REPORT ON END TERM EVALUATION OF THE SUSTAINABLE LIVELIHOOD SECURITY FOR VULNERABLE HOUSEHOLDS IN NYANZA PROVINCE "DAK ACHANA" PROGRAM

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Note: The views expressed in this report are those of the Evaluation team: Dr. Mumbi Machera (Team leader, Regional Development Consultancy), Dr. JP Oyore and Dr. S Anyango (Associate Evaluators)

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PROJECT SUMMARY

Project Name	THE SUSTAINABLE LIVELIHOOD SECURITY FOR VULNERABLE HOUSEHOLDS IN NYANZA PROVINCE "DAK ACHANA" PROGRAM
Life of the Project (LOP)	FY 2004-2008
Project Location	NYANZA PROVINCE: Nyando Migori, Suba, Homabay, Kisumu, Rachuonyo Bondo Districts
Implementer	Recipient: CARE INTERNATIONAL IN KENYA
Activity Number	FFP-A-00-03-00085-02
Type of contract:	COOOPERATIVE AGREEMENT

ACRONYMS

ARVS	Antiretroviral
CCF	Christian Children's Fund
BCR	Benefit Cost Ratio
CARE	Cooperative Assistance for Relief Everywhere
CASH	Commercialized Agriculture for Small Holders
CBO	Community based organization
CBS	Central Bureau of Statistics
CBTs	Community Based Trainers
CMC	Central Management Committee
CORPS	Community Own Resource Persons
COSAMO	Community Savings mobilization
DAP I	Development Assistance Program (FY1998-2003)
DAP I	Development Assistance Program phase 1 (FY1998-2003)
DAP	Development Assistance Program
DAP1I	Development Assistance Program (FY20042008)
DAP1I	Development Assistance Program phase 2 (FY2004-2008)
DMC	Disaster Management Committee
DRA	Demand Response Approach
ETE	End Term Evaluation
FAO	Food and Agriculture Organization
FAs	Farmer's Associations
FC	First Crop
FCC	Flood Control Committees
FFP	Food for Peace
FFW	Food For Work
FGDs	Focus Group Discussion
FY	Financial Year
GAEO	Government Agricultural Extension Officers
GHP	Group Health Promoters
GoK	Government of Kenya
GSL	Group Savings and Loans
HIV-AIDS	Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome
HLS	Household Livelihood Security
IGAs	Income Generating Activities
ILRI	International Livestock Research Institute
IPTT	Indicator Performance Tracking Table
IRR	Internal Rates of Return
KDHS	Kenya Demographic and Health Survey
Ksh	Kenya Shilling
LFA	Logical Framework Analysis
LIFE	Leadership and Investment in Fighting an Epidemic
M&E	Monitoring and Evaluation
MENR	Ministry of Environment and Natural Resources
MFI(s)	Micro-finance Institution(s)

MMD	Mata Masu Dubara
MOARD	Ministry of Agriculture and Rural Development
MOH	Ministry of Health
MOU	Memorandum of Understanding
MTE	Mid Term Evaluation
NCPB	National Cereals and Produce Board
NDHEWAS	Ndhiwa Health, Education, Water and Sanitation Project
NGOs	Non-governmental Organizations
NHW	Nyanza Healthy Water project
NPV	Net Present Value
NRM	Natural Resource Management
OVC	Orphaned and Vulnerable Children
PLWHAs	People Living with HIV/AIDS
PMP	Performance Monitoring Plan
PPH	Per House Hold
PRSP	Poverty Reduction Strategy Paper
SC	Second Crop
SHDF	Self Help Development Foundation
SHEWAS	Siaya Health, Education, Water and Sanitation
SO	Strategic Objective
SPM	Selection, Planning and Management
SPSS	Statistical Package for Social Scientists
SWS	Safe Water System
TASK	The Improved Agriculture for Smallholders in Western Kenya
TRACE	Training Resource Persons in Agriculture for Community Extension
UNEP	United Nations Environmental Program
US	United States Government
USAID	United States Agency for International Development
USD	United States Dollar
USGG	United States Government Global
VHPs	Village Health Promoters
VIP	Ventilated Improved Pit latrine
VIRED	Victoria Institute for Research on Environment and Development
WASEH	Water, Sanitation and Education for Health

EXECUTIVE SUMMARY

Introduction

The evaluation focused on the five year Title II Development Assistance Program Phase II (DAP II) titled "Sustainable Livelihood Security for Vulnerable Households in Nyanza Province, Kenya" also referred to as "Dak Achana, which the local dialect, Dholuo, means Healthy Households. CARE DAP II was implemented in seven geographical districts of Nyanza Province namely Homa bay, Migori, Nyando, Rachuonyo, Suba, Kisumu and Bondo.

The program was funded by USAID under P.L.480 Title II from October 1 2003 to September 30 2008 with a no cost extension to September 302009. Funding was mainly from monetization ($5,929,235), Section 202(e) ($914,115), ITSH($322,578) and commodities for direct distribution.

The goal of the evaluation was to conduct an end of term assessment of Dak Achana program,which was carried out by an independent team of Consultants from March to May 2009 with the keen support from CARE Kenya program staff.

The communities of Nyanza have suffered perennial food shortages, flooding and environmental related health problems. In addition, the region has one of the lowest economic indicators in Kenya. The region also has the highest prevalence of HIV infection and mortality in the country. To avert some of these socio-economic problems, CARE International in Kenya implemented five interrelated program components namely: (i) The Improved Agriculture for Smallholders in Western Kenya (TASK) (ii) Water, Sanitation and Education for Health (WASEH) (iii) Community Savings and Mobilization (COSAMO), (iv) HIV/AIDS-LIFE Initiative and (v) Food for Work (FFW).

CARE faced various challenges during implmentation of the program: delays associated with monetization; post election violence lead to loss time, partiularly the start of the South West Sakwa water project while 36 Mt of commodity was looted from the program warehouse. The post election violence also forced the relocation of key staff. Despite these challenges, CARE still managed to deliver its obligations in respect of goals and intermediate results, even though it had to request for a no cost extension for one year.

Evaluation objectives and methods

The evaluation provides an opportunity for examining the implementation of the different components and assessment of achievement of set targets and desired impacts This report presents findings for each project component.

The End Term Evaluation utilized a triangulation approach in data collection,the main method being a household survey in which 528 program beneficiaries were interviewed using an interviewer administered questionnaire. Through the survey, the evaluators derived quantitative data. Qualitative data was collected through Focus Group Discussions (FGDs) and Key

Informant Interviews. A total of 8 FGDs were conducted with primary stakeholders and 33 KIIs with a range of secondary stakeholders.

Summary of findings

Based on literature and documentations: from the initial Baseline Survey, Mid Term Evaluation (MTE), Project monitoring and evaluation tools and End Term Evaluation (ETE) analysis, and focusing on the Logical Framework Analysis (LFA) indicators, the five Dak Achana program components were evaluated to determine its influence on the livelihood and food security in the implementation area A summsry of the evaluation finding s by component is presented below:

The Improved Agriculture for Smallholders in Western Kenya (TASK)

Findings indicate a steady increase on the amount of land under cultivation in all the land type categories during both cropping seasons (i.e. long rains and short rains) between the Baseline Survey (BS) to End Term Evaluation (ETE). Overall, most of the land is currently owned by individuals as opposed to joint family ownership or renting. Generally, individual land ownership is associated with better land management and higher productivity as compared to communal ownership. During DAP II, agricultural activities have become more intense, as the total area under cultivation continued to increase. Further evidence shows that rented land is more cultivated than any other 'type of owned' land because individuals who rent land aim at maximizing the cultivation area to recover costs. The households in the project area obtain most of their food from a few prominent crops such as maize, beans and sorghum.

Agriculture provides an important source of subsistence as well income for practising households. It is evident that maize which is the staple food for most families is the most widely grown cereal crop. Other major crops include beans, cassava, and cereal crops such as millet, rice and sorghum. Kale, tomatoes, onions, bananas, traditional vegetables, green grams, sunflower ground nuts water melon and pineapples are considered important but minor crops. There is a definite increase in crop diversity and thus an increase in the number of farmers growing crops such as tomatoes, green gram, water melon, traditional vegetables and other commercial crops, indicating a positive outcome of the project interventions.

Results show an increase on the number of crops that are grown for sale in comparison with the BS and MTE, thus an increase in commercial agricultural enterprises. Although more land is devoted to maize production, income generated from horticultural crops is much higher. Farmers' Associations (FAs) producing through formal marketing contracts increased from 37 (57 percent) in FY 06 to 71 (109 percent) against a target of 65 (100percent) in FY 07/08 hence surpassing the target. Most households grow their food to feed their families and rely on the market for food security because only 25 percent of the households' income is from non –farm sources. Furthermore, only 65 percent of the respondents reported that they experienced food shortage in the last one year, a significant improvement compared with reports on the same from BS and MTE (86 percent).

Several agricultural technologies were consistently used by farmers in the target area to improve their crop production. Use of certified seeds, timely operations and soil fertility improvement were the most common. The main crops under irrigation in the project area includes: Kales,

tomatoes, traditional vegetables, water melons, maize, bananas, rice. Farmers adopting small-scale irrigated agriculture increased from 409 (68 percent) in FY 06 to 1006 (168percent) against a target of 600 (100percent) households. Meanwhile the number of crops being grown under irrigation has increased. The most commonly used techniques were bucket and furrow irrigation methods mainly along the lakeshores.

The evaluation established a satisfactory use of agricultural information in the entire process of agricultural production, marketing and consumption and this has enhanced food security. The main sources of information for farmers include government agricultural extension officers, the media and NGOs. Although the TASK project has improved the food situation significantly, it is evident that the target was not realized perhaps due to the fact that most respondents assume that once their produce is exhausted, notwithstanding the fact that they can access food the majority in such situations would respond that they are food insecure.

Water, Sanitation and Education for Health (WASEH)

Results show a significant increase in the number of respondents using water from 'protected' sources since project inception. This translates into an increase in the number of households that reported getting assistance to protect existing water resources such as springs and shallow wells. Overall, the distance taken to access water by the households has reduced significantly with majority accessing water from a source located in their homesteads or within a distance of less than one kilometre.

Consistent with the MTE findings, majority of the respondents reported that they had a special container for storing household drinking water. This is indicative of increased awareness on safe storage of drinking water. The average quantity of water used in most households at ETE was 125 litres per day (this implies an average per capita of 22.4 litres per person per day which is higher than the WHO standards) an increase of about 8 litres from the Baseline position signifying improvements in accessibility.

There is a significant increase in the number of households using chemicals such as (Chlorine/ Waterguard /Pur/Allum) for water treatment. It is also evident that most beneficiaries have changed from boiling water to using water treatment chemicals. Most of the beneficiaries purchased these chemicals from local shops and kiosks, implying that the chemicals are locally available. More people are purchasing water treatment chemicals from kiosks, meaning smaller shopping outlets are stocking water treatment chemicals and that most people are aware of their availability. WASEH has made significant contributions in educating communities on sanitation and health through community and school based hygiene promotion activities.

Overall, there is a remarkable increase in the number of people reporting having functional latrines in their home compounds. Over two thirds of all households with latrines reported that all household members including children use the latrines consistently, an improvement since BS and MTE. Furthermore, about a third of the respondents with latrines in their compounds got some kind of assistance to put up the facilities with majority citing CARE Kenya as the source of support.

The main hygiene measures and practices found in the program areas include cleaning the compound, use of dish racks, bathing and washing hands with soap after using the latrine and before eating. Asked what times they consider hand washing with soap necessary, majority cited (after use of latrines/ defecation and before eating). It was also reported that hand washing with soap was done before preparing food, after eating and after handling children's fecal material. As a result, there is a significant reduction in the prevalence of diarrhea and other communicable diseases.

Community Savings Mobilization (COSAMO)

Findings show that Group Savings and Loan (GS&L) is the most popular means of savings utilized in the program areas even though significant proportions of beneficiaries have diversified to other means of savings such as Banks and Microfinance Institutions (MFIs). Average household savings with GS&L stand at Kenya Shillings 10,336.90. Majority of the COSAMO beneficiaries are also involved in income generating activities (IGAs as a means of raising funds for contribution to the GS&L schemes as well as a means of investment).

Evidently, there is a significant increase in the number of individuals engaged in farming for income generating since the BS and MTE. This implies that communities are increasingly exploiting farming opportunities to raise their incomes. Other sources include livestock sales, merry go round, pension, and sales from assets among others. In the FGDs, we established a strong relationship between GS&L and TASK. The technologies acquired through the TASK component have been adopted non-TASK members. To a large extent, this explains why majority of GS&L members are practising farming. The proportion of respondents accessing capital through savings has increased by 10 percent since 2006 (MTE). This demonstrates the marked achievements made in the COSAMO component.

All the targets set out in the logical framework for COSAMO were achieved and exceeded with the exception of the number of GS&L groups established and trained. The number of individuals saving in self managed community savings and loans groups increased from 4,082 in FY 06 to 6,939 in FY 07 and 10,260 in FY 2008 against a target of 6000. The significant growth in membership of the GS&L was associated with increased interest by communities, especially women to save part of their incomes. Overall, distribution of GS&L members by sex indicates that women comprise over 78 percent (6669) of total membership. COSAMO has provided an opportunity for women to prove their self-worth in a community where gender relations relegate women to a lower status both economically and socially.

Collective cumulative savings increased from USD$ 97,190 in FY 06 to USD$ 337,900 in FY 08 far beyond the target of USD$ 111,300. This achievement is attributed to the increased interest among community members having realized the benefits of the COSAMO model and adoption of multiple savings, a practice where members are allowed to save more than the minimum amount stipulated in the group constitution. Loans disbursed by the GS&L groups increased from USD$ 191,740 in FY 06 to US$ 792,100 in FY 08 far beyond the target of US$ 148,400..

The GS&L groups trained in Selection, Planning and Management (SPM) increased from 20 in FY 06 to 72 in FY 07 and 161in FY 08. The target of 180 was not achieved bringing in a

shortfall of 19 groups. Few staff on the ground compared to the demand for training was the main reason given for the shortfall. Results indicate that the estimated total value for most household assets has gone up. Comparative analysis indicates an upward trend in the average value of assets per household. For example, in the BS the average value of assets per household was US$ 104, this went up to USD 126 by MTE and USD 333 by End Term Evaluation.

HIV/AIDS LIFE Initiative Project's

Three indices, Weight-for-age, Weight-for-height and Height-for-age were computed to reveal different but interrelated aspects of nutritional status for the HIV/AIDS orphans whose measurements had been taken in order for their post-intervention nutritional status to be determined. Findings show a steady improvement in Z-Scores for Weight-for-age, Weight-for-height and Height-for-age as awell as a marked reduction in the morbidity levels among the on OVC in the last one month. It was reported that incidences of morbidity have declined significantly and consistently since MTE.

Majority of the respondents seek medical services for sick children from hospital, a significant improvement in health seeking behaviour, a consequence of the project. The results indicated that despite the fact that other organizations were working in the area, majority of the respondents received food supplements from CARE Kenya. Most of the households reported major health improvements in the children receiving food supplements. For example, the children who use food supplements look physically strong and fall sick less often.

Child rights awareness education has increased. Majority of the respondents have had access to information on 'the right of children to care and support'. Sources of information include radio, government health workers, CARE staff and school teachers. Some of the rights issues cited include; right to food, education, health and shelter. Awareness of child rights has increased consciousness among caretakers and the community in general regarding how children should be treated.

The Food for Work (FFW)

The Food for Work (FFW) Component blended with TASK, WASEH and COSAMO to increase both food availability and accessibility by concentrating on improving productivity of small-scale community owned irrigation systems. In addition, de-silting canals and earth pans to enhance water retention for future use and training farming households on sustainable use for irrigation has been undertaken. As a result, produce from the schemes for both domestic use and market has been enhanced. CARE subcontracted VIRED International to distribute food to individuals who worked on flood mitigation activities.Participants were given food rations equivalent to Kshs 150 for each day worked..

Rehabilitating and restoring of silted waterways namely flood canals, rivers, streams and ponds/earth pans that cause flooding in targeted areas and other water infrastructure resulted in a significant decline in occurrence of flooding and in turn reduced the number of people displaced by floods

Integration of FFW and TASK components has spurred agricultural production in the project sites, for instance cumulative household maize yields per acre increased from 900 kgs before to 3780 kgs after intervention. Of great significance is the increase in rice yields from 3600 kgs per acre before to 10 500 kgs per acre after the intervention. The increase in rice production has provided beneficiaries with both food and income (through sale of rice) thereby contributing to enhanced food security.

Results indicate that approximately 152 acres of land had been affected by floods before the intervention but only 20 acres were flooded after intervention in 2008. In addition it took at least 180 days (6 months) before the intervention, for the flood water to subside while the time has reduced by half (3 months) after the intervention. By shortening the time it takes for the land to dry, farmers are enjoying longer farming periods than before. The total amount of land under irrigated cultivation has also increased two-fold from 82 acres before the intervention to 179 acres after the intervention. In FY 07 559 Km of canals were de-silted against a goal of 160 Km, and 327.81Km of seasonal rivers and streams rehabilitated against a target of 110Km. All the above activities surpassed their set target by over 100 percent.

Conclusions

The evaluation concludes that the USAID-funded Dak Achana Program was relevant to the context and effective in contributing to sustainable livelihoods. A number of achievements by the program have a high potential for sustainability. The evaluators also found the CARE Kenya's USAID funded projects consistent with the government's national development objectives on poverty eradication and CARE Kenya's mandate. The project was highly focused on the needs of its beneficiaries and took them into account at every step. In its planning, CARE KENYA has demonstrated flexibility to changing circumstances during the implementation of the Dak Achana Program.

The Dak Achana Program accomplished its objectives and goals across the five components and exceeded most of its targets. However, analysis by program components reveals a mixed record of complementing activities. Training was largely on target across all program components. CARE Kenya's forward programming is highly interwoven with the use of community based resource persons and materials that are easily adaptable. Participants who benefited from the trainings along with observers said that CARE Kenya's training is a valuable contribution to skills acquisition and trainees stated that it had significantly increased their knowledge and improved performance in ensuring food security, improved income levels, water and sanitation among other areas of socio-economic development.

The program generated benefits in excess of costs. This is demonstrated by the minimized dependency approach that CARE Kenya adopted in implementation. By promoting cost sharing and self-driven initiatives, the program saved money that was redirected to providing potable water through the mammoth West Sakwa Water Project in Bondo district. In addition, training was conducted by locally available resource persons thus averting high costs of supporting international staff. Over time CARE Kenya took steps to effectively increase the pool of Kenyan trainers. Overall program delivery was made more efficient through the use of needs

assessments and strategic planning to enhance synergies between CARE Kenya's capacity inputs and those of other actors, and optimizing use of human resources.

The program has produced both monetary and non-monetary benefits for thousands of rural households. The overall contribution of CARE Kenya's collection of project activities to secure sustainable livelihoods has certainly been positive. The evaluation saw positive changes in the individual lives of beneficiaries and in the community. There is evidence of improvement in the availability of clean water, enhanced food yields from the farms, decline in communicable diseases, and reduced impact of floods among other positive elements.

Beneficiaries will continue to enjoy what the project has established for them and modify it to suit their own ambitions and capacities. All the components have to a large degree established sustainable local ownership. Credit goes to CARE Kenya for taking an implementation approach that discourages dependency on external funding. Apart from one component "Food for Work" the evaluation did not come across any aspects of over-reliance on donor.

CARE Kenya has to a good extent built working relations with government counterparts and within target groups. However, CARE Kenya is not proactive enough in extending its links with human rights and protection networks through the greater outreach work. The Dak Achana Program could be replicated in other vulnerable parts of Kenya and in other countries. Components like COSAMO are already being replicated in some parts of Nyanza Province. Women in the program areas realized significant monetary and social benefits from their participation in all the project components. It has primarily benefited women by increasing their incomes, mobility, skills, self-confidence, and family respect.

General Recommendations

i. The Dak Achana Program model has great potential and should be replicated, by USAID/CARE Kenya and its partners in other parts Nyanza and Western and could be valuably extended to other parts of the Country.

ii. At the design stage, USAID/CARE Kenya and its partners should ensure that the introduction of a particular project/product being considered is workable, tried and tested, so that project impact is maximized.

iii. Future programs of a similar nature should maximize cost benefit ratios by continuing to cost-share with beneficiaries. The indicators for ensuring that cost benefit analysis takes place prior to and during the project's implementation should be identified in the project design.

iv. Based on Dak Achana experience future projects should create a sustainability plan at the very beginning and follow it closely throughout the life of the program, making modifications based upon experience. The program design team must consider issues of eventual sustainability and make the needed adjustments/interventions as part of the indicators to be monitored through the life of the program.

v. The multi-component program approach, especially in addressing the needs of vulnerable households has great potential to empower communities and women in particular. Future projects should follow Dak Achana Program model of including beneficiaries in project design and implementation, and conducting thorough needs assessment prior to project design. Doing so increases the relevance of a project to the needs of its intended beneficiaries.

vi. Gender-focused projects should develop a design that works directly for women and shows a solid understanding of their needs. USAID should consider using demonstrated knowledge of
women's needs amongst the target population as a key criterion in proposal evaluation.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

In the past 45 years Kenya's population has increased from eight million to the current estimated population of 35 million[1]. Rapid population growth rates in the 1970's and 1980's[2] combined with poor economic growth in the late 1990's due to drought, instability and poor governance has led to declining per capita GDP (only $ 580 per capita[3]), resulting in over 50 percent of all Kenya's people living below the poverty line.[4] The Economic Survey 2007 shows that real Gross Domestic Product (GDP) expanded by 6.1 per cent in 2006 compared to a revised growth of 5.7 per cent in 2005. In spite of these slight improvements, Kenya faces major challenges in planning for sustainable resource management in the face of limited natural resources, inadequate investment capital, rapid population growth, and poverty.

Only 49 percent of Kenya's population has access to improved water sources. Only 36 percent have access to essential medicine. And with an average expenditure of $79 per person for public health Kenyans spend almost 25 percent of their income on basic health care. Yet, Kenya has made some very positive strides forward in decreasing fertility rates. The total fertility rate in Kenya has dropped from 4.0 children per woman in 2004 to 3.7 in 2008[5] .

CARE International in Kenya (CARE-Kenya) has worked in Kenya for about 40 years, as a development and humanitarian agency focusing on rural poor communities and urban slum dwellers by initiating various development projects aimed at improving the general welfare of the communities particularly through household livelihood security interventions in agriculture, health, water and sanitation, and HIV-AIDS among others. CARE-Kenya has over time implemented projects in Nyanza, Eastern, North Eastern and Nairobi Provinces.

In line with its mission, CARE-Kenya undertook a development Assistance Program Phase II (DAP II) for Sustainable Livelihoods Security for Vulnerable Households in Nyanza Province. This program, locally known as "Dak Achana[6]" was a follow-up of DAP I and it was designed to improve the food and household livelihood security of vulnerable households in seven districts of the province during the FY 2004-2008.

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1 CIA World fact book 2008

2 Total Fertility rates (TFR) were at 8.1 in 1976 and remained high through the 1980's.

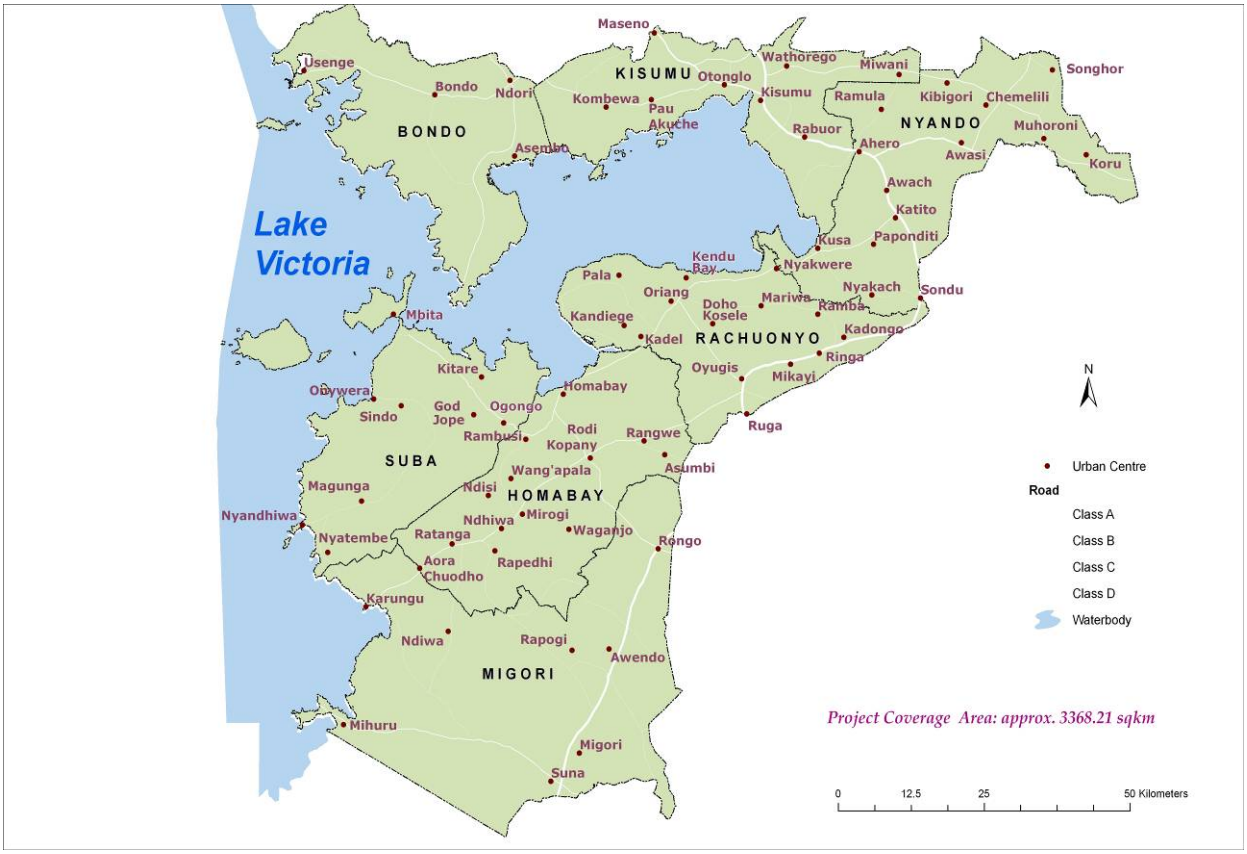
3 World Development Indicators database, 2009

4 Kenya's economic growth rate declined from 1.4 percent in 1998 to a negative 0.3 percent in 2001 mainly due to severe drought, poor infrastructure, and insecurity In 1997, however, the economy entered a period of slowing or stagnant growth, due in part to adverse weather conditions and reduced economic activity prior to general elections in December 1997. In 2000, GDP growth was negative, but improved slightly in 2005 (3.5 percent) and 2007 (7.0 percent), these changes are largely attributed to performance in the agricultural sector (The World Bank 2008) as rainfall returned closer to normal levels.

5 CIA World fact book 2008

6 Luo word for 'healthy or 'good living'

Maps 1: The seven districts where Dak Achana Program was implemented



1.2 The Development Problem

The project area is within the Lake Victoria basin in Kenya which covers an area of about 38,900 km2, approximately 22 percent of the entire Lake Victoria Basin. The basin constitutes one of the most densely populated areas in Kenyan having a density of about 300 persons per km2 (UNEP, 2006) and its one of the poorest rural population in Kenya with an average poverty level of over 55percent (WRI et al 2007). Major basic livelihoods are crop farming, livestock production and fishing. Prior to intervention over 2.5 million people in the project area were food insecure due to poor agricultural productivity, low farm incomes, and poor health status, among other factors. In addition, some of the districts in the project area are prone to severe flooding primarily due to lack of appropriate flood mitigating structures such as canals, dykes and other physical structure necessary for proper management of water during rainy seasons. The region also has the highest prevalence of HIV infection and mortality in the country.

To address some of these socio-economic problems, CARE-Kenya got funding from USAID under P.L 480 Title II to implement Development Assisitance Program,locally referred to as Dak Achana. CARE Kenya's Livelihood Security Program has been modelled on CARE International's Household Livelihood Security (HLS) framework/programming approach which recognizes the interconnectedness of livelihood vulnerabilities. This framework attempts an

integrated intervention, which is implemented to enhance a synergistic impact of various program components on the target vulnerable communities. By using a clustering of components, CARE anticipated that the synergistic effects of the combined interventions will result in impacts greater than the sum of each intervention undertaken at different times.

1.3 CARE Kenya Intervention in Response

1.3.1 Transition from DAP I to DAP II

Between October 2003 and September 2008 CARE Kenya enhanced the activities implemented in DAP I through a five component DAP II program: (1) The Improved Agriculture for Smallholders in Western Kenya (TASK); (2) Water, Sanitation and Education for Health (WASEH); (3) Community Savings and Mobilization (COSAMO); (4) HIV-LIFE Initiative and (5)Food For Work (FFW). The program aimed at sustainably enhancing food and livelihood security in seven districts of Nyanza Province. Increased production of food and commercial agricultural crops, were the basis upon which the other components were built. CARE aimed at stimulating adequate food production to enhance improved nutrition and health of the communities. Similarly, increased income from crop sales would enhance people's capacity to contribute to community development activities including those of other program components such as WASEH.

In line with CARE's programming principles, and borrowing from DAP I experiences, strategies were designed to ensure Gender, HIV/AIDS, Disaster Management and Response, HLS framework and diversity approaches were incorporated in the implementation, monitoring and evaluation of the five DAP II components. With this backdrop, CARE envisaged that synergistic effects of well coordinated, interventions would result in impact greater than the sum of the five components. In addition, CARE ensured that all its programing activities are environmentally and socially appropriate applying relevant lessons learnt within and outside CARE. Integrating gender and diversity, livelihoods, basic rights, partnerships and civil society would contribute towards lasting improvements in human well-being, hope, tolerance, and social justice, reduction in poverty, and enhanced dignity and security of people7.

DAP II targeted an expanded geographical area without commensurate resources as in DAP I in line with CARE's commitment to "Doing more with less resources". This ideal was made possible through:

- Apply programming standards framework with proven impacts
- Increase effectiveness through diversifying technologies and approaches
- Carry over from DAP I with already trained staff, existing administrative and support systems with sensitized community members, good working relationships with of Kenya (GoK) officials and other Non - Governmental Organization (NGOs).

[7] CARE International Vision and Mission, Programming Principles and Values.

1.3.2 The Theory of the Intervention

The final goal and strategic objectives of the program are outline below:

1.3.2.1 Dak Achana Program goal

To improve, in a sustainable manner, the food and livelihood security of vulnerable households in seven districts in Nyanza provinces during FY 2004 – 2009

1.3.2.2 Dak Achana Strategic Objectives

Dak Achana program design was guided by five strategic objectives. Each of the Strategic Objectives focused on a specific developmental component.

Strategic Objective 1 (S01)
Sustainable increase in food and income of vulnerable households in seven districts in Nyanza and Western provinces.

Strategic Objective 2 (S02)
Sustainable improvement in the health security of vulnerable target populations in 4 districts of Nyanza province.

Strategic Objective 3 (S03)
Sustainable increase in savings mobilization and access to credit from personal savings.

Strategic Objective 4 (S04)
Improvement in the food security and nutritional status for orphaned and vulnerable children (OVC) through provision of food commodities

Strategic Objective 5 (SO5)
Functioning canal, irrigation and other public infrastructure restored to provide reliable and safe services to flood affected communities in Nyanza Province.

Below is a brief description of the five components which were implemented through the Dak Achana Program

1.3.2.3 Description of Dak Achana Components

Component one: Agricultural interventions (TASK)

TASK aimed at increasing food and income of vulnerable households by focussing on improved agricultural and natural resources management practices, diversification of agricultural production and increased access to household income. Access to food would be increased through improved farmer organization and marketing of high value commercial agricultural crops.

Component two: Water, Sanitation and Education for Health (WASEH)

WASEH focused on improving the biological utilization of food by reducing the incidence of diarrhoeal diseases and intestinal parasites, along with other diseases that impede optimal absorption of nutrients. This would be done through improved access to potable water , improved sanitation and health education.

Component Three: Community Savings Mobilization Component (COSAMO)

COSAMO sought to enhance increased savings and access to credit from personal savings. Poor families would also benefit through training in small business practices, increased access to capital and consequent investment in micro-entrepreneurial activities such as petty-commerce, and agricultural transformation.

Component Four: HIV/AIDS Life Initiative Component

The Initiative facilitated increased availability of food to Orphaned and Vulnerable Children (OVC) through food distribution. CARE working through one or more intermediary institutions channelled food resources to local Community Based Organizations (CBOs) e.g. churches. The staff from the CBOs were trained on food distribution, storage and on nutrition and were in charge of food distribution.

