Final Evaluation Study:

School Health and Nutrition
Luwero & Nakaseke Districts

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
CDC	Center for Disease Control
CHANCE	Child Centered Alternative for Non Formal Community Based Education
DEO	District Education Officer
HIV	Human Immune Deficiency Virus
IEC	Information Education and Communication
ITNs	Insecticide Treated Nets
MIS	Management Information Systems
NGO	Non-Governmental Organization
PDQ	Partnership Defined Quality
PIASCY	Presidential Initiative on AIDS Strategy for Communication to the Youth
PMP	Performance Monitoring Plan
QITs	Quality Improvement Teams
SC/US	Save the Children Federation, Inc.
SFG	Service For Generations
SHN	School Health and Nutrition
SMC	School Management Committee
SOPs	Standard Operating Procedures
SoW	Scope of Work
TR	Terms of Reference
UNCST	Uganda National Council of Science and Technology
UNHS	Uganda National Health Study
UPHOLD	Uganda Program for Human and Holistic Development
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

This report presents findings from the final evaluation of a School Health and Nutrition (SHN) Project funded by the United States Agency for International Development (USAID) through the Uganda Programme for Human and Holistic Development (UPHOLD) and Implemented by Save the Children Federation in the United States of America (SC/US) in five sub-counties of Nakaseke and Luwero Districts.

This SHN project was aimed at improving the educational conditions of school children through improved health of school-age children together with the neighbouring communities, improving utilization of services, and adoption of positive behaviour. The project has implemented an integrated set of school-based health and nutrition activities. This includes service delivery, skills-based health and HIV/AIDS education, environmental improvement and community participation related to the control of parasitic worms, malaria control, school safety, and health and nutrition education. A particular focus has been on promoting girls' retention and achievement. The SHN projects were implemented in 91 schools located in 5 sub counties of Luwero and Nakaseke Districts.

The SHN project has run for 2 years (Nov 2005 – June 2007). In December 2005, a baseline study was conducted to document the indices of SHN among the target population. Following completion of project implementation, a final study was done in order to determine the post-intervention reference points for comparison with the baseline indices in order to determine the outcomes of the project interventions. The specific objectives of the final evaluation study included: determination of the post-intervention reference points for the SHN indicators and comparison of the baseline and final evaluation indices and determine the magnitude of effect of the project interventions on certain aspects of the children's lives including health status, and school performance. The results of effect were compared to targeted improvements of the school health and nutrition indicators.

A representative sample of 420 pupils was selected for this study, using a two-stage sample design. The first stage involved the selection of 21 schools from among the 117 schools (formal and non-formal). The second stage of selection involved the selection of 420 pupils (20 from each school) using stratified random sampling proportional to the size of each school.

The study used pre-coded and open-ended questionnaires, key informant interviews, observational checklists and review of school records.

[1] Out of 420 pupils selected to participate in the study, 393 were interviewed and the response rate was 93.6%. The results of the final and baseline evaluation studies (compared) are summarized in the Status at a Glance Table 1 below.

Table 1: Status at a Glance Table Summarizing the Final and Baseline Evaluation Indices (compared)

SHN Indicators	Baseline values—December 2005	Final values—September 2007	Outcome of effect
Prevalence of Helminths	24.5% [20.3-28.7]	15.2% [9.4-19.7]	38% reduction
Proportion of pupils reporting falling sick with malaria in the last 30 days prior to the study	54.3% [49.5-59.1]	46% [41.3-51.1]	15% reduction
School attendance rate	63% [59.5-66.5] Boys: 61% Girls: 64%	70.4% [68.6-72.8] Boys: 71% Girls: 69.4	10.5 increase (overall) Boys: 16.4% increase Girls: 8.4%
Percent of children reporting taking malaria medicine at school when ill with fever	12.6% [9.0-16.2]	21.4% [17.3-25.6]	70% increase
Percent of children reporting sleeping under or next to a treated net	19.4% [15.0-23.9]	35.0% [32.0-39.6]	80% increase
Percent of pupils reporting sexual activity in the year of the study	15.0% [10.8-19.2]	1.0% [0.6-1.5]	93% decrease
Percent of pupils who wash hands after using the toilet at school with soap or ash	33.0% [29.7-36.3]	75.8% [70.1-78.9]	130% increase
Percent of pupils who can name where a safe house is located	0	44.0% [40.1-48.5]	44% increase
Percent of pupils who know about abstinence	10.0% [5.0-15.0]	5.3% [3.9-9.0]	47% reduction
Percent of girl pupils who feel confident refusing unwanted sex	65.0% [61.3-68.7]	59.0 [53.0-62.5]	9% reduction

[1] School response rate =# of participating schools/# of sampled schools.

Percent of pupils who can name where Safe House is located	0%	44.0% 40.1-48.5]	44% increase
Percent of school with safe homes	No baseline value	42.9% [40.5-45.6]	43% increase
Percent of schools with safe school policies	0	86% [83.0-89.5]	86% increase
Percent of schools with functioning latrines for girls and boys	33.0% [28.1-37.9]	76.2 [73.5-79.6]	130%
Percent of schools with hand washing facilities that have soap or ash for cleansing	22.0% [16.8-27.2]	81.0% [78.5-83.0]	268% increase
Percent of schools with functioning SMCs,	50.0% [48.3-52.6]	76.2% [72.3-79.6]	52% increase
Percent of schools with functioning SMCs, mobilized for SHN	44.0% [39.2-48.8]	76.2% [72.3-79.6]	73% increase
Percentage of community leaders who have advocated for the Safe House in the past year	0	52.4% [49.3-55.5]	52% increase
Percent of parents of pupils who talk to them about delaying sex in the past month	44.1% [39.0-49.2]	39.9% [35.0-41.5]	10% reduction

The SHN project, implemented by SC/SU, achieved its goal of improving education and health status of marginalized and vulnerable children in the targeted sub-counties of Luwero and Nakaseke Districts. Evidence of this is significant in the improvements in the School Health and Nutrition Indicators. Much as there was statistically significant change in the SHN indicators; the set project targets were not achieved for almost all the indicators, possibly due to the short implementation duration. The SHN project was instrumental in improving the general health and educational outcomes of primary school-age children within the target sub-counties of Luwero and Nakaseke Districts. This was achieved through the implementation of an integrated set of direct service provision and behavioural change activities addressing some of the key health and nutrition issues children face, including HIV/AIDS. A particular focus was on promoting girls' retention and completion.

The major reported challenges that constrained project implementation include the following:

a) School holidays interrupted the flow and pace of activities.

b) The target sub-counties are very remote with very poorly developed road networks, which were almost impassable during the rain season.
c) Some school administrations were uncooperative thereby rendering the process time consuming especially in the organization of parents meetings.
d) Community mobilization was also found to be very time consuming although it was very useful.

The following are lessons learnt from the process of project implementation:

a) When communities are organized, they can make a significant contribution to school health and nutrition improvements.
b) Use of ash for hand washing can provide a no-cost option for schools in addressing hygiene.
c) Parents acknowledge the need to get more involved in school health and nutrition activities.
d) SHN project activities should run over a period of at least 3-5 years in order to meet the set project targets.
e) SHN project activities should be determined and implemented using the following approaches: community mobilization; capacity building; whole school involvement and child-centred programming.

SECTION ONE

1.0 INTRODUCTION

This report presents the findings of the Final Evaluation of School Health and Nutrition Projects funded by the United States Agency for International Development (USAID) through the Uganda Programme for Human and Holistic Development and Implemented by Save the Children Federation in the United States of America (SC/US) in five sub-counties of Nakaseke and Luwero Districts.

1.1 Background to the School Health and Nutrition Projects

The Uganda Program for Human and Holistic Development (UPHOLD) is a bilateral intersectoral program funded by USAID under the Strategic Objective 8 (S08) results framework. It has the mandate to improve the quality, utilization, and sustainability of services delivered in three integrated social sectors namely Education, Health and HIV/AIDS. USAID through UPHOLD, awarded a grant to Save the Children Federation, Inc.(SC/US) to implement a School Health and Nutrition (SHN) project in 100 primary schools in Luwero and Nakaseke Districts.

