

BASELINE SURVEY

School Health & Nutrition Project

Luwero & Nakaseke Districts



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Table of Contents

LIST OF ABBREVIATIONS	ERROR! BOOKMARK NOT DEFINED.
EXECUTIVE SUMMARY	3
1 INTRODUCTION	4
1.0 Background to Evaluation of School Health and Nutrition Projects	4
1.1 Background to the Study Area	5
2 SURVEY IMPLEMENTATION	7
2.1 Sample Design	7
2.2 Survey Instruments.....	7
2.3 Specimen Collection and Laboratory Testing	8
2.4 Training and Piloting of Survey Instruments	9
2.6 Data Processing	10
2.7 Ethics Consideration and Quality Control.....	10
3 SURVEY RESULTS	11
5 DISCUSSION OF THE RESULTS	17
6 CONCLUSIONS	20
6 APPENDICES	21
APPENDIX A: MAP OF LUWERO AND NAKASEKE DISTRICTS.....	21
APPENDIX B: INDIVIDUAL QUESTIONNAIRE	22
APPENDIX C: KEY INFORMANT QUESTIONNAIRE	23
APPENDIX C: OBSERVATIONAL CHECKLIST	25
APPENDIX D: FOCUS GROUP DISCUSSION (FGD) INTERVIEW GUIDE	26
APPENDIX E: LABORATORY RESULTS FORM	27
APPENDIX F: WRITTEN INFORMED CONSENT FOR THE PARENTS/GUARDIAN	28
APPENDIX H: ORAL CONSENT FOR FOCUS GROUP DISCUSSION PARTICIPANTS	30
APPENDIX I: SCHOOL HEALTH AND NUTRITION INDICATORS.....	31

List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immune Deficiency Virus
KAP	Knowledge, Attitude and Practices
MoES	Ministry of Education and Sports
MoH	Ministry of Health
NGO	Non-Governmental Organization
RDC	Resident District Commissioner
SC/US	Save the Children Federation, Inc.
SFG	Service For Generations
SHN	School Health and Nutrition
SMC	School Management Committee
UPE	Universal Primary Education
UPHOLD	Uganda Program for Human and Holistic Development
LC	Local Council
CAO	Chief Administrative Officer
FGDs	Focus Group Discussions
LQAS	Lot Quality Assurance Sampling

Executive Summary

In 2005, the United States Agency for International Development (USAID), through the Uganda Program for Human and Holistic Development (UPHOLD), awarded a grant to Save the Children Federation, Inc (SC/US) to implement a School Health and Nutrition (SHN) project in over 100 primary schools in Luwero and Nakaseke Districts. This SHN project aims at improving the educational performance 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 behaviors. As part of project monitoring and evaluation, a baseline survey to determine current indices that will be compared with end-of-project achievements was commissioned. It is planned that a final evaluation survey will be conducted after two years of program implementation.

Service for Generations (SFG) International¹ a local consultancy firm, was contracted by UPHOLD and SC/US to conduct the baseline and end-of-project surveys in the two districts of Luwero and Nakaseke. The baseline survey was conducted over a period of 23 days using a two stage sampling design and qualitative and quantitative survey methods. The results of the baseline indicators of School Health and Nutrition are summarized in the 'Status at a Glance' Table shown below.