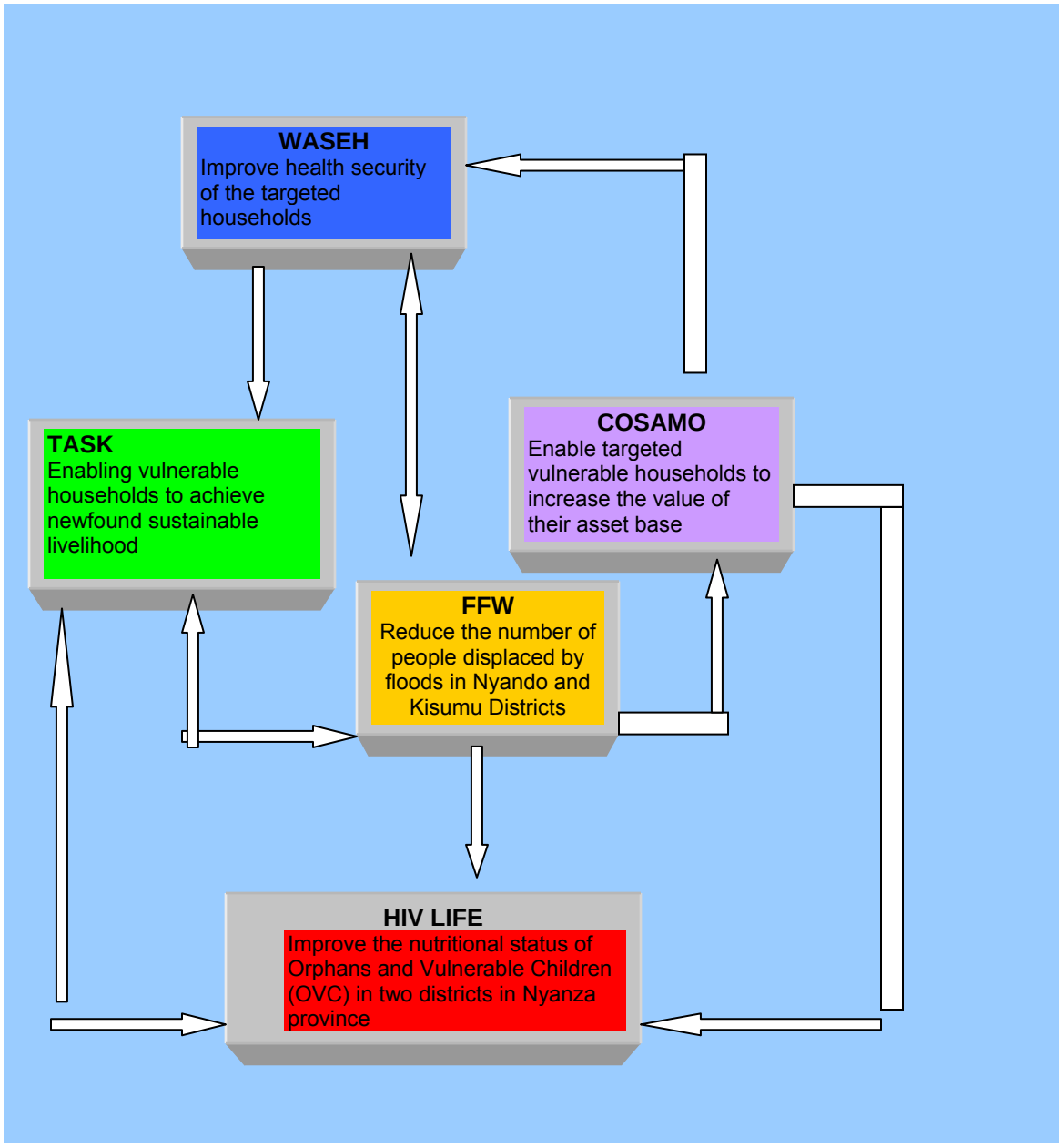
Component Five: Food for Work (FFW) Component

FFW blended with TASK, WASEH and COSAMO components to increase both food availability and accessibility by concentrating on improving productivity of small-scale community owned irrigation systems. De-silting canals and earth pans to enhance water retention for future use and training farming households on sustainable use of irrigation water. As a result, produce from the schemes for both domestic use and market access was enhanced. The major achievement of restoring canals, dykes, earth pans and any other water structure was perceived to be a significant decrease in occurrence of flooding and in turn reduced incidences of water borne diseases and human trauma. CARE, working through a sub-grantee, Victoria Institute for Research on Environment and Development (VIRED) International channelled food that was used to implement the project.

1.3.2.4 The Design of the Program

The developmental concerns outlined in the five components provided an opportunity for CARE to address distinct social economic issues with a certain level of synergy that was anticipated as shown on figure 1 below.

Figure 1: Conceptual framework showing the relationships between five components of the Dak Achana Program



NB: Framework shows complex but valuable relationships existed between the five components during DAP II as shown in this framework. The framework also summarizes the five broad objectives of the Dak Achana Program

1.4 DAP II Program components by district and division

The table below shows the districts and divisions that were covered by DAP II (2004/5-2008/9).

Table 1: Program Components by district and divisions

DISTRICT	DIVISION	District Population	DAP II COMPONENTS (Y2004-2008)
Homabay	Nyarongi	381,000	COSAMO, WASEH & HIV-LIFE
	Asego		TASK & COSAMO
	Riana		WASEH & TASK
	Ndhiwa		HIV-LIFE & COSAMO, TASK,WASEH
Migori	Karungu	565,000	WASEH, TASK&COSAMO
Rachuonyo	West Karachuonyo	322,000	TASK & COSAMO
	Kasipul		WASEH, HIV-LIFE& COSAMO
Suba	Lambwe	171,000	TASK & COSAMO
	Mbita		WASEH,TASK & COSAMO
	Central		TASK, WASEH & COSAMO
Nyando	Nyando	180,000	TASK & FFW,COSAMO
	Lower Nyakach		TASK &FFW
	Muhoroni		WASEH
	Upper Nyakach		TASK
Kisumu	Kadibo	928,000	TASK, COSAMO & FFW
Bondo		450,000	WASEH &TASK

Source: Baseline Survey Report and Discussion with staff: Republic of Kenya (2002). The 1999 Population and Housing Census. The Popular Report. Central Bureau of Statistics: Ministry of Planning and National Development, Nairobi.

1.5 Purpose of the evaluation

In March 2009, CARE International in Kenya contracted Regional Development Consultancy (RDC) to evaluate the DAK Achana Program.

The evaluation objectives were as follows:

1. Appraise the program's performance in achievement of its goal, strategic objectives, intermediate results and outputs as was planned in its Logical Framework Analysis.

2. Assess the program performance trends for each program component in relation to the Indicator Performance Tracking Table (IPTT) scored against impact and monitoring indicators.

3. Evaluate the program performance trends in addressing USAID Strategic Objective 7: "Increased rural household incomes" as guided by the Performance Monitoring Plan (PMP) developed for all the US Government Supported Projects/Program in Kenya during the life of DAP II.

4. Evaluate program performance trends towards achievement of targets (e.g. number of beneficiaries reached) contained in Monitoring and Evaluation Tracking Tables updated by the donor within the last 3 years of the DAP implementation.

5. Establish the level of effectiveness and efficiency in program management

6. Determine the sustainability of the program interventions

7. Document lessons learnt and challenges/constraint during the program implementation

8. Give recommendations on the above aspects of the study

1.6 Evaluation methodology

1.6.1 Timeframe

The evaluation took place from March 13, 2009 through May 30 2009. The fieldwork was done from March 13, 2009 through April 27 2009.

1.6.2 Data collection sites

Data was collected from seven sites distributed over seven districts in Nyanza province. These included Home Bay, Nyando, Suba, Migori, Rachuonyo, Kisumu and Bondo

1.6.3 Data collection Methods and tools

The evaluation team used a comprehensive, mixed-methods evaluation design. The evaluation utilized both qualitative and quantitative methods. These included

i. Document review
ii. Survey
iii. Semi-structured Interviews
iv. Field Visits

A systematic process was followed in acquiring the required data.

To start with the team reviewed all the relevant documents. The review of program documents provided insights into the various program components. Among the documents reviewed the DAP proposal, implementation plans, annual reports as well the baseline and mid-term reports.

An interviewer administered questionnaire was designed and used to conduct a total of 528 interviews. In addition semi-structured Interviews including Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) were done with beneficiaries and other stakeholders respectively. Field visits were made to key projects sites to make observations on the projects visible outputs.

1.6.4 The process of data collection

Recruitment and training of research assistant

An intensive, five-day training of survey crew was undertaken prior to the evaluation. The training covered the basics of enumeration, how to conduct household interviews, focus group discussions, participatory translation and back-translation of the survey instruments, demonstrations on use of measuring tools, pre-testing of the instrument for appropriateness and suitability, and actual fieldwork logistics, among others.

Data collection process

Enumerators filled out the questionnaires and sampled only heads of households (either men or women) or primary caretakers of children, or beneficiaries. However, it was the responsibility of the supervisors to verify the completeness and thoroughness of the questionnaires, before forwarding them to the Consultants for further verification then handing them over to data entry clerks.

Supervision and quality control

During the fieldwork, the supervisors met with the field coordinators after every two days for debriefing. The Consultants, besides coordinating the fieldwork also undertook key informant interviews and focus group discussions with major stakeholders in the target districts. The field exercise was undertaken in one district at a time with both quantitative and qualitative data collection being undertaken simultaneously.

1.6.5 Sample Size Determination for Quantitative Data

The study utilized a multi-stage sampling design involving the stages listed below.

Stage one

Purposive sampling was used to identify the districts where the program was implemented.

Stage two

From each district we selected cluster groups (Community Based Organisations and Farmers Associations) were selected based on the various program components.

Stage three

The cluster group provided a sampling frame of the households and survey respondents were drawn using systematic sampling design whereby every fourth household on the list was included in the study.

Stage four

The sample size determined through proportionate to size computation technique. Through this technique, the number of the beneficiaries of the DAP II program in each district was taken into consideration while at the same time increasing the level of representation in the sample.

1.6.6 Sample Size Determination

The sample size was calculated on the basis of wanting to capture change of 14 percentage points in the critical indicators (e.g. underweight) for each of the components surveyed. Detecting change of this magnitude was based on a 90percent (two-tailed test) and a 95 percent level of significance on the observed value of change. A design effect of 1.3 was chosen based on estimates of design effect in the 2004 KDHS for similar Characteristics and the baseline.

$$n = D\,[(Z_\alpha + Z_\beta)^2 * (P_1 (1 - P_1) + P_2 (1 - P_2) / (P_2 - P_1)^2]$$

KEY: n = required minimum sample size per comparison group;

D = design effect, which provides a correction for the loss of sampling efficiency resulting from the use of cluster sampling instead of simple random sampling (often set at the conservative value of 2.0).

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

P_2 = the expected level of the indicator either at some point in the future or for the project area, such that the quantity $(P_2 - P_1)$ is the size of the magnitude of change desired for detection;

Z_α = the z-score corresponding to the degree of confidence desired for concluding that an observed change of size $(P_2 - P_1)$ would not have occurred by chance alone (α is the level of statistical significance; it is frequently set at .95 for most social projects); and

Z_β = the z-score corresponding to the degree of confidence required to detect a change of size $(P_2 - P_1)$ if one actually occurred (β is the statistical power).

On the basis of these parameters, the sample size was calculated as follows:

D = 1.3

P_1 = .36 (for the indicators requiring the highest sample size to maintain the precision of the study – i.e. underweight)

P_2 = .32 (the expected percentage change is 14percent)

Z_α = .95

Z_β = .80

This gave a total sample size for project of about 550. After checking the questionnaires for completeness and consistency some of the questionnaires were discarded and we remained with a total of 528 questionnaires which were later analyzed and used in the writing of this report. The sample of 528 was still representative as it gave a 96percent response rate which is still statistically acceptable.

1.6.7 Evaluation team

The following individuals formed the evaluation team:

Team Leader, Dr. Mumbi Machera
Associate Team members: Drs. John Paul Oyore and Stephen Anyango

The team created the evaluation design, trained research assistants, arranged and conducted interviews in Nyando, Migori, Suba, Homabay Rachuonyo, Nyando, Bondo and Kisumu. The team also drafted the evaluation report.
Program Manager, Dak Achana, Mr. Njoroge Maina, ensured all logistical issues were in place during the evaluation. M&E Expert, Dak Achana, Mr. Walter Ongeng'a provided technical support by guiding the team through the shifts in Program targets and through the geographical zones. A total of 16 research assistants were recruited and trained to assist in administering the questionnaire. A supporting team of 5 supervisors assisted in the fieldwork process

1.6.8 Data Processing

Compilation and Analysis of Quantitative Data
Data entry screens were developed immediately after the pre-testing of data collection tools. Data entry was done using Microsoft Access and analysis done with the use of the Statistical package for social sciences (SPSS) software.

To ensure that only complete questionnaires were entered, the data entry clerks did a final verification of every questionnaire. Upon completion of data entry, data cleaning and computation and analysis was done using the SPSS software. However, anthropometric data were analysed in Epi Info software before re-exporting the same into SPSS for final analysis.

All the data was aimed at providing answers to whether interventions had achieved the goal, strategic objectives, intermediate results and outputs of the DAK ACHANA program. The results are presented in the form of frequencies and percentages, and where necessary data was extracted from the following program tools:

- Logical Framework (LF)
- Indicator Performance Tracking Table (IPTT)
- Performance Monitoring Plan (PMP)
- Monitoring and Evaluation Tracking Tables
- Global (Common) Indicators Tables

Compilation and Analysis of Qualitative Data
FGDs and Key Informant Interviews (KII) were used to get information on certain aspects of the project within the target population, which may not be adequately obtained from a structured interview. The information formed part of the framework for the analysis and also allowed for triangulation to ensure consistency. Qualitative information was analysed by batching into thematic areas and were mainly used in this report for detailed explanation of the quantitative data.

1.6.9 Study Limitations

The evaluation was commissioned at a time when CARE Kenya was closing out on most of the components. Thus the team had to back to back field work in order to capture respondents participants and informants. This factor is seen as a limitation due to the time constraints the time factor placed upon the team on the ground. The project area is expansive with difficult terrain and a poor road network. Thus a lot of time was spent travelling. To a certain extent this had implications on the time spent on scheduled interviews. However, the team ensured the quality of data was not compromised by these factors.

CHAPTER TWO

SOCIO-DEMOGRAPHIC CHARACTERISTICS

2.1 Introduction

Based on the literature and documentations: from the initial baseline survey, Mid Term Evaluation (MTE), Project monitoring and evaluation tools and The End Term Evaluation (ETE) Analysis. And focusing on the Logical Framework Analysis (LFA) indicators, the Dak Achana program was evaluated to determine the project influence on the livelihood and food security in the project area.

2.2 Respondents' background characteristics

2.2.1 Socio-demographic characteristics

The findings presented in this section are based primarily on data collected from a sample of male and female program beneficiaries. Quantitative data was collected from 528 individuals through a household survey covering seven districts in Nyanza Province. Supplementary quantitative data was also collected from relevant secondary sources such as project documents and monitoring tools. Also presented here are views from both primary and secondary stakeholders through 8 Focus Group Discussions (FGDs) and 34 Key Informant Interviews. Of the five hundred and twenty eight (528) respondents who participated in the household survey, 370 were female and 158 male. As shown on the table below, majority of the respondents came from Suba and Rachuonyo Districts due to Component composition.

Table 2: Percent distribution of respondents by sex , district , level of education and marital status

Characteristic	Description	Frequency	Percent
Sex **n=528**	Male	158	30
	Female	370	70
District **n=528**	Bondo	47	9
	Homa Bay	94	18
	Kisumu	40	8
	Migori	93	18
	Nyando	36	7
	Suba	109	21
	Rachuonyo	109	21
Level of formal education **n=528**	No formal education	44	8.5
	Nursery	2	0.4
	Primary	316	61.4
	Secondary	128	24.9
	Tertiary	24	4.7
	University /higher	1	0.2
Marital status n=528	Single	10	1.9
	Married	394	75.5

Separated	2	0.4
Widow/widower	115	22.0
Divorced	1	0.2
Total	522	100.0

2.2.2 Respondents by program component

It is evident that some respondents were engaged in more than one program component. For those affiliated to a single component, majority were of the respondents were in WASEH followed by COSAMO and TASK respectively.

Table 3: Percent distribution of respondents by Program Component(s)

Characteristic	Program Components	Frequency	Percent
Program Component(s) **n=528**	TASK	60	11.4
	WASEH	103	19.5
	COSAMO	92	17.4
	HIV/AIDS LIFE	51	9.7
	Food For Work	27	5.1
	COSAMO & HIV/AIDS LIFE	2	0.4
	COSAMO & TASK	14	2.7
	COSAMO & WASEH	44	8.3
	COSAMO/TASK &WASEH	14	2.7
	TASK & Food For Work	34	6.4
	TASK &WASEH	50	9.5
	TASK /WASEH & Food For Work	2	0.4
	TASK /WASEH & HIV/AIDS LIFE	1	0.2
	WASEH & HIV/AIDS LIFE	26	4.9
	COSAMO/WASEH &Food For Work	1	0.2
	COSAMO/WASEH &HIV/AIDS LIFE	6	1.1
	WASEH & Food For Work	1	0.2

2.2.3 Occupation and other sources of income

Distribution by type of occupation shows that over 69 percent of the respondents are engaged in farming while 17 percent are traders. It is also evident that majority of the respondents do not have 'other' sources of income while only 30 percent are receiving financial support from external sources.

Table 4: Percent distribution of respondents by occupation, source of income and external financial support

Characteristic	Description	Frequency	Percent
Occupation **n=528**	Farming	365	69.1
	Fishing	17	3.2
	Wage employment	7	1.3
	Artisan	14	2.7
	Salaried employment	29	5.5
	Trading	92	17.4
	Others	4	0.8
Other source of income **n=528**	Has no other source of income	350	66
	Respondent's children	82	16
	Respondent's relatives	44	8
	Respondent's friends	18	3
	FBO	5	1
	CBO	32	6
	GoK	5	1
	NGO	5	1
	Pension	12	2
	Other	7	1.3
External monthly financial support (Ksh) **n=528**	Less than Ksh. 1,000	49	9.3
	Ksh. 1,000- 2,000	59	11.2
	More than Ksh. 2,000	60	11.4
	Not receiving external support	350	66.3

2.2.4 Mean monthly household expenditures

Distribution of respondents by mean monthly household expenditure in Kenya shillings indicates that the average monthly spending per household across all items is Ksh.11,622. The highest spending goes towards purchase of food, followed by education, transport and health respectively. As shown on the table below, the cheapest commodity is water with an average mean monthly household expenditure of Ksh. 489. The cost of food is significantly higher than other commodities since households must purchase essentials such as sugar, fat, salt and meat. With the rising cost of inflation in perspective, food prices are most affected. Primary education is free in Kenya; however, households must meet the challenges of paying for secondary school and college education. The table below shows an outline of average household expenses per month.

Table 5: Percent distribution of respondents by mean monthly household expenditure

	Frequency	Min(Ksh)	Max(Ksh)	Total expenses (Ksh)	Average household expenditure

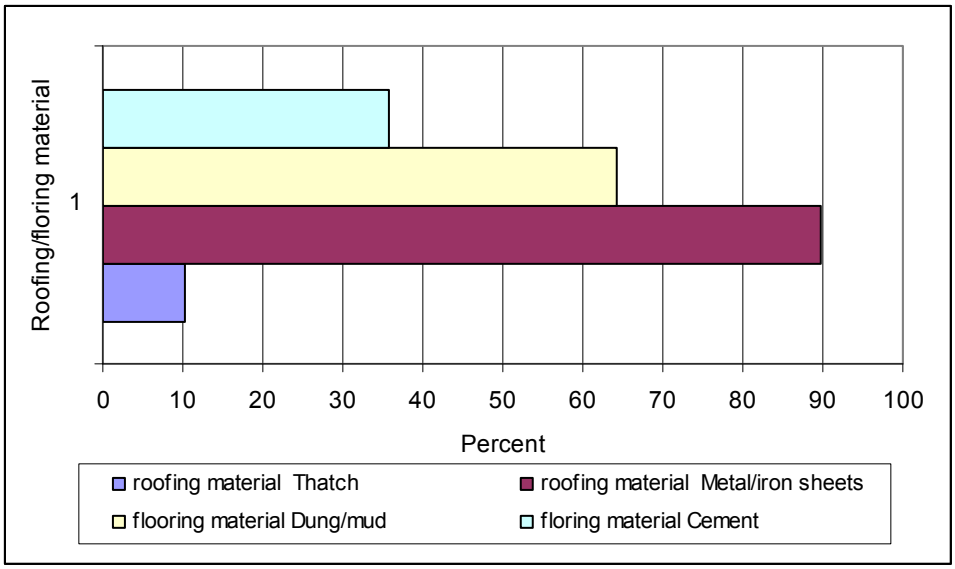
					(Ksh)
Education expenditure per month(Ksh)	492	40	93,840.00	1,716,983.00	**3,489.80**
Health expenditure per month (Ksh)	523	40	50,000.00	529,700.00	**1,012.81**
Food expenditure per month(Ksh)	527	100	15,000.00	2,621,781.00	**4,974.92**
Fuel expenditure per month(Ksh)	524	30	10,000.00	312,322.00	**596.03**
Rent expenditure per month(Ksh)	28	100	3,000.00	24,050.00	**858.93**
Transport expenditure per month(Ksh)	515	25	25,000.00	574,795.00	**1,116.11**
Water expenditure per month(Ksh)	246	8	6,300.00	119,553.00	**485.99**
Other expenditure per month(Ksh)	124	10	60,000.00	237,375.00	**1,914.31**
Total household expenditure per month(Ksh)	528	517	109,900.00	6,136,559.00	**11,622.27**

(Information on **mean monthly household expenditure is** not provided in the Baseline and Mid term reports)

2.2.5 Type of dwelling

The kind of materials used in building houses that people live is a good indicator of their living conditions or poverty status. The chart below shows the distribution of respondent's dwellings by type of roofing materials. Majority of the respondents 90.0 percent live in houses roofed with iron sheets and 10.0 percent have their dwellings roofed with thatch. With regard to flooring material, majority (over 60.0 percent) have mud floors and 35.0 percent have cemented floors.

Chart 1: Type of the roofing and flooring material for the household's dwelling



2.2.5 Other characteristics

Results indicate that the total number of persons living in the respondents' households (n=528) is 3444. Desegregation by sex shows that 50.0 percent (1727) are male while 49.9 (1717) are female. The mean age of these individuals is 20.0 years. This implies that majority of the population in the area where the program was implemented are youth. In addition analysis by occupational status shows that majority of respondents' household members are students, young children or engaged in farming. Further, 47.3 percent of respondents' household members are currently enrolled in school. Overall, majority 57 percent of all respondents' household members have attained primary level education while only 10 percent have no formal education. The mean household size was found to be 7 people per house hold.

CHAPTER THREE

THE IMPROVED AGRICULTURE FOR SMALLHOLDERS IN WESTERN KENYA (TASK)

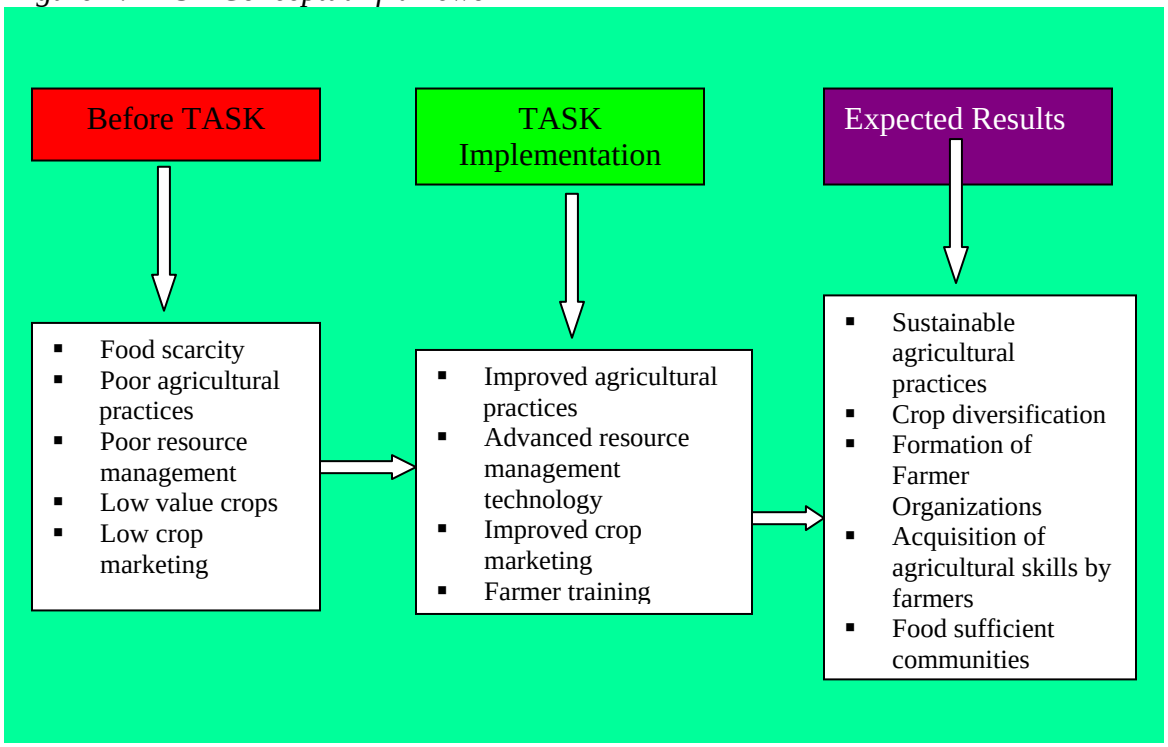
3.1 Description of the TASK component

The goal of this program component was to improve, in a sustainable manner, the food and income of vulnerable households in the seven districts of Nyanza Province during Financial Year (FY) 2004-2008. The strategic objective of the project was that by September 2008, 80 percent of the targeted vulnerable households in the seven districts of Nyanza Province will have achieved new found, sustainable food security. TASK aimed at increasing food availability by focusing on improved agriculture and natural resource management practices, and the diversification of agricultural production. Access to food was also to be improved through farmer organization and marketing of high value commercial agricultural crops.

During the project baseline survey it was shown that few households in the target communities had enough funds to purchase adequate amounts of farm inputs (chemical fertilizer, certified seeds, pesticides etc), and most of the farmers were mainly subsistence oriented and not undertaking agriculture as a commercial venture; the farmers had limited access to markets for their produce, low diversifications of crops grown in their farms and low technological adoption/innovations for improved production.

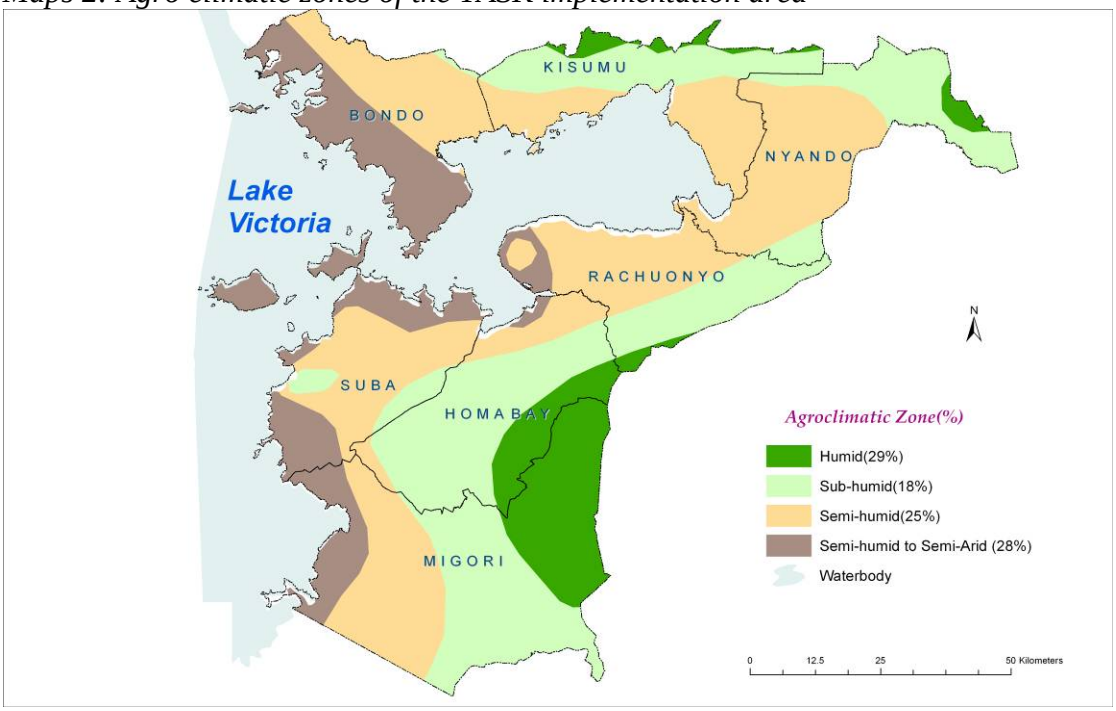
Through the TASK project, improved farming methods (through the introduction of appropriate land and crop husbandry) at scales that are appropriate and sustainable were introduced to help the communities increase farm productivity and thus enhancing food security as well as commercial crop production.

Figure 2: TASK Conceptual framework



Map 2 below shows the agro climatic zones of the project area based on the annual soil humidity. Although agriculture provides an important source of subsistence, as well as a cash income for food for the households, the spatial distribution of the agro climatic zones greatly influences the choice of livelihood strategies that communities pursue. The map also shows that a significant number of farmers are exposed to the risk of unreliable rainfall (spatial and temporal) resulting into either prolonged drought or intermittent floods thus a need for drought resistant cropping, irrigated agriculture or flood control. But limited moisture and low soil fertility are the main physical constrains to crop production in the project area. Rainfall is bimodal and presents two cropping season per annum, the long rains typically the highest occurs between March and–June and short rains occur between September and December.

Maps 2: Agro climatic zones of the TASK implementation area



Source; Administrative boundaries (CBS, 2003) Agro climatic zones (SOK and ILRI, 2000)

Source; Administrative boundaries (CBS, 2003) Agro climatic zones (SOK and ILRI, 2000)

3.2 TASK Implementation and Expected Achievements

TASK implementation strategy focused on two aspects: 1) Increased household food production through adoption of improved farming technologies and 2) increased household incomes through improved market-led production of high value crops in compliance with CARE's Commercialized Agriculture for Small Holders (CASH) strategy

3.3 Activities carried out within the TASK component

The activities carried out within the TASK component included; market research undertaken to determine viable rural farming enterprises (the results indicated that vegetables and fruit farming was viable within the project area) thereafter the focus on the production of vegetables and fruits in the project area was informed by these findings. Promotion of improved agricultural production technique through farmers training and support in adoption of appropriate crop and land husbandry; Rice production specifically in Nyando district in the community owned small scale irrigated farms including the rehabilitated flood prone lands, through Food for Work component of the project. High quality Basmati rice (*Orysa sativa-Basmati variety*) was introduced through seed multiplication/bulkanization and the resultant seeds used for local production thus enhancing household food and income; encouraging farmers to invest in buying improved germplasm (crops targeted included: sunflower, green gram, rice, pineapples, butternuts, and other assorted horticultural crops).And small-scale irrigation accessories (including: light steel self-coupling pipes and pumps) within the project area: where simple irrigation accessories were procured and delivered to farmers.

Other actvities included promotion of fruit trees: through the project's approach of "Buy one-Get one". mango (*Mangifera indica) seedling. Mango* cultivars included: Tommy Artkins, Ngowe, Kent and Vandyke that are high valued commercial varieties.; Formation of production and marketing associations and developing forward market contracting for different crops by linking the farmers to various private and public institutions.; Creating and strengthening existing commercial linkages between the farmers and various private and public market outlets with a view to sustaining production and the value addition ventures.; Development and consolidating marketing support and information linkages between farmers and agricultural input suppliers and stockiest and encouraging the establishment of farm input outlets in the target districts.;

Farmer training and support in advancing collective marketing, contract compliance, business planning, procurement and governance.

3.4. Intermediate Results and Outputs

Based on literature and documentations from the Baseline Survey, Mid Term Evaluation (MTE), Project monitoring and evaluation tools and The End Term Evaluation (ETE) Analysis and focusing on the Logical Framework Analysis (LFA) indicators, the TASK project component was evaluated to determine the project influence on the livelihood and food security in the project area.

3.4.1 Smallholder Households Increased Farm Productivity

The project's goal was that by September 2008, smallholder households in seven districts of Nyanza province will have increased farm productivity and the targeted smallholder households will be earning at least USD 365 (approximately Ks.27,375) from commercial agriculture.

