Jamaa Wazima Project

A Household Livelihood Security Project in Siaya and Busia Districts

End-Term Impact Assessment Report

Report Prepared for CARE Kenya by Strategic Public Relations and Research Ltd. P.O Box 7201 00100, Nairobi. Tel (020)601005, Email- spr@africaonline.co.ke

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AIDS – Acquired Immuno Deficiency Syndrome

CBO – Community Based Organizations

FGDs – Focus Group Discussions

GoK – Government of Kenya

HIV – Human Immunodeficiency Virus

IDIs – In-Depth Interviews

KAP - Knowledge, Attitudes and Practices

KII – Key Informant Interview

LMC – Locational Management Committees

MoA - Ministry of Agriculture

MoCSS - Ministry of Culture and Social Services

MoH - Ministry of Health

MoWRD - Ministry of Water Resources Development

NGO – Non Governmental Organizations

NORAD - Norwegian Agency for Development

SLMC – Sub Locational Management Committees

TOR – Terms of Reference

VAPs – Village Agriculture Promoters

VHPs – Village Health Promoters

VMC – Village Management Committees

Acknowledgements

Strategic Public Relations and Research Ltd. wish to thank The CARE International Kenya Country Director Mr. Dennis O'Brien, CARE International in Kenya for according us the opportunity to conduct the end term impact evaluation of Jamaa Wazima project activities in both Siaya and Busia districts.

Many thanks to the Project Manager Mr. Mathew Onduru, and his team in Siaya and Busia namely; Michael Ochieng' (M&E Officer), Benta Asol, Fred Apopa, Gordon Oluoch, Rosemary Atieno, and the entire community extension workers on the ground for their invaluable role in mobilizing the community and facilitating the evaluation.

We acknowledge the role played by the enumerators who ensured that the target respondents were interviewed on time.

We would also like to appreciate the role played by the District Public Health Officers, District Agricultural Officers, District Social Services Officer, District Water Officers and Provincial Administrators in the project area during the course of conducting the qualitative interviews.

Special thanks go to Widow Groups, Management Committees, Village Health Promoters, Water Point Caretakers and Village Agriculture Promoters for offering valuable information during the Focus Group Discussions. Several other people whose names do not appear here were instrumental in making the evaluation successful. We thank them sincerely for the various roles they played.

SPR&R would also like to thank the evaluation team Caesar Handa, Elijah Agevi, Jacinta Mulwa, Arysterico Muhinda and entire staff of Strategic Public Relations and Research Ltd. for playing key roles during the study and production of the report.

Executive Summary

Motivated by the extent and prevalence of poverty in Western Kenya, Norwegian Agency for Development (NORAD) in partnership with Care Norge, Care Kenya and the grassroots communities in both Siaya and Busia Districts designed and implemented Jamaa Wazima Project. The project's core focus is poverty reduction with a view to improving household livelihood security of approximately 54,400 people in 100 villages drawn from three and one locations in Siaya and Busia, respectively. This project, with a life span of five years that started in 2000 and ended in 2004, intervened in the water and agriculture sectors. The objectives of the initiative were to improve water, sanitation and hygiene education and to enhance farmers' knowledge and practices on agricultural production and agro-forestry.

A final evaluation was carried out to determine the performance of Jamaa Wazima project and to assess the impact of the project on the basis of key measurement areas. The evaluation exercise used a range of methodologies and approaches designed to achieve maximum interaction amongst the project stakeholders in the interest of gathering reliable data and information. Some of the tools and methods employed included; Focus Group Discussions (FGDs), Key Informant Interviews (KIIs) and Field Visits. A substantial number of questionnaires were administered to various respondents in addition to undertaking document analysis and review.

The efforts and resources invested in water intervention achieved an increased access to protected water sources by the target population. Almost all (98%) of the constructed water points were functional though water availability was hampered by breakages and drying up of some of the water points due to drought. Water treatment was promoted as an additional measure to ensure safety of drinking water. 54% of the target population adopted various methods of water treatment. A remarkable achievement of Jamaa Wazima was the drastic reduction in the prevalence of diarrhoea. The expected target of 40% further reduced to 37%. The water component also a targeted a per capita consumption of 20 litres and 19.5 litres per capita was achieved.

On sanitation, 1,259 latrines were constructed that translated into a success rate of 63%. The outcome of this was that the latrine coverage increased to 72% against an anticipated coverage of 80%. Some appropriate water and sanitation hygiene was realized. This included hand washing with soap on critical occasions. At the time of evaluation 50.5% of the respondents indicated regular hand washing with soap especially after visiting the latrine, before preparing food and after eating.

On the component of agro forestry, the project registered fair performance with regard to increased yield. The project promoted knowledge and skills dissemination through adaptive research and community extension. Crops that were promoted include: beans, maize, cassava, pineapples, mangoes, cotton and bananas. Efforts by the project to improve agricultural productivity through extension and provision of better quality seeds were also viable. The proxy indicator of “number of hunger months” indicated that although the situation had improved a bit, most households could hardly meet their food consumption needs from their own production largely because of lack of farm inputs such as quality seeds, pesticides, insufficient land, drought, reduced man hours especially as a result of the HIV scourge and low-scale farming levels. It was however, encouraging to note that 92% of the project population managed an average of two meals a day, a major improvement in food security. Food shortage (88%) was attributed to drought and crop failure. Most farmers in the project areas especially widows had adopted mixed cropping of main staple foods with crops that can enrich quality of diet (fruits and vegetables). This has made substantial contribution to the nutritional security of the communities.

The findings of the evaluation clearly demonstrate that there were remarkable achievements in the project components in which Jamaa Wazima worked with group entities e.g. water and agriculture unlike sanitation which was individual based. The research established that the greatest achievement was made in the water component. This was mainly because of the importance attached to water and the immediate benefits reaped from constructed water points like reducing time taken to haul water, assured availability of safe water and reduced instances of water related diseases.

The agriculture component of Jamaa Wazima has significantly contributed to improved livelihoods. Besides increasing the number of average household meals per day, some households, especially widow-headed ones derived increased income from the sale of farm products.

Hygiene education resulted in change of behaviour in the communities living in the project area. The project succeeded in sensitising the community members on water and environmental sanitation and hygiene. However, change of behaviour was not adequately achieved especially in latrine utilisation, hand washing and safe water containment.

The target population for Jamaa Wazima was 54,000 people; this was a very big population and a needed longer period, staff and more funds. In future programs it is important to target a specific group like the widows, youth etc for effectiveness as working with the whole community proved to be very difficult. Also working in smaller geographical areas like locations or sub locations proved more effective than working in a whole district.

Although, constrained by socio-cultural beliefs and practices on sanitation, it will be important to strategize with a view to formulate and implement an appropriate hygiene promotion strategy that motivates and encourages the local communities to appreciate the contemporary role and value of sanitation in their lives.

The target communities need to be encouraged to appreciate agriculture as a source of food and income. In addition, there is need to diversify and promote a wide variety of crops especially drought resistant ones like cassava, sweet potato etc and commercial crops like cotton, pineapples etc which are not very popular in the area. Commercial agriculture should be emphasized in order to increase income levels in these areas

Efforts and resources should be directed at supporting the widow groups to form a more vibrant entity e.g. a Co-operative Society that can effectively and efficiently protect and champion their interests' e.g. accessing farm inputs, markets and advocating for policy issues that directly affect them.

CHAPTER 1: Introduction and Background:

1.1 Background

This document is the final evaluation of Jamaa Wazima Project: a Norwegian Agency for Development (NORAD) supported combined Water Supply/Sanitation and Agro forestry intervention in Siaya and Busia Districts in Western Kenya. The project was undertaken in partnership with Care Kenya and Care Norge. Strategic Public Relation and Research carried out the final impact assessment /evaluation. This end of project evaluation was commissioned with a view to, among other things, assess the performance and impact of the project; assess partnerships built between and among critical development practitioners in the project areas (CBOs, NGOs, GoK agencies and relevant line ministries). In addition, the final evaluation took stock of the actual achievements of the project against the pre-set targets. The evaluation also assessed both software and hardware strategies for ensuring sustainability of the project.

1.2 Project Description

The NORAD supported water/sanitation and agro forestry project in Siaya and Busia Districts was motivated by the increased poverty levels in Kenya. Over 50% of Kenyans live below the poverty line, which is defined by the United Nations as persons living on less than one US dollar a day. Indeed, according to the District Social Services Officer, Siaya is ranked as the poorest district in Nyanza Province. Factors contributing to the poverty levels include inadequate access to basic human needs:-food, water, sanitation, shelter, education and health. The prevalence of HIV/AIDS in these regions magnifies the extent of poverty to almost unbearable proportions. As part of its intervention, Care Kenya designed a project known as Jamaa Wazima, which is the Swahili translation for Household Livelihood Security. The project was initiated in the year 2000. The project duration was five years and focused on three locations in Siaya District (Usonga, Township and South Alego) and one location in Busia District (Bujumba).

The approximate numbers that were projected to benefit from the project was 54,400 in 100 villages spread across the four locations. The dual objectives of

the project were to improve water, sanitation and hygiene education and to enhance farmer knowledge and practices on agricultural production and agro forestry.

1.2.1 Water and Sanitation Component

The specific objectives of water and sanitation component were to ensure;

- ✓ Sustainable community management of water and sanitation systems
- ✓ Improved community access and use of water systems
- ✓ Improved household and school sanitation system (Hygiene Education)
- ✓ Improved knowledge of domestic and household hygiene (Prevention and management of diarrhoea diseases, proper food and water handling)
- ✓ Functional Village Hygiene Promotion System (By Hygiene Promoters)

1.2.2 Agro-Forestry Component

At the end of the intervention the project aimed under the agro-forestry component to ensure that:

- ✓ Households adopted new or improved productivity – enhancing agro forestry technologies and farm management techniques.
- ✓ There was improved capacity at local level through community institutions to access and manage agro forestry information and services.
- ✓ 200 trained Village Agricultural Promoters (VAPs) to extend appropriate agro-forestry technologies and farm management techniques.

1.3 Objectives of the Final Evaluation

The purpose of the project evaluation as provided by the Terms of Reference, is summarised below:

- ✓ Assess the achievements of the project on the following aspects: impact, outcome and outputs as defined by the specific indicators.
- ✓ Assess collaboration and networking with other stakeholders, benefits and challenges during project implementation.
- ✓ Assess the systems and structures put in place for project sustainability.
- ✓ Assess behavioural changes/adoption rates to various planned interventions versus socio-economic and cultural issues.
- ✓ Determine the lessons learnt, challenges/constraints and recommendations for future programming.

CHAPTER 2: Methodology

2.1 Study Population

The impact assessment sought to evaluate the impact of the Jamaa Wazima project implemented in Siaya and Busia Districts of Nyanza and Western Provinces in Kenya respectively. The assessment focused on two main components namely: Water/sanitation and agriculture.

The project target was communities in three locations in Siaya District (Boro, Uranga, and Karemo) and one location (Butula) in Busia District. The target population in the Jamaa Wazima project is approximately 54,400 people spread over 100 villages.

2.2 Study Design

The study adopted various methods to achieve the intended objectives of the impact assessment survey. The research undertook the use of qualitative, desk review and quantitative survey.

The qualitative phase comprised of Focus Group Discussions (FGDs), Key Informant Interviews (KII), Desk Review and Case Studies.

The FGDs was an important research technique as it utilised the aspect of group dynamism to gain insights into the wide range of responses from the participants. KIIs on the other hand enabled the researchers get in-depth insight from the stakeholders of the project.
The case studies were also instrumental in documenting real life cases to shed more light on the impact of Jamaa Wazima project beneficiaries.

The desk review involved analysis of relevant secondary data on the Jamaa Wazima Project such as periodical project reports (quarterly and annual reports), mid term evaluation report, detailed implementation plan, baseline report and the cash strategy report. Other materials reviewed were the Kenya Demographic Survey and World Health Organisation Guideline Survey.

The aim of the Desk review was to shed more light on the Jamaa Wazima Project and assist the evaluators identify and define indicators to be used for the survey.

The quantitative survey deployed the use of test as well as control cell methodology to effectively evaluate the impact of the project. The test cells comprised the beneficiaries (project group) while the non-beneficiaries constituted the control cells (control group).

2.3 Sampling Design

Both cluster and systematic sampling designs were applied in the study. Consideration of the study districts and locations was purposive as it was based on the areas that had benefited from the Jamaa Wazima Project and one non-beneficiary area (Wagai) that acted as the control cell. The quantitative survey's' choice of Wagai as a control cell was due to the fact that it has similar socio-economic characteristics as the test cells. The control cell was also to enable the study draw the distinctions of the impact in the intervention and non-intervention areas.

2.3.1 Sampling Size Determination and Sampling Procedure

The sample size of the respondents for the quantitative survey was mainly a function of logistics based on a precision of 95% and a 5% tolerable error.

The sample was determined based on the size of the population and targeted the villages in the project during the baseline and midterm surveys. Both systematic and cluster sampling was deployed to select the survey households.

The formula used to derive the sample population was:

$$N = \frac{deft\,(Z^2)\,p\,(1-p)}{D^2}$$

Where;

N= sample population
Deft= sample design effect; 1
Z^2 = Level of confidence;(95% CI)= 1.96
P= Proportion of characteristics of the study population; (50%)
D= level or tolerance: 0. 05

Since the survey had available data that had been used previously in the baseline and midterm survey, the design effect was set to 1.

The clusters having been defined previously in the baseline and midterm survey enabled the construction of the sampling frame.

Thus the survey was able to come up with a total sample size of 800. This sample was statistically distributed amongst the target villages with the control population allocated a sample size of 160. Details of allocation of sample appended (See Annex 3)

The qualitative phase comprised of 8 FGDs, 12 KIIs and 6 case studies. Purposive sampling was done to select the participants and respondents for the four locations. Participants for the FGDs were all beneficiaries of the Jamaa Wazima Project, whereas respondents for the KIIs were stakeholders of the Jamaa Wazima Project.

