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FINAL EVALUATION

CHILD SURVIVAL PROJECT IN SEMUTO AND BUTUNTUMULA,
LUWERO DISTRICT - UGANDA.

AMREF UGANDA PROJECT

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EXECUTIVE SUMMARY

The final Evaluation of the USAID funded Child Survival Project implemented by AMREF - Uganda was conducted from 28th Sept - 11 Oct, 1995 by an evaluation team at the request of USAID. The project was a 3 year project, implemented from Oct 1, 1992 to Sept 30, 1995.

The main objective of the final evaluation was to assess the effectiveness and the sustainability of the project. The evaluation was done according to the guidelines and Terms of Reference provided by USAID. The accomplishments against major project objectives were assessed, including the factors that influenced the process of implementation of the project. The unintended effects of the project were also examined. The project expenditures were analysed and the sustainability of activities extensively assessed.

THE MAIN ACHIEVEMENTS OF THE PROJECT:

1. The community capacity was built through community organisation and training. As a consequence there was significant improvement in the knowledge and practices for health promotion and management of priority health problems particularly of mothers and children at the community and household levels. Care seeking behaviour also significantly improved.
2. Activities for EPI were strengthened and full immunization coverage of children under one year of age increased by 24.0%. However the project target of 30% was not reached.
3. Activities for control of diarrhoeal diseases were strengthened. The diarrhoea episodes reduced among children and the use of ORT in treatment of diarrhoea increased by 39.4%. The project target was attained.
4. The malaria incidence among children under 5 years of age decreased by 27.0% as a result of community education for malaria prevention and promotion of use of insecticide impregnated bednets. However the project target of 30% reduction of malaria morbidity among children under 5 years age was not reached.
5. Activities to improve maternal health were strengthened. Family Planning practice improved remarkably. The modern contraceptive usage increased by 152.1%. As a consequence of TBA training many more mothers were able to have deliveries safely conducted by the TBAs within their communities. However the maternal prenatal visits to the health facilities declined by 20.6%. This was a result of mothers increasingly seeking prenatal care from the TBAs. The project had far reaching effects. The demand for CBHC approach in other subcounties was created. At the district level the project influenced policy changes towards re-orientation towards PHC signified by improved resource allocation for PHC activities.

However, the expectations of incentives created by the project among the community resource persons and project counterpart personnel led to reduced morale and significant attrition of the community resource persons. The community structures left in place by the project are likely to continue. The project activities are therefore likely to continue if support is provided by the district and subcounty authorities.

Recommendations:

1. **Recommendations related to accomplishment of specific interventions**

i) **EPI Coverage**

- a) Outreach immunization centres should be increase to accelerate immunization coverage towards the project target of 80%
The need for outreach centres, and their locations should be decided in consultation with local leaders and CHWs.
- b) Motorcycles and bicycles should be used for transportation for outreach activities rather than motorcars.
- c) The necessary inputs should be identified and provided for daily immunization at all health facilities. Daily immunization at all health units is a MOH policy that should be enforced through the DMO of Luwero district.

Allowances should not be considered for daily immunization at static units as it is not sustainable.

ii) **ORT Use in diarrhoea treatment**

- a) The current ORT use rate should be further improved and consolidated through appropriate support and motivation of the CHWs, TBAs and their supervisors.
- b) The ORT use should be reinforced with preventive measures to augment the impact of the intervention.
There is real opportunity to improve water and sanitation in the community as the demand has definitely been created.

iii) **Malaria Control**

- a) Community education should be intensified using the community resource persons trained to promote the use of insecticide impregnated mosquito bednets.

- b) The demand and preference for the varieties of bednets should be assessed to ensure customer satisfaction.
- c) Environmental control measures for the mosquitos like bush clearing and mosquito screening in houses should be emphasized as these are more likely to be sustainable.
- d) Diagnosis and treatment of malaria, at the health facilities including record keeping should be improved to facilitate monitoring of the impact of the intervention.

iv) **Nutrition education**

The prevention of malnutrition in older children under five years of age should be addressed through intensified community education and promotion of production of appropriate foods, food preparation and food security.

v) **Growth Monitoring**

- a) Growth monitoring should be done to all children in the target age group of 0 - 5 years. The current integration of Growth monitoring with the immunization activities implies that the children who complete immunization are not likely to be weighed again.
- b) All children under 5 years of age attending outpatient should be weighed. The weights should be plotted on the Child Health Card.
- c) The Trainers and the CHWs should be used to check the weights of the children in the Child Health Cards and advise the mothers appropriately.

vi) **Prenatal Care**

- a) While it is important to maintain the confidence already built in the TBAs, mothers should attend ANC at the health facilities rather than at the TBAs.
- b) Both CHWs and TBAs should be used to intensify education of mothers on the benefits of prenatal care.

vii) **Family Planning**

The major hindrance to family planning was the negative attitude of the husbands towards family planning.

- a) Community leaders at all levels should be sensitized on the benefits of family planning to achieve their support and influence for family planning.

- b) Health unit personnel, CHWs and TBAs should be used to intensify education of both men and women on the benefits of family planning.
- c) The well established CBHC network should be strengthened and used to improve access to family planning services.

viii) **HIV/AIDS Control**

Two HIV/AIDS counsellors should be trained for each sub-county to support the CHWs in community education and counselling. The counsellors should be at the level of teachers and nurse.

This could be done in collaboration with other NGOs in the area involved in HIV/AIDS work.

ix) **Acute lower respiratory tract infection management**

According to the finding of the final evaluation survey the care seeking behaviour of caretakers for ALRI was already very high and did **not** change significantly over the 3 years of the project. Training of health workers in the management of ALRI is already integrated in the OPL course.

This intervention is therefore redundant and should be eliminated from the project. Instead CHW should be taught prevention of ALRI.

2. **Recommendation related to project sustainability**

- a) The number of CHWs to be trained should be reviewed and determined on the basis of the number of households each CHW is **expected** to supervise.
- b) The number of TBAs and CHW trainers/supervisors should be reviewed and determined on the basis of the number of CHWs or TBA each trainer is expected to supervise.
- c) Selection criteria of TBAs for training that were developed by the project should always be followed to ensure that only practicing TBAs are trained.
- d) Incentive schemes should be developed for the CHWs and their supervisors to improve their retention and continuity.
The IGA should be considered as a serious option to raise income for incentive payment.
- e) Income generating activities should start as community initiatives, and they should be guided to ensure feasibility and viability in the local situation.
- f) Seed money from the project should be used to support a few model IGAs to gain experiences that could be beneficial to other IGAs in the communities. Income generated from successful project support IGAs could be made available to communities to borrow to finance new IGAs.

- g) The management of the IGAs should be streamlined and strengthened through development of appropriate guidelines, and training of VHCs. The CHW and trainers should be involved as direct beneficiaries.
- h) Collaboration with the District Health Team should be improved and the project activities should be reflected in the overall district annual workplan.
- i) Community capacity for needs assessment and priority setting should be strengthened.
- j) Community Based Management Information system should be established for improved monitoring of the CBHC activities.
- k) Drug kits supplied to the CHWs is acceptable to the district health authorities and should be continued as a revolving fund for which the CHW should be accountable to the VHC.

3. General recommendations:

- a] The community capacity building process now underway in Butuntumula should be completed.
- b] The project activities in Semuto should be scaled down to focus on issues of continuity and sustainability
 - VIZ . IGA Management
 - . Support to the CHWs and supervisors
 - . Refresher courses for community resource persons
 - . Supervision
 - . CBMIS
- c] Emphasis should be put on training more of CHWs than TBAs and to rationalise their numbers. Only practicing TBAs should be trained.
- d] The orphans and vulnerable children project should be merged with the Child Survival project to maximize on available resources.
- e] The project office at Butuntumula should be strengthened to coordinate the combined orphans and Child Survival project. This is especially necessary in view of the envisaged project expansion to two other sub-counties.