One indicator of increased farm productivity is the amount of cultivated land in the project area. The table *below* shows the categories of land ownership types and percentage of land under cultivation by season. The proportions cultivated during the long rains when higher yield is expected is higher than the proportions cultivated during the short rains but during the end term evaluation the percentage of land cultivated in both seasons had increased, signalling an increase in land utilization

Table 6: Categories of land ownership type and percentage of land under cultivation

	Baseline			**MTE**			**ETE**		
Category	Total Acreage	Short Rains	Long Rains	Total Acreage	Short Rains	Long Rains	Total Acreage	Short Rains	Long Rains
Individual	1,926.5	22	52	2,285	37	49	**2,175.0**	**37.1**	**54.7**
Family	629.95	20	46	549	32	47	**175.9**	**36.3**	**58.8**
Rented	268	26	68	317	60	82	**240.63**	**71.6**	**89.0**
0thers				13	2.5	9	**5.3**	**90.5**	**97.6**

Findings show that land is currently more individually owned than family owned or rented. Overall 68 percent of the respondents were farming on land registered in their names. Individual land ownership is associated with better land management and higher productivity as compared to communally owned land. This means that agricultural activities are more intense, as the total area under cultivation continues to increase. In addition rented land is likely to be cultivated intensively in order to recover the cost of renting as well as maximizing profit. We therefore deduce that the project has influenced the demand for land.

An FGD participant views contained in the box below concurred with these findings.

> **..**Task has changed the way I use my parcel of land. I have had the land registered for security purposes. Nowadays I utilize the land fully during the two seasons. Previously I would farm during the long rains…my income has gone up from the sale of short term high value crops that I grow during the short rains
>
> *…Farmer, Male, 45 years, Rayaw Marketing Group,*

Smallholders dominate the project area with the mean average land size per household ranging from 4. 5 to 2.6 acres. Patterns in terms of area cultivated and total population, indicate variation by district as shown on the table below. Even at national level, household farm sizes are on the decline with an average of 0.5 acres reported in 2000 as compared to 1.25 acres in 1960 (FAO 2006). This may be considered less viable for a family to earn a living especially from crops with a low value per acre. TASK is therefore focused in its support for short term hih value crops such as tomatoes that fetch high profits per unit of land.

Table 7: Percentage of land under cultivation per District during ETE

DISTRICT	**District Population (*CBS, 2002)***	**Mean average land size**	**Percentage land Cultivated**	
			Short rains	**Long Rains**
Homabay	381,000	3.2	48.6	54.5
Migori	565,000	4.0	55.3	67.8
Rachuonyo	322,000	2.6	55.7	58.8
Suba	171,000	4.2	29.2	57.8
Nyando	180,000	3.4	33.2	47.6
Kisumu	928,000	3.6	35.2	61.1
Bondo	450,000	4.5	13.5	52.0

The households in the project area obtain most of their food from a few prominent sources. Agriculture provides an important source of subsistence and cash income. Maize, the staple food for most households, is the most widely grown cereal crop. Other major crops include beans and cassava, and cereal crops such as millet, rice and sorghum. Kale, tomatoes, onions, Bananas, traditional vegetables, green grams, sunflower ground nuts, water melon and pineapples are considered as important minor crops based acreage cultivated. See table 8 below

Table 8: Typical crops grown

Crop type	**Percentage of Farmers Growing the Crop**		
	Baseline	**MTE**	**ETE**

Maize		29.0	25.7
Sorghum		21.8	15.4
Beans		15.0	16.2
Sweet potatoes		1.8	3.3
Cassavas		1.0	2.7
Tomatoes		2.0	3.1
Traditional vegetables		1.3	2.4
Onions		1.1	1.2
Kales		3.0	3.3
Passion fruits		.1	
Pineapples		.9	0.8
Bananas		.5	1.5
Mangoes		.1	0.3
Cotton		1.1	
Commercial seeds		.1	
Water Melon		.8	1.5
Chillies		.4	0.2
Ground nuts		8.1	6.4
Rice		2.1	2.3
Sugar cane		.4	
Green grams		5.8	6.2
Sunflower		3.3	1.5
Other commercial crops		.2	4.9

Shaded: Information not available

Considering the percentage of households growing particular crops and comparing the MTE and the ETE findings, there is an increase in crop diversity. Increasingly more farmers are now growing crops such as tomatoes, green grams, water melon, traditional vegetables and other commercial crops in the project area as seen in table 8 above, indicating a positive outcome of the project efforts. As expected the percentage of land under maize and sorghum has declined, as a result of farmers diversification to other commercial crops. This indicates a significant increase in household income from produce sale hence enhanced livelihood.

A Focus group discussant from the TASK component views support these findings;

> **"We only used to plant food for subsistence.** CARE has enabled us get other new seeds e.g. butternuts, water melon, which enabled us get good money after sale. I am able to pay school fees and improve the standards of living around my home. I am able to purchase fertilizer for the farm, something I could not afford to do before TASK. We have also been introduced to potential buyers of our products …this is really wonderful" M*ale, 30years, Asawo Self Help Group, Suba district.*

Comparative analysis shows that crops promoted by the TASK project such as green grams, kale, water melon, tomatoes, pineapples and sunflowers significantly increased in production in the TASK areas compared to the non-TASK areas. (See table 9 below)

Table 9: Crops grown by program component

TASK component beneficiaries			TASK component beneficiaries		
	Frequency	Percent		Frequency	Percent
Bananas	7	0.8	Bananas	25	2.1
Beans	105	12.3	Beans	230	19.2
Cassavas	18	2.1	Cassavas	39	3.2
Chillies	1	0.1	Chillies	4	0.3
Green grams	**73**	**8.5**	**Green grams**	**55**	**4.5**
Groundnuts	39	4.6	Groundnuts	94	7.7
Kales	**36**	**4.2**	**Kales**	**32**	**2.6**
Maize	180	21.0	Maize	354	29.1
Mangoes	5	0.6	Mangoes	1	0.1
Melons	**23**	**2.7**	**Melons**	**8**	**0.7**
Onions	15	1.8	Onions	9	0.7
Other commercial crops	**67**	**7.8**	**Other commercial crops**	**35**	**2.9**
Pineapples	**16**	**1.9**	**Pineapples**	******	******
Rice	**33**	**3.9**	**Rice**	**15**	**1.2**
Sorghum	115	13.4	Sorghum	205	16.8
Sunflower	**26**	**3.0**	**Sunflower**	**5**	**0.4**
Sweet potatoes	14	1.6	Sweet potatoes	54	4.4
Tomatoes	**44**	**5.1**	**Tomatoes**	**20**	**1.6**
Traditional vegetables	30	3.5	Traditional vegetables	20	1.6
Total	847	98.9	Total	1205	99.0
not reported	9	**	not reported	12	**

In Bold Letters: Crops promoted by the TASK project

These findings to a large extent also imply that the spill over effects of the TASK project went beyond the specific sites marked for project implementation. Evidently, many aspects of TASK were replicated through community self-initiatives. A high level of synergy existed between COSAMO and TASK since those beneficiaries who saved part of their income found it profitable to invest their savings in the farming of high value crops. A Key informant reiterated:

> **…**TASK is a very attractive option to anyone who has a piece of land whether owned or rented. We have seen farmers in non-TASK areas replicating farming technologies that have been introduced through the project. This is quite significant for sustainability also*…Agricultural Officer, Migori*

Results indicate that maize, sorghum, beans and sweet potatoes take up the largest percentage of land under cultivation in all the seven districts. However the most valuable crops in terms of income generation are tomatoes, kale, water lemon and butternuts even though they are cultivated on small units of land.

Table 10: Ranking of the most important enterprise/crop grown per district

DISTRICT	Crop Type	Percentage land Cultivated	
		Short Rains	Long Rains s
Homabay	Maize	30.6	30.3
	Sorghum	27.1	29.6
	Beans	21.0	20.2
	Sweet potatoes	12.0	12.4
Migori	Maize	25.9	24.8
	Sorghum	23.5	22.8
	Beans	17.6	18.7
	Sweet potatoes	10.1	12.6
Rachuonyo	Maize	31.2	35.0
	Sorghum	27.7	29.8
	Beans	20.2	18.8
	Sweet potatoes	9.5	7.4
Suba	Sorghum	29.2	31.0
	Maize	27.2	25.0
	Beans	19.4	14.9
	Sweet potatoes	11.4	10.7
Nyando	Sorghum	32.5	14.4
	Maize	30.8	20
	Beans	24.8	11.9
	Sweet potatoes	8.5	6.9
Kisumu	Maize	31.5	34.9
	Sorghum	26.6	26.7
	Beans	21.0	16.3
	Sweet potatoes	12.1	10.5
Bondo	Maize	34.6	43.9
	Sorghum	30.9	31.6
	Beans	16.9	10.5
	Sweet potatoes	8.8	7.0

3.4.2 Crop production and income from farming activities

Table 11 below shows patterns of crop production and income from farming activities. A comparative analysis of the BS, MTE and ETE results also indicate a significant increase in commercial agricultural enterprises. For most crops, short rains generate less yield as compared to long rainy seasons as expected, however for horticultural crops, the yields are higher during the short rains. This is due to the fact that horticultural crops such as tomatoes and kales are mainly produced under irrigation. These findings indicate that farmers are utilizing space and time in a more productive manner. Comparing the ETE, against the MTE, and the Baseline, results indicate a significant increase in yields and the sale income from most of the crops.

	Baseline				MTE				ETE			
CROP TYPE		**Yield**		**Sales Income (Ksh)**	**Acreage**	**Yield In Kgs**	**Quantity Sold**	**Sales Income (Ksh)**	**Acreage**	**Yield In Kgs**	**Quantity Sold (Kgs)**	**Sales Income (Ksh)**
Maize 1	912.9	168,853	13,704	465,387	487.2	187 500	114 200	21278	1,173.5	254,180.	65,110.0	1,918,905.00
2	529.7	60,370.5	2,608	155,627	487	505 500	18 200	86 05	809	135,864.	33,292.0	651,655.00
Sorghum 1	512.9	96,612	16,064	170,611	48.3	86 000	1 200	4 050	270.6	80,210.0	15,460.0	277,980.00
2	36.3	2,975	350	27,350	231	194 750	8 600	24 29	87.9	16,862.0	2,996.0	113,580.00
Beans 1	409.6	28,918	7,947	286,235	59.2	38 400	28 850	84 55	64.9	36,248.0	24,156.0	776,910.00
2	158.5	8,718	3,318	66,090	58	45 200	35 250	90 05	73.3	18,972.0	11,178.0	516,510.00
Tomatoes 1	116.3	10,790	1,862	165,985	18.5	15 760	6 160	34760 0	25.7	11,591.5	10,499.0	746,600.00
2	24.5	1,057	784	253,321	14	13 380	4 540	819 750	35.5	21,915	20,202.5	1,143,620
Kales 1	13.7	454	340	240,200	11.5	15 120	13 500	103 530	19.8	56,185	47,698	344,549
2	15.3	21,350	18,230	199,580	15	21 910	17 730	77 250	42.1	54,660	45,702.0	316,450
Cotton 1	30.1	14,780	13,238	138,976	7.8	13 455	13 455	40 790	-	-	-	-
2	89	20,465	20,465	503,680	13	810	810	6 120	-	-	-	-
Groundnuts 1	25.5	13,500	13,500	148,670	22.9	18 000	18 000	112 135	43.9	13,702.0	9,962.0	346,450.00
2	2,874.3	-	-	2,821,712	51	37 350	13 140	60 350	37.4	10,074.0	6,594.0	319,300.00
Green gram 1									40.3	8,254.0	4,820.0	238,055.00
2									25.1	3,202.0	1,484.0	78,269.00
Pineapples 1									14	17018.0	13,218.0	246,050.00
2									16.8	17,114.0	15,154.0	291,940.00
Sunflowe												

Table 11: Production and Gross income from main crops

NB: 1= Long Rains; 2 = Short rains: Shaded: Information not available
Source: Table format adopted from the MTE report

Crops such as tomatoes, kales, pineapples and other commercial crops were reported to have higher annual average income per household as shown on table 12 below. A comparison between the BS, MTE and ETE shows that there has been an upward trend on the average annual income from the sale of crops.

The average income from the sale of horticultural produce was higher as compared to all the others. However tomatoes and kales continue to dominate horticultural production and also have high returns. It is also evident only a small proportion of farmers grow tomatoes and kales.

Table 12: Annual Average income per Household from Crop Production (Ksh)

Crops	Baseline		MTE		ETE	
	Short Rains	Long Rains	Short Rains	Long Rains	Short Rains	Long Rains
Maize	327	1,010	2467	1204	12,514.30	11,742.30
Sorghum	70.7	451.4	4516	2228	53,780.00	154,430.00
Beans	64.7	1,109	1178	1463	3,881.60	4,922.80
Groundnuts	0	1,482	2600	2267	5,822.00	5,934.70
Tomatoes	10,918	5,891	11632	24657	22,941.80	18,388.90
Kales	4,963	7,392	3887	3271	12,514.30	11,742.30
Cotton	13,515	10,716	5043	920	-	-
Green Grams					1,779.20	6,449.20
Sweet potato					2,395.90	4,545.00
sunflowers					25,394.10	2,844.10
Pineapples					35,800.00	21,537.50
Cassava					6,228.20	9,125.00
Melons					7,669.20	5,421.40
Chillies					8,500.00	11,400.00
Bananas					2,330.80	3,416.00
Other commercial crops					41,166.00	7,006.80
Cassava					6,228.20	9,125.00
Traditional vegetable					3,200.00	1,684.40

Shaded: Information not available
Source: Table format adapted from the MTE report

Comparing the beneficiaries of the TASK component with the non TASK beneficiaries it is evident that on average household income is higher for majority of the crops both in short rain and long rain seasons in the TASK areas. (See table 13 below)

Table 13: Average income per Household from Crop Production

Average income per Household from Crop Production (Ksh)				
	Long Rains		Short Rains	
	Non-TASK	**TASK**	**Non-TASK**	**TASK**
Beans	3,491.37	9,807.33	3,644.82	6,638.67
Maize	5,253.93	11,920.45	3,846.12	13,228.46
Sorghum	3,991.03	4,928.08	3,060.00	12,300.00
Sweet potatoes	4,835.00	800.00	3,456.09	**
Cassavas	6,400.00	9,050.00	5,364.00	12,858.00
Tomatoes	28,859.09	17,666.00	26,662.50	24,724.83
Traditional vegetables	1,652.50	211,695.45	2,050.00	3,919.23
Onions	1,625.00	3,040.00	3,023.33	2,028.57
Kales	8,982.35	10,189.42	10,128.95	7,750.00
Bananas	2,665.00	6,066.67	1,875.29	4,600.00
Melons	5,750.00	5,741.67	6,750.00	8,486.54
Chillies	11,400.00	**	8,500.00	**
Groundnuts	5,161.63	6,896.67	4,290.00	22,752.50
Rice	41,250.00	102,165.00	53,067.27	30,080.77
Green grams	2,581.11	5,178.24	1,439.31	3,167.06
Other commercial crops	942.50	10,649.73	64,388.24	10,682.55
Pineapples	**	34,965.71	**	26,521.20
Sunflower	**	3,578.23	151,680.00	4,077.92
Mangoes	**	**	**	200.00

3.4.3 Rice Production Trends

Synergy between TASK and Food for Work(FFW) components in Nyando District had a positive impact on rice production. FFW activities involved de-silting canals and earth pans to to mitigate against annual flooding.The outcome of restoring canals dykes; earth pans and other water structures also increased available land for rice production. For the year 2008 the average land acreage under rice crop was 2.7 acres per household in Nyando District, with average house hold income of about Ksh. 89,389.7. This surpasses the project target of USD 365 (approximately Ksh. 27,375) see table below.

Table 14: Production and Gross income from rice crop in Nyando district during ETE

	First Crop (FC)		Second crop (SC)		Overall [FC + SC]	
	Total Acreage Cultivated	**Mean Acreage/ H/h**	**Total Acreage Cultivated**	**Mean Acreage/ H/h**	**Total Acreage Cultivated**	**Mean Acreage/ H/h**
Crop Area	26.8	1.4	20.0	1.3	46.8	2.7
Qty produced (90kg bags)	282.0	14.8	290.0	19.3	572	34.1
Qty sold(90kg bags)	225.0	11.8	242.0	17.3	467	29.1
Total value of sales (Ksh)	743,790.0	39,146.8	703,400.0	50,242.9	1,447,190.00	89,389.70

3.4.4 Commercialization of crop production activities

With the assistance of the program farmers were able to obtain contacts with various organisations through which they sold their produce under marketing contracts during the project period as seen in Table 15.

Table 15: Organizations undertaking contract farming

Organization/group contracting farmers	**percent of farmers contracted by the organization MTE**	**percent of farmers contracted by the organization ETE**
CARE	41.7	14.8
Traders	19.4	9.6
BIDCO	20.8	5.2
East African Growers	6.9	0.7
East African Seed Company	4.2	-
AEP	2.8	1.5
Ahero Cereals Board (NCPB)	2.8	23.7
National Irrigation Board	1.4	0.7
Nakumatt		18.5

54 percent (289 respondents) reported having benefited from marketing arrangements/ contract farming from a company/ organization that supplied inputs or other services to the farmers during the project period. We noted a substantial increase since MTE where only 48 percent of the respondents reported having benefited from contract farming. Table 16 below lists the main crops that were grown for commercial purposes between the MTE and ETE.

Table 16: Typical crops grown for commercial purposes

Crop type	percent of farmers growing the crop MTE	percent of farmers growing the crop ETE
Maize	29.0	7.8
Sorghum	21.8	3.6
Beans	15.0	13.9
Sweet potatoes	1.8	2.9
Cassava	1.0	3.2
Tomatoes	2.0	8.1
Traditional vegetables	1.3	3.2
Onions	1.1	2.2
Kales	3.0	6.9
Passion fruits	.1	-
Pineapples	.9	2.7
Bananas	.5	2.4
Mangoes	.1	.3
Cotton	1.1	.3
Commercial seeds	.1	.3
Water Melon	.8	4.6
Chillies	.4	.3
Ground nuts	8.1	7.8
Rice	2.1	7.8
Sugar cane	.4	.8
Green grams	5.8	6.9
Sunflower	3.3	4.0
Okra	.2	
Butternut		9.3

Findings indicate that the number of organizations undertaking contract farming is higher in the TASK areas compared to the non TASK areas. (See table 17 below)

Table 17: percentage distribution of organizations undertaking contract farming

Organizations	TASK	Non TASK

Local schools	4.8	16.7
Arkays	7.1	**
BIDCO	7.1	**
CARE	14.3	16.7
Nakumatt supermarket	20.2	13.3
Cotton cooperative	1.2	**
East Africa	1.2	**
extension officer	1.2	**
Fresh&juicy	1.2	3.3
Ginnery.	1.2	**
Golgotha	2.4	**
Kenya Seed Company	1.2	**
local buyers/traders	4.8	16.7
NCPB	29.8	**
ST Camulas Orphanage	1.2	**
Western Kenya Rice mills.	1.2	**
AED	**	6.7
BAT	**	3.3
Mace foods Limited	**	3.3
Market Group	**	3.3
National Cereals & Produce Board	**	16.7

** Data not available

Comparing the respondents who are beneficiaries of the TASK components with the non TASK beneficiaries it is evident that the commercial crops promoted by the program such as green grams, kale, water melon, tomatoes, pineapples ,sunflowers etc significantly increased in production in the TASK areas. (See table 18 below)

Table 18: Typical crops grown for commercial purposes

CROPS	TASK	Non TASK
Maize	7.8	7.8
Sorghum	3.5	3.7
Beans	9.5	20.0
Sweet potatoes	0.3	6.5
Cassavas	1.2	6.1
Tomatoes	9.8	5.7
Traditional Vegetables	4.3	1.6
Onions	2.6	1.6
Kales	7.5	6.1
Pineapples	4.3	0.4

Bananas	0.9	4.5
Mangoes	0.6	**
Cotton	0.3	0.4
Commercial seeds	0.6	**
Melons	5.8	2.9
Chillies	**	0.8
Groundnuts	3.8	14.7
Rice	9.5	5.3
Sugarcane	0.3	1.6
Green grams	9.0	4.1
Sunflower	6.1	1.2
butternuts	12.4	4.9
Total	100.0	100.0

Farmer Associations (FAs) producing through formal marketing contracts increased from 37 (74percent) in FY 06 to 71(109percent) against a target of 65 (100percent) in FY 07/08. Table 19 shows organizations that supply inputs and agricultural service in the target area.

Table 19: External support for farm inputs

	percent of respondents				
Organization supplying inputs & services	Baseline	MTE	ETE Ranking 1	Ranking2	Ranking3
CARE		32.6	**38**	23.5	11.8
GOK		5.7	**7.0**	28.4	32.4
Others NGOs		4.8	**7.6**	38.2	50.0
Private Enterprises			**1.3**	9.8	5.9

Shaded: Information not available

3.4.5 Food Production Sustainability and Household Food Security

According to FAO statistical survey of 2006, most households grow their food to feed their families and rely on the market for food security because only 25 percent of the household income is from non –farm sources. Own food production or being able to access food by a household consistently throughout the year is an indicator of household food security. In the entire project area 65 percent of the respondents reported that they experience food shortage in the last one year indicating some significant improvement. As compared to the baseline which reported 74 percent and midterm recording 85.6 percent of people who were food insecure... The distribution of those who faced food insufficiency by district and project area is presented table 20 below.

Table 20: Households inadequate annual food supply by district (disaggregate by program component)

Project District	***percent of Households with inadequate annual food***	***percent of Households with inadequate annual food supply***

	supply by MTE(2006)	***by ETE(2008)***
Homabay	81.5	57.4
Suba	94.1	53.2
Rachuonyo	80.7	60.0
Migori	91.5	71.0
Nyando	80.0	66.7
Bondo		74.5

Nyando and Bondo had the highest number of respondents not having enough food for household needs, while Suba and Homabay recorded a significant improvement as compared to their conditions during the MTE. The sampled population had variation in terms of the number of months that food shortages were experienced with over 60.5 percent only experiencing food shortage for less than or equal to 3 months annually, as compared to 53.2 during MTE. This may be attributed to the fact that Suba and Homabay were also targets in DAP1.

Table 21: Estimated Number of Months of food shortage for the households in the project area

Number of months food shortage experienced	**percent of households at Baseline**	**percent of households at MTE**	**percent of households at ETE**
1 – 3		53.2	60.5
4 – 6		38	35.4
7 – 8		4.8	2.3
9- 12		4.0	1.8

It is also important to note that the mean duration of food insecurity reduced from 5 months to 3.4 months per year during the midterm and at the ETE it is estimated at 2.8 month per year. Food shortages were attributed to various reasons as summarized on table 22 below. Crop failure and low farm produce after harvest were considered the main reasons consistent with the baseline and MTE.

Table 22: Reasons for food scarcity

	percent of respondents giving reason		
	Baseline	MTE	ETE
Crop failure	80	82	60.3
Sale of farm produce after harvest	4	4	3.5
Low off-farm income	2	4	7.6
Low farm produce	12	9	25.4
Low fishing income	.5	0	1.2
Small land size	1	1	.3
Floods	1	0	-
Drought			.3
Sickness			.3
Total	100	100	100

3.4.6 Improved Agricultural Production and Marketing Practices

The project aimed to have at least 3825 targetd smallholder households in seven districts of Nyanza province practicing at least 3 improved agricultural and marketing practices and that 90 smallholder Farmers Associations will be acting as a focus for accessing markets and services on behalf of their members by September 2008.

Several agricultural technologies were consistently used by farmers in the project area to improve their crop production. Table 23 lists the main agricultural technologies adopted by most farmers. When considering the level of adoption of the various agricultural technologies and comparing the baseline, MTE and the ETE analysis, the adoption of various technologies has significantly improved in the project area with seed technology improving from 35 percent in baseline to 28 percent in MTE and at 46 percent in the ETE. While soil improvement also changed from 17 percent to 2 percent and eventually to 40.6 percent in the ETE. Annual reports show that households that adopted at least 3 improved husbandry practices and/or varieties had increased. Therefore this shows that the project has enabled farmers to adopt various technologies to enable them increase their agricultural production and thus the project achieved its targeted projections.

Table 23: Agricultural Production Technology (percent)

Technology	**percent of farmers using the technology**		
	Baseline	**MTE**	ETE
Seed technology	35	28	46.4
Soil improvement	17	2	40.6
Timely operations	17	17	-
Selection of crops	**	**	22.7
Soil conservation	**	**	9.8
Spacing of crops	**	**	48.7

3.4.7 Small scale Irrigation

The project target was that by September 2008, 900 smallholder farmers in seven districts of Nyanza province will have been trained on small scale irrigation.

Irrigated farming is an important aspect of increasing food production, especially in the project area where there is limited moisture for crop production. The target area has abundant amount of water from the fresh water lake and permanent rivers. The survey sought to establish the amount of land under irrigation, the crops irrigated and type of irrigation they were practicing.

The main crops under irrigation in the project area includes: kales, tomatoes, traditional vegetables, water melons, maize, bananas, rice and other commercial crops. Table 24 below indicates that farmers adopting small-scale irrigated agriculture increased from 409 (68 percent) in FY 06 to 1006 (168 percent) against a target of 600 (100 percent) households. And the number of crops being grown under irrigation has increased indicating that the project surpassed the target.

Table 24: Crops and the percent of farmers growing the crop under irrigation

Crops	**percent of farmers growing and irrigating the crop**		
	Baseline	**MTE**	**ETE**
Tomatoes	5	17	**24.9**
Kales	6.3	41	**26.5**
Traditional Vegetables	2	4	**6.8**
Onions	0.7	7	**4.9**
Maize	1	1	**6.0**
Rice	-	20	**13.6**
Water melon			**5.3**
Bananas			**.4**
Other commercial crops			**4.2**

Bucket and furrow irrigation methods were the main methods of irrigation practiced. The mean size of land irrigated was about 0.85 acre per household. Although the land size under horticulture was small compared to that under staple crops, income generated from horticulture was much higher than that of staple crops.

3.4.8 Training of small holder Farmers

The project targeted that by September 2008, 4,500 smallholder farmers in seven districts of Nyanza Province will have been trained on new and improved natural resources management. In addition 4,500 smallholder farmers in seven districts of Nyanza Province will have been trained on high value crop production and marketing.

The use of agricultural information is important in the entire process of agricultural production, marketing and consumption and therefore in enhancing food security. Government Agricultural extension officers (41 percent), Media (radio), 27 percent and NGOs (20 percent) were cited as the first three main sources of information on agricultural technology. While Relatives & friends (31.1 percent), NGOs (30.4 percent) and the Media (9.3 percent) constituted the second main sources of information on agricultural technology. The same main information sources were sited during the MTE. See table 25 below.

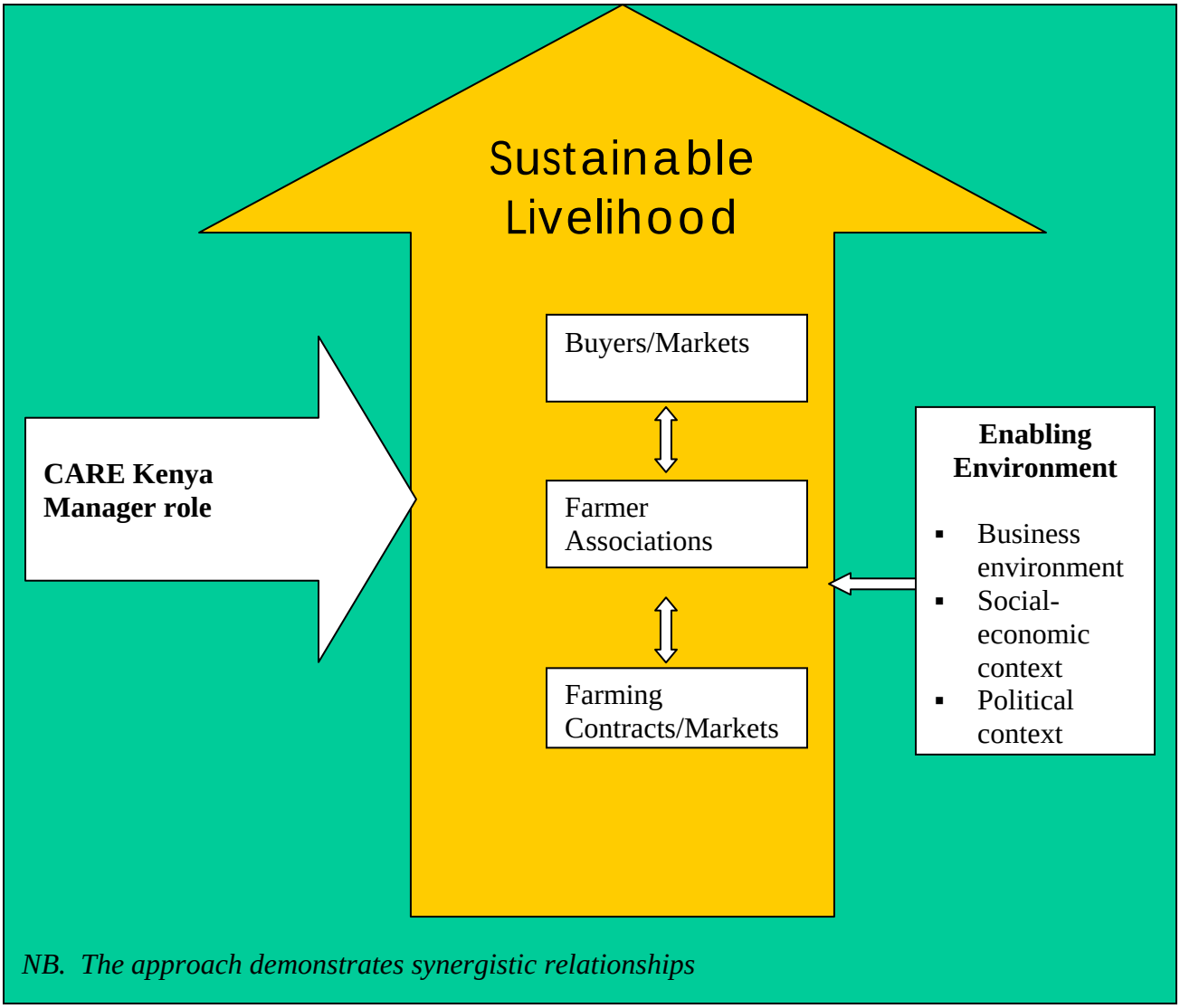
Table 25: Farmers' main sources of information on Agriculture

Source of information on agricultural technology	**Percent of farmers reporting using source as**				
	Baseline	**MTE main source**	**MTE secondary source**	**ETE main source**	**ETE secondary source**
GoK	34	30.4	-	41.0	.6
Farmers/Friends	35	7.1	11.1	8.8	31.1
NGOs	17	26.2	42.2	20.8	30.4
Media	7	24.2	4.0	27.2	9.3
Others/Community Meetings	7	-	20	-	2.4

3.5 Project Implementation and management practices

CARE Kenya played the role of manager in the implementation of the TASK component. The implementer liaised with beneficiaries to identify key elements of project design. The original idea of organizing farmers around clan groups did not work and communities preferred the administration to assist the formation of farmers' association (FA). Once this was accomplished, CARE Kenya laid out its work plan to the FA outlining the roles of each party. The role of manager (CARE Kenya) involved ensuring that FA got all the necessary support from the private and public sectors. For example, CARE Kenya initiated contract farming which to a large extent enabled farmers to obtain supplies such as seed and fertilizer. CARE Kenya also ensured farmers were linked to relevant GoK departments although little support came from this area. Apart from contract farming CARE Kenya helped farmers to establish formal market linkages with buyers such as BIDCO, NCPB and Supermarket chains

Figure 3: *TASK Implementation and management approach*



3.6 TASK Component Relevance, Effectiveness and Sustainability

3.6.1 Relevance

The TASK component focused intently on the needs of its beneficiaries and took them into account at every step. The beneficiaries have realized significant improvements in household food security through increased farm yields and income levels from an increased diversification of crops targeting commercialization of agriculture, an important aspect of rural development. The project design was based upon households needs to achieve a satisfactory level of food security at household level as well as increasing beneficiaries' asset base through improved incomes accruing from the sale of crops. As shown in the results of this evaluation the project design addressed those needs.

3.6.2 Effectiveness

The TASK component accomplished its objectives and goal, and exceeded most of its targets. There is a significant increase in households that reported improved yields from traditional staple crops such as maize, beans and sorghum since Baseline. The project has also increased the quality of farming by equipping farmers with advanced technologies through training. There is also a significant increase in the number of households adopting small scale irrigated agriculture, enabling most farmers to grow high value commercial crops such as tomatoes, kales and butternuts. These achievements in agricultural production have also translated into increased incomes thus improving households' capacity to access other livelihoods.