Participants for the FGDs were selected from the following categories.

√	Widows
√	
√	
√	
	√
	√
	√

Sampling structure for the FGDs and KII is appended (See Annex 3)

2.4 Instrument Design

The Care (K) and SPR & R team developed the quantitative and qualitative questionnaire. The structured questionnaire combined both pre-coded and open-ended questions. The questionnaires were then translated into both Dholuo & Luhya and back translated to make sure it captured the correct meanings, which was then respondent friendly. The questionnaire was projected to take 20-25 minutes.

The FGD and KII discussion guide were developed by SPR&R in collaboration with CARE (K) staff. The discussion guides were then translated to Dholuo and Luhya taking precaution not to loose meaning. The guides were projected to take about 2 hours. Case study guidelines were also developed and discussed by the project team.

2.5 Data collection

2.5.1 Enumerator Selection

The enumerators were recruited from the respective districts of Siaya and Busia. They all had a minimum of post high school education but included some with postgraduate level of education. The enumerators were also selected on the basis of their ability to fluently speak the native languages of interview.

2.5.2. Training and Pre- test

A team of 26 enumerators and 6 supervisors were trained for 3 days on interviewing techniques, questionnaire administration, objectives and goals of the study .The qualitative moderators were trained on moderating techniques for FGDs and KIIs by a qualified qualitative professional for one day. The enumerators, supervisors and the moderators were then subjected to dummies after which they were sent to the field for piloting. The pre test findings and experiences were used to review and modify the instrument with a view to enhancing its efficacy.

2.5.3 Actual Data Collection Process

The actual collection started on 29th November, a day after the piloting had been done. Each supervisor was assigned four enumerators. The process of selecting

the households was random selection by the left hand rule. Every fifth house was selected for interviewing. In the event that the head of the household was missing the sixth house was then selected for interviewing. Each interviewer managed to carry out an average of 8 questionnaires per day. The actual fieldwork took seven days.

2.6 Data processing

2.6.1 Data Processing Quantitative

Questionnaires once received were a 100% checked by the supervisors and the data entry manager to ensure quality control. All completed questionnaires were checked and edited for errors. No questionnaires were spoilt.
Experienced researchers then coded correctly completed and checked data using a code sheet developed by the lead researcher. 10% of all coded data was checked to ensure quality control. Coding took three days.

2.6.2. Data Entry and Cleaning

The correctly coded questionnaires were then entered into the computer using Statistical Package for Social Sciences (SPSS). Experienced data entry clerks trained by SPR&R entered the data into the computers. 10% of the correctly completed questionnaires were double entered and consistency test done to ensure quality control. Data Analyst and Lead Researcher conducted the consistency test.

2.6.3. Qualitative Data Analysis

Verbatim transcription of the FGDs and KIIs were transcribed and analysed in the following steps*:*

√ Initial analysis of individual reports: The moderator re-grouped the research findings in grids according to key areas of interest using the focal topics agreed upon by both the client team and the consultants.

√ The grids were then analysed in an effort to identify consistencies in arguments and similarities of points raised. The moderator interpreted these similarities and differences in light of the discussions. Interpretations were based on discussion points. The moderator drew out and synthesized

cross-cutting issues and themes in the FGDs and KIIs. The moderator also illuminated these common themes based on findings.

√ Overall synthesis: The Lead moderator did a final analysis based on the various FGD and KIIs reports.

√ The team leader finally reviewed the report and synthesized the conclusions and recommendations that had an immediate implication on Jamaa Wazima Project

2.7 Study Limitations

√ In the control area (Wagai) the respondents were reluctant to avail information on the basis that they had been interviewed severally yet nothing tangible had come their way. During the baseline survey, the same area was used as the control area.

To ensure quality control, the Care Field Officers worked through the Provincial Administration. The Chief and the Assistant Chief then talked to the villagers to agree to be interviewed.

√ Quantitative respondents were not willing to reveal household information like ages and average income, as they considered this confidential.

The interviewers were trained to be friendly and win the respondents' confidence first then ask for the sensitive information last. This worked well as after the interview the respondent realised that the interview was harmless.

√ Some enumerators experienced communication barriers. They had difficulties in understanding the local dialect.

As much as possible we only allocated the interviewers areas they were conversant with the dialect, however in a few instances we had to use interpreters to translate some of the questions.

CHAPTER 3: Study Findings

3.1.0 Desk Research

The desk study involved a thorough literature review of documents on Jamaa Wazima Project and other related documents. This was done by SPR&R Ltd. with support from Jamaa Wazima Project staff.

The objectives of the desk research were:

- ✓ Review relevant documents on the scope of the Jamaa Wazima Project.
- ✓ Assist the project evaluators identify and define evaluation priority areas and indicators to be used in the survey.
- ✓ Assist in developing survey instruments.

Relevant documents for analysis and review were identified and availed. These are listed in the Bibliography

The desk research findings from the Jamaa Wazima Project are outlined as description of project component, project monitoring indicators and targets and finally documented achievements.

3.1.1 Description Of Project Components

The baseline study was quite instrumental in formulating and designing the Jamaa Wazima Project. According to the study, the prevalence of diseases attributed to inadequate access to safe water, sanitation and food insecurity in addition to the prevalence of HIV/AIDS were major determinants of poverty in the project area. In the effort to contributing to the improvement of the quality of life of the 54,400 people in Siaya and Busia Districts, Jamaa Wazima Project intervention focused on enhancing access to water, proper sanitation, hygiene education and improving knowledge and practices on agro forestry. The project with a life span of five years, was started in 2000 and was to come to an end in 2004.

3.1.2 Project Output Indicators

The project components were water and sanitation and Agro forestry. The specific objectives under these components were:

3.1.2.1 Water, Sanitation and Hygiene Education

Objectives of water, sanitation and hygiene education component was to ensure:

- ✓ Sustainable community management of water and sanitation systems.
- ✓ Improved community access to and use of water systems.
- ✓ Improved sanitation systems.
- ✓ Improved knowledge of domestic and household hygiene (Prevention and management of diarrhoeal diseases, proper food and water handling).
- ✓ Functional Village Hygiene Promotion System (by Hygiene Promoters).

3.1.2.2 Agro-Forestry

Objectives of Agro forestry component was to ensure;

- ✓ Households adopted new or improved productivity.
- ✓ Adoption of agro forestry technologies and farm management techniques.
- ✓ Improved capacity at local level through community institutions to access and manage agro forestry information and services.
- ✓ Two hundred Village Agricultural Promoters (VAP) were trained to extend appropriate agro-forestry technologies and farm management techniques.

3.1.3 Performance Tracking Indicators and Targets

According to the project design, the following were identified as the indicators against which to measure the performance of Jamaa Wazima Project**.**

3.1.3.1 Water

- ✓ Decrease in the percentage of children with diarrhoea in the past two weeks (below 5 years) from 76% to 40%.
- ✓ Increase access of protected water source from 31% to 76%.
- ✓ Increase the number of households with year round access to safe water from protected source from 33%.
- ✓ Increase in average personal water use to 20 litre/person per day .
- ✓ Increase water treatment from 46% to 70%.

3.1.3.2 Sanitation

- ✓ Increase latrine coverage from 48% to 80%.
- ✓ Increase latrine accessibility from 70% to 80%.
- ✓ Increase household latrine utilization from 68% to 80%.
- ✓ Increase hand washing behaviour through Hygiene Education.
- ✓ Increase to 50% the population with appropriate hand washing behaviour.
- ✓ Increase safe water containment from 53% to 70% .
- ✓ Reduce time spent fetching and hauling water by women to less than 30 minutes.

3.1.3.3 Agro Forestry

- ✓ Increase in number of months of self-provisioning from own production.
- ✓ Increase in acres under improved farming.
- ✓ Increase in total staple crops production (measured by production per unit of land: kg/acre or acreage under particular crop):
  - ✓ Maize: 100 to 500 kgs per acre
  - ✓ Beans: 45 to 100 kgs per acre
  - ✓ Cassava: 0 to ½ acre
  - ✓ Bananas: 0 to ¼ acre
  - ✓ Millet:
  - ✓ Sorghum:
  - ✓ Groundnuts:
  - ✓ Cotton:
  - ✓ Banana production: 16,000 plants
  - ✓ Pineapple production: 34,000 suckers
  - ✓ Mango trees: 400 seedlings

3.1.4 Institutional Management Development and Capacity Building

- ✓ To form 17 Sub-Location Management committees.
- ✓ To have 15 sub-location sub-committees active and functioning.
- ✓ To have 15 sub-location sub-committees linked to ministries.
- ✓ To have 880 households applying Agro forestry technologies: Soil fertility, Seed Technology and pest control.
- ✓ To form 100 functional Village Management Committees.
- ✓ To ensure 100% of participating villages have Village Agricultural Promoters trained in Agro forestry and farm management.
- ✓ Sensitisation and empowerment of women to practice agriculture and participate in community management committees.

3.1.5 Documented Achievements

On the water and sanitation component, the project progress reports indicate that out of one hundred (100) water points planned for construction, ninety two (92) were actually done, which translates to 92% success. While on sanitation 1,259 toilets were put up from a target of 2,000 implying a shortfall of 741 toilets. According to the project documents the outputs on agriculture were surpassed except the output on cassava whose performance was 40%. The highest success on this component was earned on pineapples in which the set target was exceeded by 26,000 suckers. Next were pineapples was bananas that recorded a success rate of 110%. This implies that an excess of 1,575 banana suckers were planted from the expected 16,000 suckers. The acreage under cotton exceeded the expected target of 30 to 54 as did the seedlings of mangoes that shot up by 140 indicating a performance of 135%. The targets on Institutional Management Development indicate that formation of management committees at the village level was fully realized while at sub location and location level there was a shortfall of 2 and 1respectively. Varied targets were realized on capacity building. Training of location management committees recorded full achievement (100%). An excess of fifty-seven (57) person were

trained as water point caretakers. A success rate of 86% was recorded on the part of training the VAPs. The project expected to train 600 VHPs. However, 439 were actually trained as summarized in the table 1 below:

Table 1. Summary of Output Indicators

Intervention	**Target 2000-2004**	**Achievement as at December 2004**	**Percentage**
Water and sanitation			
Water point construction (No.)	100	92	92%
Latrine construction (No.)	2000	1259	63%
Agriculture			
Banana establishment (suckers)	16000	17575	110%
Cassava establishment (acres)	150	60.5	40%
Pineapple establishment (suckers)	34000	70000	206%
Cotton establishment (acres)	30	58	193%
Mango establishment (seedlings)	400	540	135%
Horticulture establishment	-	7	
Institutional Management Development			
LMC formed (No.)	5	4	80%
Sub LMC formed (No.)	17	15	88%
VMC formed (No.)	100	100	100%
Capacity Building			
LMC training (No. of Persons)	4	4	100%
Sub LMC training (No. of Persons)	15	12	80%
VMC training (No. of Persons)	100	64	64%
VHPs training (No. of Persons)	600	439	73.2%
Water point care takers training (No. of Persons)	200	257	128.5%
VAPs training (No. of Persons)	800	688	86%

3.2 Field Findings

3.2.1 Socio-Economic Characteristics of Study Population

The average number of household members was 5; on illiteracy level in the project area, 41% of the population have no formal education. The main occupation of the community in the project area is farming (85%). The main building material is mud/ dung and grass for thatching. See Table 2 below:

Table 2. Socio-Economic Characteristics of Study Population

Variables	**Total**	**Project**	**Control**
Sample size	809	649	160
Average number of people in Household	5	5	5
Highest Level of Education			
None	310 (38%)	267(41%)	43 (27%)
Primary (1-4)	127(16%)	105 (16%)	22 (14%)
Primary (5-8)	285 (35%)	211 (33%)	74 (46%)
Secondary and above	87(11%)	66 (10%)	21(13%)
Main Occupation			
Fishing	7(1%)	6(1%)	1(1%)
Salaried employment	31(4%)	23(4%)	8(5%)
Business person	80 (10%)	61(9%)	19(12%)
Farming	688(85%)	557(86%)	131(82%)
Roofing material			
Thatch	422 (52%)	347 (53%)	75 (47%)
Metal/Iron sheets	386 (48%)	301(46%)	85 (53%)
Flooring material			
Dung /mud	669 (83%)	542 (84%)	127(79%)
Cement	137 (17%)	105 (16%)	32 (20%)
Wall material			

Dung/mud	709 (88%)	574 (88%)	135 (84%)
Iron sheet	2 (0%)	1(0%)	1 (1%)
Wood	4 (0%)	2 (0%)	2 (1%)
Cut stone /bricks	84 (10%)	62 (10%)	22 (14%)
Wall finishing			
Plastered /painted	127 (16%)	91 (14%)	36 (23%)
Clay finish	227 (28%)	180 (28%)	47 (29%)
Mud dung	444 (55%)	368 (57%)	76 (48%)
Others	11 (1%)	10 (2%)	1(1%)
Primary Lighting method			
Firewood	3 (0%)	1 (0%)	2 (1%)
Paraffin (hurricane lantern)	232 (29%)	173 (27%)	59 (37%)
Paraffin (tin & wick)	565 (70%)	470 (72%)	95 (59%)
Solar	6 (1%)	3 (0%)	3 (2%)
Pressure lamp	1 (0%)	0 (0%)	1 (1%)

The field findings are presented under the major project components namely water and sanitation and Agro forestry. For the purpose of this report, the project component water and sanitation was split into water development, sanitation and hygiene education.