LIST OF ABBREVIATIONS

CHW	-	Community Health Worker
TBA	-	Traditional Birth Attendant
VHC	-	Village Health Worker
DHT	-	District Health Team
EPI	-	Expanded Programme on Immunization.
ANC	-	Antenatal Care
ORT	-	Oral Rehydration Therapy
ORS	-	Oral Rehydration salt
ALRI	-	Acute Lower Respiratory Infection.
HIV	-	Human Immune Deficiency Virus.
AIDS	-	Acquired immune Deficiency Syndrome
OPV	-	Oral Polio Vaccine
DIP	-	Detailed implementation plan.
DMO	-	District Medical Officer
DHV	-	District Health Inspector
HI	-	Health Inspector
MOH	-	Ministry of Health.
CBHC	-	Community Based Health Care.
STD	-	Sexual Transmitted Diseases
HIS	-	Health Information System
TOT	-	Training of Trainers
GA	-	Income Generating Activities
HUMC	-	Health Unit Management Committees
PHC	-	Primary Health care
HE	-	Health Education
PY3	-	Project year 3
OPL	-	Operation Level
CBMIS	-	Community Based Management Information System

1.

INTRODUCTION

1.1 General background

The child survival project funded by USAID was implemented by AMREF in 2 sub-counties of Semuto and Butuntumula in Luwero district in Uganda since October 1992.

Luwero district with a population of about 449,691 (1991 census) is located in the central Uganda. Semuto sub-county has 34 communities (villages) and a population of about 14,427. Butuntumula sub-county has 42 communities (villages) and a population of about 25,508. Butuntumula is the largest sub-county in the district with scattered nomadic population.

Luwero district was devastated by the civil war of 1981 -1986. Semuto was one of the most affected sub-counties.

Community Based Health Care programme was implemented in Semuto since 1989 in attempt to reach the most affected.

In October 1992 with additional funds from USAID, AMREF intensified integrated Child Survival activities in Semuto using the CBHC approach. Similar activities were also initiated in Butuntumula.

1.2 The goal and objectives of the Child Survival Project

The goal of the Child Survival project was to improve the health of the people, particularly those under 5 years of age, and pregnant women in Semuto and Butuntumula sub-counties through sustainable community based strategies in health and child welfare.

Project Objectives

- i) Increase the percentage of children treated with ORT for an episode of diarrhoea by 30%
- ii) Increase the full immunization coverage of children under one year by 30% or see that full immunization coverage is over 80% by Project Year 3.
- iii) Decrease malaria morbidity among the children under 5 years by 30%
- iv) Increase the use of prenatal care by pregnant mothers and high risk screening by 30%.
- v) Assess whether insecticide impregnated bednets can become a self supporting malaria control method.

1.3 Key intervention

- i) Community capacity building
 - Formation and training of village health committees.
 - Selection and training of Community Health Workers.
 - Training of Traditional Birth Attendants.
 - Training of Trainers for CHWs & TBAs.

- ii) Strengthening EPI activities
 - Community mobilization for immunization.
 - Support to outreach activities.
 - Training.

- iii) Strengthening CDD/ORT activities
 - Community mobilization for diarrhoea control.
 - Promotion of home based fluids and ORS in diarrhoea management.
 - Home improvement and environment sanitation.

- iv) Malaria control
 - Community Education
 - Improving access to treatment
 - Provision of insecticide impregnated bednets.

- v) Maternal Health
 - TBA training
 - Nutrition Education
 - Family Planning
 - Ante-natal care
 - Malaria control

- vi) HIV/AIDS Control
 - Health Education
 - Promotion of condom use
 - Counselling

- vii) ALRI Control
 - Training of CHWs on early recognition of ALRI and referral.

1.4 Objectives of the final evaluation

The overall goal of the final evaluation of the Child Survival Project was to assess the effectiveness and sustainability of the project.

The objectives were:

- i) To assess the achievements of the project against the project objectives and explain any differences.
- ii) To describe the unintended positive and negative effects of the project activities.
- iii) To analyse the project expenditures and compare with the budget contained in the Detailed Implementation Plan (DIP).
- iv) To outline the main lessons learned from the project implementation.
- v) To identify resources the community contributed and will continue to contribute that will encourage the continuation of project activities after donor funding ends.
- vi) To assess the current ability and willingness of counterpart institutions to sustain the project activities.
- vii) To outline the sustainability plan, objectives, steps taken and outcomes.

2. Terms of Reference for the Final Evaluation

- i) To compare project accomplishments with the objectives outlined in the DIP in tabular format and explain the differences. Describe any circumstances which may have aided or hindered the project in meeting these objectives.
- ii) To describe unintended positive and negative effects of project activities.
- iii) To attach a copy of the project Final Evaluation Survey Report and state the results for each relevant indicator including numerator and denominator information, as well as percentages for each indicator.
- iv) To attach a pipeline analysis of project expenditures.
- v) To compare the budget contained in the DIP with the actual expenditures of the project. To determine whether some categories of expenditures were much higher or lower than originally planned and explain any differences.
- vi) To outline the main lessons regarding the entire project which were applicable to other PVO CS projects, and/or relevant to USAID's support of these projects.
Be sure to address specific interventions, sustainability and expenditures.

- vii) To identify what resources the community has contributed and will continue to contribute that will encourage continuation of project activities after donor funding ends?
- viii) To determine what the current ability of the MOH or other relevant local institutions is to provide the necessary financial, human, and material resources to sustain effective project activities once CS funding ends?
- ix) To identify the steps the project has undertaken to promote sustainability of child survival activities once project funds end?

3. Methodology

The Terms of Reference formed the basis of the methodology for the final evaluation of the child survival project in Semuto and Butuntumula from 28 September - 11 October 1995.

On the first day an analytic framework was developed in which criteria and indicator for assessment were identified. For each indicator appropriate data collection methods were identified. [Annex I.]

For each indicator a checklist of questions was prepared and the sources of information were identified.

A Final Evaluation Survey had been done in March 1995. The quantitative data required to assess the project accomplishments were obtained through extensive review and analysis of the Final Evaluation Survey Report.

A field study was done to supplement the data in the Final Evaluation Survey report and to establish the circumstances which aided or hindered the project in meeting the objectives, and the explanation for the differences observed between the objectives outlined in the DIP and the accomplishments.

A purposive sample of villages was selected for each of the two sub-counties according to CBHC performance. In each sub-county a total of 6 villages were selected including 3 that were perceived to have performed well and 3 that had not performed so well. The final choice of the villages to visit took into account accessibility and practical feasibility within the time allocated to the field visit. Four days were allocated for the field visit. The village health committees, the CHWs and the trainers in the selected villages were informed in advance about the time of the visit.

The evaluation team split into two evenly balanced groups to carry out the actual data collection exercise. Both groups worked in one sub-county at a time, taking 3 villages each.

The team also visited Luwero District Administration, the MOH and the Uganda Community Based Health Care Association.

In-depth interviews of key informants was carried out at all levels. List of categories of people interviewed is in

Annex 2. The team also reviewed all relevant documents.

List of documents reviewed is in Annex 3.

Analysis of the qualitative data was done manually.

Further analysis of the quantitative data from the Final Evaluation Survey was done from the computer data base using EPI Info computer software package.

4.

FINDINGS4.1. PROJECT ACCOMPLISHMENTS AND LESSONS LEARNT4.1 A Project Accomplishments.4.1 .A 1 Project Accomplishments Against Major Objectives:

In this section the project accomplishments are compared with the major project objectives as outlined in the DIP. The differences are explained. The circumstances which facilitated or hindered the project from meeting the objectives are also described.