The project has also changed the community's attitude towards agriculture with an increasing number shifting to commercial agriulture. The project has enabled farmers to establish formal links with buyers through contract growing orders. In keeping to its operational motto " Building confidence through food security" the project has increased the income and confidence of farmers, particularly women farmers who were previously relegated to reproductive activities and has thus given women a higher status within their households and in the market place. The project has given most farmers multiple outlets for selling their farm products and a collective bargaining vehicle through self representation rather than marketing through 'brokers'.

Most of the successes achieved in this component are associated with the donor's (USAID) flexibility in allowing a free hand in terms of shifting strategies within particular components. For example, TASK initially focused on the promotion of cotton as a major commercial crop, however cotton growing failed and implementers shifted focus to other commercial horticultural crops. The accomplishments in the TASK component are also attributed to the input of high caliber CARE Kenya staff, strict and careful spending/ stringent budget control and ready market for all produce. In addition a certain amount of cooperation was received from Government of Kenya (GoK) staff from relevant Departments.

There were challenges that threatened the successes recorded in this component. For example, although contract farming was initially applauded as a good strategy,

occasionaly farmers would become impatient with the contractors for delays experienced in the delivery of their produce and subsequent delays in paying farmers. One such case was encountered when rice farmers delivered rice to the National Cereals and Produce Board (NCPB) but the NCPB took rather long to remit payment causing farmers to down their tools. After this apparent snag, CARE Kenya stepped in and paid farmers while NCPB paid CARE Kenya in due course. This working relationship continued for some time and towards the end of the project, CARE Kenya made arrangements for farmers' associations to have direct links with 'highest bidder buyers'.

The evaluation team also learnt that the GoK was not responsive to the requests made by CARE Kenya. Rigid bureaucratic procedures imposed by GoK led to intermittent delays in the implementation process.

Low staffing was cited as a major bottleneck that was encountered during the project life. This means the project employed very few field staff in comparison with the geographical areas they were meant to cover. This led to staff burn-out which invariably may have affected performance in some areas. For example, we learnt that several trainings did not take place because trainers were not available. Such a problem could have been avoided by increasing the number of staff. We also learnt that the project field staff did not have adequate means of transport. For example the organization provided motorcycles which could not be utilized during the rainy seasons as a result of poor terrain.

3.6.3 Sustainability

The TASK project created a self-sustaining production and market process through minimal facilitation and capacity building. It designed an exit strategy from the beginning and followed it successfully, ensuring self-dependency and minimizing the dependency syndrome among beneficiaries. Beneficiaries have embraced the skills and strategies learnt through the TASK component by discovering the importance of their roles and responsibilities in improving rural livelihoods. By training farmers associations and establishing market linkages with these organizations TASK created a sustainable environment within which the beneficiaries will continue to operate in.

The evaluation team is of the opinion that as long as demand for farm produce is sustained (no guarantees in the free market) and as long as there are no disruptions (e.g. politically instigated violence), beneficiaries will continue to enjoy what the project has established for them and modify it to suit their own ambitions and capacities. At this junction the evaluation leaves an open question as to whether incomes from farm produce will remain protected from market malpractices. However, given that there are multiple buyers and farmers associations remain united through collective bargaining chances are high that gains already made will be protected.

3.7 Conclusions on TASK

Empirical findings from this End Term Evaluation indicate that significant achievements have been realized through the TASK component. The component addressed the Strategic Objectives, Intermediate Results and Outputs as laid out in the Logical Framework Analysis (LFA) amidst several challenges which were addressed through an in built flexibility of the project design.

In our opinion, the project was implemented by highly qualified staff within an organizational environment that provided all the financial and logistical support required at every stage of project implementation. It is laudable that CARE Kenya utilized a bottom-up approach in the implementation of its project. This implies that beneficiaries were involved in project design, implementation, design and monitoring. It is evident that CARE Kenya also enjoyed the trust and confidence from the donor (USAID) who allowed flexibility in the implementation of the project. The synergy between the donor, CARE and beneficiaries invariably contributed to the gains made in the TASK component.

The project has revamped communities that often survived on food hand-outs year in year out. By enabling households to increase farm productivity through the adoption of new and effective agricultural technologies including use of high quality seeds, fertilizers and pesticides and capacity building through training farmers who under normal circumstances would not afford such trainings, CARE Kenya has 'empowered communities to fish rather than giving fish' thus alleviating a dependency syndrome that had previously taken root in the beneficiary communities.

Prior to the implementation of TASK, agricultural production basically focused on staple, low value crops such as maize and beans. TASK introduced commercialization by introducing short term and high value agricultural/horticultural crops that attract ready market such as water melons and butternuts; introduction of high quality Basmati rice while at the same time enabling farmers to reclaim land that would otherwise be lying idle and mobilizing farmers into small holder farmers associations. All these factors have given rise to healthier and economically empowered communities.

We feel that CARE Kenya's exit strategy of connecting farmers with buyers at the same time allowing them a high degree of negotiating/bargaining power with buyers in order to ensure sustainability is an empowering tool indeed. Often producers are exploited by brokers because of ignorance and accompanying lack of confidence. Exploitation kills morale, and the fact that farmers are up to task in marketing produce means that the benefits will continue to be felt. In addition, building confidence, especially among women farmers, to manage farm produce –by allocating portions for family consumptions and the same time earning an income from sale of surplus has improved gender relations significantly.

The evaluation found that communities living along the lakeshores are enabled to practice small scale irrigation. CARE Kenya introduced irrigation technology that is sustainable as well as equipping farmers with farming skills that are appropriate for smallholder irrigation farming. Previously, these natural resources were largely unutilized , while surrounding communities face starvation and persistent food scarcity.

3.8 Recommendations

The following recommendations identify the TASK project success factors and suggest their application to future projects.

i) The TASK project has great potential and should be replicated, by USAID/CARE Kenya and its partners in other parts of Kenya. The TASK project can be made most relevant to beneficiaries by including them in project design and implementation and by conducting thorough market research prior to project design. Future projects that focus on individual (rather than systemic) benefits should adopt this model.

ii) At the design stage, USAID/CARE Kenya and its partners should ensure that the introduction of a particular agricultural product being considered is workable, tried and tested, so that project impact is maximized.

iii) Future projects of a similar nature should maximize cost benefit ratios by continuing to cost-share with beneficiaries. The indicators for ensuring that cost benefit analysis takes place prior to and during the project's implementation should be identified in the project design.

iv) Future projects should create a sustainability plan at the very beginning and follow it closely throughout the life of the project, making modifications based upon experience. The project design team must consider issues of eventual sustainability of the project, and make the needed adjustments/interventions a part of the indicators to be monitored through the life of project.

3.9 Lessons Learned

- Baseline research and market assessments help to strengthen project design targeting enhancement of sustainable rural livelihoods development.

- Beneficiary involvement in selection of particular crops of interest is critical for successful project implementation and development of a particular product for a given agro-ecological zones.

- Development of farmers associations focusing on the purchase of inputs and marketing of their products enhances farmers bargaining power and enable them to access inputs and obtain better prices for their produce.
- Flexibility in project implementation approach as applied in TASK is important as the environment changes during implmentaion.
- To accelerate farmer adoption of technology, choose a crop enterprise that immediately provides food and cash to households

CHAPTER FOUR

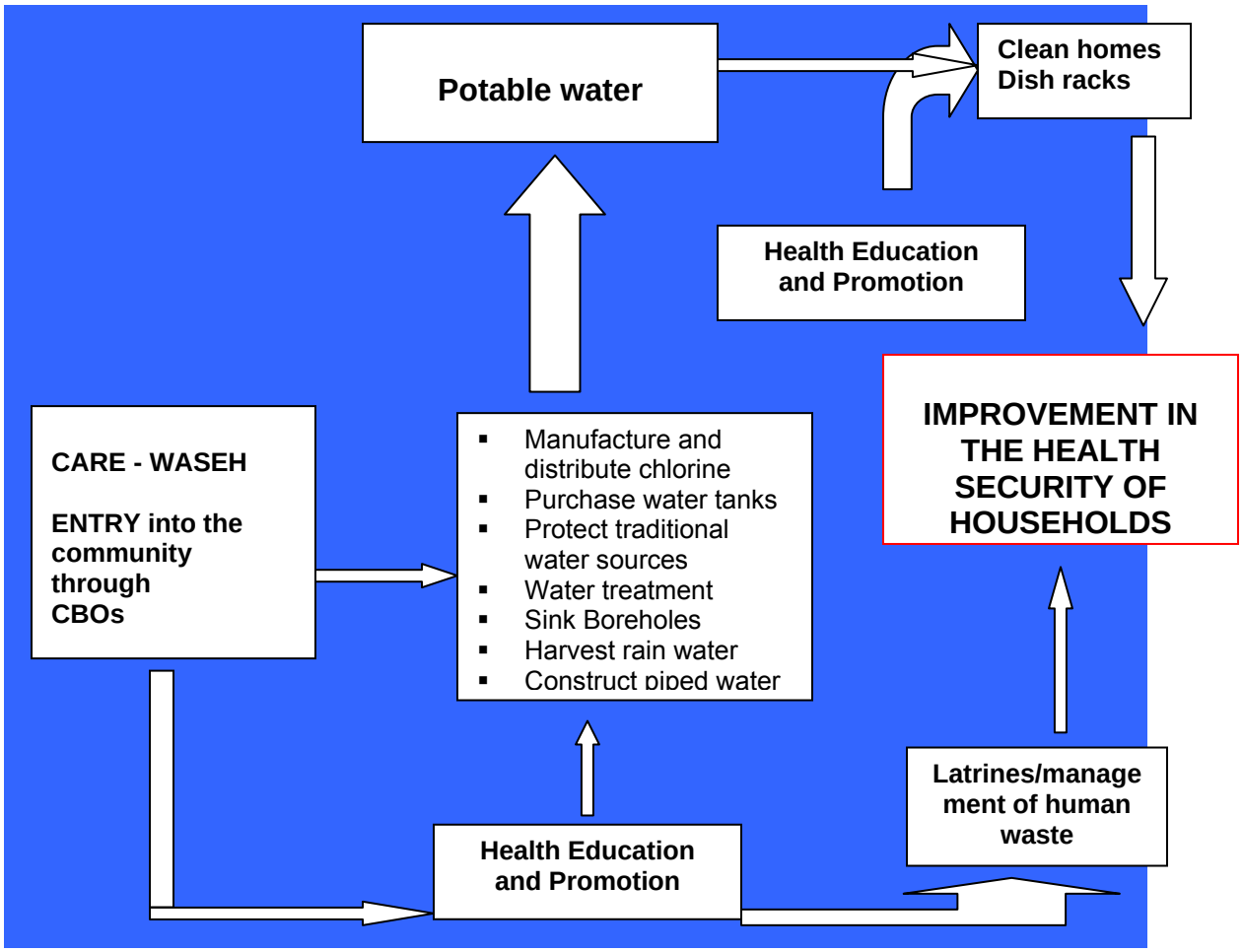
WATER, SANITATION, EDUCATION AND HEALTH (WASEH)

4.1 Description of the WASEH Component

The goal of this program component was to achieve sustainable improvement in the health security of the targeted 2,480 households in four districts of Nyanza province". The WASEH project was initially implemented in Rachuonyo, Homabay, Suba, Migori and Nyando districts of Nyanza province. Bondo District was included later in the project with the commencement of the South West Sakwa Community Water Project. These districts are largely categorized as low-potential zones (LPZ) with low rainfall and poor soils. Targeting 100 percent rural setting, the livelihood system in the WASEH project area was mainly subsistence farming, petty trading, agricultural wage labour and small-scale commercial fishing (*Dak Achana* Baseline report, 2000).

The main activities implemented by the WASEH project included water infrastructure development, sanitation improvement, water quality enhancement through a multi-pronged safe water system approach and hygiene promotion as illustrated on the framework below**.**

Figure 4 : The WASEH component conceptual framework



Programming in WASEH was based on a demand and response approach, this means only CBOs that expressed interest in project activities were included. Upon creation of awareness in the target areas, interested CBOs applied for partnership with CARE. The CBOs were vetted and memorandums of understanding established and signed with those CBOs that demonstrated high potential. Implementation was done on a cost sharing basis in which case the local CBOs contributed locally available resources including unskilled labour and some money while CARE provided technical support and materials that were not readily available locally.

4.2 WASEH implementation and Expected Achievements

WASEH's strategic objective was achieved through two but related approaches. The first approach focused on establishing sustainable structures for managing water and sanitation activities, through which households would have potable water. The second approach involved Health Education and Promotion of environmental and domestic hygiene practices.

Activities carried out within the WASEH component

4.2.1 Roles of water committees

The project aimed at establishing 16 Central Management Committee (CMCs) and 160 groups for managing water and sanitation activities in four districts by the year 2008. Results from the IPTT show that a total of 17 CMCs and 169 groups were established. Findings show that about 51 percent of the respondents were aware of the role of CMCs in coordinating water and sanitation issues. The most frequently reported was the Central Management Committee {CMC} by 30.5percent, followed by Group Hygiene Promoters (GHPs) by 15.9 percent. The role of CMC was rated as "good" by only 22.7 percent while that of GHP was also rated "good" by 40.7 percent of the respondents. On the other hand, about 62 percent reported that a member of their group had been trained on hygiene promotion.

Participants in FGDs were confident that CMCs and GHPs would uphold the newly introduced water infrastructure in the future. We are of the opinion that future projects continue promoting mobilization of such committees and groups. This tends to enhance ownership of projects thus reducing dependency on the implementer.

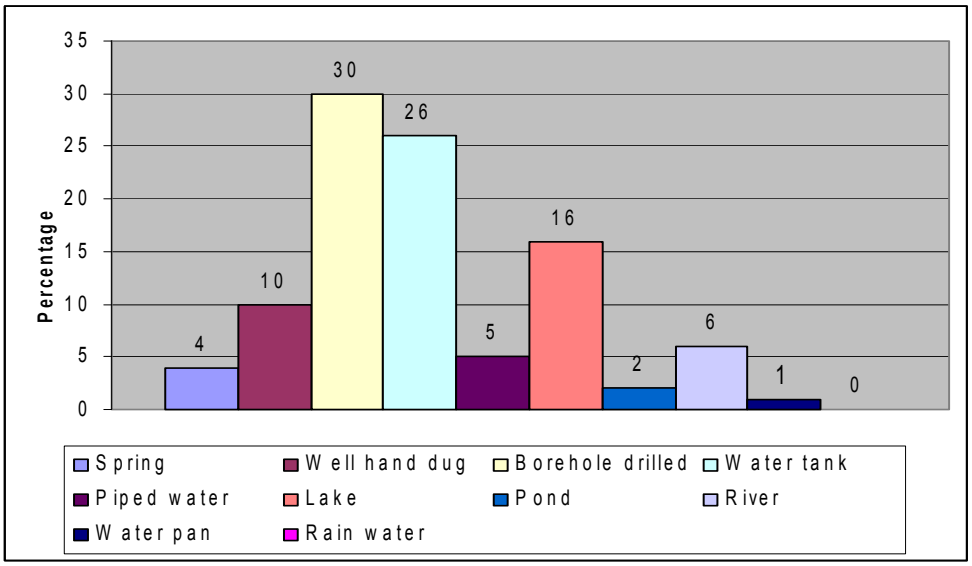
4.2.2 Access to potable water

Potable water refers to water that is clean, safe and good for human consumption. Research shows that communities may have water resources in their vicinity but the water from these sources may not be potable. Without potable water, communities are likely to suffer from waterborne diseases such as cholera, diarrhoea and bilharzias. Findings indicate a consistent increase in number of respondents using water from 'protected' sources. At Baseline, 19.5 percent of the respondents got water from protected sources compared to 57 percent at mid-term and 66 percent at ETE. This implies that the project has significantly improved communities' access to potable water hence reducing water related morbidity and mortality.

4.2.3 Sources of household drinking water

At least 30 percent of the respondent's accessed water from a drilled borehole, 26 percent from a roof catchments water tank and 10 percent from a hand dug well. Comparative analysis reveals varied trends in adoption of water sources, for example at MTE, there was 2 percent increase in use of borehole water and 6 percent drop in use of hand dug wells and a significant increase in the use of water tanks. Results indicate a marked reduction in the number of households using water from 'unprotected' sources, at BS 66 percent drew water from unprotected sources compared to 43 percent by MTE and 25percent at ETE. See chart 2 below.

Chart 2: The main source of drinking water by the respondents at End term



It is evident that over half of the respondents have access to potable water; however there are smaller proportions that are still using unsafe water. Results reveal a steady increase in the number of households reporting having received assistance to put up protective water sources with 40 percent reporting being assisted at Baseline, 63 percent by MTE and 66 percent ETE.

With regard to main sources of drinking water, comparative analysis between WASEH and non-WASEH areas indicates that at least 42.7 percent of the respondents access water from roof catchment's water tanks in WASEH areas compared to 10.4 percent in the non-WASEH areas accessing water from a similar source (see table below). These findings are consistent with the fact that CARE Kenya focused on water tank technology during DAP II.

Table 26: Main source of household's drinking water by Component

MAIN source of household's drinking water	WASEH Areas	None WASEH Areas
Spring	3.6	5
Well hand dug	7.7	11.4
Borehole drilled	25	35.4
Water tank	42.7	10.4
Piped water	2	7.9
Lake	16.1	15.7
Pond	1.2	1.8
River	1.2	10.4

Water pan		1.8
rain water	0.4	0.4
Total	100	100

Variations by other sources of water are minimal. This is as a result of WASEH implementation (in the current non-WASEH areas) during DAPI. This explains why boreholes are taking lead in the non-WASEH areas (35 percent) compared to 25 percent in non-WASEH areas.

4.2.4 West Sakwa Water project: Thousands have access to potable water (Case presentation)

West Sakwa Water project: The Magic Touch

How it all began

The South West Sakwa Community Water Project is a gigantic project that stands out as a significant achievement in the implementation of WASEH during DAP II. The project was borne out of the community's need for potable water. CARE stepped in and found some organizational structures such as committees on the ground. The community required huge sums of money to accomplish their dream. Efforts by the community to obtain support from GOK devolved funds such as the CDF were fruitless. Just at about the same time, CARE Kenya was in the process of experimenting on initiating a high gravity water scheme in a place called Kibigori, Nandi District. The technical bottlenecks identified during the Kibigori trials led to the realization by CARE Kenya that a lot more funds would be required than what was set aside. At this moment, CARE decided to respond to the call for support by the people of West Sakwa.

Construction phase

The construction phase involved contributions from both CARE Kenya and the community. Initially the community was supposed to contribute 30 percent of the total project cost. The community provided land for setting up the treatment plant and the distribution tank. Construction of lateral lines was done by the community through free labour. In addition, the community met the cost of renting the offices where the project team operates from. Ultimately, the Constituency Development Fund (CDF) made some contributions towards the project.

Distribution of water and Cost sharing

To enhance ownership and independence from donor, members are paying a small fee for water that is currently being sold through 'water kiosks'. For those who are able to purchase and lay water pipes into their compounds, a monthly user fee will be charged. Perhaps we can suggest that the CMC should make objective decisions to ensure that the most vulnerable (especially poor old women who cannot afford to buy water) are not denied the commodity.

Gender dimensions of benefits

The water project has immense benefits for the community. What is really appealing and exceptional about this project is the fact that the people of South West Sakwa have lived without potable water, even though majority live along the lake shores. Homes will have a constant supply of clean water thus improving hygiene standards as well as alleviating water related morbidity and mortality. By reducing the distance to water source, a significant burden on women's gender roles will be lifted off. Hopefully, the time that will be saved will enable women to focus on other social and personal development initiatives. The project will yield indirect health benefits especially for women and girls, who more often than not must endure heavy loads of water on their backs and heads. Research has linked back problems and migraines to heavy loads carried by women and girls especially in the rural areas.

It is also expected that pupils will spend more time in school since waterborne diseases will be a thing of the past. It is important to note that the South West Sakwa Community Water Project has a permanent provision for water treatment.

Sustainability

There are promising indications that the South West Sakwa Community Water Project will be sustainable in the absence of CARE Kenya. Community ownership of the project is of primary importance. The many years of suffering without clean water should be a strong driving force for communities to maintain this water plant. The community will continue to pay a small fee towards the maintenance of the project. The CMC will oversee the management of the water plant and where need be; devolved funds such as CDF can be used to keep the plant functional.

Overall, the evaluation established that CARE Kenya in conjunction with beneficiaries and other stakeholders applied multiple water technologies to make water sources more accessible and safe for human consumption. The table below shows various types of water infrastructure such as Ferro Cement tanks, boreholes, plastic tanks etc that were implemented during the life of DAP I and II in the seven districts

Table 27: Forms of water infrastructure

	Ferro cement	Borehole	Plastic tanks	Spring Protection	Piped water	Shallow Wells	Safe water (Water Treatment)
Nyando	NO	NO	**YES**	NO	NO	NO	**YES**
Suba	NO	NO	**YES**	NO	NO	NO	**YES**
H/bay	NO	**YES**	**YES**	**YES**	NO	**YES**	**YES**
Rachuonyo	**YES**	**YES**	**YES**	NO	NO	**YES**	**YES**
Bondo	NO	NO	NO	NO	**YES**	NO	NO
Kisumu	NO	NO	NO	NO	NO	NO	NO
Migori	NO	NO	**YES**	NO	NO	NO	**YES**

Source: Key Informant Interview, WASEH Field Officer, Homabay

CARE Kenya allowed a high level of flexibility in choosing what type of water technology should be implemented in each of the seven districts. For example, Ferro Cement tanks were introduced in Rachuonyo although this technology was halted after problems related to soil composition affected the quality of tanks. For most part, plastic tanks dominated the water infrastructure development phase. Each household provided thirty percent of the total cost towards the installation of a single water tank. Through our discussions with beneficiaries we noted a high level of enthusiasm among communities to contribute towards the water initiatives.

An FGD discussant noted that:

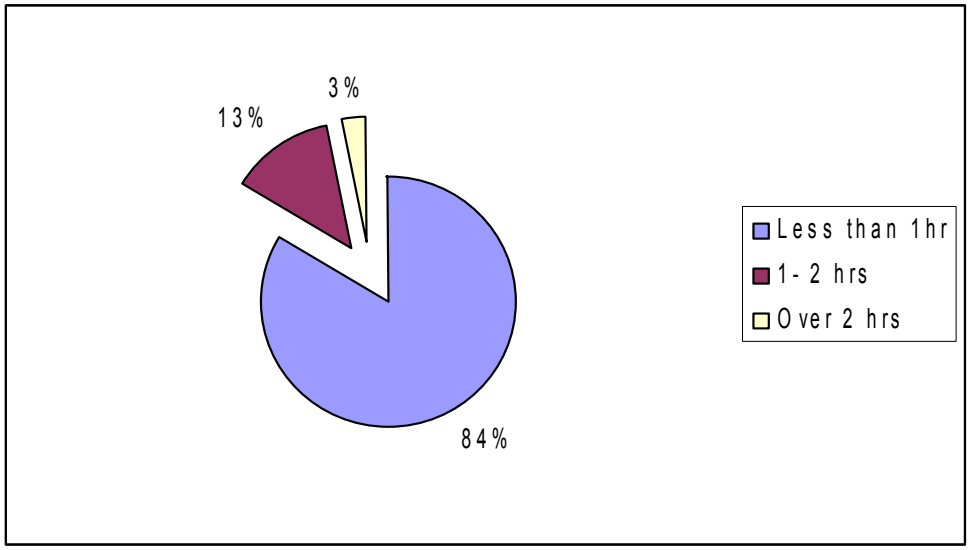
> **…**before WASEH project, we had no means of harvesting rain water, our springs and shallow wells were not protected from contamination. CARE Kenya requested us to provide labour, local materials while the organization supported us with tanks and training of installation technicians. Through cost sharing, we now have safe drinking water…..*Female, 35 years, Pith Ototo Women Group, Homabay*

We also noted that there was a strong synergy between WASEH and COSAMO. Beneficiaries drew the required initial capital of Ks. 5000, from group savings. This was a small contribution that beneficiaries paid towards the cost of a single water tank.

4.2.5 Distance and time taken to the source of water

The conventional approach in assessing accessibility to water sources is by measuring the distance or time taken to reach the water source. ETE results show that 32.6 percent of the respondents accessed water within their home compounds, 48.5 percent within one kilometre and 14 percent within 1-2 kilometres. Overall, the distance travelled to access water by the households has reduced with majority (81 percent) accessing water within a radius of one Kilometre, compared to 75 percent at MTE and 63 percent Baseline.

Chart 3: Time taken to collect water from the main drinking water source



It is evident that WASEH has reduced the time travelled by majority of the households to water sources by less than one hour (Chart 2). This achievement has positive implication on women's work considering the fact that collecting water is a gender specific role primarily allocated to women in the communities in the project area. When time taken to collect water is significantly reduced, women utilize the extra time for improving their standards of living and that of their families (Esther Boserup 1980). Consistent with these theoretical underpinnings, a discussant noted that:

> **…**the WASEH project has supported us to have water right into our homes. We are very happy. Previously we used to walk long distances to fetch water from wells. Some of us developed back aches and other health problems. With water tanks right on our door steps we have more time to concentrate on farming and also take care of our families...*Female, 22 years, Asawo Group, Rusinga*

Comparative analysis with regard to distance to the source of drinking water between WASEH and non-WASEH areas indicates that 47.2 percent of the respondents access water from within the home compound in WASEH areas compared to 19.6 percent in the non-WASEH areas accessing water from a similar source (see table below).

Table 28: Distance to the source of drinking water by Component

Distance to the source of your drinking water	WASEH	None WASEH
Within the compound	47.2	19.6
Less than 1 km	36.7	58.9
1kms - 2 kms	12.1	15.7
2 - 5 kms	3.2	3.2
Over 5 kms	0.8	2.5
Total	100	100

4.2.6 Payment for water used

Findings indicate that at least 46 percent of the respondents were paying for water at the time of ETE compared to 43.2 percent at MTE. On the other hand, only about 12 percent compared to 34 percent reported having been denied water due to non-payment. These findings have a significant implication on improvements in incomes. While more people are now able to pay for water, perhaps this can be attributed to the synergistic effects of TASK and COSAMO components. In addition, the realization that potable water adds value to people's lives by limiting sickness and disease is a motivating factor to source clean water. The payment for water is done to the Water management Groups (WMGs) for maintenance especially where boreholes are the main water source. However, these water management groups recognized very poor households within community and they were allowed to access the water without any payment.

4.3 Access to and correct use of safe water system products

The project aimed at empowering 60 percent of targeted households to access and correctly utilize safe water system products in 4 districts. Ensuring safety of water is a process that goes beyond the water source to the point of use. Findings indicate a reduction in the number of respondents not using any form of water treatment products. At both Baseline and MTE 9.6 percent of the respondents were not using any products compared to 4.9 percent of respondents at ETE.

Consistent with the mid-term findings, majority (98.5percent) of the respondents reported that they had a special container for storing household drinking water at end term. We noted an improvement since Baseline where 80 of percent of the respondent reported having a container specifically for water storage compared to 98.5 percent at MTE and

ETE respectively. These trends are indicative of increased awareness on safe storage of drinking water.

4.3.1 Measures taken to ensure safety of drinking water

Results indicate a steady increase in the number of households using water treatment products such as (Chlorine/ Waterguard /Pur/Allum). At Baseline only 34 percent were using any product, compared to 48.1percent by MTE and 74.8 percent at ETE. FGDs results show that majority of WASEH beneficiaries had shifted from boiling water to using chemicals. This was as result of the trainings by projects' group hygiene promoters which sensitized them on the fact that boiled water can easily get contaminated in storage containers before consumption unlike the chemically treated water.

A significant increase was noted in the number of respondents reporting drinking treated water within the last 48 hours. The proportions stand at 36.4 percent at MTE to 43.8 percent by ETE. Overall, two-thirds (67percent) of all Chlorine/ Water guard users added 1 capful to a 20 liters of water while 22.9 percent reported adding half capful and about 10 percent adding other quantities of the chemical to the same amount of water.

Comparative analysis with regard to measures taken to ensure safety of drinking water between WASEH and non-WASEH areas indicates that more persons in the Non WASEH components are not taking any measures to ensure water safety while more individuals 77.4 percent in WASEH component compared to 68.8 percent in the non-WASEH Components had taken measures to ensure safety of drinking water (see table below).

Table 29: Measures taken to ensure safety of drinking water

What do you MAINLY do to make your drinking water safe	WASEH	Non-WASEH
No action taken	3.2	6.5
Boiling	15.3	14.5
Chemical treatment (Chlorine/ waterguard)	77.4	68.8
Chemical treatment (Pur)	0.8	2.9
Chemical treatment (Dawa/Alum)		1.1
Filtration	3.2	6.2
Total	100.0	100.0

Most of the beneficiaries purchased these chemicals from local shops and kiosks. These chemicals are now easily accessible within the community. This also implies smaller outlets are stocking water treatment chemicals and that most people are aware of the existence of such. WASEH has made significant contributions in educating communities on sanitation and health.

Table 30: Main ways of treating water to make it safe for drinking (percent) by district

Main ways of treating water to make it safe for drinking (percent) by districts

	Bondo	Homa Bay	Kisumu	Migori	Nyando	Suba	Rachuonyo
No measure taken	3.8	11.5	7.7	11.5	3.8	34.6	26.9
Boiling	14.1	17.9	2.6	14.1	7.7	21.8	21.8
Chemical treatment (Chlorine/ waterguard)	7.9	17.8	8.4	19.9	7.1	20.9	18.1
Chemical treatment (Pur)	20.0	40.0			20.0	10.0	10.0
Chemical treatment (Dawa/Alum)	66.7			33.3			
Filtration	4.0	12.0	16.0	8.0		8.0	52.0

4.3.2 Sources of information on water treatment technology

About 60 percent of the respondents reported getting information on water treatment technology from NGOs (with 52.5percent of them citing CARE Kenya) compared to 27 percent. Those getting information from GoK were 19.5 percent at baseline and this decreased to 18.5 percent at MTE and increased to 22 percent at ETE. Other sources include the media and barazas 4.4. Access to proper sanitation and adoption of appropriate environmental and domestic practices

4.4 Household Latrines

4.4.1 Latrine distribution

There was a remarkable increase from 51.3 percent at MTE to 71 percent at ETE of those reporting having latrines in their compounds. Majority of the respondents (88.8 percent) reported owning one latrine in their compounds while 9 percent had 2 latrines and 2 percent reported having three or more latrines.

On further analysis per district it was found that Nyando district has the highest latrine coverage (97.1percent) while Suba district had the lowest latrine coverage (61.percent). The high latrine in Nyando District may be attributed to its peri-urban nature. (See table 31 below)

Table 31: Distribution of latrines in the households by district

Distribution of number of latrines in the households by district				
		Percent		
	Average (numbers)	One	Two	Three and above
Bondo	50.07	84.0	4.0	4.0
Homa Bay	36.25	83.6	11.5	1.6
Kisumu	10.88	91.7	8.3	--
Migori	30.7	76.9	18.5	4.6
Nyando	6.47	97.1	2.9	--
Suba	27.42	61.3	30.0	8.8
Rachuonyo	30.75	88.2	11.8	--

However, variation by component indicates that 34.8 percent of all households in TASK areas had latrines, 63.6 percent in WASEH areas. In addition, latrine coverage in COSAMO areas was (32.5percent), (38.9percent) in HIV/AIDS LIFE and FFW (81.6percent). As shown on the table below, some of the main reasons cited by households who did not have latrines include costs of construction and poor soil formation. The other reasons cited included use of a communal latrine such as in schools and churches.

Table 32: Reasons for not having a latrine

Reason given	**percent giving reason**		
	Baseline	**MTE**	**ETE**
Cost of constructing one is high	32	45	68.8
Do not see need to construct one	4	9	2.1
Poor soil formation/collapsible soil	38	40	9.7
Latrine under construction	-	-	9.7
Others	26	6	9.7

In addition, 6 percent of the respondents reported that their latrines had collapsed, and/or that bushes were readily available for alternative use. At ETE 9.7 percent of the households reported that latrines were under construction.

The table below shows districts where hygiene and sanitation activities took place during DAP II

Table 33: Location of hygiene and sanitation activities during DAP II

District	Latrine construction	Hygiene promotion	Promoting school health
Nyando	**YES**	**YES**	**YES**
Suba	**YES**	**YES**	**YES**
Homabay	**YES**	**YES**	**YES**
Rachuonyo	**YES**	**YES**	**YES**
Bondo	NO	NO	NO
Kisumu	NO	NO	NO
Migori	**YES**	**YES**	**YES**

Source: Key Informant Interview, WASEH Field Officer, Homabay

4.4.2 Assistance towards constructing latrines

Results indicate that at least 33 percent of all the respondents with latrines in their households got some kind of assistance to put up the facilities. When each project component was assessed, 71 percent of all respondents implementing HIV/AIDS Life project reported that they had got assistance in putting up their latrines. A significant proportion (60percent) of the respondents in WASEH project areas got some assistance while 29 percent in TASK areas and 20 percent in COSAMO areas got assistance accordingly. This variation can be explained by the fact that whereas COSAMO and TASK beneficiaries were generating incomes to put up latrines and other home improvements, areas where HIV/AIDS Life was implemented are resource poor and more vulnerable to poor sanitation.