	School Health and Nutrition Indicator	Results
1	Prevalence of Malaria cases	54.3%[49.5-59.1]
2	Prevalence of Helminth	24.5%[20.3-28.7]
3	Prevalence of Anaemia	20% [16.8-28.2]
SUB-HIGHER-LEVEL RESULT #1: Improved use of school health and nutrition services		
4	School attendance rate (Mean actual attendance rate)	63%[59.5-66.5] Boys:61% [57.5-64.5] Girls: 64%[60.5-67.5]
SUB-HIGHER-LEVEL RESULT #2: Improved health and nutrition behaviors of school-age children		
5	Percent of children reporting taking malaria medicine at school when ill with fever	12.6%[9-16.2]
6	Percent of children reporting sleeping under or next to a treated net	19.4% [15.0-23.9])
7	Percent of pupils reporting sexual intercourse in year of survey	15%[10.8-19.2]
8	Percent of pupils who wash hands after using the toilet at school with soap or ash	33%[29.7-36.3]
9	Percent of pupils with access to Safe Houses	0%
INTERMEDIATE RESULTS #2: Improved knowledge of, attitudes toward and skills of key behaviors related to health and nutrition and high risk practices		
10	% of pupils who know about abstinence	10%[5.0-15.0]
11	% of girl pupils who feel confident refusing unwanted sex	65%[61.3-68.7]
12	% of pupils who can name where Safe House is located	0%
INTERMEDIATE RESULTS #3: Increased availability of safe water and sanitation at school		
13	Percent of schools with functioning latrines for girls and boys	33%[28.1-37.9]
14	Percent of schools with hand washing facilities that have soap or ash for cleansing	22%[16.8-27.2]
INTERMEDIATE RESULTS #4: Improved community support systems and policy environment related to school health and nutrition		
15	Percent of schools with functioning School Management Committees (SMCs), mobilized for SHN	44%[39.2-48.8]
16	Percentage of community leaders who have advocated for the Safe House in the past year	0%
17	Percent of parents of pupils who talk with them about delaying sex in the past month	44.1% [39-49.2]

¹ SFG International is a Health Management Consultancy Firm advancing health care programs in developing countries (<http://www.sfg-group.com>).

1 Introduction

1.0 Background to Evaluation of 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, with 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 over 100 primary schools in Luwero and Nakaseke Districts.

This SHN project aims to improve the educational performance 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 behaviors. The project is implementing an integrated set of school-based health and nutrition activities including service delivery, skills-based health & HIV/AIDS



Community school in Luwero

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 in Luwero and Nakaseke districts. A particular focus will be on promoting girls' retention and achievement.

Field Data collection in Kinyogoga



As part of project monitoring and evaluation, a baseline survey to determine current indices that will be measured against end-of-project achievements was commissioned. It is planned that a final evaluation survey will be conducted after one year of program implementation. The comparison of baseline and final evaluation survey indicators will be used to

determine the magnitude of effect or impact of the programs on certain aspects of the children's lives including health status, and school performance. This will be compared

to the targeted improvements of the school health and nutrition indicators. This entire process is referred to as program outcomes evaluation.²

Service for Generations (SFG) International - a local consultancy firm, was contracted by UPHOLD and SC/US to conduct the baseline and end-of-project surveys in the two districts of Luwero and Nakaseke. The baseline survey was conducted over a period of 23 days using a two stage sampling design and qualitative and quantitative survey methods. The baseline survey was aimed at determining the following indicators for school health and nutrition:

- Prevalence of helminth infection
- Prevalence of malaria cases treated with in 24 hours
- Prevalence of anaemia
- School attendance rate (Mean actual 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 night of the year
- 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 with access to safe houses
- Proportion of pupils who know how to abstain
- 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 that have soap or ash for cleansing
- 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 parents of pupils who talk with them about delaying sex in the past month

1.1 Background to the Study Area

Luwero and Nakaseke were originally one district (Luwero) consisting of three counties namely: Bamunanika, Nakaseke and Katikamu.^{3, 4} 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 Table1.

² Outcome based evaluation is the systematic collection and analysis of data in order to determine the impacts/benefits/changes to individuals in the community as a result of the program(s) efforts.

³ Luwero District Portal December 2005.

⁴ Ministry of Education and Sports, Statistical Abstract 2005.

Table 1: Sub Counties, Parishes and Villages Comprising Luwero and Nakaseke Districts			
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 favorable for pastoralist lifestyle and it defines the economic activities of the people. Lying at an approximate altitude of between 1,082 m - 1,372 m above sea level, Luwero experiences high temperatures and rainfall of the modified equatorial climate type.

The key district administrators include the L.C. 5 Chairperson who is the political head elected by the majority of the people in the district. Another one is the 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 multi-ethnic area with many people of different origins and ethnic backgrounds. Among them include the Baganda, the original inhabitants of the district. Other ethnic groups include Banyarwanda, the 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, 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 private/community) primary schools. Overall, there are 171,449 (Nakaseke 51,749, Luwero 119,700) pupils enrolled in primary schools in the two districts. The study area had 14 non formal schools ('Chance' schools)⁶ with an enrolment of 780 pupils. The 'Chance' schools have classes ranging from P1 – P2. The government-aided primary schools are distributed throughout the district. UPE has tremendously increased the enrollment for primary education but the district is faced with the challenge of increasing levels of school drop outs at higher levels of education.

