable.

- **Community Management Committees.** MTE recommendation ‘*For all community-based systems, it is important to determine the role and responsibility of the CMC in the selection and management of such systems*’.

The principal mechanism by which sustainability of the program’s interventions will be achieved is through the consolidation of effective CMCs, which are the hub around which all activities related to both market gardening and NRM revolve. It appears that each partner brings its own experience in organizing farmers for collective action. As a result, there are no common guidelines or codes of ‘good practice’ that orient the formation and consolidation of these critical institutional structures. Let us take as an example the most basic indicator, the number of members of an organization which is managed by a CMC. This varies from 550 in Silmidougou, to 170-160 in Tougouri and Zeguedeguin, to between 40 and 60 in the NRM villages. The difficulty in achieving cohesion around a shared vision and a common sense of purpose is proportional to the number of farmers to be organized. This difficulty is compounded where an organization has explicit economic – rather than social - objectives and a profit motive, which is the case of the irrigation sites, and will increasingly become the case in the NRM villages as the agroenterprise activities progress.

- **Building local capacity and skills to innovate and provide services.** MTE recommendation ‘*For village-level technical support, the project could consider training community-based field agents or establishing farmer field schools (FFS)*’.

Complementary to the consolidation of the respective CMCs mentioned above, the strategy for moving toward the sustainability of the interventions once the program has terminated has included a comprehensive set of training for partner staff, members of the CMC and target farmers in a wide range of relevant topics.

With respect to agricultural practices, this has essentially consisted of a vertical process of knowledge and technology transfer from technical staff and field agents to farmers. This was perhaps inevitable given the need to attain pre-established training targets and introduce large numbers of farmers to new technologies and farming practices within a given time frame. This

major effort in training has had significant and positive results in terms of technology adoption. However, the effort has not promoted or catalyzed farmer induced innovation³³ or built a capacity for local provision of technical services. There has been no attempt to introduce a more horizontal or participatory mode of operation, in which the field agents' role is to build the capacity of farmers a) to experiment with new technologies or new farming systems, b) to access relevant information from a variety of information sources, c) to evaluate and interpret this information for problem solving, and d) learn from their experiences and share them among their colleagues. These elements are the essence of a Farmer Field School (FFS) or a Local Farmer Research Committee (CIAL from its name in Spanish), which, as suggested by the MTE, could build a local technical support capacity for users of the irrigation sites and for extending NRM techniques to greater numbers of farmers.³⁴

- **Data sets for measuring performance.** MTE recommendations '*If the indicators are modified, modify the project Proframe to reflect these changes and use the Proframe as a management tool for CRS and partner staff*' and '*Ensure that all primary data collected for the project – whether the baseline, monitoring or evaluation data – are available in electronic form*'.

The Proframe provides a framework for managing the program by having a standardized mean of reporting progress against a set of target indicators. The annual reports of partners show that the Proframe has proved a useful means of standardization in presentation of results. It is less clear how the information contained in these reports is being used by the partners themselves and CRS for taking management decisions on adjustments to the program. Beyond the preparation of the succinct yearly report to USAID, the information is not being used to build a more complete picture of progress year-on-year. The building of a data base that pulls together a critical minimum set of information can facilitate the analysis of performance across years and across partners, and help to better understand where critical bottlenecks lie. This is of particular importance for measuring progress at the irrigation sites where the ability to retain farmers will depend on year-on-year improvements in managing the infrastructure to reduce costs, increase yields, obtain higher prices for produce sold, etc.

E. GOOD PRACTICES AND LESSONS LEARNED

The three components of the agriculture SO are rich in experiences. The management of the DAP have made a concerted effort to capture and share the lessons learned and document good practice. The most recent was in April 2009.³⁵ The evaluators have not attempted to synthesize or summarize the outcomes of these deliberations. The good practices and lessons learned presented here – in the design and implementation of the program – are ones that should be taken into account for future programming, and complement those presented in the MTE report.

Good practices

Good practices can be defined as approaches, methods or techniques used in the design and implementation of the program that have proven to lead reliably to the desired outcomes of the program.

Execution through local partners. CRS' approach to agricultural development through local institutions that execute on-the-ground activities, in this case FWY, OCADES Kaya and ATT. This

³³ See: PROLINNOVA. Notes on Local Innovation and Participatory Innovation Development. Version 1. 30 March 2009. <http://www.prolinnova.net/workingpaper.php#wp>

³⁴ Braun AR, Thiele G. and Fernández M, 2000. Farmer Field Schools and Local Agricultural Research Committees: Complementary platforms for integrated decision-making in sustainable agriculture. AgREN Network Paper No. 105, ODI, UK. http://www.odi.org.uk/networks/agren/papers/agrenpaper_105.pdf

³⁵ See documents and presentations of the 'Atelier sur les leçons apprises et innovations du DAP 04-09, Ouagadougou 29 au 30 avril 2009'.

approach enhances the partners' capacity and increases the possibility of achieving results and outcomes that are sustainable and can be scaled-up when the program terminates.

Investment in literacy. The improvement of literacy of farmer beneficiaries and partnership with local institutions that can support these activities. Literacy provides a pathway for empowerment and facilitates the shift from subsistence to market-oriented agriculture.

Close interaction with government provided services and policy/regulatory decision-making. Involvement of regional and national governmental services and policy/regulatory framework makers, through regular briefing and/or participation in program activities. This has built a climate of trust and helps identify opportunities to removing bottlenecks and improve sustainability of results and outcomes.

Picking entry points for integrated agricultural development. Initial focused and relevant interventions on priority problems, as in the case of the NRM component, have provided a firm base on which to incorporate more complex interventions such as agroenterprise development. In the future, the experience with the promotion of soil and water conservation practices could also lead to a watershed management program.

Lessons learned

Lessons learned can be defined as those experiences, examples or observations that have added beneficial knowledge about how to design and implement agricultural programs of this nature.

Partnerships. Before entering a partnership relationship make sure you share common goals and agree on a set of principles to guide the partnership process. Improvisation when making critical decisions, such as with whom to partner, will affect the execution of the program and post-program sustainability.

Appropriate expertise. When making large investments in infrastructure, such as irrigation, have appropriate in-house technical expertise, or access to that expertise, to guide your decision-making on technology choice and appropriate costs, and subsequently to supervise and detect deficiencies in execution of works.

Larger is not necessarily more efficient or effective. Building larger irrigation schemes that incorporate more beneficiaries are not necessarily cheaper than smaller ones. They have the disadvantage that they require much greater input into developing the required management and administration skills to run them.

Sustainable outcomes. Focused activities, such as those that promote NRM techniques for improved staple crop production, are less complex than those aiming to shift farmers from subsistence to market gardening. End-of-program outcomes need to be clearly differentiated by intervention type and the likely need for further post-program interventions made explicit in the original proposal.

Learn from past experience. Synthesize, document, reflect on and take into account past experiences. There are likely to be many good practices 'hidden' in the Lélègse experience that could have been made use of in the present DAP.

Market-oriented approaches need capital. Access to capital is a necessary complement to market gardening and agroenterprise activities in general. Revolving funds financed by project resources, for purchase of inputs, have had limited success. Community-based savings-led microfinance programs may offer an alternative that should be explored.

Levels of risk. Markets for higher value, more perishable products for export are riskier business than lower value, less perishable products for the domestic market. If the decision is taken to produce a new product for a new market (e.g. Italian beans), do it on a manageable scale and learn from the experience before expanding.

F. CROSS-CUTTING ISSUES

SO integration

There was no programmatic integration between the agriculture, education and microfinance SOs. From the agricultural development perspective, there are two areas that merit greater thought of how the three sectors could work together to contribute to the overall goal of the DAP. These are adult literacy and appropriate financial products for farmers to access loans for purchase of essential production inputs. The adoption of the Integral Human Development framework as a guide to addressing hunger and poverty suggests that CRS should increasingly integrate interventions in health, education, finance and agriculture in an area-based approach.

Gender

The Agriculture SO has made a significant effort to involve women, with greatest effect in the market gardening component where the proportion of women farmers participating has increased as the DAP has evolved. Monitoring data disaggregated by gender is obtained and reported for market gardening and NRM components.

The evaluators evidenced that in the market gardening and the NRM components there are examples where women beneficiaries are at a disadvantage with respect to their male colleagues. Some of these disadvantages have their root in the culture of the society, others in organizational and management deficiencies and the behavior of the men that control local institutions and certain resources, and some because of the nature of the techniques or technology that are being promoted. Beyond disaggregating gender participation for presentation in reports, there is a need to understand more clearly how these limitations might be overcome.

CRS and its partners are using mechanisms that improve women's economic and social status in their communities (e.g. through organization of women's microfinance groups). Agricultural interventions should learn from these experiences and integrate good practice, so that gradually women feel empowered to play a fuller part in decision-making and local development.

Recommendations:

- ▶ Examine what innovations in technology or organization need to occur so that women are not disadvantaged compared to their men counterparts in adopting market gardening or NRM practices
- ▶ Continue to build the capacity and confidence of women so that can increasingly play a more proactive role in local agricultural development processes, particularly at the level of the CMC.

Environment

The environmental issues surrounding the two major components of the Agricultural SO, market gardening and NRM, can be viewed from two perspectives:

- The consequence - benefits or dangers - that DAP interventions may have on the environment
- The effects – positive or negative - that external environmental factors may have on the results and sustainability of the program's interventions.

During the development and operation of the irrigation sites, elements of good practice have been observed in their construction. For example, environmental assessment was carried out as part of the feasibility study and drainages were constructed so that potentially polluted water does not return to the reservoirs.

In addition, the DAP has promoted good practices with respect to pest and disease management (biological management of pests) and soil fertility management (use of compost and organic manure). Both practices require that farmers develop a culture of knowledge-based management of their productive soil and water resources. In addition they need to be able to access the raw materials

required to implement the practices (naturally occurring species that have active ingredients that act as biological control agents and organic materials for compost and manure).

As reported above, initial results are promising, but there is still a way to go to reach the targets that the program set itself in terms of the adoption of biological control practices and the use of compost and manure.

In the NRM component, the use of good soil and water conservation practices is synonymous with good environmental stewardship. Many NRM interventions suffer from the fact that the use of good practices do not have immediate payoff for the farmers that practice them. This is not the case here where the use of the soil and water conservation practices has brought about immediate increases in yields of sorghum and millet.

In both components, market gardening and NRM, environmental factors external to the project can affect results and their sustainability. For example, at the irrigation sites abuse of the environment upstream of the reservoirs will eventually reduce water availability and quality. In the NRM component there is the threat that if non-participating farmers do not protect his or her fields by using, let's say, stone bunds, there is the threat that the investment made by NRM practicing farmers will be lost should there be heavy rainfall.

To minimize these types of threats requires that complementary actions are taken at the water catchment level (for market gardening) or community level (for NRM). In the case of the irrigation sites, the DAP had the intention of engaging the local authorities and the Local Water Committees. However, as mentioned, there has been little progress in this respect because of the lack of effectiveness of, or perhaps incentives for, these bodies to promote the good use of natural resources and enforce those regulations or by-laws that do exist. In the NRM component, a raised awareness among the whole community of the benefits for all farmers in using good soil and water conservation techniques would likely improve results and reduce potential threats.

Recommendation:

- ▶ In future programming, complement field-level interventions aimed at achieving environmental sustainability of production activities with area-based actions to catalyze appropriate technical, institutional and policy support for good management of the environment. This will avoid situation in which gains made at the field level are jeopardized because of negative external environmental factors.

G. SUMMARY OF RECOMMENDATIONS

This section pulls together and synthesizes the recommendations that have appeared in the fore-going text of the document following the presentation of findings, complementing them with more general and overarching recommendations. For each component of the Agriculture SO recommendations are made on actions to address short-term needs (from now until the close of the DAP in May 2010) and those that address needs in terms of future programming.

Market gardening

1. Short-term needs

- ***Formulate a plan for how CRS' disengagement from the three irrigation sites will be achieved.***
By the end of the DAP in May 2010, none of the three sites will have reached a sufficiently high level of performance to be able to operate on their own. Specific tasks that need to be undertaken in order to prepare and adequate plan include:
 - Review of the partnership relationship with FWY and take decisions on the options for maintaining support to the Silmidougou site that ensure that present weaknesses are addressed.
 - Study how other irrigation sites are organized, especially Lélègse, and if appropriate apply any observed good practice at the Silmidougou, Tougouri and Zeguedeguin sites.

- Rethink how the Silmidougou site is organized a) for water management and b) for decisions on what to produce and to whom to sell. Adopt a more executive and business-oriented approach to management, by further strengthening the management and technical capacity of those responsible for running the site. Separate day-to-day management responsibilities from the oversight responsibilities within the CMC. Study options for dividing the site between men and women, and possibly further division into smaller groups where certain production/marketing decisions can be made. Ensure democratic procedures are established in groups at all levels. Strengthen institutional capacity in organizational and business processes, by hiring appropriately qualified personnel if necessary to support the CMC. Do not be afraid to admit mistakes and take measures to correct them.
- Conclude the *credit maraîchage* (credit for vegetable gardens) pilot, and if results are positive prepare for its rollout in future programs. If the results are not satisfactory, examine whether savings and internal lending mechanisms might be appropriate for farmers to access resources for meeting the costs of production inputs, and incorporate this component in future programs.
- Instigate the discipline of developing yearly specific market and business plans and ensure that these are documented. These can be simple and succinct. They need to be developed in consultation with the farmers that use the irrigation sites.
- Explore alternative options for providing market-related services to farmers (input supply, market information, contacts with buyers, etc.), through government-supported provincial organizations, a private sector business spun-off from one of the partners, etc.
- Design and implement a simple Excel-type data base of key information on performance of the sites and each of the farmers using them.
- Estimate with farmers the relative labor use (person-days) for production of different cropping alternatives, for both men and women.

2. Future programming needs

In future agricultural development programming, which will require follow-up actions in the present locations where the present DAP is being executed as part of the process of successful disengagement, it is recommended that:

- ***CRS/BF continues to prioritize the provision of irrigated land for smallholder farmers.*** Households with access to irrigable land greatly increase their resilience to food security shocks and therefore interventions in irrigation are very relevant. However, CRS needs to consider carefully where its particular niche is in facilitating the development of the irrigation sector in Burkina Faso. Is it at the scale of the present DAP or are there opportunities to strengthen food security in marginal areas through irrigation with localized, lower cost infrastructure that enables greater participation of the community in its construction?
- ***Experiences from the present DAP are analyzed, synthesized and documented.*** Particular attention should be paid to the process by which results and outcomes were obtained, so that good practice and lessons learned can be used in the formulation of future proposals.
- ***Technical production training to all farmers in market gardening is complemented with building the capacity of smaller groups of farmers within an irrigation site to experiment with production practices and to provide technical support to other farmers.*** Mechanisms such as Farmer Field Schools or similar type mechanisms should be adopted.
- ***Local administrations and the Local Water Committees are proactively engaged to catalyze the preparation and execution of an action plan for increasing awareness about conservation of the respective water catchments, and the enactment of local regulations for their management.***

Natural Resource management

1. Short-term needs

- ***Design a scaling-up strategy for making the positive results of the NRM component available to a much larger number of farmers.***

The spontaneous adoption by non-beneficiaries of the program suggests that there is potentially a large demand for the techniques, the tools and equipment, and the organizational processes that are required to ensure success. To make replication possible it will be necessary to:

- Fully document the process so that other organizations can learn about how to implement similar projects. In so doing, analyze carefully villages that have been most successful and those that have been less successful, and the factors that influence success.
- Look closely at why some beneficiary farmers adopt none of the promoted technologies, and explore other technological or organizational solutions to the factors that limit women's use of the practices.
- Examine how credit could be used to initiate small businesses that hire out tools and equipment.
- Develop training materials in local languages and in a format suitable for recently literate farmers.
- Select a group of the best of the 25 villages as models for farmer-to-farmer exchanges with new villages.
- Explore how radio and other means of communication, and the infrastructure of ATT in the region, can be used to reach a wide farmer audience, informing about the use of NRM technologies and successes of the project.

2. Future programming needs

- ***Strengthen the sustainability and scale-up potential of the results and outcomes achieved in the NRM component by:***

- Experimenting with the formation of community field agents as a means of providing local technical support to farmers wishing to adopt NRM techniques.
- Examining the possibility of spinning-off the tool and equipment hire functions of the CMC as a small enterprise. Look for parallels with and learn from the experience in other countries of the community agents used in savings and internal lending programs, and Farmer Field Schools where these evolve into agroenterprises.
- Consolidating the seed producers group and strengthening the relation with INERA so that their multiplication business is complemented by an on-going process of variety evaluation for sorghum, millet and other crops of economic importance to farmers. This will provide the seed producers with new and better products for multiplication that will contribute to maintaining competitiveness.

- ***Use the sound achievements in the promoting NRM techniques as an entry point to a more integrated approach to sustainable agricultural development in the area of influence of the NRM component.***

The agroenterprise and cowpea storage projects have initiated the move in this direction. This integration of activities could be piloted in all 25 villages, or villages could be grouped according to proximity, or a selection of villages could be made in which to pilot the learning about the integration process. To further consolidate this evolution, the following actions should be undertaken:

- Formalize the CMC structures within the ATT village structure and prepare them to take on a wider role in the agricultural development of their villages.
- Extend the range of NRM activities beyond the farm plot as a means of protecting gains in land restoration.
- Explore the use of microfinance and/or savings and internal loans mechanisms as a means of providing farmers access to financial resources for engaging in agroenterprise activities.
- Balance crop and livestock production interventions. Livestock and particularly small livestock are important income generators for the rural population and may have a comparative advantage over crops in the Gnagna ecosystem.
- Explore if there are water resources available to develop small-scale irrigation facilities as a mean of extending production into the dry season for both food and cash crop production.

Pilot school gardens and fields

- ***Undertake an in-depth evaluation of the schools that have consistently managed to produce significant amounts of staple crops and vegetables for their canteens.***

During the evaluation only two of the ten schools were visited. Therefore the evaluators are not in a position to categorically say whether the idea of promoting school gardens and fields as a means of partially meeting the food needs of the canteens is workable or not. From the results achieved, it is clear that not all schools will capitalize on an opportunity to develop gardens and fields, either because of leadership, organizational, logistical, or resource limitations. The study should tell us what are the factors or conditions necessary to be successful. Schools that can meet the required conditions might then be targeted. Funds for the establishment of market gardens and/or fields might be made available through a bidding process, with yearly resources granted based on results.

Cross-component

These recommendations refer to future programs:

- ***Make sure that as much attention is paid to organizational and market related performance as to the technical aspects related to production.***

The technical results obtained both in the market gardening and the NRM components have met their targets and the CRS staff and partners should be very satisfied of the results obtained through their hard work and dedication. Equal success has not been obtained so far in establishing strong rural institutions capable of sustaining the gains made. Nor has there been sufficient progress in achieving a level of ‘market literacy’ (the skills required to engage with markets profitably) both among partners or the organizations that represent the beneficiaries. CRS has pioneered the concept of the five skill set needed for successful market engagement by farmer groups.³⁶ If market engagement is going to be key in future programming, then this concept will be useful in designing more balanced interventions. The concept and the approaches used to implement its different component parts require multidisciplinary skills that may change the staffing profile for programs of this nature and/or lead to a greater level of integration among CRS’ programs.

- ***Complement the collection and reporting of quantitative M&E data with quantitative and qualitative information that will help interpret the results obtained.*** Quantitative data, from secondary sources, might include information on environmental (e.g. rainfall), market (e.g. prices and their fluctuation, trends in volumes sold into different markets), and production (e.g. national and regional trends in production and yield) aspects. Qualitative data would require an assessment of why certain technologies, methods or processes worked and others did not.

- ***Cultivate a culture of networking to help resolve seemingly intractable problems and to introduce new ideas.***

Except for the MTE, this Final Evaluation and visits from USAID/FANTA personnel, to our knowledge there have been no visits from external technical experts either to help resolve specific problems or to review progress and make recommendations. Programs as complex as these should budget for bringing in external expertise, especially in areas where in-house competence is lacking, or second opinions are required. The MTE and Final Evaluations can never have the time or the breadth of technical knowledge to play this highly specific technical role.

³⁶ Catholic Relief Services and Centro Internacional de Agricultura Tropical. 2007. *Preparing farmer groups to engage successfully with markets. A field guide for five key skill sets.*

SO2: EDUCATION

A. METHODOLOGY

Basic program documents were reviewed in preparation for the evaluation and online searches provided further background information on the development of education and school feeding in Burkina Faso. On arrival in Ouagadougou, Education and M&E staff provided briefings on the sectoral program for SO2 and on the M&E system, including data collection methods for Education program activities and results. Additional publications of MEBA (Ministère de l'Enseignement de Base et de l'Alphabetisation), the Ministry of Education, and of the agency responsible for school canteen operations, the *Projet Cantines Scolaires* (School Canteen Project) within the *Direction de l'Allocation des Moyens Spécifiques aux Écoles* (DAMSE) were reviewed. A field program was developed with Education sector staff allowing for observation and discussion both in current School Feeding Program (SFP) areas and in those recently phased out of canteen support. The Head of the Education Program and a Burkinabè consultant expert on education³⁷ made up the field team. Additional fieldwork in CRS-supported schools was carried out during the final week of the evaluation by the Head of Monitoring and Evaluation (M&E) and the local consultant.

The evaluation team visited six provinces, including three where CRS support had been phased out in 2006 and 2008, and one province with school canteens supported by the World Food Program (WFP). A total of 7 schools in two provinces currently supported by CRS were visited. Discussions were held with provincial officials, school inspectors, school directors, teachers, representatives of the *Associations des Parents d'Élèves* (APE) and *Associations des Mères d'Élèves* (AME), and children. Interviews were focused on relations with CRS and MEBA, the conditions for sustainable canteen operations, and impacts of the SFP on school attendance and enrollment. Examples of both more and less successful schools/ communities were visited. Recommendations are based on field observations and interviews as well as on available quantitative data.

Excellent logistical support was provided in the field, but circumstances beyond the control of the evaluation team limited access to schools. These included a national civil servants' strike affecting school teachers and the closures of large numbers of schools to allow students to take practice exams during the ten days set aside for field visits.

B. PROGRAM EFFECTIVENESS

SO2: Education: Increase educational opportunities for Burkinabè children, especially girls.

How effective has the Education program been?

The data collected by the program and during field visits have shown that the Education program has been effective in achieving the short term goals of increasing rates of enrollment, especially of girls, and ensuring high levels of attendance and retention of all pupils. There is evidence of success in changing attitudes toward girls' participation in school; every administrator, teacher and parent spoke positively of the increases in numbers of girls in school, and in at least two schools visited, girls' enrollment exceeded that of boys. No single agent can claim credit for this transformation; it is the result of the combined efforts of CRS, MEBA, and other programs, notably BRIGHT (Burkinabè Response to Improve Girls' Chances to Succeed). The changes it represents appear to be durable.

The school canteen program is popular and communities are aware of the need to assume greater responsibility for its management. In the medium term, however, schools are experiencing major constraints in meeting the needs of pupils for school meals throughout the year. There is an increasing awareness of the need for compromise, as resources are not expanding, and the country has already experienced one food crisis in response to rising food costs in the international market. A

³⁷ The consultant, Dr. Al-Kassoum Maiga, teaches Sociology of Education at the university of Ouagadougou.

viable solution will depend on human factors: community organization and willingness to provide support; agricultural skills and careful planning; increasing capacities among parents for management of the tasks involved in operating the canteen.