The accomplishments against the objectives are summarised in the table below:-

Table 1. Project Accomplishments against major objectives

Objectives	Accomplishment
Increase the percentage of children treated with ORT for an episode of diarrhoea by 30%	Treatment with ORT for diarrhoea episode improved from 37.5% [1993] to 52.3% [1995], that is 39.4% increase.*
Increase the full immunization coverage of children under 1 year of age by 30 % or see that full coverage is over 80% by PY3.	Full immunization coverage increased from 36.7% [1993] to 45.5% [1995], that is 24.0% increase.
Decrease malaria morbidity in children under 5 years of age by 30%	There was a reduction of the incidence of malaria in children under 5 years of age from 39.5% [1993] to 28.8% [1995], that is a decrease by 27.0%.*
Assess whether insecticide impregnated bednets can be self-supporting malaria control method.	Awareness of effectiveness of mosquito nets increased from 9.0% [1993] to 38.1% [1995]. 933 bednets were distributed at 50% of the cost price out of 2,700 targeted by PY 3.
Increase prenatal care and high risk screening by 30%	Maternal prenatal visit [on card] decreased from 50.4% [1993] to 40.0% [1995], that is 20.6% decrease.

$$\text{Percent change} = \frac{\text{Final status} - \text{Baseline}}{\text{Baseline}} \times 100$$

Increase use of ORT in the treatment of an episode of diarrhoea by 30%

The project objectives to increase the percentage of children treated with ORT for an episode of diarrhoea by 30% was achieved well beyond target. Interviews by the evaluation team revealed that the CHWs and TBAs were trained and used to educate communities on the importance of giving increased fluids to children with diarrhoea. Since CHWs and TBAs are based in the communities they were effective in reaching the potential beneficiaries with messages promoting ORT. It was clear from the interviews that emphasis was put on the use of home available fluids including sugar-salt solution, cereal based fluids among others. These are commonly used materials in homes and hence were easily available for use in diarrhoea episodes. The final evaluation survey indicated significant improvements in the use of home-based fluids.

The access to ORS was also improved by including it in the CHW drug kit.

The government policy on the promotion of ORT in treatment of diarrhoea and the emphasis on its use at the health units also very much aided the accomplishment of the project objective.

Increasing full immunization coverage of children under 1 year of age to 80%

The project objective to increase full immunization coverage of children under one year of age by 30% or see that full coverage is over 80% by PY3 was not achieved, though there was significant improvement from the baseline. Although the project target was not reached nearly all the people interviewed consistently indicated that the immunization component of the project had done very well. The members of the district health team interviewed indicated that the immunization coverage in the two subcounties covered by the project was better than the coverage in the sub-counties not covered by the project in the district.

The achievements were attributed to better community mobilization for immunization by the CHWs and TBAs in the project area. In Semuto where more CHWs and TBAs had been trained and had operated much longer the full immunization coverage was better and the increase was relatively higher than in Butuntumula where CBHC had been implemented for relatively shorter time. Semuto had a full immunization coverage of 61.8% [1995] with an increase of 28.2% while Butuntumula had a coverage of 28.1% [1995] with an increase of 15.2%.

The evaluation team attributed relatively lower overall full immunization coverage to a number of factors. There was limited access to immunization services. The outreach immunization centres were few, one per parish and distant for some mothers. The mid-term evaluation had recommended establishment of more outreach centres to accelerate the immunization coverage towards the project target. However, this recommendation was not implemented. The current use of motor vehicles to run outreach activities is expensive and hindered the expansion of outreach services.

The interviews revealed that nearly all the static immunization centres in the project area currently run immunization clinics only once a week. Opportunities are missed to immunize the children who for various reasons come to the clinics daily. There is a significant nomadic population particularly in Butuntumula subcounty which moves from place to place in search of pasture for cattle. This movement makes it difficult for the children to complete the immunization. This problem could be addressed by establishment of outreach stations at appropriate locations.

Many of the CHWs and Trainers interviewed expressed diminishing morale due to lack of incentives. The CHWs, particularly in Butuntumula where they are still few, are expected to visit, an average of 100 households. Given that the homes are sparsely distributed and there is no provision of transport the CHWs are not motivated to sustain effective mobilization of the communities for immunization and other services.

The side effects of some vaccines were said to discourage mothers from taking their children for immunization. The swelling and ulceration caused by BCG was reported to have caused a major hindrance to the mothers to take children for immunization in the previous year. However, the final evaluation survey indicated a decline in the drop out rate from 17.4% [1993] to 12.5% [1995] as a result of community education.

Reduction of malaria morbidity in children under 5 years of age bv 30%

The project objective to reduce malaria morbidity in children under 5 years of age by 30% was not achieved. However, there was significant reduction in the perceived malaria incidence in children by 27.0%. This achievement was largely attributed to community education on the prevention and control of malaria done by the CHWs. The final evaluation survey indicates a general increase in the knowledge in the community that mosquitoes and mosquito bites cause malaria. Awareness of effectiveness of mosquito nets in control of malaria increased from 9.0% [1993] to 38.1% [1995] and a significant number of families purchased and used insecticide impregnated bednets.

4.1.A2 UNINTENDED POSITIVE AND NEGATIVE EFFECTS OF THE PROJECT ACTIVITIES.

The project had far reaching positive effects both within the project area and in the other areas of the district.

- o At the community level the project has created demand for some services that were not included in the project plan, as a result of improved awareness of good health. The demands for safe water and improved latrines was consistently expressed in all communities visited.
- o The community capacity built by the project has been used as a frame work for environmental hygiene and general welfare improvements. Housing, and general hygiene in the community are gradually improving.

The project has facilitated unity, community stability and move towards inter-dependence and community self reliance. This is the effect of the community structures established with internal supervision and monitoring mechanisms. The sense of community ownership of health resources and the desire for improvement was quite evident in the communities visited.

- o The effect of knowledge transfer beyond the project area has stimulated the demand for CBHC approach in other subcounties.
- o At the district level, the project successes have facilitated policy changes towards reorientation towards Primary Health Care. From the interviews with the district and sub-county leaders there were indications of move towards allocating more resources for PHC activities.
- o The main negative unintended effect of the project has been the expectations of incentives and benefits among the VHCs, CHWs, Trainers, and counterpart health staff. This was partially responsible for the attrition of the CHWs and Trainers. A total of 162 CHWs have been trained but only 136 are active while 32 are no longer active. The counterpart health staff interviewed expressed the need for incentives to improve their morale.

4.1 .A3 FINAL EVALUATION SURVEY RESULTS FOR KEY CHILD SURVIVAL INDICATORS

The final evaluation survey of the project was conducted in March 1995. The purpose of the survey was to assess the achievements of the child survival programme compared to the baseline survey results obtained in February 1993. In this section the results related to the key child survival indicators are stated and the percentages indicated for each indicator. The numerator and denominator information is also given.

A copy of the Final Evaluation Survey report is in Annex V.

i) Appropriate infant Feeding Practices:

- a) Percent of children less than 24 months who were breastfed within the first hour after birth.

Baseline (1993) 2631590 = 44.6%

Final (1995) 3261598 = 54.5%

Numerator = Number of mothers who breastfed during the first hour after delivery.

Denominator = Total number of mothers interviewed.

There was an increase by 22.2% of the number of children who were breastfed within the first hour.

- b) Percent of children less than 24 months who were breastfed within the first 8 hours after birth.

Baseline (1993) 445/590 = 75.4%

Final (1995) 441/598 = 73.7%

Numerator = Number of mothers who breastfed within the first hour + mothers who breastfed from 1-8 hours.

Denominator = Total number of mothers interviewed.

There was a decrease by 2.3% of the mothers who breastfed within the first eight hours.

- c) Percent of infants less than 4 months who were exclusively breastfed.

Baseline (1993) 45188 = 51.1%

Final (1995) 31184 = 36.9%

Numerator = Mothers who started adding foods to breastfeeding after 4 months.