⁵ Map of Former Luwero.

⁶ '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.

2 Survey Implementation

2.1 Sample Design

The sample for the baseline survey covered the pupils in the government and chance schools in Kamira and Kalagala sub-counties in Luwero district; Kinyogoga, Ngoma and Wakyato sub-counties in Nakaseke districts. The SHN projects will cover 25% of the total number of sub-counties and 26% of the total number of schools in the two districts. A representative sample of 440 pupils was selected for the baseline survey and it was constructed in way that allowed for addressing sampling and non-sampling errors^{4, 5}

The survey used a two stage sample design. The first stage involved the selection of 20 schools from among the 117 schools (formal and non-formal). Using probability proportional to type, 17 formal and 3 non-formal schools were selected for the survey. A cumulative list of the enrolment of the program schools in each district was prepared and used to select the required schools. The second stage of selection involved the selection of 440 pupils (22 from each school) using stratified random sampling proportional to the size of each school. Pupils were interviewed from both the lower level (Primary one to four) and upper level (Primary five to seven) 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 survey, whose parents/guardians had consented to an interview of their children, were eligible to participate in the survey. Pupils who were interviewed were given stool containers to collect stool samples that were analyzed for helminth infection. In addition, they were also requested to give a blood sample for testing to determine the hemoglobin level in blood. Children who were not able to give the required information due to any disability were excluded from the survey.

2.2 Survey Instruments

The study used pre-coded and open ended questionnaires, key informant interviews, Focus Group Discussions (FGDs), observational checklists and review of school records. Blood and 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 specified childhood illness,
- Health and nutrition behaviors of school age children,
- Knowledge of, attitudes and skills of key behaviors related to health, nutrition and high risk practices,

Key informant interviews were used for headteachers and local leaders at village level (Local Council chairpersons) to collect information on the community support systems and policy environment related to school health and nutrition.

7 Kish and Leslie. Survey Sampling, 1965

8 Bennet S et al. Cluster Sampling for Community Surveys, 1991

The observational checklist was used to collect information from the school sanitary facilities as well as the school records (program records, school management committee records and target area records). The FGDs were also conducted with pupils in order to obtain a clearer understanding of the factors that may not have been well explained by the quantitative interview.

Prior to the actual data collection, the survey team visited all the sampled schools and briefed the headteachers, teachers, pupils and local leaders for the nearby communities about the survey.

2.3 Specimen Collection and Laboratory testing

2.3.1 Stool samples

Stool samples were collected with the assistance of nurses. Every interviewed pupil was accompanied to the latrine by a nurse. The pupils were requested to produce a small amount of stool in polythene bags from which the nurses picked the required stool samples using a spoon in to clean chemical free stool containers. The containers containing the collected samples were labeled with pupil and school codes (that were also indicated on the survey questionnaires) and later stored in refrigerated boxes. These boxes were also labeled as “*pathological material not for sale*” and later transported to the Makerere University Department of Pathology-Microbiology Laboratories. 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.⁶ 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

2.3.2 Blood Samples

Blood samples were collected from 340 (97%, 340/352) of the sampled pupils. 12 (5 boys and 7 girls) pupils disappeared after collecting the stool samples with out providing the blood samples. The following techniques were used to gain acceptance as well as allay anxiety regarding the blood collection procedure among the children.

- Prior to each blood draw, every interviewed pupil was counseled by a nurse in a paediatric manner, to allay any anxiety about the blood collection procedure
- An anaesthetic (lignocaine based) spray was used to cleanse the skin as a way of preventing children from experiencing pain related the blood collection procedure

At the end of the exercise, pupils were provided with light snacks and refreshments. The presence of anaemia was determined by measuring the hemoglobin level in blood using the HemoCue method; commonly used for community health surveys.⁷ The entire

⁶ Laboratory Manual for Community Health Surveys, WHO. 2001.