Evidently, the respondents cited CARE Kenya as the major source of support for latrine construction. The proportion of the population who received assistance from other organizations such as CBOs (0.2percent) and LBDA (0.4percent) was quite low. Other agencies/ organizations that gave assistance, though minimal, were SANA in Migori District and CCF in Suba. Two households in Suba District also reported to have received assistance from the Government.

4.4.3 Use of Latrines

Over two thirds (92.2percent) of all households with latrines reported that all household members including children use the latrines. This denotes a significant improvement since MTE and Baseline. Desegregation by project component shows that usage of latrines is higher in WASEH areas (89.7percent) compared to TASK (76.8percent), COSAMO (77.3percent), HIV/AIDS LIFE (57.1percent) and FFW (68.8percent).

Regarding how fecal matter from children below 5 years is handled, 35.2 percent responded that they dispose it into the latrine, 4.0 percent dispose it in a hole within the

compound while 16.8 percent dispose without covering with soil. In addition, 16.8 dispose the waste outside the compound and 2.6 percent rinse it away while washing.

4.4.4 Hygiene measures and practices

The main hygiene measures and practices found among the respondents were clearing the compound, bathing, and washing hands with soap after visiting toilet and before eating.

Table 34: Types of hygiene actions taken

Hygiene action	percent for each hygiene action		
	Baseline	MTE	ETE
Washing hands with soap after visiting toilet	50	39.4	66
Washing hands before eating	-	54.5	74
Throwing of garbage in a compost pit	27	42.4	29
Bathing daily	-	54.5	54
Use of a dish rack	-	39.4	43
Keeping food properly covered	48	27.3	34

A Focus group discussant views support these findings

Before the Dak Achana program came here PEOPLE were going to the bush to relieve themselves and since CARE International in Kenya (CK) came we now use latrines and this has helped to reduce diseases. We also learnt about DISH rack, and this has helped us in cleaning utensils and keeps them safe and dogs now don't lick them. We even have cloth hangings and tanks for water storage which assists in water storage so we have clean drinking water; Even the general cleanliness of the home has improved. Thanks to Dak Achana *(A female FGD participant in from Pith Ototo Women group, Kabuoch Division, Homabay District).*

4.4.5 Incidences of diarrhea among children

The average prevalence of diarrhea reduced to about 19.5percent from the 25 percent which was reported during ETE. This shows a steady reduction from the baseline in which 35 percent of children were suffering from diarrhea. The ETE results show an improvement bringing the percentage lower than that recorded during the KDHS (2003) at 23 percent and lower than the project target which was aimed at 25 percent.

A Focus group discussant views support these findings (see a recount below).

Because of Care (K) we have Latrines which we never had before and we are using them. In addition, we are now washing hands after going to the toilet and due to that Diarrhoea and vomiting are now a thing of the past. We have also been trained on cholera, malaria by the Village Health Promoters. *(a male FGD participant from Asawo SHG, Rusinga Division, Suba District*

4.5 WASEH Component Relevance Effectiveness and Sustainability

4.5.1 Relevance

The WASEH component focused purposely on the needs of its beneficiaries and involved them in the prioritization and implementation of the project. We established that the WASEH component addressed immediate and critical needs in the community previously described as serious in the Baseline report. Prior to the implementation of WASEH, CARE Kenya had conducted a Household Livelihood Security Assessment, which identified low access to water, food insecurity and HIV/AIDS as major social problems requiring immediate intervention.

Project beneficiaries have adopted better hygiene practices such as washing hands after visiting the latrine and proper disposal of children's faecal matter. Project beneficiaries have also learnt how to dry utensils on dish racks and this has helped to improve hygiene standards. Further more people have adopted water treatment practices thus increasing use of safe drinking water.

The WASEH project has improved the quantity and quality of water available to the beneficiaries in the project area. Clean water has been made available to the entire population through the protection of water sources. Many people now have water tanks in their homes; these are often used for harvesting rain water. Water storage has alleviated the extent of scarcity during the dry seasons. Introduction of boreholes as well as pumping and treating water from Lake Victoria has made water accessible to thousands of beneficiaries.

4.5.2 Effectiveness

The WASEH component met its strategic objectives and goal and exceeded most of its targets. There is a significant increase in households that reported access to potable water, increased water safety, construction and use of latrines. For example, the number of

latrines constructed through the project rose from 40 in 2004 to 1240 in 2008. These gains have led to a substantial decline in waterborne diseases such as cholera, previously responsible for high levels of morbidity and mortality among infants and children.

The project has also empowered communities by facilitating mobilization of Central Management Committee (CMCs), Group Hygiene Promoters (GHPs) and Water management groups. CARE Kenya also facilitated capacity building in water management and hygiene promotion.

The evaluation established that communities were responsive to the demands made upon them through out the project period. For example, they recommended individuals to be trained as water artisans and provided food and accommodation for the artisans whenever installations were going on. In addition, land was provided voluntarily for borehole drilling. Communities also complied with the requirements for preparing slabs for water tanks and pit latrines. In the area of hygiene promotion, community hygiene promoters, school teachers and pupils played a crucial role in enhancing child to child hygiene education. The child to child strategy worked well since children would obtain information from school and pass it on to their parents. All these factors contributed to the achievement of project objectives.

A few challenges similar to those encountered in the TASK component were reported. The GoK was not responsive to the requests made by CARE Kenya. Rigid bureaucratic procedures imposed by GoK led to intermittent delays in the implementation process. Furthermore, where cooperation was forthcoming, the Officers had to be compensated for their time.

Low staffing was cited as a major bottleneck that was encountered during the project life. This means CARE Kenya employed very few field staff in comparison with the geographical areas they were meant to cover. This led to staff burn-out which invariably may have affected performance in some areas.

4.5.3 Sustainability

Through the WASEH project, CARE Kenya created a self-sustaining infrastructure through minimal facilitation and capacity building. According to a Key Informant,

> '……the water infrastructure, with the exception of boreholes is highly sustainable. For example the artisans whom we have trained will continue offering services to the community at an affordable fee. We also trained teachers and hygiene promoters who hopefully will continue educating children in the child to child clubs. Furthermore, the Ferro cement and plastic tanks will seasonally be used to collect water. I am confident water scarcity will be a thing of the past in this community" *WASEH Field Officer*.

Capacity building is one of the several ways of ensuring that the benefits accrued from a project are sustainable. As mentioned earlier, there have been adequate trainings on many aspects of the water and sanitation, for instance, artisans have been trained on how to make slabs for latrines. CARE Kenya has built the capacity of Group Health Promoters (GHP) who in turn will continue imparting knowledge on health education. The CMC will continue to ensure that boreholes, springs and wells are managed. In this regard CARE Kenya has promoted the concept of community ownership. By linking distributors of tanks and spare parts with communities, CARE Kenya has created an aura of independence among beneficiaries and a laudable exit strategy. This means that communities can directly source for tanks and any other water accessories on their own. Furthermore, CMCs operate bank accounts where funds for maintenance of water sources are readily available.

The evaluation sought the perceptions of beneficiaries on the sustainability of WASEH after close-out. Results indicate that 75.1 percent had very high hopes that the benefits will be sustained while 23.9 percent felt almost the same.

WASEH: Summary of Key findings

- The role of the Group Hygiene Promoter (GHP) is rated as "good" by more respondents compared to the Central Management Committee (CMCs)
- There has been a consistent increase in number of individuals using water from 'protected' sources
- There are more individuals in the WASEH component accessing water from water tanks compared to those in other components.
- Majority of the beneficiaries have access to potable water within their homesteads
- Majority of the beneficiaries are currently taking measures to ensure safety for drinking water
- Most households have a functional latrine
- There has been a drastic reduction in the incidence of diarrhoea and other water borne diseases

4.6 Conclusions

Empirical findings from this End Term Evaluation indicate that significant achievements have been realized through the WASEH component. The component addressed the

Strategic Objectives, Intermediate Results and Outputs as laid out in the Logical Framework Analysis (LFA) amidst several challenges which were addressed through an in built flexibility of the project design.

In our opinion, the project was implemented by highly qualified staff within an organizational environment that provided all the financial and logistical support required at every stage of project implementation. It is laudable that CARE Kenya utilized a bottom-up approach in the implementation of its project. This implies that beneficiaries were involved in project design, implementation, and design and monitoring. It is evident that CARE Kenya also enjoyed the trust and confidence from the donor (USAID) who allowed flexibility in the implementation of the project. The synergy between the donor, implementer and beneficiaries invariably contributed to the gains made in the TASK component.

The project has supported communities that often survived experienced water scarcity with affordable water infrastructure. Availability of clean water and water treatment technologies has gone a long way to influence standards of living by improving health and general hygiene standards. We are of the opinion that the WASEH component of the DAK ACHANA program will ultimately and positively lower morbidity and mortality associated with waterborne diseases.

We also feel that CARE Kenya's exit strategy of connecting communities with suppliers of water tanks and spare parts in addition to training artisans and management committees will contribute to the sustainability and advancement of gains acquired through the WASEH component.

4.7 Recommendations

The following recommendations identify the WASEH project success factors and suggest their application to future projects.

i) The WASEH project has great potential and should be replicated, by USAID/CARE Kenya and its partners in other parts of Kenya where communities are experiencing scarcity of potable water and poor/weak water infrastructure.

ii) At the design stage, USAID/CARE Kenya and its partners should ensure that the introduction of a particular water technology being considered for a particular geographical location is workable, tried and tested, so that project efficiency and impact is maximized.

4.8 Lessons Learned

Interventions such as communal boreholes and medium size water supply projects e.g. the west Sakwa water supply serves more members of the community including the most vulnerable poor as compared to individual installation of tanks in cost sharing homes.

Beneficiary involvement is critical for successful project design and implementation, particularly for sustainable water and sanitation infrastructure. Nevertheless involving beneficiaries in cost sharing, although enhances ownership can easily deny the most needy members of the community from benefiting as was the case of tanks whereby one needed to contribute Ksh 5000 to obtain a water tank. Hence only members who could raise the money benefited.

Using predominantly local labor, reduces project costs and maximizes benefits and builds local capacity as was the case of protected water springs and latrines developed by the project.

Flexibility in approach ensures effectiveness and efficiency.

CHAPTER FIVE

COMMUNITY SAVINGS MOBILIZATION (COSAMO)

5.1 Description of the COSAMO Component

The COSAMO component sought to enhance increased savings and access to credit from personal savings. The project aimed at creating a savings and entrepreneurial culture to the poor families through training in savings mobilization and credit management, small business practices, increased access to credit and consequent investment in micro-enterprise actiivties such as petty-commerce, and agricultural transformation. COSAMO was founded on the conviction that savings in a group account can be more liquid than investing in livestock or any other disposable assets. Such savings can also be locally transformed to credit without the complications and restrictions of external resources as in the case of banks and MFIs. A strong relationship between COSAMO and agricultural production was established at Baseline. For example, helping farmers to move from subsistence farming to commercialized agriculture requires sustainable increase in savings mobilization and access to credit from personal savings. As identified in the proposal by CARE to USAID the intended beneficiaries of the COSAMO project were "poor, vulnerable households, with little or no capacity for saving income, improve their income levels and invest any surplus income."

5.2 COSAMO implementation design

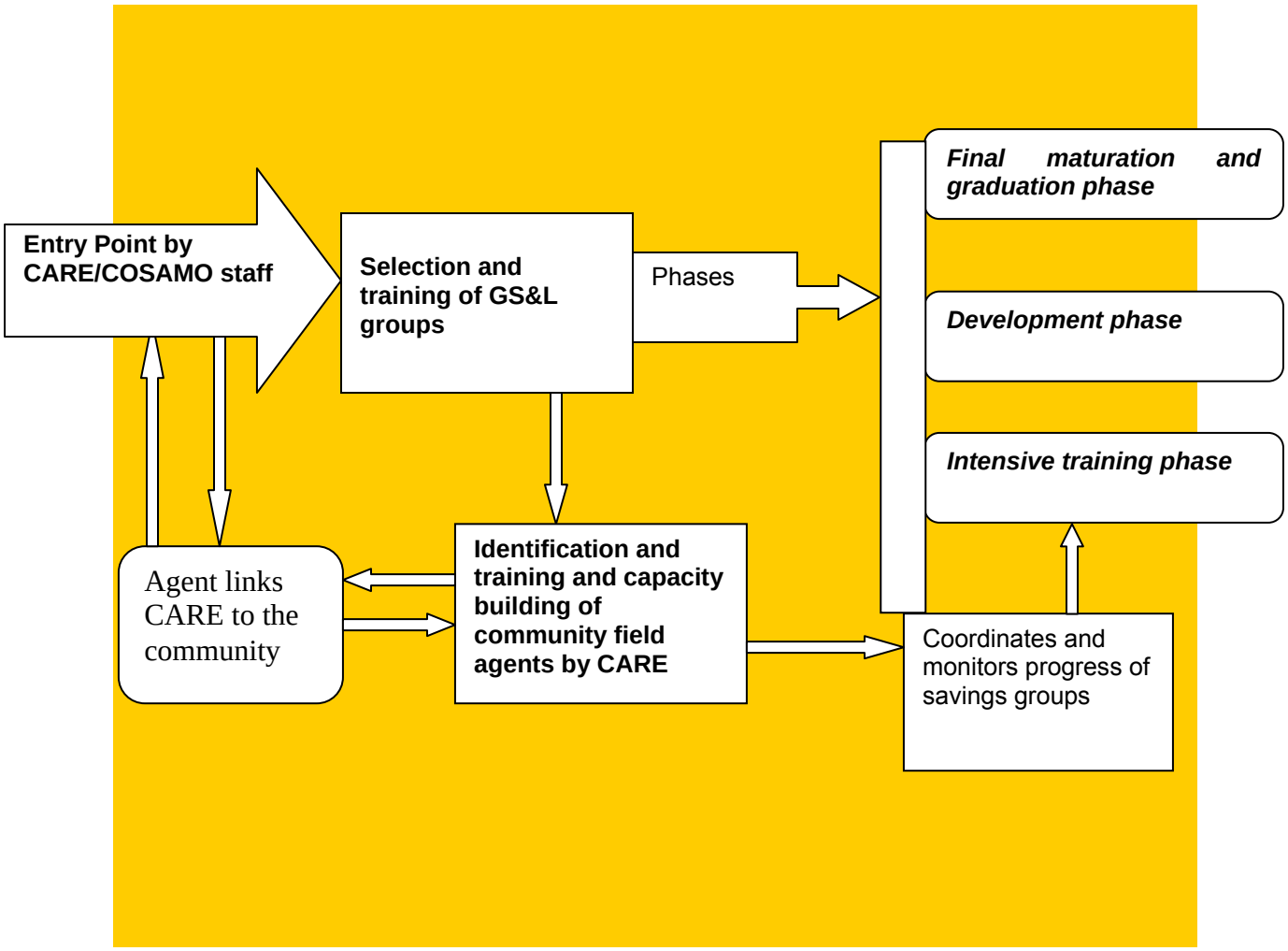
A three-fold process was followed in the implementation of COSAMO as outlined below

Step 1: Selection and training of Community Based Organizations: CARE program staff did awareness creation from the district to location level. The team then mobilized and trained the community in group saving and loan methodology (GS&L). The GS&L groups were trained in individual self screening, group formation and leadership, group fund development and record keeping. In the second year of implementation the project reverted to indirect delivery through community resource persons referred to as community based trainers (CBTs). The staffs supported the development of effective and appropriate monitoring and evaluation systems for CBOs self-evaluation and provide assistance in developing appropriate financial monitoring tools.

Step 2: Training and Capacity Building of community field agents: CARE program staff and the partner community based trainers (CBTs) identified and trained groups on savings and loan. The cbts were volunteers identified and trained as GS&L trainers and replicated the GS&L methodology The cbts usually covered a number of groups in a set area. This arrangement formed the basis of the sustainability for this component.

Step 3: Training and Capacity Building of Savings Groups: The capacity building cycle for saving groups had three different phases.

Figure 5: COSAMO's design



The project was highly focused on the needs of its beneficiaries and took them into account at every step. The project design was based on participatory approaches, by enabling GS&L members to make crucial decisions affecting membership, contributions, savings and borrowing. The project raised community's level of consciousness and discipline through commitment to GS&L expectations. Through capacity building, the groups enjoyed a high degree of independence while the skills imparted could be used to improve the capacity of upcoming groups

5.3 Intermediate Results and Outputs

The main strategic objective for COSAMO component was that by September 2008, the targeted vulnerable households in six districts of Nyanza Province will have increased the average value of their asset base from USD 104 to USD 146. The intermediate results were that by this time savings group members will have collectively saved a total sum of US$ 111,300; savings group members will have access to borrow from a total sum of US$ 148,356 of collective savings and finally at least 1200 of GSL[8] members will have borrowed to invest in new/previous IGAs.

- √ To achieve these results, activities that were envisaged included conducting awareness campaigns with respect to Group Saving and Loans (GSL) groups, facilitate the formation of 720 GSL groups
- √ Train 720 GSL groups on the operation of GSL savings and loans systems and also train 180 groups on business management skills using the select, plan and manage (SPM) approach for enhanced ncome-generating activities.

Below is a discussion on actual project achievements.

5.3.1 Improved patterns of savings by GS&L Members

As shown on the table below, the practice of saving part of an individual's income is common even among non-COSAMO respondents. Overall, 85 percent of the respondents reported that they save part of their income. During the mid-term evaluation, about 70 percent of the respondents reported saving part of their income. Thus this denotes a significant increase of 15 percent over the past four years.

Evidently GS&L is the most popular means of savings utilized in the program areas. During the mid term evaluation the proportion of respondents saving with GS&L was higher (57.5 percent). This implies significant proportions of beneficiaries have diversified to other means of savings. However, significant proportions save with banks and merry-go round groups as shown on the table below. The least commonly used means of saving are cooperatives and Micro Finance Institutions (MFI's)

[8] GSL=Group Saving and Loans

Table 35: Percent distribution of respondents by means of saving money

Characteristic	Description	Frequency	Percent
Distribution of respondents savings practices **n=528**	Respondent saves part of her/his income	450	85
	Respondent does not saves part of her/his income	78	15
Distribution of respondents by means of savings used **n=528**	Saves with bank	132	25.0
	Saves with merry go round	107	20.3
	Saves with cooperative	15	2.8
	Saves with GS&L	192	36.4
	Saves with MFI	29	5.5
	Assets-based savings	94	17.8
	Saves with the traditional bank	71	13.4

Characteristic	Description	End term Frequency	End term Percent	Midterm Percent	Baseline Percent
Distribution of respondents by source of start up capital	Savings	279	**53.0**	**43.1**	**
	Loan	54	10.0	6.0	9.0
	Donation from family	91	17.0	18.5	25.0
	Friends	21	4.0	4.4	**
	Sales from farm produce	**	**	**	**
	Others	**	**	**	**

NB. Baseline data not available

Findings show that the average household savings with GS&L is Kenya Shillings 10 336.90.

Table 36: Average current households savings with GS&L (2004-2008)

Frequency	Minimum(Ksh)	Total GS&L savings(Ksh)	Average current households savings with GS&L(Ksh)
			10,336.90
192	100	1,984,684.00	

NB. Baseline and MTE data not available

5.3.2 Involvement in income Generating Activities (IGAs)

Majority of the respondents 343 (65.0 percent) were involved in IGAs during program implementation. Asked why they were involved in IGAs, majority indicated that IGAs are a means of raising funds for contribution to the GS&L schemes and also as a means of investment.

Table 37: Source of start up capital

Characteristic	Description	End term		Midterm	Baseline
		Frequency	Percent	Percent	Percent
Distribution of respondents by involvement in IGAs	Has been involved	343	65	**	**
	Has not been involved	144	27	**	**
Distribution of respondents by types of IGAs	Manufacturing	23	4.0	11.6	19.0
	Transportation	8	2.0	**	**
	Service	70	13.0	12.5	10
	Farming	**410**	**78.0**	14.2	-
	Trade	**	**	65.3	**59.0**
	Others	5	1.0	**	12

Asked to name the source of capital for their IGAs, majority (53.0 percent) mentioned personal savings while 17 percent obtained capital from family members. Fewer respondents obtained capital by taking loans and also borrowing from friends. Evidently personal savings have remained the major source of start up capital for IGAs. There is a slight increase in the proportions reporting this source since MTE (43.1 percent) compared to ETE (53.1 percent)

As shown on the table below, majority 78.0 percent are engaged in IGAs related to farming, followed by service and manufacturing. Evidently, there is a significant increase in the number of individuals engaged in farming for income generating since the mid-term evaluation was conducted in 2004.

Table 38: Types of IGAs

This implies that communities are increasingly exploiting farming opportunities to raise their incomes. Other sources include the merry go round, pension, and sales from assets.

In the FGDs, we established a strong relationship between GS&L and TASK. A discussant reiterated the synergy existing between COSAMO and TASK

COSAMO members practice TASK activities too

….I have used part of my savings to invest in farming tomatoes and butternuts. I sell the produce and reinvest some of the proceeds in COSAMO. By doing this, my savings have increased overtime. Furthermore, my family has adequate nutritious foods all the time……Female, 42 years, Alendo Women group, Migori

This implies that technologies acquired through the TASK component have been adopted by non-TASK members. To a large extent, this explains why majority of GS&L members are practising farming as an IGA. The proportion of respondents accessing capital through savings has increased by 10 percent since MTE. This demonstrates achievements made in the COSAMO component.

5.3.3 Adjusting to Beneficiaries' Needs

To solicit beneficiary input, the project utilized a participatory approach where needs assessment was done by GS&L groups members. Community members were given an opportunity to decide how they wanted their groups organized and the size of membership thereof. Initially, CARE had proposed 10-15 members but communities opted for a maximum of 35 members seemingly, in order to benefit more households. Some FGD participants reiterated that the suggestion to have more members in a group was aimed at benefiting more people in the community especially women. Prior to project inception, the most popular means of savings especially among women was 'merry-go-round'[9]. Members do not accrue any interest from 'merry-go-round' initiatives. An FGD participant supported this position:

…we foresaw the need to have more members joining groups...the more the members the higher the contributions…and this meant that more people would benefit from the GS&L. This perception has popularised COSAMO in our communities over time….Female, 34years Suba, ASAWO Group

5.3.4 Participation in COSAMO

Out of 528 respondents, 193 (37.0 percent) were affiliated to COSAMO as beneficiaries. Being a COSAMO beneficiary means that an individual belongs to an organized community group whose responsibility is to mobilize members to make monthly

[9] An informal cash contribution system whereby monthly contributions are used to purchase utensils or other domestic tools for one member at a time.

contributions into a savings kitty. It takes six months from inception to maturation. The magic in GS&L was captured through FGDs where participants expressed their satisfaction by terming the COSAMO initiative as empowering, specifically due to its ability to transform beneficiaries' income base as well as creating an environment where individuals learn to make financial decisions.

From merry go round to building capital

Mrs Owino is proud to be a member of a GS&L. She started saving part of her income way back in 2005 through the merry go round schemes. Unfortunately, these schemes are neither pro-profit nor pro-interest. The amount of money that one can borrow from such schemes is negligible. Lack of discipline among members eventually leads to collapse of several merry go rounds in a year.

Mrs. Owino finds COSAMO satisfying in that each member is bound by the group constitution and members can borrow and pay at a fixed interest. This leads to subsequent growth in funds. At the time of liquidations, members take home significant amounts of money, such would not be realized through merry go round…(reconstructed) *Mrs. Ouma, 40 years, Alendo Women Group, Migori*

The transition from pain to gain is characteristic of most development projects in developing countries. At the initial stages, projects always face a risk of rejection due to suspicions and economic inabilities. Such barriers can emerge at the individual, community of societal levels (see ecological model WHO 2002).

5.3.5 Extent to which COSAMO objectives have been accomplished

All the targets set out in the logical framework for COSAMO were achieved and exceeded except the number of GS&L groups established and trained. The project aimed at establishing 720 GS&L groups, increasing the number of participants GS&L activities to 6000, increasing the cumulative savings mobilized to 8,106,524.37, increasing the cumulative loans given out to 10,808,699.16, training 180 groups on SPM to potential and existing income generating activities. Below is a description of achievements made by September 2008.

5.3.5a GS&L groups formation

Following initial consultations at inception, the community preferred larger groups of 10-25 against the membership proposed by CARE of 10-15 members. This shift resulted in fewer but larger groups being established. By the time of project close out, a total of 521 GS&L groups had been formed compared to 251 groups that existed in 2006 *(note. there were no GS&L groups at Baseline survey).* Even though a shortfall of 199 groups was recorded, the number of members reached exceeded the target because of the large size the groups.

5.3.5b Participants involved in GS&L

The number of individuals saving in self managed community savings and loans groups increased from 4,082 in FY 06 to 6,939 in FY 07 and 10,260 in FY 2008 against a target of 6000. The significant growth in membership of the GS&L was attributed to increased interest by communities, especially women in joining and participating in GS&L groups and the use of community based trainers. Overall, distribution of GS&L members by sex indicates that women comprise over 78 percent (6669) of total membership. COSAMO has provided an opportunity for women to prove their self-worth in a community where gender relations relegate women to a lower status both economically and socially.

5.3.5c Mobilization of cumulative savings

Collective cumulative savings increased from USD$ 97,190 in FY 06 to USD$ 231,410 in FY 07 and to USD$ 337,900 as at end of the project, far beyond the target of USD$ 111,000. This achievement is attributed to the increased interest among community members having realized the benefits of the methodology and adoption of multiple savings, a practice where members are allowed to save more than the minimum amount stipulated in the group constitution and the engagement of group members in Income Generating Activities (IGAs) by investing loans accessed from their groups.

5.3.5d Cumulative loans given out

Loans disbursed by the GS&L groups increased from USD$ 191,740 in FY 06 to US$ 454,570 in FY 07 and finally to USD$ 792,100 far beyond the target of US$ 148,360.

5.3.5e Groups trained in Selection, Planning and Management (SPM)

The GS&L groups trained in Selection, Planning and Management (SPM) increased from 20 in FY 06 to 72 in FY 07 and 161 in FY 08. The target of 180 was not achieved bringing in a shortfall of 19 groups. The total number of people trained in business management skill was 3,542.

5.3.5f GS&L group members practicing IGAs

GS&L group members practicing IGAs increased from 2,829 in FY 06 to 5,296 in FY 07 and 6,109 in FY 09 far beyond the target of 1200. This tremendous achievement is largely attributed to the availability of capital through loans from the GS&L groups.

The sustainability of the component has been ensured through training of community own resource persons (CORPS) commonly referred to as cbts for enhanced community ownership of the methodology. The SPM training has also ensured prudent management of IGAs hence making them sustainable. All these have ensured that the project meets it's SO "*increased assets base at household level*". This component therefore has ensured food security through availing savings and loans at households' level for either direct purchase of food items and/or engaging in IGAs resulting in upward income trends.

COSAMO accomplished its objectives and goal, and exceeded most of its targets. It has succeeded in increasing household income by enabling individuals to access appropriate financial services, especially micro-savings thus breaking the cycle of poverty. The project has empowered women, men and youth in taking control over their incomes through savings and investments. The project has increased the income and confidence of beneficiaries particularly; it has given women a higher status within their households and in the community. The project has given women and youth outlets for investment, a trend which was non-existent prior to project implementation. The training and capacity building provided to group members and field agents will continue to be beneficial to new upcoming groups. It is also notable that there is a huge shortfall in one of the targeted results. This is because the project operated on very thin staffing, an issue that could have been averted by employing more staff.

5.3.5g Benefiting from loans

Further findings indicate that majority of the respondents (56 percent) had taken a loan in the past two years. As shown on table below, GS&L provided most of the loans compared to other financing institutions. There has been a systematic increase in the number of individuals in the program areas sourcing loans through GS&L. This implies GS&L has enabled communities to save and also borrow from collective savings.

Table 39: COSAMO and Loans

Characteristic	**Description**	**Frequency**	**Percent**
Distribution of respondents by taking loan **n=528**	Had taken loan	297	56
	Had not taken loan	231	44
Distribution of respondents by source of loan **n=528**	Collective (GS&L)	173	33.0
	Bank	19	4.0
	Cooperative	24	5.0
	MFI	55	10.0
	Money lenders	26	5.0
Distribution of respondents by perception on whether loan was of benefit **n=528**	Loan was beneficial	291	55.1
	Loan was not beneficial	2	0.4
Distribution of respondents by perception on level of change savings have had on their lives **n=528**	High	162	30.7
	Medium	30	5.7

5.4 Utilization of loan

The study sought to find out how loans are utilized. As shown on the table below majority used their loan money to expand their business or trade (41.4 percent), followed by education (16.2 percent) and expenses related to domestic purposes.

Table 40: Distribution of purposes for taking of loan(s) by the households

Purpose	**Frequency**	**Percent**
Buying farm inputs e.g. seeds & fertilizers	14	3.1
Business expansion/trading	187	41.4
Buying livestock/poultry	29	6.4
Domestic needs e.g. food stuff/cloths etc	63	13.9
Educational need e.g. school/college fees, uniforms/books etc	73	16.2
Paying medical bills	12	2.7
Buying land	2	0.4
Buying household assets e.g. Furniture	6	1.3
Buy farm implements e.g. Oxen plough	4	0.9
Offset previous loans	1	0.2
Start a business	6	1.3
Land preparation/farming	18	4.0
House construction/improvement	11	2.4
Funeral expenses	2	0.4
Transport	11	2.4
Total	**439**	**97.1**

5.5 Liquidation and investments

At maturation, GS&L groups go through liquidation and members share out the accumulated savings plus interest earned. As shown on the table below, there is a significant improvement in the total amounts of money received by individual members upon liquidation since 2006. At least 73.4 percent reported that they receive over Ksh. 2000 upon liquidation compared to 17.0 percent in 2006. This represents a 56 percent increase of over a period of four years.

Table 41: Liquidation and investments

	End term		Mid term
	Frequency	Percent	Percent
0-500	10	5.2	20.0
501-1000	14	7.3	23.2
1001-1500	17	8.9	15.2
1501-2000	10	5.2	6.1
over 2000	141	73.4	16.7
Total	192	100.0	-

The study also sought to find out how GS&L members utilize their benefits. Findings indicate that majority of the beneficiaries used the money to buy livestock (re-investment), followed by domestic and school related expenses as indicated on the table below.

5.6 Ownership of household assets

Results indicate that the estimated total values for most household assets have gone up. Comparative analysis indicates an upward trend in the average value of assets per household. For example, in the baseline the average value of assets per household was US$104, this went up to USD 126 by MTE and USD 333 by end term evaluation. There are instances where the number of assets recorded in the ETE is smaller than in the MTE but the actual value of the asset has appreciated in the market giving a higher total value. However from the FGDs with COSAMO groups there were reported cases that loans and capital from liquidation were used to acquire household assets. See the table below for distribution of household assets.

Baseline					MTE				ETE			
Type of asset	**Number**	**Percent**	**Estimated value total (Kshs) In" 000"***	**Mean (Kshs)**	**Number**	**Percent**	**Estimated value total (Kshs) In" 000"***	**Mean (Kshs)**	**Number**	**Percent**	**Estimated value total (Kshs)**	**Mean (Kshs)**
Motor Vehicle	12	1.7	1,800	**200,000**	8	.21	1,200	**150,000**	7	0.2	2,212,000.0	**316,000.0**
Television	97	16.9	485	**5,330**	83	2.14	456	**5,500**	124	3.2	1,084,500.0	**8,746.0**
Radio	658	81.8	987	**2,248**	425	10.95	4,532	**10,700**	404	10.3	1,037,609.0	**2,568.3**
Motor cycle	19	2.6	1,520	**108,571**	16	.41	800	**50,000**	17	0.4	1,147,000.0	**67,470.6**
Bicycle	400	60.5	1,000	**3,077**	289	7.45	2,846	**9,900**	294	7.5	1,417,650.0	**4,838.4**
Gas/electric cooker	88	8.8	132	**2,809**	10	.26	41	**4,100**	23	0.6	601,000.0	**26,130.4**
Cattle	1902	72.9	13,314	**33,964**	383	9.87	2,587	**6,800**	362	9.2	22,425,350.0	**61,948.5**
Goats	1600	60.3	1,920	**5,926**	315	8.12	3,013	**9,600**	316	8.1	3,525,950.0	**11,158.1**
Sheep	833	31.7	1,440	**8,470**	158	4.07	2,190	**13,900**	122	3.1	823,900.0	**6,753.3**
Pigs	9	1.3	27	**3,857**	4	.10	8	**4,000**	1	0	800.0	**800.0**
Donkey	150	13.8	375	**5,067**	57	1.47	532	**9,300**	56	1.4	580,100.0	**10,358.9**
Boat/canoe	235	9.5	4,700	**92,157**	19	.49	200	**10,500**	23	0.6	1,253,450.0	**54,497.8**
Poultry	6413	88.1	1,283	**2,712**	483	12.45	3,885	**8,040**	445	11.4	2,427,157.0	**5,454.3**
(Utensils)Nyuolber1	1078	55.3	862	**2,903**	247	6.36	1,777	**7,200**	340	8.7	30,690,076.0	**90,264.9**
Serving bowls	1432	66.8	143	**400**	354	9.12	3,006	**8,500**	198	5.1	505,500.0	**2,553.0**
Sofa sets	546	57.7	1,920	**3,522**	391	10.07	3,554	**9,100**	241	6.2	746,320.0	**3,096.8**
Wall unit/side	250	34.5	750	**4,054**	134	3.45	882	**6,600**				

Table 42: Distribution of Assets Owned, Prices and Estimated Values

It is evident that significant investments have been made towards the purchase of household utensils, followed by livestock and sewing machines. The fact that majority of COSAMO beneficiaries were previously engaged in merry go round before graduating to GS&L explains why huge investments have been made in purchase of utensils (women tend to put priority in purchasing cutlery and other utensils). Comparatively, there is a notable increase in livestock investment since MTE.