Denominator = Total number of infants less than 4 months old.

There was a decrease by 27.8% in the number of infants less than 4 months who are exclusively breastfed.

- d) Percent of infants between six and ten months who were being given solid or semi-solid foods

Baseline (1993) = 1221130 = 93.8%

Final (1995) = 110/112 = 98.2%

Numerator = Mothers who introduced solids foods to children from 6-9 months.

Denominator = Total number of children aged 6-9 months.

The number of children given solid foods from 6 - 9 months increased by 4.7%

- e) Percent of children breastfed beyond 19 months

Baseline (1993) 17/63 = 27.0%

Final (1995) 25174 = 37.8%

Numerator = Mothers who breastfed children beyond 19 months.

Denominator = Total number of children between 19 - 24 months

The number of children breastfed beyond 19 months increased by 40.0%

ii) Management of Diarrhoeal Diseases

- a) Percent of children less than 24 months who had continued or increased breastfeeding during episode of diarrhoea.

Baseline (1993) = 1461248 = 58.9%

Final (1995) = 1711222 = 77.0%

Numerator = Number of mothers who breastfed child more than usual or same as usual

Denominator = Total number of breastfeeding children who had diarrhoea.

There was an increase of 30.7% of children less than 24 months who had continued or increased breastfeeding during diarrhoea episode.

- b) Percent of children less than 24 months who were given continued or increased fluids during diarrhoea episode.

Baseline (1993) = 177/250 = 70.8%

Final (1995) = 192/225 = 85.3%

Numerator = Number of mothers who gave fluids more than usual or same as usual.

Denominator = Total number of children who had diarrhoea who were not exclusively breastfed.

There was an increase of 20.5% in the number of children less than 24 months who were given continued or increased fluids during diarrhoea episode.

- c) Percent of children less than 24 months who were given continued or increased food during diarrhoea episode.

Baseline (1993) = 921209 = 44.0%

Final (1995) = 107/189 = 56.6%

Numerator = Number of mothers who gave food more than usual or same as usual.

Denominator = Total number of children who had diarrhoea who were not exclusively breastfed.

There was an increase of 28.6% in the number of children who were given continued or increased food during diarrhoea episode.

- d) Percent of children less than 24 months with diarrhoea who were treated with ORT.

Baseline (1993) = 1071285 = 37.5%

Final (1995) = 1251235 = 52.3%

Numerator = Number of mothers who gave ORS or Sugar-Salt solution or cereal-based fluid or other home-based fluids to child during diarrhoea episode.

Denominator = Total number of children with diarrhoea episode in the past two weeks.

There was an increase of 39.5% in the number of children who were treated with ORT during diarrhoea episode.

- iii) EPI Access

- a) Percent of children 12-23 months who received DPTI.

Baseline (1993) = 1861264 = 70.5%

Final (1995) = 1851264 = 70.1 %

Numerator = Number of children who had received DPTI on card.

Denominator = Total number of children 12-23 months old.

There was no significant change in the number of children 12-23 months who had received DPTI on card.

- b) Percent of children 12-23 months who received OPV3 on card.

Baseline (1993) = 1431264 = 54.2%

Final (1995) = 1481264 = 56.1 %

Numerator = Number of children who had received OPV3 on card.

Denominator = Total number of children 12-23 months old.

There was an increase of 3.5% in the number of children who had received OPV3 on card.

c) Percent of children 12-23 months who received measles vaccine.

Baseline (1993) = 1131264 = 42.8%

Final (1995) = 1381264 = 52.3%

Numerator = Number of children who had received measles vaccine on card.

Denominator = Total number of children 12-23 months old.

There was an increase of 22.2% in the number of children 12-23 months old who had received measles vaccine.

d) Drop out rate for DPT:
Percent change between DPT1 and DPT3 doses
 $[(DPT1 - DPT3)/DPT1] \times 100$ for children 12 to 23 months old.

Baseline (1993) 461264 = 17.5%

Final (1995) 331264 = 12.5%

There was a significant decrease in the drop out rate for DPT.

iv) Maternal Care

a) Percent of mothers with a maternal card for the birth of the youngest child less than 24 months of age.

Baseline (1993) 2851589 = 49.1 %

Final (1995) 226/567 = 37.9%

Numerator = Number of mothers who had a maternal health card.

Denominator = Total number of mothers in the survey.

There was a decrease of 22.8% in the number of mothers with a maternal health card for the youngest child.

- b) Percent of mothers who received two doses of tetanus toxoid vaccine (on card) before the birth of her youngest child less than 24 months of age.

Baseline (1993) 2181589 = 37.0%

Final (1995) 190/597 = 31.8%

Numerator = Number of mothers who had received two or more doses of TT on card.

Denominator = Total number of mothers interviewed.

There was a decrease of 14.1% in the number of mothers who received two or more doses of TT vaccine (on card) before the birth of the youngest child.

- c) Percent of mothers who had at least one ante-natal visit (on card) prior to the birth of her youngest child less than 24 months of age.

Baseline (1993) 2971589 = 50.4%

Denominator (1995) 2391597 = 40,0%

Numerator = Number of mothers who attended ANC once or more times (on card)

Denominator = Total number of mothers interviewed.

There was a decrease of 20.6% in the number of mothers who attended ANC at least once (on card).

- d) Percent of mothers who had at least one ante-natal visit (self report) prior to the birth of her youngest child less than 24 months of age.

Baseline (1993) 5711585 = 97.6%

Final (1995) 5751598 = 96.1 %

Numerator = Number of mothers who reported having attended ANC at least once.

Denominator = Total number of mothers interviewed.

There was a decrease of 1.5% in the number of mothers who attended ANC at least once by self report.

- e) Modern Contraceptive Usage

Percent of mothers of children less than 24 months of age who desired no more children in the next two years who were using a modern contraceptive method.

Baseline (1993) 12/170 = 7.1 %

Final (1995) 481268 = 17.9%

Numerator = Number of mothers using FP method to postpone pregnancy.

Denominator = Total number of mothers who did not want to have another child in the next two years or who did not know.

There was an increase of 152.1% in the number of mothers using modern contraceptive to postpone pregnancy.

- v) Knowledge Indicators

- a) Percent of mothers who are literate.

Baseline (1993) 4441595 = 74.6%

Final (1995) 4701598 = 78.5%

Numerator = Number of mothers who can read.

Denominator = Total number of mothers interviewed.

- b) Percent of mothers who know that measles vaccine should be given at nine months.

Baseline (1993) 3361535 = 62.8%

Final (1995) 420/600 = 70.0%

Numerator = Number of mothers who said measles vaccines should be given at 9 months.

Denominator = Total number of mothers interviews.

There was an increase of 1.5% in the number of mothers who know when measles vaccine should be given to a child.

Conclusions from the Results of the Final Survey

1. Infant feedinn practices

There was general improvement in the infant feeding practices. The proportion of children breastfed within the first hour of delivery improved significantly. However, there was an overall decrease in the proportion of the children who were breastfed within the first 8 hours. It would appear that the gain in breastfeeding within the first hour was due to further improvement in breastfeeding among the mothers who had breastfed in the first 1 to 8 hours. This would imply less change among the higher risk group who had waited more than 8 hours before starting to breastfeed. This will require better targeting in future. There was a significant decrease in the number of children less than 4 months exclusively breastfed. This may be explained by the fact that the community is just resettling from the effects of the civil war that badly affected the area. There is therefore increasing economic activities with mothers spending more time away from home leaving the children under the care of siblings and other relatives. This was evident from the results of the Final Evaluation survey. This necessitated giving children supplementary feeds while the mothers were away. However the weaning practices improved as well as prolonging breastfeeding beyond 19 months.

2. Management of Diarrhoeal Diseases

There was remarkable improvement in the management of diarrhoeal diseases in children using oral rehydration therapy. This was due to effective community education and emphasis on the use of home-based fluids. This was evident from the results of the final evaluation survey.

