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APPENDIX D
A.I.D. EVALUATION SUMMARY - PART I

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS!
2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE.

IDENTIFICATION DATA

A. Reporting A.I.D. Unit:
Mission or AID/W Office USAID/GHANA
(ES# _____)

B. Was Evaluation Scheduled In Current FY Annual Evaluation Plan?
Yes ☐ Slipped ☐ Ad Hoc ☐
Evaluation Plan Submission Date: FY 9

C. Evaluation Timing
Interim ☒ Final ☐ Ex Post ☐ Other ☐

D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
	P. IL. 480 Title II Program	1993	1997	N/A	Approx. $21.0M

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director

Action(s) Required	Name of Officer Responsible for Action	Date Action To be Completed
1. Ensure that Cooperating Sponsors have instituted management changes to effect greater efficiency.	E. Atieku	1/95
2. Ensure DPPs address projects that have direct relevance to Mission's strategic objectives.	E. Atieku J. Lee	3/95
3. Ensure that projects are area specific and not widely spread in too many areas of the country	E. Atieku	10/95
4. Continue to monitor the impact of project activities to ensure wide beneficiary spread	E. Atieku	Continuous
5. Ensure that future DPPs clearly indicate how complete monetization costs will be recovered and how cost-effective projects will be designed.	E. Atieku	10/95
6. Ensure that monitoring and evaluation criteria are established to measure project and beneficiary impact.	E. Atieku	6/95
7. Assist ADRA and CRS in their efforts to strengthen program monitoring and evaluation.	E. Atieku B. Dickerson	6/95

(Attach extra sheet if necessary)

APPROVALS

F. Date Of Mission Or AID/W Office Review Of Evaluation: (Month) (Day) (Year)

G. Approvals of Evaluation Summary And Action Decisions:

	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director
Name (Typed)	Denise Rollins		Stephen Haykin	Barbara P. Sandoval
Signature	[signature]		[signature]	[signature]
Date	10/25/95		10/25/95	

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ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

USAID/Ghana has had a P.L. 480 Title II Program since 1958. Currently the Title II Program amounts to approximately $7 million annually. The three cooperating sponsors are; (1) Adventist Development Relief Agency (ADRA), (2) Catholic Relief Services (CRS) and (3) Technoserve Inc. (TNS). The program monetizes bulk wheat. Some amounts of other Title II commodities had been provided for food for work, school feeding, mother and child feeding and general relief activities by CRS and ADRA.

ADRA began operations during the drought of 1984 to distribute emergency food supplies. In 1985 ADRA began a wide range of projects throughout the country. Its activities include: agroforestry, food storage, construction of schools, KVIPs and wells. It uses the local currencies generated from the monetized wheat for program administration and for the purchase inputs for its development activities.

CRS began operations in Ghana in 1958. Initially, CRS programs were widely distributed in all ten regions of the country. CRS is now in the process of focussing its activities to 3 regions in the North. CRS plans to move its headquarters from Accra to Tamale in the Northern Region. Its activities include food for work, school feeding, mother and child feeding and general relief activities.

TNS has operated in Ghana since the early 1970s, but did not receive funds from our Title II Program until 1992. TNS activities are focussed in three major areas: non-traditional exports, oil palm processing and marketing, and strengthening farm service cooperatives. It receives 100% monetization from Title II resources. It also receives support from a variety of sources including IFAD and the World Bank.

The Major Findings and Conclusions are:

- ADRA's program had suffered from management weaknesses but these were expected to change for the better with a recent change in senior management.
- ADRA needs to upgrade its monitoring and evaluation skills.
- Sustainability of ADRA's agricultural projects appeared to be excellent.
- CRS has focussed its activities by phasing out its MCH and school feeding programs in all but three regions.
- There have been significant increases in female attendance in schools under the CRS school feeding program.
- TNS projects receiving assistance had realized reduction in post harvest losses.
- Incomes of beneficiaries had increased significantly under the TNS program.

The Evaluators noted the following lessons:

- PVOs need strong management capabilities both in the field and at the headquarters.
- PVO programs should be focussed to assure measurable impacts.
- It is important to develop clear and measurable indicators.

COSTS

I. Evaluation Costs

1. Evaluation Team

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. $)	Source of Funds
POLLIMORE ASSOCIATES				
- Dr. Emily C. Moore	Food Aid Specialist	641-0000-0-00-4248	16,995.00	Project Dev. & Support Funds
- Dr. John Azu	PVO Specialist			

2. Mission/Office Professional Staff Person-Days (Estimate) _____

3. Borrower/Grantee Professional Staff Person-Days (Estimate) _____

A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)
Address the following items:
- Purpose of evaluation and methodology used
- Purpose of activity(ies) evaluated
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office:	Date This Summary Prepared:	Title And Date Of Full Evaluation Report:
USAID/GHANA	10/25/95	"IMPACT EVALAUTION, P.L. 480 TITLE II GHANA", JULY 1, 1994

PURPOSE OF THE ACTIVITIES EVALUATED

The overall purpose of the activities evaluated was the promotion of food security. This is being done through the promotion of food production under agro-forestry; the strengthening of viable rural agricultural enterprises in food processing, storage and marketing; and support for maternal and child health activities through nutrition/health education and food supplementation. Support is also given to primary school education particularly for the benefit of girls.

PURPOSE OF THE EVALUATION

USAID/Accra currently supports three Title II regular PVO programs, which monetize approximately 30,000mt of wheat a year. In addition, CRS and ADRA receive an additional amount of US commodities for developmental.and direct feeding programs. The program can be grouped into two categories; 1) Programs that began largely in response to humanitarian and relief needs and have evolved into development programs (i.e. ADRA and CRS); and 2) Programs which were originally solely supported with U.S. dollars but which later accessed Title II monetization resources to provide local currency funds for agricultural processing, and marketing activities (TNS).

The purpose of the evaluation was to review the three Multi-Year Operational Plans (MYOPs) submitted by the PVOs to determine to what extent (1) ongoing and proposed programs supported the Missions strategic objectives, (2) To assess outputs achieved and their cost-effectiveness, (3) the impact of these programs on the communities which were receiving support and (4) provide some recommendations on which program activities should be (a) continued, (b) streamlined, or (c) phased out.

METHODOLOGY

A team of two, one with food aid and the other with PVO program experience, worked for a period of 6 person weeks. Each member of the team consulted and reviewed documents related to the evaluation and held meetings and interviews with personnel at the PVO headquarters and USAID/Ghana. The team conducted field trips to the Upper East, Northern and Brong Ahafo regions where most of the PVO programs are being implemented. The PVO Specialist focussed on commodity management issues, ADRA's CCFI and agro-forestry projects, CRS' grain storage and TechnoServe's grain inventory program. The Food Aid Specialist focussed on ADRA's KVIPs, school construction/rehabilitation and wells, and its completed dry-season gardening program. This specialist also reviewed CRS' school feeding (including gender equity operations research), school rehabilitation, village health workers (emphasis on environmental sanitation), and primary health care programs.

MAJOR FINDINGS AND CONCLUSIONS

Adventist Development Relief Agency (ADRA)

ADRA had made numerous positive changes in recent years including improvements in management , planning and program focus. ADRA's management weaknesses were expected to change for the better with a recent change in senior management. Although considerable progress had been made, immediate assistance in upgrading monitoring and evaluation capabilities was required. ADRA's programs were being implemented in 10 regions but plans were initiated to reduce the number and types of projects. ADRA is attempting cluster programming which will combine interventions and activities.

Sustainability of agricultural projects from the past 3 - 7 years appeared to be excellent. Ongoing projects were being implemented on reasonable timetables and were expected to exceed targets. An example of a measurable achievement was the significant increase in enrollments and attendance in assisted schools. Indicators for ongoing projects showed that ADRA was going to exceed targets. Dry season gardening which ADRA completed in 1987 was being sustained. Many of the project outputs and impacts however, could not be evaluated.

ADRA interventions in agroforestry through the Community Collaborative Forestry Initiative (CCFI) program supported the Mission's environmental protection target of opportunity. Other programs supported the Mission's food security goals (availability of sufficient food by means of their agroforestry projects; access to available food through increased income; and appropriate consumption/utilization of food through better health status and improved sanitation and potable water resulting from KVIP latrines and well programs). The Mission's education objectives were supported through ADRA's construction of schools. Plans to support small scale Cashew and Mango production demonstrated ADRA's commitment to support the Mission's non-traditional export strategic objective.

Catholic Relief Services (CRS)

CRS had made changes notably by phasing out its MCH and school feeding activities in all but three regions and by shifting from nationwide programs to streamlined targeted programs. CRS is also attempting cluster programming. Reduction in scope have resulted in a concentration of staff expertise and energies that bodes well for the future. CRS was undergoing a major geographical transfer of its staff to Tamale to be close to their projects in the Northern sector. Comparatively, there were significant increases in female attendance in schools where school lunches were provided when compared to schools where no lunch program was being implemented. Female attendance in program areas had increased 7.5%. Two of the four grain bank projects in the Volta region were working very well. The grain project in Upper East was very successful. For the first time, 100 participating families had enough to eat and produced a surplus which were able to sell. Post harvest losses had been reduced to almost zero as a result of the introduction of proper treatment and storage practices.

CRS had completed a baseline survey in primary health care in some target communities (focus on environmental sanitation). Village Health workers had been trained in Primary Health Care practices. Soakaway pits had also been constructed outside most of the houses in the communities.

CRS supports Mission's objectives through health interventions (training village health workers, improving environmental sanitation), consumption aspects of food security (grain storage addresses food availability) and supports the Mission's educational and gender equity objectives through school rehabilitation, school lunches and a special program targeted to increase girls' enrollment and attendance.

Technoserve Inc. (TNS)

Projects receiving assistance from TNS had experienced a reduction in post harvest losses. There was an increase in incomes for members through the TNS seasonal inventory credit program. Spillover effects in communities receiving TNS assistance included road repairs, increased sales in local stores and local construction. The inventory credit program anticipated a total of 246mt for storage by 6 cooperatives but only 176 tons were realized in 1993. TNS devote a substantial proportion of its budget to monitoring, evaluation and research as well as staff training.

TNS supports Mission objectives that are focussed on increasing non-traditional exports. TNS efforts also supported the Mission's food security objectives by supporting projects that increased incomes and increased food production.

RECOMMENDATIONS

ADRA should diversify its donor base, and reduce geographical focus from ten to five regions. Headquarters staff should be reduced and a coherent staff development plan introduced. They should seek immediate technical assistance to upgrade monitoring and evaluation skills. Periodic visits should be made to completed projects to ascertain sustainability and long term impacts. ADRA should consider adopting some of the recommendations in CRS' paper on Management by objectives.

CRS should seek technical assistance in monitoring and evaluation skills and report development. It was highly recommended that CRS phase out of the Ashanti Region. It was also recommended that CRS phase out of its urban

schools lunch program and consider restructuring the entire school lunch program to target more Muslims. CRS should eliminate its take-home ration in grades P1 through P3 (where girls' enrollment is already equivalent to that of boys), and extend its program designed to encourage wider female attendance in grades P4-P6.

TECHNOSERVE should focus on a few objectives and firm timeframes for achievement in its MYOP. They should also reduce geographical focus. TNS should devote a more substantial proportion of its budget to direct field operations. TNS should design a means of attributing credit to individual donor inputs as effects and impacts are revealed. Another crop should be introduced to broaden product base and farmers should be alerted on possible risk of inventory credit. To avoid discouragement of farmers due to possible bank disbursement delays, TNS could provide financing from the CEDI Trust Fund.

LESSONS LEARNED.

1 The activities undertaken by PVOs that support Mission strategic objectives complement micro-enterprise and community based small scale development efforts and enhance overall Mission objectives in Ghana.

2. PVOs need strong management capabilities both in the field and at their headquarters to manage programs.

3. PVOs programs should not be too broad in scope or geographical focus. Project interventions by PVOs should be focussed to ensure measurable project impacts.

4. Clear and measurable indicators should be developed for PVO interventions so that impact can be tracked.

ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier; attach studies, surveys, etc., from "on-going" evaluation, if relevant to the evaluation report.)

Impact Evaluation of P. L. 480 Title II Program in Ghana.

COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

The Scope of Work for this evaluation was structured to ascertain if PVO Programs funded under the Mission's P.L. 480 Title II Program supported the Mission's Strategic Objectives. The Scope of Work also called for examining programs to determine how successful the activities were at having sustainable impact at the community level and if there was cause to reduce, streamline or phase out activities.

Unfortunately, the leader of the evaluation team was reluctant to recommend those activities that should be phased-out. The team's objectivity in this regard appeared to have been compromised because of the team leader's obvious preference for two of the PVOs being evaluated. This lack of objectivity caused the Mission to question the reliability of the analysis provided. The Mission also felt that because of this lack of objectivity of the team leader, the team was unable to fully measure the impact of the TNS projects which did not follow the classical Title II format.

The evaluation raised concerns about PVO capacity to manage field and home office operations that the Mission was already aware of and uncovered no new information on which a set of conclusions could be drawn to assist in streamlining or phasing-out PVO activities. Issues of cost-effectiveness were not well documented and as such the Mission was still unable to target ineffective programs on a cost-effectiveness basis.

In short, even though the Evaluation was useful as a narrative account of projects being implemented and provided some quantitative data on project activities, it was not very useful as a document that would enable the Mission to make policy decisions or the kinds of hard choices that were required in a financial environment that guarantees fewer resources and the need for clearer measurable indications of impact in the future.

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IMPACT EVALUATION

P.L. 480 Title II

Ghana

Catholic Relief Services
Adventist Development and Relief Agency
TechnoServe

June 13 - July 1, 1994

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ACRONYMS

ADB	Agricultural Development Bank
ADRA	Adventist Development and Relief Agency
ADB	Agricultural Development Bank
AFR	Africa Region (of A.I.D.)
CCFI	Collaborative Community Forestry Initiative
CRS	Catholic Relief Services
DHMT	District Health Medical Team
FD	Forestry Department
FFP	Food for Peace
FFPO	Food for Peace Officer
FFW	Food for Work
FPO	Field Project Officer
FY	Fiscal Year
GES	Ghana Education Service (of the MOE)
GOG	Government of Ghana
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IG	Income-Generating
JSS	Junior Secondary School
KVIP	Kumasi Ventilated Improved Pit (latrine)
MBO	Management by Objectives
MCH	Maternal and Child Health
MOE	Ministry of Education
MOFA	Ministry of Food and Agriculture
MOH	Ministry of Health
MT	Metric Ton
MYOP	Multi-Year Operational Plan
NGO	Non-Governmental Organization
ORT	Oral Rehydration Therapy
PCV	Peace Corps Volunteer
PHC	Primary Health Care
PVO	Private Voluntary Organization
SEAFOR	SouthEast Asia Forum Countries
SLP	School Lunch Program
TBA	Traditional Birth Attendant
THR	Take Home Ration
TNS	TechnoServe
UNDP	United Nations Development Program
USAID	United States Agency for International Development
USCC	United States Catholic Conference
VHW	Village Health Worker
WID	Women in Development
WVRD	World Vision Relief and Development

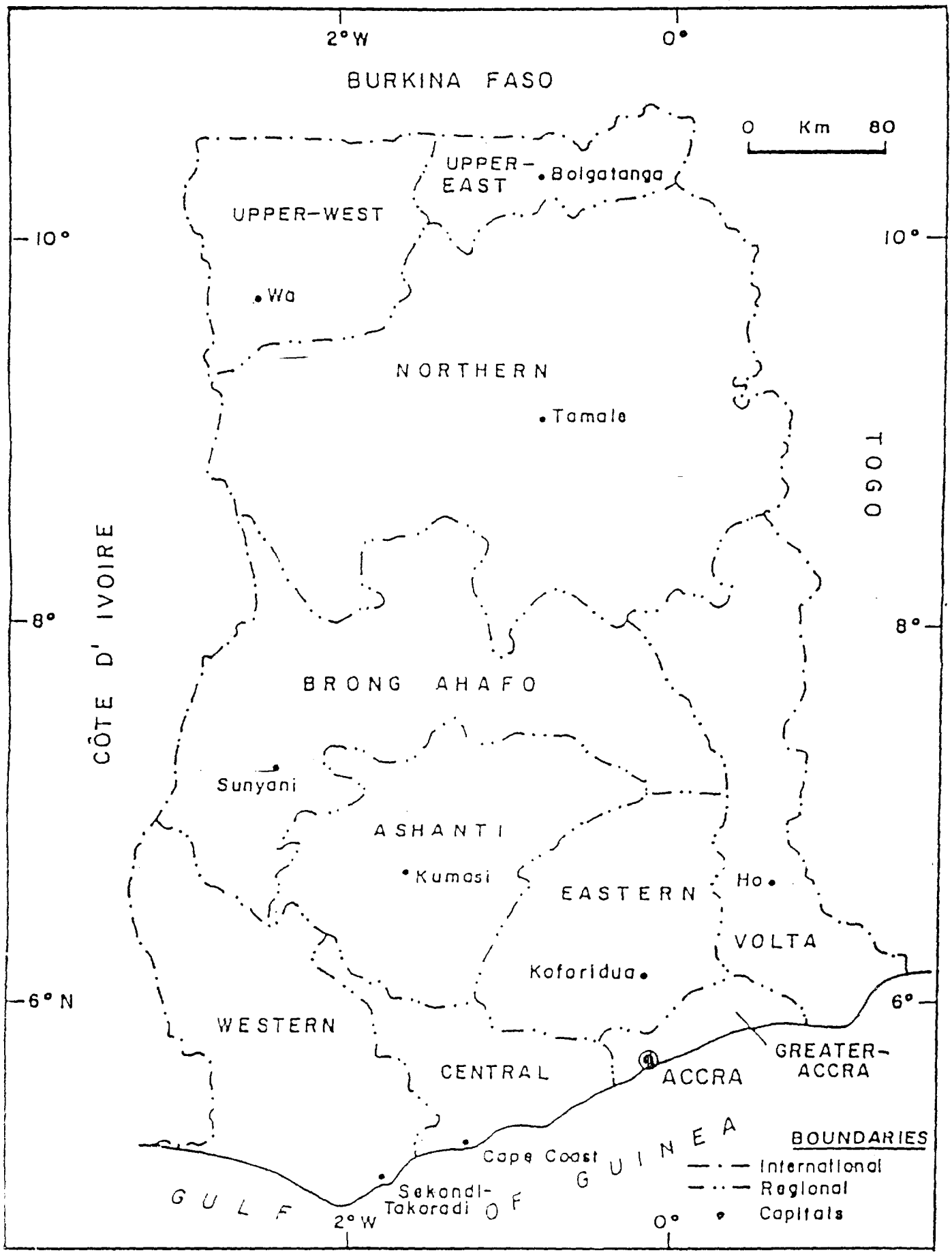
ACKNOWLEDGEMENTS

The evaluation team would like to thank the following:

At USAID: Jeffrey Lee, Deputy Chief, Office of Trade, Agriculture, and Private Sector; Emmanuel Atieku, Food for Peace Officer; and Janice Orlansky, Acting Chief, Office of Education and Human Resource Development -- all of them extremely busy, yet each of them immensely supportive and helpful to the team.

The many individuals at headquarters and in the field of ADRA, CRS, and TNS are listed in Annex C, Persons Interviewed. The TNS Director was on leave; we met briefly with the CRS Country Representative who was about to go on leave; and the ADRA Director was working his last day on the job when we met with him.

Finally, our superb driver, Sammy Brown from Arrow rental cars, who took care about his car, his speed, his passengers, and the goats and cattle along our way.



The Administrative Regions of Ghana

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EXECUTIVE SUMMARY

A three-week, two-person team assessed programs and projects of three PVOs (ADRA, CRS, TNS) using Title II resources. More time was devoted to ADRA and least to TNS.

ADRA and CRS have made numerous positive changes in recent years, usually in response to recommendations of evaluators. The improvement is visible in plans and programs. The contrast between ADRA's highly qualified, development-sensitive field staff and headquarters capabilities is marked. The apparent paradox of ADRA's management weaknesses and programmatic strengths is striking. Both PVOs have loyal, competent, experienced staff; both could benefit from more systematic training. Although both have made considerable progress (and have demonstrated willingness -- eagerness -- to comply with reporting requirements), both need immediate assistance in upgrading their monitoring and evaluation capabilities.

CRS has made drastic changes, most notably by phasing out all but three regions and by shifting from nationwide MCH and school feeding programs to much-reduced, targeted programs.

ADRA remains in all ten regions (and should reduce that to no more than 5), but has drastically curtailed the number and types of projects.

Both are attempting some version of cluster programming: combined interventions in close proximity to each other.

Phased-out projects were not evaluated. Older, long-standing projects have either been evaluated before or cannot be seriously evaluated because of lack of baseline and/or sufficient follow-up data. Sustainability of ADRA's agricultural projects from 3-7 years back appears to be excellent, but more systematic revisits to completed project sites should be done to confirm that.

Both agencies have only recently begun new types of projects, which are too new to have had time to produce effects, let alone impacts.

Both agencies have recently instituted universal (every project) baseline studies and have created new monitoring forms for staff, counterparts, or community leaders to complete for PVO analysis and inclusion in reports to the donor.

Impressions are that virtually all projects currently being undertaken by both PVOs are on track (in terms of timetables and benchmarks), and that they show initial signs of meeting or exceeding targets. It will take time before outputs, effects, and impacts can be documented.

There is no reason to conclude that any one type of projects now being undertaken is any more or less successful than the others. Neither PVO actually "builds" anything; they provide inputs, animate communities, and act as liaison with appropriate technical expertise. Both PVOs appear to have sufficient technical knowledge on staff to do competently what they are supposed to do (including the skill to know where and how to tap into more specialized expertise than they themselves have on staff). The recent reductions in scope for both PVOs have resulted in a concentration of staff expertise and energies that bodes well for the future.

Both PVOs are at an important crossroads: ADRA is undergoing a critical (and highly promising) change in leadership. CRS will be making a major geographic move, transferring most of its staff to Tamale to be closer to their projects in the Northern Sector.

Achievements that are already measurable (either by the PVOs themselves or by the evaluation team) include the following:

1. ADRA school construction led to dramatic increases in enrollment in two of three schools visited: enrollment following construction rose from 57 to 115 and from 38 to 83; attendance rose from 60% to 79.5% and from 69.8% to 83.7%. ADRA should visit all 21 schools built last fiscal year for more information.

2. ADRA planned to construct 21 schools in 1993; 10 were completed by the end of the fiscal year and the remainder were completed by December, three months later.

3. A comparison of 5 CRS lunch vs. 5 no-lunch schools showed the following consistent differences in increases in enrollment over a two-year period:

TOTAL (Boys and Girls): Percent Increase (Decrease) in Enrollment Over a Two-Year Period

Lunch	No Lunch
46.4	19.4
37.2	(7.3 decrease)
22.9	23.5
50.0	20.0
50.0	5.0

GIRLS ONLY

32.0	2.6
44.5	(12.2 decrease)
[redacted]	9.5

80.2	46.2
36.1	31.2

4. Attrition, especially of girls, appears to be greatest in no-lunch schools, intermediate in CRS lunch-only schools, and least in CRS lunch plus take-home-ration schools. The three schools for which a simple comparison was possible show a P1 cohort of 25 dropped to only 4 pupils five years later in P6 in a no-lunch school; in the lunch-only school, one cohort dropped from 43 to 26 over a three-year span, while another cohort remained steady at 35-36, and a third one actually rose from 63 to 73 in the same time period. The lunch plus take-home ration school had one cohort that rose slightly from 30 to 32 over a four-year span; another cohort remained steady at 28 over five years; two other cohorts increased from 23 to 27 over five years, and 15 to 19 over 4 years. More examples are needed to confirm this impression.

5. CRS's operations research on the effectiveness of a take-home ration for girls who attain 85% attendance in any month is nearing completion. An interim report for the school year 1993-94 (not yet ended) -- year three of the study after the baseline year -- confirm the findings from the prior year; more than 10% more girls in "treatment" schools than in "control" schools attain the 85% attendance level; the difference is more pronounced if only rural schools are considered.

6. ADRA wells are being built according to appropriate designs (i.e., not sited near latrines, etc.). In 1992, 67 were completed and in use (60 had been planned). In 1993, 20 were completed (and 20 planned).

7. ADRA KVIPs were targeted to be 40 in 1992; 36 were completed and in use by the end of the year. In 1993, only 5 of 10 planned were completed and in use, with the remainder scheduled for completion three months later by December.

8. CRS has completed 5 of 6 of the PHC structures planned, and the remaining (of a total of 9) are scheduled for construction in FY95.

9. Survival rates in ADRA-supported agroforestry projects during the second quarter of FY94 are: teak 72%, 86%, 65%, and 73% (by region); cashew 45%, 88%, 65%, and 87%; cassia 80%, 93%, 81%, and 81%; leucemia 73%, 85%, 50%, and 63%; neem 80%, 83%, 34%, 81%; mahogany 86%; akee apple 83%; katappa 58%; oranges 75%; amogasis 75%.

10. The one project the team visited that had long-ago ceased to receive ADRA support (dry season gardening, completed in 1987) was still doing well; hearsay says many others are too, but ADRA should make a systematic effort to revisit them and ascertain what proportion are still functioning.

11. CRS's grain banking projects in Volta were pilot projects; two worked very well, two others less so. Lessons learned have been applied to subsequent grain banks. The one visited by the team in Upper East had completed one full cycle, which was judged by enthusiastic participants as more than successful. For the first time, the 100 participating families were no longer hungry and could plant with more energy this year; there was still some grain left in storage, enough to carry the participants through the end of the lean season, with some expected to be left over for sale. Post-harvest losses have been cut from an indeterminate level (but reportedly "very high") to zero due to proper treatment and storage. Food remained in the community for the first time instead of being sold at distress prices at harvest time and removed from the area. Participants anticipate gradually building up the stock so that not only the annual lean season will be covered but there will also be a buffer stock in the event of one year of poor rains.

12. CRS's baseline survey in primary health care target communities has been completed, and village health workers (focussing on environmental sanitation) trained; the team visited one of these communities where we observed well-constructed soakaway pits outside most houses, and a nearly completed PHC structure where health services (including family planning, prenatal care, and TBA deliveries) can be provided under shelter and with a modicum of privacy.

13. The team visited only two TNS-assisted cooperatives in the grain inventory credit program. Members' incomes have increased, post-harvest losses have declined, they have money (soon after harvesting) when they need it (the temporary credit is better than having to sell low immediately post-harvest). Spillover effects in their communities include communal road repair, increased sales in local stores (batteries, radios, canned meat and fish etc.), local construction (members building their own houses), etc. Targeted 1993 inventory tonnage was a total of 246 MT (6 coops combined) but only 176 tons were realized.

- -

Staffing: ADRA appears to have an imbalance in staffing with regard to field and headquarters. The latter are possibly too numerous and certainly less well-trained in development than the former. Most staff in CRS will begin to transfer to Tamale, the move to be completed by June 1995.

While TNS attention to staff development is extraordinarily high, the other two PVOs have not devoted nearly enough resources (or attention) to upgrading, professionalizing their staff and providing them with career advancement.

TNS seems to devote a substantial proportion of its budget to

monitoring, evaluation, and research, as well as staff training, while the other two PVOs devote far lower proportions. Both ADRA and CRS have made commendable strides in improving their planning capacity and plans, as well as their monitoring and evaluation skills and reports, but they both need technical assistance in upgrading the latter.

- -

Support to mission strategic objectives and priorities: we found that ADRA interventions support the target of opportunity, environmental protection, with its CCFI and agroforestry; other programs support food security (**availability** of sufficient food by means of their agroforestry projects; **access** to available food through increased income; and appropriate **consumption/utilization** of food through better health status resulting from KVIP latrines and wells). The mission's education objectives are supported through ADRA's school construction. Cashew and mango production are an initial venture into non-traditional export crops.

CRS supports mission objectives in similar ways: health interventions (training village health workers, improving environmental sanitation) relate to the consumption aspect of food security; grain storage addresses food availability; school lunches and a special program targeted to increase girls' enrollment and attendance, as well as school rehabilitation, support the mission's educational objectives, including gender equity in access.

TNS supports mission objectives focussed on non-traditional exports, food security via increased incomes, and increased food production.

- -

The team has made a number of recommendations concerning the three PVOs. Chief among these are that ADRA reduce its Title II-supported activities from 10 to no more than 5 regions, reduce its headquarters staff, replace and/or intensively train the remaining headquarters staff, design and introduce a coherent staff development plan, and accept immediate technical assistance to upgrade their M&E skills (already greatly improved over past performance, but improvable). Without adding either numbers or new types of projects, ADRA should diversify its donor base.