5.7 Future Monetary Impacts

It is clearly evident that COSAMO has improved individual and household incomes. We asked GS&L members how they envisioned themselves in the next five years and all whom we talked to were optimistic that benefits are likely to skyrocket the next five years – through 2013.

Projecting future activity requires judgments and assumptions about the sustainability of project activities and likely growth or decay rates over time. The primary determinants of growth are the number of savings groups and the amounts of money that is changing hands. There is no doubt that members do not require external support to maintain the discipline required in GS&L. All the established groups have a constitution which helps shape group behaviour and commitments.

The field agents will continue to supply the necessary skills to new emerging groups. These individuals live in the communities and are easily accessible. The project's evaluation shows that most GS&L are already making entry into the more stable formal finance institutions through linkage. By doing so, the GS&L are expanding their opportunity for savings and borrowing. This is a significant development.

5.8 Non-Monetary Benefits

The project also reported non-monetary benefits for its beneficiaries. According to the internal assessment reports and interviews with project staff almost all of the COSAMO beneficiaries said that they contributed more to household decision-making and that their partners, in-laws and friends respected them more. They said that they now have greater control over their own incomes, are more self confident, and envision a brighter future for themselves. Increased incomes especially for women's contribute to more children attending school, better family nutrition and comfort. The evaluators' visit to the project sites found that women used their extra incomes to buy basic household items such as utensils, livestock and furniture.

5.9 Respondent's perception on the future of GS&L

Majority (99.9 percent) of the respondents would recommend COSAMO to someone else while 75.6 percent were very definite that COSAMO activities would continue without support from CARE Kenya.

The project has produced quantifiable monetary benefits for beneficiaries (women, men and youth). Based upon available data and assumptions about the level of pre-project savings patterns and mean asset value, we conclude that COSAMO has contributed to increasing the income of all of its targeted beneficiaries, especially the women who were majority of the beneficiaries. The project has also brought significant social changes to their beneficiaries' lives. Women are

more confident in decision making regarding money, they are better respected at home, and they are improving the well being of their families.

5.10 Sustainability

COSAMO created a sustainability plan in its original design that centered on the independence of GS&L members. After the initial capacity and skills based training, the groups were left to manage their own affairs with minimal assistance from a field agent who is also a member of the community. At maturation, the groups are completely independent of external support and a particular group can decide to expand thus allowing new members to join or even break up into several new groups. The field agent is always at hand to offer technical assistance where need be.

This flexible self-driven cycle is what ensures the continuity of GS&L in the absence of external support. The evaluation established that the GS&L groups have confidence in the money business and they will be pursuing the COSAMO model long after close out by CARE Kenya. These sentiments were supported by
The Program Manager with the views outlined below:

> ….we have trained field agents who are readily available to equip upcoming groups with skills. This ensures continuity of the GS&L groups, Members meet regularly to plan events, share information, collaborate on orders, and plan expansion of their businesses. We assume that the meetings will continue as long as they find GS&L beneficial… *Program Manager, Dak Achana*

GS&L is geared toward economic empowerment of poor women and youth, while at the same time altering gender relations for enhanced social development. GS&L has empowered many women in a manner that they can raise healthy families, pay school fees for children who would have previously dropped out and has improved livelihoods in general. The evaluators learnt that GS&L members had began to take the model further by linking beneficiaries with MFIs to obtain micro finance services.

Although not deliberately targeted, findings show that women are majority of COSAMO beneficiaries and indeed of the overall Dak Achana Program. While addressing vulnerability and livelihood issues at house hold level, the needs of women must be addressed. Women perform multiple gender roles at reproductive, productive and community management levels, thus they are the primary stakeholders in community development programs. As discussed in effectiveness and impact, through Dak Achana, women have realized significant monetary and

social benefits from their participation in the program. Their incomes have grown, as did their status in their families, they have discovered capabilities and skills they did not know they had.

The success of COSAMO project has attracted more funding from Financial Sector Deepening of DFID, for a scale up of the methodology and Barclays Bank. The methodology is currently being implemented by a number of international and local non governmental organizations in the country; like Plan International in Kenya, and Catholic Relief Services (CRS).

Some women have started operating small to medium scale business. The accruing incomes are used to improve the standards of living at family level and for reinvestment in GS&L. With the exception of transport business, there are more women engaged in different types of income generating activities compared to men. Results further indicate that there are more women female headed holds that are currently saving with various institutions. Among the women currently saving, majority are doing so with merry go round, followed by GS&L and traditional banks.

Overall distribution of households saving part of income by sex indicates that more women (69.3 percent) saving compared to 31.0 percent men. The project has primarily benefited women by increasing their incomes, mobility, skills, self-confidence, and family respect.

COSAMO*: Key findings*

- Women have learnt how to save and have gravitated from non-profitable activities such as merry go rounds to GS&L and IGAs
- Women have gained confidence in handling money matters and have won respect and admiration in the community thus lowering incidences of domestic and gender related violence
- With higher incomes, more girls are being sent to school and colleges
- Proceeds from savings upon liquidation and sale of agricultural products are used in IGAs
- Through accumulated savings communities have increased the asset base during DAP II. Most common assets include livestock, agricultural products and household goods
- Savings are also used to pay for health, education, food and water
- Training GS&L groups on saving methods
- Capacity building of field agents to ensure sustainability

5.11 Conclusions

Evidently, the component has addressed the Strategic Objectives, Intermediate Results and Outputs as laid out in the Logical Framework Analysis (LFA). The evaluation has established that this component has achieved significant mileage in enabling communities to adopt good practices in the area of saving and enhancing income levels.

We established that women formed majority of the beneficiaries in this component. Previously, women organized around informal groups that were not focused on generation of profits. These groups formed an entry point for COSAMO and were drastically transformed during the project life. As a result, beneficiaries asset base have gone up while facilitating financial independence.

Recommendations

The following recommendations identify the COSAMO project success factors and suggest their application to future projects.

iii) The COSAMO project has great potential and should be replicated, by USAID/CARE Kenya and its partners in other parts of Kenya

iv) Group members should be trained in entrepreneurship to enhance there choice of investment and therefore generate more income which can again be saved.

v) Need to create linkages between Banks and the GS&L group therefore absorb the excess un borrowed money and reduce chances of misuse

Lessons Learned

- With little facilitation, communities can increase their asset base through group saving
- Group savings are instrumental in altering gender relations in the community by empowering women to take control of their finances and investment.

Use of community Based Trainers (CBTs) cost effective and has multiplier effect

- .

Group Savings and methodology is a good tool for resource mobilization for community participatory development.

CHAPTER SIX

HIV/AIDS LIFE INITIATIVE

6.1 Description of the HIV/AIDS LIFE Component

HIV/AIDS LIFE Initiative Project's strategic objective was that by September 2008, the nutritional status of targeted 5,000 orphans and vulnerable children (OVC) in the project area will have improved. For the purposes of this project, orphans were defined as children less than fifteen years of age who have lost either one or both of their natural parents. The project focused on reducing the impact of HIV/AIDS by improving the food security and nutrition, food availability and utilization by OVCs and households affected by HIV/AIDS. However, to eliminate possible stigma all OVC were admitted without necessarily chacking if there were HIV positive. A total of 6178 OVC were reached against the 5000 targeted. . In institutions, a monthly ration of 6.25kg of Corn Soy Blend (CSB) and 1 liter of vegetable oil was provided per OVC whereas in caregiver (foster) households, the same ration was for 1-3 OVC. The component is implemented through partnerships with local CBOs and institutions.

6.1.1 HIV/AIDS –Life project implementation and Expected Achievements

The project linked up with groups who were working with OVCs before CARE came in. These groups had already identified the children in need of support. The project built on the existing capacity of CBOs and guardians in order to take better care of OVCs.

6.2 Intermediate results and outputs

Data was collected on height, weight, age and sex of the under-five children. This was done in all the districts where the project was implemented. Flagging of a large amount of data could be associated with the fact that the children were mainly under care takers who could not give the exact dates of births of the children.

Three indices, Weight-for-age, Weight-for-height and Height-for-age were computed to reflect different but interrelated aspects of nutritional status for the HIV-AIDS orphans whose measurements had been taken in order for their post-intervention nutritional status to be determined. The evaluation also looked at the distribution of the nutrition supplements. Further we assessed the efficiency and effectiveness of the systems in place.

6.2.1 Z-Scores for Weight-for-age, Weight-for-height and Height-for-age

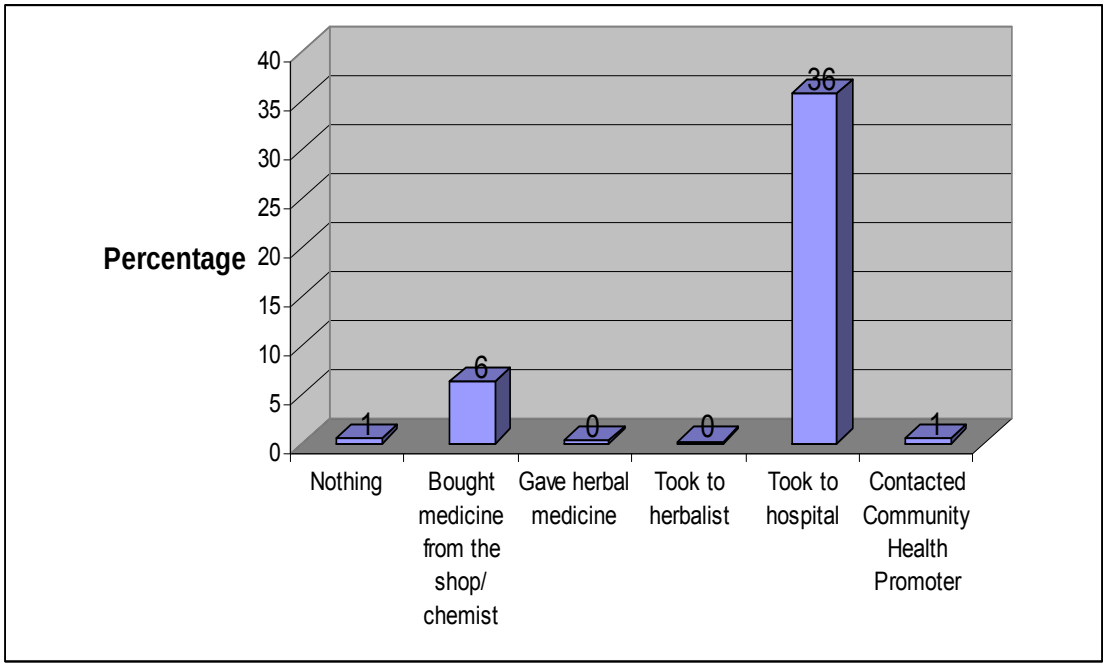
At closeout, the proportion of children who were wasted was approximately 15 percent compared to 14.3 percent at MTE and 13.3 percent at baseline. Apparently 12 percent of the children were underweight compared to 18.6 percent who were underweight at MTE and 19.1percent at baseline. This means that the project did not comprehensively reduce wasting and stunting probably because of the high increase in the number of OVCs.

6.2.2 OVC Morbidity levels

A reduction of 22.8 percent in the morbidity levels among the infants at ETE was noted compared to 26 percent at MTE. This baseline morbidity was higher with 39.5 percent of the households reporting morbidity among children in the last one month prior to the study. This means that a significant reduction in morbidity was realized during the project implementation period.

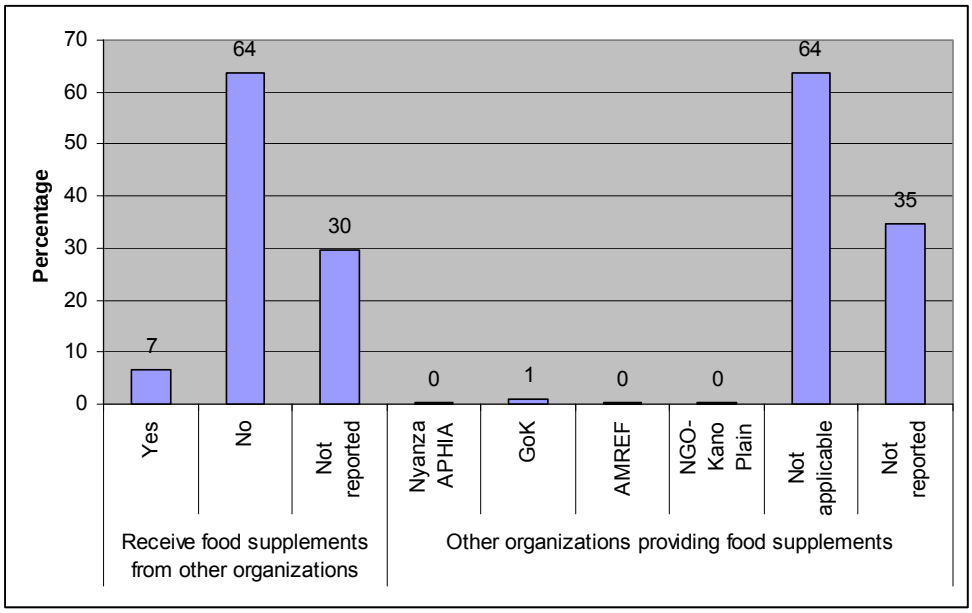
Respondents were asked to state the measures they took whenever a child fell sick. Results indicate that majority of them took the children to hospital while at least treated the child with over the counter medicine denoting an improvement in the health seeking behaviour compared to baseline.
Results are shown on the figure below

Chart 4: Measures taken the last time the child fell sick



6.3 Food Distribution

The project offered non-emergency humanitarian assistance such as the provision of oil and flour to reduce the burden from guardians and other individuals caring for OVC. Food supplements given to guardians were meant to assist OVC below five years. Results indicate that despite the fact that other organisations were working in the area, majority (90percent) were receiving food supplements from CARE. Only 7 percent received food from other the GoK.



The food distribution mechanism was efficient and effective since caution was taken not to keep the food in the central depot for long, therefore reducing the possibility of theft and contamination. In addition, only a few but decentralized points existed, this facilitated easier distribution. The use of stock control cards also ensured that food is given to the right person. Such measures prevented corruption and reduced rigidity in food distribution.

Improvement in the food security and nutritional status for orphaned and vulnerable children and households through provision of food commodities was made more efficient by linking up with the local administration, working with MoH and Children's department. In our opinion these institutions complemented HIV/AIDS Life initiative significantly.

6.4 OVC body conditions

Findings revealed that most of the households (92.2 percent) have noticed differences on the health conditions of the children receiving food supplements. Accordingly, 74 percent reported that children who use food supplements look physically strong, 24 percent reported that the frequency of sickness among children had reduced while only a small proportion (2.1percent) reported deterioration in health among the OVCs receiving food supplements.

6.5 Information sources

Findings show a 2.7 percent increase (from 83 percent at MTE to 85.7 percent at ETE) in the number of respondents reporting to have some information on 'the rights of children to care and

support'. The frequently reported sources of information include Radio (41percent), Government Health worker (24 percent), CARE staff (18 percent) and school teacher (15 percent).

6.6 Children's Rights

At ETE the right to food by children was cited by majority of the respondents (78 percent) and this was 12.5 percent drop from 90.5 percent at MTE. Other reported rights of children include right to education (70 percent), right to clothing (60 percent), right to health (50percent) and right to shelter (45 percent).

6.7 HIV/AIDS LIFE Component Relevance Effectiveness and Sustainability

6.7.1 Relevance

The HIV/AIDS LIFE project has made significant improvements in OVC health through provision of food supplements and health education on the general care of OVC. The evaluators are of the opinion that food supplements also contributed to the general health and well being for the whole family where an OVC was being supported. CARE Kenya promoted growing of supplementary food crops through kitchen gardens and this ensures sustainability. Prior to the intervention by CARE Kenya stunting and wasting were prevalent among target OVC. Inadequate supply of potable drinking water also made the OVC vulnerable to water borne and water related diseases. All these issues were addressed through the HIV/AIDS Life and WASEH components. Empirical findings indicate significant reductions in stunting and wasting. A steady improvement in under 5 Z-Scores for Weight-for-age, Weight-for-height and Height-for-age, these are major indicators of the relevance of the HIV/AIDS LIFE initiative.

6.7.2 Effectiveness

The HIV/AIDS Life initiative component met its strategic objectives and goal and exceeded most of its targets. The evaluation established a steady improvement in under 5's Z-Scores for Weight-for-age, Weight-for-height and Height-for-age. The initiative has also contributed to a decline in morbidity and mortality among OVC as a result of improved and increased awareness on nutrition and food sufficiency through education on kitchen gardening. CARE Kenya built the capacity of CBOs and other institutions with skills on how to detect malnutrition. Some training was done on effective means of distributing supplementary rations.

6.7.3 Sustainability

Several measures were put in place to ensure the sustainability of the HIV/AIDS- life component. This included the training of the caregivers on kitchen gardening, thus enhancing self sufficiency in the production of vegetables. Introduction of high nutritional value crops such as butternuts and green grams through the TASK component will continue to avail foods that are rich in proteins and minerals. We also established some caregivers are also beneficiaries of TASK and COSAMO components. For those in COSAMO, group savings can be used to purchase food for OVC under their care. The exit strategy is sustainable since the HIV/AIDS Life initiative was formally handed over to APHIA II Nyanza, that is currently implementing a long-term food supplementation program in the Dak Achana program sites.

One major threat to sustainability is that the information provided in the trainings may not be implemented due to lack of resources by communities, thus the full benefits of the trainings may not be realized.

HIV/AIDS Life Initiative: ***Key findings***

- A steady improvement in under 5's Z-Scores for Weight-for-age, Weight-for-height and Height-for-age
- Lower morbidity and mortality among OVC
- Improved nutritional status among OVC and their families
- Increased awareness on nutrition and self sufficiency through education on kitchen gardening
- CARE Kenya built the capacity of CBOs and other institutions with skills on how to distribute supplementary rations

Conclusions

Empirical findings from this End Term Evaluation indicate that significant achievements have been realized through the HIV/AIDS Life initiative. The component addressed the Strategic Objectives, Intermediate Results and Outputs as laid out in the Logical Framework Analysis (LFA).

In our opinion, the project was implemented by competent CBO's in conjunction with CARE Kenya to alleviate morbidity and mortality among OVC. Trusting CBOs to undertake the identification of households with OVC and to distribute food is a strategy that demonstrates the willingness of CARE Kenya to entrust social responsibility to beneficiaries. We learnt that often food distributors were accused of malpractices, however CARE Kenya's stepped in to capacitate stakeholders on how to avoid and resolve conflicts.

We strongly feel that CARE Kenya's exit strategy of handing over HIV/AIDS life initiative to APHIA II Nyanza will ensure continued support to OVC.

Recommendations

The following recommendations identify the HIV/AIDS Life initiative project success factors and suggest their application to future projects.

Considering that the number of OVC in the country is on the increase, it is imperative that USAID/CARE Kenya and its partners continue to support such projects in the future

Lessons Learned

- Nutritional support should go hand in hand with provision of other basic needs such as medical support, clothing etc. to ensure all round improvement in the quality of life for the OVC.
- It is difficult to adequately meet the needs of OVC within a family environment without giving some support to the caregiver's family
- For tangible impacts, Orphaned and Vulnerable Children initiatives need to be integrated with other livelihood projects.

CHAPTER SEVEN

FOOD FOR WORK (FFW) COMPONENT

7.1 Introduction

The Food for Work (FFW) is a flood mitigation project aimed at reducing the number of people affected by floods in the plains adjacent to Lake Victoria through which River Nyando flows into the lake. These areas are prone to flooding whenever the area or the highlands west of the Rift Valley receive above average amounts of rainfall, both during short and long rains.

The Food for Work (FFW) component blended TASK, WASEH and COSAMO components to increase both food availability and accessibility by concentrating on improving productivity of small-scale community owned irrigation systems. The activities under this component aimed at de-silting canals and earth pans to enhance water retention for future use and training farming households on sustainable use of irrigation water.

The baseline study reported that the floods in Nyando District destroyed bridges, roads, water supplies and dykes. The effect was severe because it interrupted the lives of many people in the area. Due to the destruction of water supplies, there were increased cases of water borne diseases such as dysentery and typhoid among the people. It also led to acute shortage of food in the months of July and August. Estimates obtained from the Kenya Red Cross-Kisumu during the baseline survey indicate that at least 7525 persons had been affected by floods between 2000 and 2004. Mortality stood at 31 deaths during this period.

The Food for Work (FFW) project therefore aimed at reducing the number of people displaced by foods in the area by at least 25 percent by the end of the project period in 2008. CARE-Kenya's strategic objective five aims at providing functioning canals, irrigation and other public infrastructure restoration in order to provide reliable and safe services to flood- affected communities in Nyanza province.

7.2 Beneficiaries and their Needs

The Food for Work (FFW) Component increased both food availability and accessibility by concentrating on improving productivity of small-scale community owned irrigation systems. In addition, de-silting canals and earth pans to enhance water retention for future use and training farming households on sustainable use of irrigation water enhanced these achievements. As a result, produce from the irrigation schemes for both domestic use and market access increased markedly. It is also evident that FFW blended with TASK, WASEH and COSAMO to ensure sustainable livelihoods.

7.3 Implementation methodology

Community members, most of whom were women, worked on specific days and were compensated for their labour through food rations. For a day's work 2 kg of pinto beans /split

peas and 0.5 liters of oil was paid. This translated into Ksh. 150 equivalent to a day's manual labor wage. In cases when oil was missing beans /peas ration was doubled to compensate for the oil.

CARE partnered with Victoria Institute for Research on Environment and Development (VIRED) International in Kisumu and Nyando through a sub granteeship arrangement to manage the supervision of labour and food distribution process.

7.4 Selection Flood Control Committees (FCC)

To facilitate the operations of the FFW project the community elected Flood Control Committees (FCC) in each location. Initially, the responsibility for committee selection was given to clans but emerging inter-clan conflicts forced VIRED to source committee members from sub-location level as opposed to clans. The committees were charged with the responsibility of allocating work to community members. The committees reported to the Divisional Disaster Management Committee (DDMC).

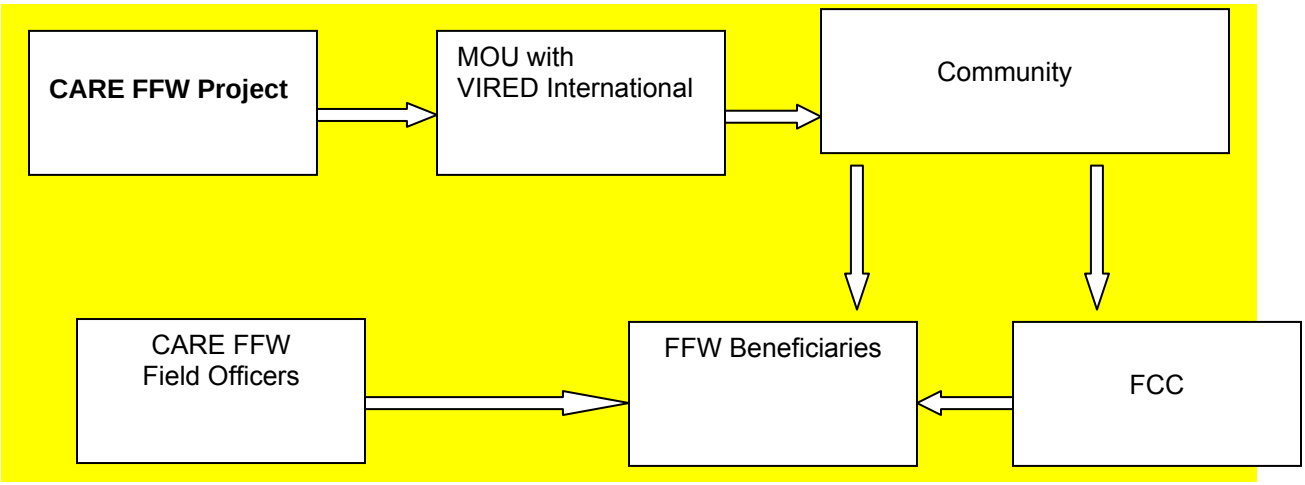
7.5 Selection of households to benefit

VIRED did most of the identification of households for food support. Others involved in the selection of households included teachers, neighbors, friends, relatives and the provincial administration.

7.6 Work mobilization

Communities would be mobilized for work by 6 am in the morning. Field assistants confirmed the number of workers reporting for work as well as assessing the quality of work. Labor distribution forms were used by the FCCs to maintain a record of workers in all the 16 locations where the program was implemented.

Figure 6: FFW Implementation design



The project addressed the most pressing needs of Kisumu and Nyando residents. Prior to project implementation, flooding rendered people homeless, diseased and without food. The project design was based on community involvement in rehabilitation work thus alleviating an inevitable dependency syndrome. The project raised community's capacity to deal with floods and at the same time increasing farm yields thus improving household food security.

7.7 Intermediate Results and Outputs

The main strategic objective for FFW was to reduce the number of people displaced by floods in Nyando and Kisumu Districts will have declined by 25percent. To achieve these results; key canals, irrigation and other public infrastructure would be protected to provide reliable services - even during times of flooding including rehabilitating 50 km of rural roads, desilting 210 km minor and major canals, strengthening their banks and stabilizing them with vegetation, excavating 200 km of seasonal rivers and streams in Nyando and Kisumu districts and their banks strengthened and stabilized with vegetation and finally desilt 63,000M^3 of earth pans in Nyando and Kisumu districts.

7.7.1 Number of respondents participating in FFW

Survey results show that only 85 (16.2 percent) out of 526 respondent's participated in the FFW project. Majority (11 percent) of these mentioned CARE and VIRED as the institutions that were running the project. Several activities were undertaken during the implementation of the FFW project. These are listed below:

- Construction of flood control canals
- De-silting of earth pans
- Opening up and gravelling rural access roads
- Excavation of waterways (riverbeds and streams
- Strengthening river and stream banks
- De-silting of canals
- Rehabilitation of community owned irrigation schemes

Other activities included

- Distribution of food commodities (pinto beans and vegetable oil).
- Monitoring of the food commodities.
- Carrying out Rapid Assessment Survey of food aid as per Care's Food Aid manual.
- Training in First Aid Techniques for food distribution committee member and staff supervising labor gangs.

Slightly less than half (40) of the respondents went through some kind of formal training before engaging in the aforementioned activities and all of these respondents affirmed that the training undertaken was very enabling.

Asked whether any problems were encountered in the distribution of food commodities, at least 25 interviewees responded in the affirmative. Some of the problems cited are listed below:

Main problems experienced in food distribution		
	Frequency	Percent
Delay in food distribution after work	4	0.8
Sometimes less than the expected quantities are received	13	2.5
Long queues during the distribution exercise	2	0.4
People who have not worked sometimes receive food	3	0.6
Biasness in distribution	3	0.6
No problem reported	24	4.6
Total	49	9.3

Although all the project activities were perceived as important, ranking shows that flood control was considered the most important, followed by opening up of rural access roads and desilting of canals subsequently**.**

The MOST important work done under program		
	Frequency	Percent
De-silting of earth pans	5	1.0
Flood control canals excavation	20	3.8
Opening up and gravelling rural access roads	18	3.4
Excavation of waterways (riverbeds and streams)	4	0.8
Strengthening river and stream banks	2	0.4
De-silting of canals	11	2.1
Rehab. of small-scale community owned irrigation scheme	5	1.0
Total	65	12.4

7.7.2 Distribution of food

VIRED International distributed food to individuals who participated in implementation activities. Food rations included pinto beans and vegetable oil. The food served as a motivation towards engagements and to a large extent provided much needed nutrition for poor households. Pinto beans are exceptionally rich in protein

7.8 Has FFW accomplished its objectives?

The FFW project strategic objective was stated as follows, "Functional canal, irrigation, dyke and other public infrastructure restored to provide reliable and safe services to flood affected communities in Nyando and Kisumu districts of Nyanza.

The project also specifically defined intermediate results as follows:

- Effective partnership and distribution mechanism for food for work resources
- Restored waterways, dykes, and water retention points in flood prone areas
- Enhanced capacity of smallholder farmers to sustainably manage small- scale irrigation schemes
- Improved access of rural roads in flood prone areas

7.9 Achievement of targets (FFW)

7.9.1 *Reducing the number of people displaced by floods*

Implementation of the activities under this project has contributed to achievement of the FFW Strategic Objective of reducing the number of people displaced by floods". At least 19 percent (101 where n=526) of the respondents reported having experienced flooding in the last 12 months. Of these only four respondents moved to a temporary site while majority (48) built barriers for the flood water using the technologies learnt during the FFW program. The IPTT shows that all the targets under this output have been exceeded.

The over achievement of other flood mitigation structure was due to the increased labor force on the ground and the realization of the benefits of the project to the community.

The major achievement of rehabilitating and restoring of silted waterways namely flood canals, rivers, streams and ponds/earth pans that cause flooding in targeted areas and any other water structure resulted in a significant decrease in occurrence of flooding and in turn reduced incidences of water borne diseases and human trauma.

7.9.2 *Enhanced Food Security*

FFW lead to rehabilatation of smallholder irrigation farms that had remained unused since the last *El -nino* rains. By availing food commodities to the vulnerable household who worked on the flood control infrastructure and increasing production through opening up of more land in the rehabilitated community owned smallholder rice schemes, FFW contributed to food availability and accessibility and thus food security. As shown on the table below, cumulative household maize yields per acre increased from 900 kgs before to 3780 kgs after intervention. Of great significance is the increase in rice yields from 3600 kgs/acre before to 10 500 kgs/acre after the intervention. A significant increase in tomato yields was also recorded.

Table 43**:** Benefits accruing to the households [before/after] the FFW project

Enhanced Food Security					
	Frequency	Minimum	Maximum	Total	Average
Maize Yields per acre[before](kgs)	53	0	900.0	9,032.0	170.4
Maize Yields per acre[after](kgs)	53	0	3,780.0	32,350.0	610.4
Rice Yields per acre[before](kgs)	41	0	3,600.0	26,955.3	657.4
Rice Yields per acre[after](kgs)	41	0	10,500.0	53,580.8	1,306.8
Vegetables/tomatoes Yields per acre[before](kgs)	34	0	2,400.0	7,130.0	209.7
Vegetables/tomatoes Yields per acre[after](kgs)	34	0	6,000.0	17,078.0	502.3

7.9.3 Decrease in amount of land under flooding

Results indicate that approximately 152 acres of land had been affected by floods before the intervention but only 20 acres were flooded after intervention in 2008. As shown on the table below, it took at least 180 days (6 months) before the intervention, for the flood water to subside while this time was reduced by half (6 months) after the intervention. By shortening the time it takes for the land to dry, farmers enjoyed longer farming periods than before**.**

*Table **44**: **Benefits accruing to the households [before/after] the FFW project***

Decrease in amount of land under flooding					
	Frequency	Minimum	Maximum	Total	Average
Area of land flooded[before] (acres)	54	0.5	30.0	151.8	2.8
Area of land flooded[after](acres)	59	0	7.0	20.1	0.3
Duration taken by flood waters to	62	1	180.0	2,227.0	35.9

dry/subside[before](days)					
Duration taken by flood waters to dry/subside[after](days)	58	0	120.0	567.0	9.8
Total amount of land under cultivation [before](Acre)	58	0	4.0	82.0	1.4
Total amount of land under cultivation [after](Acre)	58	0	20.0	179.0	3.1

7.9.4 Increase in the amount of land under cultivation

The total amount of land under cultivation increased two-fold from 82 acres before the intervention to 179 acres after the intervention. As indicated on the table below, this has ensured greater farm yields which translate to more and sustainable food for family consumption as well as surplus for sale thus providing families with incomes. The total acreage under rice production increased from 44 acres to 60 acres with an average increase of at least 0.4 acres per household.