The use of oral rehydration therapy including oral rehydration salt, sugar-salt solutions and cereal based fluids increased from 36% to 51.1%. However the use of medicines, mainly antibiotics increased. This reflects the need for further education of both the health workers and the communities on the cases and management of diarrhoea.

3. EPI Access

There was some improvement in the immunisation coverage though it fell far short of the project target. The EPI access was not increased since the outreach activities were maintained at the same level.

In Semuto subcounty there were 1 static and 7 outreach immunization centres while Butuntumula subcounty which is much bigger both in population and geographical area had 2 static and 8 outreach immunization centres.

The full immunization coverage in Semuto was 61.8% [1995] while in Butuntumula it was 28.1% [1995].

Opportunities were missed to immunize children who were brought to the health facilities for various clinics as immunization was done only once a week at the static facilities.

However the drop out rate for DPT was significantly reduced through improved community mobilization by the CHWs and TBAs.

4. Maternal Care

There was consistent decline in the care of expectant mothers considering only the mothers who sought care from professional health workers at the health facilities.

Visits for prenatal care decreased from 50.4% to 40.0% while the mothers who had received two or more doses of TT during previous pregnancy decreased by 14.1%.

This was because increasingly more mothers sought prenatal care from TBAs. The fact that modern contraceptive usage increased remarkably from 7.1% to 17.9% could also contribute to the decline in prenatal attendance since a significant proportion of mothers postponed getting pregnant.

5. Knowledge indicators

There was significant improvement in awareness about good health among the mothers which contributed to the improvement of the child survival indicators. This was evident in the final evaluation survey results. Just as an example, there was an increase of 11.5% in the number of mothers who knew when measles vaccine should be given to a child.

General Conclusion

On the whole there were improvements in the Key Child Survival indicators as a consequence of the activities of the project.

However it should be noted that the community capacity building strategy used by the project is necessarily a slow process which must be done at the pace of the community. The desired resultant change in the community was therefore slow to come.

This is quite evident when comparison is made between Semuto Subcounty which had a much longer period of CBHC implementation and Butuntumula subcounty which had much shorter CBHC experience. CBHC was started in Semuto in 1989 while CBHC implementation started in Butuntumula in 1992.

Comparison of selected child survival indicators for the two subcounties is made in Table 2.

TABLE 2: ACCOMPLISHMENTS FOR SELECTED INDICATORS IN SEMUTO AND BUTUNTUMULA SUBCOUNTIES

Indicator	Semuto			Butuntumula		
	Base line [1993]	Final [1995]	Percent Change	Base line [1993]	Final [1995]	Percent change
Exclusive breastfeeding < 4 months	62.9%	38.6%	-38.6%	11.7%	7.2%	-38.5%
Continued or increased breastfeeding during episode of diarrhoea	80.4%	77.6%	-3.5%	62.3%	68.8%	+ 10.4 %
ORT use for treatment of diarrhoea	35.4%	47.9%	+ 35.3%	34.2%	43.4%	+ 27.0 %
Full immunization coverage of children under 1 year of age	48.2 %	61.8%	+ 28.2%	24.4%	28.1 %	+ 15.2 %
Modern contraceptive use	7.1 %	23.3 %	+ 228.2%	1.7%	6.3%	+ 270.6 %

From the table it is evident that the child survival indicators were much better in 1995 for Semuto than for Butuntumula. Because of the large differences in the two subcounties for some indicators the combined achievements were low. Because of the much lower indicators for Butuntumula subcounty, the combined achievements for the two subcounties were generally low.

4.1B PROJECT EXPENDITURES

The pipeline Analysis of the project expenditure was done using the format provided by USAID.

In this section the budget in the DIP is compared with the actual expenditures of the project. The expenditure against the major budget items is outlined in table 3. The detailed analysis is in Annex VI.

Table 3. **Expenditure against major budget items**

Item	Budget (DIP)			Expenditures			Budget - Expenditure
	USAID US \$	PVO US \$	TOTAL US \$	USAID US \$	PVO US \$	TOTAL US \$	
HEAD QUARTERS (AMREF USA)							
1. Personnel	18,048	0	18,048	18048	0	18,048	0
2. Travel/per diem	5,438	0	5,438	3095	0	3,095	+ 2,343
3. Consultancies							
4. Procurement							
5. Other direct costs	0	0	0	2410	0	2,410	2,410
Indirect costs	6,222	0	6,222	6091	0	6,091	+ 131
TOTAL	29,708	0	29,708	29,644	0	29,644	+ 64
COUNTRY BUDGET (UGANDA)							
1. Personnel	78,442	23,850	102,292	89,123	16,902	106,025	- 3,733
2. Travel/per diem	31,458	9,465	40,923	27,371	13,132	40,503	+ 420
3. Consultancies	56,608	11,110	67,718	17,218	0	17,218	+ 50,500
4. Procurement	78,505	52,093	130,598	112,719	76,910	189,629	59,031
5. Other direct costs	54,711	17,892	72,603	53,698	7,808	61,506	+ 11,097
Indirect costs	70,760	29,343	100,103	70,104	28,688	98,792	+ 1,311
TOTAL	370,484	143,753	514,237	370,233	143,440	513,673	+ 564

1. **Headquarters (AMREF USA)**

The total budget for the headquarters was US\$29,708 while the total expenditure was US\$29,644. Thus there was an overall balance of US\$64. On the whole the expenditures were within the budget. The only significant difference between the planned budget and expenditure was in respect of **travel/per diem**. Although 5,438 dollars was budgeted for travel/per diem, only 3,095 dollars was spent. However, the balance on travel/per diem was absorbed by other direct costs which had not been budgeted for (see table 4.)

2. **Country Budget (Uganda)**

There were major differences between the budget and the actual expenditure for most major budget items.

Whereas US\$102,292 had budgeted for personnel costs, the expenditure on personnel was 106,025 dollars.

There was an over expenditure of 3,733 dollars. This was mainly due to the fluctuations in the exchange rates. The salaries and wages for personnel were fixed in Uganda shillings. However during 1993 - 1994 the shilling gained against the dollar and the rate stayed low for a prolonged period of time. This means that a lot more dollars was required to pay salaries and wages resulting in the over expenditure.

The budget for travel/per diem was 40,923 US dollars but only 40,503 dollars was spent on travel/per diem. There was remarkable difference between the budget and the actual expenditure on consultancies.

The budget for consultancies was 67,718 dollars while only 17,218 dollars was spent on consultancies. This was mainly because much of the consultancy work was done by local consultants approved by the USAID.

This saved money for air travel and hotel lodging as the local consultants were able to operate from their homes most of the time.

The procurement budget was US\$130,98 while the expenditure was US \$189,626. There was an over expenditure by US \$ 59,031

This was because a lot more training was done, particularly at the community level. The additional funds were re-allocated from the savings from consultancies and other direct costs. Despite differences between the budget and expenditure for specific items, all planned activities were funded by re-allocation of funds. There was an overall balance of US \$ 564.

Whereas the budget for other direct costs was 72,603 dollars 60875 dollars was spent, learning a balance of 11,728 dollars. On the whole the project budget was operated with internal flexibility that made it possible to re-allocate funds from one budget item to another. This was important to ensure that activities that had been under costed were covered. The final overall balance was only 1064 dollars from the country budget.

4.1 .C Lessons Learnt

There were a number of lessons learnt from CS project implementation that could be useful to other PVO CS project.