Background to SO2

School feeding and support to basic education made up the largest part of activity in the CRS FY2004-2009 Development Activities Program (DAP) in Burkina Faso, with activities in 23 Provinces nationally, and projected use of 39.8% of cash and 88.4% of commodities to support SO2.³⁸ Catholic Relief Services has been providing commodity and management support to school canteens in Burkina Faso since 1962, working in close partnership with the Government. The school canteen (cantine scolaire) is an important element in primary schooling. The duration of the school day, running from 8 to 5, with a three-hour break at noon, in an environment where children may walk long distances to school, necessitates the provision of food at school.

The 2004 – 2009 DAP proposed phasing out through a gradual reduction in the amounts of commodities provided, leading to a reduced number of provinces served, under an implementation model in which all schools in a targeted province are provided with some support until it has been phased out. Several related interventions supporting basic education throughout the life of the DAP form part of SO2. These include support to school canteens in pre-schools; the monthly distribution of Take Home Dry Rations (THR) to female students maintaining a 90% attendance record; food for work (FFW) for school construction and infrastructural development; and a campaign of public education (Information, Education and Communication – IEC) on the establishment of community based canteens, and on the value of literacy and girls' education. These interventions were supported by a school health program, SO3, including de-worming, micronutrient supplementation and nutrition and hygiene education for teachers, parents and pupils, supported by Government and donor funds.

Activities under SO2 are summarized below.

Program	FY2006			FY2007			FY2008			FY2009		
	# schools	# benefi- ciaries	MT									
SFP	2135	468,736	9899	1327	232,701	7030	1521	272,402	7003	1328	245,868	3927
THR	94	5690	434	94	7790	436	94	9479	434	94	10,728	380
Pre-schools	61	5509	136	41	3592	76	46	4241	117	41	4029	101
FFW for infras		490	9		2310	43		0	0		0	0
IEC		57,565			75,446			65,470				

School feeding is intended to meet short-term food security needs, supporting better educational outcomes through improved enrollment, attendance and retention/completion rates. These educational effects are expected to have long-term impacts on larger food security objectives. The value of a meal early in the school day in promoting attention and learning has been widely recognized. The availability of food at school stimulates attendance and participation, while the provision of a take home ration - usually to girls - serves as a resource transfer to the household. By offsetting educational³⁹ and opportunity costs of their schooling the THR provides an incentive to educate girls. In the longer term, increased participation of children, particularly girls, in basic education is known to promote improved health in under fives, better agricultural practices, smaller families and increased

³⁸Including ITSH, monetization proceeds and section 202(e) requests. See *P.L. 480 Title II Catholic Relief Services/Burkina Faso FY2004-FY2009: Development Assistance Program Proposal, 1 November 2002.*

³⁹ Education has been free in Burkina Faso since the reforms initiated under the *Plan Décennal de Développement de l'Éducation de Base 2000-2009* [PDDEB], Ministère de l'Enseignement de Base et de l'Alphabétisation, Burkina Faso, but parents are expected to contribute to school-related costs through a 'cotisation' fee ranging from 1000 to 5000 FCFA [\$2 - \$10 US].

ability to utilize micro credit. CRS's 2004-2009 DAP used school feeding, including THR, to achieve short-term educational objectives.

SO2 includes two Intermediate Results:

- ▶ **Intermediate Result 2.1: National schools canteen program achieves greater sustainability**
- ▶ **Intermediate Result 2.2: More children, especially girls, enroll in and attend school**

The development of a national network of sustainable school canteens is the primary means through which increased enrollment and attendance have been promoted in this DAP.

IR 2.1: National schools canteen program achieves greater sustainability

The assisted school canteen has been the primary delivery mechanism for FFE throughout the current DAP, providing 9,899 MT of commodities to 468,736 school children at its peak in FY2006. This provided continuity with a long history of early and extensive involvement by CRS in canteens, ensuring that the assisted canteen became a national institution in Burkina Faso. Between 1962 and 1988, when MEBA created the Service des Cantines Scolaires [school canteen service], CRS was responsible for provisioning a national network of school canteens with US-origin commodities. The entry of new partners, including the European Union, World Food Program (WFP) and several bilateral donors in the 1990s initiated a period of 'semi-assisted' canteens (cantines semi-assistées), receiving significant support from the Government, and formalized under the *Plan Décennal de Développement de l'Éducation de Base* (PDDEB), the national 10 year plan for educational reform and development, published in 1999. In 1998 CRS phased out support to 11 provinces, followed by a further 11 at the end of the 2005-2006 school year. PDDEB set out a target for full national school canteen coverage by 2010.

In Government planning the 'cantines endogènes'⁴⁰ [endogenous canteens], supported primarily by the community with government assistance, were distinguished from 'cantines assistées' [assisted canteens], which continued to receive significant donor support, provided through CRS and WFP. In 2004 the relationship between the Government and CRS was further formalized through the creation of DAMSE, the Government body responsible for management of the School Canteen Project in conjunction with CRS/CATHWEL.⁴¹

CRS has been engaged in a long-term process of assisting, nurturing and handing over school canteens for more than 20 years. The critical importance of a viable phaseout plan for CRS-supported school canteens was identified during the FY1997 – 2001 DAP, and in 1998 CRS 'graduated' 11 provinces from direct support, in conformity both with the Government's Retargeting (*Reciblage*) Plan for school feeding and with USAID priorities. A series of recommendations were made in the final evaluation of the FY97-01 DAP to move this process forward. These included a gradual phaseout of support, with graduated reduction in commodity amounts, allowing communities time to identify mechanisms for supporting their canteens and filling this gap. IEC campaigns were to be intensified, incorporating extensive use of radio, development of print materials on phaseout, with the inclusion in broadcast messages on lessons learned and best practices on canteen management. MEBA was encouraged to work with the National Council for Parent-Teacher Associations (CNAPEP), the national structure coordinating the Parents' Associations - the Associations des Parents d'Élèves (APE) and Associations des Mères d'Élèves (AME) - to strengthen their management capacity.

⁴⁰ The 'cantine endogène' is defined as a canteen which is "created, maintained and managed by the educational community of the village" [*Manual Cantine Scolaire au Burkina Faso*, p.11]. It is "based on the collection of food by the community and is managed by the pupils and their families." [p. 27]

⁴¹ In SFP activities, CRS operates in Burkina Faso through the local Caritas body, CATHWEL.

In preparation for re-targeting and phaseout, a detailed national food security assessment was carried out by CRS in 2000. With the development of the current DAP in 2002, this process was focused on the design of a plan to maximize the chances for self sufficiency of canteens supported by communities and the Government, while ensuring that food security needs in these communities would continue to be met. In preparation for the DAP, the 23 provinces where CRS continued to work were ranked on the basis of four variables: girls' enrollment, food security, the presence of other CRS activities and MEBA's planning priorities.

Using the data generated by the ranking exercise, the FY2004 – 2009 DAP includes a comprehensive canteen phaseout plan, featuring the prioritization of provinces in the phaseout process; a gradual reduction in commodity amounts provided by CRS; and a concurrent scaling up of Government and community donations. [See Annex M, DAP Proposal]. Three Tiers of provinces are identified: those prioritized by MEBA on the basis of need, and expected to receive Government support after CRS phaseout [Tier 1]; those expected to be able to assume community responsibility for provisioning and management of the endogenous canteens [Tier 2]; and those expected to be in need of food aid and other assistance in the longer term [Tier 3]. CRS support was to be provided to the six Tier 3 provinces throughout the DAP.⁴²

Several strategies were used to prepare communities for the phaseout process, following the recommendations of the FY97-01 DAP evaluation. These included extensive IEC campaigns on all aspects of the phaseout, utilizing radio broadcasts and public meetings - from national down to local level - and preparation and dissemination of a manual, *La Cantine scolaire au Burkina Faso*,⁴³ co-authored by three senior school inspectors.

The sustainability of the school canteen program was measured through two monitoring indicators:

Indicator 2.1.1: By end of DAP, 100% increase over baseline in number of canteen[s] in Tiers 1 and 2 functioning with government and/or community contributions

Indicator 2.1.2: By the end of the DAP, 50% increase in sources of outside funding supporting national canteen program increase in sources of outside funding supporting national canteen program

Findings: Indicator 2.1.1 has been easily achieved during this program. By 2008, a total of 1649 schools in former CRS operational areas – 244% of the target of 676 - reported community contributions to their canteens. All were also receiving commodities from MEBA. This shows the rapid involvement of communities in endogenous canteens, indicating progress toward the objective set out by DAMSE of universal awareness of the need to contribute.⁴⁴

Canteens w.comm/MEBA support	FY03		FY06		FY07		FY08		FY09
	Base-line	Target	Achieved	Target	Achieved	Target	Achieved	LOA target	
	356	605	943	641	1390	676	1649	712	

Indicator 2.1.2 was also exceeded early in the life of the program, when WFP assumed support for 4 provinces, bringing the number of outside sources of support to 4, from a baseline of 2. These quantitative indicators are very useful in assessing trends in sources of support to canteens over the life of the program. Additional information is needed to more fully capture key elements of increased

⁴² The original plan included 7 'Tier 3' provinces, but WFP assumed responsibility for provision of commodities to canteens in Soum, a highly food insecure northern province, along with three other provinces in the Sahel region.

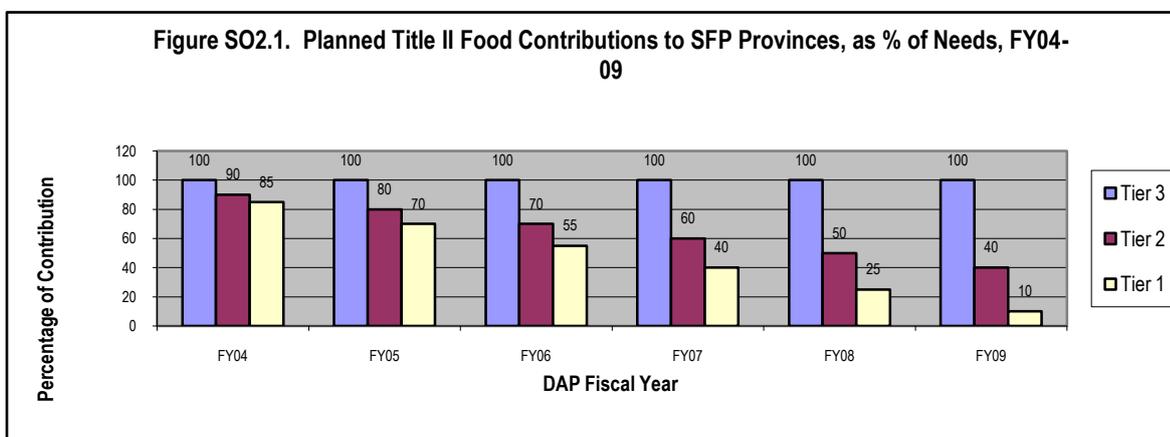
⁴³ Ministère de l'Enseignement de Base et de l'Alphabétisation, CRS and USAID.2006. *La Cantine Scolaire au Burkina Faso*, Ouagadougou.

⁴⁴ Interview with Issaka Kaboré, Director, DAMSE, May 20, 2009.

sustainability: the adequacy of food commodities available for school meals, and the quality of community management of canteens. Given the critical place of the school canteen in relation to primary education in Burkina Faso and as a part of CRS's Title II program, the final evaluation team focused field data collection on the process of phasing out.⁴⁵

Preparation for and Evolution of the Phaseout Process

The phaseout process described in the FY2004-2009 DAP included a gradual reduction of commodity support to school canteens in the 16 provinces of Tiers 1 and 2. The graph below, adapted from the Midterm Evaluation, shows planned commodity levels over the LOA.



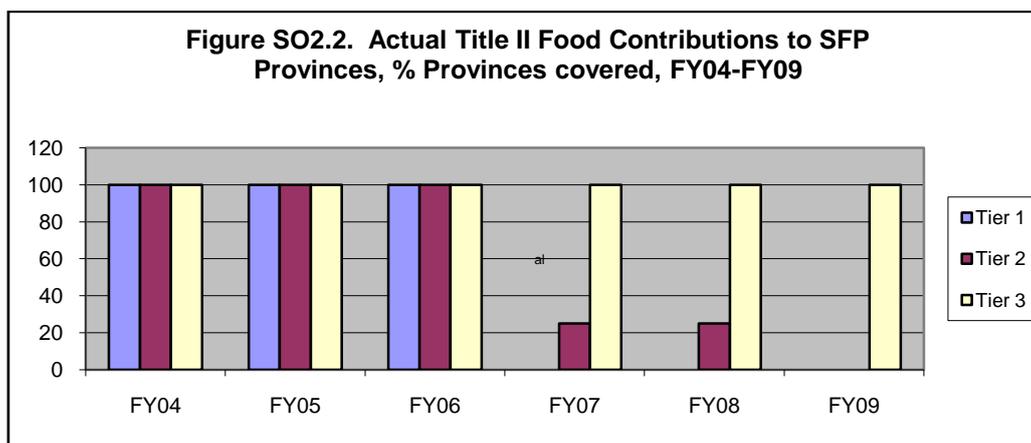
By 2006, mid-way through the DAP, CRS was responsible for commodity support to 19 provinces, MEBA for 22, and WFP for 4. Administrative requirements, commodities provided and procedures for distribution of commodities were specified for assisted and endogenous canteens. Communities were expected to contribute to all school canteens, but this objective had not yet been realized.

At the start of FY2007 (School Year 2006-2007⁴⁶) CRS found it necessary to accelerate the phaseout process in response to several pressures arising during 2006. With the implementation of national educational reforms, which reduced the cost of schooling, enrollments in CRS-supported schools increased rapidly and new schools were constructed to accommodate the increased demand for access to primary schooling. Under CRS policy, all schools in a supported province, including the newly established, received support. Growth in school populations greatly increased the commodity budget needed to maintain SFP support, even at a reduced level. At the same time, USAID notified CRS of a shortfall in available commodity resources. This led to a decision by CRS to discontinue all commodity support to 11 provinces.

Three Tier 1 provinces, (expected to transition to full Government support), and one in Tier 3 had been taken over by WFP in FY2006. They formed the basis of an expanded WFP school feeding program in the northern Sahel region of the country, where it was felt that school meals would boost enrollment, especially of girls, among the lowest in the country. CRS continued to provide commodities to 6 focus provinces in Tier 3. Two Tier 2 provinces where school garden activities had been initiated in FY2006 were included, so that by FY07 only 8 provinces were receiving CRS support.

⁴⁵ A broad follow up study of the phasing out process has been planned by CRS/BF.

⁴⁶ The School Year runs from 1 October through 31 May, corresponding roughly to the first 8 months of the Fiscal Year.



Excludes 4 Tier 1 provinces taken over by WFP in FY06.

CRS developed a strong and constructive working relationship with MEBA throughout this transition. This includes use of the same commodity accounting software; cooperation on transport arrangements for US-origin commodities, which are donated to MEBA through an ‘Accord de Cooperation’ (MOU); joint responsibility for oversight through school visits by inspectors and controllers; and the location of the Projet Cantines Scolaires (School Canteen Project) in the CRS Commodity offices adjacent to the warehouse.

Two major initiatives were developed and implemented by CRS to support the eventual self sufficiency of Tier 1 and Tier 2 canteens during this DAP: school gardens and a major information campaign on the transition (IEC). School gardens, found under SO1, are discussed below in the analysis of the capacity of phaseout communities to provide commodities to school canteens, and at length in the analysis of the Agriculture support program.

IEC and Community Training for Phaseout

Extensive preparation for phaseout was initiated in FY05. The IEC component included public information campaigns, meetings, and a radio campaign; exchange visits by parents’ committee members were initiated by CRS in FY05 in preparation for a gradual phaseout from canteen support. Public meetings and workshops, at national, regional and local level, focused strongly on the phaseout process, including discussions of the reasons for the change, requirements for establishment of the endogenous canteen, and current problems related to commodity operations. In FY05, one national and two regional meetings were held, with 562 administrators, MEBA officials, parents and representatives of partner NGOs participating. Radio broadcasts with information on the phaseout process were broadcast in four local languages and were estimated to have reached almost 62,000 people. Information reached an estimated 58,000 the following year, over 75,000 in FY07, and over 65,000 in FY08 through radio and meetings with PTAs and other community groups. The canteen management manual, *La Cantine scolaire au Burkina Faso*, included detailed discussions of ration requirements, management of different types of canteens and reporting requirements. Ten thousand copies were printed and it was widely distributed to Provincial MEBA officials, teachers and administrators in FY07. School communities were trained on planning, and school action plans were prepared by 87 communities, a process starting in FY05. Parents and teachers in five provinces carried out sponsored exchange visits to schools in ‘model’ provinces for discussions on the establishment and management of endogenous canteens. Focused training on communication was carried out among staff and parents of 300 schools. Basic literacy training was provided by CRS partners to 70 parents.

In FY07, following the phaseout of the Tier 1 and Tier 2 schools, CRS focused attention on more direct preparation of parents and schools for the process through a further exchange visit jointly organized with MEBA, involving 88 community members. Schools were selected from those participating in the pilot school garden program; those needing support were paired for the visit with others which had made good progress and the visit was held in June, at the end of the school year.

The discussions during the visit produced an extensive list of constraints faced by communities in establishing, provisioning and managing endogenous canteens. Solutions proposed by parents, included community organization, involvement of local leaders in community mobilization, scheduling of the collection of commodities immediately after the harvest, and other practical, low cost actions. Many of the problems and proposed solutions identified by these community groups were confirmed by field visits, and found to be common to other schools struggling with the challenges of supporting the school canteen, as discussed below.

Follow up fieldwork was planned during the evaluation to gather additional information on exposure to IEC messages; this information is not available. Preliminary observations are based on field visits to phased out schools

Findings:

- ▶ CRS coordinated all phaseout activities closely with MEBA, extending an already strong relationship.
- ▶ CRS initiated preparation for the phaseout process early in FY05, and information about it was disseminated to a wide audience using IEC methods. The processes of community mobilization were also initiated early in the FY2004-2009 DAP cycle.
- ▶ The sensitization process initiated through cross visits to schools by parents was an effective method of moving participating communities toward the identification of solutions to the challenges of the phaseout process.
- ▶ The IEC program, while extensive, has not yet communicated effectively with all the schools and parents who need to hear and understand messages about phasing out. Some respondents reported that they were not fully aware of the phaseout, while others testified that they had been told about the process, but they did not take the information seriously.
- ▶ Print materials in French, such as the manual on canteen management, while appropriate for school directors and teachers, may not be accessible to members of the APE, who preferred to use local languages during our fieldwork.
- ▶ Mothers (AME members) are, in most cases, illiterate, and cannot use any print materials.
- ▶ Radio broadcasts are limited to areas where FM transmissions can be heard. These do not cover all provinces where phaseout was taking place, as noted in Annual Progress Reports.

Radio communications are most effective when conveying one or two simple messages in each transmission, with subsequent reinforcement and repetition. The mechanics of canteen establishment may be too complex to be fully explained through this medium. While no data was available on this, a film made under this program and designed for television transmission would probably not reach the vast majority of rural school communities who have no access to television broadcasts. It is not known whether the film was shown to rural school communities using a 'video cinema' outreach campaign.

Recommendations:

- ▶ CRS should develop a phaseout training program for APE and AME members including design and production of 'user friendly' materials, accessible to non-literate learners, explaining the basics of canteen establishment and operation. Plans should be made with MEBA on roll out of this additional training. Further details are suggested below.
- ▶ In future activities with communities CRS should incorporate the techniques used during cross visits as first steps in the process of mobilization. This sensibilization process would be initiated at the level of the individual school and its catchment community. For effective support to phaseout planning an exercise to assess the extent and success of existing efforts on the ground would be followed by a large number of visits.
- ▶ Any future phaseout planning for canteen support should be based on a time frame of 2-3 years of intensive facilitation support with individual schools ('accompaniment').

Effectiveness of the phaseout process

The concept of community responsibility for the endogenous canteen is widely understood and accepted, but the rapid transition and resource constraints in Burkina Faso have made this transition difficult. Three aspects of the phaseout process were reviewed in this evaluation:

- ▶ *Management of CRS-supported canteens*
- ▶ *Capacity of phaseout communities⁴⁷ to provide commodities to school canteens*
- ▶ *Capacity of phaseout communities to manage canteens*

Management and phasing out of CRS-supported canteens in Tier 3 schools and pre-schools is an ongoing concern for FY10, the final year of the DAP. The capacities of phaseout communities to provision and manage canteens are discussed separately.

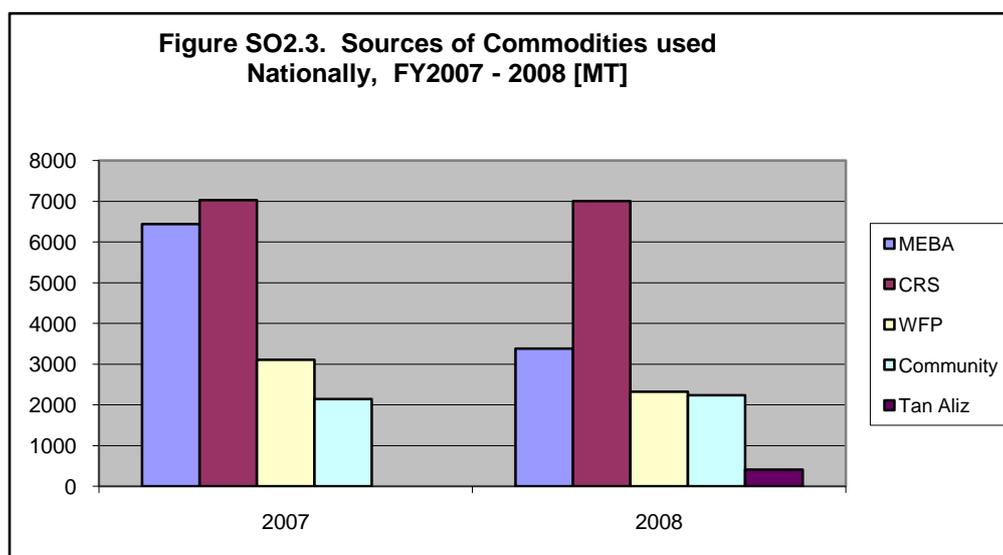
Management of CRS-supported Canteens

Commodities planned for and used during in the SFP during the LOA are shown below.

Table SO2.3. SFP Commodities Planned and Used 2004 - 2009

	2004-05	2005-06	2006-07	2007-08	2008-09
MT Planned	10200	9613	8935	8164	6990
MT Distrib	8826	9900	7030	7003	3927
# pupils	318,616	468,736	232,701	272,402	245,868
# schools	1639	2101	1327	1521	1328

CRS continued to provide a high proportion of school commodities nationally, even after the phaseout of 11 provinces at the end of FY06. All major sources are shown below. Levels of support by CRS and WFP remained relatively stable up to 2008, while MEBA's resources were reduced by almost half in the same period. Community contributions also remained at the same level, although the number of provinces recording support to endogenous cantines increased from 20 to 33. Tan Aliz, an organization supported by a wealthy Burkinabè businesswoman, provided about 400MT in 2008.



Estimated enrollments sent by MEBA are verified by CRS and an agreement for commodities is signed one year in advance of anticipated use. Targeting and ration sizes are determined by CRS

⁴⁷ The term "phaseout communities" describes school communities in the 11 provinces where support was discontinued in FY07.