3.2.1. Water Development

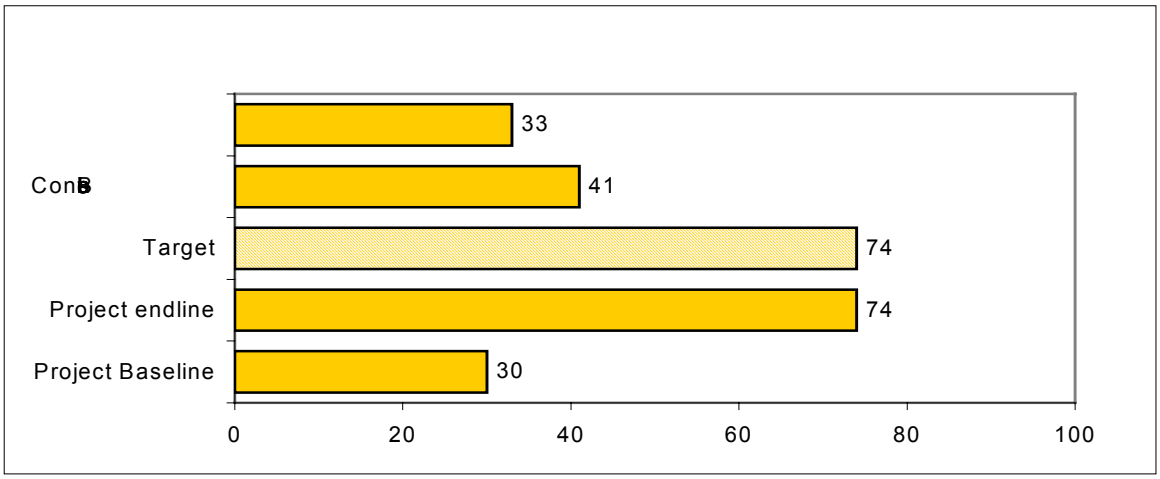
The water component intervention was the construction of communal water-points in selected villages. The achievements are discussed under the following indicators: access to protected water source, water treatment, diarrhoea prevalence and household per capita water consumption.

3. 2.1.1 Access to Protected Water Source

According to the baseline survey, only 30% of the population had access to water from a protected water source. Poor quality water from unprotected sources like rivers; lake, ponds and unfenced dams are associated with water borne and

water related diseases. The Jamaa Wazima Project has progressively achieved the set targets by constructing 92 out of the targeted 100 water points, 98% of which were found to be functional during the final evaluation period. About 74% of the population in the project area had access to protected water sources as shown in fig 1. In water, the achievement was very good because of adequate collaboration and working closely with stakeholders, government and community support.

Fig 1. Households with Access to Protected Water Source



From the FGDs and KIIs findings, community members attributed the proper functioning of the water points to the following factors:

- ✓ Community ownership of the water points: because they contributed about 30% to construct the water points, it was their interest to protect what they considered to be their property.

> *"Water point construction was through cost sharing, we contributed labour, food and water while Jamaa Wazima contributed the rest, so it is our water…" Water point caretaker Alego.*

- ✓ Good management by committees,

> *"I can say that the committee was very devoted and ensured successful completion and good utilization of the water points" Assistant Chief in Bujumba*

- ✓ Co-operation and commitment among community members,

> *"The community members are committed to make the water project a success" Assistant Chief in Usonga*

- ✓ The water points are near to the homesteads thus protected from vandalism
- ✓ The water points have clean water compared to other sources of water. Members of the community have understood the importance of protected water sources from hygiene education.

"Hygiene education made people understand that water from unprotected sources was dirty, now they appreciate water constructed for them by CARE(K)" Assistant Chief in Township

- ✓ Availability of locally trained water point caretakers

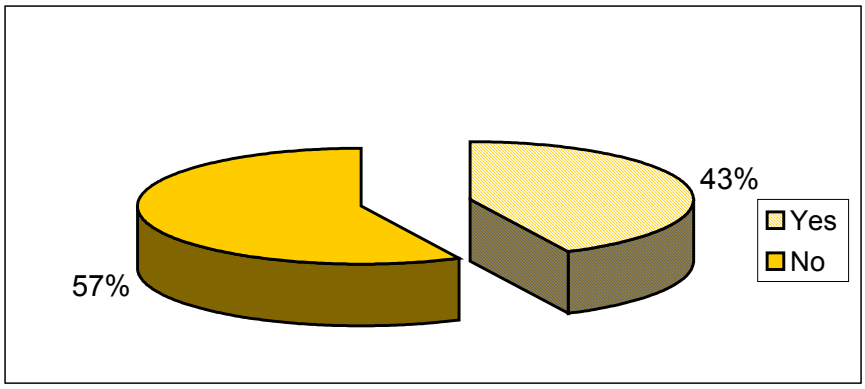
"We have trained water point care takers who can repair the water source immediately a problem is reported' Widow Usonga

- ✓ Community monthly fee contribution to cover cost of maintenance and repairs.

"We pay ten shillings per month to cover maintenance costs" Water point caretaker Alego

As shown in Fig 2. below, respondents were asked if they had missed water from protected sources over the last one year, 43% reported that they had missed water.

Fig 2. Whether Household Missed Water in the Past One Year.



Year round access to water source was however hindered by breakages (41%) and drying up of some water points (37%). See details in table 3 below.

Table 3. Reasons for missing water from protected source

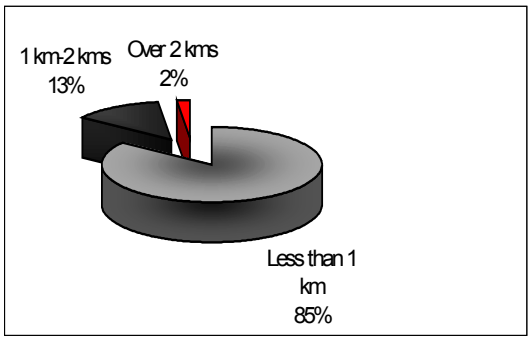
	Total	Project	Control
Total - Households that had missed water from protected source	**265**	**233**	**32**
Lack of money to pay	5%	5%	3%
Breakdown of water system	36%	41%	0%
Drought	37%	37%	38%
Others	27%	22%	63%

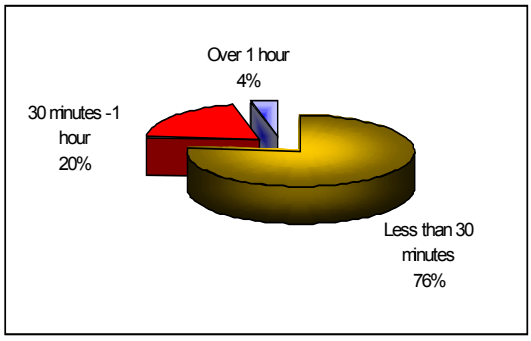
Other reasons included absence of someone to haul water from water points, presence of alternative source and protected water source being too far especially in the control group. The qualitative research revealed that where management committees were weak, misappropriation of monies contributed led to delays in repairing water points in cases of breakdown. However the communities change inefficient officials regularly to ensure smooth running of the pumps. Community members who delay monthly contributions for more than two months are barred from fetching water, though this was very rare as very poor community members are treated differently.

3.2.1.2 Distance/ Time Taken to Nearest Protected Water Source

Distance to the nearest protected water source has reduced substantially and 85% of the population in the project area have water within a kilometre, though only 76% reported spending less than 30 minutes to collect water.

Fig 3 Distance/ Time Taken to Nearest Protected Water Source



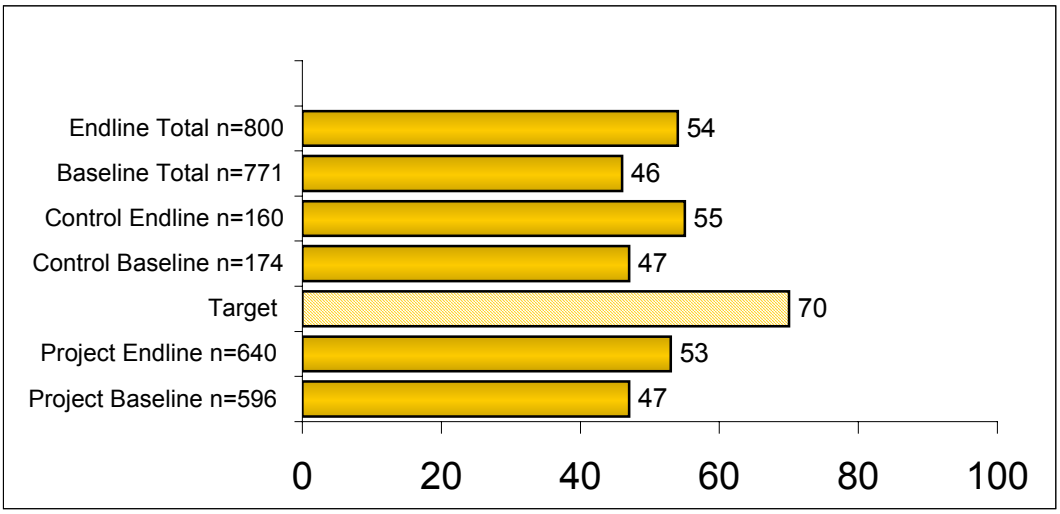


3.2.1.3 Water Treatment

This project component aimed at increasing the treatment of drinking water from 46% to 70% by the end of the project as shown in Fig 4 . The methods of treating water common in the project area according to the baseline were boiling (36%) and chemical treatment (Klorin or Water Guard) (3%). Through its hygiene education, the project has managed to improve water treatment in the area to 54%; chemical treatment went up to 19% while boiling dropped to 35%.

Findings from the Focus Group Discussions showed that people considered water from the protected sources safe and thus felt no need to treat it further. This could pose a challenge as contamination could also occur in the process of fetching and storage.

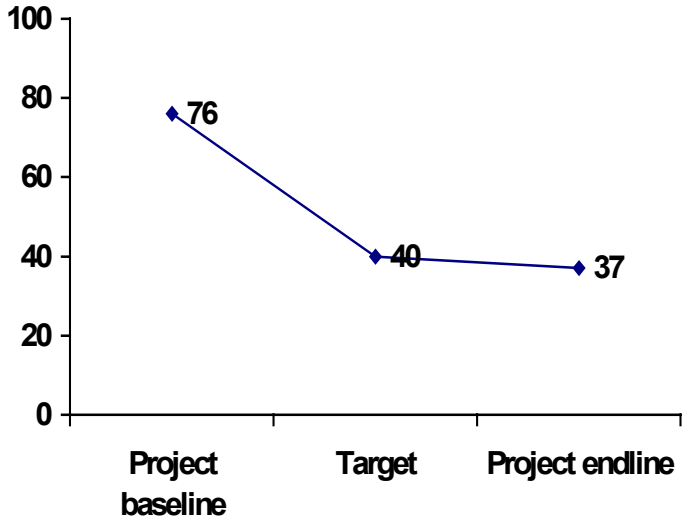
Fig 4 . Households Treating Drinking Water



3. 2.1.4 Diarrhoea Prevalence

As shown in Fig 5, the project goal was to achieve a reduction in the incidence of water born and water related diseases like diarrhoea. Specifically the target was to reduce diarrhoea prevalence among children less than five years from 76% to 40%. At the time of the evaluation, diarrhoea prevalence stood at 37%. This was a major achievement as it surpassed the target of 40%. The indicator was based in the past fourteen-day's recall prior to the interview.

Fig 5. Diarrhoea Cases Reported in the past 2 weeks Among Children Below Five Years



One major achievement was that since the start of Jamaa Wazima in 2000 there has not been a cholera outbreak in the project area, which was common before the intervention. This can be attributed partly to the fact that consumption of unsafe water, which is one of the main transmitters of cholera, has significantly reduced in the project area. A good number of the project areas have benefited from safe water point construction from Jamaa Wazima Project.

"I can say that since we got the water from CAR,E malaria and stomach problem that we had before have reduced" Assistant Chief in Bujumba

"We used to get water from the lake, diarrhoea cases were very frequent, but nowadays we are healthy, because the water is clean." Widow beneficiary in Usonga

3.2.1.5 Per Capita Water Consumption

The amount of water available for household domestic use is a measure of water poverty in terms of the degree of achieving adequate nutrition, personal and environmental hygiene. This implies that households with inadequate access to water have high probability of practising improper water and sanitation hygiene. The project aimed to increase water per capita to about 20 litres. The intervention also aimed at attaining 20 litres per capita consumption. 19.5 litres per capita was achieved. This was a fairly good achievement of the target. Qualitative research findings reported an increased quantity of water in the project areas households though could not give exact figures for comparison.

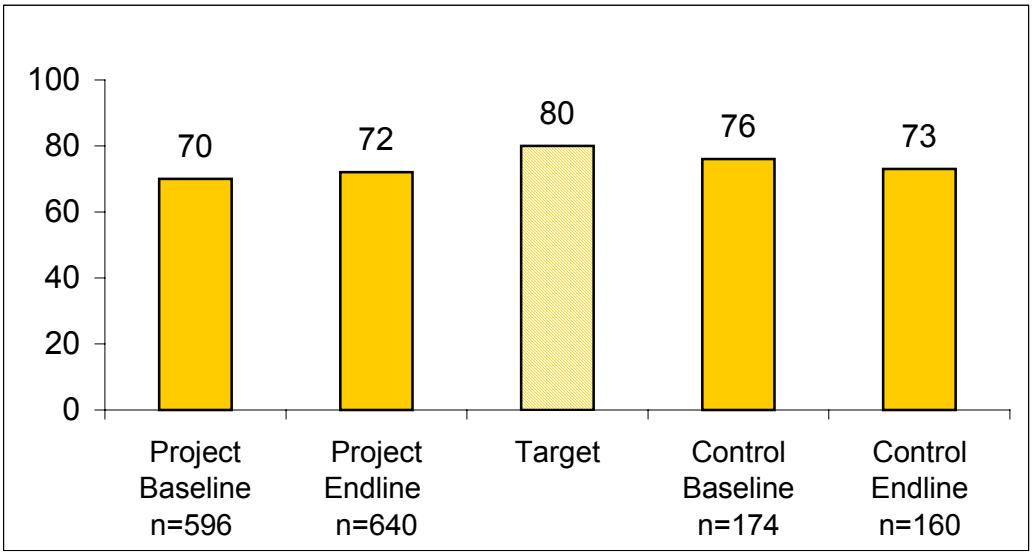
3.2.2 Sanitation and Hygiene Education

The sanitation intervention was the construction of latrines in the project area, while hygiene education was mainly community training on personal and household hygiene. The achievements are discussed under the following indicators: latrine coverage, latrine use, hand washing behaviour and safe water containment.