This SHN project was aimed at improving the educational conditions of school children, the health of school-age children and the health of neighbouring communities through improved utilization of services and the adoption of positive behaviours. The project has implemented an integrated set of school-based health and nutrition activities including: service delivery; skills-based health and HIV/AIDS education; environmental improvement; and community participation related to control of parasitic worms, malaria control, school safety, and health and nutrition education with the aim of improving general health and educational outcomes of primary school-age children. A particular focus has been on promoting girls' retention and achievement.

The specific objectives of the project included the following:

a) Increase access to school-based health services,
b) Improved hygienic behaviours of children,
c) Increase retention rates, in particular for girls,
d) Improve children's ability to make healthy and responsible choices in particular regarding HIV and reproductive health.

In order to attain the above objectives, SC/US implemented the following key activities:

a) Community mobilization and district support to increase coverage and magnitude for child day activities in Luwero and Nakaseke Districts.
b) Establishment and support of safety improvement teams in schools was part of the safe school policy processes.

c) Provision of support to male focussed groups to improve gender awareness and demonstration of proper respect between boys, girls and women;
d) Creation of safe houses, specific homes in the community where children can run to in case of a problem to or from school
e) Training network of peer educators established and supported
f) Forming buddy or "safety friend" system to enhance protection for children to and from school.
g) Piloting the cool parent guide to promote child parent communication especially on issues regarding sexuality and HIV/AIDS;
h) Promotion of improved hygiene and sanitation practises among primary school-aged children - by providing health education and tippy taps to promote washing of hands especially after the use of toilets.

Table 1 provides the detailed activities that were planned for implementation in accordance with the Memorandum of Understanding between USAID/UPHOLD and SC/US (Ref: 88-2005).

Table 2: SHN Project Activities

Increase access to school based health services.
▪ Mobilize activities for child days ▪ Train teachers in providing first aid to students ▪ Provide first aid kits to school ▪ Train teachers in personal health, hygiene and nutrition ▪ Develop a behaviour centered communication strategy to support parents and students ▪ Facilitated links with organizations/institutions to provide bed nets and also support treatment of bed nets
Improved hygienic behaviours of children
▪ Prepare school management committees to take leadership role in mobilizing communities ▪ Facilitate links with community based health programmes
Increase retention rates, in particular for girls
▪ Conduct a Partnership Defined Quality (PDQ) workshop with students, parents and teachers ▪ Train members of the school management committees in their role as Quality Information Teams ▪ Develop safe school policies for schools ▪ Mobilize SMCs and schools to provide washing facilities in older girls latrines ▪ Train schools and community stakeholders on gender sensitivity and appreciation for girls needs ▪ Establish and work with male focus groups to identify and develop special activities
Improve children's ability to make healthy and responsible choices in particular regarding HIV and reproductive health
▪ Identify and implement no cost school based activities to promote reproductive health dialogue ▪ Train senior women and men teachers in counselling ▪ Identify "safe houses" in the community ▪ Train volunteer parents on the "Cool Parent Guide" ▪ Create Tippy Taps for schools ▪ Identify and train peer educators ▪ Provision of support to peer educators

1.2 Rationale and Objectives of Final Evaluation Study

The SHN projects were implemented for 2 years (Nov 2005 – June 2007). In December 2005, a baseline study was undertaken to document the baseline indices of SHN among the target population. Following completion of project implementation, a final study was carried out. The aim was to determine the post-intervention reference points for comparison with the baseline indices in order to establish the outcomes of project interventions. The specific objectives of the final evaluation study included the following:

a) To determine the post-intervention reference points for the following SHN indicators:

- Prevalence of helminth infection
- Proportion of children reporting falling sick with malaria in the last 30 days prior to the study
- School attendance rate
- Proportion of children who report taking malaria medicine at school when ill with fever
- Proportion of children reporting sleeping under or next to a treated mosquito net
- Proportion of pupils reporting sexual intercourse during the year of the study
- Proportion of pupils with access to safe houses
- Proportion of children who report washing of hands after using a toilet at school with soap or ash
- Proportion of pupils who know about abstinence
- Proportion of girls who feel confident refusing unwanted sex
- Proportion of pupils who can name where a safe house is located
- Proportion of schools with functioning latrines for girls and boys
- Proportion of schools with hand washing facilities, plus soap or ash,
- Proportion of schools with functioning School Management Committees (SMCs), mobilized for SHN
- Proportion of community leaders who have advocated for safe houses in the past year
- Proportion of pupils who report having received a talk from their parents about delaying sex in the past month

b) To compare the baseline and final evaluation indices, and determine the magnitude of effect by project interventions on certain aspects of the children's lives including health status, and school performance. The outcomes of effect were compared to the targeted improvements of the school health and nutrition indicators;

1.3 Background of the Study Area

Luwero and Nakaseke existed originally as one district (Luwero) consisting of three counties namely Bamunanika, Nakaseke and Katikamu.[2] In July 2005, the original Luwero district was divided into two separate districts namely Luwero and Nakaseke. The number of sub-counties, parishes and villages comprising these new districts are indicated in Table 3:

Table 3: Sub-counties, Parishes and Villages Comprising the Districts of Luwero and Nakaseke

District	Sub-counties	Parishes	Villages
Luwero	13	87	571
Nakaseke	7	47	308

Nakaseke borders the districts of Masindi in the north-east, Kiboga in the west, Nakasongola in the east and Luwero in the south. Luwero borders Mukono and Mpigi in the south and Lake Kyoga in the north. [3]

Generally, the topography of the two districts is flat with undulating hills and with savannah grasslands. This type of vegetation makes the district favourable for pastoral lifestyle thus defining the economic activities of the people. Luwero is situated bewteen altitudes of between 1,082m - 1,372m above sea level, and experiences high temperatures and rainfall of modified equatorial climate.

The key district administrators include; LC5 Chairperson who is the political head, elected by the majority of the people; Chief Administrative Officer (CAO) who is the Chief Executive of the district, and the Resident District Commissioner (RDC) who is the government's political representative.

The districts have always been a cosmopolitan area with many people of different origins and ethnic backgrounds. Among them are the Baganda, the original inhabitants who are agriculturalists. Other ethnic groups include the pastoral Banyarwanda, and Banyankole from Western Uganda, the Luo speakers and Nubians of Sudanese origin.

Education is one of the major priorities in Luwero and Nakaseke districts. The District Education Departments target training of the entire community through several programmes. These include the government's Universal Primary Education (UPE) for primary school-going children, pre-primary school training,

[2] Luwero District Portal, September 2007.

[3] Map of former Luwero district

tertiary and vocational training, college and university training. The overall objective is to create a developmental, literate society.

There are 384(248 government and 136 primary/community) primary schools. Overall, there are 171,449 (Nakaseke 51,749, Luwero 119,700) pupils enrolled in primary schools in the two districts.[4] The study area had 14 non-formal schools also known as chance schools with an enrolment of 1,280 pupils. The chance schools[4] have classes ranging from P1 – P2. The government-aided primary schools are distributed throughout the district. UPE has tremendously increased the enrolment for primary education but the district is faced with the challenge of increasing levels of drop-outs at higher education levels.

[4] Chance schools are community based schools that were established to support non-formal education. They specifically target the hard-to-reach and most disadvantaged groups in the communities.

SECTION II: STUDY IMPLEMENTATION

2.1 Sample Design

The sample for the baseline study covered the pupils in the government and Child-centered Alternative for Non-formal Community-based Education (CHANCE) schools in Kamira and Kalagala sub-counties in Luwero district; Kinyogoga, Ngoma and Wakyato sub-counties in Nakaseke districts. The SHN projects were implemented in 91 schools located in 5 sub-counties of Luwero and Nakaseke districts.