Education sector managers. Commodity operations are fully integrated between MEBA and CRS through use of the Food Log software, responsibility for transport is shared, and deliveries are jointly planned. End use reporting is done following each delivery. Schools are visited twice yearly, once by the MEBA Inspector and once by a CRS Controller, primarily to check on commodity management. At the end of FY2006 CRS took over responsibility for end-use checking; commodity losses were experienced by MEBA in several provinces in 2007 and 2008.⁴⁸ Storage was adequate in all stores visited, in both CRS supported and phased out schools.

One CRS-supported canteen was visited jointly with the Commodities/ General Relief evaluation team. In other locations, stores were viewed and discussions held with school directors, teachers and parents.

Findings:

► Commodity management in CRS schools is well established, with good commodity accounting. The General Relief evaluation consultant noted that some aspects, such as the weighing and measuring of daily rations, were not standardized.

Inspection of School Store



► Transport of commodities has been a problem for some schools in the past, as communities, responsible for these costs, were unable to collect funds in a timely way. With the assumption of responsibility for transport by MEBA, supported by the World Bank, the situation improved in 2008. In FY07 and FY08 initial deliveries to schools were made in October, at the start of the school year.

► In FY09, a significant reduction in the commodities available to the program has resulted in the availability of only about 4 months' of commodities. It was decided to provide these during the hungry season, from January/February up to May, with initial deliveries in January. This gap has stretched community resources.

CRS assistance has not been made conditional on the community collection of crops for canteen use, the *collecte*, although schools have traditionally been required to provide condiments (salt, vegetables, onions, etc.) to their canteens.

Some CRS-supported schools have initiated collections of basic commodities; this was observed in 2008 in most of those participating in the school garden program.⁴⁹

Recommendations for the final year of the DAP:

► The CMO should identify a standard measurement system for use in CRS-supported schools, to facilitate planning and ensure compliance with commodity accounting requirements. If this is based on cheap widely available local containers, its use can also be promoted in endogenous canteens.

► CRS should make efforts to complete and implement MTE recommendation 1.2, to develop a process for commodity planning, which takes into account estimated amounts expected to be locally collected, as well as contributions of other donors.

► CRS should take an early decision on the levels of support to be provided to schools in the six Tier 3 provinces in the follow on MYAP. Recommendations on planning for FY10 will depend on these decisions.

⁴⁸ Reported national losses in FY07 were 38.2 MT, valued at 3,772,095 FFCFA (\$7544). In FY08 the figures were 1.6 MT, valued at 733,975 (\$1468). See MEBA, DAMSE, Projet Cantines Scolaires/MEBA/CATHWEL, *Rapport Annuel d'Activités des Cantines Scolaire, Année Scolaire 2006-2007*, Août 2007, and *Rapport Annuel 2007-2008*, Août 2008. Teachers' salaries are withheld until re-payment has been effected.

⁴⁹ These 10 schools were phased out of commodity support in FY09.

► During the remaining year of the DAP, CRS should work closely with teachers and parents on appropriate phasing out plans for the six Tier 3 provinces using successful mobilization/ sensitization practices (discussed above under IEC), and ensuring a higher level of staff contact with school communities than has been possible in the program up to now.

► An intensive program of support in FY10 to schools being phased out of the program may necessitate recruiting a cadre of outreach workers with community development skills.

Capacity of phaseout communities to provide commodities to school canteens:

How well have schools done in providing for school canteens? How did recently phased out schools compare with others? The data on achievements of schools in provisioning canteens for FY07/08 are based on self reporting to MEBA at the close of the academic year; these reports undoubtedly underestimate local efforts, but they provide some basis for looking at the relative importance of community contributions and external assistance in schools which have been phased out. They show an increase in the ability of phased out school communities to contribute to their own provisioning through the *collecte*, between 2007 and 2008, with the number of provinces reporting school contributions rising from 5 to 11.

	# schools (a)	Total MT (b)	MT/ school (c)	# children fed (d)	kgs/ child (e)	# months coverage (f) ⁵⁰	# provin- ces (g)
CRS	1330	7030	5.29	323,703	30.2	6	8
MEBA [all schools]	3064	6437	2.1	675,850	9.5	1.9	33
WFP	479	3102	6.48	n.d.			4
National Collecte⁵¹ Collect in CRS p/o provinces⁵²	2213	2139	0.97	469,029	4.6	0.92	20
MEBA provision to p/o provinces⁵³	812	348	0.43	158,845	2.19	0.44	5
All sources, p/o provinces	1301	2314	1.78	264,281	8.76	1.75	9
	1360	2662			11 ⁵⁴	2.19	11

MEBA, DAMSE, Projet Cantines Scolaires/MEBA/CATHWEL, *Rapport Annuel d'Activités des Cantines Scolaire, Année Scolaire 2006-2007*

The table above illustrates reported amounts of commodities provided to all schools in Burkina Faso for the SFP from all sources⁵⁵ in FY07, and provides a basis for a rough comparison of the adequacy of different sources in meeting needs. Column c shows amounts per school, averaged across all schools reported to have received commodities, and e shows the average amount available per child, based on reported school populations. Schools phased out of the CRS SFP were compared to all schools, on the variables of amounts collected and MEBA donations.

In FY2007 only 5 former CRS provinces reported on local *collectes*, averaging 2.19 kgs per child, with an additional 8.76 provided by MEBA to schools in all 11 former CRS provinces. It can be seen that amounts collected at community level were still very low, averaging less than 1 MT per school, with an average of only half of that amount in former CRS schools. This is consistent with reports from the field, where relatively effective schools reported collecting 700 – 1000 kgs. Interestingly, MEBA had included all 33 provinces into the national program, including 13 which

⁵⁰ Based on 5 kgs per month.

⁵¹ Based on all data provided to MEBA by all reporting schools, including former CRS schools. Data are probably incomplete.

⁵² Boulgou, Ganzourgou, Kouritenga, Passoré, Yatenga reported local collection.

⁵³ Includes Ganzourgou, Kompienga, Koulpelogo, Gourma, Ziro, Boulgou, Bam, Yatenga, Kouritenga.

⁵⁴ Estimated total of averages provided by MEBA and by communities [data not adequate to calculate actual average].

⁵⁵ Data are probably incomplete as there are no verification systems for cantines endogènes

had not been prioritized⁵⁶ in the initial planning. In line with this data, a child in a school phased out by CRS in that year might expect to receive school meals based on about 11 kgs in the year⁵⁷. This is equivalent to just over two months' provision of the standard CRS monthly ration of 5 kgs.⁵⁸ Schools provisioned by CRS received over 30 kgs. commodities per child, less than a full 8 month ration would require, but three times as much as the amount received in other schools.

In 2008, the ability of communities to collect commodities for support of canteens increased, and double the number of schools as in 2007 reported having donated some food to their school canteens to supplement the assistance of MEBA and partners⁵⁹.

	# schools	Total MT	MT/ school	# children fed	kgs/ child	# months coverage	# provin- ces
CRS	1429	7002	5.29	272,402	25.7	5.14	8
MEBA [all schools]	4779	3384	0.71	1,053,141	3.2	0.64	33
WFP	586	2323	3.96	76,262	30.5	6.1	4
National Collecte	4503	2235	0.5	985,462	2.27	0.45	33
Collect in CRS p/o provinces	1649	1051	0.64	359,391	2.92	0.58	11
MEBA prov to p/o provinces	1778	1693	0.95	359,391	4.7	0.94	11
All sources, p/o provinces	1778	2744	1.54	359,391	7.62	1.5	11

MEBA, DAMSE, Projet Cantines Scolaires/MEBA/CATHWEL, *Rapport Annuel d'Activités des Cantines Scolaire, Année Scolaire 2006-2007*

In 2008, the national *collecte* amounted to 2.27 kgs per child, and this was slightly higher in former CRS program areas, due largely to the exceptional performance of one province. Significantly, over 4500 schools nationally, including schools in all former CRS provinces, reported local donations. WFP and CRS maintained commodity levels/ child similar to those of the previous year. MEBA's donation declined significantly, with a much larger student population, less food available for distribution, and an increase in the number of schools. This reflects the combined pressures of the rapidly growing school enrollment and the rising prices of commodities worldwide, which undoubtedly affected the local purchases made under the *Projet Cantines Scolaires*.

With growing downward pressures on the Government, who by their own estimate provide only 3-4 months' of commodities to canteens,⁶⁰ the potential for community support to the endogenous canteen has become critical. All respondents, at central and local level, from within Government and representing communities, commented on the difficulties in obtaining sufficient commodities to provide school meals throughout the year. This is not a new concern, having been noted during the MTE and as far back as the baseline study. The chronic food insecurity of provinces targeted in the DAP has posed challenges to the capacity of parents to donate to the *collecte*. Droughts, the most recent in 2005, and irregular and unreliable rainfall, are major causes of low agricultural production; in one province, known to be highly food insecure, parents reported three poor harvests out of five. One local official in a CRS-supported province, commented that "Without rain, there's no endogenous canteen."

⁵⁶ Provinces not included among the original 20 'Priority Provinces'.

⁵⁷ Yatenga, a former CRS province with a long history of strong communal organization, generated over 224 of the 348 MT collected.

⁵⁸ 3.6 kgs. cereal; 0.9 kgs. lentils; 0.5 kgs. oil.

⁵⁹ The donation from Tan Aliz is not included in the analysis shown here.

⁶⁰ Interview, Director of DAMSE, 20 May 2009.

Seasonality also limits the ability of communities to contribute. Respondents indicated that they were only able to make contributions to the *collecte* immediately after the harvest. Collecting at that time, between August and November, was recommended by parents during their exchange visits and in our field discussions. As this would take place near to, and possibly just after the start of the school year, it would require careful advance planning by MEBA to meet schools. In every school visited, including those with well functioning endogenous canteens, parents testified to the difficulties encountered in collecting sufficient quantities of cereals and beans to supplement what they were receiving from MEBA; none thought they would be able to replace the full ration formerly provided through CRS/CATHWEL. The Director of DAMSE estimated a range of 1 to 3 months' local contribution to be typical of most schools.

The concept that all parents should donate both to the cash fund, the *cotisation*, (contribution or subscription made by parents to school operations) and to the *collecte* is well accepted, although it is acknowledged that a few poor families may not be able to do this. In line with the MEBA policy of ensuring universal access to primary schooling, it was affirmed by APE members and teachers that children in these families would still benefit from the canteen.

School Gardens and Fields

In an effort to promote commodity self sufficiency during the phaseout process, CRS provided technical support and basic agricultural equipment to 10 schools in two Tier 2 phaseout provinces, Kourwéogo and Oubritenga, for the establishment of school fields - for extensive cultivation of cereal crops - and school gardens, smaller plots in the school compound planted in vegetables and other horticultural crops. Crop production would provide commodities for donation to canteens and sale in these schools. Both provinces are located close to Ouagadougou, facilitating access by CRS Agriculture program staff, including specialists in community mobilization and extension, who shared responsibility for technical supervision of the project with the office of the Provincial Director of Basic Education and Literacy (DPEBA). Members of the parents' associations, the APE and AME, and teachers were to be trained.

Gardens and fields were to become part of school action plans, a key element in the phaseout strategy. Fields were established in all 10 schools in 2006 and gardens in the following year. School staff and parents, through the APE (PTA), are jointly responsible for this activity. Agricultural practice is taught, and teachers reported that older pupils worked in gardens. Both provinces - originally included in the group to be phased out in FY07 - continued to receive Title II commodities for school canteens through FY08. In 2009 they were supported by MEBA and other donors.

The operation of school gardens and field is discussed in detail in the analysis of SO1, which includes this activity, and in Annex SO1.9. The discussion of SO1 takes up questions posed in the DAP; two of these are particularly relevant, the proportion of needs which can be met by school-based agricultural activities and the issue of whether school gardens/ fields are a viable strategy for addressing canteen needs. An evaluation was undertaken following the 2007 growing season⁶¹, and some 2008-9 data became available following the drafting of this discussion. These will be used to supplement field data in the discussion here. Two schools, identified by CRS staff as representing stronger and weaker performance, were visited by a joint team of Agriculture and Education evaluators. The education team also visited two schools identified by MEBA Controllers with functioning school gardens which are not receiving CRS support.

The 2007-08 evaluation estimated the contribution of field crop production, including parents' contributions from their own production (the *collecte*), to the commodities required to provide school meals for 140 days, a full school year. These contributions averaged 6% of the total needed in FY2007. Actual production varied widely among schools, from almost 30% of needs to a low of

⁶¹ Hogan, C. 2008. *A Study of the School Gardens and Fields Project*, CRS Burkina Faso, Ouagadougou, March.

0.1%⁶². In the following year, FY08, production declined, and the contribution to annual requirements was estimated at 1.4% from school field production and 4.9% from the community collection⁶³. In 2008-09, combined production and collection of cereals and cowpeas comprised 41% of needs in the best performing schools, but only 1% in the lowest producers. School garden production, largely sold, was 6.5 MT in FY07 and just over 4 MT in FY08. Declines in production levels as these schools were being phased out of CRS support, are cause for concern, but relatively high performing schools have been able to identify other sources of assistance. One such school, among the highest producers in 2007-08, was the third best producers in 2008-09. Strategies for combining school garden resources with other sources of support are profiled below.

Moving Toward Achieving Self Sufficiency – Guesna School

Guesna School and community are managing one of the more successful of the 10 pilot school agriculture projects. By combining their own production and collection with assistance from MEBA and from a European NGO, they have been able to provide school meals covering eight months of the school year, ensuring a successful phaseout from CRS assistance in FY09. This year they collected roughly 1500 kgs. of field crops, and continued to cultivate school field and gardens. They estimated this food as sufficient for four months of school lunches. Some of the groundnuts and vegetables grown in school gardens were sold to purchase condiments, and the canteen received donations of cowpeas and oil through a twinning relationship with a town in France. They also received commodities from MEBA.

Factors in Success Identified by the School Director and Parents:

- ▶ *Labor for school gardens and fields is well organized, with written rosters and teachers reminding parents of the need to turn up for work*
- ▶ *The collection is consistent and reliable; amounts are set through a community process*
- ▶ *Everyone contributes; parents are willing to sacrifice*
- ▶ *Donations are collected right after the harvest*
- ▶ *Water is well managed and competing needs for the school pump are limited*

All schools visited had wells with hand pumps in or near school compounds, and vegetable production within the school compound is possible throughout the year. Several factors influence success in establishment of school gardens and fields. The most important is probably the ability of the school community to organize voluntary labor. Those who were doing best had well organized parents' associations with a clear planning strategy and high levels of voluntary participation.

Among some CRS-supported school gardens, problems have been encountered in organization of labor and general management, and some parents reported lacking time for this additional work. The school field, located outside the village and dependent on rainfed cultivation, has proven harder to organize than school gardens. Labor requirements are highly seasonal and may compete with a household's own production, although the Agriculture sector team were told that if 100 parents can be mobilized to work a 1.25 ha. field, the work from each one would take up five part days during the season. One promising school agriculture program, established by parents with some technical assistance from OCADES, was found in a former CRS school in a Tier 2 province. This community was re-organizing voluntary labor in their school fields, which had not succeeded the previous season, and they expected to be able to produce larger amounts of field crops in the next year. It is clear from these examples and parents' own findings, that increasing production in school gardens and fields

⁶² Hogan, Graph II, p. 25.

⁶³ The 2007-08 growing season was reported to have been bad.

depends at least as much on social organization and management skills as on access to inputs or other resources.

Findings on communities' capacities to provide commodities to canteens:

- ▶ There is widespread support for endogenous canteens, and community contributions continue to rise. School communities are moving toward success, if this is defined, as it has been by DAMSE, as an awareness of the need to contribute to canteens rather than full self-sufficiency.
- ▶ Communities continue to struggle with the provision of contributions to the school canteen, and it is clear that through their own production⁶⁴ they cannot replace more than ¼ to 1/3 of what was provided under CRS support.
- ▶ School gardens and fields, if well run, can provide some of the needed commodities, but they will be affected by irregular rainfall and periodic drought, which also limit household production.
- ▶ While CRS can do little to mitigate the effects of climate, both the *collecte* and gardens/fields require a high level of social organization and facilitation to increase the probability of success, and CRS can promote this process of capacity building.

Recommendations:

- ▶ CRS should carry out a survey of school participation in canteen collections, across all former Tier 1 and Tier 2 schools, to determine the adequacy of commodities collected and produced for school canteens (in conjunction with those donated by MEBA). This work, which would replicate the baseline data collection,⁶⁵ would enable CRS and MEBA to define a strategy for follow on support to community efforts to provision canteens. If staff are insufficient for the comprehensive data collection needed in this kind of comprehensive study, a sampling methodology may be used [as in the baseline] to verify annual data reported by individual schools to MEBA for SY2008-09. In this way the MEBA data base on local collections for all schools can be used with confidence.
- ▶ Support to school gardens and fields should be initiated only where there is clear evidence of strong community commitments to providing adequate labor and inputs. Communities may need supervision and support visits over a period of several years. If simple training materials for management of school gardens and fields are not already in use, these should be identified from among partners and other Francophone CRS offices and translated for use in this program.

Capacity of phaseout communities to manage canteens:

The analysis of management issues and constraints in school communities is based heavily on observations made in the field, in visits to six schools over one week. These are highly consistent with issues identified elsewhere, especially in reports of community consultations⁶⁶. They also include reference to observations of the Burkinabè consultant education expert who accompanied the team. They are consistent with observations shown in the MTE. As noted above, schools visited were selected in line with perceptions among staff of CRS and MEBA of their success or difficulties in establishing and maintaining canteens.⁶⁷

Some schools have achieved impressive levels of organization in the supply and management of their canteens. For example, in one CRS-supported Tier 3 school, parents responded to the news from CRS of a late delivery of commodities this year by establishing a *collecte* to cover the period from October through December. In another school, phased out in FY07, profiled below, awareness of the need for self-reliance has led to the establishment of a well-managed community-run canteen.

⁶⁴ The baseline study carried out in 2004 found that about 27% of sampled schools were able to provide more than 4 months of provisions through their own production. Only 3% could provide meals throughout the year. See CRS. 2004. *Étude de base pour la composante éducation du programme d'activités de CRS/BF* (DAP 2004-2009). Catholic Relief Services, Ouagadougou, June 2004, p.81.

⁶⁵ *Étude de base*.

⁶⁶ See Mémo to Désiré Yameogo, chef de DPT Education from Etienne L. Zoetyandé, chargé d'IEC, *Rapport de mission/Visite d'échange*, n.d.

⁶⁷ One school in the WFP program area was selected opportunistically due to constraints arising from the national strike.

Napalgué School - Successful Transition to Self Sufficiency

Napalgué is located about 35 kms from the Provincial headquarters of Bam, in a semi-arid area with large numbers of livestock; there is a small lake near the school. Parents at Napalgué have established a successful school canteen at this small primary school in a remote location with low agricultural potential. The community has gone through several steps to achieve this goal. The collecte was initiated in 1999, during



construction of the current school building. CRS-provided commodities were supplemented in the early years with extra fish and oil bought by parents. As CRS assistance phased out, parents introduced the donation of staple foods, supplementing MEBA's contribution of 35 50 kg sacks of rice. Amounts were adjusted over time, from 20 kgs down to 14, when it was found that parents couldn't manage the larger amount. The school maintains a productive garden, where older students work. Fuel wood is donated; community women rotate duties as cooks, occasionally receiving small cash donations.

Teachers and parents acknowledged that the food provided by CRS was 'special' and the amounts larger than what they now have. And one year when they lacked funds for milling of donated cereal, the school closed at noon for two weeks. With MEBA's contribution they are able to provide balanced meals throughout 8 months of the school year and consider themselves to be self-sufficient. Parent leaders trace their success to sensitization by an NGO worker. They describe their transition to self-sufficiency as "passing from night into day."

School Director with Tamarind in Store

In the province where Napalgué is located, a provincial body, the Groupe Cellule de la Mobilisation Sociale [Social Mobilization Group] coordinates all key Government bodies involved in canteen support: MEBA, the Controller of Canteens, the Responsable de Mobilisation sociale, Responsable de l'infrastructure, Responsable de l'éducation de filles, Syndicats (unions) and the APE, to raise awareness in all schools, including new ones, on the importance of the endogenous canteen. This initiative could serve as a prototype for organization in other provinces.

The biggest challenges to canteen sustainability arise out of organization and management. CRS, in anticipation of this, focused efforts on the 'software' needed to prepare communities for phaseout, through IEC campaigns and provision of print materials from FY05 onward. Exchange visits and local level workshops have played an important role in the process of preparing school communities for phaseout.

Findings on communities' abilities to manage canteens:

- ▶ Some schools have had difficulties in meeting the cost of transport through the *cotisation* for commodities being received from MEBA. External support to MEBA in FY09 relieved this problem, but communities are unlikely to be able to bear these costs in the future.
- ▶ Some schools reported that the phaseout was abrupt, (*brusque*), leaving little time for preparation.
- ▶ Frequent changes in teachers have left some schools with limited capacity to manage canteens. As MEBA insists on the involvement of school directors and teachers in canteen management to ensure accountability for commodities and cash⁶⁸, their role is central. In more remote schools many teachers are young, and may leave before learning how to manage the program.
- ▶ Frequent changes in the 'bureau', or elected leadership of the APE, leave parents with limited capacity to support canteen management. In several schools visited, newly elected members of the APE leadership were not familiar with canteen operations.

⁶⁸ Teachers and school administrators are financially responsible for reimbursement for missing commodities.

- ▶ Tensions exist between teachers and school administrators and parents over the role of each group in canteen management. Situations of conflict were reported. This hampers the evolution of shared responsibility.
- ▶ Commodity donations are not always coordinated among communities, MEBA and donors. Some schools are managing 3-4 separate sources of support.⁶⁹ this responsibility falls on the school director.
- ▶ Several schools visited had not yet prepared action plans; parent leaders in at least two stated that they had solid plans ‘in their heads’.
- ▶ Some communities have weak planning capacity: in one school visited, the APE collected and stored over 800 kgs of beans while waiting for donated rice from MEBA. When this was not received, and spoilage began, part of the stock was sold. Proceeds, 80,000 FCFA [\$160], were being held by the APE with no plan for their use. No canteen had functioned in this school during the year, despite the evident hunger of many children and poverty of their households.

Despite intensive planning and strong efforts during the FY04-09 DAP, and many local initiatives, most endogenous canteens will still require significant support to become viable. As access to donated commodities becomes more costly and difficult, new and innovative strategies must be found to promote, encourage and strengthen local efforts to provision and manage school canteens.

Despite intensive planning and strong efforts during the FY04-09 DAP, and many local initiatives, most endogenous canteens will still require significant support to become viable. As access to donated commodities becomes more costly and difficult, new and innovative strategies must be found to promote, encourage and strengthen local efforts to provision and manage school canteens.