CRS should also accept TA in monitoring and evaluation. Several of its already-planned changes are endorsed by the team, namely phase-out in Ashanti, phase-out of urban schools in the lunch program, and consideration of restructuring the entire school lunch program to target more Muslim schools, possibly eliminate the take-home ration in grades P1 through P3 (where girls' enrollment is already equivalent to that of boys), and to extend the successful program designed to encourage girls' attendance.

ADRA and CRS could benefit from a heightened level of communication and cross-fertilization, which should become more feasible with the new ADRA direction.

TNS has a very large number of objectives in its MYOP; greater focus is needed. TNS has activities in seven regions; greater geographic focus is also recommended. Consideration should be given to devoting a more substantial proportion of its budget to direct field operations.

I. BACKGROUND AND INTRODUCTION

A . Title II in Ghana

The Adventist Development and Relief Agency (ADRA) has been present in Ghana since the mid-1980's when it began relief work during the drought. (It was then known as SAWS, Seventh Day Adventist Welfare Service.) As ADRA moved increasingly into development activities, it undertook a wide variety of projects and is currently operating in all ten regions. The number and range of projects has been dramatically reduced in recent years; the current MYOP (1993-1995) includes five types of projects: the Collaborative Community Forestry Initiative (seedling nurseries), outplanting in woodlots and (now mainly) on agroforestry plots, materials assistance to communities for the construction of KVIP latrines, hand-dug wells, and primary schools.

Catholic Relief Services (CRS) also began with emergency response in Ghana in 1971. CRS, like ADRA, shifted to a major emphasis on development projects over the years, with a continuing component for humanitarian assistance to vulnerable groups. Recently CRS reduced the number of regions in which it operates to focus on the Northern sector (3 regions), with nearly-completed phase-out in other regions. The headquarters office will soon begin a phased move to Tamale, to be completed by September 1995. The long-standing MCH supplementary feeding program has been drastically restructured, now replaced with a primary health care program focussed almost exclusively on environmental sanitation. CRS scaled back its nationwide school feeding program to 100 schools at present, and is in the final year of an operations research program to test the efficacy of an a take-home ration (in addition to school lunch) in increasing girls' enrollment and attendance. With both private funding and Title II resources, CRS has completed four pilot grain storage banks and has begun to replicate the best elements of the models tested. Their current MYOP runs from 1994-1996.

TechnoServe (TNS) has also been operating in Ghana since 1971, working with rural groups to increase the value added in processing and marketing of agricultural commodities. It now operates in seven regions (mainly in the South), and has projects in non-traditional exports, oil palm processing and marketing, strengthening farm service cooperatives, and a program which uses cooperative grain inventory as collateral for tide-over loans from the African Development Bank. TNS receives support from a wider variety of sources than the other two, including IFAD, World Bank, etc. Their program relies on 100% monetization of Title II commodities, which was extended (slated to end in 1995) to the end of the imminent MYOP period (1995-1997).

B. "Fitting" into Host Country Development Plans, USAID Country Development Strategic Plans, and Title II Food Security Mandates

PVOs have several plans or sets of priorities into which they must fit their own. In the best of circumstances, these do not conflict.

In addition to their own world headquarters' strategic plans, focus areas, priorities, as well as what they perceive to be the priorities of the participants in projects supported by the PVO, they must also fit within (or at least not conflict with) the development plans (goals, objectives, and strategies) of the host country government, the strategic objectives of the USAID mission, and for those using Title II, their plans must clearly indicate how projects using Title II resources contribute to improvement in food security (availability, access, or consumption).

In the case of Ghana, while food security is not present on the mission's objectives tree, it is considered a priority. While the mission's health sector is heavily focussed on family planning, three other health indicators are included under one of the human resources objectives. Although the mission's agricultural activities are largely focussed on export promotion, activities related to increased production (including reducing post-harvest losses) of locally consumed foodstuffs falls easily under the food security umbrella if not the mission's objective tree. In short, it is not always entirely clear how PVOs should structure their plans and present their proposals in order to be certain that they are fitting into all the appropriate plans and priority lists.

The mission recently asked A.I.D./Washington assistance in designing a food aid strategy. The outcome was advice that the mission's strategic objectives were sufficient, and that there was no need for a separate food aid strategy. Shortly thereafter a cable from another A.I.D./W office directed the PVOs to ensure that their MYOPs conformed to the mission's food aid strategy. It is difficult to know how the PVOs should respond to such a directive.

C. In the Pipeline

At the time of this evaluation, the team learned that a number of related events and documents were already in the pipeline and in most cases imminent.

1. ADRA:

a. An internal impact evaluation was actually underway concurrently with the present one; it will be concluded July 15th (ours was concluded July 1).

b. A cost-benefit analysis of the monetization program is to be done sometime in FY94.

c. Baseline surveys in ten communities in each of the ten regions were to have been completed by the end of June, 1994.

d. Most importantly, the new director George Baiden was to begin at the beginning of July.

2. CRS:

a. The third year school lunch gender equity operations research report will be done when the school year ends in August (the Peace Corps Volunteer and CRS computer specialist were kind enough to generate an interim report for the evaluation team).

b. There has not yet been a Progress Report during the current (1994-96) MYOP period; the FY94 report is not due for several months. (The team had access to the FY93 Progress Report, relevant to the prior MYOP, FY91-93.)

c. CRS has phased-out the School Lunch Program in the Western Region and intends to collect enrollment and attendance data for the last year, and again two years later to ascertain the effects of the withdrawal.

d. In September 1994, the PCV will add 50 schools (to the Operations Research 50 treatment, and 50 control schools) with no Title II lunches whatsoever for comparison with the lunch and lunch plus take-home-ration schools.

II. DEFINITIONS, CHRONOLOGY, APPROACH

A. Definitions (Effects, Impact, Short-term, Long-term)

The evaluation team feel that the traditional distinction between short-term effects and long-term impact is a useful one, and we have used it in our report.

B. Weeks One, Two, Three

The first week of three was devoted to developing a work plan, acquiring and reviewing documents (see Annex E), interviewing key informants at USAID and the headquarters offices of the three PVOs (see Annex C), creating an outline for the report, constructing interview guides, and attending to logistics (rental of a vehicle, preparation of the itinerary -- see Annex B, arranging for field contacts and appointments, and making preliminary choices of sites to visit -- see Annex D).

The second week was devoted to field work, primarily in the Upper East Region, with some site visits also in the Northern and Brong Ahafo Regions. (No time was lost in going so far afield as we traveled up on a Sunday and back on a Sunday, ostensibly "rest" days.)

The third week was devoted to verification of impressions, analysis of some data collected in the field, report-writing, and USAID debriefing.

C. Overall Approach

The team adopted a "problem-oriented approach" to the evaluation, paying most attention to ADRA, and least attention to TechnoServe, given the mission's impression that the former had the most, the latter the least "problems" in a very general sense, with CRS falling in between.

The two-person team interviewed and observed together in the field when necessary, but when vehicle and translator availability permitted, the two split up. Azu focussed on ADRA's CCFI and agro-forestry projects; CRS's grain storage; and TechnoServe's grain inventory program. Moore focussed on ADRA's KVIPs, school construction/rehabilitation, and wells, plus completed dry-season gardening; CRS's school feeding (including gender equity operations research), school rehabilitation, village health workers (emphasis on environmental sanitation), and primary health care structures.

We were able to visit 2 CCFI sites, 3 agro-forestry sites, one woodlot, one completed dry-season gardening site,3 ADRA-assisted school construction sites, one CRS school rehabilitation site, 2 schools (one with, one without, school lunch program), 1 well, no KVIPs, 1 primary health care structure, one village health worker site, one grain storage site, and two grain inventory cooperatives (see Annexes C and D, Persons and Groups Interviewed and Project Sites Visited).

Except for the TNS grain inventory cooperatives in Brong Ahafo and one CCFI nursery, one woodlot and contiguous agroforestry plot in the Northern Region, all sites were in the Upper East Region. This remote region was chosen for two reasons:
(1) logistically, it was the only place we could go to where both ADRA and CRS sites were within reasonable distance of each other; and (more importantly) (2) because Upper East is generally considered the most difficult region in the country in which to work, we felt that if effects and/or impact could be found there, they could be expected to be all-the-more evident in less-difficult regions. Although we indulged shamelessly in the "tarmac bias" (Robert Chambers) -- visiting projects closer to urban centers and paved roads -- we feel this was easily compensated for by focussing almost exclusively on the most remote and "difficult" region. (We did, of course, go well off the "tarmac", over some barely passable roads, and on some occasions more than an hour from the regional capital, but never to THE most remote sites.)

III. OBSERVATIONS

A. ADRA

1. **Strengths, Indications of Responsiveness**

The evaluation team feels that blanket criticisms of ADRA for failure to respond to prior evaluation recommendations are unjustified. We also find that ADRA has succeeded in focussing a very wide range (29 different types in 1990) and number of projects (775 in 1990) to a much smaller range (5 types) and number (355 in 1991, 49 in FY93). At present they focus exclusively on just two health-related structures (wells and KVIPs), one education (schools), and two agriculture/forestry projects (CCFI and agroforestry).

ADRA has responded to requests to eliminate their entire MCH program, to focus geographically (we will note below our recommendation that the process be carried further -- from consolidating to contiguous districts within all regions to reducing the regions from ten to five), and to reduce staff (we will also note below our recommendation that this be continued).

The general relief category is planned for phase-out by FY95.

Having briefly experimented with small enterprise development (a department headed up by someone with only urban factory experience), ADRA has discontinued this activity.

Similarly, though now more aware of the need to integrate women in various aspects of all its programming, ADRA no longer feels it can afford the luxury of a full-time WID person on staff. (ADRA's progress in gender awareness over the last few years is commendable.)

Even before MYOP guidance required that PVOs using Title II commodities should include food security-enhancing objectives (in accordance with the 1990 Farm Bill), ADRA/Ghana included detailed plans for activities directed toward a specific set of food security objectives in their 1990-and-beyond Strategic Plan (i.e., they are not just now coming to inclusion of food security in their plans).

In September 1993, in response to recommendations that ADRA pay more serious attention to measuring impacts, a two-person team (retired A.I.D. career persons) were engaged by ADRA (via Support Systems International) to draw up a methodology for the current internal impact evaluation (whose budget is 2.5 times that of this external evaluation; hopefully it will produce more

detailed valid results). The SSI team praised ADRA (as have other evaluators) for their cooperation and responsiveness.

Regional Food for Peace expert Bob Sears (January 1994) commented on ADRA's efforts to institute a system of project follow-up to yield impact data, which included a workshop on baseline surveys and output measurement (the distinction between outputs and longer-term impact was not yet clear). The results of that workshop resulted in baseline surveys which are now completed or nearing completion.

In response to a CCFI evaluation which recommended that the program attempt to stimulate demand for seedlings (supply was then exceeding demand), ADRA is in the process of training extensionists to do this. Demand actually already exceeds supply in some areas. Extensionists will also be able to maintain better count of survival rates after outplanting as they will be more mobile than nursery trainees.

Finding that CCFI nursery trainees take better care of seedlings when they are "paid" (in food and cash) on a piecework basis, rather than according to the time put in, ADRA has gradually shifted to the former at all CCFI sites.

In response to pressure to focus and cut back, ADRA has reduced the planned number of trainees from 10 to 5 at CCFI nurseries, reducing the intended number of seedlings concomitantly from 1.76 million to 1 million.

Also in response to external recommendations, ADRA will rotate the trainee positions at CCFI nurseries.

Despite management weaknesses (see below), ADRA field staff have drawn high praise from a wide variety of evaluators for the quality of their projects (with the exception of the MCH program, now phased-out). Numerical targets have often been achieved and exceeded. Not only the 1989 evaluation team, but Judy Bryson (once Food for Peace Officer with USAID/Ghana, now widely recognized as the Food for Work guru) agreed that ADRA/Ghana's Food for Work projects were among the very best in the world and should be visited by representatives of other PVOs in other countries. That such high quality was maintained in the face of extremely discouraging management style is a testament to the field staff's ability, loyalty to the organization, and fortitude.

When ADRA's Food for Work projects demanded a two-step process -- a community undertaking first a communal agricultural project to raise funds with which to purchase materials for the second stage, construction of a school, a post office, storage facility, etc. -- the sustainability of the first stage project was noteworthy. Several years after such money-raising agric projects were initiated, communities were found to be continuing the

activity, raising funds for subsequent communal buildings. (The proportion continuing in this way was never ascertained, and the revisit schedule was impromptu and unstructured.)

Although recently criticized for an "absence of development indicators," ADRA in fact has in its most-recent MYOP update what this evaluation team considers to be perfectly acceptable indicators -- e.g., reduction in guinea worm prevalence in target communities from 46% currently to 10% in FY95 (the indicator may be overly ambitious, but it surely qualifies as a "development indicator"). Other examples include a decrease in ascaris prevalence from 65% to 40%; an increase in maize crop yields in the forest zone from 1946 kg per acre to 2432, and from 600 kg per acre to 750 in the savannah zone, and in cassava yields from 2800 kg to 3500 kg per acre. School enrollments are anticipated to increase by 20% where ADRA assists in building new structures. While it can be argued that any of these indicators is too ambitious, they all appear to have been based on some baseline measures, and all surely qualify as "development indicators."

Despite some difficulties in ascertaining seedling and tree survival rates (Peace Corps Volunteers leave their posts just at the critical period; large numbers of seedlings are sometimes sold or distributed outside the district and following up on them is difficult; seedlings outplanted in communally-run plots can be followed up, but when they are planted on many dispersed individual plots, this becomes difficult or impossible), ADRA has now created a monitoring form for communities themselves to complete. The first of these have been returned, and survival rates were calculated in the evaluation team's presence (see below).

Although ADRA needs some immediate help in drawing up and implementing a comprehensive Monitoring and Evaluation Plan (see below and Annex F), they have made considerable progress in moving from counting activities or numbers of completed projects, to attempting to verify whether structures constructed are used and maintained (or whether trees planted actually survive), and finally to identifying impact indicators so that "how people's lives have changed" can be ascertained. They are still uncertain in some cases how to obtain the data, whether the indicators are the "best" (or should be substituted with proxy measures, for example), but the progress over recent years is evident and the next steps needed to improve upon the process are clear.

2. Weaknesses, Areas Needing Strengthening

It is critical to make two vital distinctions: (1) between management weakness and programmatic strengths, and (2) between headquarters and field staff (concerning both skills and attitudes).

A series of evaluations have repeatedly pointed to management weaknesses in ADRA/Ghana. Some of these have admittedly been corrected, particularly in the matter of accountability (for both finances and commodities). This evaluation occurred at a turning point in ADRA's history; the team are optimistic that the change in directors bodes well for the organization; USAID's patient investment in ADRA can be expected to "pay off" in the not-too-distant future.

The high quality of some of the field staff, experienced in development work, is generally not matched at the headquarters level where a number of former teachers have been engaged. While some of them undoubtedly would be able to "catch up" if given intensive training in development, the lack of awareness of the need to improve ADRA's development work and the evident lack of experience in development that have been noted by other observers are valid observations only insofar as they are confined almost entirely to administrative staff (and then, should not be applied uniformly to all headquarters staff).

ADRA and CRS share two important weaknesses: neither has enough know-how yet in monitoring and evaluation to have the information to sufficiently document the successes that they have, and neither has yet learned how to "self-promote" as have some other PVOs. Even when they are in possession of impressive data and information, they appear either to overwhelmed with modesty (!) or unaware of the fact that such information would be useful to donors and evaluators. (See Annex F. Monitoring and Evaluation Plan, and a Suggested Technical Assistance to both PVOs in Creating Such a Plan.)

ADRA has also recognized its over-dependence on a single funding source; measures to diversify funding were discussed as far back as 1990 (during the Strategic Planning workshop). Some staff have felt that in order to diversify funding, the organization must add on new projects, and in the atmosphere of attempting to focus, consolidate, and phase down, these two aims seemed contradictory. The evaluation team has stressed that ADRA can -- and should -- diversify funding sources without diversifying programming. Finding donors willing to buy into existing projects may be difficult (some donors want to take full credit for a project) but not impossible; even if donors insist on "owning" an entire project, rather than supporting a discreet portion of it, ADRA can suggest projects that are in the areas of expertise it currently has on staff.

The constant changeability of the organization chart, placement of individuals, and titles (one person, for example, told the team he had had no fewer than three titles in the course of one 12-month period) had been matched by a proliferation of consultants (both external and internal) who have offered varying and sometimes conflicting advice. One says that goals must be quantified and

measurable, another says goals can be general but objectives must be measurable. Still another says that objectives need not necessarily be measurable, but should be verifiable. One team draws up an impact evaluation methodology, and then another team uses a different methodology to carry it out, etc.

3. Interventions

ADRA now focusses on infrastructure (wells, KVIPs, and school buildings), on CCFI (collaboration on tree seedling nurseries which are managed by Peace Corps Volunteers, with local trainees, technical assistance from the Department of Forestry, and sometimes help from Amasachina, a local NGO now less involved than in the earlier years of the CCFI program); and on agroforestry, in which either groups or individuals learn about the value of and how to include fruit and other trees intercropped with other products. Storage facility construction will be incorporated in the agroforestry program in FY95. Food rations are provided to farmers as an incentive (to help overcome the widespread taboo on tree-planting -- if you plant a tree, when it matures, you will die), and beyond that to enable the farmers to tend the seedlings for the first few years to ensure their survival (while farmers by this time fully understand the importance of this activity, it must be done precisely during the lean season; in this instance, the food is less an incentive than an enabling factor).

The CCFI program, with Department of Forestry technical assistance, originally linked up with outplanting of CCFI's seedlings in community woodlots. However, the classic problems associated with such woodlots (which belong to everyone and thus to no one, with consequent conflicts) have led ADRA to move increasingly into agroforestry instead. The agroforestry projects rely on CCFI seedlings when the two are near enough for this to be feasible. Some of the crops are intended for export (cashews and shea butter). The harvests are used both for home consumption and for sale, in varying proportions.

KVIP latrines and wells are intended to contribute towards food security by reducing the incidence and prevalence of debilitating fecal- and water-borne diseases which interfere with proper food consumption.

School construction and rehabilitation are intended to make it possible to conduct "normal" classes where previously teachers and pupils met under trees or in roofless classrooms; this in turn is intended to raise enrollments and regularity of attendance.

4. KVIP Latrines

The evaluation team was unable to visit any KVIP latrine project. There are 9 such projects (none in Upper East and just one in the Northern Region, too far for us to visit). The baseline data are recent, so it is too soon to expect results. To our knowledge, all KVIP latrines built (and revisited) are used and maintained, but there is not yet a systematic scheme for ensuring periodic visits to projects completed some time ago. It is certainly too soon to measure impact of currently completed latrines. In fact, the evaluation team maintains that it should not be necessary to measure disease incidence to ascertain the health effects of latrines. As immunizations, this is a category in which linkages have (at great expense which need not be incurred in connection with all such projects) been well-established. If latrines are built and not properly used or maintained, positive effects cannot be expected. If they are not used as trash receptacles, and if they are appropriately cleaned, etc., the health effects can be assumed and need not be measured.

5. Wells

There are 20 recently completed well projects (2 in each region, 3 in Northern, and one in Greater Accra). We saw only one nearly completed one on the grounds of a school constructed with ADRA assistance. As with other previously constructed projects, ADRA does not have a regular schedule of revisits to prior project sites to determine sustainability. It is too soon to look for effects of current projects. We were told that reasons for non-use of wells (in general, not necessarily in ADRA projects) include: (1) people don't like the taste (if they are accustomed to stream or pond water); (2) they have not been properly educated to the importance of using only well water; (3) though the well water may not actually be contaminated, it may oxidize on reaching the surface and its brownish color is a deterrent.

Neither of the team is an expert in well-construction, but the well we observed appeared to be thoroughly cemented and usable with buckets until the pump is installed. The community is accustomed to well use; we observed the nearby well whose construction was inferior and whose sides are caving in.

The Field Project Officer in Tamale obtained a report for us from the chairman of the Community Guinea Worm Eradication Committee in Langa Village, Savelugu/Nanton District, Northern Region. The hand-dug well was completed in March 1992. The previous water source was a dam half a km from the village; it does not provide water year-round, and is usually muddy. The dam water is no longer used (we cannot be sure if this is accurate or merely the assertion of the chairman).

The chairman's report includes tables on guinea worm and diarrhea incidence, both of them showing marked declines from 1989 to 1994 -- in the case of guinea worm, from 20 to zero, and in the case of diarrhea, from 43 to 4. The FPO could not tell us how "diarrhea" was measured, though he thought it might be "cases needing referral for care." The well, however, was not the only guinea worm eradication intervention in the village; filtering cloths had also been distributed.

The committee chairman is also the school's head teacher; he constructed his own form for recording these declines. They are impressive, but the uncertainty in what they really mean needs to be corrected by ADRA as they continue to refine their data collection systems.

6. School Construction/Rehabilitation

The targeted number of schools for last FY was 21; 10 were completed by September 30, and the remaining 11 before the end of December. The 40 scheduled for FY94 are all underway and most are nearing completion. ADRA staff do not think that the target of 49 for FY95 is too ambitious, given the relative ease with which this year's projects have been undertaken. (Slowdowns last year were nearly all attributable to ethnic conflicts in the North.)

a. Zoko Gamborongo Primary School. We spoke at length with the Village Development Committee Chair, a dynamic individual who was educated in Accra and returned to motivate his village, some 20 miles from Bolgatanga.

The original school building was constructed in 1961; it collapsed shortly thereafter. In 1963, one block was built by the government; in 1985 it collapsed. The chief and elders organized the people to build another, of four rooms this time; it soon collapsed. The next year, a three-room structure was built; it also collapsed. In 1987, a six-room school was built; guess what, it soon collapsed as well. The village was promised help (in the form of materials) from Bolgatanga, but the materials never arrived. The women tried plastering, but when the rains came, the building fell down. By then, the chairman had returned to his village; he suggested they build with cement blocks next time, but the villagers had never seen such construction. He organized a levy (100 cedis per woman, 200 cedis per man) in 1988. They bought 40 bags of cement, provided community labor, molded blocks. They asked World Vision for help, but they "had their hands full." Finally they found ADRA. The women gathered sand and water, the men made blocks. Community Development, Bolga, provided some technical assistance. They began a three-room structure; after they reached window level, ADRA was willing to assist.

Following ADRA's usual procedure, the community filed application forms, which were then approved by the Education Office (ensuring the school would have a teacher and equipment, and that there was not a nearby substitute school), by the District Assembly, and by the community committee. They received from ADRA 780 bags of cement, 20 packs of roofing sheets, 20 packs of roofing nails, 14 packs of other nails, and 472 pieces of assorted wood. (The chairman, among other talents, has a remarkable memory for figures.)

Construction began in mid-1992; ADRA provided materials by May 1993, and the building was first used in November 1993. Though it has six rooms, they are already insufficient to house the many pupils who attend.

Unlike another such school we had visited earlier in the day, this community has moved on from the primary school to pressuring the government for a Junior Secondary School to be built so that the villagers can continue their education nearby.

Spillover effects include the construction of the teacher's house, the beginning of construction of a school (on their own -- it will take many years without ADRA's input of materials) in the next village, an enthusiastic community spirit which has generated energy for undertaking a series of projects. They have begun to build a dam with community labor and canal construction assistance from IFAD, with dry-season farming the objective. (USAID's support to ADRA, and ADRA's support to the community, has therefore resulted in the village's capacity to seek and obtain other types of assistance as well.)

The chairman and others present say they now know how to mold their own blocks and are doing so, without assistance from a mason.

Children now stay over to do their studies in the school building after 2 PM.

The structure when we saw it was being used (once a week) by the vaccination team and the school office for prenatal examinations.

Enrollment: the year prior to the school's completion, classes were held, if at all, under the baobob tree. There was a large slate whose two sides were used as blackboards by two classes going on simultaneously under the same tree. **In 1992-93, there were 57 enrolled pupils (24 girls, 33 boys); in 1993-94, with the new structure completed early in the school year, this rose to 115.** 16 of these were repeaters, and **99 of them were new-starters.** Without further inquiry, there is no way to know which of these would have gone to some other school if this one had not been built, and how many of them actually constitute an increment in

school enrollment, but it seems safe to say that since the nearest other school is very distant, most of this growth in enrollment represents a genuine increase in enrollees.

We took time to calculate attendance rates for January through May of 1993 (before the new school) and this year (1994) the same months (see Annex H. Calculating Attendance Rates for our methodology). **The rate for P2 was 60% before the school, rising to 79.5% after the new school.**

We have presented the saga of this school in some detail (and promise to be briefer about the other two schools visited); we have done so because it represents an apparent success story par excellence. One cannot discount the importance of a single dynamic charismatic individual who mobilizes his own community (and what a pity one cannot photocopy and widely distribute such individuals), but ADRA assistance was clearly the catalyst. That the changes are sustainable can be predicted, and a systematic ADRA methodology for revisits to completed projects should bear that out.

We also visited two more ADRA-assisted schools. The first is in the Village of Madrashil, 18 km from Bolga, the Hassaniya Islamic (English-Arabic) School. It is a "normal" school in the morning, with Islamic studies taught in the afternoon. It began as a Koranic school in 1974, developing into an English-Arabic school by 1982. It was first housed in a mud structure which collapsed, then shared with a building owned by the Cocoa Board. Construction on the new building began in early 1993, and it was occupied in January 1994. Before, two or three classes had to share a room. Enrollment and attendance were poor, teachers could not perform well; two teachers would share a blackboard. Some areas had no roof, so that either hot sun or rain would deter attendance.

Respondents said that the community awareness of the value of education was enhanced simply by the fact that an outside organization was willing to assist the community in building what must have been "an important structure." Parents are now offering to help, such as having recently built the well (with ADRA material assistance). Although the well is intended only for the school, community members are also using it. It has already increased quantity and improved quality of water available (the pump has not yet been attached). After the well, the community will work on building a school latrine.

Enrollment in P1 increased from 38 before the school to 83 the first year of the new school -- an increase of 218%. As noted above, it is hard to imagine that all or even most of these are children who would otherwise have gone elsewhere; the community leader said that he was certain almost none of these "new" enrollees would have gone to the roofless Cocoa Board building.

Attendance in P3 increased from 69.8% during January through May of 1993 to 83.7% during the same period in 1994 after the new school was built.

The other school visited was disappointing. The head teacher had not been present the day the ADRA person had attempted to inform her the evaluation team would visit, and she was very late the day we arrived. This was the Sorogobisi school in Yorogo Village, established in 1987. Classes then were held in the nearby Presbyterian Church. ADRA assisted with construction of the new school in 1990-91. There is an older structure, one of three classrooms without a roof, and the new structure directly in front of it built with ADRA aid.

Enrollment rose (to 122 in P1 -- from what number no one could say) the first year after construction, but has fallen since (currently only 34 in P1) and the buildings are clearly underutilized. Rain destroyed recent records of enrollments and attendance. The reason for the decline was said to have been the absence of any nearby Junior Secondary School, so children prefer to go a greater distance to another primary school which feeds into a companion JSS. (The first school described above took matters into their own hands, first building the primary school, then insisting the government provide a companion JSS.)

No one could tell us what attendance was like, but according to numbers of enrollees and a physical head count of those present, we calculated a 60% ABSENTEE rate that day. We were told this was a highly unusual day, since the head teacher just the day before had insisted on payment of school fees and many children were kept at home. There were only 14 (6 boys, 8 girls) present out of 34 enrolled in P1; 19 (6 boys, 13 girls) present of an unspecified number enrolled in P2; 13 (9 boys, 4 girls) present out of 35 enrolled in P3; 14 (8 boys, 6 girls) present out of 33 enrolled in P4; 7 (5 boys, 2 girls) present out of 27 enrolled in P5; and 14 (5 boys, 9 girls) present out of 25 enrolled in P6.

7. CCFI and Agroforestry

The ADRA Community Collaborative Forestry Initiative (CCFI) and Agroforestry programs were established to:

> Encourage selected rural communities to adopt modern efficient and environmentally friendly and appropriate agricultural practices in order to ensure food security and regular source of income.

a. CCFI nurseries:

The CCFI proposed establishing 20 community forest nurseries and woodlots over a period of 6-8 years in critical areas in the Upper East, Upper West, and Northern Regions of Ghana.

The purpose is to rehabilitate the environment, to raise the level of soil fertility, and to provide a source of construction poles, fuelwood and other wood products that can be used either in the communities or sold to outsiders.

The program consists of the provision of appropriate inputs (food and construction materials to community-initiated projects). These are seedling production in nurseries (CCFI) and agroforestry.