Table 45**: Benefits accruing to the households [before/after] the FFW project**

Increase in the amount of land under cultivation					
	Frequency	Minimum	Maximum	Total	Average
Total amount of land under cultivation [before](Acre)	58	0	4.0	82.0	1.4
Total amount of land under cultivation [after](Acre)	58	0	20.0	179.0	3.1
Total acreage under rice production[before] (Acre)	48	0	4.0	44.3	0.9
Total acreage under rice production[after] (Acre)	48	0	5.0	60.1	1.3

7.9.5 Rehabilitation of rural access roads and canals

In FY 07, 312 Km of rural access roads was rehabilitated against a target of 40Km. The target for FY 08 was to rehabilitate 50 KM of rural access roads. In FY 07 559 Km of canals were de-silted against a goal of 160 Km, and 327.81Km of seasonal rivers and streams rehabilitated against a target of 110Km. All the above activities surpassed their set target by over 100 percent.

7.9.6 Excavation of earth pans

In FY 07, a total volume of 55272 (M3) earth pans were excavated against 47250 (M3) of the volume expected

FFW accomplished its objectives and goal, and exceeded most of its targets. It has succeeded Rehabilitating rural roads in Nyando and Kisumu districts. In addition minor and major canals in Nyando and Kisumu districts have been de silted and their banks strengthened and stabilized with vegetation. Seasonal rivers and streams in Nyando and Kisumu have also been excavated, and their banks strengthened and stabilized with vegetation while earth pans have been systematically de-silted in the two districts.

7.10 Project effectiveness

Opening up of the irrigation canals helps to increase the amount of land under cultivation-and improves food security and income. The amount of time it takes for water to drain to the lake is much less. However in the upper reaches of Kano area there has been a reduction in the amount of water available to the community due to reduced flooding. The opened up canals have made water move fast through the areas during rains. There are thus no marshy areas to graze the livestock or even domestic water during the dry season. This has resulted in new mitigation measures such as digging of water pans to improve access to water!

Irrigation canals, dykes and other public infrastructure are being restored to provide reliable and safe services to flood affected communities in Nyando and Kisumu districts. This has been possible through collaboration and partnerships with VIRED and GoK. The work done by the community to improve flood mitigation infrastructure, even the ones the government was unable to complete due to lack of funds, has created a whole new sense of confidence and enhanced productivity in the area. Feeder roads are now accessible which makes it easier to transport produce to the market and sick people to the hospital.

There are better harvests and these are associated with food-for-work making more land agriculturally viable. Food security has therefore improved. The food comes in very handy especially during drought. Other benefits that have accrued from the project include a reduction of diseases such as malaria and cholera. In FGDs it was noted that malaria was prominent due to stagnant water and cholera was wide spread because there were no latrines since they were destroyed by floods. After the intervention there has been a noted reduction of malaria and cholera. The project has also helped in putting up chief's offices.

The following are some of the benefits reported to have been accrued to the households by the food for work project:

- Reduction in flooded land.
- Increase in total amount of land under cultivation.
- Reduction in acreages of crops destroyed by floods.
- Increase in yields of maize, rice and vegetables.

- Increase in length of time pans hold water.

The project has produced significant results in controlling flooding since 2005. This has led to an increase in the amount of cultivatable land thus improving the quantity of farm yields. Availability of food for family consumption and income generating purposes is a major impact of the FFW project. Rehabilitation of rural access roads has affected communities positively making transportation more accessible. The roads aspect of the project has opened up opportunities for people to access markets and other social amenities. By providing food for work done, the project improved the nutritional status of poor households thus improving the general health status of adults and children in the community

7.11 Project Sustainability

Some aspects of the FFW project ensure its sustainability. For example capacity building provided to community members implies that even though the project has wound up, basic but essential skills are available in the community. Even though compensation through food commodities will not be sustainable, benefits accrued at individual level will serve as bait, nudging the community to work together to avoid flooding, displacement, poverty and disease. The fact that FFW activities have drastically reduced death and displacement as well as improving agricultural production and income levels, we can argue that communities are empowered to prevent disasters that left them homeless and in great distress, hunger and poverty prior to the implantation of FFW project.

FFW*: Key findings*

- **Significant reduction in the number of persons displaced by floods in Nyando District**
- **Reduced floods related mortality and morbidity**
- **Reduced the amount of time it takes for land to dry out after floods**
- **Built the capacity of people to mitigate against floods without depending on external factors**
- **Introduction of high quality Basmati rice which has higher yields than local types**
- **Increased the amount of land under cultivation**
- **Introduction of crops with high monetary value and a shorter maturation periods**
- **Enabling farmers to sell their farm produce by creating links with buyers**
- **Protecting farmers from unscrupulous brokers thus enabling them to have direct negotiations with buyers such as Bidco company and Nakumatt stores**
- **Enabling women to work and learn about floods mitigation**
- **Gender empowerment by enabling women to take control of their lives, farm produce, surplus and incomes**

Conclusions

Evidently, the component has addressed the Strategic Objectives, Intermediate Results and Outputs as laid out in the Logical Framework Analysis (LFA). The evaluation has established

that this component has achieved significant mileage in enabling communities to adopt good practices in the area of saving and enhancing income levels.

The strategy utilized in the FFW component motivated communities to recover and reclaim resources they had previously lost hope in. Motivation provided in the form of food rations kept people interested in volunteering labor. For this reason, the evaluators are skeptical with regards to sustainability of the FFW component.

While it is evident that increased rice production is a motivator in itself, not all farmers are capable of dealing with flood mitigation for example without external support. However, with the combined benefits accrued from sale of rice and other high value crops introduced through TASK component, farmers are likely to succeed in preventing floods from ruining the established farming and transport infrastructure.

Recommendations

The following recommendations identify the FFW project success factors and suggest their application to future projects.

i) The FFW project has great potential and should be supported, by USAID/CARE Kenya and its partners in the same FFW project sites until communities are stable enough to mitigate flooding without external support.

ii) In Future, USAID/CARE Kenya should ensure that capacities of local NGOs such as VIRED are strengthened to boost sustainability of collaborative projects.

iii)

Lessons Learned

- Food rations can create dependency and it is difficult to mount an exit strategy for projects implemented under such designs

- Sustainability of FFW initiated interventions such as the flood control infrastructure maintenance could only take place if the community members derive an economic benefit from the same.

Challeges faced during implementation

CARE faced various challenges in the course of implmentaion, among them:

1. Delays associated with Monetization: there were delays in sale of commodities which occasionally lead to slowed down implementation.

2. Interruption in delivery of commodities for direct distribution. In one particular incident serious interruption occurred when over fortified CSB was received which had to re-mixed in country

3. There were key challenges associated with the Post Election Violence in early 2008: delay in the start of South West Sakwa project for almost 6 months while attendant inflation lead to a reduced budget;36Mt commodity was looted from program warehouse and key staff were forced to relocate further worsening the situation.
4. To encourage ownership and sustainability the community was required to contribute both in cash and in-kind which often took longer than anticipated leading to delay in completion of some activities.

These challenges lead to the request for no cost extension of the program from by one year to September 30 2009 and a delay in the completion and handing over of South West Sakwa community water project to December 2009. Despite the challenges, CARE still managed to deliver its obligations in respect of goals and objectives as reported above.

CHAPTER EIGHT

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

8.1 *Summary of findings*

Based on the literature and documentations: from the initial Baseline Survey, Mid Term Evaluation (MTE), Project monitoring and evaluation tools and The End Term Evaluation (ETE) analysis, and focusing on the Logical Framework Analysis (LFA) indicators, the five Dak Achana program components were evaluated to determine its influence on the livelihood and food security in the implementation areas.

The TASK project component was evaluated to determine the project influence on the livelihood and food security in the project area. Findings indicate a steady increase on the amount of land under cultivation in all the land type categories during both cropping seasons (i.e. long rains and short rains) between the Baseline Survey (BS) to End Term Evaluation (ETE). Overall, most of the land is currently owned by individuals as opposed to joint family ownership or renting. Most land is also registered in individuals' names. Generally, individual land ownership is associated with better land management and higher productivity as compared to communal ownership. That means during DAP phase II, agricultural activities have become more intense, as the total area under cultivation continued to increase. Further evidence shows that rented land is more cultivated than any other 'type of owned' land because individuals who rent land aim at maximizing the cultivation area to recover costs. The households in the project area obtain most of their food from a few prominent sources.

Evidently, agriculture provides an important source of subsistence as well income for practising households. It is evident that maize which is the staple food for most families is the most widely grown cereal crop. Other major crops include beans, cassava, and cereal crops such as millet, rice and sorghum. Kale, tomatoes, onions, Bananas, traditional vegetables, green grams, sunflower ground nuts water melon and pineapples are considered important but minor crops.
There is a definite increase in crop diversity and thus an increase in the number of farmers growing crops such as tomatoes, green gram, water melon, traditional vegetables and other commercial crops, indicating a positive outcome of the project interventions.

There is an increase on the number of crops that are grown for sale in when comparing the BS, MTE and ETE results thus an increase in commercial agricultural enterprises. Although maize production seems to be the highest in terms of the cultivated land, income generated especially from horticultural crops is much higher. Farmers' Associations (FAs) producing through formal marketing contracts increased from 37 in FY 06 to 71 against a target of 65 in FY 07/08. Most households grow their food to feed their families and rely on the market for food security because only 25 percent of the households' income is from non –farm sources. Furthermore, only 65 percent of the respondents reported that they experience food shortage in the last one year, a significant improvement compared reports on the same from BS and MTE.

Several agricultural technologies were consistently used by farmers in the whole area covered to improve their crop production. Use of certified seeds, timely operations and soil fertility improvement were common. The main crops under irrigation in the project area includes: Kales, tomatoes, traditional vegetables, water melons, maize, bananas, rice and other commercial crops. Farmers adopting small-scale irrigated agriculture increased from 409 in FY 06 to 1006 against a target of 600 households. Meanwhile the number of crops being grown under irrigation has increased. The most commonly used techniques were bucket and furrow irrigation methods mainly along the lakeshores.

The evaluation established a satisfactory use of agricultural information in the entire process of agricultural production, marketing and consumption and this has enhancing food security. The main sources of information include government agricultural extension officers, the media and NGOs. Considering the expected impact at the end of the project (that 80 percent of the households in the project area will be self sufficient in food), the evaluation established a major shortfall in this target. Although the TASK project has improved the food situation significantly, it is evident that the target was not realized perhaps due to the fact that most respondents assume that once their produced exhausted, notwithstanding the fact that they can access food from the market , majority is such situations would responding that they are food insecure.

Results show a significant increase in number of households that reported getting assistance to put up protective water sources which translates to an increase of the number of respondents using water from 'protected' sources since project inception. Overall, the distance taken to access water by the households has reduced significantly with majority accessing water from a distance of less than one kilometre.

Consistent with the MTE findings, majority of the respondents reported that they had a special container for storing household drinking water. This is indicative of increased awareness on safe storage of drinking water. The average quantity of water used in most households was 125 litres per day an increase of about 8 litres from the baseline position.

Further findings show a significant increase in the number of households using chemicals such as (Chlorine/ Waterguard /Pur/Allum) for water treatment. It is also evident that most beneficiaries have changed from boiling water to using water treatment chemicals. Most of the beneficiaries purchased these chemicals from local shops and kiosks. This also implies smaller outlets are stocking water treatment chemicals and that most people are aware of their existence signofying sustainability of the supply process.. WASEH has made significant contributions in educating communities on sanitation and health.

Overall, there was a remarkable increase in those reporting having latrines in their compounds. Over two thirds of all households with latrines reported that all household members including children use latrines consistently an improvement since MTE. About a third of the respondents with latrines in their compounds got some kind of assistance to put up the facilities. Most of the respondents reported receiving support from CARE Kenya.

The main hygiene measures and practices found among the respondents included cleaning the compound, bathing and washing hands with soap after visiting toilet and before eating. When respondents were asked when they consider hand washing with soap necessary, majority of respondents cited after use of latrines/ defecation and before eating. It was also reported that hand washing with soap was done before preparing food, after eating and after handling children's faeces. As a result, there is a significant reduction in the prevalence of diarrhea and other communicable diseases.

Findings show that GS&L is the most popular means of savings utilized in the program areas even though significant proportions of beneficiaries have diversified to other means of savings such as banks and merry-go round groups. The current savings with GS&L per household is Kenya Shillings 10 336.90. In addition majority of the respondents were involved in IGAs during DAP II phase compared to the MTE. Respondents were also involved in different forms of income generating activities as a means of raising funds for contribution to the GS&L schemes as well as means of investment.
Evidently, there is a significant increase in the number of individuals engaged in farming for income generating since the BS. This implies that communities are increasingly exploiting farming opportunities to raise their incomes. Other sources include the church, burial fund, livestock sales, merry go round, pension, and sales from assets. In the FGDs, we established a strong relationship between GS&L and TASK. The technologies acquired through the TASK component have been adopted by members and non-TASK members. To a large extent, this explains why majority of GS&L members are practising farming. The proportion of respondents accessing capital through savings has increased by 10 percent since 2006. This demonstrates the marked achievements made in the COSAMO component.

All the targets set out in the logical framework for COSAMO were achieved and exceeded except the number of GS&L groups established and trained. By the time the project was terminated, a total of 456 GS&L groups had been formed compared to 251 groups that existed in 2006. Even though a shortfall of 264 was recorded, the achievement is remarkable considering that the project experienced significant bottlenecks especially in the area of human resource. The number of individuals saving in self managed community savings and loans groups increased from 4,082 in FY 06 to 6,939 in FY 07 and 8551 in FY 2008 against a target of 6000. The significant growth in membership of the GS&L was associated with an increased interest by communities, especially women. Overall, distribution of GS&L members by sex indicates that women comprise over 78 percent (6669) of total membership. COSAMO has provided an opportunity for women to prove their self-worth in a community where gender relations relegate women to a lower status both economically and socially.

Collective cumulative savings increased from USD$ 97,190 in FY 06 to USD$ 231,410 in FY 07 far beyond the target of USD$ 86,550. This achievement is associated with an increased interest among community members having realized the benefits of the methodology and adoption of multiple savings, a practice where members are allowed to save more than the minimum amount stipulated in the group constitution and the engagement of group members in Income Generating Activities (IGAs) by investing loans accessed from their groups. Loans disbursed by the GS&L

groups increased from USD$ 191,740 in FY 06 to US$ 454,570 in FY 07 far beyond the target of US$ 115,400. An important feature to note about the GS&L model is that the value of loans disbursed is always bigger than the amount saved because the former comprise of savings, interest accruing from savings and penalties.

The GS&L groups trained in Selection, Planning and Management (SPM) increased from 20 in FY 06 to 72 in FY 07 and 97 in FY 08. The target of 180 was not achieved bringing in a shortfall of 83 groups. Few staff on the ground compared to the demand for training was the main reason given for the shortfall.

Results indicate that the estimated total values for most household assets have gone up. Comparative analysis indicates an upward trend in the average value of assets per household. For example, in the baseline the average value of assets per household was US$104, this went up to USD 126 by MTE and USD 333 by end term evaluation.

Three indices, Weight-for-age, Weight-for-height and Height-for-age were computed to reflect different but interrelated aspects of nutritional status for the HIV-AIDS orphans whose measurements had been taken in order for their post-intervention nutritional status to be determined. Findings show a steady improvement in Z-Scores for Weight-for-age, Weight-for-height and Height-for-age. Results show a marked reduction in the morbidity levels among the on OVCs in the last one month. It was reported that incidences of morbidity have declined significantly and consistently since MTE.

Results indicate majority of the respondents took a sick child hospital, a significant improvement in health seeking behaviour, a consequence of the project. The results indicated that despite the fact that other organizations were working in the area majority of the respondents received food supplements from CARE only. Most of the households reported major health improvements in the children receiving food supplements.

Child rights awareness education has increased in the project areas. Majority of the respondents have had access to information on 'the right of children to care and support'. Sources of information include radio, government health workers, CARE staff and school teachers. Some of the rights issues cited in the right to food, education, health and shelter.

Findings indicate that the Food for Work (FFW) Component blended with TASK, WASEH and COSAMO to increase both food availability and accessibility by concentrating on improving productivity of small-scale community owned irrigation systems. De-silting canals and earth pans to enhance water retention for future use and training farming households on sustainable use of irrigation water achieved this. As a result, produce from the schemes for both domestic use and market access was enhanced.

The major achievement of rehabilitating and restoring of silted waterways namely flood canals, rivers, streams and ponds/earth pans that cause flooding in targeted areas and any other water structure resulted in a significant decrease in occurrence of flooding and in turn reduced incidences of water borne diseases and human trauma. The most remarkable achievement is food security. As shown on the table below, cumulative household maize yields per acre increased from 900 kgs before to 3780 kgs after intervention. Of great significance is the increase in rice yields from 3600 kgs before to 10 500 kgs after the intervention. A significant increase in tomato yields was also recorded.

The increased rice production has provided both food and income (through sale of rice) for the participating households thereby contributing to enhanced food security. Furthermore, integration of FFW and TASK components has spurred agricultural production in the project sites.

Results indicate that approximately 152 acres of land had been affected by floods before the intervention but only 20 acres were flooded after intervention in 2008. In addition it took at least 180 days (6 months) before the intervention for the flood water to subside while the time was reduced by half (3 months) after the intervention. By shortening the time it takes for the land to dry, farmers enjoyed longer farming periods than before. The total amount of land under cultivation increased two-fold from 82 acres before the intervention to 179 acres after the intervention. In FY 07 559 Km of canals were de-silted against a goal of 160 Km, and 327.81Km of seasonal rivers and streams rehabilitated against a target of 110Km. All the above activities surpassed their set target by over 100 percent.

The evaluation concludes that the USAID-funded Dak Achana Program was relevant to the context and effective in contributing to sustainable livelihoods. A number of achievements within the program have a high potential for sustainability. The evaluators also found projects consistent with the government's national development objectives on poverty eradication and CARE Kenya's mandate. The project was highly focused on the needs of its beneficiaries and took them into account at every step. In its planning, CARE has demonstrated flexibility to changing circumstances during the implementation of the Dak Achana Program.

The Dak Achana Program accomplished its objectives and goals across the five components and exceeded most of its targets. However analysis by program components reveals a mixed record of completing activities. Training was largely on target across all program components. CARE Kenya's forward programming is highly interwoven with the use of locally available resource persons and materials that are easily adaptable. Participants in the trainings along with observers said that CARE Kenya's training is a valuable contribution to skills acquisition and trainees stated that it had significantly increased their knowledge and improved performance in ensuring food security, improved income levels, water and sanitation.

The program generated benefits in excess of costs. This is demonstrated by the minimized dependency approach that CARE Kenya adopted in implementation. By promoting cost sharing

and self-driven initiatives, the program saved money that was redirected to providing potable water in the mammoth West Sakwa Water Project. In addition, training was conducted by locally available resource persons thus averting high costs of supporting international staff. Over time CARE Kenya took steps to effectively increase the pool of Kenyan trainers and it is evident costs were drastically reduced. Overall program delivery was made more efficient through the use of needs assessments and strategic planning to enhance synergies between CARE Kenya's capacity inputs and those of other actors, and optimizing use of human resources.

The project has produced both monetary and non-monetary benefits for thousands of rural households. The overall contribution of CARE Kenya's collection of project activities to secure sustainable livelihoods has certainly been positive. There is evidence of improvement in the availability of clean water, enhanced food yields from the farms, decline in communicable diseases, and reduced impact of floods among other positive elements.

Beneficiaries will continue to enjoy what the project has established for them and modify it to suit their own ambitions and capacities. All the components have to a large degree established sustainable local ownership. Credit goes to CARE Kenya for taking an implementation approach that discourages dependency on external funding. Apart from one component "Food for Work" the evaluation did not come across any aspects of over-reliance on donor. In order to diversify its options and approaches for such components, CARE Kenya

CARE Kenya has built solid working relations with government counterparts and within coordinating groups. However, CARE Kenya is not proactive enough in extending its links with human rights and protection networks through greater outreach work.

The Dak Achana Program and could be replicated in other food insecure parts of Kenya and in other countries. Components like COSAMO are already being replicated in some parts of Nyanza Province.

Women in the program areas realized significant monetary and social benefits from their participation in all the project components. The project has primarily benefited women by increasing their incomes, mobility, skills, self-confidence, and family respect.

General Recommendations

i. The Dak Achana Program model has great potential and should be replicated, by USAID/CARE Kenya and its partners in other parts Nyanza and Western and could be valuably extended to other parts of the Country.

ii. Programs designed by USAID/CARE Kenya and its partners can at the design stage identify possible weaknesses or issues that can arise in the future, and ensure their mitigation.

iii. At the design stage, USAID/CARE Kenya and its partners should ensure that the introduction of a particular project/product being considered is workable, tried and tested, so that project impact is maximized.

iv. Future programs of a similar nature should maximize cost benefit ratios by continuing to cost-share with beneficiaries. The indicators for ensuring that cost benefit analysis takes place prior to and during the project's implementation should be identified in the project design.

v. Future projects should create a sustainability plan at the very beginning and follow it closely throughout the life of the program, making modifications based upon experience. The program design team must consider issues of eventual sustainability and make the needed adjustments/interventions as part of the indicators to be monitored through the life of the program.

vi. The multi-component program approach, especially in addressing the needs of vulnerable households has great potential to empower communities and women in particular. Future projects should follow The Dak Achana Program model of including beneficiaries in project design and implementation, and conducting thorough needs assessment prior to project design. Doing so increases the relevance of a project to the needs of its intended beneficiaries.

vii. Gender-focused projects should develop a design that works directly for women and shows a

solid understanding of their needs. USAID should consider using demonstrated knowledge of

women's needs amongst the target population as a key criterion in proposal evaluation.

viii. Drawing from the Dak Achana Program successful example, future projects should create a sustainability plan at the very beginning and follow it closely throughout the life of the project, making modifications based upon the findings of project monitoring.

Annex 1: Household Interview Questionnaire

Sustainable Livelihood Security for Vulnerable Households in Nyanza Province

(DAK ACHANA)

End term Evaluation

Household Interview Questionnaire

Hello:

We are conducting a survey to learn about the effects of the *Dak Achana* program in your area. Information from this survey will help us in our efforts to understand the results achieved during the program.

Your answers to this questionnaire will remain confidential and are basically for the evaluation.

Thank you for your assistance.

Respondent name _____

001 Questionnaire No._____

002 District: _____

003 Division: _____

004 Location: _____

005 Sub-location: _____

006 Village: _____

For Official Use Only	
Project Component	
1 TASK	
2 WASEH	
3 COSAMO	
4 HIV/AIDS LIFE	

Name of interviewer: _____

Date: ---/---/2009

Name of Supervisor: _____ **Initials of Supervisor**

SECTION I: SOCIO-DEMOGRAPHIC BACKGROUND

101 **Can you please tell me the names of all the members of your household who usually live here, sleep here and eat from the same source, including yourself? Please include children, relatives or orphans, even if they are not at home at the time of interview but do not count temporary visitors.** (Wachie jogo manie odi ka, tarik monyuolgi, machuo kod manyiri, tudruok gi wuon ot, jonyuol mangima, sombgi gi tijegi.)

The questions in this section are for the person who is most knowledgeable about the household members.
After asking about name, continue with the other questions about each person, i.e. gender, relationship to the head of the household, age, etc.
Fill the table beginning with the oldest to the youngest in the house hold

Member number	First Name	**Sex** 1.Male 2.Female	**Relationship to Household head** 1 Head/self 2.Spouse 3 Child 4 Grandchild 5 Other blood relative 6 Other	**Age** Yrs Note-below five years put a zero	**Father alive (for children below 18)** 1.Yes 2.No	**Mother alive (for children below 18)** 1.Yes 2. No	**Marital Status** 1.Single 2.Married 3.Seperated 4.Widow/widower 5. Divorced	**Occupation** 1 Unemployed 2 Farming 3 Trading 4 Artisan 5Wage employment 6.Salaried Employment 7 Fishing 8 Student 9 Others(specify)	**Currently Enrolled in School? (children below 18)** 1 Yes 2 No	**Level of Education attained** 1. No for educati 2. Nursery 3. Primary 4. Secondary 5. Tertiary 6. University /higher 7. Don't Know
1										
2										
3										
4										
5										
6										
7										
8										

9										
10										
11										
12										
13										
14										
15										

102 Child health evaluation

Fill in the table for any household members under 60 months (5 years) old

1	2		4	5	6		7			8			9	10	11	12	13	14
Name of child	Age in months	Sex 1 Male 2 Female	Immunization status **Chanjo** 1= Partial 2=Full 3=None **Check the child's clinic card**	Is this child exclusively breastfed? **Nyathini imiyo chag thuno kende** 1=Yes 2=No **For children below 6 months only**	Clinical signs of		Length in (cm) estimate to 1 dec pl			Weight In Kg			Child had diarrhoea in the last 14 days? **Nyathini be oseodiewo endalo jumbe ariyo m0kalo mokalo?** 1=Yes 2=No **then for the child skip cols 10 -14**	Had bloody diarrhoea? **Ne odiewo remo** 1=Yes 2= No	Was the child breastfed during diarrhoea? **Kinde mane odiewo ne idhodhe?** 1= Yes 2= No	During diarrhoea what else did you give the child? **Ango kendo mane imiye** 1= ORS 2= Drugs 3= Rice water/soup/fruit juice 4= water 5= salt/sugar solution 5= Nothing 6= Others (specify)	During diarrhoea how much food was the child given? **Chiemo ne imiye maromo nadi** 1= Less than usual 2= Same 3= More	According to you, what was the cause of the diarrhoea? **Iparo ni ango mane okelo diepno** 1= Infection 2= Witchcraft 3=Teething 4= Others (specify)
					Kwashiorkor 1= Yes 2=no	Marasmus 1= Yes 2=no	1st	2nd	Ave	1st	2nd	Ave						

SECTION II **SOCIO-ECONOMIC BACKGROUND** (Circle the responses provided)

201**What is your** Main **source of household income? (**Yo mane maduong ma utiyo go kor ka yudo pesa?)

Farming (pur)	1
Fishing (lupo)	2
Wage employment (amal/orak)	3
Artisan (jua kali)	4
Salaried Employment (Msara)	5
Trading (ohala)	6
Others specify (mamoko)	7

202**State other sources of financial support for the family (circle all relevant ones)? (**Nitie pesa ma iyudo koa kwonde mamoko?*)If none, go to Q 204*

None (Onge)	1
Children (Nyithindo)	2
Relatives (Wade)	3
Friends (Osiepe)	4
FBO (kanisa)	5
CBO (Riwruok mar jogweng')	6
NGOs (migawo maok mar srikal)	7
GoK (srikal)	8
Others (mamoko)	9

203**Approximate the amount of total external financial support per month** *(if any) (*Pesa maoa oko gi nyalo rom nadi e dwe - kanitie*)*

< 1 000	1 000 – 2 000	> 2 000
1	2	3

204**Expenditure per month** *(Pesa adi maitiyo go edwe kor ka…?)*

(Note : If the respondent gives amount for the year then divide by 12)

		Estimated amount (Kshs)
1	Education **(Somo)**	
2	Health **(Thieth)**	
3	Food **(Chiemo)**	
4	Fuel **(Yien/Mafuta)**	
6	Rent **(Chulo ot)**	
7	Transport **(Yore mag wuoth)**	
8	Water **(Pi)**	
9	Others **(Mamoko)**	
Total		

SECTION III GROUP SAVINGS AND LOANS (COSAMO)

301 **What IGAs have you been engaged in over the last four years (2004-2008)? Multiple responses allowed** (Tije mage maisebedo kaitimo makelo pesa e ihigni angwen maokalo?)

Trade (ohala)	1
Manufacturing (gik miloso gi lwedo)	2
Transport (wuoth)	3
Service (tich)	4
Farming (Pur)	5
None (onge)	6

302**What was your source of start up capital?** (Pesa mane ichako kodo ohala ne iyudo kanye?)

Savings (kungo/keno)	1
Loan (Hola)	2
Donation from family (chiewo mar joot)	3
Friends (osiepe)	4
Others (specify) Mamoko	

303**. Do you save part of your income?** (Kuom yuto nigi be ikano moko?)
1. Yes **2. No** *(go to309)*

304**. If yes, where do you save?** (Ikeno kanye?) Multiple responses allowed

Bank (bengi)	1
Merry Go Round (nyoluoro)	2
Cooperatives (cooperative)	
Group Savings and Loan (GSL) (Kungo gi hola)	3
Micro-finance Institutions (miegepe matindo machiwo hola	4
Asset based savings (kano e mwandu)	5
Traditional banking (under mattress, bush, roof etc) (keno ei dala)	6
Others (Specify)	

Are you a member of COSAMO
1. Yes **2. No** *(go to309)*

305**. If saving in a GSL group what is your approximate total savings to date?** (Kaikeno, e riwruok mar COSAMO iparo ni isekano pesa marom nadi nyaka sani?)
_____

306 **Has your GSL group been liquidated?** (Be ne osochopo kuma group uni pogo pesa duto mausekano?)

1 Yes **2 No** *(go to 309)*

307**If yes how much did you receive upon liquidation (**To ka kamano to uyudo pesa adi?) _____

308**What did you use the money for?** (Pesa mane iyudogo ne itiyo go e yo mane?) Multiple responses allowed

Paying fees Chulo fees	1
Buying livestock Nyiewo chiayo	2
Domestic use tije mag ot	3
Business ohala	4
Farming pur	5
Others (Specify)mamoko	

309**Have you ever taken a loan?** (Be isegakawo hola?)
1 Yes **2. No** *(go to 313)*

310**If yes from which source (Specify)** (Neikawo hola no , ne ikawe kanye?)

Bank bengi	1
Cooperative Society coporative	2
Micro-finance institutions(miegepe matindo machiwo hola	3
Money lenders (joholo maei gweng)	4
GSL groups (kungo gi hola)	5
Others (Specify) mamoko	

311**Was the loan beneficial to you?** (Be pesa maneiholono okonyi?)
1. Yes 2. No

312**If the loan(s) was from GSL fill in the details in the table below** *(2004-2008)(ka Neisekawo hola didi? Mokwongo ne en pesa adi to ne itimo go ango? To maluwe…)*

Loan	Total Amount	Major purpose
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

313**Which assets do you own and how many of each?** (Mwandu mage maiseyudo to gin adi?) *Probe*

	Type of asset	Number owned	Unit Price	Total Value of Asset (s)
1	Vehicle			
2	TV			
3	Radio			
4	Motor cycle			
5	Bicycle			
6	Gas/Electric cooker			
7	Cattle			
8	Goats			
9	Sheep			
10	Pigs			
11	Donkeys			
12	Boat / canoe (Non engine)			
13	Poultry			
14	Trees			
15	Utensils - Nyuol ber			
16	Utensils - Serving bowls			
17	Sofa sets			
18	Wall units/side board			
19	Boat engine			
20	Mobile phone			
21	Sewing machine / knitting machine			
22	Indoor grain storage (metal silos)			
23	Others, specify			

314**What investment have you made in the last four years?** (Kuom higni angwen mokalo dongruok mage maisebedo go?)

	Capital Investment	Total Value of Investment (s)
1	Small business	
2	House construction	
3	House improvement	
4	Business premise	
5	Others (Specify)	
	Social Investment	**Total Value of Investment (s)**
6	School fees	
7	Dowry	
8	Others (Specify)	

For GS and L beneficiaries only

315. How would you rate the changes that have taken place in your life (family)since you started saving

1. High 2.Medium 3.None

316. Would you recommend G S and L to a friend whom is not a member?

1. Yes 2. No

317 How would you rate the continuity of GS and L in the absence of care support

1. High 2.Medium 3.None

SECTION IV AWARENESS LEVEL ON AGRICULTURAL SUPPORT (TASK)

401 Estimate in acres the various categories of land accessed by the respondent's household. (Iparo ni lowo maromo nadi majoodi tiyo go?) *Read out the options*

	Category of land ownership	Total area (acres) (estimate to 2 dec. place) **(Orom nadi) e.g 1.20**	Actual land area under cultivation (in acres) **(Lowo mane ipuro)**	
			Short Rains 2008 **(Opon)**	Long Rains 2008 **(Chiri)**
1	Individually owned (Inherited or purchased) **(Lopi iwuon – moweni kata mainyiewo)**			
2	Family owned **(Lop anyuola)**			
3	Rented **(Lowo maikodesha)**			
4	Others **(Mamoko)**			
	TOTAL			

402 Is the land you individually own registered under your name? (Bende ondik nyingi e lopino?)

1. Yes **2. No**

403 Have you ever heard of CARE's Agriculture project (TASK)? (Bende isewinjo migao mar jo Care mar pur gi pith?)

1. Yes **2. No**

404 **If yes what does it do?** (Ango magitimo?) *(Multiple answers possible)*

Activity	
Training farmers on new agricultural technology Tiego jopur ei yore manyien mag pu	1
Facilitate formation and organization of Farmers Association /Groups) Kelo riwruok mar jopur	2
Training farmers on Small scale irrigation Puonjo jopur olo pi ni cham	3
Introduction of higher value crops Kelo kothe man gi yuto mamalo	4
Linking farmers to markets **Tudo jopur gi chiro/jong'iewo**	5
Others (Specify)	6

405 Which crops were grown in your farms, quantities harvested and sold during the year 2008? **Rank the crops in order of importance to the farmer (1 being the highest and 21 being the least).** *Use the key under the table to fill the units column.*
(Kwanie kit cham ma upuro e puotheu, kar romb keyo to gi mauuso kuom higa Achiel mosekadho. Kwangi kaluwore kod pek ma imiyogi e chwiri kod opon.)