Recommendations on Canteen Phaseout:

- ▶ In preparation for the final year of the DAP, CRS should join with partners [MEBA, UNICEF and WFP] and donors in a review of all aspects of the CRS program of food-assisted education. While CRS currently provides a large proportion of commodities utilized in school canteens, the trend is clearly toward a reduced role in this activity for CRS. CRS will need to look for other forms of education support utilizing the program’s comparative strengths, from SY2010-11 onward. Further recommendations are shown below.
 - ▶ The value change process regarding girls’ education set in motion by IEC, canteen support and MEBA’s efforts should be reinforced through strengthened capacity building for canteen management and ongoing community sensitization on the value of girls’ education, focusing on schools in the six Tier 3 provinces.
 - ▶ In order to strengthen the support package to tier 3 canteens [and, where feasible and appropriate, to endogenous canteens in former tier 1 and 2 schools], CRS should go ahead with a planned study of conditions for successful canteen phaseout, focusing on documenting communities which have made the transition to local management successfully. This will provide a model which can be used in development and revision of training and IEC materials.
 - ▶ If resources allow and data from the phaseout survey indicates, follow up capacity building support should be provided to schools in tier 1 and 2 which have already been phased out, particularly those having school gardens and fields supported by CRS.
 - ▶ Training of trainers (TOT) materials should also be developed to extend the training of controllers and inspectors on the basics of canteen operation so that they can work with community members – especially APE and AME officers – on management of endogenous canteens. Trained staff should be offered refresher training. CRS should discuss shared responsibilities for this support with MEBA as part of the forward planning process.
 - ▶ To provide the necessary level of support to reinforce community planning, staff may need to be expanded, adding a cadre of community development facilitators supported by CRS. Their tasks will focus on all aspects of canteen operations, not only commodity management and verification. As

⁶⁹ One recently phased out school visited received commodities from MEBA and a private donor, carried out the *collecte* and maintained a school garden with assistance from the agriculture program of CRS. The burden of coordination of resources was borne by the school director.

in the current program, canteen controllers/ inspectors are the staff best equipped to work directly with parents and school staff on operational issues and problems, but they are already overloaded.

I.R. 2.2: More children, especially girls, enroll in and attend school.

The monitoring and evaluation of CRS's Education program has been based on the measurement of three key parameters of student participation in basic education: retention, enrollment and attendance at assisted schools. IR 2.2 is measured through enrollment and attendance. Retention rates, measured separately for boys and girls annually, are used as indicators of program impact. Monitoring and evaluation data are derived from secondary analysis of statistics collected by MEBA on an annual basis [enrollment numbers] and on analysis of data collected by teachers and program staff at school level in a sample of program schools [attendance and retention].⁷⁰

Studies across several countries have shown an association between the introduction of school feeding/ food for education programs and improved rates of school enrollment and/or attendance. Some include comparisons between groups of schools with and without programs.⁷¹

Indicator 2.2.1: Each year of DAP, 5% increase in girls' enrollment in school feeding program [SFP] provinces

Indicator 2.2.2: Each year of DAP, 5% increase in boys' enrollment in school feeding program [SFP] provinces

Indicator 2.2.4: Each year of DAP, percentage of children regularly attending schools in SFP area is maintained at least at 80%

These indicators will be considered together. As increased enrollment is a key objective of the program, increased rates of enrollment are a direct measure of the result. In an effort to examine whether differences can be identified which may be attributed to the program, comparisons have also been made between rates of growth in enrollment in provinces receiving SFP assistance and those newly phased out. The strength of the effects of school feeding on these variables – enrollment, attendance and enrollment - independent of other changes, may not be possible to estimate.

Enrollment

Major increases in numbers of children enrolled in CRS-supported schools have been shown throughout the second half of the DAP, continuing a trend documented for FY04-06 in the Midterm Evaluation. Numbers of girls in SFP schools have increased by 15 to 20% annually, while boys' rates of enrollment have risen by 11% to 15%, greatly exceeding the IPTT target of 5%⁷². This trend reflects a combination of factors, of which access to the SFP in targeted provinces is undoubtedly important. The FY2004-2009 DAP has been implemented at a time when the Government was also implementing the policy of universal access to primary schooling, which by removing financial barriers and mobilizing public opinion, has encouraged large increases in enrollment⁷³. It is not possible to disaggregate or assess the relative importance of supported school canteens as compared

⁷⁰ Two other indicators - academic achievement and nutrition - were not measured. Learning achievement is difficult to measure and there are no universally accepted measurement methods, while attempts to measure nutritional outcomes in food for education programs are technically complex and have shown unclear results.

⁷¹ These are summarized in GAO, Report to Congressional Requesters: Foreign Assistance, *Global Food for Education Initiative Faces Challenges for Successful Implementation*, GAO-02-328, February 2002, Table 4: Results From Selected Studies and Experts on the Impacts of School Feeding Programs on Enrollment and Attendance. Some included comparisons of rates in groups of schools with and without FFE programs.

⁷² Comparisons with Government data, collected by MEBA, are limited by the use by CRS of a different measurement methodology for enrollment. CRS compares the numbers of children enrolled in a given year with the numbers enrolled in the previous year in the same provinces. This measures absolute enrollment [see *Indicator Guide*, p.12], but does not calculate rates of enrollment, the measure used by MEBA, which are based on comparisons with school-aged children in the population. MEBA measures both net and gross enrollment rates.

⁷³ Population increases, estimated at 3% per year in Burkina Faso, may have affected this variable, which, as measured, increases in proportion to the size of the school aged population, even if rates of enrollment remain the same.⁷³

with Government initiatives introduced to promote universal school access on these increases in enrollment. Anecdotal evidence given by teachers and parents in supported and phased out schools affirmed that school meals have provided an important incentive for both enrollment and attendance.⁷⁴ Increases in gross enrollment throughout the DAP are shown below for girls and boys in the six Tier 3 Provinces where CRS is continuing to provide school feeding. These greatly exceed the average national increase over the same time period.

Province		2003/04	2004/05	2005/06	2006/07	2007/08	Ave annual increase
Namentenga *	Boys	39.5	43.2	50.6	55.6	63.5	12.2
	Girls	29.5	29	36.4	43.4	51.9	20
Sanmatenga	Boys	54	56.9	61.8	68.3	74.9	7.8
	Girls	33.9	38.3	43.5	50.3	57.6	14
Gnagna *	Boys	31.7	33.5	40.3	44.9	51	12.2
	Girls	24.7	28.1	35.5	42.4	50.8	21.2
Komandjari*	Boys	23.6	27.6	35.2	40.4	44.6	17.8
	Girls	19.4	25.1	39	45.7	52.4	34
Tapoa *	Boys	35.2	35.4	37.7	46.6	52.7	10
	Girls	23.5	25.9	28.4	36.2	41.3	15.2
Loroum	Boys	63.7	74.4	84.2	92.2	101.9	12
	Girls	35.7	45.4	54.4	63.4	73.9	21.4
National	Boys	58.1	62.4	66.1	71.7	76.8	6.4
	Girls	46.2	51	55	61.2	67.9	9.4

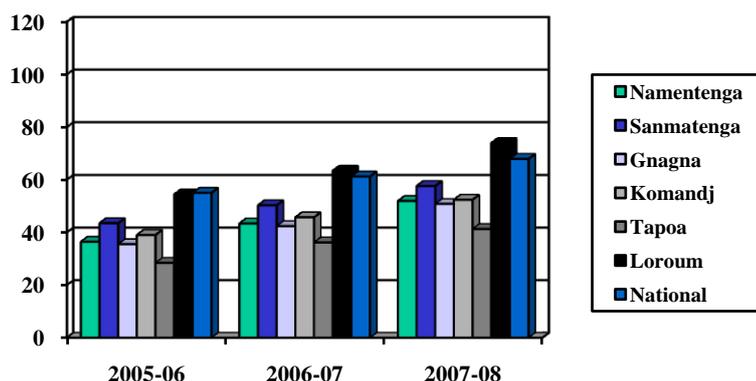
MEBA, *Statistiques de l'Éducation de Base, 2004/5, 2005/6, 2006/2007 and 2007/2008*

The table above shows the growth of gross enrollment rates over the life of the program in the six provinces where school feeding is now focused. Despite rates of increase significantly higher than national rates during the period of the DAP, five of these provinces have not yet caught up in total enrollment. This supports the validity of CRS's targeting criteria. Increases in rates of girls' enrollment have been greatest in provinces with lowest initial rates, and these remain near or below 50% in 2008. These provinces: Namentenga, Gnagna, Tapoa and Komandjari (shaded), have been targeted for the provision of Take Home Rations and their poorest performing schools [in terms of girls' enrollment] would form the basis for any extended program of THR..

Rates of growth over the three most recent years for which data is available are shown graphically below.

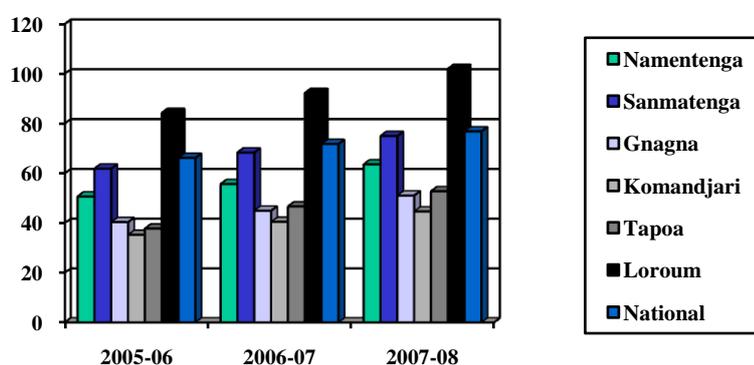
⁷⁴ Staff of several schools described situations in which the closure of the canteen was associated with a drop off in attendance.

Figure SO2.4 Girls' Gross Enrollment Rates Tier 3 Provinces and Nationally



MEBA, *Statistiques de l'Éducation de Base, 2005/6, 2006/2007 and 2007/2008* [both figures]

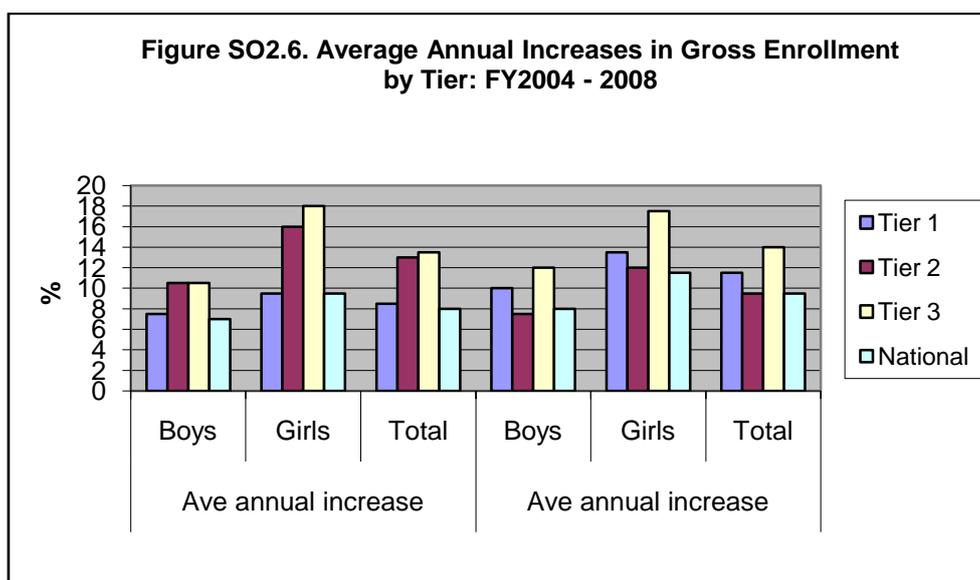
Figure SO2.5. Boys' Gross Enrollment Rates Tier 3 Provinces and Nationally



As the graphs above show, girls' enrollment rates increased rapidly during the period since the Midterm Evaluation, both in the six provinces where CRS continues to provide school feeding and nationally. While boys' base rates of enrollment were higher, increases have been greater among girls. This period has been characterized by strong efforts to increase participation in primary schooling through provision of free academic materials by the Government and construction of new schools, information campaigns and support to school canteens by CRS and Government.

In an effort to assess the impact of the SFP over the life of the DAP, we also compared gross and net rates of enrollment over time across each Tier of provinces – those phased out during the program (Tiers 1 and 2) and those participating SFP throughout the LOA (Tier 3).⁷⁵ Four provinces taken over by WFP in FY06 were excluded from the analysis. Using data published by MEBA, increases in gross were compared for the period from FY2004 - 2008. These data have not yet been compiled for the current year. Comparisons at school level of schools having different levels of access to school feeding cannot be made with available data; this data analysis might be undertaken by CRS staff in FY10 to further assess program impacts.

⁷⁵ Including the two provinces, Oubritenga and Kourwéogo, which received rations throughout FY2008.



MEBA, *Statistiques de l'Éducation de Base, 2004/5, 2005/6, 2006/2007 and 2007/2008*

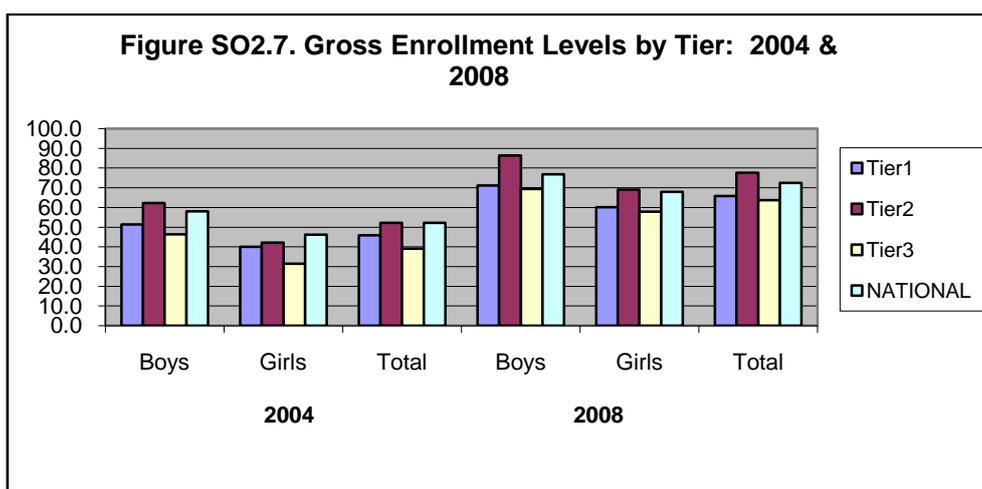
This graph shows changes in rates of enrollment, based on gross numbers reported by MEBA. . During the first time period, FY2004-2006, CRS-assisted school feeding was provided in all tiers shown here. In FY2006, schools in Tiers 1 and 2 were phased out of the program, relying on the school *collecte*, school gardens and fields, MEBA assistance and other donors for provisioning school canteens from FY07 onward. Rates of enrollment continued to increase rapidly in schools in Tier 1 and Tier 3. Rates of increase in Tier 2 schools slowed down after FY2006. The data are shown in the table below.

	2004-2006			2006-2008		
	Ave annual increase [%]			Ave annual increase [%]		
	Boys	Girls	Total	Boys	Girls	Total
Tier 1	7.5	9.5	8.5	10	13.5	11.5
Tier 2	10.5	16	13	7.5	12	9.5
Tier 3	10.5	18	13.5	12	17.5	14
National	7	9.5	8	8	11.5	9.5

MEBA, *Statistiques de l'Éducation de Base, 2004/5, 2005/6, 2006/2007 and 2007/2008*

These figures support the enrollment information collected by CRS, showing a steady high rate of increase in enrollment in Tier 3 - especially among girls - exceeding both the national level and rates in schools in other tiers. For Tier 1, rates of girls' enrollment continued to increased following the phaseout, rising at a more rapid rate than before. They did not rise as quickly as rates in Tier 3 schools. In Tier 2, increases in girls' enrollment rates were lower after FY2006. falling from an average of 16% p.a. to 12%.

On the basis of these data, it is clear that gains, especially in girls' enrollment, have continued to exceed the national average in all tiers, through FY2008. The highest rates of increase are found in Tier 3 schools, and the SFP has contributed to this. Enrollment growth in Tier 1 provinces, phased out by CRS but targeted as highly vulnerable and prioritized by MEBA for assistance, has also remained high. In Tier 2 schools, rates of increase are now very close to the national averages. Two factors may have contributed to these patterns, in addition to the positive impacts of canteen assistance. National level efforts to promote girls' schooling, combined with MEBA assistance, probably supported continued strong growth in Tier 1 schools. Levels of enrollment in Tier 2 provinces were higher at the start of the program, leaving less 'space' for annual increases over the following four years, as compared with other provinces. Levels of enrollment in each tier in FY2004 and in FY2008 are shown below.



MEBA, *Statistiques de l'Éducation de Base, 2004/5, 2005/6, 2006/2007 and 2007/2008*

Findings:

- ▶ Provinces receiving SFP assistance have shown steady increases in rates of enrollment over the LOA; these have exceeded increases in provinces phased out of the program in FY07.
- ▶ Rates of increase in girls' enrollment have exceeded national rates, rates among boys and rates among boys and girls in provinces phased out of the program, throughout the LOA.
- ▶ These results are consistent with several studies of the effects of school feeding in other developing countries.

Recommendations:

- ▶ Additional comparative studies should be undertaken, both with MEBA enrollment data and utilizing data collected with CRS's methodology to further confirm the relationship between participation in the SFP and increases in rates of enrollment. The impact of phasing out could be reviewed through a comparison of FY08 – 10 data on Kourwéogo and Oubritenga, (phased out at the end of FY08) with data on Tier 3 schools collected during FY10.
- ▶ It is recommended that CRS try, wherever possible, to use standard indicators, with measurements following the same methodology used nationally in Burkina Faso, and internationally.

Attendance

Indicator 2.2.4: Each year of DAP, percentage of children regularly attending schools in SFP area is maintained at least at 80%.

Regular attendance in SFP schools has been defined as the percentage of students attending school at least 90% of the time during a month. Attendance is measured during three months, November, February and April, selected as periods in the academic calendar when school participation is not affected by vacations or other disruptions. The target is a minimum of 80% of students maintaining this level; boys and girls are enumerated separately. This methodology is similar to Estimated Attendance.⁷⁶

Attendance rates exceeded the 80% target in every year, as shown below.

⁷⁶ In CRS supported schools teachers report on attendance during target months and CRS field workers verify results. The *Indicator Guide* recommends measuring 'Estimated attendance' by making "a series of unannounced spot visits on a random number of days" to count students present. See discussion, p. 17.

	SY2004	2005	2006	2007	2008
Girls	90%	93%	96%	97%	96%
Boys	89%	93%	96%	95%	96%

As with enrollment, improved and stable attendance have been shown in many studies to be associated with participation in school feeding programs.⁷⁷

Take Home Rations:

The second key intervention in support of increased school enrollment, improved attendance and better long term educational outcomes has been the Take Home Ration [THR], a dry ration of 8 to 10 kgs of cereal, usually soy fortified corn meal, provided to female students in CRS-supported schools, conditional on maintenance of a high standard of attendance – 90%. The THR, a form of direct transfer to the pupil’s household, is intended to provide an incentive to families to send girls to school by compensating for the opportunity cost of their lost labor at home and by providing family access to additional resources. Much of the IEC activity in the FY2004-2009 DAP has focused on the benefits of increased enrollment of girls, supporting the long-term objective of the THR program to influence attitudes of parents toward greater acceptance of the value of girls’ education. The strongest evidence for program effectiveness is increased enrollment figures.

Enrollment and Attendance in THR Schools

Indicator 2.2.3: Each year of DAP, 10% increase in girls’ enrollment with THR program provinces

Indicator 2.2.5: Each year of DAP, girls in province with THR program average 90% attendance rate.

Girls’ enrollment in THR provinces has greatly exceeded the target set at the start of the program, with rates of increase above 20% in every year.

% Increase in enrollment	2004	2005	2006	2007	2008
	53%	23%	26%	25%	21%

The major increase in enrollment between 2003 and 2004 probably reflects both the effects of the THR program and changes in Government policy. Following this increase, enrollment continued to increase at rates exceeding those among girls in non-THR provinces and among boys in all provinces. While a gender gap still exists in levels of enrollment, it is declining in schools providing THR, as shown in the table below.

⁷⁷ Some studies cited in GAO, op. cit. include Del Rosso, J.M. *School Feeding Programs: Improving Effectiveness and Increasing the Benefit to Education: A Guide for Program Managers*. The World Bank (August 1999).; Stakeholders. “School Feeding/Food for Education Stakeholders’ Meeting.” Summary proceedings of a meeting at USAID of 50 practitioners and experts from USAID, USDA, the World Bank, UNICEF, the World Food Program, and other organizations that either administer or implement school feeding programs. October 3, 2000 (unpublished).

Provinces	2007			2008		
	Boys	Girls	Total	Boys	Girls	Total
THR	48.2	40.9	44.7	54.7	48.2	51.6
DAP [Tier 3]	61.2	48.4	54.9	67.8	55.8	61.9

Since FY2005, girls' attendance rates in THR provinces have exceeded the target of 90%.

The impact of THR, like that of school canteens, is difficult to separate causally from other initiatives to promote increased enrollment, particularly of girls, by the Government. But increases in enrollment were noted in the final evaluation of the previous DAP, in 2001,⁷⁸ before large scale efforts by Government, and enrollment rates have increased consistently since the start of the current program.

A recent study in the Sahel region of northern Burkina Faso⁷⁹, where WFP has taken over the THR and school feeding program from CRS, showed a 6% increase in girls' enrollment rates. Additional positive impacts included nutritional gains among younger siblings in households receiving THR. One unanticipated effect was a negative impact on attendance among some girls receiving rations. These were explained by increased household labor needs and a possible shift in responsibilities from agricultural to household work among girls enrolling in school. This observation was reinforced by a discussion with a young primary student in a school outside Dori, in the Sahel. She lived near enough to the school to go home for lunch, but it was difficult to manage obligations to help with food preparation at home that had to be completed during the lunch break, while her mother was at the market. She pointed out that non-school going girls had the entire day to finish their chores.⁸⁰

The THR program is intended to provide an incentive for sending girls to school and also to encourage social acceptance of girls' education. Field interviews with school directors and teachers suggested that a value shift is taking place, stimulated in part by THR, toward an increased valuation of girls' education. Studies of THR in several countries have shown an association with improved girls' participation in school. More importantly, they suggest that "while food is the initial motivation for sending girls to school, parents of participating girls develop an interest in the education of their daughters. This change in parental attitudes is an important factor enhancing the commitment to education beyond the duration of food assistance."⁸¹ In Gnagna, where commodities had been delivered late this year we were told by one school director that parents who take school seriously continue to send their children when the ration is not provided.

Findings:

- ▶ Girls' enrollment has increased rapidly in schools receiving Take Home Rations. Attendance levels have also exceeded the target of 90% in every year of the program.
- ▶ School staff, administrators and parents report a value shift toward much higher valuation of girls' education throughout the DAP program area, including those provinces with historically low rates of participation of girls. This is attributed to the SFP and THR programs as well as to MEBA efforts to promote universal access.

Recommendations:

- ▶ Given the high levels of acceptance of girls' participation in schooling as a result of the THR program, it may now be appropriate for CRS to expand and re-target THR. In planning for the

⁷⁸ See the DAP 2004 – 2009 Proposal, citing the *DAP 1997-2001 Final Evaluation* (Ouagadougou, 2001).

⁷⁹ H. Kazianga, D. de Walque, H. Alderman, *Educational and Health Impact of Two School Feeding Schemes: Evidence from a Randomized Trial in Rural Burkina Faso*, Dec. 1, 2008.

⁸⁰ Meeting at Djomga Primary School, May 12, 2009.

⁸¹ WFP School Feeding Support Unit, *School Feeding Works for Girls' Education*, Rome, n.d. (ca. 2001)

new Title II MYAP attention should be given to determining the feasibility of scaling up support to THR, focusing THR on schools in severely food insecure areas (identified at CEB or individual school level). These would probably be located in tier 3 provinces, but conditions in other provinces should be examined, if feasible, at community-level since provinces may contain pockets of severe food insecurity. A carefully targeted THR program would provide income support to the most food insecure households, while continuing to support the broader objective of increasing participation by girls in basic education.