CCFI is basically a tree seedling production project. It is a collaboration among ADRA, Peace Corps (PC), the Forestry Department (FD), Amasachina (a local NGO), and selected communities. In the collaborative effort, nursery establishment and management techniques about site and species selection and education of village communities on the importance of tree planting are performed by PC, FD an Amasachina respectively. ADRA as the lead agency seeks funding for the initiative on behalf of the collaborators, supplies inputs (including the food aid ration), coordinates activities of the collaborators, and prepares reports for donors.

Under the agroforestry project, assorted tree seedlings from the CCFI nurseries, FD, or communities' own nurseries are outplanted onto agroforestry plots and woodlots by the communities, individual farmers, and schools.

The targets and outputs of these programs are shown on the next page.

In FY93, 14 nurseries were established and 149 trainees were trained in seedling production. The number of trainees trained was 25% below target. There were two systems of remuneration during this period. Some trainees were paid ¢10 per seedling produced and surviving, plus a FFW ration. Others were paid a flat amount of ¢6,000 a month plus a FFW ration. Starting in FY95 all trainees will be on the piecework system of remuneration.

Managers (Peace Corps Volunteers) and trainees undertake extension activities in addition to seedling production. They are supposed to discuss the importance of tree planting with chiefs, farmers, community leaders, teachers, communities, schools, and women's groups. Eventually, however, on advice from a consultant, ADRA has hired extensionists to do the outreach work.

b. CCFI outplanting:

ADRA has encouraged both individuals and communities to intercrop trees with food crops and to establish woodlots.

Together with the Forestry Department and MOFA Extension Division, ADRA has enabled farmers to receive their tree seedling supply from the FD and/or CCFI nurseries. Some farmers, however, got their supplies from their own or privately owned nurseries. The ADRA Field Project Officer animates the communities and sometimes helps by conveying seedlings to project sites.

During FY93 there were 862,281 (23% below target) assorted tree seedlings outplanted from the 14 nurseries.

The program created jobs for 149 trainees and the food ration has cushioned them against food shortage in the lean season. The families of trainees were assured of food and regular income.

Agroforestry is gradually being accepted by most of the targeted communities and individuals, as evidenced by the high percent of seedlings outplanted (80-99.5%) from nine of the nurseries. The CCFI nurseries provide easier access to seedlings compared to the distances one has to cover to procure from FD nurseries.

It is expected that concentrated extension (i.e., relying on full-time extensionists rather than PCVs and trainees) will improve the rate of outplanting; demand already exceeds supply in at least some of the nurseries.

It is anticipated that the experience gained by the trainees will lead them to make this activity their main business when ADRA phases out.

c. Agroforestry:

Encouragement was given to communities where tree planting is unfamiliar for collective ownership of woodlots as well as promotion of domestic production. The main tree species being promoted are teak, mango, cashew, leancaenea, cassia, katepa, eucalyptus, akee apple, shea butter, albizia, lebbeck, neem, mahogany, and awadawa.

A total of 262 projects covering 4494 acres (27% above target) and 28,861 beneficiaries received sponsorship from the food for planting program. A total of 1,657,503 tree seedlings were outplanted to agroforestry/woodlot plots. The project targets were exceeded in terms of acreage (1,210), seedlings outplanted (15,503) and number of participants (2,008). Out of the total 5292 participants, 2311 (43.7%) were women. The overachievement is

focussed in a few communities where the success of the initial participants has had a spillover effect onto their neighbors; it should be possible to ascertain when such a "takeoff" point has been reached in an area and move on to another area so that food rations are not used where no longer needed.

A total of 33 agroforestry projects were organized for women's groups in the Eastern, Brong Ahafo, Upper East, and Upper West regions.

Each project had between 10-40 participants who were either employed or underemployed. Food rations eased the burden of food inadequacy especially during the lean season. As a result of the FFW, farmers were able to preserve some of their own grain for planting.

Interplanting, if done correctly, inevitably leads to the improvement of soil fertility and therefore increases in crop yields, thus enhancing food security in the communities.

Some communities will also have access to fuelwood as well as poles for construction and rafters from their woodlots.

Non-traditional export trees (cashew, mango, and leguminous crops like soybeans) have been introduced to some communities (Toryo/Gleogo in Upper East, Savleju in the Northern Region). These are expected eventually to increase incomes.

Spillover effects include the ability of participating communities to leverage additional aid and loans. For example, ADRA-supported tree-planting associations at Bekwai (Brong Ahafo) and Wiamoase (Ashanti) received ¢1.2 million from the Africa 2000 Network of the UNDP to assist in the purchase of farm tools and equipment for their tree nurseries and planting activities.

The Asokore Area Tree Planting/Nursery Association received a loan from the Standard Chartered Bank Ltd to expand their agricultural activities. Through the Agricultural Development Bank, IFAD supported the group with machinery and equipment to process their farm produce.

Seventy-seven women involved in agroforestry in the Brong Ahafo Region were educated by the MOFA Extension Department to construct storage facilities to store their farm produce in order to enhance food security and regular flow of income.

On the advice of ADRA field personnel, 20% of the members of the women's groups participated in the functional literacy program of the Non-Formal Education Division of the Ministry of Education.

d. Qualitative Effects/Impacts (ADRA assessments)

- Nursery trainees are acquiring the skills of nursing seedlings and managing small nurseries.
- They have acquired the skills of reed collection and seed treatment.
- Through their association with the project, many of the trainees have attended literacy classes organized by the Peace Corps nursery managers; some trainees have learned to write reports.
- Among the various communities, much awareness has been created and continues to be created regarding the usefulness of trees. This is evidenced by the fact that many individuals want to plant their own woodlots.
- Through the project, two communities have instituted measures to prevent bush fires in their respective communities to protect the tree seedlings.
- Indications are that CCFI will have to provide more cashew seeds to the nurseries as nursery managers continue to demand far more seeds due to increased demand from farmers.

e. Evaluation Team Visit Observations

The evaluation team posed questions to individuals and participants in focus groups concerning the effects on participating farmers and their families of the food ration, skills acquired by the participants, and secondary effects.

Women constituted about 20-25% of the trainees. Most of the trainees have large families (15-30 people), many of whom are children. The general consensus among participants was that the food ration went a long way to supplement family food intake. In some cases, it has made it possible for them to realize a surplus from their own farms, which they can then sell for added income.

Most respondents said they used the cash payment to pay school fees and uniforms, and for health center or hospital fees. Children are the main beneficiaries.

Members of a group which had harvested their woodlot of neem trees listed some benefits: many housing poles, rafters for roofing and stakes for yams were sold to outsiders after the needs of the farmer participants had been met, This means that the farmers did not have to cut trees from elsewhere. Income realized from the project was shared among the participants and some have improved their houses and structures with the money. The women

obtain dried and broken twigs which they use for firewood, decreasing the time needed for searching. Regrowth of the harvested woodlot has begun, and farmers are now growing groundnuts and millet in between the rows. Alley cropping will continue until the canopy of neem trees begins to close in. One of the farmers bought a breeder goat with his share of the money and hopes to have more from the kids that will be born.

Other farmers in the community are now interested in neem tree woodlots because of the multipurpose poles they can get from it and they are planning to start their own woodlots.

Some PCV managers train in vegetable production. One group has made profits from their vegetable farm and are investing the money in beehives.

Farmers working on community plots are also cultivating cash crops such as groundnuts and soybeans in between the still-immature trees; this earns them income until such time as they can begin harvesting the woodlots and fruit trees.

A group near Navrongo in the Upper East region has started a livestock project in connection with their four-year-old community agroforestry project and are using as fodder the leaves of some of the tree species.

There is no need to prove again and again that woodlots and agroforestry technologies result in improvement of soil fertility which also results in higher yields of crops: there are several ways in which these technologies contribute to soil fertility:

1) the mining of minerals from the lower depths of soil by the deep roots of wood tree-species to the surface into the leaves which eventually fall to the ground and form humus.

2) the shading of the soil and reduced degradation of organic matter (humus) during the hot dry season; humus fertility build-up is enhanced.

3) nitrogen fixation by leguminous tree species also adds to the nitrogen supply and enhances fertility.

Therefore the impact of a woodlot on a community is inevitably (other things being equal) increased yields which result from the higher soil fertility.

There used to be a popular notion in the northern regions that if you plant a tree and sit under its shade, you will surely die. Interviewees indicated that in their communities this notion has been dispelled because residents have been able to see proof that the notion is untrue.

The team also visited a communal agroforestry site which was in the same community as the dry-season gardening project described below. The group secretary had received training from ADRA. Group members are still receiving food rations as incentive to interplant cassia trees, which in one year are already knee-high. ADRA instructed the group on building firebelts. Sand barriers will be built to protect other tree species from animals. The groundnut harvest the year before alleycropping with cassia was poor -- only two bags per acre -- but that was partly attributable to weather failure. This year they harvested fully six bags an acre; it is difficult to say how much of the increase is due to better weather and how much to the effects of the tree-planting. Cassia is only slightly nitrogen-fixing, but its leaves provide good fertilizer, and their presence ensures better moisture retention of the soil. In about three years, the trees can be sold for firewood.

Three thousand seedlings were planted in June 1993; there were exactly 2752 surviving by March 1994 when last counted, a survival rate in slightly less than a year of 91.7% -- well above the targeted 80%.

Although other community members, seeing the apparent success of this project, want to join in -- and are willing to do so without food rations, ADRA feels the food is not needed as an incentive but IS still needed to make it possible for fragile seedlings to receive the level of tender care they need for the first three years. They caution residents that the large increase in yields may not be due entirely to the trees.

8. Sustainability: A Dry-season Gardening Example

The only opportunity we had to visit a completed project was the gardening plot in the same village as the communally-owned agroforestry project. It was begun in 1987 with assistance from ADRA, with 14 members (only one of them a woman, the same woman now involved in the nearby agroforestry project). (Other agroforestry projects in the area which we did not have a chance to visit are 100% women; these are offshoots of ADRA's presence in these areas with MCH centers, now phased out.)

ADRA's assistance lasted for two years. A dam was built (with heavy machinery, skilled labor paid by ADRA, unskilled labor provided -- without food aid -- by the community), and individual wells were dug. The village is divided into 9 sections, each of which provided 20-40 workers for an 8 AM - 2 PM working day in rotation (no lunch).

The visit did NOT coincide with the dry season (October to May), but we were told it still functions in both rainy and dry seasons; the dam and wells are still well-maintained and yields are

satisfactory. They grow cassava, okra, and maize, palm fruits and mangoes. Produce is partly consumed, partly sold in markets 5, 8, and 14 km away. Mangoes were sold for 25,000 cedis each of seven times this year; some use the proceeds to purchase cattle. Judging by their appearance, the group secretary maintained that the children in the gardening families are now better nourished. He also asserted that 2-5 children used to die in a week from measles (one hopes that was not throughout the entire year, but only during a measles epidemic), but now there have been none for two months. However, he acknowledged that immunizations since 1987 might have had more to do with that than the increased supply of vegetables! While the secretary's statements of dramatic effects from the garden were impressive, the team was skeptical. We concluded only that the villagers involved are sufficiently satisfied themselves to carry on with the project long after the end of ADRA assistance.

During the 1989 ADRA Title II evaluation, the team found that when projects that had been completed were visited, some were clearly sustained long beyond ADRA's assistance and oversight. It was not then possible to ascertain what proportion of projects were sustained, and the system for follow-up is still such that it cannot be determined. (This is not a criticism of ADRA per se, as very few PVOs have a systematic methodology for revisiting completed projects. Nonetheless, since ADRA projects give them impression that many ARE sustained, we suggest that this impression be verified by just such a revisit system, at least for a long-enough period to prove or refute the point.)

9. Constraints

As perceived by ADRA field staff, a major hindrance to better performance is poor communication between Accra headquarters and the field offices, largely due to an ancient and often non-functioning radio system. (CRS has the same problem.) There is no Motorola in Accra, and one only in Tema.

Other constraints focus on leadership (a constraint most -- ADRA field staff and the evaluation team -- presume will lessen considerably with appointment of the new director), absence of a career path/possibilities for staff development and promotion; understaffed and underequipped field offices (most with just one person and no computer or photocopy machine); undertrained and often mis-assigned staff.

We would add that the aforementioned inability to recognize what information should be analyzed, and what to share with donors even after data have been collected and analyzed, act as an important constraint to ADRA's receiving the credit it deserves. Their belief that they need a public relations department is, we feel, misplaced. Rather they need a well-trained planning and evaluation coordinator (not to be responsible alone

for planning and evaluation, but to coordinate the efforts), and a general recognition of the importance of documenting successes as well as failures, for both course correction and institutional promotion, including donor relations. The M&E technical assistance recommended in Annex F would include an exercise in using appropriately collected and analyzed data for just such a purpose.

10. Staffing

The Marine Overseas Services 1992 evaluation of ADRA's Institutional Support Grant (page 10) comments that "considering its prevailing salary scale, ADRA/G has done an admirable job of selecting and recruiting qualified staff. The low level of remuneration does, however, act as a constraint on ADRA/G's ability to attract skilled staff and may make it difficult for ADRA to retain staff over the long term."

That ADRA HAS retained a loyal core of field staff over long periods is, in fact, remarkable. ADRA staff salaries and benefits (including per diem rates pegged to missionary rates) have long been a source of some discomfort. We understand the Adventist Union may now be more flexible in the matter of per diems, but salaries remain exceedingly low. The unofficial restriction of most (though not all) staff positions to church members further restricts the employment pool. Again, what is remarkable is the high level of many of the staff despite these constraints.

The pervasive marginalization of qualified staff (particularly after individuals were praised by outside evaluators), the frequent changes in job descriptions and the organization chart, seemingly haphazard promotions, demotions, geographic assignments and reassignments, can now be expected to have come to a halt. The expectation of increased stability should be reassuring to the more qualified.

At the same time, the new direction may well result in a series of immediate staff changes...provided the Union allows the new director the authority to do so.

Staff currently perceive the Union not as a policy-making body but as a group "supervisor." We hope the perception (and the reality, if the two coincide) can be changed.

The Union membership includes one woman who works with the Ministry of Health (in what position we were not told) and another who has retired from the military, as well as the pastor who is both Union president and president of the ADRA Board of Directors. We hope the Union will consider including individuals with a strong development background, preferably in the field, in future.

The choice of a new director bodes well for ADRA. He is already familiar with ADRA; he is a Ghanaian; he has worked in the Northern sector (the most needy area), but has also participated in various headquarters activities; he has experience in both development and emergency relief; and he was widely respected (and liked) by UN agencies, other PVOs, et al. in Liberia where he has worked for ADRA for the last several years, as well as by ADRA/G field staff with whom we spoke. We wish him well.

The emphasis in recent years (if not before) has been too heavy on staffing headquarters and too little on staffing in the field.

ADRA world headquarters in Silver Spring has virtually no authority to bring about staffing changes, though they may play an advisory role in this regard.

11. Monetization, Direct Distribution (for Relief and for Development)

ADRA now monetizes 97% of its Title II commodities.

Even though its Food for Work projects (where commodities were distributed and usually cooked for mid-day meals) were highly praised, it was eventually determined that communities were better off with provision of inputs and building materials than with food. The trade-off is that work may take longer (on the theory that workers can put in longer days if they are fed at noon), but the project may be completed faster (and the structure be more durable) if some of the key materials are purchased and supplied by ADRA.

ADRA has withdrawn from MCH (which used commodities as incentive for attendance, as well as presumed direct nutrition transfer to mothers and children) and was never involved in school feeding. Therefore, two classic reasons for direct distribution are not part of ADRA's current programming.

The only remaining distributions are done in connection with general relief, as partial payment for CCFI nursery trainees, and as either incentive to encourage skeptical farmers to begin agroforestry, or as a way to make it possible for them to tend to outplanted seedlings during their first vulnerable years (as their intensive care coincides with the hungry season). In response to some pressure, ADRA has planned to phase out these direct distribution channels.

The evaluation team understands the reason for discontinuing food distributions to needy families not experiencing emergencies, but does not agree that orphans et al. should also be cut from the program. In fact, we are frankly puzzled by what appear to be conflicting messages: on the one hand, ADRA has been

told it should discontinue relief work, and on the other hand, it has also been told that perhaps it should focus entirely on relief and discontinue developmental uses of Title II. We remain perplexed, and understand if ADRA is too.

Given the planned phase-out of Food for Work distribution, and the planned phase-out of relief distribution, ADRA will be left with virtually no reason to use Title II on site, and will then be in a position similar to that of TechnoServe -- 100% monetization. We believe this should be reconsidered. CRS believes that an infusion of food commodities (whether Title II or local swaps) is still needed in the Northern sector.

It would not be unprecedented for there to be a common warehouse for more than one PVO in Ghana. (In Haiti, four PVOs -- ADRA, CRS, CARE, and formerly International Lifeline -- all stored their commodities in a single warehouse, for convenience and economy.)

12. Support to Mission Objectives & Priorities

We believe that all of ADRA's current programs support mission objectives and/or the mission priority on food security (see Section IV below).

A few agroforestry projects where cashews and shea nuts are produced support the mission's objective related to export promotion. Arrangements have already been made for purchase of the production for export.

School construction and rehabilitation, designed to increase enrollment and attendance, support the mission's education objectives.

Income enhancement is a critical expected outcome of many projects.

Reduced post-harvest losses and agroforestry are both intended to support food security. (While food security per se is not represented on the mission objectives tree, it IS a Title II mandate, and we are assured that it "counts" as a mission priority.)

Health-related projects do NOT support the mission's almost exclusive focus on family planning, but since ADRA's health-related interventions now focus on worms and parasites, they are directly supportive of the consumption aspect of food security (no amount of food quantity can ensure food security if parasites and worms are consuming a substantial portion).

13. Recommendations

1. ADRA should institute a schedule for regular (rather than casual) revisits to completed projects to ascertain sustainability and, in some cases, to inquire about long-term impact (negative as well as positive) on participants, their families, and communities.

2. ADRA should phase down projects (and begin no new ones supported by Title II) in five of the ten regions by the end of FY96. The two years should be time enough for the new director to get his bearings, for appropriate study and discussion to take place to enable a reasoned decision about choice of the five remaining regions, to advise phase-out communities of the changes and help them prepare for sustainability (or alternate funding).

3. ADRA, of course, is free to retain a presence in all ten regions with non-USAID funding. We would like to discourage that, however. Consolidating into just five regions, it will be possible to reassign qualified field staff to those areas. If all ten regions remain in the program, however, there will be pressure to keep current staff where they are (or reshuffled).

4. While neither the evaluators nor USAID wish to interfere in the internal policies of the Adventist Church, we strongly recommend that the Union be as flexible as it can be in allowing the new director to make major staffing changes, in numbers, in deployment, and in staff development.

5. The overstaffing of headquarters should be addressed, a skills inventory taken and compared with needs. Central staff should be reduced in numbers and upgraded in skills (either through replacement or intensive training). As of the 1993-95 MYOP, there were no fewer than seven assistant directors. The new director can be expected to design a new configuration in line with regional realignment and other staff-related recommendations contained herein.

6. ADRA should pay far more attention (which should become possible with a consolidation to five regions) to professionalization of its staff. While the oft-used expression "career path" emphasizes opportunities (and thus heightened morale) for individuals, "staff development" or "professionalization" of the staff are broader concepts, allowing both for the addition of staff who are already more highly trained than current staff, as well as the upgrading of current staff skills.

7. Staff training should cease to be hit and miss; there should be a training coordinator with field experience in development, who should know how (or learn how) to do a training needs assessment, then develop a coherent plan for staff development based on its results. If affordable, timely workshops are not available, they should be commissioned. A more judicious

selection of persons to attend workshops should become the order of the day. Long-term training (6-9 months) should be permitted in exceptional circumstances.

8. Monitoring and evaluation, while greatly improved, still require concerted attention. ADRA needs a well-qualified person to coordinate (not to do) planning and evaluation. Together with CRS, ADRA should be provided technical assistance (see Annex F) in developing a coherent monitoring and evaluation plan (not just a set of indicators). This will require careful review of each program, all current forms and procedures, for refinement or complete revision. Logic models should be elaborated and refined (the evaluators' versions are contained in Annex K, but ADRA needs to review and revise these for themselves) as part of the process of determining at what point along each separate chain of presumed causality it is both appropriate and feasible to take measurements.

9. The Ministry of Education already certifies the need for a school, as well as their commitment to provide teachers and materials, when ADRA assists a community to rehabilitate or construct a new school. There should be a further consideration added: in order to avoid the problem observed in at least one school (immediate increase in enrollment, followed by dramatic decline, resulting in an underutilized school), the Ministry (with ADRA's knowledge of the community and its leaders as additional input) should consider the eventual placement of a Junior Secondary School close enough to the proposed primary school for the latter to serve as a feeder school to the former.

10. If CRS is willing to share its Lome Cluster Management by Objectives document with ADRA, ADRA should devour this excellent document and not be ashamed to imitate, or indeed, to adopt major portions of it for their own use. (It is a well-considered, well-written set of goals, objectives, and related indicators that are to be shared by all CRS countries in the cluster. It is NOT a plan for management of several countries from one hub country. ADRA/Ghana and other West African ADRAs could do likewise, and if they decide to do so, the wheel has already been invented; they would not have to start from scratch.)

11. Some PVOs have undergone a lengthy process to develop their own particular vocabulary (e.g., CARE has "final goals" and "intermediate goals" and "operational objectives"). Other PVOs adopt the current USAID vocabulary (as the Logical Framework has undergone changes, so too has the vocabulary; sometimes there is a separate purpose, sometimes it is absent or synonymous with objective). Still other PVOs seem to go with the vocabulary of the consultant who last visited them (measurable goals give way to verifiable objectives; evaluation of long-term impacts gives way to monitoring of presumably immediate impacts, and so on). ADRA is one of these. Confusion reigns. ADRA should, therefore, make a decision as to whether they will work on creation of their own

institutional vocabulary (which they would then present to consultants as a "given" for them to use, regardless of their personal preference), adapting when writing A.I.D. proposals and reports to whatever the current required vocabulary might be.

12. Cluster programming (several projects in the same community) has been recommended (and partially adopted already) by the SSI evaluation methodology team (1993, page 4). Robert Sears (REDSO, Abidjan) has recommended future siting of agroforestry projects closer to each other. We concur in both these recommendations.

13. ADRA has long incorporated food security as a goal, with specific objectives to support it. It would be appropriate for ADRA to reconceive its wells and KVIP latrine projects under this same umbrella, since their intent is to reduce the very diseases and conditions which undermine proper food consumption/utilization.

14. ADRA should distinguish between rations provided as an incentive (in areas where tree-planting taboos are strong, and farmers are highly skeptical of the proposed new activity), and rations that are provided to the already-convinced only to enable them to care for the new trees during the seedlings' first vulnerable years (the intensive care coinciding with the lean season). Where the former use of food rations is not necessary, they should not be used.

15. Although ADRA annual progress reports include intended targets as well as achievements, some interim reports do not. Achievements without comparable targets are difficult to assess. So too are raw figures (trees planted, trees surviving, without a rate calculated).

16. We find the titles "Deputy Director for USAID Programs" and "Assistant Director for USAID Programs" underscore ADRA's over-dependence on a single donor. The titles should be changed, but the more-important underlying concept should also be changed. Without increasing either the number or types of projects, ADRA should make serious efforts to diversify its funding sources.

17. All 21 schools constructed in FY93 should be visited, enrollment and attendance data recorded from classroom registers for 1991-92 (before construction) and for 1992-93 and 1993-94 (two years after construction). (See Annex H., Calculating Attendance Rates.) In any school in which attendance has not risen by a certain percentage since before construction (say, at least 20%) in at least three of the six grades, a revisit should be made and an in-depth investigation conducted to find out why (perhaps there was another new or adequate school nearby; perhaps it is in a conflict area). The head teacher, community leaders, and parents should be visited to see if an explanation can be uncovered. It should be determined whether that explanation could have been anticipated

BEFORE construction was approved so that the situation will not be replicated in future.

18. No complete school should be built with ADRA assistance if there is another school no more than 2 km away which can be made usable by re-roofing alone.

19. Agroforestry projects have won high praise; with the departure of Godfrey Ntim, ADRA should make concerted efforts to replace him with a person of equally high calibre, and if this is not possible, should reconsider whether to retain agroforestry projects within its portfolio.

20. Many organizations carry out periodic governing board training. ADRA should consider doing so as well.

B. CRS

1. Strengths, Indications of Responsiveness

In late 1989, a 4-person team conducted an evaluation of CRS's Title II program (jointly funded by USAID and CRS). One member of that team, blissfully unaware (at that time) that objectives such as "to feed 10,000 mothers and children" was common, and apparently then acceptable, urged the other members of the team to declare the program "unevaluable" on the grounds that if CRS could not specify what they hoped to accomplish through such feeding, the evaluators could not tell them if they had succeeded.

To CRS's credit, when the results of this evaluation led to some difficulties with USAID, the Country Representative, instead of cursing the darkness, lit a candle and invited the same consultant to return to assist in the formulation of better objectives and overall plans. After a series of planning and reinforcement workshops, CRS's MYOP was singled out as one of the two "most coherent" in all of Africa of any PVO. (The other was a WVRD MYOP from another West African country which, it was later learned, had been written entirely by an American consultant with a little input from the WVRD staff, in contrast to the CRS/Ghana MYOP which had been constructed and written entirely by the CRS staff, with workshop facilitation provided by the American consultant.)

While this judgment -- one of the two 'best' MYOPs in a desk review of all MYOPs from all PVOs in all African countries -- was rendered by a lowly intern (a Woodrow Wilson scholar from Princeton) and thus "suspect", it seems unlikely that CRS/Ghana's MYOP could have been among the WORST in all of Africa!

CRS has not yet attained either Nirvana or perfection in MYOP construction, but the progress over the intervening years is remarkable. A-MYOP-by MYOP examination, including periodic updates, shows a gradual but steady improvement in specificity and in distinguishing between output measurement and verification of both short-term effects and long-term impacts.

The agency has also got an impressive list of ways in which they have made sincere (and usually successful) efforts to respond to evaluations. The 1989 evaluation found CRS stating that its overall goal was to improve the health of Ghanaians, to be supported by an objective of feeding a certain number of women and children, with no idea why such ration distribution was expected to result in any sort of health improvement of the mothers and children or anyone else in the family partaking of the rations.

This long-standing MCH program (in effect for over 30 years) was nationwide until 1986, when it was phased out of the

sanitation and related education in personal hygiene, with referrals for curative care); the facilitation of the construction of individual houses' soakaway pits (to drain dirty wash water into the earth so it does not stand as a breeding ground for mosquitoes); and Mozambique toilet slabs. (CRS has rejected community KVIP latrines as one cannot adequately serve a community of dispersed houses. ADRA maintains that individual KVIP latrines can be built, and that these enable the accumulation of night soil for use as fertilizer while Mozambique slabs do not. A dialog between the two organizations might be useful in this regard.)

Again, in response to pressures to consolidate, CRS not only moved Food for Work activities out of the southern regions; they decided to locate them in the same communities as their PHC activities, with prospects thereby for synergistic effects. Communities may now select Food for Work or construction materials (purchased with monetized funds). Most choose the latter.

CRS has instituted baseline surveys in all new project areas. These will form the basis for comparisons with follow-up studies, already scheduled for specific intervals, according to project type.

New monitoring forms have been designed and counterparts or CRS staff instructed in their use.

Although Ghana is not a Child Survival priority country, CRS has sent 5 staff to Sierra Leone for training in the Johns Hopkins Child Survival measurement methodology, since CRS's PHC interventions are similar to some child survival activities.

The CRS Lome Cluster Management by Objectives paper had considerable input from the CRS/Ghana staff; it is an excellent thoughtful piece in which the key question "How far along the causality chain is it necessary and feasible to measure?" has been very well addressed.

2. Current Interventions -- Overview

From a proliferation of activities in years past (never as diverse or numerous as those of ADRA), CRS has narrowed the field and is currently engaged in the following: grain banking; PHC (VHW training, PHC structures); materials to rehabilitate school buildings; school feeding in 100 schools (lunch); a sub-section of the last, an operations research program studying the effects of an additional take-home ration for girls who attain 85% attendance; and general relief (orphans etc.).

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3. Grain Banking

Among the four overall goals of CRS/Ghana's current MYOP is the promotion of food security, specifically with respect to the availability and accessibility of food to rural families. Grain farmers are forced to sell their produce to middlemen at low prices in the immediate post-harvest period due to absence of secure and good storage facilities at the community level, inability to transport produce to better markets where prices are more favorable, and lack of knowledge about possibilities and benefits offered by collective marketing and storage schemes.