A representative sample of 420 pupils was selected for the baseline study and it was constructed in a way that allowed for addressing sampling and non-sampling errors. [5, 6] The study used a two stage sample design.

a) The first stage involved the selection of 21 schools from among the 117 schools (formal and non-formal). Using probability proportional to type, 18 formal and 3 non-formal schools were selected for the study. A cumulative list of enrolment program schools in each district was prepared and used to select the required schools.
b) The second stage of involved the selection of 420 pupils (20 from each school) using stratified random sampling proportional to the size of each school. Pupils were interviewed from both the lower (Primary one to four) and upper levels (Primary 5 to 7) classes. In the case of non-formal schools, this was done using probability sampling proportionate to size of the section. Selection of pupils from both the lower and upper levels was done using computer-generated random numbers**.**

All pupils who were available in the target schools on the days of the study were eligible to participate in the study. Pupils who were interviewed were given stool containers to collect stool samples that were analyzed for helminth infection. Children who were not able to give the required information due to any disability were excluded from the study.

2.2 Study Instruments

The study used pre-coded and open ended questionnaires, key informant interviews, focus group discussions, observational checklists and review of school records. Stool specimens were also drawn from each participating pupil.

The individual questionnaires were used to collect information from all the sampled pupils in the program schools and covered the following topics:

- Infection with malaria and helminth
- Health and nutrition behaviours of school-age children

[5] Kish and Leslie. Study Sampling, 1965
[6] Bennet S et al. Cluster Sampling for Community Studies, 1991

- Knowledge, attitudes and skills of key behaviours related to health, nutrition and high risk practises

Key informant interviews were used for head-teachers and members of the School Management Committees. The aim was to collect information on the community support systems and policy environment related to school health and nutrition. The observational checklist was used to collect information from school sanitary facilities as well as school records (program records, school management committee records and target area records).

Prior to the actual data collection, the study team visited all the sampled schools and briefed the head-teachers, teachers, pupils and local leaders in the nearby communities about the study.

2.3 Specimen Collection and Laboratory Testing

Stool samples were collected in clean chemical free stool containers and were stored in refrigerated boxes prior to transportation to the laboratory. Stool samples were examined for intestinal parasites by the Formal-Ether Concentration method; both when stained and unstained with Lugol's iodine using the high dry microscope objective.[7] The analysis of stool was aimed at detecting the common childhood parasites (*Ascaris Lumbricoides*, *Enterobius Vermicularis, Entamoeba Histolytica, Giardia Lamblia and Schistosoma Mansoni).* The different parasitic forms were also counted and reported as follows:

- Scanty……..1-3 per preparation
- Few……..4-10 per preparation
- Moderate number……..11-20 per preparation
- Many……21-40 per preparation
- Very Many……..over 40 per preparation

All procedures for stool examination were performed according to Standard Operating Procedures (SOPs) for the collection, storage, transportation and laboratory specimen processing. The results of the analysis were recorded on special laboratory forms.

2.4 Training of Study Field Staff

The training of field staff for the baseline study was conducted for a period of three days from 13th to the 14th of August 2007 at the SFG study offices located at Nakasero, Kampala district. The trainings were conducted in a highly coordinated fashion by the SFG consultants.

The interviewers were thoroughly trained in open and non-judgmental questioning techniques to increase on likelihood of honest responses, and

[7] Laboratory Manual for Community Health Studies, WHO. 2001.

accurate recording of responses. After training the interviewers, the study process was not piloted as this had already been done during the baseline study. Standardized questionnaires were used to maximize the comparability of data across time and pupils in different districts.

2.5 Community Mobilization and Field Work

Prior to starting field work, SFG arranged for numerous activities that were designed to promote awareness of the study, as well as school and pupil participation. UPHOLD formally introduced SFG to district leaders and highlighted their role in the study. The district leaders in return provided letters of support introducing the study team to the program schools. The head-teachers were then briefed about the study administration process and procedure for obtaining pupil and parent participation. The purpose of the study, its design, and implementation, and issues of confidentiality were thoroughly discussed with all the head-teachers and local leaders for the communities surrounding the program schools.

Three teams carried out the data collection for the study. Each team consisted of one supervisor, a female interviewer, a male interviewer, a nurse and a driver. Data collection was done over three days, from 17th to 19th of August 2007. Male and female interviewers respectively interviewed the sampled boys and girls.

2.6 Data Processing

The processing of the baseline study questionnaires begun shortly after the filed data collection commenced. Completed questionnaires were returned to the study office in Kampala at the end of each working day in the field. Data processing personnel with special training for this task entered the data, which was then edited. The concurrent data processing was a distinct advantage for its quality, because the data entry personnel were able to advise field teams of errors detected during the data entry process. The data entry was done using Epiinfo version 6.0 and was analysed with SPSS version 12.0 for windows. The data entry and editing phase of the study was completed on 22nd of August 2007. Data from key informant interviews was transcribed and translated into English, coded, analyzed and separated into themes. It was triangulated with quantitative data findings to gain a deeper understanding of the information given.

2.7 Ethics Consideration and Quality Control

Non-research determination was sought from the Uganda National Council of Science and Technology (UNCST). Permission to gain entry to the communities was sought from the district authorities and respective LC1 leaders in the study area. The consent obtained from all respondents was verbal after explaining to them the goals and objectives of the data collection, confidentiality safeguards, and the potential risks and benefits of the whole process. Furthermore, we ensured total confidentiality of all information provided, and it has been utilized only for the purposes spelled out in this study. No names of informants have been used in the reports without the consent of owners.

2.8 Quality Assurance/Quality Control

Quality assurance was an integral component of the entire study process and used the following were used to ensure the quality of the study:
Adoption of appropriate random sampling procedures: The sample selection procedures were properly documented before commencing fieldwork.
Appropriate preparation and orientation of field interviewers: The development of field interviewer and supervisors' guides ensured that the interviewers had a handy guide to quickly refer to whenever in doubt. We trained more interviewers than the number we needed, a reserve team was always at hand.
Provision of adequate and proper supervision during fieldwork ensured that:

The interviewer teams were adequately served with the required field logistics;
The movement of the teams was monitored to ensure that they reach all the selected study sites ;
Technical advice was provided regarding the implementation of the sampling plan; and in interpretation and coding of difficult field responses
The field team followed all the study implementation procedures and completed their allocated interviews in a timely manner
All the field returns were reviewed while still at the schools to minimize the return of incomplete study questionnaires.

SECTION III: RESULTS & FINDINGS

3.1 Response Rates

Table 4 shows the response rates for the final study of School Health and Nutrition. A total of 21 schools and 420 pupils were selected in the sample. All the schools participated in the final evaluation study yielding a school response rate of 100%. [8] Out of 420 pupils who were selected to participate in the study, 393 were interviewed thereby yielding a response rate of 93.6%. [9] The overall response rate[10] was 93.6%.

Table 4: School and Pupil Response Rates

Result	Response
Number of schools sampled	21
Number of schools that participated	21
School response rate	100%
Number of pupils sampled	420
Number of pupils interviewed	393
Pupil response rate	93.6%

Table 5: Characteristics of the Sampled schools

District	Formal Schools	Non Formal Schools	Total
Responsive schools			
Luwero	8	1	9(42.9%)
Nakaseke	11	1	12(57.1%)
Total	19 (90.5%)	2 (10.5%)	21(100.0%)

The sampled children to respond to the interview questions attributed the pupil non response to failure. The characteristics of schools involved in the study are summarized in Table 5.

3.2 School Health and Nutrition Indicators

3.2.1 Infection with Helminth

Table 5 summarizes the prevalence of helminth infection in school age children. The overall prevalence of helminth among the sampled children is 15.2% [9.4-19.7] with *Ascaris Lumbricoides* as the commonest intestinal parasite identified (8.8%). 1(0.8%) child had parasitic forms that could not be identified morphologically.

[8] School response rate =# of participating schools/# of sampled schools.
[9] Pupil response rate=# of participating pupils/#of sampled pupils
[10] Overall response rate=school response rate x student response rate

Table 6: Prevalence of Helminth Infection in School-Age Children

Type of Parasite	Proportion	Parasite intensity				
	n(%)	Scanty	Few	Moderate	Many	Very Many
Enterobius Vermicularis	1(0.8%)	0	0	0	0	100.0%
Giardia Lamblia	6(4.8%)	0	33.3%	50.0%	0	16.7%
Entamoeba Histolytica	1(0.8%)	0	0	100.0%	0	0
Schistoma Mansoni	0	--	--	--	--	--
Ascaris	11(8.8%)	9.1%	63.6%	18.2%	9.1%	0
Others[11]	1(0.8%)	0	0	0	0	100.0%
Overall	19(15.2%)					

3.2.2 Prevalence and Treatment Patterns for Malaria Infection

46% [41.3-50.2] of all sampled children reported falling sick with malaria in the last 30 days prior to the study. Only 25% [21.3-28.9] of the children who had malaria illness reported receiving malaria treatment while at school.