► These changes will require a planning strategy based on by specific population-based targets, rather than provincial targets measured by sampling of schools. [for example, “XX % increase per year in proportion of age-eligible girls’ enrolled in schools in target school catchments”.]

BRIGHT and Girls’ Participation in School

CRS’s involvement in the promotion of girls’ education, has been extended and strengthened through participation in the consortium implementing BRIGHT [Burkinabè Response to Improve Girls’ Changes to Succeed], a program funded through the Millennium Challenge Corporation (MCC) and the Government, and implemented by Plan, FAWE [Forum for African Women Educationalists], Tin Tua, a Burkinabè NGO, and MEBA. This program, which completed its first phase in September 2008, included construction of 132 new ‘satellite’ type schools, including three classes, with water and sanitation, and a school canteen, in remote locations. THR were provided to girls, and scholastic materials to all pupils, and activities were carried out to raise awareness among parents and support adult literacy. A total of 91 schools and 10 pre-schools, or bisongo, were constructed under CRS’s supervision.

BRIGHT, while not a part of the DAP, has directly supported SO2; the geographical location of program activities in five of CRS’s six focus provinces [Gnagna, Komondjari, Tapoa, Sanmatenga and Namentenga], by providing new schools, has allowed CRS to strengthen its presence

Support to Bisongos and Pre-Schools

With the national expansion in 2003 of pre-schools or ‘bisongos’⁸² providing early childhood education to 3 to 6 year olds, CRS extended two major forms of support: donation of fortified corn meal and oil for use in pre-school canteens, providing morning porridge and a mid-day meal, and training in hygiene, nutrition and sanitation for care takers, “petites mamans” [small mothers], and members of the pre-school management committees. These activities have been undertaken in close collaboration with UNICEF, which supports pre-school education and early childhood development under the African Girls’ Education Initiative (AGEI).

At the time of this evaluation, the CRS program was supporting pre-schools in 9 provinces, including Sanmatenga, Namentenga, Komandjari and Gnagna, where primary school feeding is also fully supported. Bisongos are established at the request of community parents, usually in locations where they can be built adjacent to a primary school, with the intention that children should ‘graduate’ from the bisongo into an already familiar learning environment, and that infrastructure such as water supplies can be shared. Pre-schools are constructed to a high standard, including a large activity room, water supply, latrines and a school kitchen. Parents contribute to bisongo canteens, at a level of 2000 – 5000 FCFA⁸³ per year, and donate food commodities in rural areas. A locally selected parents’ management committee, the Coges (Comité de Gestion), manages these resources.

⁸² The Bisongo, reported to have first been established in 1995, with rapid expansion after 2003, is promoted by UNICEF and others. It is intended to extend the benefits of activities that promote early childhood development and socialization beyond the urban centers, where they are often seen as an extension of formal schooling, to rural communities with limited resources. This extension to a much larger population group is in line within the framework of Education for All (EFA). [Interview with Bernadin Batono, National Education Program Director, UNICEF, 20/05/09.] The bisongo has been defined as “a familiar village setting for children between the ages of 3-6 years to ensure their protection, security, intellectual development whilst allowing their mothers to attend to their daily activities and their sisters to go to school.” [quoted from Yaro, Y (2005). *The impact of Burkinabè early childhood management initiatives on education and the protection of girls in Burkina Faso: the case of the Bisongos*. FASA/CEFODES.

⁸³ USD4 - 10. This figure is slightly higher than the contribution level reported for the primary school *cotisation*.

	2006	2007	2008	2009
No. of beneficiaries	5509	3702	4241	4029
Amt. provided [MT]	136	136	117	101
No. of schools	61	41	46	41

The Pre-School or Bisongo is expected to have two key positive impacts on education:

- ▶ To prepare 3 to 6 year olds for entry into formal primary schooling
- ▶ To facilitate school attendance by older female siblings who might otherwise be kept at home to care for younger children⁸⁴

The DAP design did not include specific indicators of impact for support to pre-schools; evidence on impacts presented here is anecdotal and observational. One bisongo and one formal pre-school were visited and discussions were held with the Provincial Director of Social Action and National Solidarity [DPASSN], representative of the ministry responsible for pre-school education, in three provinces. A ‘Most Significant Change’ [MSC] study undertaken by the CRS M&E Department in 2007 provided insights into the impacts of the bisongo.⁸⁵

Findings:

▶ **School readiness:** In every location visited, school directors, care takers, parents and the provincial DPSSN stressed the role of the bisongo or pre-school in preparing the child for active participation in primary schooling. Children become familiar with an organized play environment and ‘lose shyness’.⁸⁶ These were consistent with field observations.

▶ **Encouragement of girls’ enrollment in primary school:** The MSC study generated data on the importance of the bisongo in stimulating girls’ enrollment in primary schools serving the same villages. This was reinforced by the observation that most children in the bisongo (who included similar numbers of girls and boys) were expected to continue on to the local primary school.

Recommendation:

▶ CRS will need to seek new ways to collaborate with MEBA and related ministries in providing commodity support to basic education in Burkina Faso in the new Title II MYAP. Planning attention should be given to determining the feasibility of scaling up support to pre-schools [rural bisongos]. Expanded Pre-school feeding would support both educational and nutritional objectives

It should be noted that pre-school education is accessible to only a tiny fraction of pre-school aged children in Burkina Faso, estimated at 1.17% of those eligible in 2004.⁸⁷ Significant population-level impacts will depend on the rapid expansion of pre-schools over the next five years through increased levels of activity by donors and other NGOs.

Bisongo canteen sustainability:

As in primary schools, the challenges of increasing parental support for and ensuring the sustainability of bisongo canteens in a situation of reduced or phased out CRS commodity

⁸⁴ An output included in the Education Proframe, “older girls are free to attend school.”

⁸⁵ Report on CRS/Burkina MSC experience. Topic: Impact of preschools on communities. March, 2008

⁸⁶ One indirect indicator of this socialization was the ease shown by older children with visitors, while the younger ones were clearly afraid.

⁸⁷ In 2005 the Government estimated that 27,192 children were in pre-school, as compared with 1,647,759 in basic (primary) education. [*l’Education Nationale en Chiffres 2006-2007*, Ministère de l’Enseignement de Base et de l’Alphabétisation, Ministère des Enseignements Secondaire, Supérieur et de la Recherche Scientifique and Ministère de l’Action Sociale et de la Solidarité Nationale, April 2008].

support, were reported to be great. Efforts are being made by parents to increase their participation in provisioning the canteen through school gardens/fields; these were established at all but one bisongo in one province visited. The collection of donated food is also well established in some locations, and the concept of the endogenous canteen is well understood. In one bisongo visited, parents had used their *collecte* to provision the canteen for the first three months while waiting for a late CRS shipment. It was stressed to the team, as in schools, that parental contributions are not sufficient to establish a canteen program lasting throughout the school year. One urban pre-school visited was supported by CRS/CATHWEL through the local Catholic Diocese. There, most parents paid significantly more than the typical rural *cotisation*, while a small number of children whose parents were not able to meet the fees attended the school and made donations of firewood. Here, too, it was stressed that CRS commodity support could not easily be replaced through donations from parent

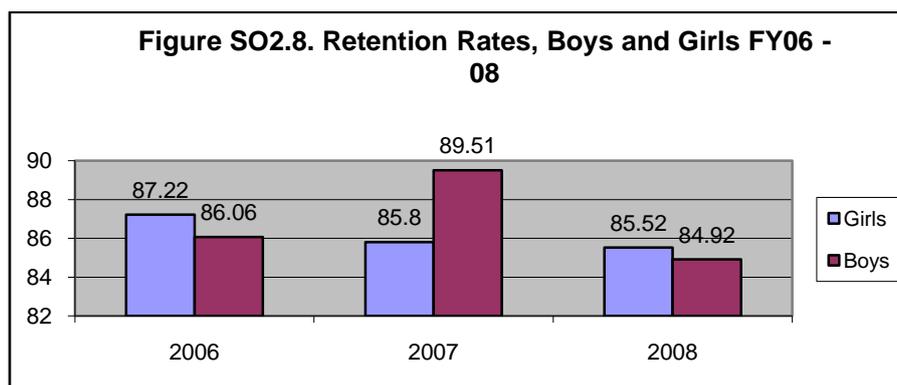
Program Impacts: SO2

Impact Indicator 2.1: Each year of DAP, the retention rate in schools in SFP [school feeding program] area is maintained at least at 85%

The retention or continuation⁸⁸ rate, defined by USAID as “The percentage of children enrolled in a given year who continue to be enrolled in the next year, whether they are promoted or not,” has been measured separately for boys and girls, in line with the emphasis in the DAP on girls’ education. This indicator measures children’s progress in schools served by the SFP.⁸⁹

Findings: Retention

The target, set at 85%, has been exceeded every year from FY04. Data are shown below:



Retention rates for FY2006 are based on 19 provinces, while those for FY2007-08 are based on the 8 provinces covered by the program after phasing out of 11 others. At national level, the Ministry measures repetition (taux de r doubl ment) and drop outs (taux d’abandon). There are no comparable national level data on retention.

Recommendations:

⁸⁸ This is the name given by Bergeron and Del Rosso to this indicator. See the *Indicator Guide*, p. 12, for this definition. 12.

⁸⁹ CRS has measured retention through data provided by a sample of schools selected in provinces where the canteen program is fully supported by CRS. A two stage sampling methodology is used, selecting first some target provinces and then schools within those provinces. The *Indicator Guide* recommends collection of data from every school with program activities, using an averaging method to aggregate the individual rates [p.23].

- ▶ It is recommended that impact indicators be chosen in future to be comparable to those used nationally or internationally, so that impact can be assessed through comparisons of changes over time with communities not affected by the program and reviewed in terms of existing literature.

- ▶ If data can be obtained from other tier 3 schools, a comparison of retention data from the sampled schools currently being monitored with this data would ensure that sampled schools do not differ significantly from others in ways that affect retention data.

- ▶ In determining how to measure the impact of the program more effectively, CRS should review existing data on complementary indicators, such as drop out rates, completion rates⁹⁰ and academic achievement. An early study (1994)⁹¹ providing evidence of superior academic achievement in CRS-supported schools in Burkina Faso should be reviewed.

- ▶ If feasible, at least one study based on an indicator of educational progress [should be undertaken. Examples of these indicators and measurement methods are described in the *Indicator Guide*.⁹²

Program Impacts: Adequacy of coverage among eligible beneficiaries

The activities included in CRS's ESP reach different categories of eligible beneficiaries. In targeted provinces, as noted above, all school going children are reached by the canteen program. This group makes up 47% (Tapoa) to 88% (Loroum) of the population of primary aged children. Coverage of this group is comprehensive; out of school children are not eligible for benefits. The decision to channel commodity support through school canteens, made by CRS over 40 years ago, has greatly stimulated school participation and enabled CRS to support MEBA and to establish a cost effective commodity management system. Pre-school feeding and other support to bisongos, while reaching all children enrolled in assisted pre-schools/ bisongos, has also limited outreach to the much larger population of children 3 - 6 years of age who are not enrolled in pre-school programs. THR now covers all eligible girls in a limited number of schools. In a follow on MYAP, CRS may want to consider re-defining "eligible beneficiaries" to include aggressive outreach to out of school children through community level sensitization, and additional support to the expansion of access to pre-schools, where demand for places exceeds supply.

Impacts beyond program beneficiaries:

There is some evidence of program impacts outside of the beneficiary groups. Most studies suggest that THR and, possibly school feeding⁹³, can strengthen the food security of the child's household. The 'Most Significant Change' (MSC) study carried out among parents and teachers of children attending bisongos suggested that mothers of enrolled children have more time for income generating and household activities.

Additionally, increased enrollment, particularly of girls, is associated with exposure of parents to increased information on the benefits of girls' education, provided by CRS in collaboration with MEBA. Parents interviewed during the MSC study reported that the presence of the bisongo in a community contributed to the 'automatic' enrollment of girls – including those who had missed out on bisongo participation - in primary school.

C. PROGRAM QUALITY

Targeting:

- ▶ Support to canteens has targeted all children in a covered schools: this is appropriate and consistent with what is known about the broadly relevant benefits of school feeding

⁹⁰ In a five year program, it is difficult to utilize evaluation indicators such as cohort survival to grade 5 [Defined in *Indicator Guide*, p.19-21]

⁹¹ Moore, E. & Kunze, L. *Evaluation of Burkina Faso School Feeding Program*. Catholic Relief Services, consultant report (February 1994). This report was not available at the time of this evaluation.

⁹² See p. 12 for a list and definitions. Data collection and measurement methodologies are described on pp. 27-30.

⁹³ Anecdotal evidence of children carrying home uneaten portions of their school meals to share with younger siblings was provided during field work

- ▶ THR has targeted all girls in 94 selected schools. It is not clear whether children in other schools might respond equally strongly to the extension of THR.

- ▶ There is evidence of changes in norms, with much higher acceptance of the value of educating girls and high rates of new enrollments of girls in schools without THR programs, suggesting that the program could be re-targeted with an emphasis on family food security or nutritional support to adolescent or pre-adolescent girls.

- ▶ There is no evidence from this program or others that THR is a disincentive for boys' school participation

- ▶ All schools in a targeted province were provided with canteen assistance; Provinces were selected according to the following criteria:

- ◆ Level of food security
- ◆ Enrollment rates: boys vs. girls
- ◆ MEBA planning for extension of canteen benefits

Rapid review of provincial level data show widely varying rates of total enrollment and enrollment of girls at CEB level; this opens the possibility of targeting THR or canteen assistance at that level, to provide support to the poorest achieving schools

Findings and Recommendations: Long Term

As suggested above, re-targeting, done at provincial level at the end of the last DAP, will need to be repeated, using new parameters. As noted in the MTE, the poverty profiles of areas in which CRS works are not stable, nor is the donor environment. While annual re-targeting is not practical, especially at CEB or school level, given the cost and complexity of establishing logistical support to commodity programs, an annual review with MEBA and other partners of the whole program is recommended. This exercise could be used to adjust ration levels and schedules to accommodate changes in the operating environment.

Coverage:

- ▶ CRS canteen support is covering 100% of school going children in selected provinces. Coverage of all children in a participating school is culturally appropriate and cost effective. The program also covers all schools in targeted provinces, phasing out of entire provinces without evaluating needs at a low level as noted above, this approach, while cost effective and logistically simple, may not have been the most effective in meeting food security needs which affect school participation at community or district (CEB) level. A THR covers all girls in selected schools

Findings and Recommendations:

Given the objectives of this DAP, coverage has been comprehensive. In planning any future program the principles determining coverage and targeting criteria at province, district and school levels should be re-considered in relation to available resources. Suggestions on how this may be done are found in the report.

Appropriateness and Relevance:

- ▶ Assistance to school canteens meets felt needs – agreement was high among all respondents that this support was appreciated and valued.

- ▶ The mid-day meal, provided through canteens at primary schools, is important to children's ability to learn in Burkina Faso where:

- ◆ The academic day runs from 7:30 to 12:40 and from 3pm to 5pm
- ◆ Many children walk long distances to school and could not return home at mid-day for a meal

- ▶ Provision of food to school children through canteens, Take Home Rations and pre-school feeding are all appropriate ways to subsidize household food resources.

- ▶ School health initiatives have been shown to be relevant and appropriate, particularly as the nutritional impact of school feeding is reinforced through micronutrient supplementation and deworming.

Findings and Recommendations: Long Term

Given the history of CRS's role in support to school canteens in Burkina Faso, and the consensus on the importance of school feeding in food insecure provinces, the use of commodities can be expected to remain an element of CRS's ESP over the long term. However, CRS will need to re-examine the focus of this support with a view to assessing the relevance and impact of all three major forms of assistance: canteen provisioning, pre-school feeding and THR. CRS will need to determine which activity has the potential to contribute most to increasing primary school enrollment, maintaining children in school through completion of the primary cycle and supporting household food security.

Collaboration/ cooperation:

- ▶ CRS has established excellent working relationships with relevant Government bodies: MEBA and DAMSE, at national and provincial levels, over twenty years. Relations with staff of individual schools are also strong.
- ▶ CRS has entered into a series of relationships with partners that strengthen SO2 activities and enhance their impact. Partners reported close and productive relationships. These include:
 - ◆ Coordination with WFP on the transition to WFP canteen assistance in the Sahel region and on future national planning for SFP
 - ◆ Coordination with UNICEF on commodity aid to bisongo canteens and training of staff in hygiene and nutrition.
 - ◆ Participation in the BRIGHT consortium on school and bisongo construction and provision of THR
 - ◆ Participation in the school health consortium with MEBA, HKI and FDC
- ▶ At school level, coordination in targeted schools has been focused on management of donated commodities rather than on larger issues of canteen management and commodity planning.
- ▶ After a school has phased out of the program, collaboration and contact with CRS ends, excepting for the small number of schools with ongoing participation in other CRS programs, such as school gardens or school health
- ▶ Fieldwork suggested that CRS's networks with other NGOs, including those who also promote/ support school canteens, could be extended; this would strengthen CRS's future work.

Findings and Recommendations:

CRS is valued as a partner and has shown the ability to work productively with a range of organizations, accessing additional funding for related interventions that strengthen the impact of the SFP. Networking should be extended to ensure that CRS continues to learn from the successful experiences of other NGOs who may not be direct partners.

Sustainability/ exit strategies:

The phaseout of direct commodity support to the school canteen program is discussed above, and recommendations are made on this process.

- ▶ CRS has accelerated the phaseout plan developed in the FY2004-2009 DAP, due to unforeseen factors relating to availability of commodities, evolution of Government policy, and the pace of organizational development in school communities.
- ▶ While sustainable community-managed endogenous canteens can be achieved and examples have been identified in the field, endogenous canteens are not sustainable at the level envisaged in original planning for phasing out, in which they were expected to be able to access 140 days of commodities. At best they will be able to provide 50 – 65% of the commodities currently provided by CRS.
- ▶ Successful self-managed school canteens should be used as models for understanding the conditions for success in the design of exit strategies. The Provincial level Groupe Cellule de la Mobilisation Sociale in Bam Province can also provide an example of best practice in intra-provincial coordination

Findings and Recommendations:

Exit strategies will need to take account of MEBA’s definition of success as growing community awareness of the need for their participation in support to and management of the canteen, rather than the goal of full substitution by the community of the ration provided in assisted canteens.

Monitoring and Evaluation:

- ▶ CRS is implementing a comprehensive program for collection and analysis of quantitative data on education results, enabling the close annual monitoring of the indicators defined in the Indicator Program Tracking Table. Data drawn from the extensive MEBA database are combined with indicator data collected at school level through a sampling methodology developed in FY2003. Some comments and recommendations on individual indicators are included in the analysis of program effectiveness.
- ▶ This system, described by USAID as ‘robust’, while effective in meeting the mandated M&E requirements of the Education program, is limited in its ability both to gather data on variables not included in the IPTT or on schools phased out of the program. No data are collected on out-of-school populations.

Findings and Recommendations:

Several studies are suggested by the planning needs of this program. Information gathered from carefully designed studies of reasons for failure to send children to school⁹⁴ would strengthen CRS’s IEC initiatives by allowing for an analysis of the relationships between the messages disseminated and the reasons given by parents for failing to enroll children in school. Limited population-based surveys may shed light on constraints to increased enrollment in provinces currently targeted by the program. There is a need to assess the impact of IEC campaigns conducted to date to inform the design and targeting of new messages. As noted above, the implementation of a planned in-depth study of the canteen phasing out process should be a high priority.

Given the need for increased attention to the strengthening of the role of the school community in canteen management, CRS may want to consider the incorporation of simple tools and training for organizational assessment into the M&E system. As more sophisticated monitoring indicators of canteen sustainability are developed, staff would then be equipped to carry out extensive assessments across schools in the current six SFP provinces

It is not recommended that CRS introduce significant new quantitative school-based data collection activities, as controlled studies on impacts of school feeding are difficult and expensive to implement and interpret.⁹⁵

D. RESPONSES TO MAJOR MIDTERM EVALUATION RECOMMENDATIONS

Recommendation	Actions Taken
Validation of local food: Exchange visits were proposed to try to reduce the preference for US commodities over locally available foods in schools in the canteen program.	This has continued in the supported schools. It is a cultural phenomenon which may not be addressed by exposure to communities with diversified local canteen meals. These types of exposure should be followed up.
Revision of the contracting process with schools: It was recommended that this be made more flexible, to allow for the vulnerability of communities to climatic shocks.	No formal action has been taken; it was felt the process would be too complex. Greater flexibility in planning is strongly recommended, as communities are supporting endogenous canteens through a range of food sources.
Support to the process of handing over canteen management to community/ school structures.	Some support has been provided, primarily through IEC and school gardens. As recommended in the

⁹⁴ A study of this type was carried out with support from Plan Netherlands in a tier 3 province. See de Lange, Albertine. 2007. *Deprived Children and Education: Namentenga, Burkina Faso*. Foundation for International Research on Working Children [IREWOC]

⁹⁵ These issues are discussed in depth in Adelman (2008) and mentioned in the *Indicator Guide*.

	MTE, there is a need for the development of a system of “accompagnement” (accompaniment) of schools trying to establish viable endogenous canteens. MEBA concerns about any transfer of responsibility from teachers, who can be held responsible for diversion of commodities, to parents, remain an obstacle to handing over.
Add qualitative data collection tools.	The MSC study in July 2007 equipped 14 M&E staff with new skills. It is recommended that the experience be expanded to include new methods, particularly those relating to analysis of community capacities.
Provide literacy training for APE/AME bureau members.	A total of 70 leaders and members were trained in first level literacy by a CRS partner agency. Expansion of this program is recommended.
Revise the phaseout strategy to determine what is needed to ensure sustainability of the education program.	CRS has continued to strengthen the IEC component; a comprehensive approach, as described in the MTE, is strongly recommended in the final year of the DAP.

E. LESSONS LEARNED AND BEST PRACTICES:

Lessons Learned

1. Flexible planning is essential in the face of unanticipated changes in resource levels; food aid is highly responsive to world markets and policy changes
2. Changes in entitlement programs like support to school canteens require a long phase in period and repeated public information campaigns
3. Development of a well functioning school canteen, an institution responsible for a set of complex activities, may require several years of management support
4. Given the very low level of literacy among women, and the widespread use of local languages by men and women, public information campaigns need to be designed to be accessible by these audiences; this may require additional human resources.

Best Practices

1. CRS anticipated and carefully planned for the phasing out process over a period of almost 10 years; this is a complex process of institutional development at community level, and will require additional technical support.
2. Commodity management is well organized and losses have been minimized.
3. The principle of 100% coverage of children in a school for school meals has been described as a factor promoting social integration in communities where some households enjoy much higher levels of food security than others. It is consistent with local values.
4. Inclusion of a school health initiative in schools has amplified the nutritional and educational benefits of school feeding.

F. CROSS CUTTING ISSUES

Program integration:

The lack of an integrated approach to the three key areas of intervention: Education, Agriculture and Microfinance, represents a missed opportunity in the FY2004-2009 DAP. The proposal mentions the importance of integration, but the program was planned as a set of separate strategic objectives, with limited overlapping of these in a few communities. While the requirements of successful Microfinance programming may have precluded the promotion of integration by intentional expansion into school communities - since borrowers must meet eligibility requirements, and all are women - agricultural support could have been more closely linked to the larger issues of household food production in areas of phaseout. The major initiative to link these program elements across common populations, the school garden program, has had some success in 10 schools and has shown that social

organization and community cohesion are critical elements for success in this activity. These are dimensions that might have been best approached through integrated capacity building activity involving Agriculture and Education staff.