Pilot projects in grain banking were organized in the Volta Region to test the hypotheses that: (1) market equity and access to markets will increase food security, and (2) availability of a community grain bank will ensure availability of food during the lean season.

The objective of the program is improved food retention and post-harvest management of the produce of selected rural farmers' groups. This objective is strongly supportive of the USAID mission's interest in promoting food security.

The original plan was to have implemented two pilot community projects, one in the Northern and the other in the Volta Region during 1992. The pilots were to provide "how to" information prior to expanding the schemes during the subsequent MYOP period.

Eventually, four communities were selected. This afforded the opportunity to learn lessons from several different types of groups -- one all-women's group, one mixed-gender group, one interested in corn storage, and a settler group.

The groups were supported by CRS through a one-year cycle, encompassing one major-season harvest and one minor-season harvest.

All members of the groups were trained in the treatment of grain -- drying and insecticide application for safe storage and warehouse security against rodents. Some of the groups set aside their own grain for storage and purchased additional grains with monetization funds. Inputs purchased with monetization funds were also used to treat the grain prior to storage.

Two of the four groups stored major-season grain, while the other two stored minor-season grain.

The groups decided how to sell (in bulk or retail) and where to sell (whether in the locality or far-away markets). By the end of July 1993, all the groups had disposed of their grain stocks and accounts rendered on the business. Two groups made net

profits because they took the advice of the post-harvest consultant. They shelled, dried, treated, and stored their maize for a brief period. However, at the end of November 1992, one group of the two decided to sell because they figured the price was high enough; they used the money to buy minor-season grain preferred by them for storage. They made a good profit on the sale of the early maize, which they invested in the purchase of the minor-season maize.

The third group acted against the advice of the post-harvest consultant and stored early maize on the cob. They lost 50% of their maize through pest infestation within three months. They, however, sold what was left and invested the money in purchasing minor-season maize.

The fourth group experienced a loss because they spent too much money on transport in surveying prices in far-away markets.

These four pilot projects demonstrated the retention of grain in the community, as well as reduction in post-harvest losses. They also provided information on the "how to's" of establishing grain banks, the strengths, weaknesses, opportunities and threats (SWOT) of such undertakings which will enable CRS in planning expansion of such schemes in the next MYOP period. The pilot program was successful in this sense.

There were, of course, constraints and problems encountered. For example, the consultant's schedule was delayed, and thus there was also a delay in the start of training and other storage activities. The one-year period did not encompass a complete cycle of production, storage, and resale during the lean season, so the study period was extended.

Only one of the four groups built their own storage facility; the others rented or were given permission by one member to use their private facility. The ownership problem could, if not solved, affect the cohesion of the group, especially if the one providing a free facility then begins to ask for payment. CRS has taken steps to avoid this in future by providing material support under their Food for Work program so that farmer groups can construct their own high-standard storage facility (strong foundation, plastered walls, and rodent-exclusion barriers).

The aforementioned consultant provided a final report on the pilot projects in Volta, including a detailed account of each step of the process, the results, lessons learned, and recommendations. These lessons and recommendations were then incorporated in the plans for subsequent grain banks, to be located in the same Northern sector communities (or nearby) in which CRS is supporting primary health care activities during the 1994-1996 MYOP

period, with the intention of creating the possibility for synergistic effects.

In addition to the consultant's report, CRS performed its own impact assessment of the pilot projects, examining conditions before and after the first production cycle. Interviews were conducted with community individuals who had NOT participated in the project. Some had previously believed that major-season maize cannot be stored safely; they changed their minds when the saw the positive results of the pilot projects. There was one participating group who discovered that they were the only people with maize stocks during the lean season. They decided then to retail the grain on credit to families in the community at the price it would have cost them to travel to the nearest market to purchase grain. Thus, not only did they make a profit, but the community benefitted from having this supply close at hand.

At the time of the pilot projects in Volta, CRS already had a diocesan grain banking project in Upper West (Wa), and was planning one in Upper East, both of them assisted with private funds. Animation began in an Upper East community early in 1993 and diocesan funds were provided in December 1993 for grain purchase. Following the experience of the pilot projects in Volta, the one in Upper East was modeled along the same lines; it is this project that the evaluation team visited. (Although it is not supported with Title II resources, it is patterned after those that were, and so we felt it an appropriate site to visit in the course of this tightly-scheduled evaluation.)

A visit was made to the village of Tilli near Bolgatanga where the Azupupunga Noreyine Grain Bank was located. This area is endemically grain-deficient. According to Rex Asonga, the Agriculture Coordinator of CRS, Bolgatanga, animation began in February-March 1992. Communal construction and warehouse roofing were done April-May, followed by production and storage training. There are 100 registered members, each of whom paid a registration fee of 1000 cedis. The storage capacity is about 30 tons. Grain from the 100 members was purchased with CRS-provided funds in December 1992; the grain was dried, treated with storage pesticide, and stored. The members stored 600 100-kg bags of millet, sorghum, groundnuts, corn, and rice. The amount of money required for buying the grain was determined by what the members thought was adequate for the village to carry them through the lean period. There was also a groundnut stock which was being issued to the communities (10-12 farmer groups of 15-20 people each) as seed loan; for every bag issued as a loan, the recipient had to repay 1.5 bags to ensure that the supply of planting seed continued to grow.

At the time of our visit, more than 50% of the original stock had been sold to the people in the community (not yet to outsiders). The group's chairman indicated that they would sell to

outsiders only if all the needs of their communities had been met. More than 50% of the planter groundnut seeds had also been issued. The chairman said that the cost of grain from the bank is not excessive since it is a service by and for the community. At present they are getting the cost of grain plus a 15% margin.

Key informants in the community were interviewed, as were members of the farmers' group, individually and together in a focus group. They were asked about the bank's impact on total assets or food supply of the participants' households; reduction in post-harvest losses; learning skills which they believed would be useful to them in future; secondary or spillover benefits to the households and communities; and retention of grain in the area throughout the lean period.

At the time of the visit (lean season), there was still grain in the village. Several farmers indicated that **for the first time in many years, 100 families who were accustomed to going hungry in the lean season now have adequate grain prior to the new planting season; thus they do not have to work on their farms while hungry. They assert that now they are working harder than ever before and expect to increase their production this year.**

They also indicated that, in contrast to prior years, **post-harvest losses were reduced to zero.** This was confirmed by the evaluation team; bags of grain still in the store revealed no insect infestation whatsoever in any of the bags examined.

It was also evident that the farmers had learned the skill of safe drying and fumigation prior to storage. Several respondents have personally passed on this safe storage technology to other non-participating farmers and other communities.

There were indications of a display of social responsibility from the members toward the poor among them who had no grain or money to buy grain. The needy were helped with food loans. Some of the group's executive members have started personal savings with the bank, now that they have learned the advantages of so doing (as they have deposited group earnings in the bank).

Several farmers intend to plant groundnuts to broaden their production base this year because there is a seed loan from the grain bank; this constitutes a real breakthrough for them. Many normally lose much of their seed to storage pests and have to buy at high prices during the planting season, which many could not afford.

The group intend to try to store as much grain to last them for at least two seasons to tide them over (with a buffer stock) in case of crop failure. (The failure of many grain bank schemes occurs when their entire stock is depleted during a bad year; this group has begun with a normal harvest, but are thinking

ahead and trying to build up enough not only to span the lean season, but to allow for one year of crop failure.)

The focus group participants concluded that the grain bank activity has attracted more widespread participation and interest than other community activities because it addressed their most pressing need -- food security. It has thus become a focal point for organizing the people for other community activities.

Interest in the bank has risen in the area and several other communities now want to join. The executives must decide whether to expand the facility or to open a new one.

Generally, it is obvious that the intervention has achieved a positive effect by ensuring relative food security in an otherwise food deficient area. There was a remarkable reduction in post-harvest losses, as well as dramatic spillover effects in the community. This program has the capacity to produce profound effects (and eventually, longer-term impacts) on participants, their households, and the community. During the current 1994-96 MYOP period, CRS intends to implement the grain bank program with 12 groups in four primary health care intervention areas in the Northern sector and one in the Ashanti region (as the last CRS intervention in that phase-out region).

The 1995 MYOP update includes the following "impact indicators":

> 50% of members of farmers groups routinely practice the new grain storage and management techniques introduced;
>
> 10% reduction in post-harvest loss rates compared to baseline figures.

The evaluation team considers these valid measures, but only the latter of the two should be deemed an "impact" indicator. (The first is a process, or outcome indicator. By our definition of short-term effects and long-term impact, we might also say that reduced post-harvest loss is an effect indicator. Impact in terms of eventual family wellbeing should be considered beyond the responsibility of an assisting PVO such as CRS, and resides more in the bailiwick of a research institution capable of household surveys and nutrition studies.)

Benchmarks in the 1995 update include the following: 12 groups are identified and selected in 4 PHC districts; baseline surveys are conducted before training; improved storage facilities are introduced to communities prior to the harvest; funds are made available to 12 farmer groups to purchase, treat, store, and sell 30 metric tons of local food each.

4. School Rehabilitation

Fourteen schools are to be rehabilitated in Upper East and Upper West. Most, but not all of these, are schools in the School Lunch Program. The present monitoring system already captures attendance rate data, and can therefore be used to see if an improved school structure (especially roofing) will be followed by improved attendance. The work began in February 1994, so it is too soon to measure, but Sandys (FFW coordinator) has begun visiting these schools to ascertain their status.

A current Ministry of Education objective is to ensure that no child need walk more than 5 km to school. Despite World Bank support to the Community Construction Project for 3019 schools, 1983 head teacher houses, and re-roofing of 1546 classrooms, persons with whom the team talked said the results so far are "negligible" or "invisible" in this area, indicating there is an urgent need from other sources such as CRS and ADRA to assist in the overall effort; the MOE continues to request their help.

5. School Feeding

> "African farmers who have completed four years of education -- the minimum for achieving literacy -- produce, on average, about 8% more than farmers who have not gone to school."
>
> (World Bank. World Development Report 1990, page 81)

When the School Lunch Program was supported by Title II commodities through CRS nationwide, more than 1000 schools were involved, with 68,000 children fed. The program was cut in 1974-76, and now there are only 100 schools in the program (in contrast to 1700, or 65% of the nation's schools, in neighboring Burkina Faso).

An add-on to the Gender Equity Operations Research program (next section) is an upcoming addition of data from 50 schools not participating in the SLP; this will be done in September, and enrollment, attendance, and drop-out rates will be the focus for comparisons between program and non-program schools. (In fact, a three-way comparison will be possible -- non-program schools, lunch-only schools, and lunch-plus-take-home-ration schools.)

Every year the issue comes up of whether it would be more beneficial to provide the meal mid-morning (when children still have classroom work to do) than at noon (just before they leave for the day), but it seems to be impossible to mobilize cooks early enough for an earlier meal to be served. That's a pity.

A recently completed CRS impact evaluation of the Burkina Faso school feeding program was far more extensive than any planned (or needed) in Ghana. It included 80 consultant days, plus a full-time Burkinabe staff of three for nearly a year. Multiple approaches were used, including 18 matched pairs (36 schools) which showed higher attendance in program schools; 5-year time series of schools integrated into or dropped from the program, which showed increased enrollment following integration and decreased enrollment following termination, with drop-out rates also rising and falling according to the status of the school in the program (each of 19 schools thus acted as its own control, having been both in and out of the program at some point in time); national enrollment data, which found only a slightly higher enrollment on average in program schools than non-program schools; and an examination of all program vs. non-program schools in each of three provinces, which showed in four of the five provinces a markedly higher attrition rate for the non-program schools.

The evaluators in the Burkina study were amazed, halfway through the process, to stumble upon a three-country extensive (and obviously very expensive) study done by the University of Dijon. More than 3000 P2 pupils in each of Burkina, Benin, and Togo were given standardized exams in math and French language in October and again in June. The learning that was evidenced between the two was analyzed by a huge number of variables, including family characteristics, home environment, individual pupil characteristics, school construction, teacher age, gender, training, experience, mother tongue, etc. The researchers did NOT set out to look at school canteens, but found their presence to be one of three variables most strongly associated positively with scores on the math and French exams, with the association strongest for those "with the most after-school home duties" (i.e., girls).

The 6th grade standardized test results (the only grade in which national, uniform exams are routinely administered) were also positively associated with the schools in the CRS canteen program in the ten poorest provinces; the success rate was more pronounced for girls than for boys in the program; the relationship was strongest for the three very poorest provinces.

The present Ghana evaluation team feel it should not be necessary to replicate such a thorough and expensive study in every country where there is a school feeding program. The evidence from the Burkina study, as well as many others around the world, is fragmentary but points to the power of a school feeding program to attract more pupils (the question of whether these are actually additional enrollees or merely transfers from other schools is discussed above in the section on ADRA), to encourage more regular attendance, and to decrease the drop-out rate (i.e., increase the retention rate).

The two studies in Burkina (CRS's and the French one) both found positive associations between the school canteen and exam outcomes. A similar relationship could be tested in Ghana now that there are soon to be three years of standardized 6th grade exams (Criterion Referenced Test, CRT).

To assist the Peace Corps Volunteer in her planned comparison between program and non-program schools, the team visited two schools in Upper East to test whether some of the techniques applied in Burkina could also be used (at less expense) in Ghana.

It was not possible, given the time frame and the inadequate data at our disposal to pick a genuinely matched pair of schools -- i.e., alike in important characteristics, the only difference being presence or absence of the lunch program. Unhappily, the two to which we were escorted by the GES counterpart supervisor in Bolga were not only poorly matched, they were outrageously different. It was not till we were leaving the no-lunch program school that we learned it was within easy walking distance of Navrongo. Its attendance rates, which we meticulously calculated, were even higher than typical urban school rates -- well above 85%! On arrival at the school we were aware that this was an exceptionally well-run institution; an alert articulate head teacher (who routinely skips his own lunch so he can be there with both morning and afternoon shift pupils), orderly lines of pupils, imaginative teaching (some of which we overheard as we recorded attendance data), and unusually complete sets of classroom registers. The lunch program school, by contrast, was far more rural, with a head teacher we later learned had been sanctioned for poor cooperation (i.e., record-keeping and submission) with the program. The dusty registers going back to 1968 were helter skelter on top of a filing cabinet, and appeared to provide a lovely nest for cockroaches. Some current ones could not be located. Teachers did not have the proper books to fill in this year, and some had improvised their own system in blank exercise books.

The attendance rate in this school was, not surprisingly, far lower (around 60%). We had hoped to test the possible extraction of data for a 5-year time series in this school, since we found registers going back many years. However, no one was quite sure when the lunch program had begun, and there were large gaps in available registers. The year that we thought was the first year after start-up of the program had impossible attendance figures (enrollment in one class, for example, was only 52; the maximum number of pupil-days in a week with no holidays would be 52 x 5 or 260, but figures indicated many weeks with more than 300 pupil-days of attendance). We had to discard this approach, and have been told that it is unlikely ANY school can be found anywhere in Ghana with intact registers for a couple of years before and after integration or suspension.

We also attempted to see if attrition rates could be calculated, using fragments of data concerning enrollments in the classes P1 through P6 over six years, tracing how many pupils were in P6 five years after they entered P1. In this miserable school, such an analysis was not possible, but we found that it would be possible in several other schools, as indicated here.

Attrition Rates: Three Types of Schools

Yamariga, 13 miles from Bolgatanga, no food (canceled 1980's)

Girls only

	90-91	91-92	92-93	93-94
P1	25	13	12	18
P2	10	28	9	10
P3	3	2	6	6
P4	2	10	2	4
P5	0	3	2	4
P6	2	0	2	4

The girls who began as 25 in P1 had dropped to 4 by the time they reached P4. The P2 girls, 10 at the start of the series, were down to 2, then 4. The 3 girls in P3 rose unexpectedly to 10, then fell back to 2 and 4.

Kongo, 11 miles from Bolgatanga, public school, lunch only

Girls only

	91-92	92-93	93-94
P1	63	52	40
P2	43	53	57
P3	35	50	73
P4	24	36	26
P5	11	22	36
P6	15	11	22

Girls who began P1 in 1991 went from 63 to 73 two years later in P3. P2 girls who began with 43 had dropped to 26 two years later. P3 girls remained at 35-36 over three years. P4 girls also remained almost entirely stable, 24 to 22 over three years. P5 girls lost none of their 11 over two years. Except for P2, classes

either increased or did not lose significant numbers of girls in this School Lunch Program school.

Wakii, 10 miles from Bolgatanga, public school, lunch plus take-home ration for girls attaining 85% attendance in a month

Girls only

	89-90	90-91	91-92	92-93	93-94
P1	28	30	37	19	49
P2	23	31	27	40	30
P3	15	23	26	30	42
P4	40	15	18	25	32
P5	25	39	22	24	28
P6	17	26	36	19	27

The take-home ration began in 1991-1992.

P1 girls who began as 28 in 1989 were still 28 by the time they reached P5. P2 girls who were 23 in 1989 had begun to lose (down to 18 by 1991), then recovered and rose to 24 and then to 27 by the last year of the program. P3 girls were 15, then 22 the first year of the operations research program, dropping slightly to 19 the next year. P4 girls were unusually numerous at 40, then 39, then 36.

The turnaround in attrition of those in P2 and the stable numbers of girls in P1 are contrary to the usual trend of gradual losses year by year.

It is clear that looking only at these three schools, the take-home ration school has the lowest, the lunch-only school intermediate, and the no-lunch school the highest attrition over time. It would be necessary to do a similar attrition rate analysis in many more schools to be sure this pattern held up, but we were struck by the consistency of the data with expectation in this completely haphazard ("random" would be too scientific a term) choice of three schools all within about the same distance of the regional capital.

Total Enrollment, Matched Pairs

PAIR # 1. Balobia and Adda

With food: Balobia

From 91-92 to 93-94, total enrollment grew from 308 to 451, an increase of 50% in 2 years;

Without food: Adda

Same years, total enrollment increased from 201 to 240, an increase of 20%.

The lunch school experienced a much higher increase (50%) than the no-lunch school (20%).

Girls only -- Balobia (with food) increased from 147 to 194, an increase of 36.1%;

Adda (without food) girls increased from 77 to 101, an increase of 31.2%.

The girls in the lunch school had a somewhat larger increase (36.1%) than in the no-lunch school (31.2%).

PAIR # 2. Kongo and Nangodi

With food: Kongo

From 91-92 to 93-94, total enrollment increased from 452 to 620, an increase of 37.2%.

Without food: Nangodi

Same years, total enrollment decreased from 218 to 202 -- a decrease of 7.3%). (No new schools were built nearby to siphon off potential enrollees.)

Enrollment in the lunch school increased 37.2% while that in the no-lunch school declined 7.3%.

Girls only:

Kongo: from 191 to 276, an increase of 44.5%.

Nangodi: decreased from 74 to 65, a decrease of 12.2%.

Girls' enrollment in the lunch school increased 44.5% while that in the no-lunch school declined 12.2%.

PAIR # 3. Sheaga and Yameriga

With food: Sheaga

From 91-92 to 93-94, total enrollment increased from 345 to 424, an increase of 22.9%.

Without food: Yameriga

Same years, total enrollment increased from 119 to 147, an increase of 23.5%.

Girls only:

Sheaga: increased from 97 to 130, an increase of 34.0%.

Yameriga: increased from 42 to 46, an increase of 9.5%.

In this pair, while total enrollment was no different between the two schools, the proportion of girls shifted dramatically in the lunch school, and there is a strong contrast between girls' increased enrollment in the lunch school compared with the no-lunch school (34% vs. 9.5%).

PAIR # 4. Bgeogo and Kulpeliga

With food: Bgeogo

From 91-92 to 93-94, total enrollment increased from 280 to 420, an increase of 50%.

Without food: Kulpeliga

Same years, total enrollment increased from 99 to 104, an increase of 5%.

Enrollment in the lunch school increased 50% while that in the no-lunch school increased only 5%.

Girls only:

Gbeobo: from 96 to 173, an increase of 80.2%.

Kulpeliga: from 26 to 38, an increase of 46.2%.

Girls' enrollment in the lunch school increased 80.2% while that in the no-lunch school increased only 46.2%.

[CRS is planning to do the above, but with 50 schools and not just the few represented here (available to the team via the CRS counterpart supervisor at GES in Bolgatanga.]

SUMMARY (including 1 additional school not detailed above)

Percent increase in Enrollment, 2 years	Lunch	No Lunch
TOTAL (Boys and Girls)	46.4	19.4
	37.2	(7.3 dec.)
	22.9	23.5
	50.0	20.0
	50.0	5.0
GIRLS ONLY	32.0	2.6
	44.5	(12.2 dec.)
	34.0	9.5
	80.2	46.2
	36.1	31.2

In summary, in all but one of the instances described above, the school with a lunch program grew in enrollment more, or considerably more than the school without a lunch program, and the difference is usually greater for girls. Are the "new" enrollees actually pupils who would have attended another school but transferred to the lunch school, or would have attended a non-lunch school if there were no lunch school nearby? It's not possible to say without further investigation, but when we queried community leaders and parents in several instances, we were told that the

children were nearly all "additional" enrollees since the only other nearby school had no roof, which discourages not only rainy season attendance but basic enrollment as well by parents who feel it hardly worth their while to pay school fees for a "school" that meets under a tree or only when the sun is not too hot or when it does not rain. In addition, all of these schools have had or not had a lunch program for many years; none represent a situation where a lunch program is recently introduced, and that school then "steals" pupils from another nearby no-lunch school.

6. Gender Equity: Operations Research

> "We always had to quit school in March to help with the spring work. But I stayed with it till I got through the McGuffy Sixth Reader and that's as far as school went in those days." "It was harder for boys to finish than girls because they did have to work outdoors more," Mama explained. (from Anna Plus, Tales from a Town Called Wells by Anna Allison Peck, 1994, about life in a small Kansas town in the early 20th century. Peck is Judy Bryson's mother -- Judy was once USAID/Ghana's Food for Peace officer).

CRS conducted a baseline study prior to introduction of the take-home ration for girls who attain 85% attendance in a month. Workshops were held to explain the study to supervisors. Motorcycles were provided so that monitoring could be properly done. Forms were designed, tested, revised, distributed, and repeatedly explained. The first study year produced reasonably valid data, but the collection system has greatly improved since then. A second year of data were obtained and written in a full report. The evaluation team were provided with a third year interim report, at our request (the academic year is not yet finished). The results confirm the two prior years' data, namely a 10% higher attendance rate for girls in take-home-ration schools compared with girls in lunch-only schools. The difference is more pronounced if urban schools are excluded. (Indeed, urban results are the reverse of overall results, which suggests that CRS should phase out lunches in urban schools, as has been done already in Burkina Faso.)

A home visit questionnaire has been designed and will soon be administered to check on various aspects of the operations research program (such as how the family used the take-home ration, whether it supplements normal family food intake or substitutes therefor). About 20 households of girls enrolled in each of the take-home ration schools will be visited, supplemented by focus groups interviews with parents and elders.

Ghana has now had two years (and in July 1994 will add a third) o f a national standardized P6 exam in English and math. National results show very little difference between boys and girls, but the discrepancy in the three Northern regions is enormous -- suggesting that girls must be doing somewhat better than boys in some or all of the other regions. The discrepancy between girls and boys in regularity of attendance at school is surely a major contributing factor, which underscores all the more the importance of stressing attendance (and not just enrollment).

The objectives of the OR component of CRS's Title II-supported take-home ration have always been deliberately formulated relative to the research aspect, not the outcomes. That is, if the results of the research were already known, then a certain percent increase in enrollment and attendance would be the objective. But until the research is officially concluded, CRS does not want to presume the results. The agency has therefore correctly stated these unusual objectives and benchmarks in terms of completing the research. If and when the successful results are applied to other schools, the organization will state objectives in the usual way -- i.e., changes expected to occur as a result of the intervention.

7. PHC

The evolution from a nationwide MCH supplementary feeding program to a narrowly focussed PHC program has now reached the point where CRS's role in the PHC communities is to provide financial support for a baseline survey (using rapid appraisal techniques, sampling 20-25% of households in a village, conducting semi-structured interviews with household heads), training of Village Health Workers, training for the District Health Management Team (e.g., Information/Education/Communication skills, PHC management, etc.). VHWs are literate persons (some men) who are unpaid volunteers selected by their community. They maintain community registers (births and deaths, weighing charts). A health professional from the MOH visits the community every two weeks to weigh, vaccinate, and do health education. The PHC activities originally were out of doors, but now are conducted in PHC structures (2 rooms and a veranda) made with community labor and bricks, and roofing supplied by CRS. These structures are now also used by Traditional Birth Attendants for deliveries, formerly performed in unsanitary conditions in homes. The VHWs assist MOH staff in health and nutrition education and refer cases to hospital or health center.

The PHC program was started in the Ashanti Region, known for being an area which usually provides a faster response than the Northern sector regions. PHC centers in Upper East and Northern Regions were begun in May and March 1993, respectively. Village Health Workers (VHW) were trained (as were Traditional Birth

Attendants, a component recently dropped from the program on the advice of USAID) starting in March 1992.

PHC activities were started with a baseline survey in each of 12 communities in December 1991. With baseline data now collected in each community, the MYOP provides for follow-up evaluations. Meanwhile, quarterly visits are made to the communities; the information from a standardized monitoring visit form is computerized. The first results are expected at the end of June (too late for inclusion in our evaluation). The DHMT will collect the forms, and CRS will analyze them.

The Centre for the Development of People, a local NGO involved in training at the grassroots level, has been contracted to explore the possibilities of incorporating income-generating activities for women, but also involving men so that the IG action can be an entry point for nutrition education. (A 1992-93 household survey by IFPRI in Ghana found that adequate caloric adequacy at the household level -- i.e., household food security -- does not necessarily translate into individual food security for women and children. The most frequently offered explanation for this blockage is that traditionally Ghanaian men eat "first, most, and best -- the protein." If CRS does undertake this add-on, they would be in a position to test an approach to repealing this damaging tradition.)

The evaluation team met Dr. Dominick Quaye, District Medical Officer in Bolgatanga, who explained the district, sub-district structure set up to improve DHMT functioning. A sub-district health team includes workers from MCH, environmental health, medical care, plus representatives from "health-related sectors" such as agriculture and community development. (We were pleased to see agriculture listed as a health-related sector. We hope the feeling is reciprocal.) There are nine CRS-assisted villages in Upper East, each one in a different sub-district. This new (end 1993 implemented) structure is intended to provide horizontality to an essentially verticalized health structure.

It is the District Health staff that trains the Village Health Workers, with CRS providing the funding for the training (per diems, training materials, meals during training). After training, CRS provides money for transport fuel and ongoing monitoring, as well as construction materials for Mozambique slabs (in lieu of latrines, since communities are widely dispersed and a slab can be provided for each house). There are not yet monitoring forms, but CRS is helping them with a checklist, which we were told has just been finalized, but not yet used. First reports are therefore not yet available.

Baseline surveys having just been completed, there is no way yet to compare CRS-assisted villages with other villages; such a comparison will be included in the FY96 evaluation.

It would not be meaningful to look for decreases in disease incidence (malaria) until at least 5 years from the start of the program, and then it will be extremely difficult (as it often is in health programs) to attribute observable disease incidence declines to the program interventions. In fact, there may initially be an apparent increase in incidence as diagnosis and reporting improve.

Communities should be assisted to build wells at the same time as other environmental sanitation measures are taken (Mozambique slabs, soak-away pits outside individual homes to reduce insect-breeding stagnant water bodies).

To ascertain whether diarrhea continues to play a debilitating role in child health, it is internationally accepted that it is more meaningful to monitor caretakers' practices in managing it than to attempt to measure instances. (WHO and UNICEF now urge that evaluators and program monitors examine how diarrhea management is promoted and how well it is accepted and learned.)

Several interventions are needed simultaneously in order to effect a measurable decline in diarrhea-related mortality: toilets (built, maintained, and properly used), regular hand-washing, proper waste water disposal such as via soakaway pits, proper refuse disposal, and immunizations (a lower incidence of measles also decreases incidence of diarrhea).

It is the doctor's opinion that the enclosed structures made possible with CRS materials are essential; certain health services can be performed under the baobob tree, but others require privacy, such as intramuscular injections (NOT given in the upper arm), family planning, prenatal care.

Of the 9 villages selected in Upper East, 5 structures are completed out of the original 6, and 3 more have only just been identified in the current MYOP.

If CRS is concerned about health measures as support to broader food security objectives, it would be meaningful to add deworming therapy to complement personal hygiene and environmental sanitation. This simple addition "would go a long way toward reducing diarrhea and malnutrition."