Table 7: Prevalence and Treatment Patterns for Malaria Infection

	Boys	Girls	Overall
Report falling sick with malaria in the last 30 days prior to the study	47%	45%	46%
Report falling sick with malaria in last 30 days prior to the study and also received antimalarial treatment from school	12%	13%	25%
Report falling sick with malaria in last 30 days prior to the study and also reported not receiving antimalarial treatment from school	38%	38%	75%

[11] Different parasitic forms including eggs and cysts were identified in the stool but they could not be typed (the parasitic type could not be discerned morphologically) in a few stool samples

3.2.3 School Attendance rates

Table 7 presents the school attendance rate by gender in the sampled schools. The average number of days each student attended school was found to be 131 out of 186 functioning primary school days in the year. The overall mean of actual attendance rate[12] was 70.4% [68.6-72.8]. Boys are more likely to attend school (71.0%) when compared to girls (69.4%).

Table 8: School Attendance Rate by Gender

Gender	Average number of days when each pupil attended school	Mean actual attendance rate
Boys	132	71.0%
Girls	129	69.4%
Average	131	70.4%

3.2.4 Use of Mosquito Nets

Table 9 presents the distribution of sampled children with regard to use of mosquito nets. 35% [32.0-39.6] of all sampled pupils reported sleeping under or next to a treated mosquito net. 37% of all interviewed pupils reported not sleeping under the mosquito net and 8% of the pupils were not sure of the appropriate responses.

Table 9: Proportion of Children Sleeping Under/or Next to Mosquito Net

	Boys	Girls	Overall
Sleep under or near a treated mosquito net	31%	38%	35%
Do not sleep under or near a treated mosquito net	21%	20%	20%
Not Sure	9%	7%	8%
Do not Sleep Under or near any mosquito net	40%	35%	37%
Total	100%	100%	100%

3.2.5 Sexual Activity among Children

Table 9 presents the proportion of children reporting sexual activity during the year of the study. 1% [0.6-1.5] of the interviewed pupils reported sexual activity during the year of the study.

[12] Mean actual attendance rate=Sum of days each pupil attended school/sum of functioning primary school days in a year

Table 10: Proportion of Children Reporting Sexual Activity with in the Year of the Study

	Sexual Activity Reported	No sexual activity reported	Not Sure
Boys	0.5%	96.8%	2.6%
Girls	1.5%	95.1%	3.4%
Total	1.0%	95.9%	3.1%

3.2.6 Hand-washing after Using the Toilet at School with Soap or Ash

Table 11: Proportion of Pupils Reporting Hand-washing

Pupils	Report Washing hands after toilet use	Do not report hand washing
Boys	75.3%	24.7%
Girls	76.4%	23.6%
Total	75.8%	24.2%

Table 11 summarizes the proportion of pupils who reported washing hands after visiting the toilet. 76% [70.1-78.9] of all the sampled pupils reported washing of hands after visiting the toilet.

3.2.7 Safe Houses

Table 12: Access to Safe Home

Community/School	%
% of schools that have safe school policies	46%
% of schools with safe homes	43%
% of sampled children who can name where a safe home is located	44%
% of community leaders who have advocated for a safe home	52.4%

A Safe House is a home or location where a child may go for safety or assistance when the child encounters a threat or other emergency. Safe House locations can be marked with a distinctive placard for easy identification. In this study, 43% [40.5-45.5] of all sampled schools had a designated safe home where children could run for safety in the event of any threat to their lives while travelling to and from schools.

44% [40.1-48.5] of all the sampled children could name where a safe home is located. 46% [43.0-49.5] of all sampled schools have safe school policies. 52% [49.3-55.5] of all community leaders who were interviewed advocated for a safe home in the last one year.

3.2.8 Knowledge about Abstinence

Table 13: Proportion of Pupils who Know about Abstinence

Knowledge on Abstinence	%
Name three realistic abstinence strategies	5.3%
Name less than three abstinence strategies	58.8%
Do not Know	35.9%

Table 13 summarizes the responses regarding abstinence strategies. The common abstinence strategies reported by the pupils include the following: 'Say my Parents do not approve', 'Saying that parents will beat me', boldly saying 'No', fight the person of the opposite sex and reporting the person of the opposite sex to the parents/ teachers. 5% [3.9-9.0] of all the pupils could name at least three realistic strategies to abstain from sex.

3.2.9 Refusal of Unwanted Sex

Table 14 summarizes the children responses regarding refusal of unwanted sex by the interviewed pupils. Out of the 393 pupils interviewed in the study, 59% [53.0-62.5] reported; feeling confident refusing unwanted sex.

Table 14: Proportion of children who feel confident refusing unwanted sex

Proportion of Children	%
Feel confident refusing unwanted sex	59%
Do Not feel confident refusing unwanted sex	36%
Not sure	5%
Total	100%

3.3.0 Presence of Functional Latrines and Hand-washing Facilities in Schools

Table 15: Presence of Functional Latrines and Hand Washing Facilities at Schools

Description of school	%
Schools with functional latrines for boys and girls	76.2%
Schools without functional latrines for boys and girls	23.8%
Schools with hand washing facilities	81.0%
Schools with out hand washing latrines	19.0%

Table 15 summarizes the results about the presence of functional latrines and hand washing facilities at the sampled schools. 76% [73.5-79.6} schools had functional latrines for boys and girls. 81% [78.5-83.0] of all sampled schools had hand washing facilities.

3.3.1 Proportion of Schools with Functioning SMCs, Mobilized for SHN

76.2% [72.3-79.6] of all sampled schools were found to have SMCs mobilized for School Health and Nutrition.

Table 16: School Management Committees (SMCs) Mobilized for SHN

SMC mobilization	%
Presence of SMC	95.2%
SMC meets regularly	76.2%
SMC does not meet regularly	19.0%
SMC does not meet at all	4.8%
SMC review school health and nutrition issues	76.2%

3.3 2 Proportion of pupils whose parents talk with them about delaying sex in the past month

With regard to delaying sex, 40% [35.5-41.5] of all interviewed pupils reported that their parents had talked to them about delaying sex in the past month. 60% of all pupils reported having not having had any talk with their parents about delaying sex.

SECTION IV: DISCUSSION OF RESULTS AND CONCLUSIONS

4.1 Comparison of Baseline and Final Evaluation SHN Indicators

Table 17 summarizes the comparison of baseline and final evaluation indices.

Table 17: Comparison of Baseline and Final Evaluation SHN Indicators

SHN Indicators	Measurement of SHN indicator	Baseline values—December 2005	Final values—September 2007	Realised Outcome	Targeted Outcome	Odds Ratio	P Value (Mantel-Haenszel)
Prevalence of Helminths	Number of children with worms in a sample / Total number of children in a sample	24.5% [20.3-28.7]	15.2% [9.4-19.7]	38% reduction	50% reduction	0.55 [0.31-0.98]	**0.030**
Prevalence of Malaria cases	Number of children with malaria treated within 24 hours in the past month / Total number of children in the sample	54.3% [49.5-59.1]	46% [41.3-51.1]	15% reduction	50% increase	0.72 [0.53-0.97]	**0.025**
SUB-HIGHER-LEVEL RESULT #1: Improved use of school health and nutrition services							
School attendance rate (Mean actual attendance rate)	Sum of number of days each student attended school	63% [59.5-66.5] Boys: 61% Girls: 64%	70.4% [68.6-72.8] Boys: 71% Girls: 69.4	7.4 increase (overall) Boys: 16.4% increase	20% increase, by gender	0.45 [0.35-0.90]	**0.020**