3.2.2.1 Latrine Coverage

Jamaa Wazima has enabled the community construct better latrines especially in Usonga where due to weak soil formation, latrine construction was almost impossible using the local technology. During the baseline survey, 70% of the households in the project area had latrines and 76% in the control area. The target of sanitation component was to raise latrine coverage to 80% in the project. The approach in increasing coverage was to cost share with the community members contributing 90% of the latrine construction cost. This component, unlike water, which was community effort, targeted the individual household. By the time of this evaluation 72% of the households in the project area (an improvement of about 2%) had functional latrines while in the control area coverage went down from 76 to 73% as shown in figure 6 below. Improvement of latrine coverage was mainly attributed to Care (K) intervention especially the assistance in latrine construction and hygiene education, which was instrumental in promoting safe waste disposal in the project area.

Fig 6. Households with Functional Latrines

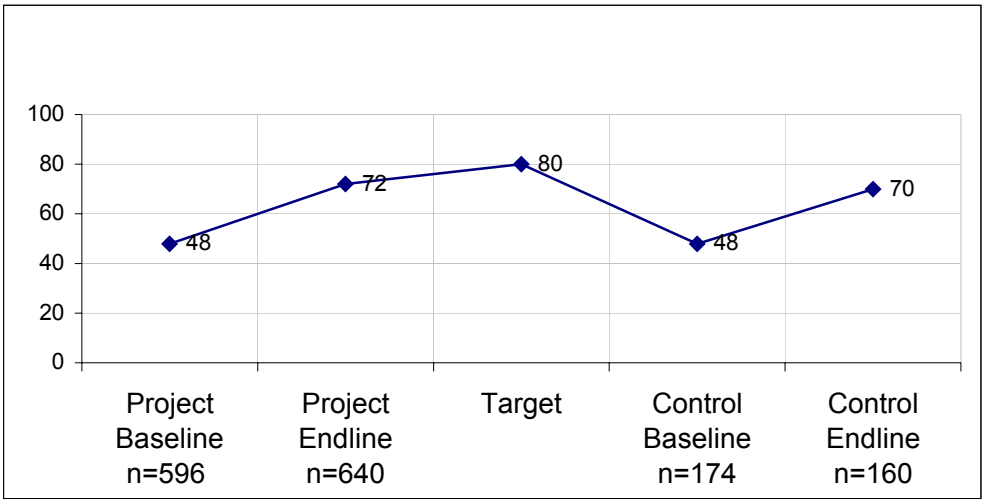


3.2.2.2 Latrine Use

Latrine utilization is determined by the level of use by all household occupants and takes into account the households reported having a latrine. Findings from KIIs and FGDs showed that the community where Jamaa Wazima worked has some cultural inhibitions that some members of the family cannot share a latrine. This forced some household members to use alternatives even with the presence of a functional latrine in the homestead. However this has been reversed to a greater extent by hygiene education and some of the resistant members advised to construct more than one latrine to sort out this issue. The project target was to achieve 80% complete latrine use. At baseline only 48% of the households had complete latrine use, during the time of this evaluation 72% of the households with latrines reported complete use by all household members. Though the target of 80% was not achieved, this was a remarkable change of behaviour as household members are adopting hygienic ways of human waste disposal amidst socio-cultural inhibitions. This was a major achievement for Jamaa Wazima Project on the hygiene education component of creating attitude change amongst the project area population. See Fig 7. below for more details

"Even a four year old can use the latrine without fear of falling inside" beneficiary sanitation – Usonga

Fig 7. Households with Complete Latrine Coverage and Use



3.2.2.3 Hand Washing with Soap

Although this indicator was not measured during the baseline, the project targeted 50% proper hand washing behaviour with water and soap by the end of the project. About 70%% of the respondents indicated regular hand washing with soap after visiting the latrine, 50.4% before preparing food, 46.7% before eating and 47.1% after eating as shown in table 4 below;

Table 4. Hand Washing with Water and Soap

	Total	Water only	Water and Soap	Water and Sand/Ash
After visiting the latrine	552 (68%)	149 *(27%)*	387 *(70%)*	2 *(0.4%)*
Before preparing food	423 (52%)	194 *(45.9%)*	213 *(50.4%)*	2 *(0.5%)*
Before eating food	763 (94%)	333 *(43.6%)*	356 *(46.7%)*	11 *(1.4%)*
After eating	682 (84%)	225 *(33%)*	321 (47.1%)	1 *(0.1%)*

The hygiene education in the project area has had a remarkable influence as participants in the FGDs reported increased hand washing behaviours. From the table, 70% of the respondents reported regular hand washing with soap after visiting the latrine. From the qualitative research, hand washing with water only is common to avoid soap smell and taste in food, though this is changing due to knowledge gained from hygiene education.

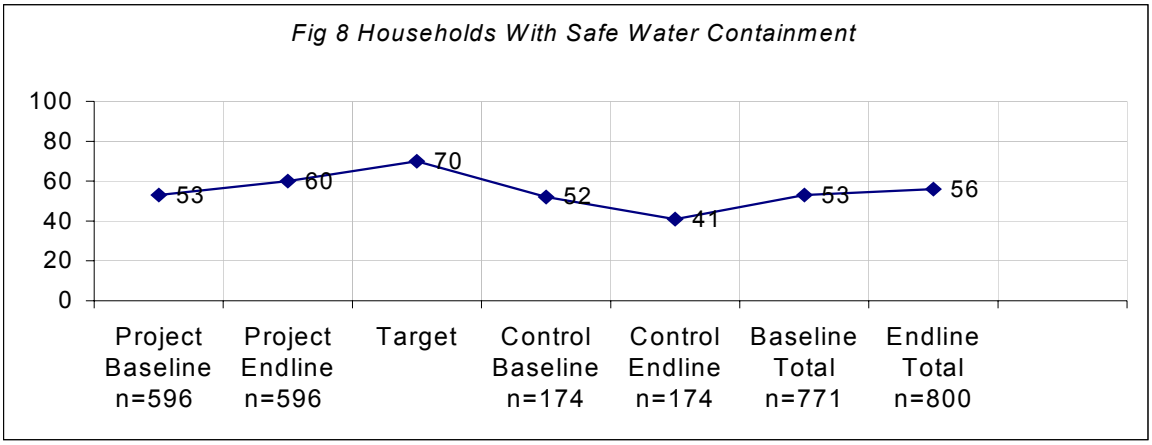
"Jamaa Wazima taught us about personal and household cleanliness, fencing the homestead, dish racks, constructing dumping sites and putting water near the latrines for washing hands."
Widow – Usonga

3.2.2.4 Safe Water Containment

A water receptor is considered safe if it has a cover/ lid and if it's only used for water storage. The project aimed at increasing safe water containment from 53% to 70%. Safe water containment at the time of evaluation was at 60% as shown in fig 8 below. Although 84% of the containers were used for water only, only 60% had a lid and used only for water collection and/or storage. Findings from the FGDs indicated adequate hygiene education on water containment.

"They taught us to safeguard water by using clean containers with lids to collect and store water and also using clean cups to draw the water from the containers." VHP – Alego

Fig 8. Households with Safe Water Containment



3.2.3 Agro forestry

The performance in this aspect of the project in terms of increasing yield was found to be fair. The intention of the project to improve food security and income from crop production is appreciable.

The project has promoted knowledge and skills dissemination through adaptive research farmers. Crops promoted include beans, maize, cassava, pineapples, mangoes, cotton and bananas. The introduction of these crops is having positive effects on the community (*see case studies appended*) An example of the success of this component is cassava which had been wiped out in the area by cassava mosaic. Currently, farmers have planted cassava as a result of the

project due to introduction of new varieties and new farming methods. The cultivation of pineapple, sweet potatoes, mangoes and bananas has also increased.

Agricultural productivity in the areas targeted by the project is generally low. Apart from erratic rainfall, other negating factors such as poor soils typified by phosphorus deficiency and limited access to quality seed have contributed to continued food insecurity in the project area. It is advisable to give priority to crops that the community has relied on for a long time such as maize that form the core of their value systems and improve the yield of such crops.

Efforts by the project to improve agricultural productivity through extension and provision of better quality seed are viable. The proxy indicator of "number of hunger months" indicated that although the situation has improved a bit, most households could hardly meet their food consumption needs from own production largely because of lack of farm inputs such as quality seeds, pesticides, lack of land, drought, lack of labour especially as a result of the HIV scourge and low-scale farming levels. It was however encouraging to note that 92% of the project population managed an average of two meals a day. This is a major improvement in food security. 88% of food shortage was attributed to drought and crop failure.

"They taught us new farming techniques especially the composite manure which has increased our harvests." Beneficiary agro forestry – Alego
"Farmers were taught how to keep farm records to calculate their profits" District Agricultural Officer - Siaya

It was noted that most farmers in the project area especially widows had adopted mixed cropping of main staple foods with crops that can enrich quality of diets (fruits and vegetables). This has made substantial contribution to nutritional security of the communities. Nutrition has substantially improved and cases of malnutrition have reduced in the project area especially where pineapples, bananas and mangoes were adopted.

"We have now planted kales, bananas, tomatoes, among others which have helped our children not to starve." Beneficiary agro forestry – Alego

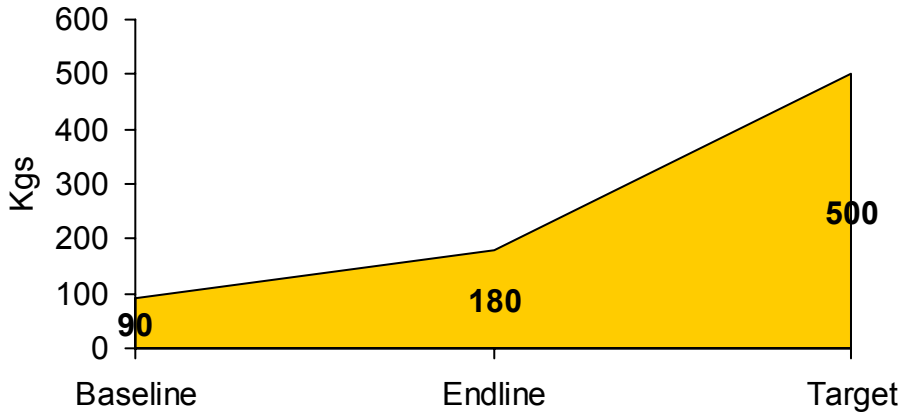
The individual crops yields and/ or acreage is summarised below;

3.2.3.1 Maize

Maize average yield during the evaluation period was 180 kg/acre up from 90kg/ acre during baseline period. Although a fair achievement, the project intervention was not able to achieve the target of 500kg/acre as shown in Fig 9 below. FGDs reported cases of many households supplying their maize subsistence and commercial needs. Case studies also revealed increased maize harvests with improved seeds, spacing and extension services from the project staff.

"We now have enough food to consume and can even manage to save a little money from sale of crops." Beneficiary agro forestry – Usonga

Fig 9. Maize Yield Per Acre

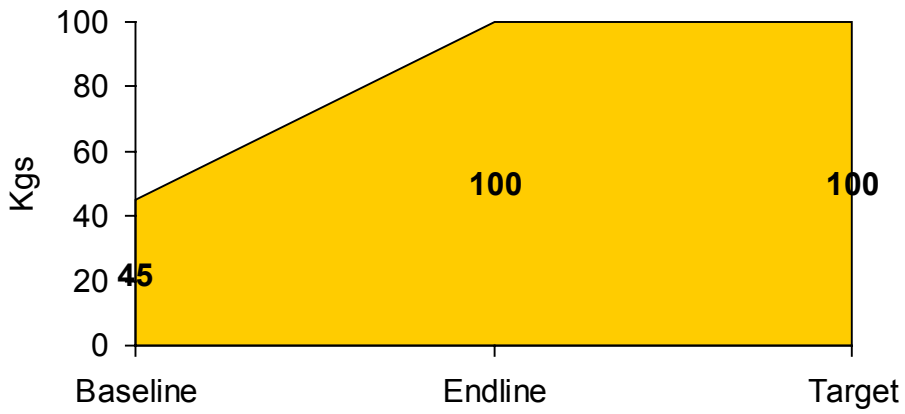


3.2.3.2 Beans

As shown in Fig. 10, During the Jamaa Wazima Project implementation period, yield per acre improved from 45kg/acre to 100kg/acre. This was a very good achievement as the target was met. The achievement was attributed to information, services and farm input support from Jamaa Wazima project staff and VAPs in the community.