⁷ Uganda Demography and Health Survey, UBOS. 2000-2001.

procedure of collecting and analyzing blood was conducted in a special designated room /place with in the school. Capillary blood was collected after obtaining informed consent from the parents and also after pupils had assented to the procedure. Retractable disposable cuvettes were used to puncture the fingertip or heel in order to draw and hold blood. The cuvette was inserted in to the HemoCue machine, which consists of a battery operated photometer. The hemoglobin level in the blood was analyzed, and the results were displayed in a digital register. The levels of anaemia in blood were classified as severe, moderate and mild basing on the hemoglobin concentration in the blood and also according to the criteria developed by the World Health Organization (WHO) as indicated below:

- Severe anaemia: Hemoglobin concentration is below 7.0g/dl
- Moderate anaemia: Hemoglobin concentration is 7.0-9.9g/dl
- Mild anaemia: Hemoglobin concentration is 10.0-10.9 g/dl

All laboratory procedures were performed according to Standard Operating Procedures (SOPs). The results of the analysis were recorded on special laboratory results forms.

2.4 Training and Piloting of Survey Instruments

The training of field staff for the survey was held from 18-19 November 2005 at Ivy Hotel located in Rubaga Division, Kampala District. Interviewers were thoroughly trained in open and nonjudgmental questioning techniques, in order to increase on the likelihood of honest responses, and in accurate recording of responses. Prior to training of the interviewers, the entire survey process was piloted on the 15-16 November 2005 at Kinyogoga preparatory school in Nakaseke district before commencing with the actual data collection.

Aspects of the survey process that were piloted included; quality of information captured in the questionnaire, selection of survey respondents, feasibility of completing interviews with selected respondents, timing (ability of the interviewers to carry out the required number of interviews in a day), role of the supervisors (how the supervisors maintained quality control), and storage and transport of completed questionnaires. This phase also assisted in generating codes for some open ended questions in the structured questionnaire. Adjustments were made before commencement of the actual field work. 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 the start of field work, SFG arranged for numerous activities that were designed to promote awareness of the survey and also promote school and pupil participation. SFG consultants attended a stakeholders meeting in Luwero that was organized by SC/US to brief the community leaders about the SHN project. SFG was introduced in this meeting and in addition the community leaders were briefed about the survey process.

UPHOLD formally introduced SFG to the districts leaders and highlighted their role in the survey. The district leaders in return provided letters of support introducing SFG to the program schools. The headteachers were then briefed about the survey administration process and procedure for obtaining pupil and parent participation. The purpose of the survey, its design, implementation as well as 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 survey. Each team consisted of one survey administrator, two female interviewers, two male interviewers, one laboratory technician, two nurses and one driver. Data collection was done over four days from 22 November to 25 November 2005. The sampled boys and girls were interviewed by the male and female interviewers respectively

2.6 Data Processing

Questionnaires were crosschecked at the end of each day to ensure correctness and completeness. Data was double entered into EPIINFO 6.04, cleaned and there after exported to STATA 8.0 statistical soft ware for analysis⁸. Data from FGDs and key informant interviews was transcribed and translated into English, 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

Ethical Clearance was sought from Uganda National Council for Science and Technology. A written informed consent was sought from the parents/guardians. Prior to the field data collection, translated notification forms were forwarded to the parents requesting for the pupil participation in the survey as well as highlighting the need for collecting stool and blood samples from the children. Pupils were requested to return completed consent forms from their parents. The local leaders and the headteachers were also sensitized prior to the data collection; in order to be able to provide additional clarifications to the parents who were not able to make timely contact with SFG. Pupils were also briefed about the survey and made to formally assent before participating in the survey process. The names of schools and pupils were not indicated on the questionnaires. All the data collected was handled with the confidentiality required.

The following steps were taken in order to achieve quality control of the entire survey process:

- There was careful selection of study teams that included experienced and interested individuals,
- Survey team was trained in order to standardize the procedures of data collection, inspection/observation, collection, transportation and handling of patient specimens
- Pre-testing and adjustment of qualitative and quantitative survey instrument was done prior to the actual data collection in the field,
- There was adequate supervision and on spot consultation among the team members to arrive at consensus in case of uncertainty,
- Questionnaires were checked for completeness and accuracy before leaving each school,
- Established good rapport between study teams, districts and schools,
- Data was cleaned in the field and before data entry levels,
- The Survey Coordinator held daily survey team meetings as a way of ensuring data quality,

⁸ STATA 8.0 has the ability to analyze survey data taking into account the cluster sampling design effect.