In any future programming, CRS may want to work on the design of this activity to try to maximize success. It is clear that many communities have already spontaneously established fields and gardens to support school canteens, so prospects for success should be good. Linkages of Education and Commodity Management have been strong and relations smooth. Discussions with staff, and the review of commodity operations, suggest that situations where unanticipated shortfalls arise, as they did in FY09 when commodities were reduced, are being dealt with in an *ad hoc* way. An integrated programming mechanism may be needed to deal with these situations in the future, so that programmatic implications, at school and community levels, can be anticipated.

Gender effectiveness:

The focus in the Education program on increased participation of girls in schooling has contributed to a major impact on levels of female enrollment and attendance. This has been reinforced by assistance to pre-schools. This emphasis is in line with the focus of the Government and other donors on improving the educational status of girls and women in Burkina Faso. This program has maintained an appropriate gender emphasis. Future programming, while maintaining the focus on primary education of girls, should consider strategies for expanding literacy training for women, particularly members and officers of the AME, given the very low levels of women's literacy.

Environmental impacts:

In general, the Education program has had little environmental impact, excepting for the continued use of firewood for preparation of school meals throughout program areas. This impact has not been quantified and alternatives may be difficult to identify. The fuel consumption requirements for preparation of different commodity mixes might be explored in a future program supporting school meals.

G. SUMMARY OF RECOMMENDATIONS:

Commodity Programming: priorities

Planning and decision making on phaseout commodity support to canteens in the current tier 3 provinces: This process, which is already underway, should be 'fast-tracked' to allow for at least one year (two would be preferable) to provide capacity building support to tier 3 schools on the development and management of their endogenous canteens.

Consideration of re-targeting of commodities used in the ESP to bisongos and to an expanded THR program: CRS should give serious consideration to the identification of new foci for the Education Support Program activities that will ensure a measurable contribution to community level food security. These new activities should be accompanied by the identification of food security-related impact indicators. It is suggested that re-targeting to scale up support to pre-school feeding and THR may achieve these impacts.

Introduction of simple methods to improve uniformity in measurement of ration sizes: Joint review of one school canteen with the Commodities evaluator showed the need for the adoption of a uniform standard for measurement of commodities, using locally available containers. This should be promoted.

Studies:

In planning for FY10, CRS should concentrate on learning from successful past experience. Several studies have been proposed in the report. These are intended to prepare for and contribute to planning for the follow on food security program. They include:

A proposed study of the phasing out process,⁹⁶ covering a large number of schools: An assessment at school level of how communities have planned for and established endogenous canteens should be carried out, with the objective of identifying a model for successful phaseout. This will contribute to the elaboration and extension of existing IEC materials and training activities on phaseout. With this information, CRS will be better equipped to:

- Define key steps in the process of community planning which may need to be reinforced in school action planning, such as the need for re-adjustments in the amounts mandated for the *collecte*.
- Revise existing training materials to take account of specific problems and bottlenecks identified in the field.
- Explore with communities the most effective training methods, including the use of pictorial materials and those in local languages.
- Examine, with MEBA, different modalities for distribution of limited commodities, with special emphasis on seasonality and community decisions on optimum timing during the school year.

A review of available information on out of school children, focusing on the constraints that prevent parents from enrolling children in school. This information will enable CRS to focus future IEC messages and activities designed to encourage support for girls' education on families who have not enrolled children, with a clear understanding of the full range of factors influencing parents' decisions on schooling. The study carried out in Namentenga provides an example of data collection and analysis on this question.

A review of the effectiveness of the IEC program: In addition to estimates of outreach to radio listeners, CRS should carry out further research on impacts of IEC activities to date, using methods such as those developed for Behavioral Change Communication programs, designed to determine whether behavior changes have been associated with exposure to specific IEC messages. This research will also contribute to an understanding of the most effective methods of dissemination.

Canteen Management Support:

More intensive management and training support to schools in the 6 tier 3 provinces to promote adequate planning for phasing out: The introduction of a capacity building program with schools that are phasing out of commodity support will enhance the sustainability of their endogenous canteens and ensure that School Action Plans are realistic, feasible and can be implemented.

Longer Term Planning

Clear food security objectives for Education Support: Future commodity support to education should have clear food security objectives and should, wherever feasible, be integrated with community level activities in agriculture, NRM and provision of small-scale credit.

Food Programmer: If CRS remains committed to large-scale commodity programming, creation of the position of Food Programmer should be considered. This position would carry responsibility for the developmental aspects of commodity use in both Education and General Relief, while the CMO would continue in a commodity management role.

⁹⁶ This study was proposed to take place simultaneously with the final evaluation, utilizing a sampling methodology for schools, focusing on those already phased out of the program.

SO3: IMPROVED HEALTH AND NUTRITIONAL STATUS FOR PRIMARY SCHOOL CHILDREN IN BURKINA FASO

This Strategic Objective was developed in partnership with MEBA and implemented through a consortium of Helen Keller International (HKI), the Foundation for Community Development (FDC) – the local office of Save the Children - and CRS/CATHWEL. It was funded with donor funds as part of the National Ten Year Education Plan, (PDDEB). No DAP resources were used. School health interventions complement the school feeding program in important ways. The positive effects of improved health and nutrition on learning are widely recognized and school health is a key part of MEBA's strategy for improving education in Burkina Faso.

A baseline survey for the school health program carried out by HKI across a sample of 3,488 pupils in 130 schools showed high levels of Vitamin A deficiency, anemia and undernutrition and low levels of health and hygiene knowledge among pupils.⁹⁷ Interventions have been based on a minimum package of activities (PMA) including health, hygiene and nutritional training among pupils, de-worming, Vitamin A supplementation and the establishment of community strategies for raising awareness on health, hygiene and nutrition. The program covers schools in 25 provinces; CRS has been responsible for implementation in 12. Of these 4 are current Tier 3 provinces, one is a province where CRS is implementing schools gardens, and the remainder are food insecure provinces that have been phased out of CRS canteen support.⁹⁸ Impacts are to be measured in two areas of disease reduction:

II 3.1: By the end of the project anemia in school children will have decreased by 20% as compared to baseline

II 3.2: By the end of the project, the rate of schistosomiasis in school children will have decreased by 10% as compared to baseline

Intermediate Results were defined through behavioral change and actual delivery of health 'products', micronutrients and de-worming medication.

This program had not yet begun at the time of the MTE, and implementation has been interrupted due to late funding in FY2008⁹⁹. At the time of the final evaluation, two years of activities had been achieved, and partners were requesting a funding extension. While no data was available on program impacts or results, some achievements can be noted. In FY2006 implementation planning was completed, staff hired and material, equipment and health supplies procured. CRS established an effective working relationship with other partners. During the 2006-2007 school year, substantial implementation took place. 111,627 children in 12 provinces were provided with iron supplements. Among these, 28% of children received the full 16 weeks of supplementation. Almost 75% received iron during at least 10 weeks. This has been supplemented by provision of Vitamin A and de-worming medication (Albendazole) twice yearly. In 2008, a national de-worming campaign was carried out. School health activities were resumed in FY2009. Results were not yet available at the time of the evaluation. However, field interviews indicated appreciation of the school health activities, and a belief that they had positively affected school participation and performance, these responses were combined with some uncertainty about the reasons for the break in implementation in 2008.

⁹⁷ Ministère de l'Enseignement de Base de de l'Alphabétisation and Helen Keller International, Enquête de base du projet de santé et nutrition scolaires, Burkina Faso, February 2007.

⁹⁸ Including four supported by WFP.

⁹⁹ 61% was received in May, at the end of the school year. [Annual Progress Report FY2008].

SO 4: MICROFINANCE

A. METHODOLOGY

The methodology used for the evaluation of the microfinance component included a review of CRS and GRAINE documents during the DAP period. Internet research supplied additional information on microfinance benchmarks and impact from microfinance, applicable to CRS MF activities. Interviews were conducted with GRAINE personnel and Board, and staff of the CRS MF unit. The evaluator observed village bank activities (9 banks in five languages in six provinces) and interviewed clients, non-clients, and ex-clients, and visited selected income-generating activities of current clients (see Annex: People Interviewed). The village banks and clients visited were chosen by the CRS BF MFU staff based on the following criteria: geographic areas covered by both the Bogande and Boromo branch offices, including several Point de Service (sub-branch offices); urban and rural areas; different ethnic/tribal groups; successful and unsuccessful groups (e.g. dissolved groups) and individuals (e.g. dropouts).

This evaluation is supported by two additional studies – a baseline study conducted in 2004 by a consulting firm, Lessokon Limited, and a follow up impact study conducted by the same firm in 2009, using an impact study methodology approved by the Consultative Group to Assist the Poor (CGAP, www.cgap.org), a donor consortium in microfinance and inclusive financial sectors. Additional input for conclusions comes from a Report on Voluntary Savings Promotion at GRAINE SARL (2008), a Rating of GRAINE SARL done by the Italian rating agency Microfinanzas (March 2008), and an information technology (IT) diagnostic by an external consultant (February 2008). Finally, documents provided by CRS and GRAINE contributed to this evaluation.

B. PROGRAM EFFECTIVENESS

CRS has made very good progress in creating permanent financial services for very poor women in Burkina Faso. There is evidence that access to both loans and savings has helped clients raise their revenues, diversify their income sources, build their savings, decrease their vulnerability to external shocks (food crises), improve their families' well being, and improve their own economic and social status in their communities. CRS has done this in an extremely challenging environment – rural, severely poor, large distances, poor infrastructure, and with many ethnic and linguistic groups. CRS is to be congratulated for this work.

For this final evaluation, assessing the microfinance program's effectiveness is defined as the degree of success in carrying out project activities, i.e. measuring CRS' success in providing financial, human and other inputs (activities) in order to deliver specific services (outputs) and achieve intermediate results (IRs). This process involved comparing final targets with actual performance. It should be noted that some targets are for 2009 (the original end of the DAP) and others are for 2010 (the extended DAP period).

The CRS/BF DAP microfinance component had three intermediate results:

- IR 4.1. Poor rural women have permanent access to financial services.
- IR 4.2. Voluntary savings of targeted poor rural women have increased.
- IR 4.3. Professional quality of microenterprises of poor rural women strengthened.

These three intermediate results were supposed to contribute to the Strategic Objective for microfinance:

SO4: Increased income from microenterprises for rural poor women in Burkina Faso.

This Strategic Objective in turn was supposed to contribute to the Program Goal:

Improved food security of targeted rural populations in Burkina Faso and extremely vulnerable populations in urban, peri-urban and rural areas throughout the country.

This section will discuss the achievement of the three IRs.

➤ **IR 4.1. Poor rural women have permanent access to financial services.**

The results of the CRS BF microfinance program after five years of activity are as follows:

Indicators and Targets	Baseline (2004)	Current (May 2009)
By the end of FY06, an MFI has been created from the unification of the two branches of Bogande and Boromo.	A MF program in existence with two branch offices in Boromo and Bogande	A MF program on its way to becoming a permanent MFI called GRAINE (form: limited liability company). Two branch offices and numerous sub-branches exist. 46 staff (Dec. 08). Assets of USD \$3.3 million (March 09). Its own statues and Board. Awaiting permission from the Ministry of Finance to transfer assets using the mechanism of a “business to business” transfer (which is the lowest taxable event). Established clientele and methodology. 5-year business plan exists. New General Manager since Feb. 2009.
Operational self-sufficiency ¹⁰⁰ rate is equal to 106% by the end of FY08 and 120% by the end of FY09.	50% for the program	OSS – 119% (March 09)
Financial self-sufficiency ¹⁰¹ rate is equal to 86% by the end of FY08 and 95% by the end of FY09.	unknown	FSS – 71% (March 09)
By the end of FY08, 16,000 clients have been reached, 7,240 of which have become clients during the DAP 2004-2009 period.	8,760 clients for both branches	28,155 clients, all women, poor, from rural, urban, and semi-urban areas

Indicator Quality: Regarding the indicator “creation of an MFI”, this could have been clarified with additional of terms such as “legally established”, “licensed”, “functioning Board” “assets its own name” and so on.

Regarding the OSS and FSS ratios, these are standard ratios for MF benchmarks, and as such, are fine to use.

¹⁰⁰ Operational self-sufficiency: Total financial revenue/Total operating expenses

¹⁰¹ Financial self-sufficiency: Total financial revenue/Total adjusted expenses

Regarding the “number of clients reached”, it is not clear if this means “number of active clients” or “number of clients who have passed through the program”. “Number of active clients” is a better indicator for MFIs since it is related to revenues.

Findings and Conclusions on IR4.1:

Creation Of A Separate And Permanent Microfinance Institution:

Findings: The program has mostly met its targets for IR1. For the creation of a separate and permanent microfinance institution, GRAINE is registered as a limited liability company, has its own Board, and produces its own financial statements which are consolidations of the two branch offices in Boromo and Bogande. It has a General Manager. The current owners of GRAINE Ltd are CRS and L’Organisation Catholique pour le Développement et la Solidarité (OCADES), with 49% and 51% respectively.

However, technically it has no assets, and the Board is not fully functioning (i.e. not meeting regularly). This is because the assets have not been transferred from CRS due to tax issues, and the Board feels that it is important to maintain a low profile legally until the assets are transferred. CRS and OCADES have requested an exemption from the Ministry of Finance on the taxation of assets transferred to the institution (January 2009), but this has not yet been approved. A meeting was held at the end of the evaluation period between GRAINE and the Ministry of Finance. A positive response looks forthcoming.¹⁰² As soon as the asset transfer occurs, the ownership of the institution will be 100% OCADES.

Recommendation: Continue to lobby the Minister of Finance for permission to use the option of transfer of assets from business to business. If this is not approved, investigate other alternatives. La Caurie (Senegal) is currently converting from a Non Bank Financial Institution to a cooperative form because the new “PARMEC” law will tax income. This may be an option for GRAINE. A GRAINE Board member or the General Manager should stay in touch with La Caurie.¹⁰³

Recommendation: It is important to have an independent non-OCADES voice on the Board after CRS hands over control. Adjust the statutes to allow for this, and find an independent (non-owner) Board member for the Board, with experience in building for-profit microfinance institutions in Africa.¹⁰⁴ It is recommended also that CRS develop a advisory/TA role to GRAINE, perhaps participating as well in a Board committee (audit, product development).

Findings: As for GRAINE’s permanence, there is still need for significant capacity building and institutional strengthening. The most urgent need is a management information system; currently the institution is using Excel spreadsheets, which are time-consuming. An IT consultant was hired to advise the Board on the purchase of an information system. The report was well done and CRS, OCADES and GRAINE have taken the consultant’s recommendations seriously. The consultant recommended that other systems and procedures be put into place before making a decision on the software.¹⁰⁵ CRS has been working with GRAINE to put these systems and procedures in place. Many new manuals exist but have not yet been completely systematized and internalized, and positions are still being filled for missing and needed posts. The IT consultant is returning soon for the second phase of the diagnostic.

¹⁰² Interview, CRS BF Country Director. 16 May 2009.

¹⁰³ As per phone and email communications with Tom Shaw, CRS MFU, 16/6/09.

¹⁰⁴ For more information on the rationale of having an independent board member, see the website “[bankersonline](#)”.

¹⁰⁵ AF Consulting. Project SIG GRAINE Etape 1: Préparation et Analyse des Besoins. Rapport Provisoire. Feb. 2008.

Recommendation: Continue implementing the IT consultant's recommendations, proceeding with a decision on the MIS. Key criteria for choosing an MIS would be: 1) applicability to various credit methodologies (group, individual); 2) an accounting module that links automatically with the portfolio module; 3) technical support from the region and in French; 4) reasonable cost; 5) ability to provide reports required by the regulatory authorities, 6) ability to track both voluntary and obligatory savings, 7) other criteria as recommended by the IT consultant.

Findings: Further capacity building is needed for strengthening internal controls, building governance capacity in commercial microfinance, product refinement and development of new products, and funding mobilization (both savings and external grants and loans).



Microfinance Clients

Recommendations: Send Board and senior staff on exchange visits to similar programs in Francophone West African countries¹⁰⁶. Hire and train new staff as needed to address institutional weaknesses. Send several Board members and General Manager to the [Boulder MF course](#) in Turin this year (it is offered in French this year).

Findings: The General Manager is new since February 2009, and has many responsibilities on his plate.¹⁰⁷ He will need additional support to meet those responsibilities.

Recommendation: CRS should provide GRAINE with a salary subsidy for a two-year Deputy GM position or an expat Technical Advisor for one year.

Findings: The West African Monetary Union has recently created a microfinance law to supplement its PARMEC law, which was addressed to cooperative forms of microfinance but not to privately owned forms. This new law has not yet been adopted by Burkina Faso, but may be in the future.

Recommendation: CRS: Send one or two GRAINE Board members and the general manager on an exchange visit/study tour to an MFI in a West African country where the MF law PARMEC II has been approved by the government (La Caurie in Senegal would be suitable). Currently it is approved in Senegal and Guinea Bissau.¹⁰⁸ Investigate the impact of the new law on MFIs like GRAINE.

¹⁰⁶ Exchange visits have been shown to be quite useful in building Board capacity.

¹⁰⁷ See, for a list of his tasks to accomplish, the five-year GRAINE Business Plan.

¹⁰⁸ As per the Law Library of Congress, 5/1/2009.

Findings: Regarding financial ratios (OSS and FSS), GRAINE has reached its targets. However, these ratios are obscuring the fact that GRAINE needs additional staff, since its own staff is overloaded, and there are vacancies in key posts. GRAINE's management is currently recruiting up to 15 additional staff. With the addition of these staff, its OSS and FSS will drop. However, it is essential to have the staff in order to provide the services needed to clientele and to strengthen the capacity of the institution and its systems.

Recommendation: GRAINE: Expand cautiously, not exceeding the capacity of the institution. Make efforts to recover good clients who have dropped out, if they left for reasons other than non-payment. This will keep operational costs down while expanding clientele, and thus help build the operational sustainability.

Recommendation: Make sure that village bank groups do not decrease in number of members as they mature. As groups decrease over time, the cost of attending them does not but the revenue generated from the interest payments may. So it is in the best interest of the institution to make sure that the groups either remain the same size, or even better, grow in number. By adjusting product characteristics (loan terms, payment frequencies, loan amounts) and adding other incentives, GRAINE will be able to retain existing clients and attract new ones.

Findings: The credit and savings methodology is not consistently implemented across the whole institution.

Recommendation: The new GM and other senior staff should embark on a re-training program for all field staff to make the methodology consistent throughout the institution. This will require on-going repetition. The budget line for training in the Business Plan is too low and should be increased to pay for training events such as this.

Findings: Regarding the number of clients, the program has surpassed its targets. In fact, the program has reached many more clients than the current number of clients indicates, because there are many more who have taken loans, saved, and then retired from the program with their savings. Unfortunately, it is not possible to know how many more, since there is no computerized management information system (MIS), and many clients have gone in and out of the program, making it impossible to count them manually.

Recommendation: Make sure that the new MIS has the capacity to track clients who go in and out of the program.

Findings: Some poor women do not participate in the program due to the perceived risk of taking a credit. Other poor women, already clients of the institution, drop out when they cannot make their payments, due to family sickness or the death of an animal. This reduces the impact potential that GRAINE can have.

Recommendation: Hire a consultant to design, then pilot and roll out if effective, a microinsurance product which pays off a client's loan in case of death, major sickness, or even loss of assets (for example, death of animals). This prevents the good clients from having to pay with their savings (or other money) for the defaulted loans of other clients. In this way, good clients are retained in the program. Reinstate the group emergency fund account.

Findings: GRAINE compares well with its peers in West Africa, according to The Mix Market's benchmark study (2008)¹⁰⁹:

¹⁰⁹ [Africa MF Analysis and Benchmarking Report, 2008. The Mix Market.](#)

Parameter	West African MFIs	GRAINE
Adjusted No. of Borrowers	7,618	28,155
% Women Borrowers	60%	100%
Gross Loan Portfolio	USD 2,643,336	USD 1.55 million
Average Loan Size	USD 375	USD 69
Borrowers per Loan Officer	220	828
OSS	106%	118.55%
Adjusted Return on Assets	- 1%	0.52%
Operating expense ratio	16%	5.6%
Portfolio at Risk (30 days)	5.9%	2.87%
Cost per borrower	USD 105	USD 6.33

GRAINE's small average loan size indicates that it is reaching clients who are poorer than the average West African MFI. The average West African MFI focuses on urban clientele, whereas GRAINE is focused on rural clients. By focusing on rural women clients, GRAINE is achieving its mission, yet this has a trade-off. Rural clients cannot pay as much interest, nor make loan principal payments as frequently, nor pay off principal as quickly (i.e. the loan term must be longer), as urban clients. This lowers GRAINE's ability to achieve profitability and to expand.

It is very important that GRAINE develop a product that generates more revenue for the institution than the current loans. This would have to be a loan product for petty commerce. A more diversified investment by GRAINE in these activities will also reduce its own risk. There are women in rural markets who need more capital than is currently available, and there are women doing petty commerce in urban areas who can pay monthly. The Board is also reviewing the possibility of loans out of the new Ouagadougou office. All of these are good possibilities. However, GRAINE must have a management information system installed and working before it takes on loans with faster rotation (i.e. more frequent disbursements and payments) because these loans put more pressure on systems.

Recommendation: After installing a new MIS that is capable of tracking more frequent payments, investigate the possibility (through market research) of an urban loan, either to individuals or to smaller solidarity groups. This will be a larger loan than is currently offered, and may have a higher interest rate. This will help improve GRAINE's financial sustainability.

Recommendation: Hire more credit agents to reduce the workload (number of clients per credit agent). The current workload is too high.

Findings: There is some growing competition in microfinance from the credit unions (caisses) and from a commercial bank. But currently GRAINE is the only MFI that provides microcredit and savings directly to the villages, even remote ones, and does so without requiring physical collateral, titles for assets, and/or upfront savings as requirements for a loan. Unfortunately, GRAINE has not publicized these advantages. In addition, the competitors do not publicize their own effective interest rates (nor does GRAINE), and so some GRAINE clients think that the competitors' rates are lower.

Recommendation: Develop a tool that compares GRAINE's products with the competition, and train Credit Agents to explain this to clients. This should take into account the collateral requirements and the extra fees. Publicize the advantages of GRAINE's services in comparison to the competition. This is a kind of financial literacy training, and there are donors that support financial literacy who may be willing to provide support. Training clients to critically analyze credit offers will help GRAINE maintain its clientele.

Findings: CRS' and USAID's support has been vital to building GRAINE to the point where it is now. Yet GRAINE needs further support, both financial and technical, to grow into an institution that is profitable, has access to commercial sources of funds, and can utilize its clients' savings for lending.

Recommendation for CRS: Continue to support GRAINE with donations on a decreasing basis, and soft loans on an increasing basis, until GRAINE is reinforced, operationally self-sufficient (fully staffed), and accessing commercial loans. Five more years should be enough.

Recommendation for CRS: Maintain enough MFU staff to provide TA advice and services to GRAINE. The MFU can be especially valuable in research and development of new products, in helping GRAINE obtain consultants for specific tasks, and in helping with fundraising from donors and investors. Build TA support from the CRS HQ MFU into the DAP budget.