"I now get two bags from the farm where I used to get a 'debe' " Beneficiary agro forestry – Alego

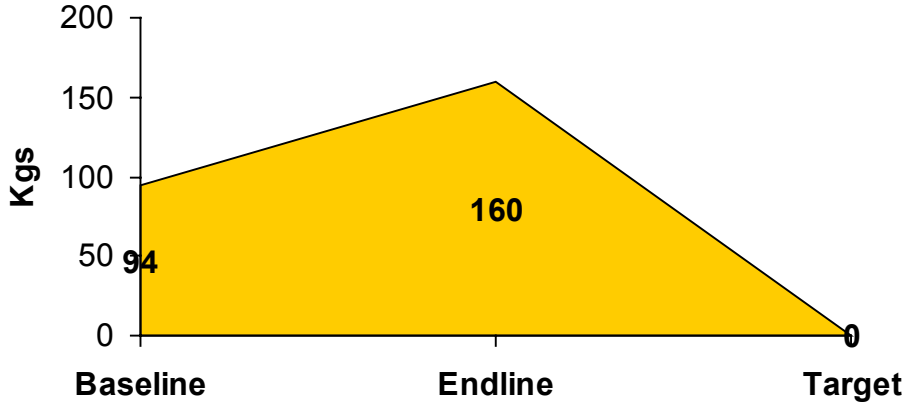
Fig 10. Beans Yield Per Acre



3.2.3.3 Sorghum

As shown in Fig 11, although the project did not have a target for sorghum, yield in the project area increased from 94kg/acre to 160kg/acre at the time of this evaluation. Sorghum was promoted as one of the indigenous crops resistant to drought and diseases that could increase food security. FGDs reported sorghum was particularly useful in enhancing child nutrition and was a common weaning food for infants within the community.

Fig 11 Sorghum Yield Per Acre



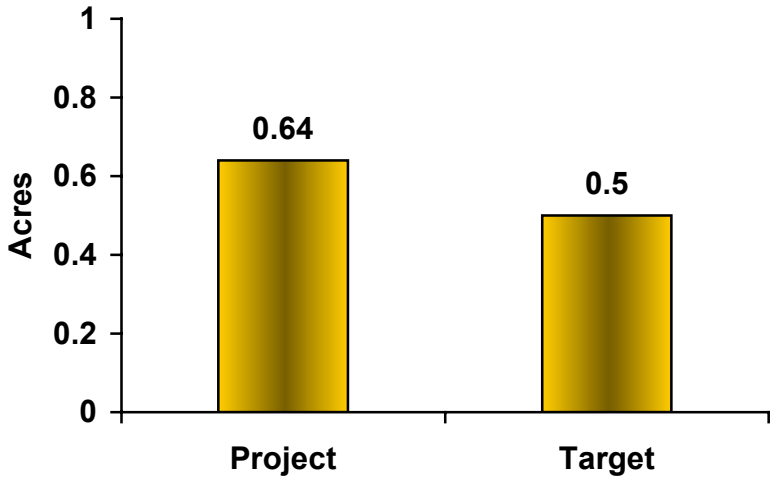
3.2.3.4 Cassava

The project target of achieving 0.5 acres of land under cassava per homestead was achieved. Land under cassava at the time of the evaluation was on average 0.64 acres per household among 18% of the farmers in the project area, compared to only 3% in the control area as seen in Fig 12. Cassava being a drought resistant crop has greatly enhanced food security in the project area.

"They gave us bananas and cassava which mature fast and not affected by diseases" Widow Farmer -Usonga

It is important to encourage more farmers to take up cassava farming; VAPs efforts could adequately achieve this.

Fig 12 Acreage Under Cassava



3.2.3.5 Cotton

Jamaa Wazima worked with farmers groups to promote cotton. They advanced them with farm inputs, capacity-building training and extension services. The project went further to create a collective marketing for the farmers through the signing of a marketing contact with a ginnery.

"In terms of cotton production, Jamaa Wazima assisted farmers who were in need of farm inputs" District Agriculture Officer - Siaya

The efforts increased land under cotton from zero at baseline to 2% of farmers with an average acreage of 2 acres under cotton.

3.2.3.5 Pineapples

Jamaa Wazima also promoted farming of pineapples especially among widows. The project area reported that 2% of the farmers were involved while the control area recorded 0% involvement. The spill over effect of pineapple farming was evident from the case studied as neighbours adopted farming techniques amongst themselves. One of the widows visited had this to say;

> *"Pineapples have changed my life, in fact have recalled my grandchildren who were looking for jobs in town to come and manage my farm" Widow - Case study*

3.2.3.5 Bananas

Banana farming has also started in the project areas as an intervention of Jamaa Wazima Project. Farmers took up banana farming to cater for both subsistence and commercial needs. To ensure bananas were taken up for commercial purposes, Jamaa Wazima had set a minimum of 50 suckers per farmer. This ensured surplus production for income generation. Although the number of banana farmers is still low (6%), those who have planted reported good harvests.

> *"I have bananas from Jamaa Wazima Project so I cannot lack food." Beneficiary agro forestry – Usonga*

The farmers also sell banana suckers, a widow who has benefited from banana farming had this to say

> *"From the sale of bananas, I was able to realise a sum of Kshs 2000 which I used to build my beautiful house that I currently reside in, before the sales of banana, I never had a house and nobody was willing to assist me build one." Widow farmer -Case study*

3.3 Other Findings

Under this sub section, findings related to the project as a whole are discussed. These are the cross cutting issues that were not specific to a particular project component, classified as community participation and mobilization, sustainability of Jamaa Wazima, unmet expectations, challenges and best practices.

3.3.1 Community Participation and Mobilization

The Jamaa Wazima Project's major strength was the ability to mobilise and work through the grassroots community structures. The project utilised community members trained in previous CARE (K) projects. One of the key strategies was targeting the vulnerable segments of the community, in this case widows who, though, most vulnerable were available and provided a strong entry point to the community as they comprise an estimated 35% of adult female population.

Making the community feel as a part of the project was very useful and instrumental in the project implementation, ensuring community ownership of the project was inbuilt at the project design. This was done through cost sharing needs based participatory methodology and training of community resource persons i.e. The VAPs, VHPs, Water Caretakers, and Management Committees also assisted a great deal to meet the objectives.

"The idea was Jamaa Wazima's, but the locations to put up the water points were decided by the community." Beneficiary – Usonga
"We have trained community members who will continue after Jamaa Wazima exits this area." Widow – Usonga

The signing of a Memorandum of Understanding helped to define the responsibilities of each party and thus avoided collision during the implementation process.

3.3.2 Sustainability of Jamaa Wazima Project

This aspect of the project was intended to ensure continuity to derive benefits drawn from the intervention for present and future generations. The pillars of sustainability include:

- ✓ Social

- ✓ Financial
- ✓ Organizational
- ✓ Environmental
- ✓ Technical

Social

Considering that the project was motivated by pertinent needs, it contributed in garnering community-wide support besides sharing and involving the opinion leaders in key decisions and information sharing. To this end the social security and safety of the project is ensured as long as the practice is upheld and fostered. The various groups formed were registered with the Ministry of Culture and Social Services.

Sustainability systems put in place were mainly the community institutions that the project used in implementation process. The social groups have been linked with government officials in various ministries who are supposed to work with them after the Jamaa Wazima Project. Besides the government, the community institutions have the capacity to work with other supporters in the improvement of their status.

Financial

The setting up of a monthly tariff for maintenance of water points and constitution of administrative units to manage the financial aspects of the water projects will ensure proper management and continuation of the project component. On agriculture, which was predominantly done by widows, the management groups operate bank accounts and have a mechanism for ensuring uniform sale price for the farm products. In addition, a percentage of the total sale is saved in the group accounts. The committees were trained on basic management strategies, store keeping as well as controlling inflows and outflows. This helped in controlling finances from water points.

Organizational

To ensure co-ordination and management of the project, Jamaa Wazima established an organizational arrangement in which various committees with

specific roles and responsibilities were formed at village, sub location and location levels. This set up, if maintained will significantly contribute to the sustainability of the project after the CARE(K) pulls out.

Environmental

The project ensured conservation of the environment by adopting environment friendly technologies. In agriculture, the farming techniques applied to mitigate soil erosion, in addition to conserving and protecting the soil enhanced the inherent soil fertility. The water projects incorporated safe disposal of wastewater. However, the perennial flooding cases in Usonga posed a great challenge to environmental sustainability as projects that have been put in place are destroyed during floods.

Technical

The intervention strived to transfer managerial, administrative and technical skills/ knowledge to the local people with the aim of ensuring technical capacity to manage the project efficiently and effectively in order to continue deriving maximum benefits from the project. Some of the people trained included VHPs, VAPs, Water caretakers and various artisans. The greatest challenge is to identify a motivational and sustainable package to offer these resource persons to enable them continue providing the services.

The water caretakers were trained to repair the pumps at a small fee. These are community members who are supposed to continue even after exit.

> *"Water can continue because we have caretakers and we collect money enough to repair the pumps" Widow Usonga*

In agriculture the VAPs trained by Jamaa Wazima Project will continue providing support to farmers after exit of CARE (K). The major strength in agriculture is that the farmers are motivated to continue with the technologies after seeing the increased farm outputs.

> *"They left us with Ministry of Agriculture; they left adaptive research and VAPs who are well trained" beneficiary – South Alego*

The sanitation component of the project relied on capacity building by training the communities on the importance of proper waste disposal; the technological support given to construct the latrines was rather expensive thus its sustainability could not be guaranteed.

3.3.3 Challenges

3.3.3.1 Agro Forestry Challenges

- ✓ Negative attitudes of the community in the project area towards agriculture ,especially commercial farming

> *"Most farmers in this area do not take commercial farming seriously, they only do subsistence farming" District Agricultural Officer*

- ✓ Limited land sizes,: the community have small acreage and this limits the varieties and quantities of crops that can be planted

> *"My greatest challenge is the size of my farm its only ¾ acres, which is not large enough to accommodate all that I intend to do." Widow – Case study*

- ✓ Some community members felt that with secured water sources there was no longer need for latrines, as they were not using unprotected water sources. However hygiene education addressed this issue.

- ✓ Working with group farms was a challenge, but was used for entry, training, acquiring inputs and marketing. Later they were to do it individually.

> *"I must admit working in groups could not be sustainable, after training we had to split and work individually" Jamaa Wazima Project staff*

- ✓ Some species that were promoted were not suitable for the area and thus didn't do well

> *"The bananas given were not suitable for our type of soil" Beneficiary - Township*

3.3.3.2 Water and Sanitation Challenges

- ✓ Difficulty in establishing and setting water points. In some instances the identified water point sites had water that was too hard or unsuitable; this forced the project staff and communities to identify a different site. This was demoralizing.

> *"A group in Alego has dug twice and the water is too hard, they are demotivated to try again" Jamaa Wazima Project Staff*

- ✓ Communities were slow in adopting the technologies taught and expected a lot from the project. The community in Bujumba was reluctant to accept the method of circular pit because they were used to the rectangular pits which is easier to dig.

> *"At times the communities were slow to take up new ideas." Jamaa Wazima Project staff*

3.3.3.3 Other Programming Challenges

- ✓ Working with very poor communities with a mean income of about Kshs 1000 a month was a great challenge as getting their participation, time and money. Some of the community members were not willing or able to pay for the water. This slowed down the implementation process especially their sanitation intervention.

> *"Siaya is the poorest district in Nyanza province, its very challenging to work here" District Social Development Officer – Siaya*

- ✓ HIV/AIDS was a major challenge as the region has 35% infection rate (according to Siaya District Public Health Officer). The project needed to have an HIV/AIDS component, as this is a major issue in household livelihood because of the resource requirements associated with the disease in terms of caretakers and drugs.

> *" At times, some of the widows are too sick to do farm work, most of the money from sale of crops goes to hospital bills. VAP - Alego*

- ✓ Some Management committees and community members expected incentives for the services given to the community. They had mainly expected to get handouts from CARE (K) as other organizations previously working in the area had brought the culture of free support without community members making contributions.

  Some administrators and opinion leaders expected incentives to participate in the project. When these were not forthcoming they lost interest in the project and became unsupportive. The project only worked with volunteers who were willing to work for the community.

"Success depended on Management committees; those who expected to be paid have failed" Community member - Bujumba

"We expected mosquito nets but up to now we have not received them" Community member - Township

However Jamaa Wazima managed to reduce the impact of these challenges through community sensitisation and training.

3.3.4 Best Practices

i. Community involvement

Participation of community members. Jamaa Wazima embraced the practice of involving the local community in the project not just as beneficiaries but as partners in the implementation of the project. This was exhibited by the presence of Memorandum of Understanding (MOUs)

"Care (K) was very clear, they were not working for us but working with us to improve our livelihoods." Youth group member – Case study

"Jamaa Wazima had clear MOUs which set out clear roles for each party" VHP-Alego

ii. Need based approach

The success registered by Jamaa Wazima was mainly out of the fact that the project targeted at tackling major issues of concern to the local community that were articulated and planned for implementation by them. This approach significantly contributed to the general community support in realising the intended objectives of the initiative.

"Water was a major issue in this community, intervening in this area was bound to succeed" District Water Officer

"I think the needs assessment was right, sanitation is a big issue in Nyanza Province." District Public Health Officer

iii. Efficiency

Timely delivery of materials and disbursement of project funds ensured efficient project implementation.

"The technicians were sent promptly after completing our part." Water point Caretaker - Alego

"Resource flow was good, there were no cases of delay on part of CARE (K)" Jamaa Wazima Project staff

iv. Collaboration

Jamaa Wazima collaborated well with the Provincial Administration, other government ministries, NGOs and community members.

"They entered through the chiefs and then to sub locations where they were working with the assistant chiefs who took them to the villages where the committees were elected by the communities" Beneficiary - Township
"Jamaa Wazima held seminars and training for all the stakeholders in the project area before they started the project implementation." Beneficiary agro forestry – Alego

3.4 Summary Findings Based on Performance Tracking Table

The first column has the project indicators for the various components namely water, sanitation, hygiene education and agro forestry. The second column has the baseline information status from the baseline survey. Third column has the target achievements per indicator; this was the projected achievement by the end of the project. The fourth column has the achievement as at the time of the end term evaluation, while the last columns gives remarks for the particular indicator. The last column gives the evaluators comments based on the achievements of each indicator.