Crop code	Crop type	2008SHORT RAINS								2008 LONG RAINS							
		Rank crop	Area /acres 2 dec.	Qty produced	Measurement Unit used	Qty sold	Measurement Unit used	Unit price Kshs	Total value Kshs	Rank crop	Area /acres 2 dec.	Qty produced	Measurement Unit used	Qty sold	Measurement Unit used	Unit price Kshs	Total value Kshs
1	Maize																
2	Sorghum																
3	Beans																
4	Sweet potatoes																
5	Cassavas																
6	Tomatoes																
7	Traditional veg.																
8	Onions																
9	Kales																
10	Pineapples																
11	Bananas																
12	Mangoes																
13	Melons																
14	Chilies																
15	Groundnuts																
16	Rice																
17	Greengrams																
18	Sunflower																

19	Other commercial crops (specify)																	
	TOTAL INCOME/VALUE																	

KEY: UNITS 1=**90kg bag;** 2=**50kg bag;** 3=**Debe (16kg);** 4=**Gorogoro (2kg);** 5=**Crates;** 6=**Numbers;** 7=**Bunches ;** 8=**Tonnes ;** 9=**Kgs**

406**For each crop listed below fill in the following indicators for 2008. (**Wachie gi maduong ma omiyo ipidho cham mane iwacho gi kendo kar rom gi).

Crop Code	CROP	Principal use **(Ahinya ipidhe nikech ango)** 1 Commercial 2 Subsistence	Hired Labor *(Jo otong'o)*		Use and cost of (Fertilizers/ Pesticides/ herbicides/ manure)		Cost of seeds & others (Kshs)	Source of seed 1 Certified **(Kodhi maopuodhi)** 2 Not certified **(Kodhi maok opuodhi)**	**Total costs (Kshs)**
			# of pple	Cost (Kshs)	1=Yes 2=no	Total cost (Kshs)			
1	Maize								
2	Sorghum								
3	Beans								
4	Sweet potatoes								
5	Cassavas								
6	Tomatoes								
7	Traditional Veg								
8	Onions								
9	Kales								
10	Passion fruits								
11	Pineapples								
12	Bananas								
13	Mangoes								
14	Cotton								
15	Commercial seeds								
16	Melons								
17	Chilies								
18	Groundnuts								
19	Rice								

20	Sugarcane								
21	Green grams								
22	Sunflower								
23	Okra								
24	Others (Specify)								
	TOTAL COST								

407 Have you produced any crop for a specific market during the last 4 years(market contracts)? (Bende isepidho cham moro amora ka in gi adieri kuma idhi wuse?

1.Yes **2. No** *(GO TO 410)*

408 If yes, which crops did you produce under contract? (Gin cham mage?)

1	
2	
3	
4	
5	

409 With whom was the contract? (Winjruok ni ne en ekindi kod ng'a?)

----

410 Have you benefited from any arrangement from any company/organisation for the supply of inputs or any other services? (Be iseyudo puonj kata gik mitiyo godo e pur koa e migao kata kambi moro amora)

1. Yes **2. No** *GO TO 412*

411**If yes, which company/organisation**? (Migepe /kembe mage?)

1	
2	
3	

4	
5	
6	

412 **What are your** TWO MAIN **sources of information on agricultural technology?** (Chiw e yore ariyo madongo maiyudo go riekni mag pur?)

GOK Agricultural Extension Officer	1
Radio	2
Television	3
Newspaper	4
NGO (Name)	5
Church Leaders	6
Friends	7
Relatives	8
Theatre/Play	9
Pamphlets/Posters	10
Community Meetings	11
Telephone	12
Other (Specify	

413 **What** 3 MAIN **agricultural technologies do you use to improve crop production?** (Riekni adek mage madongo maitiyogo mondo yuto omedre?) **(***Probe for Multiple answers. Do not read choices***)**

None (Onge)	1
Use of certified/improved seed Tiyo gi kodhi mpwodhi/ nyaduka	2
Spacing of crops Pithe e lain	3
Timely operations (plant/harvest Tiyo ei wang saa	4
Nursery establishment/management	5

Loso sambro /nursery	
Pest and disease management Geng'o kute /tuoche	6
Soil conservation Geng'o ridruok mar lowo/ofula	7
Soil fertility improvement Medo ndhandhu mar lowo	8
Marketing Dwaro chiro	9
Selection of crops Yiero cham machiek maber	10
Farm planning and record keeping Chanro gi kano andike mag pur	11
Others, specify Mamoko	13

414 **Do you engage in irrigated agriculture?** (Bende itiyo gi riekni mag olo pi e cham?)

1. Yes **2. No** *(Go to 416)*

415 **If Yes which of these crops did you produce under irrigation in the last 2 years?** (Cham mage maneipuro ka itiyo gi rieknigi?)

	Crop	Area under irrigation (acres)	Type of Irrigation 1=Flood 5=Sprinkler 2=Furrow 4=Bucket 3=Drip 6=Others (specify)
1	1.Maize		
2	2.Sorghum		
3	3.Beans		
4	4.Sweet potatoes		

5	5.Cassava		
6	6.Tomatoes		
7	7.Traditional vegetables		
8	8.Onions		
9	9.Kales		
10	10. Water melons		
11	11. Passion Fruit		
12	12. Pineapples		
13	13.Bananas		
14	14.Mangoes		
15	15. Cotton		
16	16.Commercial seeds		
17	17. Chilies		
18	18. Groundnuts		
19	19.Rice		
20	20. Sugarcane		
21	21.Other commercial crops (Specify)		
	TOTAL		

416**Did you plant any tree/fruit species in the last four years?** (Be neipidho olemo kata yiende e higni angwen maokalo?)
1. Yes **2. No** *(go to 418)*

417**If yes which of the following trees/Fruit species did you plant in the period (2004 and 2008). What was the value of output sold? (***As timber, seedlings or fruits)* (Gin yiende kata olembe mage? Kuom mane iuso ne iyudo pesa adi?)

Plant Type	2005		2006		2007		2008	
	Number planted in 2005	Total value of sales (if any)	Number planted in 2006	Total value of sales (if any)	Total value of sales (if any)	Number planted in 2007	Total value of sales (if any)	Number planted in 2008
Tree Species								
1. Grevillea Miti kahawa, Kibiriti, Rais, Bole bolea								
2. Eucalyptus Bao, Ndege, Kaladan, Kaladali								
3. Sesbania Asao, Oyieko								
4. Sena siamea Bap Oyieko, Obino								
5. Terminalia Umbrella**,** Onera								
6. Makhamia Siala								
7 Other (specify)								
Fruit species								
1. Mangoes								
2. Bananas								
3. Paw paw								
Others (specify)								

418**If no trees planted** (Refer to Q-416-)**, give** main **reason** (Ango maomiyo ne okipidho yien moro amora)?

Have never thought about planting them	1
No land	2

No proper knowledge	3
Lack of planting materials	4
Others (specify)	5

419**. If no fruit species planted** (Refer to Q 416)**, give** main **reason** (Ango maomiyo neokipidho olemo moro amora)

Have never thought about planting them	1
No land	2
No proper knowledge	3
Lack of planting materials	4
Others (specify)	5

420 Was there a period in the last one year when you didn't have enough food for your household (produced or purchased)? (Dibedie kinde moro ei higa achiel mokalo mane ionge gi chiemo maoromo e odi)?

1.Yes 2. No *GO TO Section V*

421 If yes how many months? (Dweche adi)?**_____**

422 What was the main reason for difficulty in meeting your household food needs in during that period ? (Ne ango maneokelo pek maomiyo ne ionge gi chiemo moromo e odi)?

Crop failure	1
Sale of farm produce immediately after harvest to meet other basic needs	2
Low off-farm income	3
Low production	4
Low fishing income	5
Others (specify)	6

423 What was the MAIN **means of coping with the food shortage?** (Ne ukonyoru nade e kinde kech)?

Received relief food	1
Depended on remittance from relatives	2
Reduced number of meals	3
Changed eating habits to other varieties	4
Participated in Food for Work program	5
Others (specify)	6

For TASK beneficiaries only

424How would you rate the changes that have taken place in your life (family)since you started being in TASK

Very High

Medium

None

425Would you recommend TASK to a friend whom is not a member?

1. Yes 2. No

426How would you rate the continuity of TASK in the absence of care support

High

Medium

None

SECTION V WATER SANITATION AND EDUCATION FOR HEALTH

501 Does this household have a latrine? (Be untie gi choo e dalau ka)?

1. Yes **2. No (***Go to 503)*

502 If Yes, how many? *THEN GO TO Q 505* (Gin adi)?

1.One **2.Two** **3. Three and above**

503 If no latrine, **give reason?** (Ango momiyo uonge gi choo)?

Cost of constructing one is high **Gero choo dwaro pesa mangeny**	1
Do not see the need to have one Ok ane tinde	2
No response Onge dwoko	3
Poor soil formation/collapsible soil Lowo sienyore/ yom yom	4
Others (specify) **mamoko**	5

504**Where do you mainly relieve yourself?** (Kara ukonyo ru kanye hie hie/ udhi oko kanye)?

Bush outside homestead	1
Neighbour's latrine	2
School latrine	3
Dig hole for immediate use	4
In the lake	5
Others (Specify)	6

505 **If Yes**, **did you get any assistance to put up the latrine?** (Bende neuyodo kony moro amora e gero choo u ni)?

1.Yes **2.No** ⟶ *GO TO Q 507*

506**Who assisted you?** (Ngano maneokonyo u gere)? *(Multiple response)*

	Type of assistance
Group buche	1
Individuals Jogweng	2
LBDA Jo lake basin	3
CARE	4
CBO Riwruok mar oganda	5
Others (Specify)	6

507**Do** all **household members use the latrine?** *(Be joodi duto tiyo kod choo no)?*

1. Yes **2. No**

508**How do you handle or dispose of your child's stool (Children under 5 yrs)?** (Ere kaka uwito losruok kata ooko mar nyathi/nyithindo) *Probe for Multiple answers*

No Child in the household	1
Child's stools are always thrown into the latrine	2
Child's stools are buried in the yard	3
Child's stools are thrown in the yard	4
Child's stools are thrown outside the yard	5
Child's stools are rinsed away while washing	6

Others (specify)	7

509 **What hygiene practice measures do you apply in your household?** (Gin yore mage mag rito ler ma utiyo go e odu ka)? *Probe for Multiple answers without reading choices.*

Washing hands with soap after visiting toilet	
Washing hands **before eating**	
Throwing garbage in a compost pit	
Washing fruits **before eating**	
Washing vegetables **before** cutting	
Bathing daily	
Use of a dish rack	
Cleaning compound	
Hanging lines	
Smear floor and walls	
Keeping food **properly covered**	
Covering the hole of a pit latrine always	
Treating water with water waterguard	
Treating water with *Pur*	
Treating water with *Alum*	
Boiling / filtration	

510 **What is the** MAIN **source of your household's drinking water?** (Uhinyo golo piu mar modho kanye)? **(***Only one response)*

Protected Sources	
Spring soko / thidhia/ chiya	1
Well hand dug - Kisima	2
Borehole drilled - kisima	3
Water tank-	4
Piped water	5
Unprotected	
Lake nam	6

Pond yawo matin/ matut	7
River aora	8
Water pan yawo /dam	9
Others (specify) mamoko	10

511**Did you get any assistance to put up the protected water source?** (Be ne uyudo kony moro amoro ei gero kar piu no)?

1. Yes **2.No** ⟶ *GO TO Q 513*

512**If yes, who assisted you?** (Ngano mane okonyo u)? multiple responses allowed

		Type of assistance (kony mane)
1	Community	
2	Individual	
3	LBDA	
4	CBO/Group	
5	CARE	
6	Others (Specify)	

513**How far is the source of your <u>drinking</u> water?** (Kama ugoloe pi mar modho bor maromo nadi)?

Within the compound	1
Less than 1 km	2
1kms – 2 kms	3
2 - 5 kms	4
Over 5 kms	5

514**How long does it take you to collect water from this main <u>drinking</u> water source?** (Kawi kinde marom nadi omo pi kuma uthoro omo pi modho dhi gi duogo)?

Less than 1 hr	1
1hr – 2 hrs	2
Over 2 hrs	3

515**Do you have a special container for storing drinking water?** (Bende un gi gima ukanoe pi modho kende)?

1 Yes 2 No *GO TO Q 519*

516**If** yes, **what type of container?** (En gima chal nadi)? *Probe for Multiple answers*

	Has/ Have cap(s) 1=Yes 2=Not all 3=No	**Total capacity of containers** (in litres)
Improved clay pot with a tap		
Improved plastic container with a tap		
Ordinary Clay pot		
Metal Container		
Ordinary plastic container		
Others (specify)		

517**Do you use the drinking water storage container for any other purpose?** (Bende utiyo gi gir kano pimodhoni e yore moko)?

1. Yes 2. No *(go to 519)*

518**If yes, what are the other purposes?** (Gin yore mage)? *Probe for Multiple answers*

Bathing/Washing	1
Carrying porridge/milk	2
Storing grains	3
Others (specify)	4

Estimate the average quantity of water your household uses daily (Liek ane pi mautiyo go e odu ka pile ka pile)? *(water brought into the home)*

	Total quantity of water used in Litres
Bathing	
Washing	
Drinking	
Cooking	
Other uses	

519 **Do you pay for any water you use in your household?** (Bende ungiewo pi moro amora mautiyo go e ot ka)?

1. Yes **2. No** *GO TO 525*

520**If yes**, **how much do you pay per month?** (Uchulo /utiyo gi pesa adi e dwe)?_____

521**To whom do you pay?** (Uchulo nga)?

To individual owner	1
Water vendors	2
Water management committees	3
Group	4
Others (specify)	5

522**Are there times you have been denied access to this water source due to non-payment?** (Bende nitie ndalo mane osetami nikik ituom pi nikech okichudo)?

1. Yes **2. No** ⟶ *GO TO Q 525*

523**If yes, how did you cope?** (To kare neukonyo ru nadi)?

Went to unprotected sources	1
Going without water	2
Others (specify)	3

524**What do you** MAINLY **do to make your drinking water safe?** (Ango maithoro timo mondo pigi obed maber mar modho)?

Nothing	1
Boiling	2
Chemical treatment (Klorin/ waterguard)	3
Chemical treatment (Pur)	4
Chemical treatment (Dawa/Alum)	5
Filtration	6
Others (specify)	7

525**. If chemical treatment is used where do you buy it?** (To ungiewe kanye)?

	Klorin/ waterguard	Pur	Dawa/Alum
Local Stockist			
Nearest shop			
Pharmacy			
Others			

526**. Is your current drinking water treated with Klorin/waterguard** (Bende pi modho mautiyo go sani othiedh gi yadhno Klorin/waterguard /Pur)? **(Refer Q 525)?**

1 Yes 2 No *(go to 30)*

527**When did you last treat the current drinking water?** (Uthiedhe mogik kara ngo)?

Within 48 hours (2days)	1
Over 48 hours (more than 2 days)	2

528**What quantity of Klorin/waterguard did you add to the water (20 litres)?** (Ne uketo yath maromo nadi? Epi marom nadi?)

½ capful	1
1 capful	2
Others (specify)	3

529**Do you use the treated drinking water for other purposes?** (Pi maothiedh mar modhoni utiyo kode e yore mamoko?)

1. Yes 2. No *Go to Q 532*

530**For what other purposes do you use this treated water?** (Gin yore mage?) **(**Probe for multiple response**)**

Bathing	1
Washing	2
Cooking	3
Hand washing	4
Others (specify)	5

531**If no, why not?** (Nikech ango?)*(Probe for the main reason)*

Expensive	1
Bad taste/smell	2
It resembles jik	3
Too difficult to use	4
Don't know where to buy it	5
Others (specify)	6

532**. What is your** MAIN **source of information on water safety system *(storage, handling, treatment)?*** (Ngeyo kata riekni mag keto pi obed maber uthoro yudo koa kanye?)

None/I just know	1
Media (print, electronic)	2
Ministry of Water	3
GoK (MOH etc)	4
Other NGOs	5
CARE	6
Others (Specify)	7

533**. When do you consider hand washing with soap necessary?** (Gin seche mage ma ineno ni ber mondo ngato olog gi sabun?) *(Probe for Multiple response)*

After using the latrine/defecation	1
Before preparing food	2
Before eating food	3
After eating	4
After handling children's faeces	5
Others, specify	6

534**. Is there a committee that co-ordinates water & sanitation issues of groups in this area?** (Bende nitiere jo committee matayo weche mag pi gi rito ler e grube man karu ka?)

1. Yes **2. No** *(go to 539)*

535**. If yes what is the name of the committee?** (Committee no iluongo nango?) **(***If not CMC go to 539)*

Central Management Committee CMC)	1
Group Hygiene Promoter GHP	2
Constituency dev fund CDF	3
location dev. committee LDC	4
Other, specify	

536**What are the main roles of the CMC within this area?** (Tije mage madongo ma CMC timo e karu ka?)

_____

_____

537**How do you rate the role of the CMC?** (Jo CMC gi tayo u nadi?)

1. Good **2. Fair** **3. Poor**

538**Are there members of your group who have been trained on hygiene promotion?** (Bende nitie jo grubu moko maosepuonj yore mag jiwo rito ler?)

1. Yes **2. No** *(Go to section vi)*

539**If yes, what are their TWO main roles within the community?** (Tije gi ariyo madongo gin mage?) **(***Record two main responses only***)**

_____

_____

540**How often do they visit you?** (Gilimo u bang kinde marom nadi?)

Once a week	1
Fortnightly	2
Occasionally	3
Once a month	4
None	5

541**How do you rate the role of the GHPs within the group/community?** (Gi tayo u nadi?)

Good	1
Fair	2
Poor	3

For WASEH beneficiaries only

542How would you rate the changes that have taken place in your life (family)since you started WASEH

Very High
Medium
None

543.Would you recommend WASEH to a friend whom is not a member?

1. Yes 2. No

544.How would you rate the continuity of WASEH in the absence of care support

High
Medium
None

SECTION VI HIV/AIDS (LIFE)

601 **Were you receiving food supplements for orphans and vulnerable children from CARE under the HIV/AIDS Life project?** (Bende ne uyudo chiemo makonyo nyithi kiye kaoa kuom jo CARE?)

1. Yes **2. No** *(go to 608)*

602**. If yes, how often were you receiving it** (Uyudo gi e kinde marom nadi?)

Fortnightly	1
Once a month	2
More than a month	3

603**Who selected your household for the food support?** (Ngano mane oyiero joodi mondo oyud kony ni?)

Local CBO	1
Teacher in school	2
Neighbour	3
Friend	4
Relative	5
Provincial Administration	6
Others (Specify)	7

604 **Who uses the supplement within the household?** (Ngama tiyo gi chiemo ni eodi ka?)

OVSs only	1
All the children in the house	2
The whole family	3
Others (specify)	4

605 **Are there any differences you have noticed on the body condition of the child receiving the food?** (Be nitie lokruok maisenene e nyathi matiyo gi chiemo ni?)

1.Yes 2. No,*(go to 607)*

606 **What differences have you observed on the OVC's body?** (Lokruok mane?)

Children look physically strong	1
Children are deteriorating in health	2
Children do no get sick quite often	3
Other (specify)	4

607 **What activities do you have in place to provide food for OVCs beside what CARE provides?** (Chenro mane maingo mar manyo ni nyithindo makiye gi chiemo bang mopogore gi mane CARE chiwo?)

Kitchen gardening	1
Fruit trees production	2
Own farm production of food crop	3
Establishment of home butcheries e.g rabbit, chicken, duck etc	4
Other (specify)	5

608 **Did the OVCs fall sick in the last one month?** (Be nyithindo gi osebedo matuo e i dwe achiel maokalo?)

1. Yes 2. No *(go to 610)*

609**If yes, how often do the OVCs fall sick?** (Gi turore bang kinde marom nadi?)

Weekly	1
Monthly	2
After every three months	3
Others	4

610**What are the common illnesses amongst the OVCs under your care?** (Tuoche mage mathoro makogi? Kuom touche gi ere kaka wanyalo keto gi kaluwore gi pek margi) *(Multiple response)*

Sickness	**Code**	**Rank**
Respiratory Infections	**1**	
Diarrhoea related	**2**	
Measles (Ang'iew)	**3**	
Malaria	**4**	
Others (specify)	**5**	

611 What measure did you take the last time the child fell sick? (E tuo nyathini mogik nene utimo nango?)

Nothing	**1**
Bought medicine from the shop/chemist	**2**
Gave herbal medicine	**3**
Took to herbalist	**4**

Took to hospital	**5**
Contacted Community Health Promoter (Nyamrerwa)	**6**
Prayers	**7**
Others (specify)	**8**

612 **Do you receive food supplements from other organisations other than CARE?** (Bende iyudo kony mar chiemo kaoa e migawo mamoko maopogore gi CARE?)

1 Yes **2 No** *(go to 615)*

613 **If yes which organisation** (Gin mage?)_____

614 **What conditions do you have to meet to get such nutritional supplements from these other organisation?** (En dwaro mane magiketo niichopie ka podi ok gimiyi chiemoni?)

_____

_____

615 **Do you have any information on the right of children to care and support?** (Be in gi lony/ngeyo e weche mag ratiro mag nyithindo?)

1 Yes **2 No** *(go to section vii)*

616 **Where did you get this information?** (Ngeyo ni nene iyudo kanye?) Multiple answers possible

Radio	1
TV	2
Newspaper/ Magazine	3
Government health worker	4
School teacher	5
Neighbours / friends	6
Care givers	7
Group members	8
Nutrition promoters	9

CARE staff	10
Others specify	11

617 **What children's rights did you learn about?** (Ratiro mage mag nyithindo mane ipuonjori?)

Right to Food	1
Right to Shelter	2
Right to Clothing	3
Right to Health	4
Right to Education	5
Right to Protection	6
Others specify	7

For HIV and life beneficiaries only

719 How would you rate the changes that have taken place in your life (family)since you started being in HIV and life

High

Medium

None

720. Would you recommend HIV and life to a friend whom is not a member?

1. Yes 2. No

721.How would you rate the continuity of HIV and life in the absence of care support

High

Medium

None

SECTION VII FOOD FOR WORK

701**Have you ever been involved Food-for Work activities?** (Bende isetiyo tije mabang tich imiyi chiemo?)

1 Yes 2 No (*go to 703*

702**Who was running the project?** (Migao mane mane tayo tije go?)

CARE/VIRED	1
GoK	2

Others (Specify)	3

703**Is CARE involved in Food for Work in this area?** (CARE bende ni gi chenro mar Food for Work karu kae)

1 Yes 2 No (*go to 717) 3.* **Dont know**

704**What type of work has been done through the CARE FFW project in your area?** (Tije mage maosetim e chenro mar CARE/VIRED Food for Work e karu kae?)

Flood control canals	1
De-silting of earth pans	2
Opening up and gravelling rural access roads	3
Excavation of waterways (riverbeds and streams	4
Strengthening river and stream banks	5
De-silting of canals	6
Rehabilitation of community owned irrigation schemes	7

705 **Did you get any training before engaging in this activity?** (Bende ne iyudo tiegruok moro amora ka nepok itiyo tijni?)

1 Yes **2. No** *(go to708)*

706 **If yes, was the training helpful in enabling you do the work?** (Bende tiegruokni ne okonyi e tiyo tijni?)

1 Yes **2. No**

707**Are there problems experienced in food distribution?** (Bende nitie pek mauneno e pogo chiemo?)

1 Yes **2 No** *Go to709*

708 If yes, what was the MAIN **problem experienced?** (En pek mane?)

Delay in food distribution after work	1
Sometimes less than the expected quantities are received	2
Long queues during the distribution exercise	3

Expired food given	4
People who have not worked sometimes receive food	5
Others specify	6

709 **According to you as a member of this community, are the works satisfactorily done?** (Kaka jaguengni ineno katijni tiyore malongo?)

1. Yes *Go to 711* **1. No**

710 **If not, why?** (Ango maomiyo ok odhi maber?)

There is no proper supervision done on the works	1
Community members involved do not appreciate the need for the works	2
Poor method of work allocation	3
Too much work for less ration	4
Others specify	5

711 **Among all the works done under the program which one is the** MOST **important to the community in your sub-location?** (Kuom tije matiyore ebuo chenro ni ere maduong nu ahinya e sublocation u ni?)

De-silting of earth pans	1	
Flood control canals excavation	2	
Opening up and gravelling rural access roads	3	
Excavation of waterways (riverbeds and streams)	4	
Strengthening river and stream banks	5	
De-silting of canals	6	
Rehabilitation of small-scale community owned irrigation schemes	7	
Other, specify	8	

712 **Are there any problems experienced by the community after the putting up of these works?** (Bende nitie chandruok moro amora ma jogueng oseyudo kaluore gi tije gi?)

1 Yes **2 No** *Go to714*

713 **If yes, which main problem/shortcoming has been realized?** (Chandruok mane maduong?)

_____

_____

714 **Are there any benefits that have accrued to the community from the FFW project?** (Nitie ber mauseyudo kaoa e chenro mar Food for Work?)

1 Yes **2 No** *(go to 716)*

715 **What benefits of the FFW project have accrued to your household?** (To odi oseneno ber mane?)

Item	**Unit of measure**	**Before**	**After**
Area of land flooded (Kuende ma ne pi oimo)	Acres		
Duration taken by flood waters to dry/subside (Ndalo ma pi kawo ka pod ok odok piny)	Days		
Total amount of land under cultivation (Acre ma ipuro)	Acres		
Total acreage under rice production (Acre ma ipuro mchele)	Acres		
Acreage of crops destroyed (Acre mar cham pi oketho)	Acres		
Yields per acre: Maize (Oduma ma ne iyudo e acre achiel)	Kgs		
Yields per acre: Rice (Mchele ma ne iyudo e acre achiel)	Kgs		
Yields per acre: Vegetables/tomatoes (Alode/nyanya ma ne iyudo e acre achiel)	Kgs		
Length of time earth pan holds water	Days		

(Ndalo adi ma yao bet ka podi ni gi pi)			

716**Are there other benefits that have accrued not mentioned Q 715 above?** (Nitie ber mamoko?)

_____

_____

_____

717 **Over the last 12 months has your land been subjected to flooding?** (Kuom dweche apar gi ariyo maosekalo be lopi pi oseimo?)

1 Yes 2 No *(go to checklist)*

718**If yes what action did you take?** (Ango mane itimo?)

Moved to a temporary site	1
Did not move	2
Built barriers for the flood water	3
Others (Specify)	4

For FFW beneficiaries only

719 How would you rate the changes that have taken place in your life (family)since you started FFW

High

Medium

None

720. Would you recommend FFW to a friend whom is not a member?

1. Yes 2. No

721.How would you rate the continuity of FFW in the absence of care support

High

Medium

None

Go to checklist

OBSERVATION CHECKLIST

A. **Assess the roofing material for the household's dwelling?**
   1 **Thatch**
   2 **Metal/Iron Sheets**
   3 **Others specify**_____

B. **Assess the flooring material?**
   1 **Dung/Mud**
   2 **Cement**
   3 **Others, specify**_____

C. **Assess the material used for the walls***?*
   1. **Dung/Mud**
   2. **Iron sheet**
   3. **Dressed stones/ bricks/blocks**
   4. **Semi permanent**
   5. **Others (specify)**_____

D. **Observe the condition of the toilet**
   1. **Functional (in use and depth should be more than 1 meter)**
   2. **Not Functional**
   3. **Absent**

E. **What is the type of latrine?**
   1. **Ventilated improved pit latrine (VIP)**
   2. **An ordinary latrine**
   3. **Latrine in state of Disrepair**
   4. **Not Applicable**

F. **Assess if the latrine hole is covered**
   1. **Covered/All covered**
   2. **Not covered**
   3. **Some covered others not covered**
   4. **Not applicable**

G**. Assess presence of a leaky tin**
   1. **Present (with water and soap)**

2. **Present (with water and no soap)**
3. **Present (no water, no soap)**
4. **Absent**

H **Assess presence of dish rack**

1. **Present in use 2. Present, not in use 3. Absent**

I. **Assess presence of rubbish pit in the compound**

1. **Present 2. Absent**

J. **Assess presence or absence of chlorine in drinking water**

1. **Present 2. Absent**

Respondent comments on the survey

1…….

2…….

Enumerator's comments

……..

Questionnaire checked by……Sign……..Date……..

ANNEX II: LIST OF KEY INFORMANTS

No	**Last Name**	**First Name**	**Title**	**Organization**
1	Okumu	Samson	ABEO	USAID
2	Chege	Ngugi	Assistant Country Director of Programs	CARE Kenya
3	Njoroge	Maina	Program manager	CARE Kenya, Kisumu
4	Kute	Zadock	Program manager	CARE Kenya, Kisumu
5	Ongenga	Walter	M&E Officer	CARE Kenya, Kisumu
6	OKute	Boniface	Assistant Project Officer, TASK	CARE Kenya, Nyando
7	Kobare	Sylvester	Project Officer, COSAMO	CARE Kenya, Homabay
8	Lesso	Margaret	Field Officer, WASEH	CARE Kenya, Suba
9	Gichuki	Bension	M&E Officer	GOK, Agriculture, Suba District
10	Buke	Ibrahim	M&E officer District Agriculture	GOK, Agriculture, HomaBay District
11	Ochieng	Caroline	Divisional Agricultural Extension Officer	GOK, Agriculture, Asego Division
12	Onyango	-	Engineer	Waterworks Company, Bondo
13	Moth	Iscar	DASCO	GOK, Health

				Rachuonyo
14	Achola	Charles	District Water Officer	GOK, Water Rachuonyo
15	Muhamed	Kassim	Inspector of Water Engineering	GOK, Water Suba
16	Ombija	Paul	Divisional Agricultural Extension Officer	GOK, Agriculture, Karungu Division
17	Okinyi	Douglas	Social Worker	Divisional Social and Gender Office, Migori
18	Oguta	Jared	Community Development Assistant Field Officer	Homabay/Ndhiwa
19	Asusa	Veronica	DO 1	Nyando
20	Osina	Thomas	Divisional Public Health Officer	Migori
21	Fr. Oyugi	Jacob	Manager, St Pauls Sunflower Project	Migori
22	Owuor	Joshua	Beneficiary, Nguku Voluntary Group -WASEH	Homabay/Ndhiwa
23	Vuzigwa	Nancy	Chairlady , New Life Self Help Group- HIV Life beneficiary	Homabay/Ndhiwa

24	Obure	Daniel	Chief	Lambwe West Location Suba
25	Odongo Ochuodho	Alfred	Chief	Central Kanyidoto Homabay /Ndhiwa
26	Aluoch	Margret	Sub Chief	Ogongo Suba
27	Odero	Fred	Sub chief	Godjope Suba
28	Dulo		VIRED	Food for Work Nyando
29	Ajuala	Mathew	GOK Public Health	Suba
30	Odada	Mary	Community Based Trainer	Nyando
31	Okongo	Morris	Chief	Central Kochia Homabay
32	Kasuku	Ezekiel	District Water Officer	Rachuonyo
33	Okinyi	Douglas	Social Worker	Migori

ANNEX III : NAMES OF FGDs

Date	District	Name of FGD	Component	Number of participants by gender	Total
16th March	Homabay	Rayaw marketing group	TASK	Male – 10 Female -14	24
17th March	Homabay	Pith Ototo Women group	WASEH	Male – 4 Female – 8	12
18th March	Migori	Alendo women group	COSAMO	Male – 10	10
20th march	Suba	Asawo gropu Rusinga Island	COSAMO/TASK/ WASH	Male – 4 Female – 7	11
23rd March	Rachuonyo	Oyugis	HIV life	Male – 6 Female – 12	18
26th march	Nyando	Bunde Rice growers self help	Food for Work TASK	Male – 5 Female – 8	13