Recommendation for CRS: Assist GRAINE in addressing staff recommendations, found in the table below. Many are related to staff safety. A cost-benefit analysis would undoubtedly show that implementing their suggestions would save the institution money in the long run. It is worth remembering that the Credit Agents are the institution’s assets, that is, they generate the revenues for the institution. There is high staff turnover, and these capable and trained agents go to the competition. They also could present a security threat, since they know GRAINE’s procedures on money handling.

- Staff recommendations:
- **Management information system**, to reduce the workload and increase productivity
 - **Cost of living increase**, to reduce staff turnover
 - **Training** in microfinance, to improve effectiveness
 - **Heavy Duty Motorcycles** (replaced every three years), to prevent breakdowns
 - **Put Safes in Points de Service**, to store money when the banks and credit unions are closed, to reduce theft
 - **Indemnity insurance policy**, in cases of theft, so that agents don’t have to pay
 - **Per diem**, for days that are longer than 8 hours and/or beyond an established distance, to reduce staff

“Every day that I go out, I am exposed to danger. Everyone knows that we carry money.”

Agent de Credit, Bogande

➤ **IR 4.2. Voluntary savings of targeted poor rural women have increased**

Indicators and Targets	Baseline (2004)	Current
By the end of FY08, 50% of all active clients have voluntary savings.	600 clients	2,688 clients (9.5%) (source: ITTP Nov 2008)

Indicator Quality: The indicator is fine. The target was unrealistic.

The Mid-term Evaluation, conducted in 2006, found the following with regards to voluntary savings:

- There has been little “*sensibilization*” (awareness-raising) as to what the programmatic and domestic benefits are of saving “extra” funds, on an ongoing basis or for new clients,
- There is no interest paid on savings,
- There is virtually no access to clients’ savings except for the end of cycle,
- Savings used as a guarantee mechanism, not a true savings product, and are going to pay off loan balances (both the client’s and other members),
- No campaigns/promotions/ studies/trainings have been undertaken,
- There is no long-term strategy on the use of savings for the institution,
- Clients do not know the amounts of their savings—either verbally or in writing and don’t track them,
- Clients’ savings have been lost through fraud,
- Severe drought has affected both target areas, but particularly Gnagna in 2004/2005, rendering it almost impossible to save extra funds.

CRS has implemented the following activities in response to the Mid-term Evaluation recommendations:

- GRAINE-SARL will complete the development of the voluntary saving product with in partnership with AQUADEV (in process).
- Internal controls have been strengthened.
- Interest is paid on some savings according to the policy of the financial institution in which the savings are deposited.
- Implementation of a pilot test of voluntary saving promotion through a school loan product in 2006/2007.
- An in-depth and systematic voluntary saving study was conducted in July 2008.

Findings and Conclusions on IR4.2:

Finding: The number of women with voluntary savings accounts is 2,688, or 9% of the total client at this date (Nov 2008). According to the Lessokon impact study, savings as a component of familial income increases as a function of seniority in the program: from 7% of family income for cycles 3 to 5, to 9% for 6 to 10 and to 13% for members in the 10th cycle and beyond.

Finding: It is very difficult (time-consuming and costly) for GRAINE to track savings (both voluntary and obligatory), since this information has to be reconciled between the clients’ passbooks, the Agents’ control forms, and the financial institutions’ statements where the savings are deposited. There are many of these institutions, since the village banks are so dispersed.

Recommendation: Implement the MIS installation, ensuring that it has a module for monitoring savings, and an accounting module.

Findings: Clients are quite aware of the benefits of savings. They have used savings for weathering crises. For example, during the food crisis of 2004/2005, women withdrew both voluntary and obligatory savings in order to survive.¹¹⁰ When the solidarity guarantee is invoked (in other words, when group members have to pay for another member who could not pay on time), clients prefer not

¹¹⁰ The Mid-term Evaluation notes: “During the 2004/2005 food crisis, approximately 4,434 DAP microfinance clients in the provinces of Gnagna and Namentenga withdrew the equivalent of US \$28,308 from their individual savings to purchase food and other basic needs for their families.”

to touch their savings, and instead will find money from other sources to pay the delinquent client's amount. These sources could be income from their income-generating activities, family savings, or borrowing from family members.

Clients see their savings as both insurance for future events and as a source of investment capital for their own businesses once they leave the program. Women have currently saved \$513,000 (March 09).¹¹¹

Recommendation: Allow women to remain in the group, without a loan, but continuing to save. Publicize this as an option in all groups. This ensures that poor women will have savings in an emergency. It also ensures that GRAINE has net savers, once GRAINE is legally and institutionally capable of lending its clients' savings.

Findings: The staff of GRAINE is aware of the future importance of savings as a source of funds for lending.

Recommendation: Continue to raise awareness among staff of the importance of savings for the future of the institution.

Findings: There is no interest paid by GRAINE on savings, because GRAINE does not collect and use the savings. The institutions (banks, caisses) where the savings are deposited sometimes pay interest and sometimes not. Clients are reportedly aware of amounts paid, and prefer to earn interest.

Recommendation: Raise financial literacy skills of clients by helping them understand the concept of earning interest on savings, and to understand which institutions pay interest on savings.

Findings: Some clients interviewed do not know the amounts of their obligatory or voluntary savings, seemingly for several reasons: a) they are illiterate; b) the passbooks, where their savings are written down, are sometimes with the Agent de Credit in the office because the Agents are overworked; c) the clients trust the program/institution. Others do know the amount of their savings, because the Agents tell them at the end of each month.

Recommendation: Make it an institutional policy of GRAINE to inform clients of their savings amounts at each meeting.

Findings: Some groups reportedly withdraw their savings and return to the first cycle loan amounts. This seems to happen because: 1) there are payment problems in the group, so the group decides to liquidate its savings and start again, and 2) because the loan amounts have gotten too high to be payable, and returning to the first cycle allows women to retrieve their savings and lower the loan amount at the same time to an amount which is much more manageable. On the other hand, individual women, often at the end of the fifth cycle, have saved enough that they leave the program, using their accumulated savings to invest in their businesses.

Findings: Some interviewed clients, especially in the rural areas, report that they have a hard time saving more than the obligated amounts. Others (but very few) are saving double the amount required. This difference is a function of the type of business, with petty commerce having higher savings potential.

Recommendation: The situation where a client has to drop out of the program because she needs to withdraw her savings should be avoided. Develop incentives for women to remain in the program and leave their savings intact. The nine-month loan is an example of an incentive, because women don't have to work as hard to make profits as they do with the six-

¹¹¹ Using 500 CFCA exchange rate. Bog-Bor Consolidated spreadsheet March 09.

month product. Over time, GRAINE should strive to make its savings policy more flexible and more suited to the individual needs of its clients, as long as it does not increase its risk in doing so.

Findings: In some villages with financial institutions, clients themselves make their savings deposits to their chosen financial institution (bank or credit union). In other cases, where financial institutions are far from the village, it is dangerous for clients to do this, and distances are very long. So Credit Agents do it instead. This increases the risk of theft to the Credit Agents. In general, GRAINE cannot guarantee the safekeeping of clients' savings when transporting them.

Recommendation: Implement an indemnity insurance policy to protect Credit Agents from this risk. Investigate and implement an insurance policy for the institution itself in cause of loss of client savings.

Findings: Internal controls have improved with the addition of a controller at the branch office level.

Recommendation: Continue improving internal controls. The new organizational arrangement of having a senior internal audit who reports to the Board is a good step.

Findings: GRAINE clients are confused about the interest and the savings. GRAINE charges 2% per month of the loan amount in interest, and requires 1.5% per month of the loan amount in savings. Clients perceive that GRAINE is getting more money than they are.

Recommendation: Credit Agents need to explain to clients the difference between the two payments, and the reason that they pay interest.

Finding: A study on the savings habit of GRAINE clients clearly indicates that women save in-kind (animals) as well as in cash, and many prefer to save in-kind. Given this habit, and the fact that rural women (GRAINE's current clients) have difficulties saving and need to retire their savings quickly in emergencies, and the fact that mobilizing rural savings is costly and risky for GRAINE personnel, it is unlikely that these savings will provide GRAINE with sufficient funds for on-lending once it has the regulatory status to do so.

Recommendation: GRAINE will need to concentrate on mobilizing savings from stable, better-off urban populations for this purpose in the future. An urban savings product should be built into GRAINE's strategic plan (after an MIS installation).

➤ **IR 4.3. Professional quality of microenterprises of poor rural women strengthened.**

Indicators and Targets	Baseline (2004)	Current
12,000 clients have been trained in business skills (2,000 each year)	600 clients	0 (2004) 2,215 (2005) 779 (2006) 2,985 (2007) 2,688 (2008) 8,667 Total
2,000 women (members of village banking committees) have been trained in functional literacy.	0 committee members trained	0 committee members trained
New MF products have been developed (no numerical target)	1 product	2 products, a six-month loan and a nine-month loan (plus one product which was piloted and failed, and another which is being piloted at

		the time of the evaluation)
--	--	-----------------------------

Indicator Quality: Regarding the business training, the indicator has not been clear since the beginning of the DAP. The DAP text states “number of clients trained in business skills”, whereas the performance framework attached to the DAP text states “By the end of FY08, 75% of clients microenterprise assets have increased.” The Mid-Term does not mention “microenterprise assets” as an indicator. The ITTP again mentions assets: “Monitoring indicators 4.3.1. Each year of the DAP, 2000 clients trained in business skills development have increased their microfinance assets”, but the monitoring is only for number of clients trained, rather than increase in assets.

Regarding the literacy training for village banking committee members, monitoring this seems to have dropped off the charts since before the Mid-term Evaluation. Regarding new products developed, there are no targets in the DAP. The Mid-term Evaluation discusses the issue, but the ITTP does not monitor it.

Findings and Conclusions on IR4.3:

Findings re: training of clients in business skills: A consultant was hired to develop materials, but the materials were not suitable for an illiterate population. A second consultant was hired to develop training materials for an illiterate population. This resulted in two training modules about marketing that uses images rather than text. Credit agents were trained in the delivery of the module.

The modules focus, in simple terms, on the following topics:

- The identification of a concept for a profitable income-generating activity
- Strategies for capitalizing the activity
- Market study
- Human resources and bookkeeping for an activity
- Techniques for determining production costs and margins (the cost)
- Simplified management tools (notebooks sales and purchase)
- The hygiene and sanitation of the place of production and sales

Clients are reportedly happier with this module, and request more training, according to credit agents. This training seems to be given sporadically. Several groups in their third cycle had not received it, even though it is during the first three cycles that group members have the most difficulty making profits.

Recommendations re: business development training for all members:

- CRS and GRAINE: The institution is too overloaded with its own MF activities to be able provide effective training. The best solution would be to delay training activities until the institution is stable under its new independent form and with its new general manager (probably several years in the future) and then investigate the options. One option is to partner with a capable training partner.
- CRS and GRAINE: In the medium term, look into [Grameen Bank’s 16 decisions](#), and adapt these to GRAINE’s context. The repetition of these messages at each village bank meeting in Bangladesh may be effective in changing client behavior, without the need for expensive training. CRS, Freedom from Hunger, and other NGOs have developed “[Learning Conversations](#)” as training tools for self-help groups. These can be used for village banks as well.
- CRS and GRAINE: In the longer term, investigate Freedom from Hunger’s training materials for illiterate clients (FFH worked with the RCBF, so they may have a copy). Find a partner who would be able to deliver these modules to clients, at least in some urban areas.

Findings re: functional literacy training for village bank committee members: This did not happen to the extent planned in the DAP. CRS did coordinate and facilitate communities' access to government funds for literacy training. This resulted in literacy training for some groups. In a 2005/2006 literacy campaign, 23 village bank groups comprising 668 members participated in the first phase of literacy training lasting 60 days (300 hours), given by the following organizations:

- CEFRAP
- ACTIF
- OCADES
- ICODEV

In the 2006/7 campaign, four providers gave literacy training to 22 village bank groups. In the 2007/8 campaign, five providers gave training to 19 groups. A second phase of training (200 hours) was given to 4 groups by ICODEV.

It is not clear what the impact of the literacy training was. The management committees of the village bank groups that were visited were not transcribing their own data in their passbooks or control forms; this work was done by the credit agent. One group had an external (male) scribe to help with payments.

The achievement of this goal is hampered by the following:

- Distances from villages to training centers, lack of transportation, poor infrastructure;
- Large number of groups;
- Women's workload in general;
- Time commitment needed to achieve functional literacy.

Recommendations re: functional literacy training for village bank management committees:

- . For those groups in urban areas where there is a literacy provider nearby, facilitate the access to this training for all village banking members, not just the committee members (providing financing if necessary).
- For groups that are far from literacy providers, functional literacy training is not cost-effective for either GRAINE or the women themselves, and so the goal should be abandoned

Findings re: new MF products: CRS has made good efforts to study the needs of its clientele and to develop loan products that better suit their needs, without endangering the sustainability of the institution. Several excellent studies have been done on clients' needs. An education loan was developed, which matched client savings with a loan at the time when clients need to pay school fees (October). This loan did not work because it was a parallel (i.e. additional) loan to the enterprise loan, and it overburdened the clients with debt. A nine-month loan has been available for several years, and has been well received by clients. Its major problem is that the interest payments are higher (not the interest rate however) and this is a burden. Another loan product, for market gardens, is being piloted.

Recommendations re: new products:

Recommendation: CRS should continue to provide assistance to GRAINE in adapting current products and in developing and monitoring new products. Products should have two objectives: a) improve GRAINE's financial sustainability, b) improve impact at the client level. It may be useful to hire an expert in group credit methodologies, making sure that this person has experience in rural areas in West Africa.

Adapted and new products might include (disaggregated into short-medium, and long term objectives):

Short-medium term:

- i) a petty commerce loan product with monthly payments of capital, interest, savings. Maximum amount should be higher than the current 300,000 for the nine-month loan.
- ii) a loan with an upfront interest payment. This gives GRAINE more interest revenue, and reduces the payment burden on the client.
- iii) a one-year loan for excellent clients. This rewards good clients and keeps them in the program. This loan should be de-linked from the solidarity guarantee in the village banks.
- iv) reduce the savings required from 10% to 5%, at least in the higher cycles. This can be an incentive for clients with larger loans who have already demonstrated their capacity to pay back loans.
- v) Consider partnering with organizations that provide training on animal fattening to clients, or hire an expert in this activity. Training should be provided in the villages.
- vi) form smaller solidarity groups of women with larger loan amounts, especially in rural areas. This reduces the risk for women with smaller amounts who must pay if a woman with a larger amount defaults.

Long term:

- vii) an individual loan product.
- viii) a microinsurance product.
- ix) a specific product for animal fattening.
- x) a product for men.
- xi) For the very best clients, a renewable line of credit (with a minimum monthly capital payment, and interest and savings payments).

All these ideas, and others, should be studied and vetted through focus groups before piloting and rolling out. Most of these products will need a new MIS to track them.

Recommendation: Credit is not the only thing that these severely poor clients need. There are many external factors that are reducing the good impact of the credit and making it an insufficient input to getting people out of poverty. Lack of rain, degraded soils, sickness of animals, sickness of clients, lack of information on market prices, illiteracy, distances to markets, and gender issues are some of these factors. Wherever possible, CRS should integrate its other activities with GRAINE clients to improve impact. For its part, GRAINE should make efforts to link its activities to other donor projects (in addition to CRS).

The above recommendation is especially true for the poorest clients. For them, a loan represents a risk, and the risk is real. Non-clients are afraid of taking loan for this reason. GRAINE must find ways of reducing the risk to them, and improving the possibility of good impact. The insurance policy and emergency funds will help, as will (targeted and cost-effective) training in animal husbandry and farming, and marketing for petty commerce. These poorest clients are CRS and GRAINE's target group, and it's important to make sure that the impact is not negative.

Program Impacts

Impact at SO level

The Strategic Objective for Microfinance was: *Increased income from microenterprises for rural poor women in Burkina Faso*. The indicators and targets were as follows:

By the end of FY08, at least 6,000 clients have increased their annual income by at least 50% over the baseline of 61,240 FCFA (\$55).

Baseline: Clients had average annual income of 61,240 FCFA (\$55), or 22% below the poverty threshold.

Results: 98% of clients sampled had income greater than \$82.50 (50% more than baseline of 2004). From this, we can extrapolate that the goal has been surpassed.

Income:

In the recently conducted impact study by Lessokon, which was a follow-up to the 2004 baseline study, **98%** of a random sample of clients had revenues of greater than 50% above the baseline.¹¹² By contrast, only 39% of non-clients had revenues greater than 50% above the baseline.

Clients were also less poor than non-clients; clients were 18% under the 2006 poverty line (89,712 FCFA), while non-clients were 24% under the poverty line.

The income gap between clients and non-clients has increased between 2004 and 2009. The income for clients is 43.7% higher than for non-clients (73,261 FCFA against 50,967 FCFA), compared to a difference of 3.8% in 2004 (62,544 FCFA for clients against 60,256 FCFA for non-clients). The difference is largely due to the income from income-generating activities.

Clients continue to receive the bulk (65%) of their income from their income-generating activities. The percentage of income in the family budget from savings has decreased, while income from farm activities and income-generating activities has increased (2% and 6% respectively).

Expenditures:

Clients also had higher expenditures on basic needs than non-clients (31%) and this difference was greater than in 2004 (21%), indicating that clients have increased their expenditures on basic needs. Expenditures on basic needs grew by 80% from 2004 to 2009. Fifty-five percent of expenditures are for food.

Assets:

Both clients and non-clients have increased their expenditures on assets, clients more so than non-clients (196% for non-clients and 296% for clients).

Impacts beyond program beneficiaries

No hard data has been collected on this, nor were their targets or indicators. However, anecdotal evidence from credit agents indicates that there has been broader community impact. Credit agents spoke of greater social cohesion. One group had been able to make a donation to its church.

¹¹² Op.cit. Lessokon SARL.

Adequacy of population coverage among eligible beneficiaries

GRAINE covers about 6% of the eligible female borrowers in the nine provinces where it works.¹¹³ This is probably an underestimate, since the denominator “economically active women” includes women who are not poor, who would not be interested in a loan, and for other reasons would not be eligible.

C. PROGRAM QUALITY

Targeting

Burkina Faso is one of the poorest countries in the world. GRAINE works only with women. GRAINE works primarily in rural areas. By using these three criteria, GRAINE is reaching the poorest.

“We’re so poor, we’re last in the world.”

MFU Staff member

To prove this, a recent study on client revenues showed that the annual average revenue of a sample of newer entrants to the program (women in the 3rd – 5th cycles) are 23% under the poverty line. Observation during the evaluation reinforces the conclusion that GRAINE clients are very poor.

Recommendation:

- If GRAINE has not already commissioned a study to evaluate the poverty level of entering clients (first cycle), it should do so to lay any doubts to rest about its poverty outreach. This could be part of the baseline study for the new MYAP. This could be done using USAID’s Poverty Assessment Tools (PAT), if a tool exists for Burkina Faso.

Coverage

The CRS MF program had a five-year business plan that determined its expansion during the DAP period. Microfinance institutions expand according to demand, size of markets, competition, and saturation of markets, in addition to criteria based on their core social mission. GRAINE’s expansion has been based on these criteria. GRAINE works in three food-insecure provinces (Gnagna, Namentenga, and Komandjoari) and in six other provinces (Bale, Boulkièmdé, Sanguié, Sissili, Mouhoun, and Tuy). It should be noted that food-insecure areas changed during the DAP period, with pockets of food insecurity opening up in previously food-secure zones, due to rainfall patterns, cotton-growing, and other factors.

Appropriateness/ relevance

In general, credit and savings are products that are highly valued by these women. Both credit and savings have had a good impact on their revenues and expenditures. Women and credit agents state that women spend their income on household expenses, sick children, school expenses, investments in their business, and even purchase of assets (bicycles, carts). Credit agents also state that they see increases in women’s self-esteem and ability to express themselves. Clients, even ex-clients, interviewed during the course of the evaluation, gave thanks to CRS for providing these services to them. All clients interviewed had never before had a loan. Savings have increased enough so that individuals sometimes leave the program and invest their savings in their business instead of using the credit. Savings also significantly helped families weather the food crisis and the droughts.

However, it is worth noting that the impact can vary from cycle to cycle. There have been women who lost money on their businesses, and had to borrow from friends or family to pay off their loans. A common cause is the death of an animal. Another cause is a variation in the market price of a commodity that a woman is trying to sell. Anecdotally, women seem to get better at investing their

¹¹³ Using population numbers from GRAINE’s Business Plan 2009 – 2013.

money over a period of several cycles. In the long term, the impact is positive, according to the recent study by Lessokon (2009)¹¹⁴. (Impact is discussed in greater detail in the section: Program Impact)

Recommendation: Collaborate with other CRS departments and other agencies to train clients in their chosen income-generating activities. Develop mechanisms for reducing clients' risk (training, insurance, market information).

As to appropriateness, the CRS MF program has been adapting its core village banking products to the needs of its target population. The credit is delivered to them in their villages. The savings are picked up and deposited, or the group's management committee is trained to make the deposit. Agents communicate in the local languages. Clients' passbooks are written in the local language. Since most clients can't read, the passbooks include a photo of the owner, in case the booklets get switched.

The amounts are appropriate for the majority of clients, and have increased during the DAP years. There are some clients whose businesses have grown so large that they require more money, but the solidarity guarantee makes this difficult. Clients often complain about the interest rate, saying that other institutions have lower rates. This is true, but other institutions have harder guarantee requirements, and don't deliver to the villages.

Clients complain that the monthly payments are difficult. This is true especially with animal fattening, where there is no cash flow until the animal is sold.

Recommendation: Create a specific loan for animal fattening. This loan might have a pre-loan savings guarantee, an upfront interest payment, no monthly payments, and the principal paid at the end of the cycle. A non-reimbursable insurance payment in case of the death of the animal could be useful as well.

Clients also complain about the shortness of the six-month loan. This is not long enough to do certain income-generating activities, and puts pressure on clients to sell even when the market is not favorable for the sale.

Recommendation: Continue to make small adjustments to interest rates and length of cycles, without jeopardizing the sustainability of the institution or raising its risk.

Collaboration and cooperation

As noted in the midterm evaluation, OCADES has been a key partner in the growth of GRAINE. OCADES continues to be involved as an owner of the institution and with four Board seats. Its involvement will be critical to the future of GRAINE. OCADES engages in community-level activities with poor beneficiaries and the potential for linkages between the two programs is great. OCADES also partners with CRS in other activities.

CRS/BF is also an active member of the local microfinance network (APIM) and helped draft the new national microfinance policy. APIM has also provided training to GRAINE staff.

Banks and credit unions are partners, in the sense that the clients' savings are deposited in these institutions. This situation is, of course, not ideal for GRAINE, since those institutions are using GRAINE's clients' savings to lend to some of the same target groups. On the other hand, once GRAINE resolves its legal tax issues, those financial institutions may be willing to lend GRAINE money for on-lending to clients.

¹¹⁴ Etude Finale Des Revenus Pour La Composante Microfinance Du Programme D'assistance Au Développement De CRS/BF (Dap 2004-2009). 2009. Lessokon SARL.

Sustainability and exit strategies

A key focus of the microfinance component of this DAP has been sustainability. GRAINE's financial and institutional sustainability has been a goal of the MF activities, and CRS MFU has consistently monitored the progress, which has been good. It should be noted that financial sustainability in the context of rural Burkina Faso is a huge challenge, given the distances, the heat, the weak economy, the droughts, client illiteracy, degraded soils, lack of infrastructure, gender issues, many languages, and so on. Considering all these challenges, GRAINE's progress is admirable.