SHN Indicators	Measurement of SHN indicator	Baseline values—December 2005	Final values—September 2007	Realised Outcome	Targeted Outcome	Odds Ratio	P Value (Mantel-Haenszel)
	Sum of functioning school days in the year / Sum of students enrolled			Girls: 8.4%			
SUB-HIGHER-LEVEL RESULT #2: Improved health and nutrition behaviours of school-age children							
Percent of children reporting taking malaria medicine at school when ill with fever	Number of pupils who reported seeking treatment at school when ill with fever / Total number of pupils sampled	12.6% [9.0-16.2]	21.4% [17.3-25.6]	70% increase	50% increase (30% increase by year 1)	0.58 [0.28-0.80]	**0.030**
Percent of children reporting sleeping under or next to a treated net	Number of pupils who report sleeping under or near a treated net / Total number of pupils sampled	19.4% [15.0-23.9]	35.0% [32.0-39.6]	80% increase	20% increase (10% increase by year 1)	0.62 [0.35-0.92]	**0.020**
Percent of pupils reporting sexual activity in the year of the study	Number of pupils under 15 who report sexual activity in the year of the study / Total number of pupils sampled	15.0% [10.8-19.2]	1.0% [0.6-1.5]	93% decrease	20% decrease (10% decreased by year 1)	0.06 [0.02-0.17]	**0.10**

SHN Indicators	Measurement of SHN indicator	Baseline values—December 2005	Final values—September 2007	Realised Outcome	Targeted Outcome	Odds Ratio	P Value (Mantel-Haenszel)
Percent of pupils who report washing hands after using the toilet at school with soap or ash	Number of pupils who report washing hands after using the toilet with soap or ash Total number of pupils sampled	33.0% [29.7-36.3]	75.8% [70.1-78.9]	130% increase	75% increase (50% increase by year 1)	0.08 [0.05-0.09]	**0.021**
Percent of pupils who can name where a safe house is located	Number of pupils report where a safe house is located Total number of pupils enrolled in program schools	0	44.0% [40.1-48.5]	44% increase	75% schools with services available (50% by year 1)	0	**0**
INTERMEDIATE RESULTS #2: Improved Knowledge, Attitudes toward and Skills of Key Behaviours Related to Health and Nutrition and high risk practices							
% of pupils who know about abstinence	Number of pupils who can name at least 3 realistic strategies to abstain Number of pupils sampled	10.0% [5.0-15.0]	5.3% [3.9-9.0]	47% reduction	75% (50% by year 1)	1.51 [1.28-1.92]	**0.170**
% of girl pupils who feel confident refusing unwanted sex	Number of girl pupils who feel confident refusing unwanted sex Number of girl pupils	65.0% [61.3-68.7]	59.0 [53.0-62.5]	9% reduction	75% (50% by year 1)	0.33 [0.23-0.45]	0.001

SHN Indicators	Measurement of SHN indicator	Baseline values—December 2005	Final values—September 2007	Realised Outcome	Targeted Outcome	Odds Ratio	P Value (Mantel-Haenszel)
% of pupils who can name where Safe House is located	Number of pupils who can name nearest Safe House / Number of pupils sampled	0%	44.0% 40.1-48.5]	44% increase	75% (50% by year 1)	0	0
% of school with safe homes	Number of schools with a designated safe home on the main route to school / Number of sampled schools	No baseline value	42.9% [40.5-45.6]	43% increase	Not set	Not applicable	Not applicable
% of schools with safe school policies	Number of schools reported to have safe school policies / Number of sampled schools	0	86% [83.0-89.5]	86% increase	Was not set	Not applicable	**Not applicable**
INTERMEDIATE RESULTS #3: Increased availability of safe water and sanitation at school							
Percent of schools with functioning latrines for girls and boys	Number of schools with functioning latrines for girls and boys / Total number of program schools	33.0% [28.1-37.9]	76.2 [73.5-79.6]	130%	75% (50% by year 1)	0.25 [0.10-0.65]	**0.20**
Percent of schools with hand washing facilities that have	Number of schools with hand washing facilities	22.0% [16.8-27.2]	81.0% [78.5-83.0]	268% increase	75% (50% by year 1)	0.36 [0.25-0.91]	**0.010**

SHN Indicators	Measurement of SHN indicator	Baseline values—December 2005	Final values—September 2007	Realised Outcome	Targeted Outcome	Odds Ratio	P Value (Mantel-Haenszel)
soap or ash for cleansing	Total number of pupils in program schools						
INTERMEDIATE RESULTS #4: Improved community support systems and policy environment related to school health and nutrition							
Percent of schools with functioning SMCs,	Number of schools in target area with functioning SMCs / Total number of schools sampled	50.0% [48.3-52.6]	76.2% [72.3-79.6]	52% increase	75% (50% by year 1)	0.46 [0.21-0.70]	**0.030**
Percent of schools with functioning SMCs, mobilized for SHN	Number of schools in target area with functioning SMC Committees discussing SHN issues / Total number of schools in sample	44.0% [39.2-48.8]	76.2% [72.3-79.6]	73% increase	75% (50% by year 1)	0.32 [0.19-0.60]	**0.010**
0Percentage of community leaders who have advocated for the Safe House in the past year	Number of leaders who advocated or supported Safe Houses in past year / Total number of leaders in communities near program schools	0	52.4% [49.3-55.5]	52% increase	60% (25% by year 1)	0	**0**

SHN Indicators	Measurement of SHN indicator	Baseline values—December 2005	Final values—September 2007	Realised Outcome	Targeted Outcome	Odds Ratio	P Value (Mantel-Haenszel)
Percent of parents of pupils who talk with them about delaying sex in the past month	Number of parents of pupils under 12 who talked with them about delaying sex in the past month	44.1% [39.0-49.2]	39.9% [35.0-41.5]	10% reduction	75% (50% by year 1)	1.12 [0.8-1.52]	**0.435**
	Number of parents sampled						

4.2 Discussion of Results and Conclusions

The SHN project implemented by SC/SU achieved its goal of improving education and health status of marginalized and vulnerable children. This was in target sub-counties of Luwero and Nakaseke Districts. Evidence is by the significant improvements in the School Health and Nutrition Indicators (Table 16). Much as there was statistically significant change in the SHN indicators, the set project targets were not achieved for almost all the indicators, possibly due to the short implementation duration. The SHN project was instrumental in improving the general health and educational outcomes of primary school-age children within the target sub-counties of Luwero and Nakaseke districts. This was achieved through implementation of an integrated set of direct service provision and behavioural change activities. The process was addressing some of the key health and nutrition issues children face, including HIV/AIDS. A particular focus was on promoting girls' retention and completion.

Both water-borne and soil-transmitted parasites are common throughout Uganda. These parasitic worms infect the intestines and/or blood and are a major source of disease in school-age children. They can lead to anaemia, general malnutrition, diarrhoea, and general malaise in addition to severe long-term health problems. Dr. Ntwatwa of the Ministry of Health School Health Section, estimates that more than half the pupils have intestinal worms. The SHN project reduced the prevalence of helminth by 38%, largely due to the direct support, which was provided to 5 sub-counties and all the other communities through the district health officers; with the aim of increasing participation of communities in child days, so that children are de-wormed and also provided with micronutrient supplementation (Vitamin A).

Planning and continued dialogue was conducted with the districts to partially meet their costs for the mobilization exercise in addition to working with lower level health facilities and political structures to disseminate information. The district health offices also provided IEC materials to increase the information available at the community level including child day posters and information leaflets. Child days benefited over 87, 707 school going children in 91 schools (Formal and CHANCE) in Luwero and Nakaseke Districts. These children were reached with de-worming and Vitamin A. Occasional stock outs of de-worming tablets and Vitamin A constituted a notable constraint to child day activities.

Malaria is the most common health problem in school-age children throughout the country. According to Uganda National Health Study (UNHS) 2002/3 only 8% of children below 18 years usually sleep under a mosquito net. At the beginning of project implementation, 12.6% of all sampled children reported taking malaria medicine at school when fallen ill with fever and 19.4% of all sampled children reported sleeping under or next to an ITN. The SHN Project reduced the prevalence of malaria cases by 15% (although a 50 % reduction was targeted).