- Extra vigilance was exercised to ensure that completed questionnaires and collected samples did not get misplaced

3 Survey Results

3.1 Response Rates

Table 2.0 shows the response rates for the baseline survey of School Health and Nutrition. A total of 20 schools and 440 pupils were selected in the sample. 18 schools participated in the baseline survey yielding a response rate of 90%.⁹ Out of 440 pupils who were selected to participate in the survey, 352 were interviewed thereby yielding a response rate of 80%.¹⁰ The overall response rate¹¹ was 72%.

Result	Response
Number of schools sampled	20
Number of schools that participated	18
School response rate	90%
Number of pupils sampled	440
Number of pupils interviewed	352
Pupil response rate	80%

The main reason for the school non-response was that; two schools were found engaging pupils in the writing of final exams at the scheduled time for data collection. The non-participating schools were not replaced with other schools in this survey. Pupil non response was from the affected schools. The characteristics of the responsive and non-responsive schools are summarized in table 3.

District	Luwero	Nakaseke	Total
School Response			
Formal School	10	6	16(94%)
Non-formal (chance schools)	1	1	2(67%)
School Non-response			
Formal schools	0	1	1(5%)
Non-formal schools (chance schools)	0	1	1(5%)
			2(10%)

⁹ School response rate =# of participating schools/# of sampled schools.

¹⁰ Pupil response rate=# of participating pupils/#of sampled pupils

¹¹ Overall response rate=school response rate x student response rate

3.2 Results of the Baseline Indicators of School Health and Nutrition

3.2.1 School Attendance rate

The average number of days each student attended school was found to be 116 out of 186 functioning primary school days in the year. The overall mean actual attendance rate¹² was 63% [59.5-66.5]. Table 4 shown below details the school attendance rate by gender in the sampled schools.

Gender	Total number of days each pupil attended school	Mean actual attendance rate
Boys	114	61%
Girls	119	64%
Average	116	63%

3.2.2 Prevalence of Anaemia

Of the 340 pupils who provided blood samples, 68 (20% [16.8-28.2]) of them were found to have some degree of anaemia. Levels of anaemia were classified as severe, moderate and mild basing on the hemoglobin concentration in blood and according to criteria developed by WHO (see Section 2.3.2). Table 5 summarizes the prevalence of mild, moderate and severe anaemia among those who were found to be anaemic.

Sex	Severe(below 7.0g/dl)	Moderate(7.0-9.9g/dl)	Mild(10.0-10.9g/dl)	Total
Females	6(1.8%)	20(5.9%)	12(3.5%)	38(11.2%)
Males	3(0.9%)	18(5.3%)	9(2.6%)	30(8.8%)
Total	9(2.7%)	38(11.2%)	21(6.1%)	68(20%)
Age-groups				
7-10years	4(1.2%)	22(6.5%)	16(4.6%)	42(12.3%)
11-15 years	5(1.5%)	16(4.7%)	5(1.5%)	26(7.7%)
Total	9(2.7%)	38(11.2%)	21(6.1%)	68(20%)

3.2.3 Prevalence of Helminths

Table 6 summarizes the prevalence of helminth infection in school age children. The overall prevalence of helminth among the sampled children is 24.5% [20.3-28.7] with *Ascaris Lumbricoides* as the commonest intestinal parasite identified (6.53%). 8(2.3%) of children had parasitic forms that could not be identified morphologically.

Type of Parasite	Proportion	Parasite intensity				
		Scanty	Few	Moderate	Many	Very Many
<i>Enterobius Vermicularis</i>	18 (5%)	7	17	72	2	2
<i>Giardia Lamblia</i>	20 (5.9%)	5	17	74	1	3
<i>Entamoeba Histolytica</i>	18 (5%)	5	15	70	7	3
<i>Schistoma Mansoni</i>	4(1.14%)	92%	6%	2%	--	--
<i>Ascaris</i>	23 (6.5%)	85%	9%	5%		1%
Others ¹³	8 (2.3%)	97%		3%		
Overall	91 (24.5%)					