8. Constraints

Like ADRA, CRS has an Accra-to-the-field communication problem. Everyone suffers from poor telephone connections, but CRS's radio system is old and insufficient. Delays in approvals from Accra are common. However, the move of most staff to Tamale, starting soon and to be completed by July 1995, should minimize most (though not all) of that.

The team can see both pros and cons of the move to Tamale, but the decision has been made. Some staff are concerned that although the conflict zones are peaceful for the time being, the situation could change.

The constraints perceived by staff are not uncommon: too few people to do what needs doing in too little time with too little equipment. The vehicle problems hindering CRS and counterparts have been considerably lessened in recent years.

The team, while commending CRS for remarkable progress in the quality of their planning skills, and for recent progress in monitoring and evaluation as well, they also need help in sharpening the latter. Technical assistance could easily be rendered to both CRS and ADRA, not in a joint workshop, but in a single visit, with some crossover and inter-agency communication and collaboration during the course of the assistance period.

9. Staffing

There is little the team has to say about CRS staffing. A core of loyal, long-term employees has amassed many years of experience and skill. They have weathered well the series of drastic changes in the CRS program over recent years. The two nurses bring a high level of professionalism to the agency's PHC component. The indefatigable program director brings not only experience but tact and wisdom to a difficult job.

It is good that Hippolyt Pul was sent for a three-month course in Germany in order to learn GTZ's planning process. Pul already has learned well, and applied consistently, the Simplified Log Frame (starting with problem identification and problem analysis) introduced by Moore. With the German system added to his skills, he is now in a position to choose one, blend the two, or come up with his own approach.

Another CRS staffer, Tony Batche, has also shown outstanding planning ability.

Equivalent strengths in monitoring and evaluation can be achieved...with a little help.

10. Support to USAID Mission Objectives and Priorities

CRS's school rehabilitation, School Lunch Program, and especially its Operations Research (gender equity) all fully concur with and support the mission's Access to Primary Education objective number 3B.

CRS's PHC activities support the three health indices included in objective 4C: soakaways, preventing mosquito breeding places, relate to the febrile episodes indicator; Village Health Worker training relates to ORT (diarrhea management). And CRS's support to the construction of PHC structures indirectly (and not explicitly) supports the mission's interest in family planning. (In fact, before the evaluation team left the village in which we observed one such structure, a village leader and head teacher began to argue about the desirability of using condoms; the former asked us to see about resuming condom supplies, as they have experienced recent stock-outs!

CRS's grain storage project supports the mission's emphasis on food security -- both availability (reduced post-harvest losses) and access (food no longer leaves the community).

CRS's PHC activities, by eventually reducing debilitating diseases and conditions, also contribute to the consumption aspect of food security.

11. **Recommendations** (or concurrence with CRS's own intended steps)

1. CRS already intends to phase out soon in the Ashanti Region.

2. CRS will soon conclude the third and final year of its operations research on increasing girls' school enrollment and attendance. Results to date suggest the school feeding program (not just the take-home ration) should be phased out in urban areas, and CRS intends to do so.

3. This will also present an opportunity to reconsider the entire school lunch program, with the possibility of drawing up new criteria for participation, with special outreach efforts to involve Muslim schools. We could well envision an expanded program, including the successful take-home ration.

3. It is now possible for CRS to look at P6 national exams (CRT), comparing lunch schools with all schools in the same region.

4. While we would not suggest the setting up of either a CRS or ADRA "University," we feel both organizations should devote more attention, and therefore more budgetary support, to staff development and continuous professionalization of the agency.

5. Technical assistance in M&E should be provided to assist CRS in upgrading their evaluation skills and in putting into place a comprehensive M&E plan.

6. Like ADRA, CRS might benefit from reconceiving their health interventions as the "consumption" leg of the three-legged table supporting food security. This is not merely window-dressing, but a way of perceiving a cluster of complementary objectives and related activities.

7. Not a recommendation, but a request: we hope CRS will be willing to share its cluster's excellent paper on Management by Objectives with ADRA, whom we have urged to borrow unashamedly therefrom.

C. TechnoServe

1. Program Overview

TechnoServe (TNS) has been operating a nationwide program of community based Rural Enterprise Development in Ghana since 1971. TNS is assisting rural communities to locate profitable marketing outlets for local production and therefore ensuring availability and access to both food and cash on a year-round basis to ensure rural food security.

TNS has received three shipments of Title II wheat since 1992. The proceeds from the monetization of the wheat have been deposited and invested in a Community Enterprise Development and Investment (CEDI) Trust Fund and maintained as a multiyear source of funding for TNS operations.

The program goal is to enhance food security in Ghana, thereby improving the long-term economic and social wellbeing of low-income rural people through the creation and strengthening of viable agricultural enterprises.

Program objectives are as follows: Funds from the Trust are authorized for use in five budget categories:

TNS operations
TNS staff and beneficiary training
TNS capital expenses
venture capital for rural enterprise development
CEDI Trust administration.

The funds allotted to objective one (program operations) come from a variety of sources, most importantly USAID, the Government of Ghana, and the World Bank.

Monetization funds are used to assist 45 rural businesses operating in three sectors:

- palm oil processing and marketing (30% CEDI Trust Fund funded)
- cereal storage and marketing (100% CEDI Trust funded in all but Upper West Region, where it is largely World Bank financed)
- non-traditional export development (15% CEDI Trust Fund supported).

Only the Cereal Storage and Marketing assistance was reviewed in the course of this evaluation because it is the only group of projects funded entirely from proceeds of Title II sales.

Assistance was in the form of production planning (with the Ministry of Food and Agriculture, MOFA), reduction of post-harvest losses (also with Global 2000 and MOFA), and marketing (with the Agricultural Development Bank, ADB) with farmers' cooperatives/associations in Brong Ahafo and Eastern Regions in 1992-93 and 1993-94 seasons. There were six cooperatives in 1992-93 and twelve in 1993-94.

Marketing assistance included the use of "inventory credit" -- a scheme under which farmers are provided commercial (ADB) loans against collateral of their own produce. This produce, stored in a cooperatively managed warehouse, is used to leverage loans valued at 75% of harvest-time market prices, thereby permitting farmers to take advantage of price peaks in the lean season when supply is low (often more than 100% above harvest-time prices), while avoiding post-harvest cash flow shortages.

The project objectives relating to the cereal program are among others:

to assist organized groups of entrepreneurial farmers to produce, store, process and/or market 36,000 MT of foodstuffs, both for local consumption and for export. (The anticipated annual breakdown is 9000 MT in FY95, 12,000 MT in FY96, and 15,000 MT in FY97).

to generate rural revenues

to create rural added value

to create rural jobs

to mobilize rural equity

to use the equity to leverage funds in rural credit from the formal financial sector for investment in productive agricultural enterprise

to significantly reduce post-harvest losses.

2. Achievements Relative to Targeted Outputs

As of September 1993

Cooperative	Inventory MT 92-93 Target	Inventory MT Actual	Buy/Sell MT Target	Buy/Sell MT Actual
Toh Kpalime	15	16.7	5	6
Yilo Krobo	25	no disburse.	10	--
Offuman	116.5	83.6	10	5.6
Aworate	26.8	18.3	--	--
Techir	33.0	26.4	--	--
Nsuta	55.0	30.4	10	20.5
TOTAL	246.3	175.8	25	32.1

Total loan available: 24 million cedis
Withdrawn: 15.6 million cedis

Targets 1993-94, as of June 15, 1994: total inventory, 12 cooperatives
(Yilo Krobo, Abomasu, Offuman, Aworate, Ampenkro, Nsuta, Brenyekwa, Dotoba, Bodom, Asuam, Twimia, and Aworowa) targeted at 600 MT; Achieved: returns not yet in for compilation, but all loans have been retired.

Total loan disbursement 39.7 million cedis
There was no buy and sell activity in 1993-94.

In FY93, there was under-achievement of the targeted tonnage of 246 MT to be stored. This was partly due to the fact that disbursement was delayed by the bank for the Yilo Krobo group. All loans were retrieved on time. During the same period some of the communities bought grain on the open market, stored, and sold later. The amount of 25 MT targeted was exceeded by 28%. The total loan targeted, however, was 35% under-achieved.

In FY94, a target of 600 MT of maize to be stored was set; however, at the time of reporting the returns have not been compiled to enable comparison. The bank also confirmed that all loans for 1993-94 have been retired.

There was a 100% increase in the number of participating cooperatives in 1993-94 compared to the six cooperatives in operation in 1992-93.

3. Benefits of the Inventory Credit Scheme

Farmers get cash when they need it most but are not forced to surrender their farm produce when prices are at their lowest. Rather, they can store this produce into the lean season when prices rise as much as 150% above that prevailing at harvest time and do one of two things:

(1) they can instruct their cooperative to sell their produce, using the proceeds to repay the bank for its credit as well as the cooperative for its safekeeping of the produce, and in most years the farmers can still earn a profit of 10-50%; or

(2) they can buy back their own produce from the cooperative, paying back the bank and the cooperative yet still saving 10-50% by not having to pay prevailing market rates.

There is a reduction in post-harvest losses due to the better storage conditions.

From a food security point of view, this translates into both availability and access to foodstuffs for rural communities as well as to cash when they need it most.

In 1992-93, ADB inventory loans totaling 25.7 million cedis were advanced against 300 tons of maize to TNS-assisted cooperatives.

On the average, participating farmers were able to realize net incremental benefits of 41% or 3075 cedis per bag or 36,905 cedis per farmer, by participating in this program. In a country where the average family farm (nationwide) earns approximately 200,000 cedis per annum, this represents an increase of nearly 20% in farm family income.

In 1993-94, ADB inventory loans totaling 39.7 million cedis were advanced against 600 tons of maize to twelve TNS-assisted cooperatives with a combined membership of 1400 people. At the time of reporting, sale of the maize had been completed at the Offuman and Nsuta cooperatives. Some of the major buyers are local and international NGOs, intended primarily for food relief and/or school feeding. Some major poultry feed millers have also been catered for.

In the period 1995-97, TNS anticipates expanding its coverage to 27 cooperatives of 50-300 maize/sorghum farmers each, while at the same time focussing on two regions only (Brong Ahafo and Upper West Regions).

4. Linkage to Food Security Policy and USAID Mission Strategic Objectives

The cereal inventory credit program focuses directly on the enhancement of food security. Farmers will only grow surplus food for sale to the general public if they can make a profit. The way to generate the profit as well as to increase on-farm productivity while reducing post-harvest losses, and also increase rural job opportunities, is through the establishment and growth of viable community based agro-businesses.

These activities also fit into USAID's primary goal to prom ɜ sustainable, broad-based and market-oriented economic growt. by increasing income and employment and improving the quality of the human resources base. Through the CEDI Trust, USAID supports TechnoServe's community based enterprise development programs, including the domestic cereal storage and marketing in the Eastern and Brong Ahafo Regions.

5. Constraints to the Achievement of Targets

The banks, although having recently become more cooperative in their dealings with TNS, are unfortunately still not sufficiently speedy in loan processing and disbursement. This has frustrated some of the groups because their money arrived late. There seems to be a growing frustration with the ADB bureaucracy. Delays in disbursement reduce farmer participation and lower the marginal benefits of market timing.

Inventory credit schemes are far from being risk-free. Participating farmers must be made aware of this from the onset of the program so that when a problem arises in future, they will be forewarned.

Despite the historical data on peaks and lean season price trends, there could be serious problems if early surveys to assess crop performance and evaluation of potential effects of commercial/government imports and food aid programs on prices are not done. Without such assessments, the risk of unexpected drops in price of inventory produce could be high.

There is a need to negotiate flexible terms with the Bank. Without flexibility of ADB, inventory loan repayment schedules are too stringent. Repayment schedules need to be tailored to anticipated price movements to ensure that loans are not due before the benefits of price trends can be fully reaped.

Without the institution of and adherence to quality control measures at harvest time to avoid inventory infestation and moulding, and to enhance marketing opportunities, anticipated profits can be wiped out.

6. Impact Evaluations by TNS's Enterprise Research and Development Department

Monitoring of the TNS programs is conducted via a computerized "Field Data Base", which captures over 100 variables relating to community effects, enterprise profitability, and organizational sustainability. Data are analytical rather than descriptive in nature, recorded as "actual" and "planned", and compared at all times to baseline conditions. All data are updated and reviewed on a quarterly basis. Evaluations are conducted before, during, and at the end of assistance and are geared to assessing both the "impact" of TNS assistance on the community and the cost-effectiveness of this assistance.

"Impact" evaluations are carried out by comparing a long list of baseline indicators to current data. Indicators include those relating to rural productivity, incomes, employment, skill levels, the role of women in the community, and environmental practices.

All evaluations entail the administration of detailed questionnaires to a representative sampling of enterprise participants and non-participants.

7. Current Impact Assessment of the TNS Cereal Inventory Credit Scheme

Two cooperatives (Offuman Multipurpose Coop Society, and the Nsuta Multipurpose Coop Society), both in the Brong Ahafo Region were visited to (1) assess the impact of the inventory credit program on the individual members and their households and communities and (2) to analyze any secondary benefits and spillover effects attributable to the scheme.

Among the key indicators are the following: tonnage of foodstuffs produced, stored, or processed in MT; revenues generated; rural value added; rural jobs created; farmers' equity mobilized for rural investment (an indicator of farmer commitment to enterprise success); rural credit leveraged; enhanced food security; effect on household assets; learned skills; effects on the surrounding community.

A focus group, key informant, and other individuals were interviewed in the villages of Offuman and Nsuta.

All the respondents agreed that they made more money per year since they joined the cooperative. They have been able to buy radios, cloth, etc. and are now capable of paying school fees for their children. The vice-chair of the Offuman coop indicated that one of her children who had had to quit junior secondary school because she could not afford to pay has now sent the daughter back

to school (after two years at home). Many of the members of the Offuman coop have begun building projects (their own homes, one with 8, another with 5 rooms) using the added income they are now making. The local shopkeeper, when asked about how brisk business has been, indicated that her sales have gone up significantly since the inventory credit began. She pinpointed cloth, torchlights and batteries, canned fish and meat, and medicated soaps as the items that are now moving in her store.

Many farmers in the cooperative are also increasing their farm sizes for both the major and minor season maize crops and the introduction of labor-intensive vegetable and root crops, especially yams, because they can now afford to hire farm laborers using the money from the advance payment on the inventory maize and the profits made after selling the main season grain. The interviews revealed that farm sizes have increased by about 25-30% and the production extension training has led to the planting of high-yielding maize varieties and use of better production techniques that are giving them 15-20% more yield than they were getting before the introduction of the program.

The chairman of the Nsuta Cooperative who happened to be the chairman of the village development committee, revealed plans the cooperative has for putting some of their earnings into a development project in the village. A nine-km portion of road from the village of Offuman to Techiman (a 21-km stretch) has been rehabilitated by the cooperative as a service to the community, and there are plans to continue with the rehabilitation in future. Children and the elderly were, according to the respondents, the predominant beneficiaries. Both the men and women interviewed agreed that more money now goes to the women for running households. There is now in these villages knowledge about the storage of maize and those who do not belong to the cooperative are also storing their maize safely with chemical insecticides.

This area, the Brong Ahafo region, is a food surplus area and the problem here is how to dispose of the surplus grain at a good price. The program has had a positive impact on the farmers, their dependents, and the communities as a whole. They all agreed that life has become better than it was prior to the advent of the grain inventory program, where jobs have been created for women, farm laborers, watchmen, and loading boys, and there are many beneficiaries, both direct and indirect (buyers both small-scale and institutional).

8. Recommendations TNS

1. Technoserve currently has some projects funded from different sources -- e.g., the oil palm project and the NTE project are 30% and 15% respectively funded by USAID Title II, the rest by other donors. Thought should be given now to how credit can eventually

be attributed to individual donor inputs as effects and impacts are revealed. (The problem of attribution is not unlike the problem of attributing a decline in disease incidence to a single intervention when there are many that have contributed.)

2. The Technoserve MYOP lists 19 objectives with no indication of priorities or time frames. There is a need for focusing on a few objectives and firm time frames for achievement.

3. Technoserve is involved in a number of activities and several major donors, including contracts with the GOG and the World Bank. The GOG and other agencies (ASSIP, IDA, and the EEC, for example) are discussing project support to TNS as well. TNS is currently involved in seven regions. The classic problems of being spread too thin, growing too fast, taking on too many diverse activities may soon threaten TNS and should be given serious consideration sooner rather than later.

4. Technoserve should alert participating farmers to the possible risk of inventory credit, and should introduce another crop such as yams into the scheme to broaden the product base in case of market failure of corn.

5. Technoserve could take advantage of the present opportunity to assess the effect of their inventory credit scheme on overall price stabilization of maize.

6. To avoid discouragement of farmers especially when the banks delay in disbursing funds, Technoserve could provide bridge financing from the CEDI Trust Fund.

IV. SUPPORTING USAID MISSION OBJECTIVES -- RECAP

In the sections above on each PVO, we have included a section pointing out how that PVO's programs support USAID strategic objectives and food security priority. The information contained in this section is the same, merely rearranged according to objective, rather than according to PVO.

Obj. 1 Export promotion:

ADRA	shea nuts, cashews in agroforestry program
TNS	non-traditional export program

Obj. 2D Agribusiness:

TNS

Obj. 3B Primary education:

ADRA	school construction, rehabilitation
CRS	school rehabilitation
CRS	school lunch program
CRS	equity (operations research, take-home ration for girls)

Obj. 4C Other health indicators:

ORT	-- CRS VHW training
febrile episodes	-- CRS VHW training -- CRS soakaways
guinea worm	-- ADRA well construction

Target of Opportunity -- Environment:

ADRA	CCFI
ADRA	agroforestry

Food security:

Availability:

TNS	grain inventory
ADRA	agroforestry
CRS	grain storage

Access:

TNS	grain inventory (income)
CRS	grain storage (food stays in community)
CRS	SLP (income transfer)
CRS	take-home ration (also income transfer)
ADRA	agroforestry (increased yields, some consumed, some sold, income used for "better" food)
CRS	all three school-related programs (medium-term reduction in fertility & therefore numbers to be fed (female education)

Utilization:

CRS	PHC
ADRA	wells
ADRA	KVIP latrines
CRS	school interventions (medium-term improved child care, family health and welfare because of increased female education)

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Measuring Impact

We have adhered to the traditional, internationally accepted use of the terms "short-term effects" and "long-term impacts" in this report. We also accept the nearly universal consensus that impact is somehow more important, more long-lasting than effects, which can be trivial and ephemeral. It goes without saying that effects are nearly always easier (and less expensive) to evaluate than impact, and that routine monitoring can be expected to track effects, but only lay the groundwork for a serious evaluation of impact.

Not mentioned thus far in this report, but worthwhile mentioning here, is the important difference between "quantifiable or measurable" objectives and "verifiable" objectives. The latter makes provision for the possibility that some important consequences of an intervention are not expressible in numbers. Often mentioned, for example, is the "spirit" of a community that has been animated with the help of a PVO; this spirit translates not only into a successful project, but is strongly associated with the probability of spillover effects, sustainability of the original project, and progression to additional projects later on.

ADRA and CRS's work, especially in the Northern Sector, have often been praised in general, unquantifiable terms. It is hard to put a price tag on these types of success, but the praise in future CAN be better documented. (For example, IFAD's Rome office recently advised one of its regular consultants, in Ghana evaluating European Community-funded projects as the same time as our team was at work, that she should not miss looking at ADRA's very successful projects in the North.)

The logic models in Annex K are presented to illustrate the intended chains of causality that underlie the concepts of the PVO programs. They are also useful to demonstrate the following point: it is not always entirely clear just where along such a chain one can specify that "this is an output, but that is an effect, and way down here we can call this an impact." Not only can labeling present a problem. Deciding what to measure, how far along the chain, can also be difficult.

If immunizations are properly administered (right dose, right number, to children of the right age, etc.), there is no need to measure decreased disease incidence, prevalence, or mortality: the link is so firmly established that it need not be further investigated.

Similarly, if KVIP latrines are properly sited, soundly built, appropriately maintained and used, it is not necessary to measure incidence of fecal-borne diseases.

WHO and UNICEF have advised that it is not meaningful to attempt to measure diarrhea episodes, but rather to assess caretakers' knowledge and practice in the management of such episodes.

The labeling and measurement problem become more complex in the following example, however. Consider the following chain of presumed causality. Plant seeds, tend seedlings, a minimum percent of seedlings survive, seedlings are sold or distributed free, seedlings are outplanted, again a percent survive, the survivors grow into adult trees, the trees form a windbreak, wind erosion decreases, soil fertility increases, per-acre yields increase. At this point the chain splits into two: the farmer can decide to cultivate less next year (keeping the same quantity of produce as before, but with less work); s/he therefore has more free time, which she can spend sleeping, drinking beer, taking a literacy course, engaging in an income-generating activity, devoted to child care, etc.

At this point, we can ask whether those in charge of the seedling nursery should be held accountable for how the farmer uses the new-found leisure time. The example is ludicrous, but illustrates the point well.

Returning to the chain, the other alternative consequence of increased yields is to cultivate the same area next year and therefore harvest more; the produce can be left to rot, or create additional food for family consumption, or be sold (or combinations of these three alternatives); if the family consumes, this could either improve family nutrition or contribute to obesity; if some of the surplus is sold, it creates income, which can be used to buy more beer, buy a fuel-efficient stove, pay off the money lender, buy more family food, buy higher-quality family food, buy food that is more convenient to prepare, or buy poorer-quality family food. As cited earlier based on the IFPRI study done in Ghana, more food available at the family or household level does not necessarily result in better nourished women and children; it can result in a better-fed father, better-fed older child (whose long arm reaches into the common pot more effectively that does the arm of the family's poorly nourished child) etc. Convenience food can result in freeing up the woman's time, which takes the chain back to the "what does she do with the extra time" linkages.

What is one evaluator's output is another's effect, and still another's impact.

What is appropriate to measure in connection with a seedling nursery is not "far enough" if the intervention is an agroforestry project.

Most are content to measure increments in income as a legitimate end point, but it is clear that people do many different things, good and bad, with income, with leisure time, with roads. Is it the responsibility of the PVO to ascertain to what uses time, income, and roads are put? Our interviews with TNS coop members in Brong Ahafo provided information on how they used "new" income -- they bought radios, batteries, canned meat, canned fish, and built new houses. Is that TNS's responsibility? If not their responsibility, should they be concerned about it? Should they attempt to track this information periodically?

B. Competing for Scarce Resources

We do not believe it is productive to pit one PVO against another in assessing the successes of their work:

TNS works mainly in the Southern tier, where people are relatively more food secure than in the Northern tier where CRS and ADRA focus their activities.

The very nature of TNS's interventions makes it easier for them to measure outputs and effects:

measuring changes in the lives of a discreet group of 60 coop members is simpler than measuring consequences for a community of 10,000;

measuring bags of produce and cash income is simpler than measuring improvement in a subsistence farmer's assets, or than measuring improvement in health status, or even in measuring whether a well or KVIP latrine is "properly" sited, built, maintained, and used.

TNS spends a substantial amount of money on its own staff development, as well as on research, monitoring and evaluation; the other two do not. (Throughout this report, we have urged that the latter two should devote more resources to staff development and to their M&E systems.)

TNS, despite its legal status as a PVO, has often been described (and is often perceived in Ghana) as "a consulting firm providing technical assistance", while the other two are more "classic" PVOs.

In short, efforts to make comparisons among the three, or between TNS and the other two, would be not a case of comparing apples and oranges, but apples, oranges, and toothpicks!

Even within a single PVO, even if we had been able to accumulate statistical data to show strong positive effects, choosing among programs is more a judgment based on personal preferences than on "cost benefit." Is it "better" to invest in children's health (because they have more productive years ahead) than in chronic care for the elderly? If so, should care for everyone over 40 be abolished? Is it "better" for a hospital to purchase a CAT scan machine or a Magnetic Resonance Imaging machine? Is it "better" to build village wells or to construct soakaways? These are all examples comparing alternatives in the same sector. What about comparisons across sectors -- is it "better" to intercrop or to use a toilet correctly?! is it "better" to raise girls' school attendance or to protect the environment?

It probably took an analyst at the World Bank a year of poring over data from many countries to come up with the following: it is better by far (as measured in fertility declines) to raise the average level of girls' schooling in a nation by one year than it is to double the number of family planning service delivery sites. (It may be far cheaper to do the latter than the former...or vice versa. The conclusion says nothing about the COST of either.)

The evaluators can express their own personal biases, not as professional evaluators necessarily, but as individuals (one of whom is an American taxpayer); both of us agree that if we HAD to pick one sector, and a set of activities in that sector, it would be education (despite one team member's background in agriculture and the other's in health). We hope the mission will not take this comment too seriously.

We also carry the following biases: if scarce resources are to be shared, and hard decisions made that cannot yet (or ever) be backed up with data, the following considerations should at least figure into the decision-making process.

1. Does the mission want to focus resources on interventions that can produce **short-term results?** If so, then take-home rations, school construction, some agro-forestry, agribusiness, grain storage programs are suitable. Or is the mission willing to invest in interventions that may take longer (if the payoff is girls' enrollment and attendance, that's short term, but if it's not considered an "impact" until that education results in lower fertility, better family health and nutrition, higher productivity of the adult, then that's medium-to-long-term, with higher productivity expected immediately after four years of education, and lower fertility starting in the girls' teenage years). Health interventions nearly always take some years before their effects can be measured.

2. Does the mission want to invest only in programs whose results are **easily measured**? (Income-producing, crop yield-increasing programs fill the bill.) Or is the mission willing to support those where results may be there, but more difficult to pin down, and even more difficult to attribute to a single intervention when success may be due to multiple interventions?

3. Should PVOs with **low overhead** be preferred?

4. Should PVOs with **higher salaries, more intensive staff development** be preferred (on the assumption that these result in more qualified staff)? Or the reverse (on the grounds that dedicated staff at low cost can produce just as efficiently)?

5. Should the mission put its money where PVOs have demonstrated their ability to **leverage inputs from other sources**, such as collaborating sponsors (Peace Corps and Amasachina in ADRA's CCFI project come to mind), or who work primarily through local counterparts (CRS's work, in which the relevant Ministry or diocese puts up most of the cost of a project while CRS may contribute only construction materials, vehicles, training, educational materials, and so on)?

6. Should priority be given to PVO projects in the **poorest regions** (Upper East, Upper West, and Northern)?

7. Should priority be given to PVO projects that involve the **poorest communities and poorest individuals**, or those where agricultural surpluses already exist?

8. Should priority be given to projects that promote **gender equity**?

The team members, were they making choices, would give priority to those PVOs and those projects that are located in the Northern Sector, working with poor, food-insecure individuals, families, and communities, promoting gender equity (or at least not increasing inequity).

While we recognize the difficulties in measuring certain outcomes, and the patience needed in connection with the realization of achievement in some cases, we do not think that either ease of measurement or imminence of expected impact should be the determining (or even an important) consideration in making hard choices.

C. Progress, Responsiveness, Focus

We find that ADRA and CRS have made a great deal of progress in improving the quality of their planning process and plans. Both are currently in the process of improving their M&E systems, and in no more than a year, these efforts should produce useful results. With some immediate, intense assistance, the systems can be improved.

We feel that charges of unresponsiveness are largely unjustified. The change in leadership at ADRA should correct whatever unwillingness was in fact manifest (by headquarters, certainly not by field staff) in the past.

Both organizations have made strides in reducing geographic focus, particularly CRS (and we recommend that ADRA not only consolidate within regions, but within the nation as a whole).

Both organizations have greatly reduced the variety of programs they used to undertake.

ADRA has slashed the number of discreet projects undertaken in a year from nearly 800 to under 100.

Within sectors, both organizations have narrowed their focus, with ADRA concentrating its construction inputs to wells, KVIP latrines, and schools, and with CRS concentrating its once-broader health interventions to an almost exclusive emphasis on environmental sanitation.

D. On the Verge of...

Both ADRA and CRS are at a critical crossroads at this time. ADRA was literally between directors as we undertook this evaluation. The new one begins in July. He needs time to settle in (a shorter time will be needed for him than would be needed for a non-Ghanaian or someone who did not yet know ADRA), negotiate staff changes (reduction, redeployment, retraining), determine which regions should be continued and which should be phased out (of Title II programming), and to work with the communities to prepare for phase-out. He and staff will also need time to diversify funding sources -- without proliferating projects or types of activities.

Another, far more labor-intensive and longer in duration impact evaluation is underway at the same time as ours, scheduled for completion July 15th.

CRS is not undergoing a leadership change, but they are in the initial stages of a drastic alteration in their programming and are soon to begin a critical move of most of their staff to Tamale. Their baseline surveys are just now producing results.