This was mainly due to the increase in the proportion of children who report sleeping under or next to a treated net (80% increase). SC/US worked with Population Services International (PSI) in order to determine willingness and ability of families to pay for Insecticide Treated Nets (ITNs). PSI provided IEC materials on malaria prevention and the benefits of ITNs with which the SHN project used to educate teachers, children and families on the use of ITNs. The remoteness of the target sub-counties constrained the distribution of ITNs to those communities.

In addition to malaria, intestinal worms and micro-nutrient deficiencies are also among the major health/nutrition problems affecting primary school-age children across the country. These are also responsible for high rates of school absenteeism. When children do show up for class, their capacity to learn can be greatly diminished and their performance suffers. Poor performance may cause children to repeat classes or drop-out altogether; thus denying them the opportunity to attain the basic reading, writing, and life skills necessary to lead productive and fulfilling lives as adults. The SHN project increased participation of communities in child day activities that increase children's access to de-worming medication and micronutrient supplements. The SHN project increased the school attendance rate by 10.5% (boys: 16.4% and girls: 8.4%) as a result of the reduction in helminth and malaria prevalence rates. The school-based interventions ensured that investments made by the education and health sectors are effective by reducing absenteeism, improving performance and by ensuring continued health for children over five years old.

There was a 70% increase in the proportion of children who report taking malaria medicine at school, when sick with fever. This was attributed to the training of teachers in the provision of basic health services to students with malaria and common illnesses, including assessment, treatment and referral of sick children. SC/US trained 102 teachers (58 males and 44 females). In addition 197 teachers from 91 schools in five sub-counties of Ngoma, Kinyogoga, Kalagala, Kamira and Wakyato have been trained on a skills-based approach to educate students in personal health, nutrition and hygiene at appropriate and strategic times of the school year (i.e. according to seasons of the year and distribution cycles of deworming). The SMCs were also oriented on the how to monitor supplies and assist teachers to record and re-order supplies. 102 teachers out of the targeted 300 were trained in the provision of basic health services with only 197 training in skill-based approaches. This was largely due to limited project funding.

The pre-adolescent youth is a group often ignored in many HIV/AIDS education projects. SC/US believes it is important to facilitate dialogue among youth and equip them with life skills for HIV prevention before they become sexually active and before they succumb to the pressures of their peers and elders. Studies from around the world have also demonstrated that it is more effective to help younger adolescents develop health practices than to change older adolescents'

practices.[13] The Presidential Initiative on AIDS Strategy for Communication to Youth (PIASCY) is an opportunity to utilize. To achieve this, the SHN project activities were enhanced by the efforts of PIASCY. The project strengthened implementation at the school level and complemented measures to increase safety. The SHN project reduced the proportion of children reporting sexual activity in the year of the study by 93%. Paradoxically, the proportion of girls who know about abstinence and those who feel confident refusing unwanted sex reduced by 47% and 9% respectively. In addition, the proportion of parents of pupils who talk with them about delaying sex in the past month reduced by 10%.

The reduction in number of pupils reporting sexual activity in the year of the study is attributed to the following implemented activities:

- 30 youth clubs have been established and currently plan with 91 schools to identify and implement no cost based activities and systems that promote dialogue on issues of HIV/AIDS prevention and care.
- 200 senior women and men teachers have been identified to provide effective and age appropriate counselling to students.
- Establishment of a network of 100 peer educators to facilitate dialogue and healthy decision role models for abstinence and other protective practises against HIV/AIDS.

The SHN project played a key role in the identification of safe homes on the paths to schools where children can go if they run into trouble on the way to school. These have been promoted through SMCs, which led to an 86% increase in the proportion of schools with safe school policies. Also realised was a 43% increase in the proportion of school with designated safe homes; 44% increase in the proportion of pupils who can name where a safe house is located. An increase of 52% was in the proportion of community leaders who have advocated for the safe house during the duration of project implementation. By the end of the project implementation period 37 safe homes had been established.

While girls' early enrolment in primary schools in Uganda is equal to that of boys', enrolment rates for girls in upper primary begin to drop rapidly relative to boys. Most girls drop out before completing primary school; and those that do complete generally score lower than their male counterparts. The lower rates of completion and poorer performance of girls relative to boys is a result of various structural and behavioural factors. These range from schools not having proper facilities, like sanitation and access to clean water to address the special needs of adolescent girls, to parental attitudes that do undermine the value of girls' education, to outright abuse that girls are prone to by both male teachers and pupils. The SHN project developed and implemented strategies to effect changes in attitudes and behaviours, towards women and girls and to create safe and supportive schools and communities. The project attempted to address the

[13] Gallant, Melanie and Eleanor Maticka-Tyndale. *School-based HIV prevention programmes for African Youth.* Social Science and Medicine, August 2003.

special needs of adolescent girls (i.e. separate latrines and washing facilities). There was a remarkable increase in safe water and sanitation facilities in schools. This evidence was displayed by 130% increase in the proportion of schools with functioning latrines for girls and boys. There was also a 268% increase in the proportion of schools with hand washing facilities that have soap or ash for cleansing. An increase of 130% was also realised in the proportion of pupils who wash hands after using the toilet at school with soap or ash. By the end of project implementation, 68 schools had functional latrines for both girls and boys and also hand washing facilities with soap or ash.

The SHN project also contributed greatly to mobilizing School Management Committees for School Health and Nutrition. By the end of project implementation; 91 SMCs and 300 SMC members were trained on school health and nutrition issues. Overall, there was 53% increase in the proportion of schools with functioning SMCs and 73% increase in the proportion of schools with functioning SMCs mobilized for SHN.

The success of the SHN project is mainly involved the following lines of approach employed in its implementation:

a) **Community Mobilization**: SC/US established partnerships with schools and communities and mobilized them to establish non-formal centers to prove flexible and responsive education to marginalized children. SC/US also trained and mobilized a network of over 250 community-based volunteers in Nakasongola District to improve the quality and delivery of education and health services. SC/US has also been piloting an innovative Partnership Defined Quality (PDQ) improvement process that aims to bring health providers and clients together as Quality Improvement Teams. These teams define the nature and quality of reproductive health services and a process for improving quality. This same approach was used in assisting schools, communities and districts define quality education content and institutions. It included health, nutrition, and safety components. Community mobilization activities included community discussions, songs and dancing using primary schools, and other IEC activities.

b) **Whole School Involvement**: Improvements in the quality of services, whether education or health services, requires input and active involvement of a range of stakeholders. In its work with schools, SC/US built the capacity of all school-level stakeholders to participate in school improvement, including teachers, head-teachers, parents, communities, students, and School Management Committees (SMCs). SC/US implemented the PDQ approach to school improvement. The approach used the following steps:

    - Focus group discussions with different stakeholder groups, especially children were used to define the issue,

- Bridging the gap workshops with representatives from different stakeholder groups to develop joint definitions of quality and issues which promote or impede the achievement of quality
- Establishment of a Quality Improvement Team (QIT) using the schools as the base to develop an action plan for achieving quality
- QIT members report back to constituents' progress in implementing the action plan on a regular basis.

c) **Capacity Building**: The project worked with district health and education staff during all phases of the project including design, implementation, and monitoring to develop the skills and systems to support this new project. Simultaneously, the project supported the schools and communities to develop the skills to identify and address their own needs. SC/US worked closely with district officials and school-communities to assess needs, define program strategies and activities, provide support/supervision and monitor and report on progress.

d) **Child-Centered Programming**: Children were at the centre of all SC/US's programs. Their role is not merely that of "beneficiary", but their involvement begins with participation in defining the problem and possible solutions. Children were full participants in the PDQ process as members of the stakeholder's focus groups and QITs. Children attended all meetings to ensure their views are accurately presented. Children were also trained to be peer educators to support fellow children particularly in HIV/AIDS prevention.

The major challenges reported as being responsible for constraining project implementation include:

e) School holidays that interrupted the flow and pace of activities: the opening of the school term in formal schools at the end of May, leading to the expansion of Child Day Periods.
f) The supplies and facilitation for the child days delayed to reach the lower level units;
g) The target sub-counties are very remote with very poorly developed road networks which were almost impassable during the rain season.
h) School variation regarding the available facilities (sanitation and other basic facilities) necessitated a case-by-case intervention.
i) Some school administration personnel were uncooperative rendering the process time consuming, in particular the organization of parents' meetings.
j) Community mobilization was also consumed a lot of time although proved very useful in the end.