Table 5. Summary of Performance Tracking Table

Indicator by project component	Baseline information status	End-term projected	End-term achieved	Remarks
Component: Water				
% of children with diarrhoea in the past two weeks (below 5 years)	76%	40%	37%	Cases of diarrhoea have substantially gone down
% Increase in access to protected water source	31%	76%	74%	Good achievement
% of households with year round access to safe water from protected source	33%		48% Community contribution of 30% slowed down the process but it makes the community own the project.	Access to year round safe water challenged by breakdown of pump and drought.
% Increase in average personal water use by litre/person per day.		20 litres per person per day	19.5 litres per person per day	19.5 litres per person. Women and children still hauling water for all
Distance to nearest water source / time taken to collect water		Less than a kilometre/ less than 30 minutes	85% of project area have protected water source within a kilometre, while 76% spent 30 minutes or less to collect water	A very good achievement. Though a lot of time is still spent on unrelated activities when hauling water.
Increase water treatment	46%	70%	53%	Fair achievement, people consider water from protected sources safe to drink.
Sanitation				
% Increase in latrine coverage	48%	80%	72%	766/2000 target for 2004 constructed so far. Actual implementation of latrine component started in 2003. A

Indicator by project component	Baseline information status	End-term projected	End-term achieved	Remarks
				good number of people constructing latrines without assistance could be attributed to hygiene education, community's own initiatives and fear of free things. Replication and spill over effect evident.
Increase latrine accessibility	70%	80%	73%	A fair achievement
Increase household latrine utilization	68%	80%	73%	A good achievement considering the beliefs and cultural practices associated with latrine use. A section of population is denied use of latrine especially children and in laws
Sub-component: Hygiene Education				
% Increase in population with appropriate hand washing behaviour (Must describe and demonstrate)		50%	After visiting the latrine 70%, Before preparing food 55%, Before eating 96%, after eating 86%	50.5% hand washing using water and soap. Remarkable achievement considering that change of behaviour is a slow and tedious process
Increase safe water containment	53%	70%	60%	Fair achievement some storage containers still have no cover
Agro forestry Component:				
% Increase in number of months of self-provisioning from own production			About 50% of the population reported having an average of 4 hunger months in a year	April, may, June and November reported as the worst months of food shortage
Acres under improved farming			87%	A good achievement
Average Meals a day			92% at least two meals a day	Food security has substantially improved
% Increase in total staple crops production (measured by production per unit of land: kg/acre)	Maize=111.39	from 100 to 500 kg per acre	181.8kg/acre	A good achievement. Should be sustained and more variety introduced.
	Sorghum= 94		160kg/acre	

Indicator by project component	Baseline information status	End-term projected	End-term achieved	Remarks
	Beans= 45	45 to 100 kg per acre	100kg/acre	
	Millet= 60.		90kg/acre	
	Cassava	0 to ½ acre	0.64 acre –mean acreage	
	Pineapple		0.5 acres –mean acreage	
	Groundnuts		90kg/acre	
	Banana	0 to ¼ acres	0.3 acres – mean acreage	
	Cotton		2 acres – mean acreage among 18% of farmers	
sub-component				
Number of Sub-Location Management committees formed	0	17	15	The project opted not to work in South Central Alego location after the location's leaders blocked the entry process.
Number of sub-location sub-committees committees active and functioning	0	15	12	Bar-ding and Bar-Osimbo sub-locations in South Alego have inactive sub-LMCs
Number of sub-location sub-committees linked	0	15	12	The above inactive sub-locational committees were not linked
Number of Households applying agro forestry technologies: Soil fertility, Seed Technology and Pest control	0	880		Some village agricultural promoters dropped out due to expectations of incentives which could not be met by the project
Banana production	0	16000 banana plants	17095 banana plants	The response to banana establishment has been overwhelming. Replication was adequate. Level of achievement commendable.
Cassava production	0	30 acres	79 Acres	Farmers adopting cotton farming after assurance of markets from ginners who signed a MOU

Indicator by project component	Baseline information status	End-term projected	End-term achieved	Remarks
Pineapple production	0	34000	70000	Overwhelming achievement
Mango trees		400 seedlings	540 seedlings	Very good achievement
Functional Village Management Committees	0	100	100	Good achievement
100% of participating Villages have Village Agricultural Promoters trained in agro forestry and farm management	0	100	100	Target was achieved.
Gender				
Reduce time spent fetching and hauling water by women	32.3 minutes	Less than 30 minutes	76% of the project area population spend less than 30 minutes. 85% walk less than a kilometre to collect water from protected water source	More time is still taken fetching water as women and children wait to fill their containers There is need to increase coverage to reach the 24% population.
Sensitisation and empowerment of women to practice agriculture and participate in community management committees			Projects worked with widow groups who are considered vulnerable.	The project has empowered women especially by targeting widows on banana, pineapple and cassava production. Half of all management committees consist of women. The treasurers in all these committees are women.

3.5 Case Studies

3. 5.1 Case Study One- Mama Helida Oluoko, South Alego

"I went visiting, I saw what my fellow widows were doing, and I told my self, I would never be the same again".

This statement summarises the story of Mama Helida Oluoko, a widow in South Alego. The widow commenced her story by describing the death of her husband and the absolute poverty that she was relegated into. She was left with five children to take care of without any resource base to facilitate her take up this responsibility. When CARE-JAMAA WAZIMA started working with them, they were taken to visit Kabuoch in South Nyanza. What she experienced and saw there was a big eye opener and springboard that catalysed the processes that culminated to what she is today.

She was trained by Jamaa Wazima and made a VAP. She was trained on how to grow cassavas, bananas, pineapples, maize and mangoes. JAMAA WAZIMA upon completion of training started her off. She was told to dig 64 holes for banana suckers. Thus, the journey to the present livelihood provision begun. In the year 2002, she planted bananas, pineapples, and cassavas. From the sale of bananas, she was able to realise a sum of Kshs 2000. Using the proceeds, she built her beautiful grass thatched house that she currently resides in (see plate). She informed the evaluation team that before the sales of banana, she never had a house and nobody was willing to assist her build a house. Helida went ahead to count her blessings that sprung as a result of CARE. At this point she was silent as if meditating and lost in thought, then illustrated how her children were now able to go to school. Before CARE came, none of her children was going to school. The situation was so grim that one of her boys was a herdsman and her daughter was a house help. She was very proud to let the

Helida outside her newly built house

evaluation team know that her son was going to do his standard eight final examinations the next year which was a milestone achievement to the best of her knowledge. Mama Helida continued with her story, and at this time she smiled very broadly prompting the evaluators to ask what the source of joy was all about. Then she was at the story, but this time explaining how her efforts had diffused and spilled over to the rest of the community. She told the team that she influenced 13 other women whom she was following up. One of her students is an old lady otherwise referred to as Daa Raila (Raila's grandmother) *(see plate*).

Daa Raila in her pineapple farm

The evaluation team then visited the farm of Daa Raila and what the team saw was practically wonderful. For her age which was over 80, her farm was indeed beautiful. Infact, she was able to recall her grandchildren who were looking for jobs in Siaya town to come back home and manage her farm. Mama Helida also talked of other things she learned from CARE including hygiene, and the clean water she was able to access. Her greatest challenge was the size of farm ¾ acres, which was not large enough to accommodate all that she intended to do. She finalised her story by appreciating her involvement with Jamaa Wazima and wished that Jamaa Wazima could continue working in South Alego.

Mama Helida in her maize farm

3.5.2 Case Study Two- Mama Josephine Oduol- Usonga

This case was also outstanding as the widow had lost hope, because her farm was not producing enough food for her family. When Jamaa Wazima introduced bananas in the area, she dug 50 holes and CARE (K) provided her with 50 banana suckers. So far the bananas have matured and she is able to sell suckers and banana bunches to meet all the basic needs of her family. She has influenced several of her neighbours to plant bananas both for food security and commercial purposes. She attributes her self-reliance to Jamaa Wazima Project.

Evaluation team at Mama Leonidas banana and pineapple farm

"My life is no longer the same" she sums up the story. Josephine has also benefited from the sanitation project and now has a latrine in the household. She says that she had never dreamt of having a latrine because of financial limitations. Through Jamaa Wazima all she was required to do was to do the latrine pit and build the structure. She managed to get someone to do this for her from proceeds from bananas.

3.5.3 Case Study Three- Bujumba Five Brothers Youth Group

Five Brothers Association is one of the youth groups that CARE (K) worked closely with in Busia, Bujumba location. The partnership between them and CARE (K) enabled them to secure a water pump that they are using to irrigate their farm. CARE (K) also exposed the youth group members to a variety of agricultural technologies and alternative crops. The youth group core activities were on agriculture, cultivation of farm produce like kales, passion fruits, sweet potatoes, arrowroots and maize. They supply kales to three secondary schools during the dry season; however, their main challenge is that they only have market when there is drought as their customers plant their own vegetables during the rainy season. Flooding during rainy seasons is also a major challenge that the youth group faces. The floods inundate their farm thereby adversely affecting the ultimate yield.

Five Brothers Youth horticulture Farm

CHAPTER 4: Discussion of Findings

4.1 Water

The outcome of constructing 92 out of the expected 100 water points was such that 74% of the target population had access to water from a protected source. Despite the intermittent supply of water due to either drought or physical breakdowns of hand pumps, the community had a per capita water consumption of 19.5 litres. The combined efforts through “hardware” and “software” (trainings and treatment of water) aspects resulted into the availability of safe, sufficient and affordable water that significantly reduced the prevalence of diarrhoea from 76% to 37%. Though a remarkable achievement, the prevalence is still very high compared to the Nyanza Province prevalence which stands at 17.2% (KDHS 2003). Majority of households 76% are within less than 30 minutes of their water sources. Comparison of these findings with the national and global standards indicate that the project almost attained the national standard of at least 20 litres per capita. This standard is similar to that of United Nations Millennium Development Goals (MDGs) which specifies *per capita water consumption in the range of 20-50 litre*s. It is noted from *KDHS that 32.9% of people from Nyanza province draw water from unsafe sources*. This revelation almost ties with the survey findings in which 26% of the target population have no access to safe water. In essence, this implies that more efforts and resources need to be invested in order to achieve the specified milestones. Preferably, alternative water sources need to be identified and promoted e.g. rain water harvesting and surface water sources. However, at the local level it is encouraging to note that the project has made it possible for more than half the population to have access to water which is far beyond the *MDGs Goal 7 Target 10 that works towards reducing by half the proportion of people without sustainable access to safe drinking water.*

4.2 Sanitation and Hygiene

Even though the uptake of sanitation intervention was rather slow, the physical construction of latrines reported 63% success that translated into 72% latrine coverage and use. This was a progressive rise by 24% from 48% at the time of baseline. Even so, in light of socio-cultural factors this success rate resulted into a paltry 2% rise in latrine accessibility in comparison to baseline information. The promotion of hand washing achieved a behavioural change amongst the populace whereby 50.5% of the target population were practising hand washing with soap. To ensure safe transportation and storage of water for domestic use, the use of covers or lids on water containers was advocated by the project. An achievement of 7% was realised. According to *KDHS, 26.2% of people in Nyanza province have no access to sanitation,* a figure which is quite close to the deficit identified in the survey of 18%. Similarly, from KDHS it was established that 35.5% of households do not share toilet with other households, while 38.5% do share with other households. From the survey it was established that sharing of latrines within the household was hampered by cultural practices that defined who should use which latrine. On average, five persons shared one latrine. The lack of proper human waste management poses a fundamental threat to available water resources. The World Summit on Sustainable Development targeted at *reducing by half the proportion of people who do not have access to basic sanitation.* Despite the local challenges associated with beliefs on sanitation, the contribution of Jamaa Wazima Project towards achieving this milestone is quite commendable. However, more efforts and resources should be directed at arresting the deep-rooted and retrogressive socio-cultural practices that potentially hold back realization of holistic access to sanitation facilities.

4.3 Agro Forestry

The goal of the agriculture component of the project was to facilitate increased farm production and productivity through the extension and adoption of appropriate Agro forestry technologies and farm management techniques. The main focus of the component was therefore to facilitate access to technical

information by communities in the project area. This focused at ensuring food security. Jamaa Wazima managed to increase the average number of meals a day to 2 in 84% of the population, this is in line with the United Nations Millennium Development Goals to half the proportion of people who suffer from hunger.

Tree planting has been very minimal and only a few households had managed to plant trees over the project period.

Care (K) has had over 10 years experience of promoting Agro forestry in Siaya District. Jamaa Wazima has founded its Agro forestry extension activities through Training Resources Persons in adaptive Research and Community Extension (TRACE); this has enabled the project to make good progress in capacity building.

Focus on extension and capacity building to disseminate knowledge/skills for this project was justified by the fact that a majority of the beneficiary–community are poor and have not benefited from agricultural credit. This is especially true of women who often do not own any non-land property of substantial value.

It was however noted that the performance and the yield of the crops is significantly different from one area to another. This is mainly attributed to differences in soil quality in the project area. The disparity in yields of the same crops amongst the farmers could be as a result of inadequate soil analysis and planting crops without considering soil types.