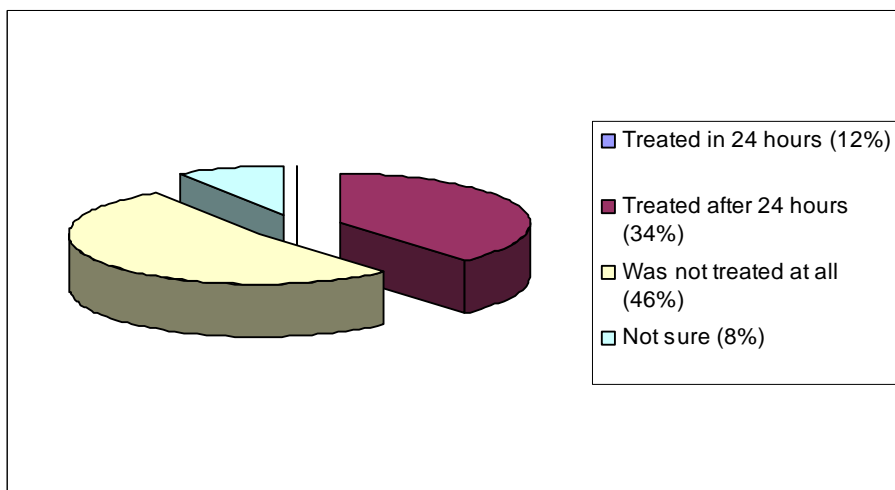
¹² Mean actual attendance rate=Sum of days each pupil attended school/sum of functioning primary school days in a year

¹³ 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

3.2.4 Prevalence of Malaria cases¹⁴ in the last 30 days

191 (54.3% [49.5-59.1]) of the interviewed pupils reported falling sick with malaria in the last 30 days prior to the survey and 161 (46.7%) had not suffered from any illness. 109 (57%) pupils reported having been treated with Chloroquine and Fansidar and 82 (43%) could not figure out medication that were offered. Figure 1 shown below summarizes the treatment pattern of those who reported malaria infection in the previous month. 47 (12.3% of the total sampled pupils) reported having received treatment for malaria infection with in 24 hours.

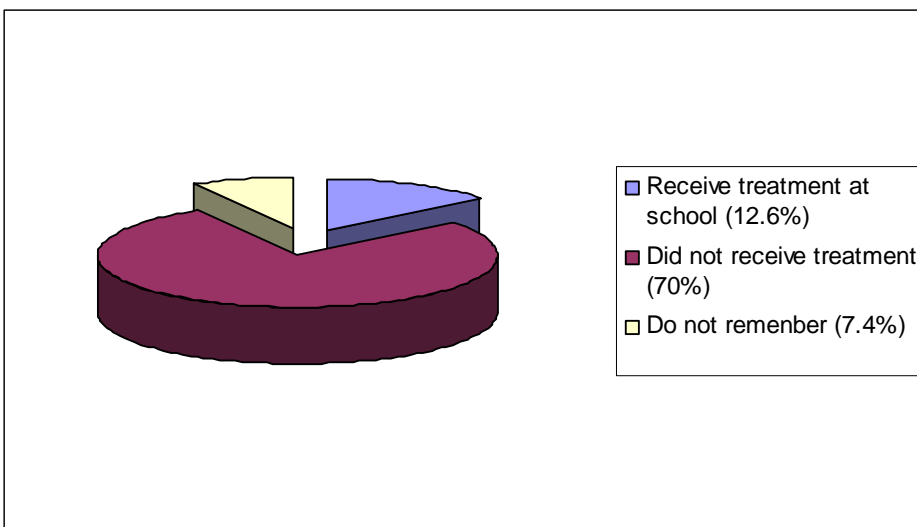
Figure 1: Treatment Pattern of Reported Malaria Cases



3.2.5 Percent of Children Reporting Taking Malaria Medicine¹⁵ at School when ill with Fever

26 (12.6% [9-16.2]) pupils reported taking malaria medicine at school when ill with fever. Figure 2 shown below summarizes the sources of medication for children who fall sick with malaria. One of the sampled schools operates a school clinic which caters for pupils sponsored by the founding body of the school.

Figure 2: Source of treatment for children falling sick with fever



a treated net

¹⁴ Malaria was defined as fever that was treated with antimalarials with in 24 hours, in the last 30 days

¹⁵ Refers to commonly used antimalarials such as Chloroquine and Fansidar

With regard to sleeping under a mosquito net, 68(19.4% [15.0-23.9]) pupils reported sleeping under or next to a treated mosquito net. 58% of the interviewed pupil reported not sleeping under the mosquito net and 11.2% of the pupils were not sure of the appropriate responses as shown in table 7.