The operations research program will soon conclude; no one expects any surprises -- the interim third year report supported the more-than-10% difference in girls' attendance between ration and non-ration schools that was found in the second year study. Urban schools will almost surely be phased out, and decisions will have to be made about extending the successful girls' ration to other schools; this will present the opportunity for an overhaul of the entire school lunch program, with the prospect of specifying different criteria than in the past for inclusion in the program. Muslim schools are currently underrepresented.

E. CRS's Regional MBO

There seems to have been some misunderstanding about CRS's intention for a regional management plan. Unlike the "hub" concept which was tried in East Africa, the current plan goes no further than a commonality of goals and objectives (plus corresponding indicators) for all of CRS's Lome Cluster countries. It was drawn up in connection with the MBO plan presented by a consortium of PVOs to USAID under which PVOs operating in countries where there is no USAID mission would continue to operate Title II-supported programs, taking responsibility upon themselves for monitoring and reporting progress toward achievement of specific objectives -- i.e., "management by objectives." The plan presented by the PVOs was written by Mike Frank of CRS headquarters in Baltimore.

F. Recommendations

Our recommendations to the PVOs are detailed in the sections above.

The major recommendations relative to ADRA concern a reduction in operational regions (from 10 to 5), redeployment of qualified field staff, a reduction in headquarters staff, upgrading of headquarters development awareness and capabilities (through training and/or replacement), professionalization of all staff (via a coherent hiring and training plan), and consistency in use of external advisors (including the development of an institutional vocabulary/set of concepts).

The recommendations concerning CRS are few; some merely reinforce decisions they have already made -- phase out in the Ashanti Region, phase out of urban schools, expand the gender

equity program after the conclusion of the operations research, continue the highly successful grain storage program and the promising new directions in primary health care.

Recommendations concerning TNS are also few: we concur that the monetization component of their program should end at the conclusion of the current MYOP. Other suggestions concern warning participants in inventory credit programs that despite early successes, the venture is not entirely risk-free; investigation of price-stabilizing effects of the program; and the possible provision of bridge funding by TNS itself when bank loan processing is delayed.

TNS hardly needs encouragement for staff development, but the other two agencies do.

TNS already devotes a substantial portion of its time and energies to documenting the successes (and occasional failures) of its programs. CRS and ADRA need to devote considerably more attention to theirs, but they will need help in order to do so.

Annex A. Scope of Work

1. Review the CRS and ADRA MYOPs to determine objectives and targets for each. Determine to what extent these programs support the Mission's strategic objectives.

2. Assess outputs achieved relative to targets.

3. Assess impacts of each program.

4. Assess constraints to achieving targets, e.g., lack of focus, management issues, etc.

5. Determine whether/how PVOs have measured impact and the extent actions have been taken to establish monitoring systems to achieve this.

6. Recommend which program activities should be continued and which should be reduced, if appropriate, recommend how/which programs should be phased-out or phased-down to make them more effective. Determine which activities should be given reduced funding levels and what those levels should be. The phase-down/outs should be designed to be completed within two years.

7. Related to above, determine programs that should be monetized and those that should provide food relief [later explained to mean monetized vs. direct distribution, including relief and development].

8. Evaluate CRS's proposal to include the CRS/Ghana program as a pilot for a Regional Management Approach, and the viability of beginning this as early as FY 1995. Does it make sense to assist ADRA to design a similar regional approach?

9. [Orally removed from the SOW] Determine whether there are commodities other than those presently being provided that make sense. Examine problems related to wheat and determine if wheat is a viable commodity in the future. [This was done by Ron Shaw, SSI, under another contract.]

Level of Effort:

This assessment will involve a team of two individuals, one with food aid experience and the other familiar with PVO programs. The entire assessment should take 6 person weeks to complete, 3 weeks for each of the two individuals.

Reporting Requirements:

The team will prepare a draft report prior to leaving Ghana. This report will be written in such a way as to provide a guide to help the Mission: (1) more effectively utilize limited Title II

resources, restructure or phase down/out the ADRA and CRS programs to ensure greater focus, developmental impact and sustainability, (2) determine how ADRA and CRS programs can be designed to support USAID/Ghana's strategic objectives and (4) provide a timeframe for reducing the size of programs in areas where they have had little or no impact.

Annex B. Chronology, Itinerary

Monday 13 June.	Jeff Lee, Jeff Bell, office setup, PC hookup, assembled documents, review cable guidance, USAID request for food aid strategy technical assistance and Africa Bureau response, etc. to CRS; met with headquarters staff to ADRA, met with headquarters staff returned to USAID, more document review
Tues. 14 June	rented car; contracts for advance; to TechnoServe, got a few documents to CRS, got organization chart, more reports, arranged logistics for trip to ADRA, got documents to Finance re contract reviewed documents
Wed. 15 June	reviewed documents met with CRS Program Director re Washington comments on MYOP update
Thurs. 16 June	to TNS, met with headquarters staff to ADRA, more documents, another staff meeting to CRS, met with Program Director dinner with ADRA soon-to-be ex-staffer
Fri. 17 June	arranged for advance, changed to cedis to Arrow car rental to TNS, requested documents again (later delivered to hotel) to CRS, met with PHC coordinator met with Title III evaluation team
Sat. 18 June	created logic models for CRS and ADRA programs reviewed TNS and ADRA documents prepared interview and focus group guides finalized division of responsibilities
Sun. 19 June	9 AM left Accra, arrived Tamale 6:30 PM
Mon. 20 June	to CRS Tamale, met with PCV concerning operations research to ADRA Tamale, met with Field Project Officer and CCFI Coordinator visited ADRA CCFI project, met with PCV nursery manager, focus group with trainees to Bolgatanga by 4 PM met with CRS Program Manager (up from Accra) searched for CRS counterpart supervisor at Ghana Education Service visited CRS grain storage project

	reviewed logic models with CRS Program Manager
Tue. 21 June	met with District Medical Officer, overview visited CRS PHC project village, met chief, focus group with men and women, saw soakaway pits and PHC structure met with CRS counterpart supervisor, GES visited ADRA CCFI nursery, PCV and trainees
Wed. 22 June	visited 3 ADRA-assisted schools and 1 well visited ADRA agroforestry site visited ADRA (completed) dry-season gardening site and contiguous agroforestry site discussed ADRA staffing with CCFI assistant coordinator
Thurs. 23 June	to GES, met with CRS counterpart supervisor visited two schools, one with, one without CRS school lunch program; tested comparison methodologies (attendance, cohort attrition rates, before-after time series) returned to Tamale by 5 PM
Fri. 24 June	to ADRA, debriefed FPO visited 28-person family woodlot and contiguous agroforestry plot to CRS, debriefed Administrative Officer met with PCV, obtained interim Year Three report on operations research met with computer expert re data met with PHC coordinator re environmental sanitation, PHC structures
Sat. 25 June	Tamale to Techiman to IFAD at Agricultural Development Bank, interviewed IFAD Project Manager for TNS to TNS, met with Project Manager and Project Advisor visited two grain inventory cooperatives, interviewed chair, vice-chair; focus group of 7 members
Sun. 26 June	Techiman to Accra organized notes
Mon. 27 June	Arrow car rental arranged for debriefing, use of computer on national holiday (our last working day) arranged for second tranche payment discussed findings with Title III team

	drafted and typed parts of report
Tue. 28 June	continued draft report
Wed. 29 June	continued to write and edit report prepared and conducted USAID debriefing
Thurs. 30 June	continued writing report
Fri. 1 June	concluded report; printed and duplicated it Moore departed 8 PM

Annex C. Persons Interviewed

1. ADRA

a. Headquarters
Israel Agboka, then Director
Steven , Administrative Assistant
Chris Quarcoo, Deputy Director for Finance and Administration (and Acting Director)
Florence Ntim, Human Resources Director
Paul Sono, Planning and Evaluation
Victoria Daaku, Assistant Director for USAID Programs
Godfrey Ntim, Sector Coordinator

b. Tamale
Gabriel Denkyi , Field Project Officer, Northern Region
Sammy Antwi, CCFI Coordinator

c. Bolgatanga
Abigail Abandoh-Sam, Sector Coordinator
Ampem Darko, FPO, Upper East Region
Wisdom Bessie, Women's Coordinator
Simon Saaka , CCFI Assistant Coordinator

d. at project sites
Royce Sharpe, CCFI Peace Corps Volunteer
Po Chun Tsui, CCFI PCV
CCFI trainees (16 and 15, 83 and 5 of them women)
focus group of 2 mothers, 2 fathers, primary school community leader, head teacher, primary school and well-users
2 farmers benefitting from their family woodlot and contiguous agroforestry plot
project secretary, agroforestry site and contiguous (completed) dry-season gardening site

2. CRS

a. Headquarters
Shirley Dady, Country Representative
Hannah Evans-Lutterodt, Deputy Director and Program Manager
Annie Bani, PHC Coordinator

b. Tamale
Clement Tizaa, Administrative Officer
Cecilia , Ashanti Region
Charlotte Zygmont, PCV, Operations Research
Eddie Akayesi , computer specialist
Tony Batse, Program Officer

c. project sites
   chief, PHC project village
   focus groups, 14 (3 of them men) users of PHC structure, beneficiaries of soakaway pits, advisees of village health worker
   head teacher, school with school lunch program
   executive committee, participants, and non-participants at grain storage site
   head teacher, school without lunch program
   head teacher, school rehabilitated

3. TNS

a. Headquarters
   Margaretta Boateng, Director, Research and Development
   Anthony Cobbah, Director, Finance and Administration

b. Techiman
   Marc Muosieyiri, Project Advisor
   William Kotey, Project Advisor
   John Heloo, Project Manager, Farmers' Service Coop

c. Two cooperative sites
   focus groups with coop members
   coop chair, co-chair, secretary

4. USAID

Jan Orlansky, Acting Chief, Education and Human Resources Division
Emannuel Atieku, Food for Peace Officer, Title II

5. Other

District Health Officer, Bolgatanga (re CRS PHC projects)
M. Haruna, CRS counterpart supervisor, Ghana Educations Service, Bolgatanga
A. Mahama, IFAD Desk Officer, Techiman

Annex D. Project Sites Visited

ADRA

Northern Region:

1. CCFI seedling nursery
2. family woodlot (and contiguous)
3. family agroforestry plot

Upper East:

4. school
5. school and well
6. school (and PHC site)
7. agroforestry site, individual families
8. agroforestry site, group plot
9. completed dry-season gardening plots

CRS

Upper East:

1. PHC structure
2. PHC soakaway pits (village health worker)
3. school, roofed with CRS assistance
4. no-lunch school
5. school lunch program school
6. grain storage

TNS

Brong-Ahafo:

1. grain inventory coop
2. grain inventory coop

Annex E. Documents Reviewed

1. Cable FFPO/Accra to A.I.D./Washington (FFP and Africa Bureau). Request for Aid to Develop Food Aid Strategy, 14 Feb. 1994.

2. Cable from Pat Radar/A.I.D./W (Africa Bureau). USAID Ghana Food Aid Concept Paper, April 1994.

3. Cable from USAID/Accra (Lee) to A.I.D./Washington (FFP Rosario and AFR Crawford to Rader). PVO Status (ADRA, CRS, TNS), 17 May 1994.

4. Cable from USAID/Accra (Lee) to A.I.D./Washington (Wilburn, Rader, Rosario). USAID/Ghana's Review and Comments on FY95 MYOP Update, 11 May 1994.

5. Planning Assistance, Washington, D.C. An Evaluation of Ghana PL 480 Title II Program, Dec. 1989.

6. Country Program Strategic Plan, Ghana FY 1992-96.

7. Agreement between the Government of the United States of America and the Government of Ghana for the donation of Agricultural Commodities, June 1991.

8. Assessment of Program Impact, Ghana. USAID, Oct 1993.

9. FY 1995 PL.480 Title II Voluntary Agency Program Plan and Grant Proposal Guidance, 1994 (Cable).

10. Memorandum: Issues; Meeting on OIC Ghana and TechnoServe/Ghana's MYOP, May 1994.

11 Status of FY 1994 Ghana/ADRA, Ghana/TechnoServe, and Ghana/ CRS Regular Title II Programs and Plans for FY 1995 (Cable).

12. Ghana/ADRA and Ghana/CRS FY 1995 MYOP Update, Issues and Concerns, 1994 (Cable).

DOCUMENTS FROM CRS

1. CRS, PHC Activities, Quarterly Report Form.

2. CRS Internal Memorandum. MCH/Child survival, WIC and Domestic Feeding Programs. Rapid Assessment of Health Indicators, 1994.

3. CRS/Ghana Programs. Multi- Year Operational Plan, FY 1994-96, June 1993.

4. CRS Ghana Program FY 1995 MYOP Update (FY 1994-96), April 1994.

5. Training Manual Covering Diet in Pregnancy, Breast Feeding, Weaning, Control of Diarrhoea, Personal Hygiene, Communicable Disease Control and Sanitation in Community. CRS Document.

6. CRS Ghana Program Title 11 PL480 Progress Report FY 1993, Dec. 1993.

7. Memo: Report on a Field Trip to the Northern Regions. Sept. 1993.

8. Memo: Report on Monitoring Visits to the Three Northern Regions March, 1994.

9. Memo: Supervisory Visit to the CRS Supported PHC Communities in the Sekyere East District of the Ashanti Region, March 1994.

10. Final Report on The Study of the Scope of Multilateral and Bilateral Donor Support to Ministry of Health Primary Health Care Program (PHC) with a view to advising CRS/Ghana of the need for its participation in the program. 1994.

11. CRS/Ghana Title II Program Operational Plan, FY 1988-90.

12. CRS/Ghana FY 1992 MYOP Update and Monetization, May 1991.

13. CRS/Ghana Program. Title II PL 480 Progress Report FY 1991, Nov. 1991.

14. US Catholic Conference Ghana Program, Part 1. FY 1993 Update for Multi-Year (1991-93) Operational Plan, March 1992.

15. CRS/Ghana Program Title II PL480 Progress Report FY 1992, Dec. 1992.

16. CRS - USCC West Africa Region Title II Regular Program Management by Objectives Plan, April 1994.

17. CRS/Ghana FY 1992 Update for MYOP FY 1991-1993.

18. 1993 Update for MYOP FY 1991-1993.

19. CRS/Ghana FY 1994-96 MYOP, 1993.

20. Operations Research Interim 3 Report. Charlotte Zygmont to Dr. Emily Moore, June 1994.

21. CRS/Ghana School Lunch Program Operations Research, End of Year Two Report, January 1994.

DOCUMENTS FROM TECHNOSERVE

1. PL 480, Title II Project. 1992-1994 Multi-Year Operational Plan and FY 1992 monetization Proposal 1991.

2. PL 480 Title II Multi-Year Operational Plan and Monetization request for FY 1995-1997, April 1994.

3. Technoserve/Ghana Program, Field Operations Database (FDB) Analysis - 1993.

4. FY 1994 PL-480 Title II Monetization, Semi-annual Report, Oct. 1993 - March 1994.

5. Technoserve Teaching Case Program. "Bringing the World to Your Classroom". Project Monitoring: An Essential Tool in Quality Control of Development Assistance, Ghana, 1993.

DOCUMENTS FROM ADRA

1. Report of the 5th Annual Review Workshop. Collaborative Community Forestry Initiative, Nov. 1993.

2. Trip Report: Management Assessment of the Adventist Development and Relief Agency (ADRA), Accra 1994.

3. ADRA/ Ghana Community Development Program Impact Evaluation (1989 - 1993), Scope of Work, 1994 .

4. ADRA/Ghana Community Development Program Impact Evaluation (1989-1993), Approach Memo, May 1994.

5. ADRA/ Ghana Community Development Project Baseline Survey Questionnaire, Jan. 1994.

6. End of Project Evaluation of the Adventist Development and Relief Agency, Ghana Institutional Support Grant Evaluation Report, Sept. 1992.

7. Collaborative Community Forestry Initiative, Training Program Proposal, March 1994.

8. Report of the Support Systems International Ghana Team concerning a methodology for measuring the impact of ADRA/Ghana Food for Development Activities, June 1993.

9. ADRA/Ghana Multi-year Operational Plan FY 1989-1991.

10. Update FY 1989, FY 91 MYOP.

11. ADRA/Ghana FY92 Operational Plan; Extension of FY 89/91 MYOP.

12. ADRA/Ghana FY 1993-1995 MYOP.

13. ADRA/Ghana FY 1994 Operational Plan, Updated FY93-FY95 MYOP.

14. ADRA/Ghana FY 1995 Operational Plan, Updated FY93-FY95 MYOP.

15. ADRA/Ghana FY 89 Annual Progress Report. October 1988 - September 1989.

16. FY 1990 Annual Progress Report. October 1989 - September 1990.

17. FY 1991 Annual Progress Report. October 1990 - September 1991.

18. FY 1992 Annual Progress Report. October 1991 - September 1992.

19. FY 1993 Annual Progress Report. October 1992 - September 1993.

MISCELLANEOUS

1. Children and Women of Ghana; A Situation Analysis. Republic of Ghana and United Nations Children's Fund, 1990.

2. Report of Primary Education Program (PREP) Mid-term, Evaluation, 1993.

3. School Feeding Programs and Educational Achievement, ABEL Information Bulletin 1992.

4. Guatemalan Development and Female Education, ABEL Information Bulletin 1993.

Annex F. Suggested Technical Assistance in Monitoring and Evaluation

As noted repeatedly throughout this report, even though both ADRA and CRS have made remarkable strides in data collection and reporting, both still need some assistance to set their M&E systems in order so that usable data will be collected on a regular and periodic basis. A proliferation of consultants using their own M&E vocabularies have sown if not confusion, then at least a multiplicity of expressions. Pressures from headquarters of the PVOs, coupled with expectations from donors, combined with time constraints of already overburdened staff, have resulted in forms and procedures that could use some improvement. The sooner the better, since some major decisions (some already taken) hinge on data that can be generated in the near future.

Workshops on M&E are useful (the CRS one for five Southeast Asian countries resulted in a detailed set of guidelines for that region which could easily be shared with the Lome Cluster), but it seems that individual technical assistance would be more helpful at this time for both PVOs in Ghana.

We suggest that the TA be provided more or less as follows:

1. Meet briefly with top staff -- field as well as headquarters -- primarily to impress upon them the importance and urgency of investing in a good system and taking the time out to get procedures underway.

2. Meet individually with program staff, to examine:

   who needs what kind of information, in what form, when; the "who" refers to PVO staff in country, PVO headquarters staff, donors in country, donors in Washington (and Stockholm, Amsterdam, etc.), and communities in which the PVO is working

3. Review current forms, or visit checklists, to ascertain if the necessary information is being captured.

4. Together make decisions about what to collect, in what form, by whom -- not too much, not too little, written in such a way that its tabulation and analysis takes as little time and effort as possible, without sacrificing quality.

5. Determine who will collect, who will analyze, who will summarize and report to whom -- i.e., paper (and oral presentation) flow -- what goes where, when (and of course, why).

6. Piece by piece, program by program, design the details of a complete M&E Plan, as suggested below.

The aforementioned CRS/SEAFOR M&E Guidelines can be used as a reference, as can the excellent CRS MBO document recently completed by the Lome Cluster.

It would probably be useful to bring both PVOs together (and possibly also a one-day meeting of CRS Lome Cluster representatives, and ADRA West Africa representatives) to explain the plan once designed, and to share concepts and approaches between the two PVOs. While they need not come up with identical plans, it would be desirable if they ended up with identical methodologies for calculating school attendance, for example.

ESSENTIAL COMPONENTS OF A COMPREHENSIVE MONITORING AND EVALUATION PLAN

WHO . . . . . should collect
WHAT . . . . . information from
WHOM?
WHERE?
WHEN?
HOW OFTEN? . . . . . .using
WHAT INSTRUMENT(S)?

WHO . . . . . should design the data collection instruments?

WHO . . . . . should analyze the information?

WHO . . . . . should summarize the analysis?

WHO . . . . . should write the report(s)? to

WHOM . . . . . should the information be given?
-- PVO headquarters
-- PVO in-country staff
-- PVO regional office
-- donor headquarters
-- donor in-country office
-- community

. . . . . in
WHAT FORMAT? (oral presentation, workshop, written synopsis, full narrative, tabular form only etc.) . . . . . for

WHAT PURPOSE(S)?

The last of these questions should be addressed first when designing the system.

INDICATORS in the plan should correspond closely with inputs, activities, outputs, and most-importantly objectives. Care should be exercise when deciding on proxy measures not to choose one too distant from the outcome one wishes to measure. (For example, improved soil fertility may be the information we want to capture, but it's easier to count yields per hectare or acre than it is to do soil tests, so even though "yields" are further along the chain of causality than "soil fertility", it may be more practical to measure the former than the latter.)

Annex G. Why a PVO Doesn't Need a Separate Fundraising Department!

This annex is far afield from the evaluation team's Terms of Reference...so far afield, in fact, that instead of inclusion here as an annex, perhaps it should be tucked away as an entirely separate document.

Nevertheless, we venture to include it here since it was inspired by the team's bemused discovery that ADRA had sent 26 staff persons to a weeklong workshop in Sunyani on proposal writing. One of the conclusions was that there should be a fundraising department at headquarters.

The consultants feel This about That.

There is no magic formula to winning grant monies. There is no secret language that will guarantee fundraising success.

If a PVO has done a good Problem Identification, then a thorough Problem Analysis, which has then been turned into a coherent, long-range institutional Plan, out of which particular discreet Projects can be drawn, there is no need to specialize in Project Proposal Writing.

If one wishes to apply for funds from the Canadians, or the Dutch, or the Swedish, one would do the following:

1. Visit their embassy.
2. Ascertain if there is a particular individual charged with receiving/processing funding applications.
3. If there is, request a brief information-only visit with that person.
4. Ascertain the funding cycle; once a year? quarterly? any time?
5. Is there a format that must be followed, or forms to be filled in, or may the PVO submit a proposal in its own format?
6. Will they accept a brief concept paper, rather than a full-blown proposal, at first (to be followed by a proposal if they express interest in the concept)?
7. Are they willing to discuss a proposal in person, or is it simply to be submitted in writing?
8. How long does the review and approval process normally take?
9. Are their guidelines for the approximate magnitude of budgets that will be considered for funding?
10. Will they fund a discreet portion of an already-existing project, or one for which other funding has already been assured -- or do they prefer to fund an entire project alone?

With the answers to these questions in hand, the PVO can then fit their already superbly designed project into the time frame and the format required by each individual donor, with appropriate embellishments (history of the PVO, if that seems useful, for example). Presto! Diversification of funding.

A good solid plan, moderately well-written in proposal format, stands a better chance of funding than a poorly conceived plan, extremely well-written. If writing skills on staff are uniformly substandard, the PVO might consider outside writing help...but never, never use the writer as project conceptualizer.

Annex H. Calculating School Attendance Rates

It is necessary to have a uniform method for calculating attendance rates when assessing the effects of school roofing, school construction, school lunches, and take-home rations.

Classroom teachers in primary schools record both presences and absences on schooldays, then total the numbers for boys and girls separately, plus totals, on a daily, weekly, and term basis, but the totals are often inaccurate.

Attendance RATES (presences or actual pupil-days, divided by possible presences or pupil-days) are rarely calculated either by the classroom teacher or the head teacher and must be calculated therefore by the PVO representative while visiting each individual school.

A. DENOMINATOR

1. Count the number of weeks and multiply by 5 to get the **maximum possible number of schooldays** in the year (e.g., 30 weeks x 5 days = 150 schooldays).

2. Subtract the total number of holidays in the year (some teachers mark "holiday" while others simply leave the column blank). Grades do not all necessarily have the same number of holidays; a class may be off for a day because of the funeral of a colleague, for example, or some classes may be affected by a teacher's strike while others are not. (e.g., 150 maximum schooldays minus 12 holidays = 138 **actual schooldays.**)

3. Multiply the number of actual schooldays (138 in our example) by the number of pupils in the class at the beginning of the school year to get the number of **potential pupil-days** in the year (138 schooldays times 50 pupils = 6900 pupil-days). **This is your denominator.**

B. NUMERATOR

4. Class by class (P1 through P6), record all weekly totals (these are usually accurate enough to be used without re-adding them). If it is decided to keep separate records for girls and boys, keep these on separate sheets -- one for girls, one for boys, and one for totals. (There will be anywhere from 25 to 40 weeks in the academic year. All classes will not necessarily have the same number of school weeks.) **This is your numerator.**

C. ATTENDANCE RATE

5. Divide the numerator by the denominator (e.g., 6000 divided by 6900 = .87).

6. Multiply by 100 (that is, remove the decimal point to express the 87 as a percent). **This is your attendance rate for that class, for that year.**

Annex I. Suggestions for Future Evaluations, Research

1. CRS already intends to add on 50 no-lunch schools to the data they have in hand from their operations research, so that a three-way comparison can be made among no-lunch, lunch only, and lunch plus take-home ration for girls. (The evaluation team looked at one of each of these, all public schools, all approximately 12 km from Bolgatanga. We recorded as many years and classes of girls' enrollment, as available, deriving a table from which cohort attrition could be determined. The no-lunch school had horrendous drop-outs, from a P1 class of 25 that had declined to only 4 by P6. The lunch-only school had a lower attrition (only three years of data were available), starting with a class of 43 that declined to 26 two years later). The lunch plus take-home ration school retained a steady number of girls, starting with 28 in P1, remaining 27 by P6.

2. CRS already intends to complete the final year (of three compared to baseline) of their "treatment" (take-home ration) vs. "control" schools. The evaluation team was provided an interim report since the school year was not yet complete; the data support the second year's findings of a 10+% difference between the two in girls' attendance (11 and 12% if only rural schools are counted).

3. CRS's take-home ration experiment is clearly successful. It should be compared with the USAID 4 pilot schools where "scholarships" (money for uniforms, desks, and chairs) are given to girls. The up-front (scholarships) approach can be compared with the CRS after-the-fact (extra rations only after a girl reaches 85% attendance for the month) can be compared.

The acceptability of the two approaches should be compared; boys daily sitting on the floor while girls sit at tables would seem to be more likely to result in resentment than a once-a-month ration which is immediately carried home to a family (in which brothers can share) and is thus not visible for very long, but this should be looked at more closely.

The two approaches should then be compared according to results. Which one results in a greater increment in enrollment and attendance?

Finally, the cost of extending either to a much broader number of schools should be compared. The research costs should be factored out in both cases. Routine monitoring, as any other program, should be included, but the additional cost of research should NOT be included.

If a comparison is made between the USAID "scholarship" program in four pilot schools (only one of which is Upper East, one in Upper West, one in Northern) and the CRS take-home ration approach, it

should be remembered that the CRS incentive is added onto an already-existing lunch program, which in and of itself is shown to influence enrollment and attendance when compared with no-lunch schools. The addition, therefore, of a take-home ration should not be expected to have as strong an incremental effect as if it were inserted into a no-incentive environment.

4. Comparisons should be made between roofing a school that is otherwise in relatively good condition vs. building an entirely new school, in terms of increments in enrollments and attendance, according to costs of each. (The team has already recommended that ADRA not agree to provide materials for an entirely new school where there is a school needing only roofing not more than 2 km for the proposed new school site.)

5. The team found one example of a newly built school where attendance initially soared, then dropped dramatically. The explanation given was that another school served the local population better because it had a "sister" Junior Secondary School into which it fed. (Another newly built school was located in a similar community, but leaders there pressured the MOE to build a JSS nearby soon after their primary school was completed. The "no nearby JSS" explanation may simply be an excuse for community inaction, but this should be further examined.) We suggest that ADRA visit all 21 schools completed last fiscal year to look into this possibly important, possibly unimportant, association between primary and secondary schools.

6. The TNS Project Advisor in Brong Ahafo was interested in our account of the results of IFPRI's recently concluded study in Brong Ahafo (and Volta). The hypothesis (that participation in credit results in increased income, then increased household level food security, thus improved nutritional status of women in children) was confirmed only as far as the household food security level; reasons for the blockage thereafter included: (1) household distribution which favor men and the child with the longest arm; (2) additional calories available were cancelled out by the woman's energy expended to generate the extra income; (3) the health status of women and children can interfere with proper absorption of the abundant calories; and (4) ignorance of what KIND of calories (and feeding practices in general) can interfere with appropriate consumption, even when calories are sufficient.

We are not suggesting that the IFPRI research be replicated, nor that TNS should necessarily be held accountable for positive nutritional outcomes (we know of no credit program specifically designed to increase women's Body Mass Index -- although Food for the Hungry does specifically include nutrition and health education as part of their women's credit programs). We do, however, suggest that TNS and others who assist individuals, coops, and communities to increase their income take an interest when measuring impact in how the income is utilized; our evaluation found that the surplus

income realized in the TNS grain inventory program was spent on building houses, purchasing radios, canned fish and meat, and expanded production.