4.4 Other Findings

Some findings were not component specific, and were mainly learning from the project as a whole. These are discussed below

Community participation is a major strong point for the project as it ensured ownership inbuilt in the project design. This made the community members to be al part of the project. Training community resource persons and signing of MOUs were also exemplary efforts to ensure community involvement and capacity building. Exposure and cross learning amongst the target population, especially

widow groups, played a significant role in the uptake of agricultural component of the project

Although community involvement was a major strength for Jamaa Wazima Project, incorporating the community into the project has not been without challenge. The opinion leaders appointed into the committees expected incentives that the project could not provide. The strategy was later changed to include people who had ‘time’ to work with the community at the grassroots level

There is lack of clarity in roles especially in water point management whereby the provincial administration interferes and disempowers the management committees. Regions where the administrators gave full support performed very well, while areas with inadequate support performed poorly like Bar ding, Bar Asimbo and Bar Olengo sub-locations in South Alego Location.

Sustainability means ensuring continuity of the project and its benefits after project completion. Jamaa Wazima succeeded in ensuring social acceptability and financial sustainability through monthly contributions from sale of farm produce, organizational levels from village, sub location and location management committees, environmental friendly technologies and technical sustainability through training.

Jamaa Wazima had several challenges among them negative attitudes to commercial agriculture, limited land ownership, poverty, HIV/AIDS effects, cultural issues and expectations of incentives amongst some community members. Year round access to safe drinking water has been challenged by occasional drying up of the water points and breakdowns of the machines.

Best practises which can be repeated in future programming are community participation, need-based intervention approach, efficiency and effective stakeholders collaboration.

CHAPTER 5: Conclusions and Recommendations

5.1 Conclusions

5.1.1 Group Efforts

√ The findings of the evaluation clearly demonstrate that there are remarkable achievements in the project components in which Jamaa Wazima worked with group entities e.g. water and agriculture.

5.1.2 Information Sharing and Lessons Learnt

√ Collaboration and networking between Jamaa Wazima and other practitioners was strongest with GoK agencies and weakest with other NGOs working in the area.

√ Working within or through the existing community structures reduced possibilities of tension or misunderstanding during the project phase. This was a major strength for the project.

5.1.3 Empowerment Of People

√ The project was very strong in empowering a section of the population that is very vulnerable i.e. the widows.

√ The disparity between high latrine coverage and low utilization implies existence of underlying factors that are pegged to beliefs and cultural practices that should be incorporated in hygiene promotion strategy.

√ The agriculture component of Jamaa Wazima has significantly contributed to improved livelihood.

5.1.4 Health Education

√ Hygiene education has changed behaviour in the community. The target communities acquired knowledge through training and sensitisation activities.

√ People are still hesitant to treat water from the protected source because of the notion that the water has already been treated and therefore safe to drink.

√ The community members and staff of government ministries have collaborated in the improved health security. Village Health Promoters (VHPs) have therefore played a major role in improving health security by continuously sensitizing community members on hygiene practices.

Project Replication

√ A strong replication and spill-over effect especially in agriculture has been observed. The community is adopting the approach in the group farms.

√ Hygiene education component has been replicated in the control area.

5.2 Recommendations

The achievements of Jamaa Wazima Project during implementation have been remarkable the recommendations are;

5.2.1 Enhancing Capacity Building

√ It is appropriate to enhance the initiative by focusing on capacity building in the areas of project management, marketing, book keeping, monitoring and evaluation and other technical aspects of the project.

5.2.2 Incorporation Of HIV/AIDS Component

√ Incorporation of a HIV/AIDS component is needed. HIV/AIDS is a major issue, which affects livelihood security and takes up substantial resources. There is need to recognise and address the communities' problems before starting any interventions i.e. HIV/AIDS awareness creation and control

5.2.3 Commercialization Of Water Services

√ The community should not look at water as service being provided freely rather they should understand the reality is that someone is putting in capital and expects to recover the investment. Water points should be commercialized and used as source of money to ensure sustainability.

√ It is important to create systems of ensuring that the monthly contributions collected in the water points are not mismanaged, as this will challenge sustainability in case of breakdown. Collaboration with Chiefs and Assistant Chiefs have worked in some areas where the administrators ensure that the committees adhere to set down regulations, this could be spread further as embezzlement of funds is a major challenge.

5.2.4 Determination Of Role Of Stakeholders

√ It is important to set out very clear roles especially for the Chiefs and Assistant Chiefs in relation to the water point management to avoid conflicts between the Provincial Administrators and the management committees especially in finances, dispute resolution and general decision making.

5.2.5 Health Education and Sanitation

√ Hygiene promotion strategy needs to be formulated. It will effectively intervene in the deep-rooted beliefs and cultural practises that hinder effective personal hygiene especially on toilet use.

√ Sanitation intervention should only be limited to capacity building and training, getting involved in construction of latrines puts a lot of strain to the project implementers and the impact is minimal.

5.2.6 Change Management

√ There is need to change the communities' attitude towards agriculture. Agriculture is both a source of food and cash. In addition, there is need to diversify and grow a wide variety of crops especially drought resistant crops like cassava, sweet potato etc and commercial crops like cotton, pineapples etc which are not very popular in the area. Commercial agriculture should be focused more to increase income levels in the area

5.2.7 Support Of Vulnerable Groups

√ Efforts and resources should be directed at supporting the widows to form a co-operative society that can effectively and efficiently protect and champion their interests' e.g. accessing input, markets and advocating for policy issues that directly affect them.

5.2.8 Capacity building in agriculture

√ Groups' farms in agriculture should only be used for training and individuals left alone to implement in their own farms

√ The target population should be supported to design a self-monitoring strategy that will steer their efforts and resources towards the desired end.

√ There is need to strengthen collaboration with other NGOs working in the area, although consultative meetings have been done with them, close working arrangements could be enhanced further.

5.2.9 Diversifying crops

√ More emphasis should be put on drought resistant crops to ensure food security, also commercial crops should be promoted but not at the expense of food crops.

5.2.10 Target group

√ Jamaa Wazima target was to work with 54,000 people; this was a very big population and needed longer periods, staff and more funds. It is important to target a specific group like the widows, youth etc for effectiveness as working with the whole community proved to be very difficult. Working in a smaller geographical area like locations or sub locations proved more effective than working in a whole district.

5.2.11 Need to compensate services

√ Community work can be challenging if beneficiary community views conflict expectations from the service providers. The VHPs should be good role models, have the ability to communicate and cover their area of jurisdiction effectively. Working as volunteers is challenging. Service by VHPs should be demand driven. In such a case, a nominal fee should be charged to cover basic wages to VHPs. Support to VHPs by the community and project to be good role models will enhance their work.

Annexes

6.1 Annex 1 Quantitative questionnaire

CARE-KENYA
HOUSEHOLD LIVELIHOOD SECURITY PROGRAM
IMPACT ASSESSMENT Questionnaire

General Information

Name of respondent_____
Questionnaire Code/No_____
Questionnaire target 0 Project 1 Control
Enumerator's Name:_____
Survey Date ___/___/___ (day/month/year),
District:_____ Division:_____
Location:_____ Sub location:_____
Group/ Village:_____ HH Code:_____
Start :_____Stop_____Interview duration:_____ in Minutes

For official Use

Project Scenario
1=Agric
2= Watsan
3=Control

Part 1: Household Member Information

Q1 List each member of the household's age and gender. Indicate the head of household and the Mother or Primary Caretaker in the last column. *(Msbolakho abandu bamenya muinyumba muno, amiaka tsiabwe, besisatsa nende besikhasi.)* (*Note: For children under 5 years old, list age in months only e.g. 5 years = 60 months)*

List Each Household Member			Indicate choice		*Respondent Coding*
1.1.1.1.1.1.1.1.1 Description (Name) start parents, then the eldest child	HH Member Code Household member code Household Head = 1, Spouse = 2, Child = 3, other relative = 4	*1.1.1.1.1.1 ge* In Years/months	1= *1.1.1.1.1. ale*	2= *1.1.1.1.1 ema le*	1=Head of Household Code, 2=Mother/ Primary Caretaker Code
			Male	1.1.1.1.1. ema le	Total Male and Female
	Total persons in household				

Part 2 – Household members' Socio-demographic

Q2. What is your highest level of education *(Wola esikero shina shia masomo)*
1. None
2. Primary (1-4)
3. Primary (5-8)
4. Secondary and above

Q3 What is your MAIN occupation *(one answer only) (Mulimo shina kwa wesika)*

1. Fishing
2. Salaried employment
3. Business person
4. Other (specify) _____

Part 3 – Household shelter Information

Q4 Assess the roofing material for the household's dwelling (house in which the interview is conducted)
1. Thatch
2. Metal/Iron Sheets
3. Others specify _____

Q5 Assess the flooring material
1. Dung/Mud
2. Cement
3. Others specify _____

Q6 Assess the material used for the walls
1. Dung/Mud
2. Iron sheet
3. Wood
4. Cut stone / bricks
5. Others, specify _____

Q6b Assess the finishing of the wall
1. Plastered/Painted
2. Clay finish
3. Mud/Dung
4. Others specify _____

Q7 What is the *primary* method for lighting the household dwelling(s) at night time *(one answer only) (Ni shina shia mwekhonyeranga okhulera obulafu munzu muno eshiro)*
1. Fire wood
2. Paraffin (Hurricane Lantern)
3. Paraffin
4. Solar
5. Pressure Lamp
6. Others, specify _____

Part 4 : Water, Sanitation and Hygiene

Q8 How many latrines do you have within the homestead *(Muli nende tsichoo tsianga mwidala muno)* (probe for number and *confirm presence*)
1 One
2 Two
3 Three and above
4 None
If No skip to No.14

Q9 Who uses the latrine *(Ni bandu shina bekhonyelanga tsichoo tsiene etsio)*
_____

Q10 Who is excluded from using the latrine *(Ni wina abalafuchirirwa khwekhonyera tsichoo tsiene etsio)*
1. Children
2. In-laws
3. Visitors
4. Others specify _____

Q11 Did you get any assistance to put up the latrine *(Wanyolakho obukhonyi bwokhumbakha tsichoo tsiene etsio*)
1. Yes
2. No

If No skip No.12 and 13

Q12 What kind of support did you get (multiple responses) *(Bukhonyi shina bwawanyolakho)*
1. Financial
2. Materials
3. Technical
4. Information/Advice
5. Others specify _____

Q13 If yes, name source *(Bukhonyi bwarula ena*)
1. CARE KENYA
2. NGOs/CBOs
3. GoK
4. Relatives
5. Others (specify) _____

Q14. How do you handle or dispose of your child's stools (child below 5 years) (*Ufubanga ena ichoo yo omwana)* (multiple responses allowed)
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 outside the yard
4. Child's stools are rinsed away while washing
5. Others specify _____

Q15 Has any of your children below 5 years suffered from diarrhea in the past two weeks *(Khu mawiki kabiri kabwere aruo khubana bao hasi wemika kirano wanyalalakho*)
1. Yes
2. No

Q16 What is the *main* source of your household's drinking water (*Odayanga ena amatsi kokhunywa)* (*Only one response)*
1. Protected (well, borehole) *(Sisima sialongwa ne esimiti*)
2. Protected spring *(Isebere yalongwa ne esimiti)*
3. Unprotected sources (well, lake, pond, rivers)
4. Rain water catchment *(Matsi ke ifula)*
5. Piped water *(Matsi ke mifereji)*
6. Others, specify_____

Q17 How far is the source of your drinking water *(Burambi shina bwoluchendo khula wawendenga amatsi kokhunywa)*
1. Less than 1 km
2. 1kms– 2 kms
3. Over 2 kms

Q18. How long does it take you to collect water from this main drinking water source *(Ni bikha binga biawekhonyelanga khwenda amatsi kokhunywa*)
1. Less than 30 minutes
2. 30 minutes– 1 hour
3. Over 1 hour

Q19 What Container type do you use to fetch drinking water *(Okingiranga amatsi kokhunywa mushindu shina)* (*ask to see the container)Note that containers of different sizes could be used.*

1. Plastic container
2. Clay pot
3. Metallic container
4. Others (specify) _____

Q20 Does this (these) container(s) have a cover, cap, or fastened lid *(Please confirm) (Ebindu biokingilangamuo amatsi kokhunywa biri nende ebifuniko)*

1. Yes
2. Some
3. None

Q21 Do you use the same containers to store drinking water *(Ebindu bia tsana nibio biobikhangamuo amatsi kokhunywa)*

1. Yes
2. No

Q22 If No, mention the storage containers used *(Ralakho ebiobikhanagmuo amatsi kokhunywa) (multiple responses)*

1. Improved clay pot with a tap
2. Ordinary pot
3. Improved plastic container with a tap
4. Ordinary plastic container
5. Tank *(not for rain water harvesting)*
6. Others (specify) _____

Q23 Are the containers used for other purposes besides collecting and/or storing drinking water *(Ebindu biobikhangamuo amatsi kokhunywa obirumikhilangakho khumilimo kindi*

1. Yes
2. No

Q24 Estimate the average quantity of water your household uses daily for domestic use. *(in terms of 20 liters jerrycans) (Mwekhonyelanga amatsi kaka karie khuinyanga munyumba yao)*

_____jerrycans

Q25 On average, how much do you spend on water per month *(Khumuosi mulala wekhonyelanga amapesa kanga khumatsi)*

_____Kshs

Q26 To whom do you pay the money *(Orunganga khuwina amapesa ako*)

1. Individual owner
2. Water management committee
3. Others (specify) _____

Q27 Are there times in the past 12 months that you have missed water from protected source *(Khumiosi ekhumi nende kibiri kibwere wakosakho amatsi okhurula khomatsi kalongwa*) *(explain that water from protected source is safe)*

1. Yes
2. No

Q28 If yes give reasons *(Khulwa shina)*

1. Lack of money to pay
2. Breakdown of water system
3. Drought
4. Others,specify_____

Q29 What do you MAINLY do to make your drinking water safe *(Osirikhanga orie amatsi kokhunywa)*