The following were lessons learned from the project implementation:
k) When communities are well mobilized; they can make significant contribution to school health and nutrition improvements.
l) Use of ash for hand washing can provide a no-cost option for schools.

m) Parents acknowledge the need to be more involved in school health and nutrition activities.
n) SHN project duration should be at least 3-5 years in order to achieve the set project targets.
o) SHN project activities should be designed and implemented using the following approaches: community mobilization; capacity building; whole school involvement and child centered programming.

The following are the lessons learnt from the project implementation;

a) When communities are well mobilized; they can make significant contribution to school health and nutrition improvements.
b) Use of ash for hand washing can provide a no-cost option for schools.
c) Parents acknowledge the need for more involvement in school health and nutrition activities.
d) SHN project duration should be at least 3-5 years in order to achieve the set project targets.
e) SHN project activities should be designed and implemented using the following approaches: community mobilization; capacity building; whole school involvement and child centered programming.

ANNEXES

Annex A: Respondent Questionnaire for Interviewing Sampled Children at School

Identification Particulars					
District	**Sub county**	**School Category**	**Support**	**Gender**	**Type**
1=Luwero 2=Mpigi	1 = Kalagala 2 = Kamira 3 = Ngoma 4 = Kinyogoga 5 = Wakyato	1= Formal 2= Non formal	1 = Gov't 2 = Private 3 = SCF (Chance school)	1=Boys 2=Girls 3=Mixed	1=Boarding 2=Day 3=Mixed
Name of School					
School code					
Interviewers name					
Date of birth of pupil			Class / Form :		
Age of pupil			Age Code :		
Questionnaire Completed	1=Yes 2=No				
If not complete, reason					
Identification Number (must be completed)					
School #			Pupil # (to be given in the field)		

DD MM YY ☐☐ ☐☐ ☐☐

ENUMERATOR'S NAME:_____ DATE OF INTERVIEW

DD MM YY ☐☐ ☐☐ ☐☐

SUPERVISOR'S NAME :_____ DATE OF CHECKING

Infection with Malaria			
This Section is intended to establish whether the child was treated for malaria with in 24 hours in the past one month as well as health seeking behavior of pupils when sick with fever.			
NO.	**Questions and Filters**	**Response**	**Coding column**
M1	In the last one month, have you been sick with fever? ***If no go to H1***	1=Yes 2=No	
M2	If yes, was the fever treated?	1=Yes 2=No	
M3	How soon was the fever treated?	1=Within one day 2=After one day but within two days 3=After more than two days 4=Do not know	
M4	Where did you get the treatment?	1=Home 2 = School 3= School health clinic 4 =Drug shop 5= Health unit outside the school (clinic, health centre, hospital) 6 =Traditional herbalist 7 = Other, specify	
Health and Nutrition behaviours of School going Children			
The section below is intended to determine the level of health and nutrition behaviours of school going children			
H1	Have you fallen with fever while at school? ***If no go to H3***	1 =Yes 2 =No	
H2	If yes to H1, what did you do to seek treatment?	1=Nothing 2=Asked for permission to go home 3=Waited for the day to end 4=Went to the school nurse 5=I do not know	
H3	Have you ever received treatment for fever from the school?	1=Yes 2=No 3=I do not know	
H4	Do you sleep under a mosquito net? ***If yes, go to H6***	1=Yes 2=No	
H5	If 'No', do you sleep in the same room with somebody who sleeps under a mosquito net?	1=Yes 2=No 3=Not sure	
H6	If 'Yes' (to H3 and H4 above), Is the mosquito net treated?	1=Yes (treated) 2=No (not treated) 3=Not sure	
H7	Do you wash your hands after visiting the latrine at school? ***If response is 2,3 or 4 go to H8 …***	1=Never 2=Once in a while 3=Always 4= Not sure	

H8	What do you use to wash your hands after visiting the latrine at school?	1=Only water 2=Water and soap 3= Water and ash 4=Not sure 5= Other (specify)……	
H9	Do you know where the nearest safe home is? ***If response is 1 go to H10***	1 = Yes 2 = No 3 = I do not Know 4 = Not sure	
H10	Where is the nearest safe home?	1 = At school 2 = Outside the school 3 = I do not know 4 = No safe home 5=others (specify)	
H11	***If girl pupil:*** Have you had a boy friend? ***If boy pupil:*** Have you had a girl friend?	1= Yes 2=No 3=Not sure	
H12	If yes, have you had intimate relationships (sex) with them?	1=Yes 2= No 3=Not sure	
H13	If No (H6 and H7), why?	1=no reason in particular 2=Not interested 3=Waiting till after school or for marriage 4=Not sure	
H14	Have you had sex since the beginning of this year?	1=yes 2=No 3=Not sure	

Knowledge of, Attitudes and Skills of Key Behaviours Related to Health, Nutrition and High Risk Practises			
This section is intended to determine the level of knowledge of, altitudes and skills of key behaviours related to health, nutrition and high risky practices among school age children			
H15	What do you understand by abstaining (or Delaying Sex)?	1=One Boy / Girl Friend 2=No Sex before Marriage 3= I don't Know	
H16	Name some different ways a child can use to abstain from sex. ***(Probe for at least 3 ways)***	1. …… …….. 2. …… ……. 3. …… …….. 4-10…….	

		(for more space, use space below)	
H17	What would you say / do if a boy / man approached you for sex and yet you do not want? **(what age groups should respond to this question)**	1=Say my Parents do not approve 2=say, they will beat me 3=Boldly say No 4= Fight him /her 5= Report him to my parents / teacher 6=Other(explain) ……	
H18	Do you feel confident (or bold) enough to say 'no' if some body asks you for sex	1 = Yes 2 = No 3 = I do not know	
H19	Have your parents talked to you about delaying sex in the past one month?	1=Yes 2= No 3= Not Sure 4= I do not leave with my parents	

Annex B: Key Informant Interview Guide

To be used to interview the Head teacher / Member of School Management Committee / Community Leader

a) Does your school have School Management Committee (SMC)?

---

c) How often does it meet?

---

c) When did it last meet? (see minutes)

---

d) What are some of the issues you have discussed in the school management committee?

Probe for children's health – prevention and treatment of common illnesses like malaria, worms,
School Hygiene:. Ensure availability of hand washing facilities.
Girl education – retention in schools
Safe home

---

e) Does the School Management Committee advocate for improved school health and nutrition services?

---

e) Do community leaders in the area surrounding your school visit the school?

---

g) Do they regularly visit your school?

---

h) Do they advocate for safe houses in the school?

---

i) How soon is fever treated among pupils?

---

j) Where do the pupils get the treatment from?

---

k) What do pupils do when they fall sick with fever while at school?

---

f) Do pupils wash their hands after visiting the toilets while at school?

---

m) What do pupils use to wash their hands after visiting the toilet at school?

---

n) Do pupils have relationships with the opposite sex? If yes, do they have intimate relations with them?

---

o) Where is the nearest safe house?

---

p) What would girl pupils say / do if a boy / man approached them for sex and yet they do not want?

---

q) Did parents talk to pupils about delaying sex in the past one month?