Annex J. Just an Idea -- Paddocking (for School Attendance, Fertilizer, and Regeneration of Overgrazed Grasslands)

When discussing school attendance, the subject of children being needed at home (both boys and girls) to watch the animals often comes up.

While we are attempting to assist in the process of narrowing the focus and range of PVO activities, still we wish there were some way to add a tiny experimental intervention to one of their programs.

If a fast-growing, dense, edible (as fodder) shrub were planted to create natural fencing, and farmers could be convinced to paddock their animals, it might result in three positive outcomes: free up the children to attend school, provide a way to more easily collect manure for fertilizer, and enable the regeneration of overgrazed grassland. The agriculturalist on the evaluation team believes this has never been tried in Ghana.

Annex K. Logic Models, ADRA and CRS Programs

Both CRS and ADRA have for several years approached their planning process by beginning with problem identification and analyses, then crafting an overall plan based on those analyses, with specific project designs emerging from the overall plan.

We now recommend that they also think through logic models, or presumed causality chains, in connection with each type of project. These can be helpful for several purposes:

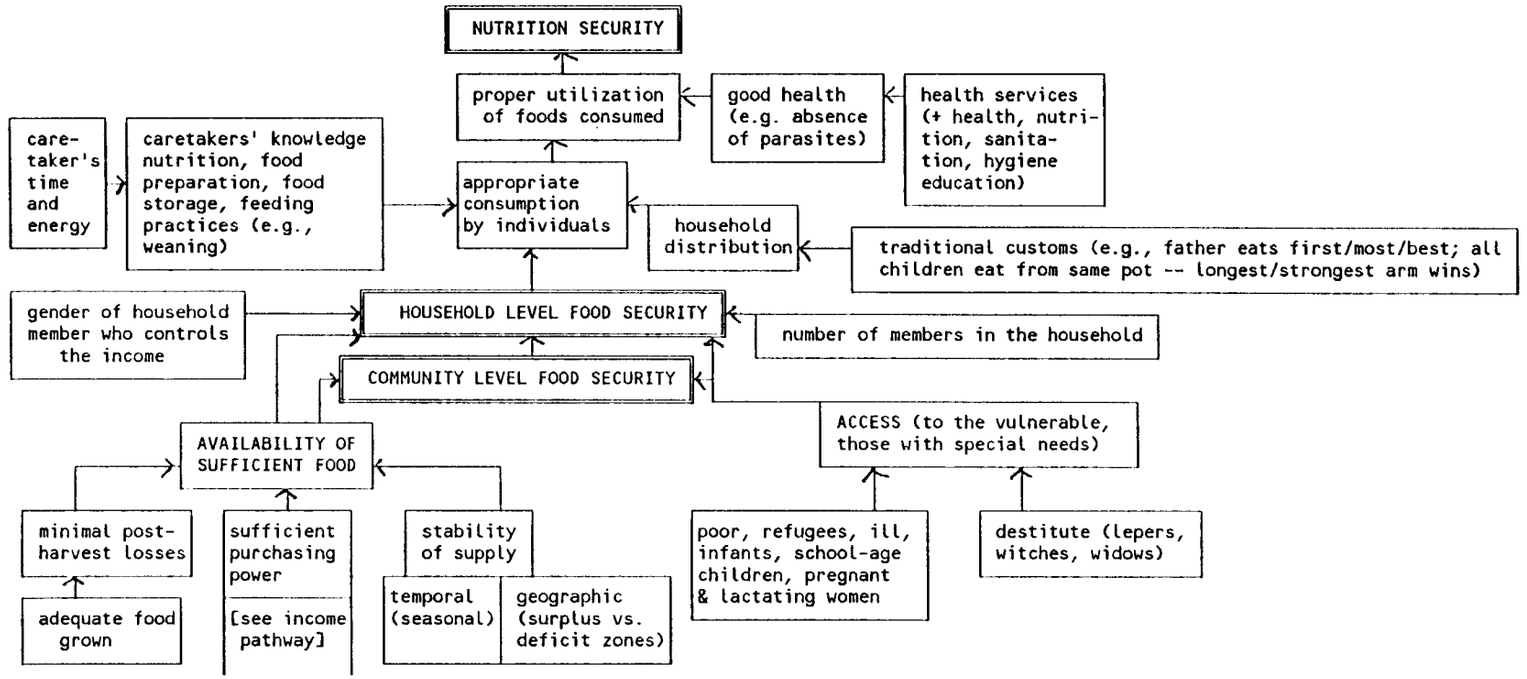
1 -- to assist in the determination of how far along each individual chain of causality the PVO should accept responsibility. (Their INTEREST in what happens, for example, with newly earned income or newly freed-up time, is different from their RESPONSIBILITY for such possible outcomes. The road-builder should not be held responsible if evil-doers traverse the new road.)

2 -- to ensure once more (in addition to the problem analysis) that their logic is good, that the critical assumptions underlying the linkages all along the chain are understood.

3 -- to enable predictions on what might go wrong, what factors could intervene to interrupt the ideal logic chain (for example, the several blockages that can prevent household level food security from being translated into improved nutritional status for vulnerable household members).

Read from the bottom up.

OVERVIEW MAJOR COMPONENTS OF FOOD AND NUTRITION SECURITY

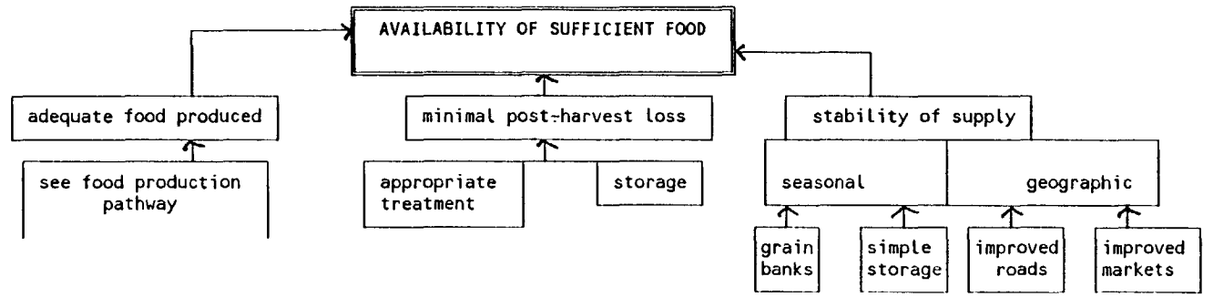


AVAILABILITY of SUFFICIENT FOOD results from growing enough (yields per hectare or acre; productivity; land under cultivation) losing less of it (proper treatment and storage) being able to buy what you can't grow (income) stability of supply, both across seasons and zones (storage, roads, market systems)

ACCESS to the vulnerable, or those with special needs, refers both to the categories who will forever need assistance (the truly destitute) and those for whom help is presumably a stepping stone to ultimate self-sufficiency (the poor who can be helped to become less poor, those whose age or condition is temporary, etc.)

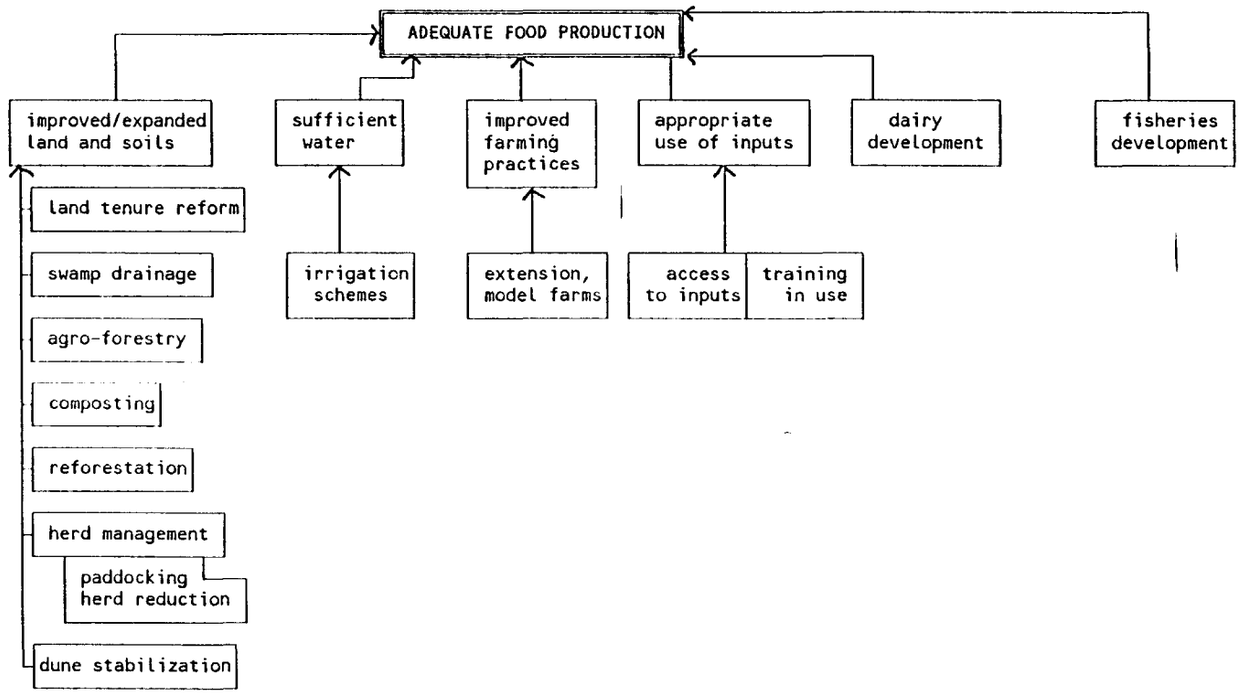
UTILIZATION of the food which is available and to which one's access is not blocked is then affected by a variety of intervening variables, such as one's state of health, traditional practices which may prevent the most needy from receiving adequate nutrition (even if the food available at their household level is theoretically adequate), by the nutrition/sanitation/hygiene knowledge and practices of the principal family caretaker (which in turn can be strongly affected by her time and energy constraints), and by the propensity of the one who controls the allocation of family resources to spend on family wellbeing

AVAILABILITY OF SUFFICIENT FOOD



[food for training] [food for work] [food for work] [food for work, cooperative marketing, auctions, local traders, triangular transactions, private sector infrastructure]

ADEQUATE FOOD PRODUCTION



[food for work; food as compensation for herd reduction; food as tide-over or risk insurance for changing practice, food for fallowing]

[food for work]

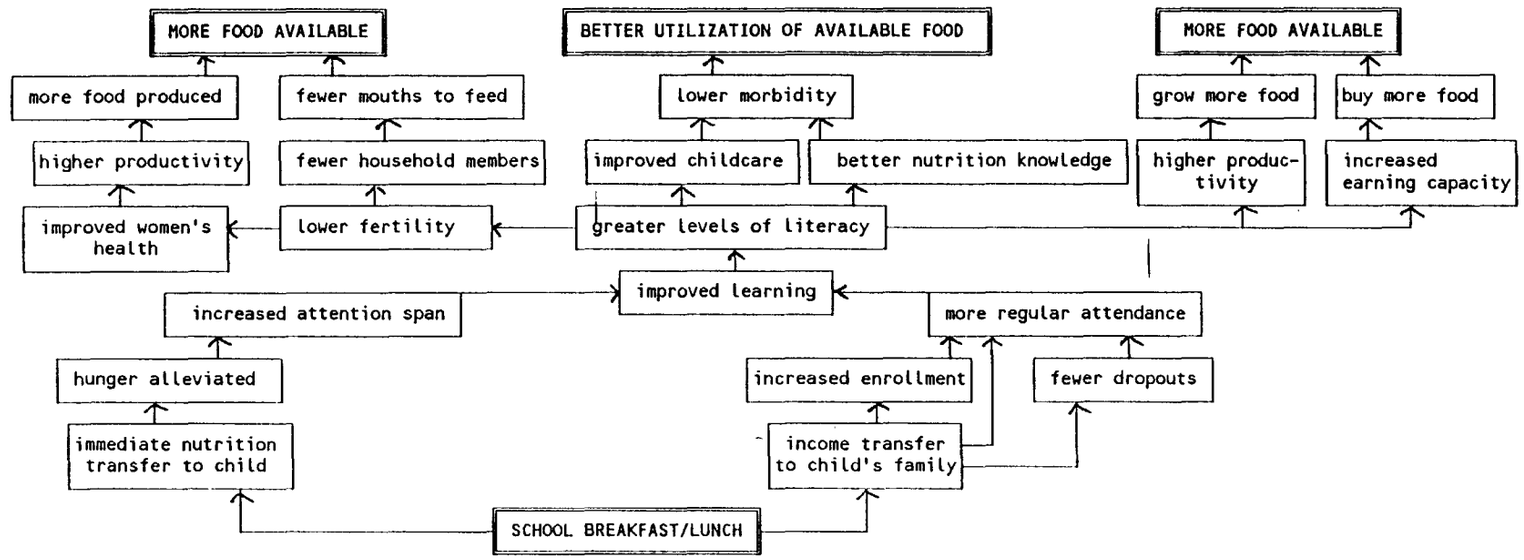
[food for training; risk insurance]

[food for credit]

[dairy development]

[food for work, food for training]

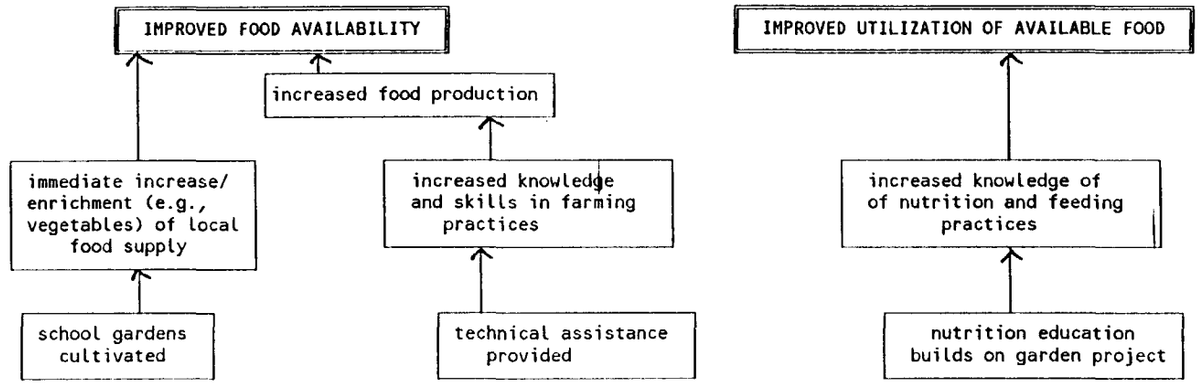
SCHOOL FEEDING: HOW DOES/CAN IT LEAD, VIA VARIOUS PATHWAYS, TO FOOD SECURITY



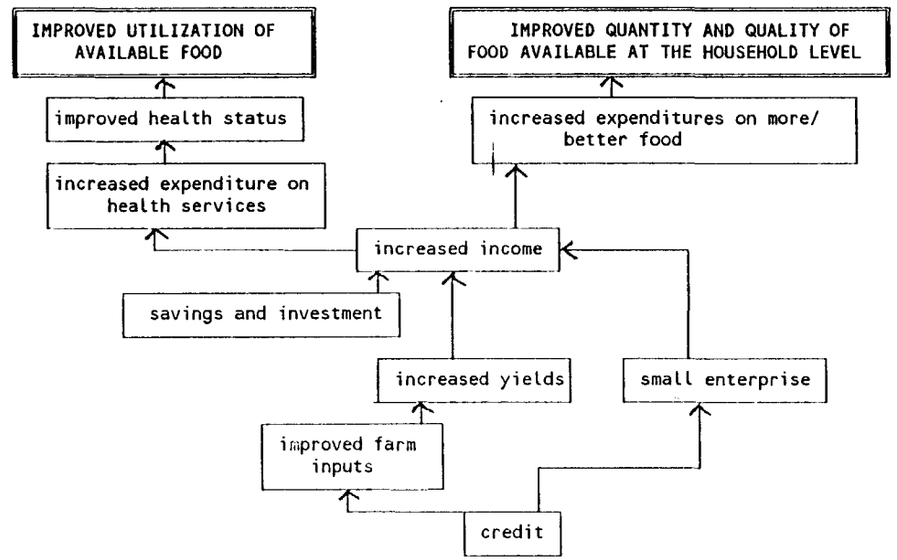
Food has many properties -- aesthetic, spiritual, social, psychological, ceremonial, nutritional, and economic.

Because food is food, we have tended in the past to focus on its nutritional value only. We do not expect major nutritional changes in a child who receives a school lunch or breakfast during the school year; stunted children will not catch up with their classmates in height; wasted children need more intensive nutritional input than a lunch or snack can provide. But children who walk long distances, or children who eat no breakfast at home, can be provided an important nutritional input which will alleviate their hunger and facilitate the learning environment. A 3-country study in Benin, Togo, and Burkina Faso (by University of Dijon) found that the presence of a school canteen was one of three (out of more than 50) most predictive variables positively associated with learning on a standardized exam given to 3000 second-graders in each of the countries. The researchers interpret their unexpected (to them) finding on the basis of a probable mixture of the canteen's positive effects both on regularity of attendance and on the wake-up-and-pay-attention effect of the nutrition transfer.

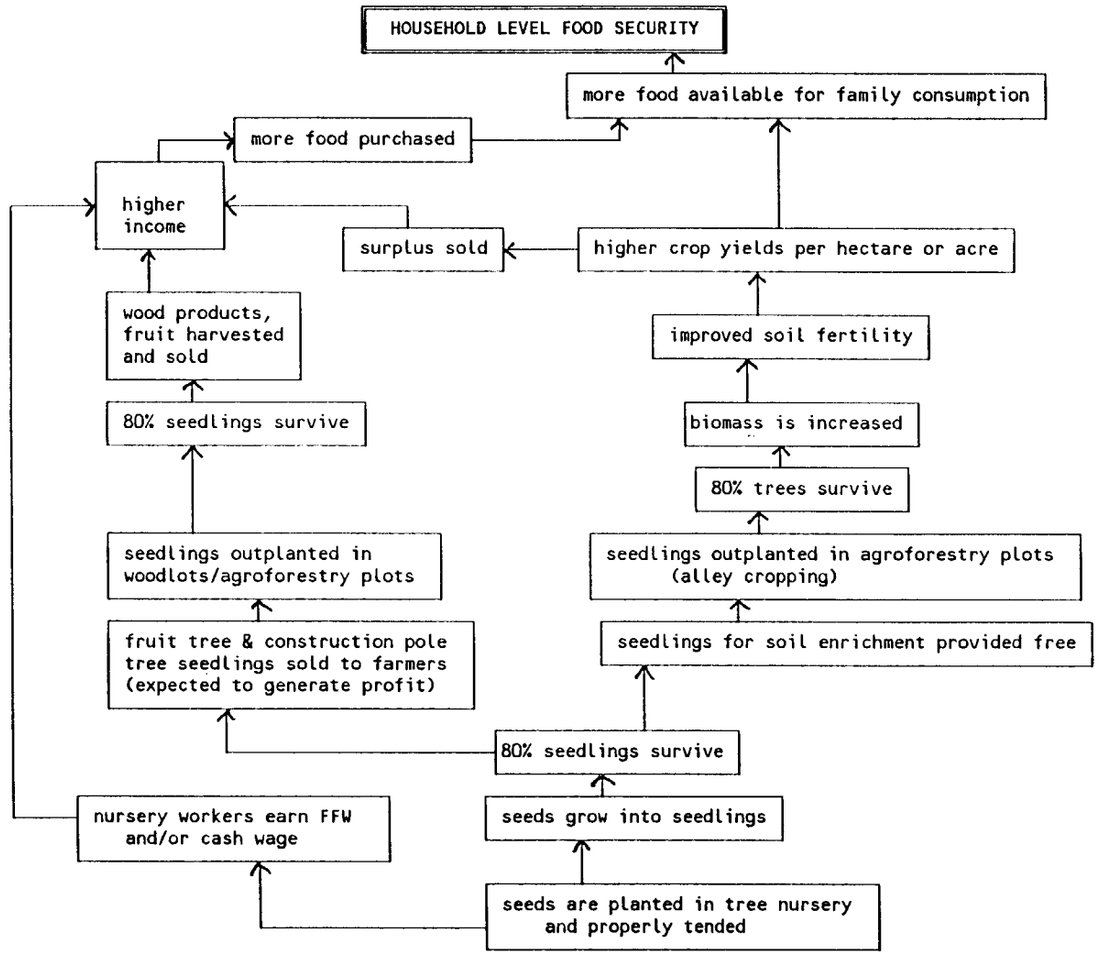
ACTIVITIES OFTEN ASSOCIATED WITH SCHOOL LUNCH/BREAKFAST PROGRAM



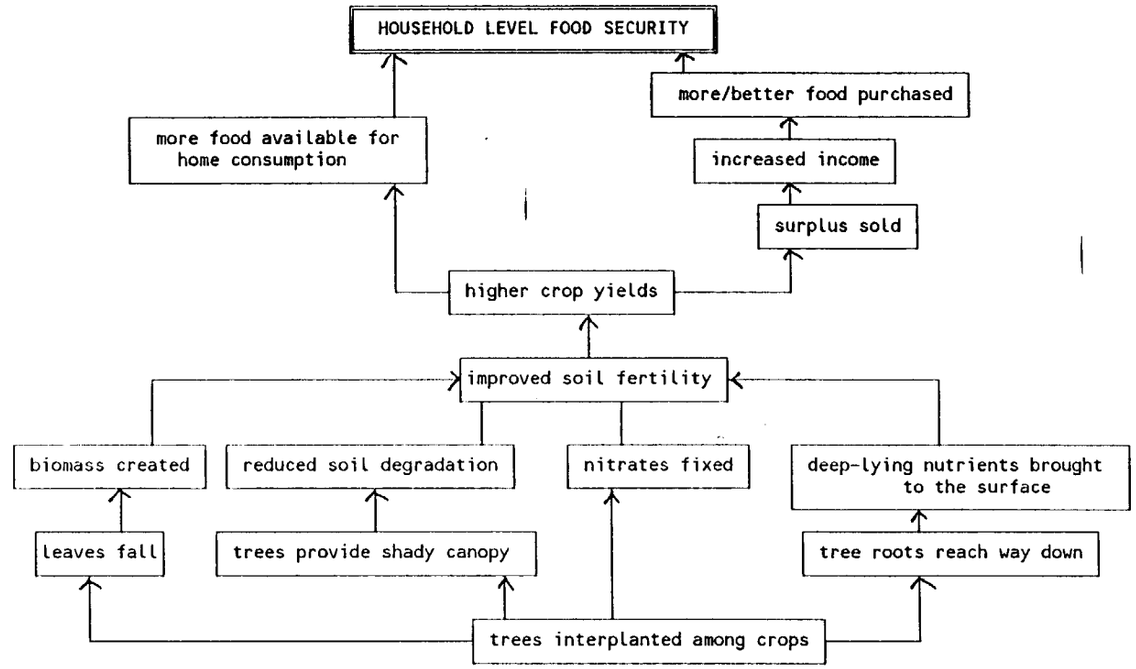
HOW DOES INCREASED INCOME LEAD TO INCREASED FOOD SECURITY?



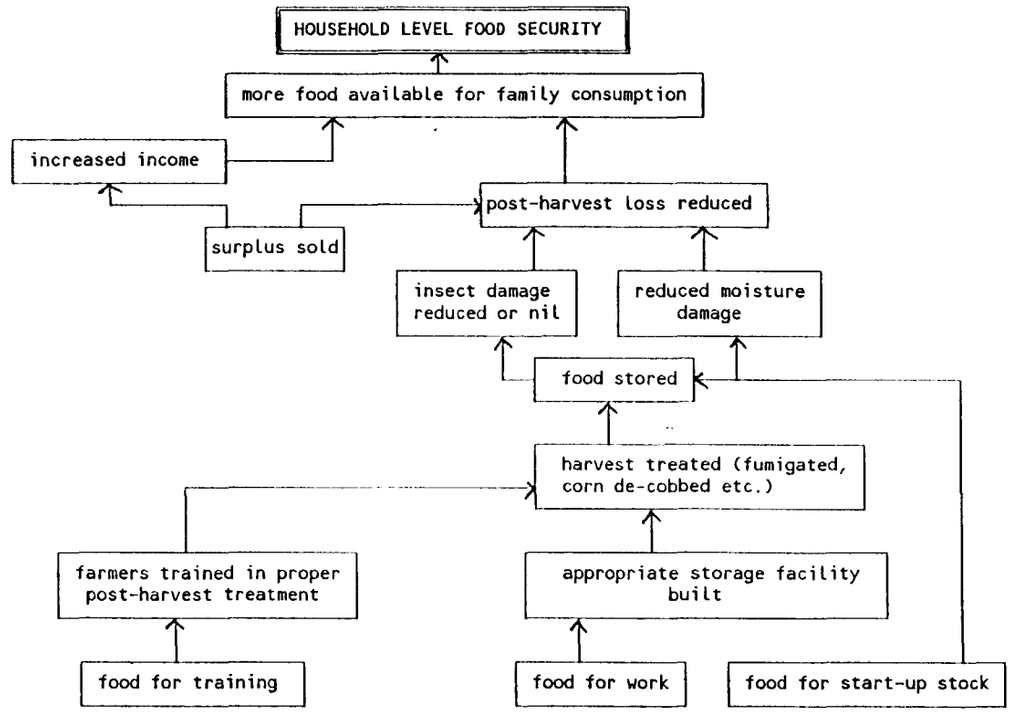
TREE NURSERIES



AGROFORESTRY

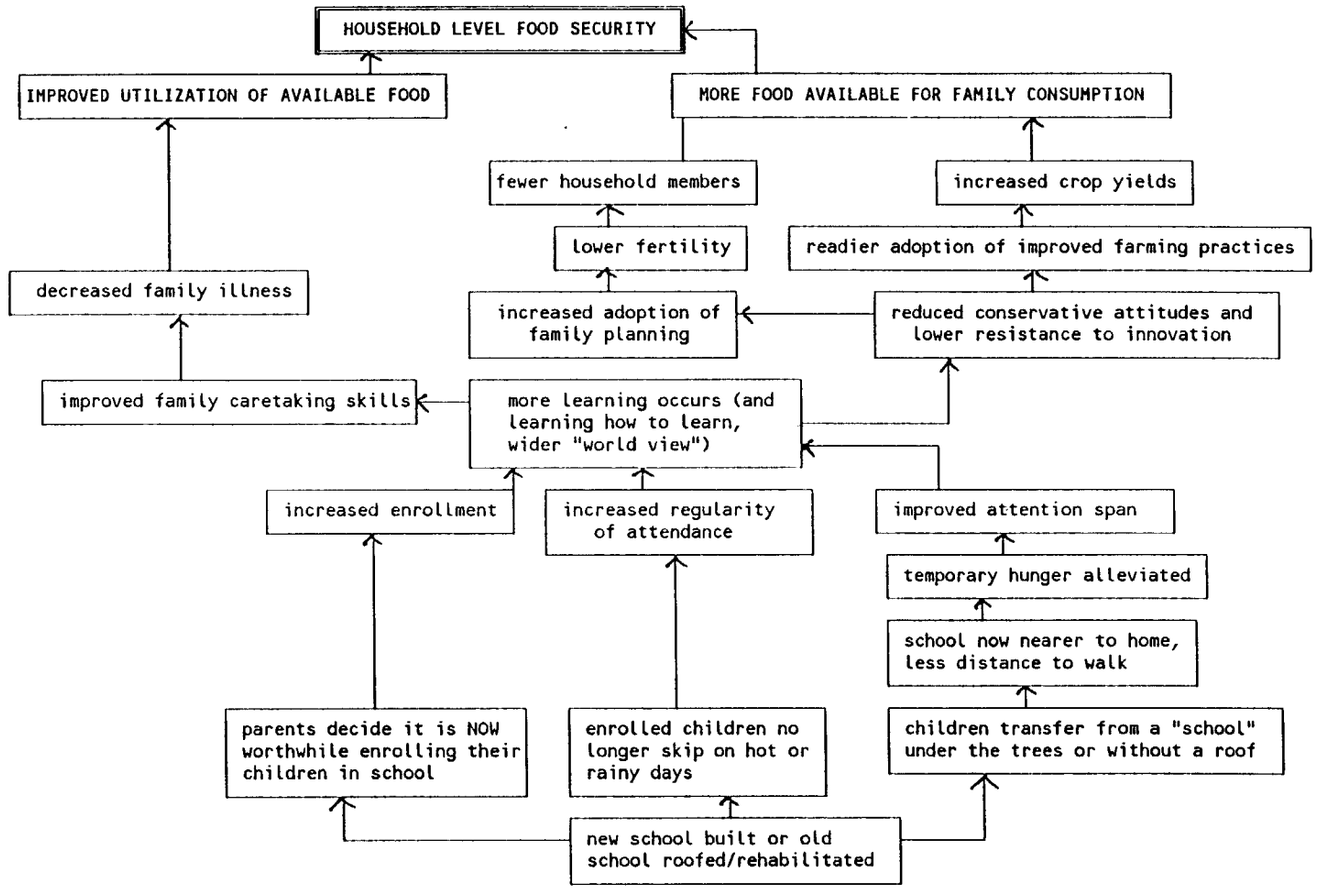


STORAGE and TREATMENT

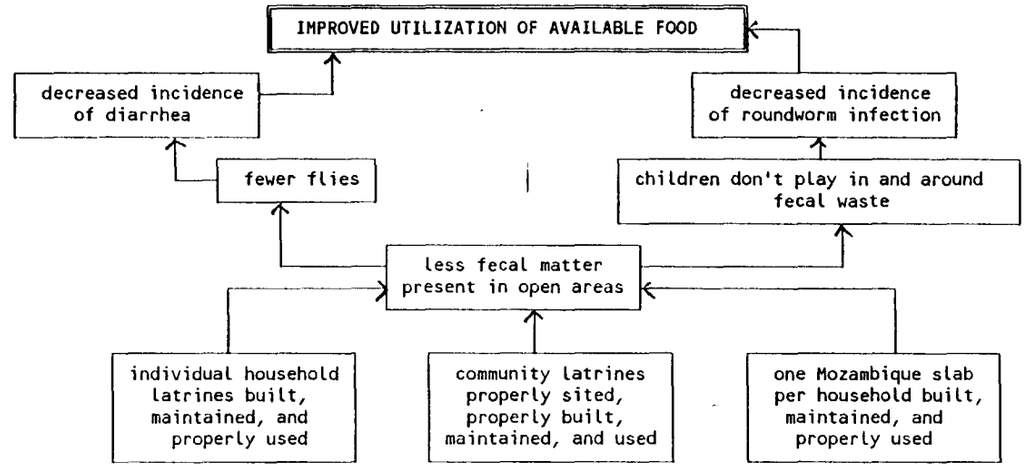


An elaboration on the above simple storage scheme is a cooperative community grain bank. Monetized Title II commodities provide the start-up capital so that the coop can purchase the coop members' harvest (instead of their having to sell at very low prices to middlemen). The members' grain is stored until regional prices rise in the lean season, at which time the coop members buy back their grain at only a slight margin above what they were paid for it at harvest time (and much lower than lean season prices charged by middlemen). The small profit made by the coop goes for administrative costs and increasing the stock in storage so that eventually there will be enough not only to tide members over during the lean season, but to provide at least a one-year local buffer stock in case of crop failure.