1. Nothing
2. Boiling
3. Chemical treatment (Klorin/water guard)
4. Other specify _____

Q30 a. When do you normally wash your hands (Gin seche mage ma ijaluoko ga lueti) *(Multiple response)*
b. What do you use to wash your hands(iluoko lweti kod ango'o)

	a	b			
		Water only	Water + Soap	Water + Sand/Ash	Others
After visiting the latrine	1	1	1	1	1
Before preparing food	2	2	2	2	2
Before eating food	3	3	3	3	3
After eating	4	4	4	4	4
Others (Specify)	5	5	5	5	5

Part 5 : Household Food, income and Farm production

Q31 On average how many meals do you usually have in a day *(Orichanga khanga khuinyanga)*
1. One
2. Two
3. Three
4. More than three

Q32 In the past 12 months which months did you experience food shortage *(Khumiosi ekhumi nende kibiri kibwele ni miosi sina kiari kieetsala)* (specify the months)
_____

Q33 Why do you think there was food shortage *(Opara inzala yario khulwa shina)* (*(in the stated months) (multiple responses)*
1. Lack of money
2. Drought/ crop failure
3. Sale of farm produce
4. Cash crop production
5. Others (specify)

Q34 How did you cope during the food shortage *(Mwekhonya murie munzala) (multiple responses)*
1. Reduce the number of meals in a day
2. Change eating habits
3. Sale of livestock
4. Borrow
5. Others specify _____

Q35 How much land does your household own *(Muri nende obulimo obwaka burie)*

_____*(in acres)*

Q36 How much of this land was under cultivation in the last main season *(Ni obulimo obwaka burie bwa mwaraka) if less than land owned ask why*
_____*(in acres)*

*Why(Bushina)*_____

Q37. What are some of the methods you use to improve crop production on your farm. (*Sinjira shina tsiawekhonyelanga khumeda likesa)*
1. Seed technology (seed selection) (*Khuyera imwo)*
2. Spacing of crops *(Khwiyenga)*
3. Timely planting *(khuraka khubikha)*
4. Nursery establishment/management
5. Pest and disease management

6. Marketing *(Ubukusi)*
7. Selection of varieties (*Khuyera chimwo chikabukhane)*
8. Farm planning and record keeping *(Khupanga nende khubikha tsirekod)*
9. Others, specify_____

Q38 What type of crops did you grow on your farm in the last main season how many acres and yield per acreage *(Ni biakhuria shina biawaraka mundalo yao khu mwaka)*

Crop	Acreage	Harvested
Maize *(90 kgs Bags)*		
Beans *(90 kgs Bags)*		
Cassava *(Acreage)*		
Bananas *(Acreage)*		
Pineapples *(Acreage)*		
Cotton *(Acreage)*		
Groundnuts *(90 kgs Bags)*		
Sorghum *(90 kgs Bags)*		
Other commercial crops		

Q39 List the type of trees/ fruits that you have planted on your farm from 2002– 2004 *(Ralakho emisala/ebiamo biawaraka muindalo yao khuchaka mwaka kwa 2002– 2004)*
(Incase of any difficulty just indicate the totals of any trees/fruits on any year)

Type of Tree/Fruit	Number of trees/ fruits planted					
	2000	2001	2002	2003	2004	Total
Grevillea						
Eucalyptus						
Sesbania						
Mangoes						
Passion fruit						
Oranges						
Bananas						
Lucean						
Others, specify						

Q40 Over the last one year how much did you earn from the sale of farm products *(Khumwaka kwabere wanyola tsisende tsinga khurula khuburimi)*
Kshs _____

Q41 On average what is your monthly household income *(Inyumba yao inyolanga tsisende tsinga khumosi)*
Kshs_____

Q42 What are your main sources of information and services on the following *(Onyolanga ena amekesio nende obukhonyi khubilondakho)*

Project Component	Source of information	Source of services
Agriculture		
Water		
Sanitation		
Hygiene		

Q43 What was your experience with the project *(Ni shina shia wekerekho khulondekhana nende muradi kwa Jamaa wazima)* Probe for implementation process, challenges, achievements, weaknesses, strengths etc

_____
_____
_____
_____
_____
_____

Q44 Any comments from the respondent

'THE END'

Enumerator's comments

……..

Questionnaire checked by…… Date……..

OBSERVATION CHECKLIST

Q1. Observe the condition of the toilet.
1. Functional (in use)
2. Not functional.
3. In disrepair

Q2. What is the type of latrine En choo machalo nade?
1. Ventilated improved pit latrine (VIP)
2. An ordinary latrine
3. Latrine in disrepair,

Q3. Assess if the latrine hole is covered
1. Hole Covered
2. Lid present but hole not covered
3. Hole not covered
4. Some covered, some NOT

Q4 Assess presence of a leaky tin
1. Present (with water, soap)
2. Present, (no water, soap)
3. Present (with water, no soap)
4. Absent

Q5. Assess presence of dish rack
1. Present, in use
2. Present, not in use
3. Absent

Q6. Ask and assess presence of rubbish pit in the compound
1. Present
2. Absent

Q7 Assess the availability of windows on the house
1. Present
2. Absent

6.2 Annex 2 Qualitative Discussion Guides

Key Informant Interviews

Introduction and warm up

Ask All

1. What are the major issues facing your community?(eke gik ma uneno ka chando ogandawu?)
2. What are some of intervention measures put in place to address these issues?(gin ang'ono gini ma ose tim mondo oresu kwom gik machandowu?)
3. Are you aware of Jamaa Wazima Project initiated by CARE Kenya in this area?(bende ing'eyo gik ma Jamaa Wazima mar jo CARE timo e gwen'g maru kae?)
4. What some of the benefits from the Jamaa Wazima Project intervention?(ere kaka Jamaa Wazima ose konyowu?) *probe for examples and cases*
5. What are some of the challenges the project has faced in this area?(gin ang'ono ma chando Jamaa Wazima e gweng'u kae)
6. What are the weaknesses/shortcomings/gaps in the Jamaa Wazima Project?(gin ang'o ma osebedo kachando Jamaa Wazima ?)
7. What are the strengths of the Jamaa Wazima Project?( )
8. How has been the collaboration with other stakeholders in the Jamaa Wazima Project?(ere kaka jogo mamoko osebedo ka konyre kod Jamaa Wazima? i.e. GOK, other NGOs and community- *probe for all components water, sanitation, hygiene education and agriculture*
9. What are some of the systems put in place to ensure intervention sustainability after pull out of care?(gin ang'o ma ose ket manyalo timo gik ma Jamaa Wazima osechako odhi nyime kata ka Jamaa Wazima osewuok?) *probe for financial, technical, social acceptability*

Ask only GoK officials

10. What was the level of collaboration in the project to other government interventions if any in the project area, *Probe for adequacy of involvement*
11. In your own opinion do you think the project was a duplication or support of government activities in the area covered, *probe for reasons for or against*
12. What policies do you think the government should put in place to ensure sustainability of such initiatives

Ask All

13. What are some of the lessons learnt from the Jamaa Wazima Project?(gin ang'o gini ma Jamaa Wazima ose puonjowu kodo?)
14. What are your recommendations for future programming?(gin ang'o gini ma di gen ni chenro mamoko manyalo biro?)

CARE (K) OFFICIALS INTERVIEW GUIDE

1. Comments on implementation plan, strengths and suitability of intervention
2. What were the challenges in implementing the Jamaa Wazima Project
3. What can you say are the achievements of the Jamaa Wazima Project up to date *Discuss target was achieved*
4. What are some of the weaknesses in the implementation of the Jamaa wazima Project
5. What are some of the policy issues that affected the project that need to be addressed in future programming
6. Comment on collaboration and networking with GoK, other NGOs and the community in the project area
7. Would you say the Jamaa Wazima Project will be sustainable after pull out of CARE, *probe for reasons, systems put/ not put in place to ensure sustainability*
8. How would you rate socio cultural acceptability of the Jamaa Wazima Project by the local community, *probe for conflicts with cultural values*
9. What are some of the lessons learnt from the Jamaa Wazima Project
10. Recommendations

FOCUS GROUP DISCUSSIONS

Introduction and warm up

1. What is the major issue facing this community
2. What are some of the interventions in place to address the issues
3. Specifically what do you think of Jamaa Wazima CARE Project
4. What are some of the issues it has addressed, *probe to what extent*
5. What are some of the achievements of the Jamaa Wazima Project in
    - Water – *discuss accessibility of water- time taken and distance to main safe water source, safe water containment as a result of the project intervention, cases, causes and prevention of diarrhoea and other waterborne diseases, - probe for examples*
    - Hygiene –*discuss washing hands with soap, food/water handling*, garbage *disposal probe for examples*
    - Sanitation –*discuss availability of latrines in households, utilizations, child waste handling etc probe for cultural values affecting use of latrines for all*
    - Agro forestry – *discuss improvement in income from agriculture, food security and any other benefit. Discuss views on trees/crops promoted by the project. probe for examples*
6. What services /information has the community got from the project trained resource persons, *discuss VAPs, VHPs, LMCs, SLMCs, VMCs in terms of effectiveness and efficiency* , *probe for any visible impact/ behavioural change as a result of the trainings*
7. What would you say is the reason for not having latrines in some households, *probe for cultural factors*
8. in your opinion what were the factors that contributed to the success of the Jamaa Wazima Project *probe for effective collaboration, steady funding, committed staff, technical support, community acceptance of project,*
9. How was collaboration with other stakeholders done, was it effective-*discuss GoK, Community members and other NGOs, community need and interest in area of intervention*
10. What was your level of involvement in key decision making *discuss siting of facilities, design, technology, participating groups etc*
11. What are some of the implementation systems, procedures and structures that were put in place to ensure programme sustainability after pull out of CARE *discuss agro forestry, water, sanitation and hygiene components. probe for financial, technical, social acceptability*
12. What are some of the socio economic and cultural issues that facilitated / hindered implementation of the project *probe for all components of the project*
13. Discuss lessons learnt, challenges, constraints and recommendations for future programming
14. What are some of your expectations that were not met by the project
15. Discuss any outstanding case as a result of the project

Thank respondents and close

6.3 Annex 3 Sample Allocation

Table 6 Quantitative Sample Allocation

Location	Sub-location	Village	No of Households	% of Population	Sample Allocation
Township			**1282**	**11.5**	**74**
		Ngoya		62.6	46
		Ndere		12.8	10
		Kalwande		24.5	18
Usonga			**3094**	**27.7**	**177**
	Sumba		**1114**	**52**	**92**
		Bukhowa 'A'		25.1	23
		Ulupi		21.3	20
		Uwasi A		13.7	12
		Mlambo		21.3	20
		Nyandheho		18.5	17
	Nyadorera 'A'		**1013**	**48**	**85**
		Uhere/Muhondo		28.1	24
		Kamalunga 'B'		23.4	20
		Kamalunga 'A'		11.7	10
		Uyingi		17	14
		Kibuye Murwiri		19.5	17
South Alego			**3047**	**27.3**	**175**
	Bar-Ding		**345**	**23**	**41**
		Kamboha		48.2	19
		Alara		56.7	22
	Bar-Osimbo		**502**	**33.5**	**58**
		Mugane		65.5	38
		Magwara		34.5	20
	Nyajuok		**649**	**43.3**	**77**
		Kolal		23.2	18
		Ting' Wang'i		25.7	20
		Kademba 'A'		24.4	19
		Rabuor		26.5	20

Location	Sub-location	Village	No of Households	% of Population	Sample Allocation
Bujumba			**3730**	**33.4**	**214**
		Iyabo		8.6	18
		Kuikali		25.3	54
		Sirikhaya 'A'		11	24
		Sirikhaya 'B'		7.8	16
		Busire		15	32
		Boro Nango		6.5	14
		Siroba		6.6	14
		Nyamwega		4.9	10
		Khuyala		7	15
		Burinda		6.9	
Total			**11,148**		**640**
Wagai					**160**
TOTAL					**800**

Table 7 Focus Group Discussions Distribution

Date	Target	Location	No of Groups
30-11-2004	i. Water caretakers ii. Youth group	Bujumba	2
1-12-2004	i. Management committees ii. Community members	South Alego	2
2-12-2004	i. VHPs ii. Widows	Usonga	2
3-12-2004	ii. VAPs iii. Community members	Township	2

Table 8 KIIs Distribution

Date	Institution	Contact Person	Designation	No of Indepths
29-11-2004	MoH	Mr Elekiah Otieno	In-charge Dept of Public Health	1
29-11-2004	MoWRD	Mr. John Omondi	In-charge District Water Office	1
29-11-2004	MoCSS	Ms Ruth Alumasa	District Social Services Officer	1
30-11-2004	Bujumba Chief"s Office	Mr. Patroba Otieno Massanga	Assistant Chief	1
1-12-2004	MoA	Mr. Peter Esidi	Acting District Agricultural Officer	1
1-12-2004	South Alego Chief's Office	Mr. Otieno Oduol	Assistant Chief Randago Sub- location	1
2-12-2004	Usonga Chief's Office	Mr Fredrick O. Otieno	Chief	1
2-12-2004	Care staff	Fred Apopa	Senior Field Officer	1
3-12-2004	Township Chief's Office	Mr. Wayodi	Assistant Chief Karapul sub location	1
3-12-2004	Care staff	Mathew Onduru	Project Manager Jamaa Wazima	1
3-12-2004	Care staff	1. Gordon Oluoch 2. Rosemary Atieno	Jamaa Wazima Field Staff	1

Bibliography

1. CARE (K) Cash Strategy Report
2. Jamaa Wazima Project Baseline Report
3. Jamaa Wazima Project Detailed Implementation Plan (DIP)
4. Jamaa Wazima Project Mid term Evaluation Report
5. Jamaa Wazima Project Quarterly and Annual Reports
6. Kenya Demographic Health Survey (KDHS) 2003
7. Millennium Development Goals (MDG) Report