Annex C: Observational Checklist

The observational checklist will be completed using School Records: Program Records, School Enrolment records, School Management Committee Records and Target Area Records and inspection of the school environment)

No	Questionnaire Item	Response	Coding column
S1	Total Number of students enrolled in your school this year		
S2	Total Number of functioning school days in your school this year		
S3	Total number of days each student attended school		
S4	Does the school have safe home(s)	1=Yes 2=No	
S5	Presence of separate / functioning latrines for girls and boys	1=Yes 2=No 3=Yes but not functional	
S6	Presence of hand washing facilities	1=Yes 2=No	
	Presence of soap or ash for cleansing outside the latrines	1=Yes 2=No	
S7	Functioning School Management Committee (SMC), mobilized for school health and nutrition	1=Yes 2=No	
S8	Number of leaders in communities near program schools		
S9	Number leaders in communities near program school advocating for safe houses in schools		
S10	Number of children 6-59 months who received vitamin A per child day round		
S11	Number of children 1-14 years de-wormed at each child day round		

Annex D: Laboratory Results Form

District	Sub-County	Parish	School	Gender	Location
	1 = Kalagala 2 = Kamira 3 = Ngoma 4 = Kinyogoga 5 = Wakyato		1=Boarding 2=Day 3=Mixed	1=Boys 2=Girls 3=Mixed	1=Formal 2=Informal

Date	
Name of School	
School code	
Interviewers name	
Questionnaire Completed	1=Yes 2=No
If not complete, reason	
Identification Number (must be completed)	
School # (01-30)	

Laboratory Results

This Form is used to record the results of the laboratory analysis of stool samples

Stool	Presence of intestinal Parasites	1=Yes 2=No	☐
	If yes, what type of worms (more than one answer accepted)	1=Ascaris 2=Hook worm 3=Schistosoma Mansoni 4=Amoeba 5=Others (Specify)	☐
	Egg count per type of parasite	……eggs per microscope field	☐
Blood	Haemoglobin level in g/dl	……	☐
	Is the haemoglobin level consistent with anaemia	1=Yes 2=No	☐

Scope of Work (SOW) for Conducting a Baseline & Final Evaluation Study

Duration of SOW

The number of days for the SOW is 90, beginning on or about July 15, 2005. The SOW would be in 2 phases: baseline study and final study. The baseline study would be the first phase to begin on or about July 15, 2005 and be completed by end of August 2005. The second phase would be the final study to begin on or about July 15 2007 and completed by the end of August 2007.

Specific Tasks

The selected firm/production agency will work with UPHOLD staff to conduct a baseline and final study for SHN projects:

1. Develop a workplan to complete all tasks (budget to come with proposal)

2. Draft quantitative and qualitative baseline study instruments for discussion with UPHOLD and partners.

3. With M&E Team, plan sample size selection within the project sites in 4 districts (Luwero, Rukungiri, Pallisa, Katakwi) and prepare a research protocol.

4. Collect data.

5. Analyze qualitative and quantitative data.

6. Prepare a report that presents data analysis in a clear and concise way to document baseline starting points for key indicators and final evaluation.

7. Revise report with input from UPHOLD staff.

Deliverables

1. Workplan
2. Research protocol and plans
3. Draft report from baseline and final study
4. Final report from baseline and final study

Qualifications

The firm/production agency must have the following minimum capabilities:

- An experienced track record in designing and carrying out qualitative and quantitative studies at the school setting.
- A record on being responsive and adaptable to sensitive client deadlines;
- Excellent references

School Health and Nutrition Indicators

SCHOOL HEALTH & NUTRITION INDICATORS	Data Requirements	Source	Target	Data Collection Method	Key Activities
Anaemia		Hemoglobin analysis		Baseline & Final	
Rate of Anaemia	Number of pupils who have anaemia in a sample Total number of pupils sampled	Haemoglobin analysis	20% reduction	Baseline & Final	
Prevalence of Helminths	Number of children with worms in a sample ___Total number of children in a sample	Stool analysis	50% reduction	Baseline & Final	
Prevalence of Malaria cases	Number of children with malaria treated within 24 hours in the past month	Self-reporting of cases of malaria and treatment patters	50% increase	Baseline & Final	
SUB-HIGHER-LEVEL RESULT #1: Improved use of school health and nutrition services					
School attendance rate (Mean actual attendance rate)	Sum of the number of days each student attended school Sum of functioning school days in the year Sum of students enrolled	School records	20% increase, by gender	Baseline & Final	
SUB-HIGHER-LEVEL RESULT #2: Improved health and nutrition behaviours of school-age children					
Percent of children reporting taking malaria medicine at school when ill with fever	Number of pupils who reported seeking treatment at school when ill with fever **Total number of pupils sampled**	Self-reporting	50% increase (30% increase by year 1)	Baseline & Final	
Percent of children reporting sleeping under or next to a treated net	Number of pupils who report sleeping under or near a treated net	Self-reporting	20% increase (10% increase by year 1)	Baseline & Final	

SCHOOL HEALTH & NUTRITION INDICATORS	Data Requirements	Source	Target	Data Collection Method	Key Activities
	Total number of pupils sampled				
Percent of pupils reporting delaying sex or abstinence : % of children under 15 sexually active	Number of pupils under 15 who report sexual activity night of the year Total number of pupils under 15 sampled	Self-reporting	20% decrease (10% decreased by year 1)	Baseline & Final	
Percent of pupils who wash hands after using the toilet at school with soap or ash	Number of pupils who report washing hands after using the toilet with soap or ash Total number of pupils sampled	Self-reporting & Observation	75% increase (50% increase by year 1)	Baseline & Final	
Percent of pupils with can name where a safe house is located	Number of pupils report where a safe is located Total number of pupils enrolled in program schools	Program records & enrolment records Enrolment records	75% schools with services available (50% by year 1)	Baseline & Final	
INTERMEDIATE RESULTS #2: Improved knowledge of, attitudes toward and skills of key behaviors related to health and nutrition and high risk practices					
% of pupils who know how to abstain	Number of pupils who can name at least 3 realistic strategies to abstain Number of pupils sampled	Pupils	75% (50% by year 1)	Baseline & Final	
% of girl pupils who feel confident refusing unwanted sex	Number of girl pupils who feel confident refusing unwanted sex Number of girl pupils	Pupils	75% (50% by year 1)	Baseline & Final	
% of pupils who can name where Safe House is located	Number of pupils who can name nearest Safe House Number of pupils sampled	Pupils	75% (50% by year 1)	Baseline & Final	

INTERMEDIATE RESULTS #3: Increased availability of safe water and sanitation at school					
Percent of schools with functioning latrines for girls and boys	Number of schools with functioning latrines for girls and boys	Program records	75% (50% by year 1)	Study with observation	
	Total number of program schools	Enrolment records			
Percent of schools with handwashing facilities that have soap or ash for cleansing	Number of schools with handwashing facilities	Program records	75% (50% by year 1)	Study with observation	
	Total number of pupils in program schools	Enrolment records			
INTERMEDIATE RESULTS #4: Improved Community Support Systems and Policy Environment Related to School Health and Nutrition					
Percent of schools with functioning SMCs, mobilized for SHN	Number of schools in target area with functioning SMC Committees (as defined by schools and SMCs)	School Management Committee records	75% (50% by year 1)	Annual meetings with teachers	
	Total number of schools in target area	Target area records			
Percentage of community leaders who have advocated for the Safe House in the past year	Number of leaders who advocated or supported Safe Houses in past year	Self-reporting; School records	60% (25% by year 1)	Annual study and meetings with teachers	
	Total number of leaders in communities near program schools				
Percent of parents of pupils who talk with them about delaying sex in the past month	Number of parents of pupils under 12 who talked with them about delaying sex in the past month	Self-reporting	Current: 20% girls, 7% boys) Target: 75% (50% by year 1)	Baseline & Final (UPHOLD LQAS)	
	Number of parents sampled				

Approvals:

_____	_____
Lisa Sherburne, Behavioral Change Specialist	Date
_____	_____
Margaret Kyenkya, Senior Health Advisor	Date
_____	_____
Samson Kironde, Team Leader, M&E	Date
_____	_____
Lydia Clemmons, Deputy Chief of Party, Technical	Date

Annex F: List of Contributors to the Final Evaluation Study

- Dr. Daniel Kibuuka Musoke, Study Coordinator/Director
- Mr. Robert Nsimbi, Deputy Study Coordinator
- Dr. John Chris Lukwago, Quality Assurance Advisor
- Mr. Malimbo Mugagga, Statistician and Data manager
- Mr. Lugolobi Jordan, Study Assistant
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- Mr. Kiyaga Frank, Study Assistant
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- Ms. Namulindwa Monica, Study Assistant
- Ms. Nakiwala Alice, Study Assistant
- Ms. Vvube Stephen, Study Assistant
- Mr. Kaggwa Raymond, Data Entrant
- Ms. Gladys Nantume, Data Entrant

UPHOLD

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Ms. Bonita Birungi

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