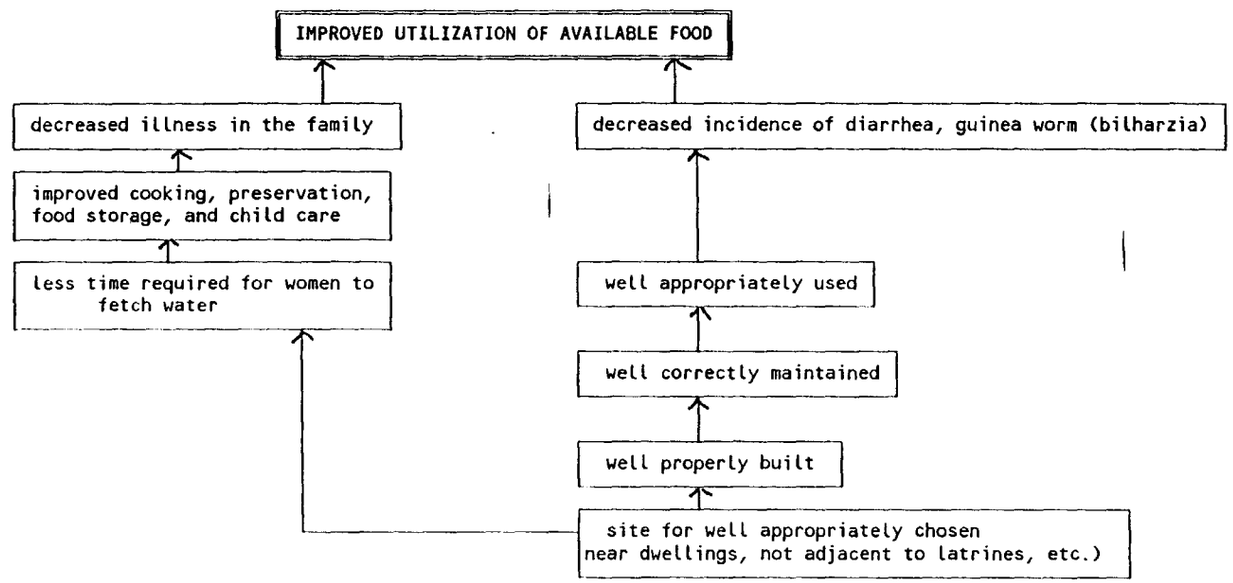
SCHOOL CONSTRUCTION OR REHABILITATION

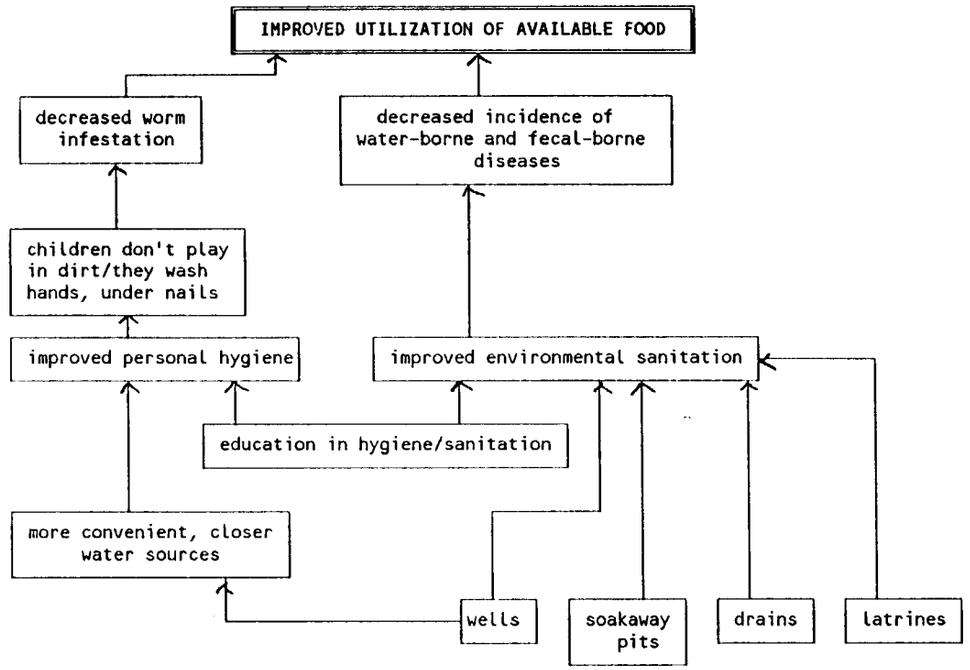


LATRINES/MOZAMBIQUE SLABS

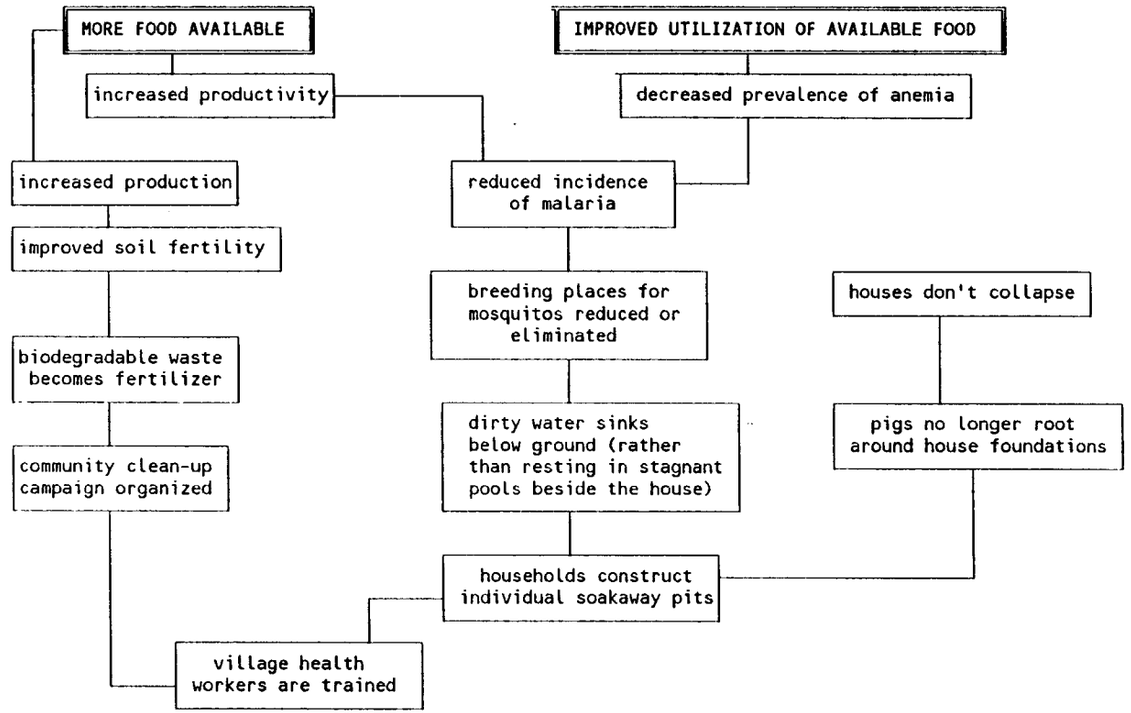


WELLS

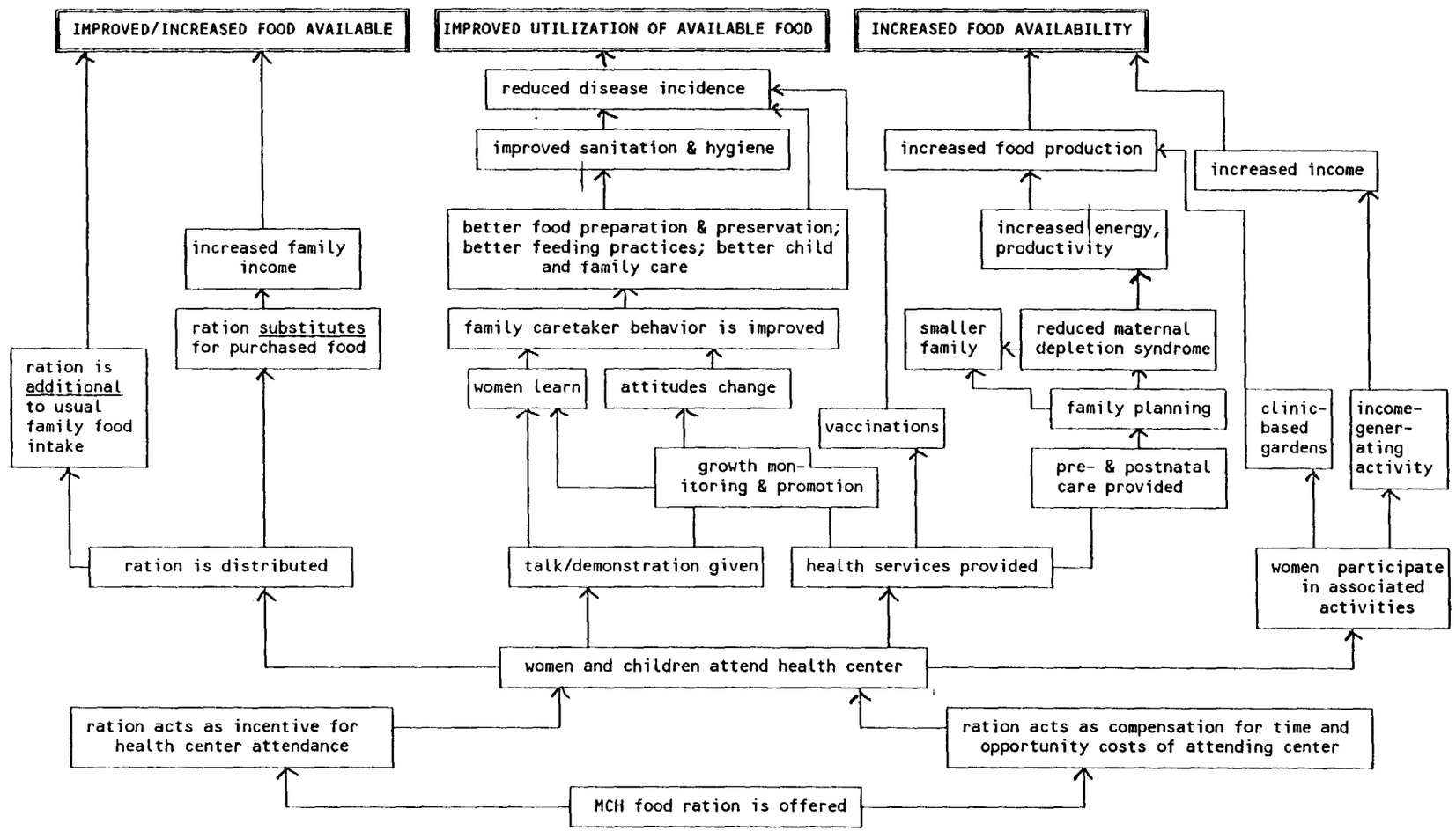

IMPROVED UTILIZATION OF AVAILABLE FOOD
decreased illness in the family
improved cooking, preservation, food storage, and child care
less time required for women to fetch water
decreased incidence of diarrhea, guinea worm (bilharzia)
well appropriately used
well correctly maintained
well properly built
site for well appropriately chosen near dwellings, not adjacent to latrines, etc.)


IMPROVED UTILIZATION OF AVAILABLE FOOD
decreased worm infestation
decreased incidence of water-borne and fecal-borne diseases
children don't play in dirt/they wash hands, under nails
improved personal hygiene
improved environmental sanitation
education in hygiene/sanitation
more convenient, closer water sources
wells
soakaway pits
drains
latrines

TRAINING OF VILLAGE HEALTH WORKERS



FOOD RATIONS PROVIDED AT MCH CENTERS



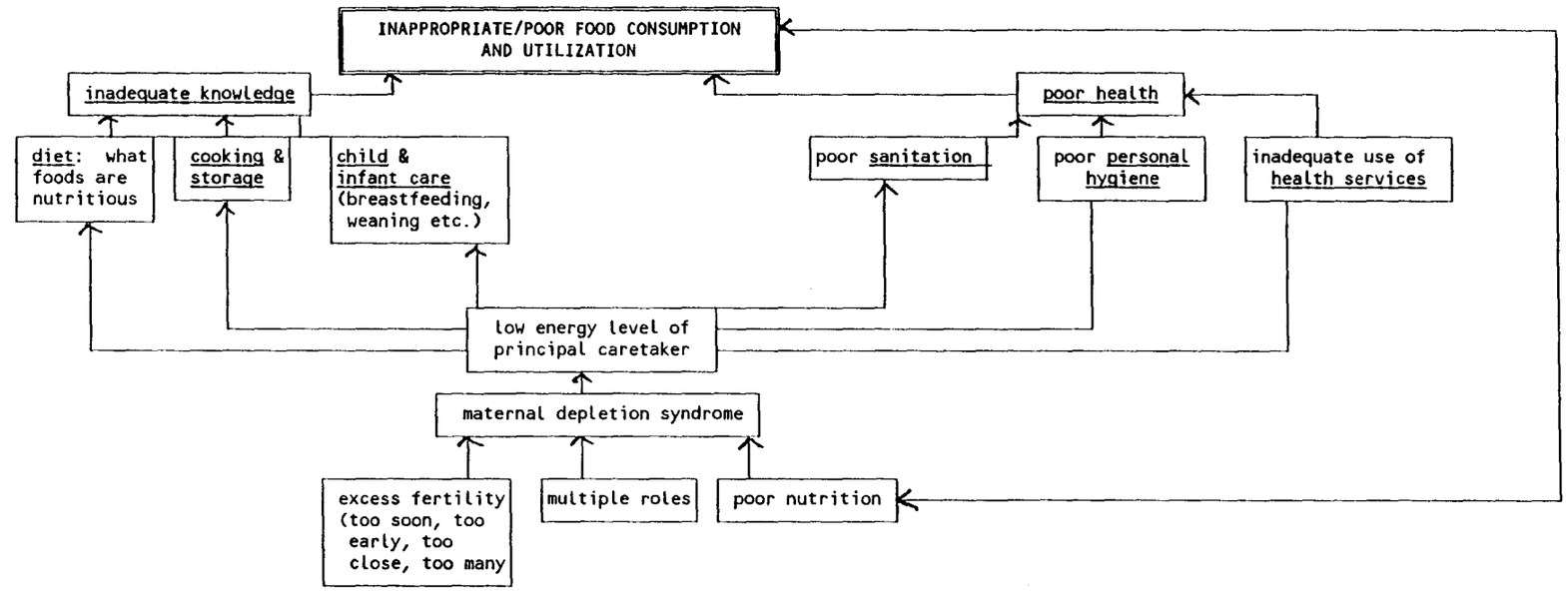
MCH is increasingly referred to as "WCH" -- Women and Child Health -- because of the importance of good health and nutrition for young women BEFORE they

A NEGATIVE ILLUSTRATION OF A CIRCULAR CHAIN OF CAUSALITY

(AN OBVIOUSLY UNDESIRABLE PATHWAY TO FOOD INSECURITY)

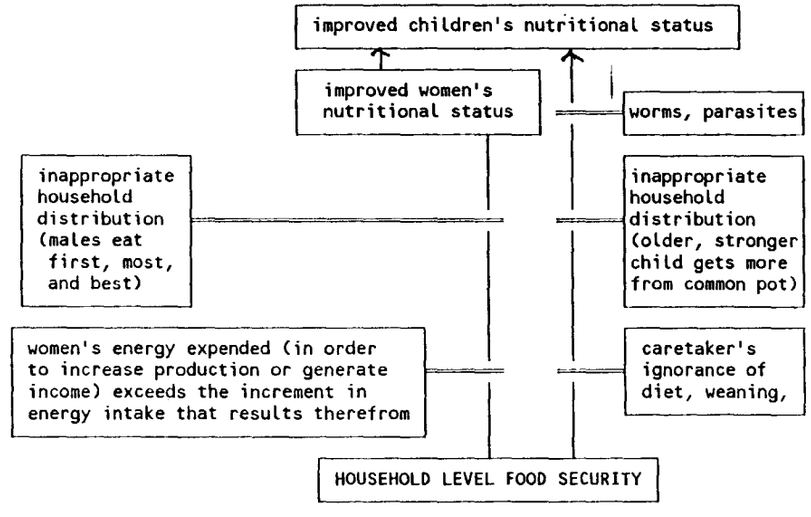
A NEGATIVE ILLUSTRATION OF A CIRCULAR CHAIN OF CAUSALITY

(AN OBVIOUSLY UNDESRIABLE PATHWAY TO FOOD INSECURITY)



BLOCKAGES, INTERVENING VARIABLES

WHY doesn't HOUSEHOLD-LEVEL FOOD SECURITY (theoretically enough food for everyone in the household) necessarily translate into improved nutritional status for vulnerable household individuals (women, infants, children, elderly, the infirm)?



MEASURING or VERIFYING IMPACT

It may be premature to begin the discussion on this important issue, but it is closely tied with the pathways to food security. As we follow these separate pathways, it becomes clear that each individual type of intervention requires a separate conceptualization of how far along that pathway it is appropriate to go when defining indicators of "success" of the intervention.

In some cases, the linkages are so well-established that it would be a waste of resources to do the research all over again; IF vaccines are properly administered (right dosage, right time, right age and so on), it is NOT necessary to measure the inevitable decline in disease incidence and prevalence.

Almost as clearly linked, latrines (IF properly sited, constructed, maintained, and used) WILL result in reduced incidence of fecal-borne diseases, and these not be measured. (In this case, even if a disease decline is found, the attribution of this happy result to the construction and use of the latrines can be an expensive undertaking and almost certainly not worthwhile.)

But what about a really LONG chain of expected (and some unexpected) causality -- some pathways leading to food security, while others leading to just the opposite. How far along such a chain should a PVO be held accountable? What's the nursery manager's responsibility may be at a very different point along the chain than the PVO and NGO counterpart who expect that outplanted seedlings are not the "end" of the chain, but only interim points along the pathway. Here's such a chain, or pathway:

seeds are planted...the seedlings are tended...a certain proportion of seedlings survive (does the nursery manager's accountability end here?)...some or all of them are sold or given away (or does his/her accountability go this far?)...the receiving farmers outplant them...and again a certain percentage survive...the seedlings grow up to be trees...which form a windbreak...which cuts down wind erosion...and so soil fertility improves...so now yields per hectare must necessarily improve. Now the pathway begins to branch: the happy farmer can either plant fewer hectares next year (because s/he can get the same amount from less area)...if so, s/he can use the extra time to sleep, perchance to dream, to take a literacy course, to start an income-generating activity, to drink beer, to increase and improve child care. Each of these branches, of course, leads on to other desirable OR UNDESIRABLE outcomes. (Is the PVO who sponsored the nursery responsible for increased beer-drinking?) The same happy farmer could also opt to farm the same area as last year and thus reap more produce. Again we branch. The extra food can be consumed by the family, which may improve the family nutrition (or it could make it worse). Or the farmer could sell some of the surplus...and use the money to buy more beer, to buy a radio, to pay off the moneylender, to buy more family food, to buy better family food, to buy convenience food, or even to buy worse food for the family. In the last option, family food intake deteriorates. Convenience food creates free time, which as we saw above can be used in "good" and "bad" ways. Even more and/or better family food does not necessarily then lead to improved nutritional status of vulnerable family members; instead, it could lead to overfed males or overfed stronger children.

By tracing such a pathway, we note several things:

- what may be an output in one project context might be considered effect in another, and possibly even "impact" in another.
- it's necessary to distinguish between what a PVO should be INTERESTED in (how did they use the new money? what did they do with their new "leisure" time?) and what the PVO should be RESPONSIBLE for accomplishing. If a new road carries people not only to the clinic, the market, and the school, but also to the bar and the bordello, should the PVO be held accountable?

INDICATORS are only one part of a COMPREHENSIVE MONITORING AND EVALUATION PLAN (which should also include WHO should measure or verify WHAT? using WHAT INSTRUMENTS or DATA SOURCES? gathering information FROM WHOM? WHEN, HOW OFTEN? to be analyzed BY WHOM? to be synthesized BY WHOM? to be summarized/reported on BY WHOM? for use BY WHOM? for WHAT PURPOSE?) The last -- for what purpose -- should be determined before any of the others are mapped out so as not to collect roomsful of data for no good use.

We shouldn't try to measure everything in sight. If you've got well-formulated objectives, deciding what to measure (or verify, in the case of non-quantifiable objectives) should not be that difficult.

We shouldn't assume linkages have been demonstrated just because they seem plausible or because there are many anecdotes that "confirm" them. (e.g., household level food security doesn't automatically ensure good nutrition for all household members...any more than community level food security ensures that all households in the community have enough to eat).

It's still useful to distinguish between short-term <u>effects</u> and medium- or long-term <u>impacts.</u> It's rare to find impact right away.

Most, but not all, objectives can be formulated in quantifiable terms. If so, the principal indicator (which will help us know if we achieved our objective) should be one with numbers in it...i.e., an quantitative indicator. Sometimes, however, a qualitative objective is perfectly legitimate; it would be ludicrous to try to attache numbers to its attainment. Find a non-quantitative way to <u>verify</u> its achievement.

Benchmarks (or milestones) are markers along the way to ultimate achievement. (If 100 flowers are expected to bloom by the end of the third project year, do we expect them to do so in increments of 33, 33, and 34? or 10, 30, then 60 in the third year?)

SAMPLE MENU OF INDICATORS FOR A SCHOOL MEAL PROGRAM

1. Enrollment: percent increase, by gender. Don't expect an INCREASE if the program is ongoing. Caution: how much of an observed increase is really NEW enrollees, adding onto the previous total in the zone, the region, the country? and how much of the increase is transfers from another school? Can pupils enroll at any age, or only up to age 6 or 7? can pupils enroll at any time in the year (such as when a school lunch program begins late in the academic year)? can they enroll in any school (i.e., is it likely that a lunch-providing school "steals" pupils from a nearby no-lunch school?)

2. Attendance: percent now compared with the percent before or after a change (a school newly integrated in the program, or a school suspended); percent attendance in a lunch school compared with no-lunch schools. (Attendance rate: total number of pupil-days attended divided by the total number of possible pupil-days in the year -- i.e., school open, teacher present, non-holiday -- times 100)

3. Repeat rates: percent of grade X who are taking the course a second time. Caution: is repeating in this context a privilege or a disgrace?

4. Drop-outs: percent who began the school year who are no longer enrolled at the end of the year. Caution: this applies only to school-year attrition; number 5 below applies to total attrition. Some teachers/school don't declare a much-absent child to be a "drop-out" until after a certain number of consecutive absences.

5. Attrition: percent of an entering class (e.g., P1) who are no longer enrolled some (e.g., five) years later (when they should have reached P6). Caution: should the start or the end of the P6 year be considered? If there's a great deal of in and out enrollment, the attrition figures can be misleading -- many of the original P1 class have left but have been replaced by others, and after five years it seems there's been little attrition judging from total numbers. Was a new school built nearby that siphoned off many pupils?

6. Exams: percent who succeed on a national, standardized examination (usually not administered until sixth grade or later).

Raw numbers rarely tell us much. We need some kind of comparison -- the situation after an intervention compared with what it was before (i.e., the need for baseline data). Or a contrast between a "treatment" population and a "control" population that is very similar in important ways.

ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

The FY1992-94 Title III program was intended to support a long-term strategy for alleviating Ghana's growing food deficit by promoting increased non-traditional exports. The foreign exchange earnings thus generated are expected to enable Ghana to finance needed food imports. The Mission planned to provide rice valued at US $30 million, of which $9.8 million was to be the cost of transporting the commodity to Ghana. Out of this planned length-of-program funding, $28.3 million was authorized and $20 million had been obligated at the time of the interim evaluation.

Under this non-project assistance program, commodities are auctioned to yield local currency which supports the development budget of the government of Ghana. The government in turn agrees to allocate programmed budgetary resources to support activities contained in annual Letters of Intent. This program is linked to the Mission's Trade and Investment Program which, together with the Human Resources Development Assistance Project (HRDA) is intended to address the Mission's strategic objective of increasing private sector-led export growth as stated in USAID/Ghana's FY 1991-1996 Country Program Strategic Plan. Funding under the P.L. 480 Title III Program supports feeder road rehabilitation and improvements along with NGOs that work with small producers. A portion of program funding set aside to support the Centre for Policy Analysis (CEPA) is intended for building capacity for private and independent economic analysis.

Rice imports under this program have had a small additional impact on food availability and negligible disincentive effects on production, pricing or imports of rice and other commodities. Commodity management has been excellent. The Department of Feeder Roads has made reasonable progress in meeting targets for feeder road improvements. Inhabitants along improved road corridors report greater availability of transportation which means a reduction in transit time to medical facilities along with improved access to agricultural extension staff and to markets. Participation of a greater number of NGOs in the program was intended. This has been hampered in part by the low number of acceptable proposals received for review. Despite delays in start-up of program activities, the two NGOs participating have made significant progress toward achieving targets for providing assistance to small producers and for increasing value of exports both in terms of volume and quality. The Centre for Policy Analysis has been established. CEPA is currently refurbishing its office accommodations and recruiting research staff but has not yet developed a program for its activities.

COSTS

I. Evaluation Costs

1. Evaluation Team

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. $)	Source of Funds
Seth D. Vordzorgbe	Consultant, Accra		$25,000	Project Dev. & Support Funds.
Tom Marchione	USAID/BHR/PPE			
Robert Sears	USAID/REDSO/WCA			
Solomon Atiase	USAID/REDSO/WCA			
Martina Odonkor	Consultant, Accra			

2. Mission/Office Professional Staff Person-Days (Estimate) _____

3. Borrower/Grantee Professional Staff Person-Days (Estimate) _____