The main lessons learnt regarding the entire project:

- o From the successes of the Luwero district CS project the main lesson to be learnt is that CBHC approach is effective in implementing integrated child survival interventions.
From the marked difference between achievement in Semuto and Butuntumula the lesson to be learnt is that community capacity building is a slow process and effects take time to achieve.
- o Most of the sustainability plans within the CBHC framework were implemented and the project activities are likely to be continued in the project areas after the project is terminated. The lesson learnt is that integrated CBHC approach provides better prospects for sustainability than vertical programme approach.
- o The experience in Semuto and Butuntumula indicates that the CHWs and TBAs are well accepted by the Community. The lesson learnt is that CHW and TBAs if properly trained and given the necessary support of and recognition can be well accepted by the community as providers of basic Primary Health Care.

Other lessons learnt relating to specific interventions:

- o The project relied on static immunization units and limited outreach clinics to raise the EPI coverage to target levels. However, the target was not reached.
The lesson to learn is that it is difficult to achieve a large increase in the EPI coverage particularly from very low levels without increasing access to EPI.
- o The gain made in the promotion of ORT use was a result of promotion of home based fluids. The lesson to learn is that promotion of home based fluids without undue emphasis on distribution and use of ORS sachets enhances ORT use in treatment of diarrhoea in children.
- o Pregnant mothers increasingly received prenatal care from the TBAs rather than travelling to the health units to be attended to by professional midwives. This was mainly due to the fact that TBAs were closer and more accessible than the professional midwives. The lesson to learn is that visits for prenatal care is more likely to improve with improved access to prenatal services.
The other lesson to learn is that mothers are willing to be attended to by the TBAs once the TBAs are trained and recognized.

4.2 Project Sustainability

4.2.A Community Participation

A high degree of community participation was evident in all communities visited. The communities in the project area have largely contributed towards the implementation of the project through their individual and collective participation in the project activities.

Members of the community served in various capacities in the community structures established to facilitate the project activities.

Village Health committees were set up by the communities themselves to plan, supervise and support the CBHC activities in the villages. The VHC whose membership includes both men and women are well respected in the communities and should continue to exist and function although individual memberships may change from time to time.

The CHWs, TBAs and their trainers trained with the project support were selected from the community by the community. They are well accepted and respected both by the communities which they serve and the local and district authorities. The trainers should be able to continue training the community resource persons to sustain their activities in the communities.

However, in order to ensure continued activities of the CHWs and their trainers they will need support and motivation.

The communities have also made substantial contribution through the purchase of bednets drugs and token payments in cash or in kind to the TBAs for their services. This demonstrates the communities willingness to contribute towards the cost of health services provided to them although the ability to pay is currently limited. The community willingness and ability to share cost of health service should continue to improve as the community resettles and recovers from the effects of the civil war.

The community has demonstrated desire to start income generating activities. Where seed money was provided by the project the communities through the VHCs have started income generating activities. However they need guidance on viability of the various IGA options and appropriate management in order to ensure continuity.

Successful IGA would enable the communities to increase their contribution towards the cost of health services and prospects for continuation of the project activities when the donor funding ends:

The current level of community contribution is likely to continue. However, additional support will continue to be required to sustain the project activities for the next few years.

4.2.B Ability and willingness of Counterpart Institution to Sustain Activities

The major counterpart institution that have closely collaborated with the project and are likely to continue supporting the project activities are the Ministry of Health, the Uganda Community Based Health Care Association and Luwero District Administration.

The Ministry of Health has the organizational framework through which collaboration with the project was possible and could be maintained. Through the MCH/FP and PHC/HE departments of the Ministry material and technical support were provided particularly to promote maternal and child health. The Ministry has the ability to continue to provide technical guidance training materials and operational guidelines. Within the provision of the decentralization policy the Ministry is likely to continue to ensure availability of required medical supplies and technical equipment. The senior officials of the Ministry interviewed expressed clear willingness to continue to support the project activities. It was however clear that the involvement of the MOH officials in the day to day project activities was inadequate. This was understandable as the project was largely district based.

The Uganda Community Based Health Association was involved with the project particularly in the planning and training of trainers and CHWs. The UCBHCA has a lot of experience in working with communities and special expertise in developing appropriate materials for training of community resource persons and guidelines for implementing community based health care activities. The officials of UCBHCA expressed willingness to support the project particularly in skills development for management and implementation of community based activities. It was however noted that UCBHCA is a self-supporting organization and does not provide free services. Funds would therefore be required for UCBHCA support. The Luwero District Administration has well trained and experienced health managers and field staff that have been used and are likely to continue to be available for the management and supervision of the project activities. Interviews of the district authorities indicated tremendous political commitment and support for the project objectives and activities.

Budgetary provisions have been made and funds actually released at the subcounty level to support the project activities. In the financial year 1994/95 about 100 dollars was provided by Semuto subcounty while in 1995/96 about 4000 dollars has been budgeted. However, the budget allocation is quite small due to competing demands for the limited district resources. This demonstrates the willingness at the district level to support the project activities.

4.2.C. Sustainability Plan, Objectives, steps taken and outcomes.

The child survival project implementation plan was developed with clear strategy and indicators for sustainability.

The strategy for sustainability was to ensure that the project left in place elements critical for the continuity of the CS activities.

The elements include:

- functioning CBHC system in 2 subcounties with
 - 40 trained TBAs
 - 40 trained CHWs
 - 40 AIDS/STD specific CHWs
 - 12 trainers of CHWs
 - 2 facilitators for training of trainers
 - 20 functioning VHCs

HIS used to plan and monitor health interventions in Luwero district.

- Finding sources for CS activities
 - increased government funding
 - Cost-sharing
 - income generating activities

Strengthened Health Unit Management committees.

The objective indicators for sustainability were:

- HUMCs hold regular meetings
- Cost-sharing systems in place
- District Health Team provides regular support/supervision to CHWs.
- Regular attendance at steering committee.
- Attendance at management training sponsored by others.
- VHC existing and operating without external support.
- VHC and HUMCs with accounts for cost-sharing and expenditure plans.

The progress towards establishing structures for CBHC is indicated in table 4.

Table 4. Community resource persons/committees trained against the target.

Project

Community Resource Person/ Committee	Target Training	Number Trained	Number Active
VHC	20	251	236
CHW	40	168	136
TBA	40	91	49
Trainers (CHWs)	12	24	20
Facilitators for TOT	2	1	1

From table 4 it is clear that the target numbers of community resource persons to be trained was very much exceeded in the actual implementation.

This was due to the demand for community resource persons expressed by the communities as result of sensitization activities carried out by the project.

Additional funds for training was also available from savings from other project budget items. However, the ratio of households to CHWs trained differed significantly in the two subcounties.

In Semuto 4 CHWs were trained for each village, to supervise 10-15 homes while in Butuntumula one CHW supervises an average of 100 homes.

The ratio of supervisors/trainers to CHW also differed between the two sub-counties. There was significant proportion of VHC, CHWs and TABs that were trained but were no longer active. Most CHWs and trainers interviewed expressed the need for incentives for the CHWs and trainers. It was expected that the IGA would generate the income from which incentives could be provided to CHWs and trainers but most of the income generating activities have not done very well.

The TBAs are well motivated by their clients who pay either cash or in kind for the services rendered. However the disparity between the number trained and the number active was due to poor selection for training which included women who were not actually practising as TBAs.

The project sustainability objectives, steps taken and the outcome are summarized in table 5.