As soon as CRS transfers assets to GRAINE, the institution will be 100% owned by OCADES. This represents a successful exit for CRS. However, to ensure that GRAINE continues to thrive, CRS should plan on providing technical assistance and financial support for several more years.

Monitoring and evaluation

M&E for the MF activities has been done within the MFU. GRAINE has compiled financial and portfolio data from its branch offices and has sent this data to the CRS MFU where it is consolidated. GRAINE (CRS) has posted this information on the MIX Market on-line database (www.themix.org) for transparency. The MFU staff conducted field visits as part of monitoring activities. They also monitored expenditures against budget. As an independent organization, GRAINE has a hierarchy of reporting: Agents de Credit are supervised by and report to their Responsable (if they are in a Point de Service) who then reports to the Branch Office Head. Weekly, monthly and quarterly meetings are held among credit staff, including Branch Office auditors and accountants. The reporting for auditors is in the process of being changed, from reporting to Branch Office Heads to reporting to the CEO and/or the Board (for better internal controls). An MIS will significantly improve monitoring.

An outside firm with considerable expertise recently conducted an impact evaluation study.¹¹⁵

D. RESPONSES TO RECOMMENDATIONS OF THE MID-TERM EVALUATION

The CRS MFU has made progress in following the recommendations of the Mid-Term Evaluation. The legal study has been completed, and led to a successful spin-off. Microfinanzas Rating of Italy conducted a rating of GRAINE. A comprehensive savings study was conducted with GRAINE clients, and several changes implemented based on the results. New staff has been hired, and recruitment is ongoing. The Process Mapping exercise for improving efficiency was not done. The most effective activity for improving efficiency would have been the installation of an MIS; this was not done. However, GRAINE and CRS have hired an IT consultant to assist in choosing an MIS. There may be an MIS installed and functioning by the end of 2009.

E. LESSONS LEARNED AND BEST PRACTICES

Best Practices	Lessons Learned
Lend to the Poorest Clients – GRAINE is lending to the poorest with an average loan size of \$70 USD and with 100% female clients.	Overly rapid expansion leads to overworked credit agents, staff turnover and loan defaults.
Promote Local Savings – GRAINE has collected \$502,000 in savings.	Weak internal controls contribute to frauds.
Adapt Loans and Savings Products to local conditions – GRAINE uses a group lending methodology to reach the poorest. GRAINE studies its clientele before developing new products.	The success of loans is closely linked to seasonal activities of women clients.
Promote Commercial Microfinance – GRAINE is an independent institution currently owned by OCADES (51%) and CRS (49%).	In weak economies, saving is difficult, but necessary.
Invest in Scale and Self-sufficiency — GRAINE has achieved high levels of growth during the DAP	In weak economies, women often prefer to use their own savings to invest in their businesses, rather than

¹¹⁵ See the Lessokon study.

<p>period, both in clients—28,205 women—and in the amount of the current loan portfolio which has reached \$1.67 million. Operational self-sufficiency has reached 119% and Financial self-sufficiency is 71%.</p>	<p>a loan at market interest rate.</p>
--	--

F. CROSS CUTTING ISSUES

Program integration

During the DAP, there was limited collaboration with other CRS departments. The MFU of CRS made an attempt to involve CRS' Education department in literacy training, but there was no result. GRAINE is currently collaborating with CRS' Agricultural department on piloting a new credit product, the *credit maraichage* (credit for vegetable gardens). The results are not yet in, but the collaboration has been important.

Gender effectiveness and impacts

Approximately one-fourth of GRAINE's field agents are female. It is admirable that GRAINE has female staff. It is more difficult for female staff to do the fieldwork, since they wear skirts, and have children to deal with.

GRAINE's clients are 100% female. Anecdotally, positive gender impacts include better self-image ("empowerment"). CRS has not studied the effects of credit on women's labor or on control of assets such as savings or profits from sales of animals; these studies tend to be very expensive and need specialized expertise. These would be interesting studies to do in the future if there is budget and expertise available.

Environmental Impact

The impact of credit on the environment has not been well studied in any context. Anecdotal evidence points to positive impacts, for example, when women use their loans to change businesses from wood gathering to buying and selling food or cosmetics, and negative impacts, such as buying goats or harvesting wood. GRAINE should make sure that its loans have no negative impact on the environment, which is already severely degraded.

G. SUMMARY OF MAJOR RECOMMENDATIONS TO CRS FOR FUTURE PROGRAMMING

The following list is a summary of major recommendations found in this report. These recommendations are based on the assumption of five more years of support from CRS to GRAINE. GRAINE has the potential to reach many more women and to increase the impact of the financial services on those women, but will need more support to do so.

- Assist GRAINE in obtaining exoneration from taxes from the Ministry of Finance; then transfer assets to GRAINE.
- Strengthen the Board; assist GRAINE in identifying an independent Board member, modifying statutes if necessary to allow this.
- Continue to support GRAINE with grants, soft loans, and access to commercial funds.
- Assist GRAINE in the purchase of an MIS.
- Support GRAINE with technical assistance in management capacity building, training for field staff, strengthening internal controls, new product development, and other areas as identified in this evaluation and supporting studies (rating, IT diagnostic).
- Provide salary subsidy for a Deputy General Manager or Technical Advisor.

- Send General Manager and selected Board members to Boulder MF course this year if funds are available.
- Assist GRAINE in modifying current products and in developing new products that are designed to lower risk and keep women in the program.
- Assist GRAINE in identifying a loan product that provides more revenue than current (rural-oriented) loans. This may involve working with a new target population – urban women in particular.

CRS, OCADES and USAID are to be congratulated for their past support to building GRAINE. In a very difficult environment for microfinance, GRAINE's impact on the lives of poor Burkinabe women is significant

SO5: GENERAL RELIEF

A. METHODOLOGY

There was a review of literature before and during the actual evaluation exercise. The literature reviewed included the DAP document, the Mid-Term Evaluation Report, various reports submitted to USAID/FFP and correspondence on files in the CRS/Burkina Faso office. Visits were made to 21 sites, over 10% of the total, providing either take home dry rations or a cooked meal. These included the four categories of beneficiaries covered by GREP, namely: i) Vulnerable people in the communities, ii) Orphanages and nutrition rehabilitation centers, iii) HIV/AIDS and Tuberculosis patients and iv) OCADES. In addition, two school canteens were also visited. At each site food managers were interviewed, food management records were reviewed, warehouses or stores inspected, and discussions held with cooks, beneficiaries and staff. Wherever possible, visits included observation of meals being served. Sites visited covered all major categories of beneficiaries. Extensive discussions were held with Mr. Kassoum Outtara and Mr. Landry Ouedraogo, who are the heads of the GREP and CMO units respectively of the CRS/BF program. The list of the people interacted with during the evaluation is also attached as appendix "B".

B. PROGRAM EFFECTIVENESS

SO 5: Increase food availability to highly food insecure people in Burkina Faso

This SO had only one Intermediate Result. Following the Mid Term Evaluation, revisions were made in the impact and monitoring indicators, to more clearly measure the effectiveness of the program. The revised indicators are discussed here.

1. Intermediate Result: 5.1: *Increased food distribution to targeted groups of highly food insecure Bukinabé*

This IR is measured through two indicators:

- a. **5.1.1:** *For each year of the program, 100% of quantities planned are distributed to the beneficiaries*

Findings: Actual amounts distributed were lower than targeted amounts, but as shown in Table SO5.2 below, the program exceeded the targets for numbers of beneficiaries reached in every year. Data for the period FY2005 – FY2008 are shown below. Records for the life of the program showed that amounts received between FY2004 and FY2009, including a carry over from the previous program in FY03 were equivalent to amounts distributed as of May 2009.

The quantities of commodities that are budgeted for in the DAP and submitted to USAID/FFP are revised annually in the Pipeline and Resource Request Proposal (PREP). The approved quantities are then called forward as and when they are needed in the year with the result that actual quantities that are received in the country program differ from the original quantities planned the DAP.

Despite shortfalls in commodity amounts, partners were able to exceed beneficiary numbers in their distribution rolls in every year of the program.

Table SO5.1. General Relief: Commodity amounts distributed FY2005 – FY2008 in MT

	FY2005	FY2006	FY2007	FY2008
Amount Planned [MT]	1249	1249	1249	1249
Amount Distributed[MT]	1045.8	1247	1002	778
Amount dist as % of Amount planned	83.7%	99.8%	80.2%	62.3%

Annual Progress Reports, CRS/BF, FY2005, FY2006, FY2007, FY2008

Table SO5.2. General Relief: Beneficiaries Served FY2005 – FY2008

	FY2005	FY2006	FY2007	FY2008
Planned Beneficiary Nos.	13,033	13,033	13,033	13,033
Actual Beneficiary Nos.	13,502	13,998	14,220	14,842
Actual Nos. as % of planned Nos.	104%	107%	109%	114%

Annual Progress Reports, CRS/BF, FY2005, FY2006, FY2007, FY2008

This IR was supported by two major activities: training and end-use checking. Targets and achievements for these are shown below.

Table SO5.3. Training activities and Visits: planned vs. achievements, FY2005-FY2008

	FY2005	FY2006	FY2007	FY2008
Planned trainings	26	26	26	26
Achieved trainings	54	54	12	29
Achieved as % of planned	208%	208%	46%	112%
Achieved visits		152	177	167
% partners receiving at least one visit	100%	94%	100%	100%
% receiving two visits	60%	72%	63%	92%

Findings:

In general, all the centers kept records of receipt and distribution of the Title II commodities and all the beneficiaries interviewed reported that they had received the commodities. In the cases that wet feeding was carried out at a center, it was difficult to ascertain whether the correct quantity was cooked each time since the cooks interviewed stated that they only cooked what quantity was given to them. This was noted at school canteens visited, where staff did not have standard measuring devices.

During visits to the centers, it was observed that quantitative records of the receipt and issue of commodities to and from the stores reflected the exact number of beneficiaries as written in the center agreements by CRS/BF. Some center officials confirmed that at times there were differences between the actual numbers served and the numbers given by CRS/BF¹¹⁶ due to absences or dropouts. The

¹¹⁶ In one case, for example, beneficiaries of a center had been sent elsewhere to assist the parish priest for the day.

records of visits by the CRS/BF General Relief Manager as indicated in the documents at the centers did not show this anomaly.

Records showed no reports of loss or misuse of commodities at any of the General Relief centers even though there was evidence of appreciable spillage at most of the centers visited. The commodities were stored in the CRS/BF warehouse in the proper manner with tally cards and proper documentation but the storage at the centers was not carried out in like manner.

At a school having an endogenous canteen the parents and teachers were running the food program according to what they had learnt earlier from the CRS school feeding program with proper record keeping. The parents took a collective decision on the time of utilizing the small quantity food collected for the year.

Some partners who do not have institutionalized beneficiaries are carrying out wet feeding for beneficiaries on a walk in basis. Whether the approved ration is cooked or reaches each of the beneficiaries on a daily basis is impossible to determine. This is an inappropriate and costly way of using resources.

All the partners and beneficiaries who were visited complained of the inadequacy of the rations and pleaded for the increase. They found it difficult to accept the fact that the supply of the food is not indefinite

Recommendations:

- ▶ The end-use checking activity should be concentrated in the CMO for the whole of the CRS/BF program. This will enable the GREP unit to concentrate its efforts on programmatic issues.
- ▶ CRS/BF must introduce a uniform commodity measuring guide to all the partners and train them on how to use the guide during the formation period.
- ▶ For the sake of transparency, the ration guide must be displayed at each center.
- ▶ CRS/BF must reduce the number of its partners in the next DAP by about 50% to strengthen monitoring and supervision. In this regard, CRS/BF must dialogue with the hierarchy of the Church at the national level to consider the strengthening of the OCADES organization such that each diocesan OCADES is given more responsibility for the vulnerable in its area of operation. OCADES should be given full monitoring and supervision responsibility for all small catholic partners.
- ▶ Any and ALL changes in commodity issues that any officer might make in the field and at the centers (like ration size changes, commodity levels, delays in delivery to centers and movement of commodities between centers), must be documented and initialed by the Country Representative or her Deputy for record purposes.
- ▶ The establishment of a process at schools for determining how commodities can be used when the quantity of commodities available is sufficient for less than the school year can be followed up and replicated across school feeding centers
- ▶ In any future DAP submission, provision should be made to keep partners and beneficiaries, if possible, informed and sensitized about the eventual cessation of Title commodities as a resource

Program Impacts:

Impact Indicator: 75% of beneficiaries report having at least one meal a day

This indicator was made operational in the design of the IPTT. When it was found to overlap with monitoring indicator 5.1.1, that indicator was re-defined, as shown above. Results of monitoring are shown in the IPTT only for FY06, when 80% of a sample of beneficiaries reported having had at least one meal in a day, against a target of 75%. According to Annual Progress Reports in FY2008 67% of beneficiaries interviewed reported having had at least one meal a day; in FY2007 this figure was 76%; in FY2006 80% reported at least one meal a day and in FY2005 79% reported have had at least one meal.

It should be noted that this is an indicator of coverage, not of program impacts, as all beneficiaries who are receiving and consuming the daily ration provided by CRS -1,024 Kcal for well beneficiaries and those with TB, and 1,405 Kcal for those with HIV/AIDS - would be having at least one meal daily. It is not clear how, how often or where the sampled beneficiaries are selected, nor why less than 100% report having at least one meal a day while participating in the program. Given the difficulty of eliciting information about adequacy of alternative sources of food from relief beneficiaries this indicator could not be relied on to demonstrate impacts beyond the period of participation in the program. The MTE proposed revisions to this indicator and others; the M&E Department reported using a randomized annual sampling methodology for institutions and beneficiaries.

Further, as noted in the MTE, distribution patterns vary according to the category of beneficiary, with many receiving rations for a fixed period shorter than one year [4 months for TB patients, for example; typically 3 months for malnourished children < 5].

Recommendations

- ▶ In any future program, a range of impact indicators could be identified, according to beneficiary category, and used to measure program impacts. For management of child malnutrition, HIV/AIDS and TB, there are established 'graduation' criteria based on health and nutritional status. Effective administration of a food aid program contributes to the achievement of improved health status which could be used as an impact indicator.

- ▶ All partners undertaking the same activities should utilize some common criteria by which their performance can be compared. For example, all HIV/AIDS partners must undertake an agreed common activity so that their respective outputs can be compared. This must be applied to the CRENS as well.

- ▶ Programs dealing with well but temporarily vulnerable populations such as young women escaping forced marriage or FGM should have well defined strategies for self sufficiency from commodity assistance with fixed terms of participation as conditions of entry into the program.

It was reported that revision in indicators is being considered for use in the next MYAP.

C. PROGRAM QUALITY

Targeting

The program works with 90 partner agencies, caring for four vulnerable groups: people living with HIV/AIDS (PLWHIV) or TB; children in nutritional rehabilitation centers (CREN); vulnerable community members, including orphans, the handicapped and young women in 'Foyers des Jeunes Filles (FJF)'; and community centers and programs under the umbrella of OCADES. Among the total of 90 partners, some have as few as 20 beneficiaries. This has resulted in duplication of efforts to reach the various vulnerable people in the same communities with the attendant problem of monitoring the numerous centers effectively.

The MTE recommended the development of targeting criteria by CRS/BF for General Relief, taking into account vulnerability, partner capacities and locations. This resulted in an increase in the proportion of beneficiaries among PLWHIV. Beneficiary selection criteria are now included in contracts with the diocesan OCADES Caritas.

Partner agencies were also requested to develop lists of criteria for selection of beneficiaries and to maintain rosters. This was reported to be in process, following a meeting between CRS and Caritas partners in October 2007.

Findings

The General Relief Program followed the mid-term review recommendation to prepare the list of criteria to be used by partners in the selection of the beneficiaries. This was evident in all the centers visited.

In the selection of partners, CRS/BF planned to use resource availability and management practices, among others, as criteria but there was no strong, recorded evidence of the application of these criteria in the selection process for the partners; in other words, most of the partners did not exhibit acquisition of these criteria.

At a school having an endogenous canteen the parents and teachers were running the food program according to what they had learnt earlier from the CRS school feeding program with proper record keeping. The parents took a collective decision on the time of utilizing the small quantity food collected for the year. This process can be followed up and replicated across school feeding centers when the quantity of commodities available is sufficient for less than the school year.

Some partners who do not have institutionalized beneficiaries are carrying out wet feeding. Whether the approved ration is cooked or reaches each of the beneficiaries on a daily basis is left to imagination. (The idea of a beneficiary going alone to consume a prepared meal in town without the other members of his/her family and then going back to leave with the family members is revolting).

Out of the 90 partners that CRS/BF works with there are as many as 54 of them who have fewer than 100 beneficiaries each. A classification of the partners according to the number of beneficiaries per partner is shown below:

Table SO5.4. Classification of partners by beneficiary numbers

Beneficiary Range	No. of Partners	Total No. of Beneficiaries
1-99	54	2760
100-199	11	1170
200-299	7	1560
300-399	1	350
400 and above	17	9012
TOTAL	90	14852

Source: GREP

Recommendations:

► CRS/BF must reduce the number of its partners in the next DAP by about 50% to allow for enhanced monitoring and supervision. In this regard, CRS/BF must dialogue with the hierarchy of the Church at the national level to consider the strengthening of the OCADES organization such that each diocesan OCADES is given more responsibility for the vulnerable in its area of operation. The OCADES should be given responsibility for the small Catholic partners. This recommendation refers in particular to partners with fewer than 100 beneficiaries.

Coverage:

Monitoring data on activities indicate that coverage has met or exceeded targets set in the proposal and DIP.

Appropriateness:

Nutritional assistance in the form of relief distributions and wet feeding is appropriate for categories of beneficiaries including PLWHIV and those with TB, malnourished children and the destitute. It was not possible within the scope of this evaluation to assess the appropriateness of general relief in comparison with other interventions for other vulnerable groups.

Collaboration and cooperation:

CRS manages a range of collaborative relationships with partner agencies distributing relief commodities. The most important in the context of general relief is with OCADES, the development wing of the Catholic Church in Burkina Faso.

Recommendation:

- ▶ CRS/BF will need to work closely with OCADES in training and management support, as needed, to ensure that it is able to take on the additional responsibility of supervising the smaller partners as proposed above.

Sustainability and exit strategies:

Commodity distribution programs depend on external donor resources and as such are not sustainable. With rising commodity prices and competing priorities for donors, these resources have been declining. CRS has made limited progress on supporting general relief partners in developing strategies for achieving a greater degree of sustainability.

At a school having an endogenous canteen the parents and teachers were running the food program according to what they had learnt earlier from the CRS school feeding program with proper record keeping. The parents took a collective decision on the time of utilizing the small quantity food collected for the year. This process can be followed up and replicated across school feeding centers when the quantity of commodities available is sufficient for less than the school year.

Recommendations:

- ▶ The management of CRS/BF should consider assisting some of the partners/beneficiaries like the FJFs to engage in income-generating activities as a means of achieving self-dependency.
- ▶ In any future DAP submission, provision should be made to keep partners and beneficiaries, if possible, informed and sensitized about the eventual cessation of Title commodities as a resource.
- ▶ The end-use checking activity should be concentrated in the CMO for the whole of the CRS/BF program. This will enable the GREP unit to concentrate its efforts on programmatic issues.

Program Impact:

There was no information available on impacts beyond beneficiary populations or on adequacy of coverage among all possible eligible beneficiaries.

Program Integration:

The Commodities Management Office covers distribution and verification of commodities used in the Education program, so activities relating to commodities are fully integrated between these sectors. Site visits and spot checking of commodities used at schools and bisongos are carried out by the CMO, which also receives requisitions from the Education sector and ensures deliveries to schools. This arrangement has worked smoothly.

Gender effectiveness:

There was no gender discrimination in the selection of beneficiaries with the obvious exceptions of the FJFs for girls and the agriculture center of Goundi, which is a Catholic institution for boys only.

D. RECOMMENDATIONS FOR FUTURE PROGRAMMING:

- ▶ All aspects of commodity management and verification should be covered by the Commodities Management Office (CMO) with, if needed, an expanded staff of controllers.
- ▶ The post of Food Programmer should be created to deal with programmatic aspects of commodity usage both in Education and General Relief. These would include:
 - Work with partners on all programming issues: targeting, measurement of outputs and impacts, coverage, cost effectiveness, programming for special populations such as OVC and PLWHIV

- Capacity building/ training with partners on developmental uses of commodity aid
- Work with partners on phasing out and planning for increased self sufficiency
- Linkages, where feasible, of commodity programming with other sectors, including Agriculture and Micro Finance.

Global Recommendations for Future Programming:

These recommendations are based on findings identified across several sectors. They relate to future programming.

Community Based Development

1. CRS would benefit from strengthened competence in facilitation of community capacity building. This can be done by equipping staff with appropriate skills. The assessment of community capacity should be built into the monitoring and evaluation of program performance. In future programming, additional results areas measuring community capacity would be included, in addition to those assessing quantitative achievements. Specific skill areas which could be strengthened at community level include:
 - a. Planning and administration [for small scale irrigation; farmer marketing groups; school canteen management groups; general relief partners]
 - b. Technical skills in agriculture: [for farmer-to-farmer extension; school gardens]
 - c. Adult literacy: [for all activities]

These skills and the related activities would promote a 'bottom up' approach to program implementation focused on active listening, community facilitation and encouragement of local initiatives.

Networking and accessing technical assistance:

2. CRS has developed several productive and harmonious partnerships with other agencies in all sectors. The benefits of these relationships would be extended through the active incorporation of more extensive technical networking by CRS/BF, including accessing of TA both within and outside of CRS. Some areas of potential benefit include:
 - a. Use of CRS's expertise in agricultural development: utilization of regional technical advisors; cross visits with programs implementing similar interventions [for example with the Malawi Title II consortium for small scale irrigation]
 - b. Use of CRS's expertise in complementary savings and credit methodologies, notably to examine the feasibility of promoting SILCs in areas where micro credit is not available [as in the CRS Senegal program]
 - c. Contact with non-partner NGOs in Burkina Faso and local authorities who have shown success in activities closely related to CRS's programs, particularly phaseout of school canteens [for example, AXIOS, Provincial coordinating bodies]

CRS Burkina Faso should encourage and reward the use of creative networking to gain new ideas and strengthen programs, both within the CRS community and in relation to other organizations doing similar work.

Monitoring and Evaluation

3. Program monitoring and evaluation activities would be strengthened through re-orientation:
 - a. Toward the creation of active feedback loops to program management, so that M&E data provides a major basis for program decision-making. This would require the incorporation of existing narrative reports by partners and the extension of internal reporting into quarterly narrative reports, with timely feedback to sector managers. M&E activities would include critical review of these progress reports, with the flagging for program managers of problem areas in implementation, as well as failures to meet targets.
 - b. Toward the expansion of activities to include more qualitative and special studies, particularly where the feasibility of new programming ideas is being considered.

These studies can focus on documenting conditions for success in implementation [study of Lélègse in small scale irrigation; study of successful endogenous school canteens] or program challenges.

Integrated area based programming:

4. Further efforts should be made to identify areas of programming where an integrated approach, implementing activities in agriculture, education and possibly health among a smaller, geographically defined population group who have been targeted as highly food insecure, will be feasible. This area or population based approach should increase the impacts of these interventions and make it possible to measure long-term impacts. It is recommended that impact be measured on a small number of indicators, selected in line with USAID/FFP guidance on standard indicator measurement.

Micro finance activities will continue to be targeted at a client population selected on the basis of need and appropriateness, who may not fit this model. This takes into account the logistical and cost constraints of MF program implementation in the field.