Table 5. Project Sustainability objectives, steps taken and outcomes

Goal	End of project objectives	Step taken to date	Outcomes
1. Community will generate and manage resources for CBHC activities.	1. VHC will be established	251 VHCs established and trained on their roles	236 VHC meets regularly every month.
	2. HUMCs will hold regular meetings		2 HUMCs met every month
	3. Cost-sharing system will be established	<ol style="list-style-type: none"> 1. Drugkits supplied to CHWs to sell. 2. Mosquito bednets sold to communities. 3. IGA supported. 4. Bicycles sold to CHWs & trainers 	<p>22 CHWs selling drugs to communities. 933 mosquito nets bought by members of the community. 5 IGA established in 4 parishes and at 1 sub-county. 24 trainers paid installments for bicycles.</p>
2. Luwero District Administration will take on the management of project activities of the CS Project	4. VHC and HUMC will open bank accounts and establish expenditure plans	<ol style="list-style-type: none"> 1. All VHC and HUMCs trained in financial management. 2. Seed money provided for IGA to VHC 	No VHC or HUMC operated a bank account or established expenditure plans
	5. District Health Team members will supervise CHWs, TBAs and Trainers	3 District Health Team members supported to supervise the CHWs, TBAs and trainers	<ol style="list-style-type: none"> 1. CHWs & Trainers being supervised by the DHI & county HI in all the parishes at least once in 3 months. 2. 2 HU giving FP services supervised by the DHV at least once monthly.
	6. Steering committee will meet regularly	Steering committee meetings organised every 3 months	District authorities and Project Staff attended 8 steering committee meetings.

5. Conclusions and recommendations

- o The child survival project implementation in Uganda was generally successful.
- o The CBHC approach used to implement the child survival interventions in an integrated manner was effective. However the community Capacity building strategy used is a slow process that has to be implemented at the pace of the community. The three years of implementation of the project was not sufficient to see the full achievements of the project particularly in Butuntumula where the community capacity building process was still far from complete.
- o The immunization coverage fell far below the project target. Strategies will need to be improved to reach the desired coverage.
- o The target for ORT use in treatment of diarrhoea was reached. The gains made will need to be maintained and consolidated.
- o Although there was significant decrease in malaria morbidity the project target was not reached.
- o The prenatal care and high risk screening (on card) declined remarkably.

The following recommendations are being made for the improvement and consolidation of the achievements.

1. Recommendations related to accomplishment of specific interventions

- i) EPI Coverage
 - a) Outreach immunization centres should be increase to accelerate immunization coverage towards the project target of 80%
The need for outreach centres, and their locations should be decided in consultation with local leaders and CHWs.
 - b) Motorcycles and bicycles should be used for transportation for outreach activities rather than motorcars.
 - c) The necessary inputs should be identified and provided for daily immunization at all health facilities. Daily immunization at all health units is a MOH policy that should be enforced through the DMO of Luwero district.
 - d) Allowances should not be considered for daily immunization at static units as it is not sustainable.

ii) ORT Use in diarrhoea treatment

- a) The current ORT use should be improved and consolidated through appropriate support and motivation of the CHWs, TBAs and their supervisor.
- b) The ORT use should be reinforced with preventive measures to augment the impact of the intervention.
There is real opportunity to improve water and sanitation in the community as the demand has definitely been created.

iii) Malaria Control

- a) Community education should be intensified using the community resource persons trained to promote the use of insecticide impregnated mosquito bednets.
- b) The demand and preference for the varieties of bednets should be assessed to ensure customer satisfaction.
- c) Environmental control measures for the mosquitos like bush clearing and mosquito screening in houses should be emphasized as these are more likely to be sustainable.
- d) Diagnosis and treatment of malaria, at the health facilities including record keeping should be improved to facilitate monitoring of the impact of the intervention.

iv) Nutrition education

The prevention of malnutrition in older children under five years of age should be addressed through intensified community education and promotion of production of appropriate foods, food preparation and food security.

v) Growth Monitoring

- a) Growth monitoring should be done to all children in the target age group of 0 - 5 years. The current integration of Growth monitoring with the immunization activities implies that the children who complete immunization are not likely to be weighed again.

b) All children under 5 years of age attending outpatient should be weighed. The weights should be plotted on the Child Health Card.

c) The Trainers and the CHWs should be used to check the weights of the children in the Child Health Cards and advise the mothers appropriately.

vi) Prenatal Care

a) While it is important to maintain the confidence already built in the TBAs, mothers should attend ANC at the health facilities rather than at the TBAs.

b) Both CHWs and TBAs should be used to intensify education of mothers on the benefits of prenatal care.

vii) Family Planning

The major hinderance to family planning was the negative attitude of the husbands towards family planning.

a) Community leaders at all levels should be sensitized on the benefits of family planning to achieve their support and influence for family planning.

b) Health unit personnel, CHWs and TBAs should be used to intensify education of both men and women on the benefits of family planning.

c) The well established CBHC network should be strengthened and used to improve access to family planning services.

viii) HIV/AIDS Control

Two HIV/AIDS counsellors should be trained for each sub-county to support the CHWs in community education and counselling. The counsellors should be at the level of teachers and nurse. This could be done in collaboration with other NGOs in the area involved in HIV/AIDS work.

ix) Acute lower respiratory tract infection management

According to the finding of the final evaluation survey the care seeking behaviour of caretakers for ALRI is already very high. Training of health workers in the management of ALRI is already integrated in the OPL course. This intervention is therefore redundant and should be eliminated from the project.

2. Recommendation related to project sustainability

- a) The number of CHWs to be trained should be reviewed and determined on the basis of the number of households each CHW is expected to supervise.
- b) The number of TBAs and CHW trainers/supervisors should be reviewed and determined on the basis of the number of CHWs or TBA each trainer is expected to supervise.
- c) Selection criteria of TBAs for training should be reviewed to ensure that only practicing TBAs are trained.
- d) Incentive schemes should be developed for the CHWs and their supervisors to improve the retention and continuity.
The IGA should be considered as a serious option to raise income for incentive payment.
- e) Income generating activities should start as community initiatives, and they should be guided to ensure feasibility and viability in the local situation.
- f) Seed money from the Project should be used to support a few model IGAs to gain experiences that could be beneficial to other IGAs in the communities. Income generated from successful project supported IGAs could be made available to communities to borrow to finance new IGAs.
- g) The management of the IGAs should be streamlined and strengthened through development of appropriate guidelines, and training of VHCs. The CHW and trainers should be involved as direct beneficiaries.
- h) Collaboration with the District Health Team should be improved and the project activities should be reflected in the overall district annual workplan.
- i) Community capacity for needs assessment and priority setting should be strengthened.
- j) Community Based Management Information system should be established for improved monitoring of the CBHC activities.
- k) Drug kits supplied to the CHWs is acceptable to the district health authorities and should be continued as a revolving fund for which the CHW should be accountable to the VHC.

3. General recommendations:

- a] The community capacity building process now underway in Butuntumula should be completed.
- b] The project activities in Semuto should be scaled down to focus on issues of continuity and sustainability
 - VIZ . IGA Management
 - . Support to the CHWs and supervisors
 - . Refresher courses for community resource persons.
 - Supervision
 - . CBMIS .
- c] Emphasis should be put on training more of CHWs than TBAs and to rationalise their numbers. Only practicing TBAs should be trained.
- d] The orphans and vulnerable children project should be merged with the Child Survival project to maximize on available resources.
- e] The project office at Butuntumula should be strengthened to coordinate the combined orphans and Child Survival project. This is especially necessary in view of the envisaged project expansion to two other sub-counties.

A1. THE EVALUATION TEAM

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ANNEX 1:

FINAL EVALUATION OF AMREF CHILD SURVIVAL PROJECT, LUWERO DISTRICT INDICATORS AND DATA COLLECTION METHODS

Areas of concern	Criteria for Evaluation	Indicators for Evaluation	Data Collection Methods	sources of Data
<p>1. ACCOMPLISHMENTS</p> <p>1. Increased ORT use in diarrhoea episode</p>	<p>1.1. of ORT by CHWs & HU in treatment of diarrhoea.</p> <p>1.2. Use of home-based fluids promoted by CHWs & TBAs</p>	<p>Episodes of diarrhoea treated with ORT</p>	<p>Review of documents & interview of key person</p> <p>- Survey</p>	<p>Reports Health units CHW Mothers</p>
<p>2. Increase immunization coverage</p>	<p>Mobilization of mothers for EPI by CHW.</p> <p>Follow-up by CHWs & TBAs to reduce drop out rate</p>	<p>80% children under one year full immunized</p> <p>- Drop out rate for DPT</p> <p>- Mothers with child immunization cards</p>	<p>- Review of document & interview of key person</p>	<p>Reports HU CHWs Mothers</p>
<p>3. Decrease Malaria morbidity</p>	<p>insecticide impregnated bednets used for malaria prevention</p>	<p>- Number of bednets distributed 30%</p> <p>Reduction in malaria morbidity under 5 yrs of age</p>	<p>Review of documents & interview of key person survey</p>	<p>Reports Project staff HU Homeholds</p>
<p>4. Increased prenatal care and screening of high risk expectant mothers</p>	<p>TBAs used for identification of high risk births malaria prevention and FP.</p> <p>FP promoted to improve maternal health.</p>	<p>Number of TBAs trained 10% new contraceptive users.</p> <p>30% increase in use of prenatal care</p> <p>30% increase in high risk screening of pregnancies</p> <p>Number referred high risk case</p> <p>Number of mothers with material health card.</p>	<p>Review of documents & interview of key persons</p>	<p>Reports Project staff HU TBAs Mothers</p>

5.	Use insecticide impregnated bednets as a self supporting malaria control methods.	<p>Promotion of use of insecticide impregnated bednet.</p> <p>The community should gradually meet the full cost of the bednets.</p>	<p>- Number of community bednet session held.</p> <p>Number of bednets distributed.</p> <p>Community contribution towards the cost of the bednets.</p> <p>80% awareness of the usefulness of mosquito nets in the country</p>	Review of documents & interview of key persons survey	Project staff DHT VHWS Community
6.	Increase exclusive breast feeding under 4 months of age	VHW and TBAs trained to identify and advise risk groups: mothers and children	- 20% increase in exclusive breastfeeding in children under 4 moths.	Review of documents Survey	Reports Mothers
7.	Improved knowledge and practices on weaning foods	<p>Health workers, CHWs and TBAs provide advise.</p> <p>Establishment of vegetable gardens by VHC supported.</p>	Increase initiating weaning foods at 4-6 months by 20%	Review of documents Survey	Reports HU CHWs, TBAs Mothers
8.	- Increased growth monitoring	Growth monitoring integrated in the immunization outreach activities. Health workers trained in their OPL course	30% increase in growth monitoring	Review documents Survey	Reports HU Mothers
9.	<p>Difference, between targets and accomplishments</p> <p>Enabling factors</p> <p>Constraints</p>	<p>Risks (Assumption)</p> <p>Socio political and economic changes</p>		Review of documents survey	Periodic reports Project staff DHT CHW
10.	<p>Unintended effects of the project</p> <p>Positive effects</p> <p>Negative effects</p>	<p>Integration</p> <p>- Capacity building</p> <p>- Shortcoming of the project</p>		Review of documents & interviews of key persons	Reports Project staff DHT SC Authorities

<p>11. Project Expenditures Budget</p>	<p>Adequacy for planned and actual activities - by Project year - Total</p>		<p>Review of documents and interview of key persons</p>	<p>DIP document Project staff</p>
<p>Expenditures</p>	<p>Expenditures according to budget - by Project year - Total - Adequacy of categories of expenditures comparison with budget</p>		<p>Review of documents and interview of key persons</p>	<p>DIP document Financial reports - Project Staff</p>

2. Project Sustainability				
Community participation	<p>Past community contributions</p> <p>Current community contributions</p> <p>Future community contributions</p>	<p>Review of documents & interview of key persons</p> <p>Survey</p>	<p>Reports</p> <p>Project staff</p> <p>Community committees</p>	
Continuation of project activities by local institution	<p>Ability of counterpart institution to support the project</p> <p>Willingness of the counterpart institutions to provide support</p>	<ul style="list-style-type: none"> - Availability of resources - Mechanisms for collaboration and coordination established - Current level of collaboration <p>Past contribution</p> <p>Budget provisions</p>	<p>Interviews of key persons</p> <p>Review of documents</p>	<p>Project staff</p> <p>MOH - MCH/FP</p> <p>District Authority</p> <p>DMO, DES, RCV</p> <p>Subcounty</p> <p>Authority</p> <p>Other agencies</p>
Achievements towards sustainability	<p>Strengthened community structures in place.</p> <p>Income generating activities established.</p>	<p>VHWS trained</p> <p>TBAs trained</p> <p>Trainers of CHWs trained</p> <p>Facilitators trained</p> <p>Functioning VHC</p> <p>HIS used for planning & monitoring</p> <p>DHT regularly</p> <p>supervising project activities</p> <p>Income generating activities ongoing.</p> <p>Cost sharing</p>	<p>Review of documents and interviews of key persons</p> <p>Observations</p>	<p>Reports</p> <p>Project staff</p> <p>DHT</p> <p>HU</p> <p>Communities -VHCs</p>
	<p>Women participation on community committees</p> <p>Collaboration with other institution.</p>	<p>Participation of women on community committees.</p> <p>Mechanisms for collaboration established.</p>		

ANNEX II:

LIST OF CATEGORIES OF PEOPLE INTERVIEWED

1. District Medical Officer, Luwero District.
2. District Executive Secretary, Luwero District.
3. Resistance Council V Chairman, Luwero District.
4. Resistance Council III Chairman, Semuto Sub-county.
5. Resistance Council III Chairman, Butuntumula Sub-county.
6. Sub-county Health Committee Chairman, Semuto sub-county.
7. Sub-county Chief, Semuto.
8. Sub-county Chief, Butuntumula.
9. District Health Visitor, Luwero District.
10. District Health Inspector, Luwero District.
11. CBHC Project Field Coordinator, Semuto.
12. CBHC Project Field Coordinator, Butuntumula.
13. Village Health Committee Chairmen [3].
14. CHW Supervisor/Trainers [12].
15. TBA Trainers [3].
16. CHWs [6]
17. TBAs [8]
18. AIDS Trainer/Counsellors [2].
19. CBHC Project Counterparts [2].
20. Health Unit in-charges [3].
21. Counterpart for the orphans and vulnerable Children Project.
22. Deputy Assistant Commissioner of Health Services, PHC/HE - MOH.
23. Executive Secretary, Uganda Community Based Health Care Association.
24. County Director, AMREF [2].
25. Country Director, AMREF (2)

ANNEX III

LIST OF DOCUMENTS REVIEWED

1. Is a Community Based Approach Effective in meeting Child Survival Goals ?
A Baseline Survey in two sub-counties in Uganda, February, 1993.
2. MID-TERM EVALUATION, Child Survival Project in Semuto and **Butuntumula**
AMREF Uganda Project No.9380500
An Evaluation Report prepared by
Gilbert Bukenya and
Margaret Muwonge.
3. Is a Community Based Approach effective in meeting Child Survival Goals ?
Baseline and Post-Intervention Results in two subcounties of Uganda, July 1995.
4. Detailed implementation Plan
Child Survival Programme Luwero District, Uganda Semuto and Butuntumula
Subcounties October 1, 1992 - September 30, 1995.
5. Luwero Child Survival Project
Reporting Period
April - June 1994.
6. Community Based Health Care in Semuto and Butuntumula Subcounties of Luwero
district Uganda Reporting Period July - September 1994.
7. Community Based Health Care in Semuto and Butuntumula subcounties of Luwero
District, Uganda Reporting Period January - March 1995.
8. First Annual report
Community Based Health Care in Semuto and Butuntumula Subcounties.
Reporting Period October 1992 - September 1993.
9. Community Based Health and Orphans Care for Child Survival.
Semuto, Butuntumula, Kakooge and Makulubita subcounties
Luwero, Uganda.
A proposal for Renewal and Extension of Activities.

ANNEX IV

LOCATION MAP OF PROJECT AREA - LLJWERO DISTRICT