Table 7: Proportion of children sleeping under/or next mosquito net			
Sleep under or next to a treated mosquito net	68	19.4%	
Sleep under any type of net	40	11.3%	
Do not sleep under or next to a treated net	204	58.0%	
Not sure	40	11.3%	

3.2.7 Percent of pupils reporting sexual activity night of the year

This indicator is aimed at determining the proportion of sexually active children. 52 (15% [10.8-19.2]) of the interviewed pupils reported having had sexual intercourse at any one time with in the year 2005. Table 8 shows the proportions of pupils reporting sexual activity night of the year.

Table 8: Proportion of pupils reporting sexual activity night of the year		
Gender	Sexual activity night of the year	No sexual activity
Males	18 (5%)	132 (38)
Females	34 (10%)	168 (47)
Total	52 (15%)	300 (85)

3.2.8 Percent of pupils who wash hands after using the toilet at school with soap or ash

Table 9 summarizes the proportion of pupils who reported washing hands after visiting the toilet. 113 (33% [29.7-36.3]) of the sampled pupils reported washing of hands after visiting the toilet.

Table 9 Proportion of pupils reporting hand washing		
Pupils	Report washing hands after toilet use	Do not report hand washing
Boys	48 (14%)	137 (39%)
Girls	65 (19%)	102 (28%)
Total	113 (33%)	239 (67%)

3.2.9 Proportion of pupils with access to safe houses¹⁶

There was no program school that was found with a safe house. All the 352 pupils who participated in the survey were enrolled in schools without safe house. Therefore there was no access to safe houses in the sampled schools.

3.3.0 Proportion of pupils who know about abstinence

Table 10: Proportion of pupils who know about abstinence	
Name three realistic abstinence strategies	35 (10%)
Name less than three abstinence strategies	153 (44%)
Do not Know	164 (46%)

Table 10 summarizes the responses regarding abstinence strategies. 313 (89%) sampled pupils were 10 years and above. These are the category of children who were interviewed with regard to

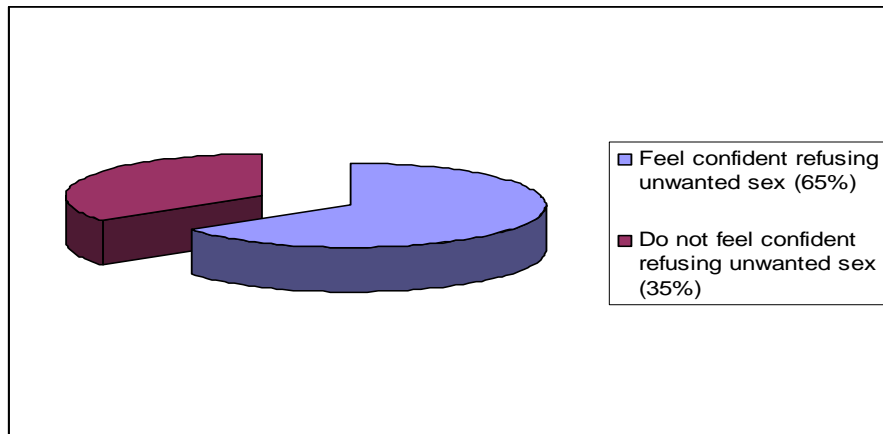
abstinence strategies. 35 (10% [5-15]) of the pupils could name at least three realistic abstinence strategies. Some of the reported strategies regarding abstinence include; Rejecting gifts from people of the opposite sex, refusing advances (boldly saying no), avoiding bad peer groups, reporting to parents and saying that parents do not approve.

¹⁶ 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.

3.3.1 Proportion of girl pupils who feel confident refusing unwanted sex

Figure 3 summarizes the responses regarding refusal of unwanted sex by the interviewed pupils. Out of the 352 pupils interviewed in the survey, 234(65% [61.3-68.7]) reported; feeling confident refusing unwanted sex.

Figure 3: Pupil Responses Regarding Refusal of Unwanted Sex



3.3.2 Proportion of pupils who can name where Safe House is located

None of the sampled pupils could report where a safe house is located. 15(4%) pupils were able to tell the absence of a safe house in the school. 250 (71%) could not understand or conceptualize the concept of the “safe house.” 87 (25%) pupils were not sure of the appropriate response to the interview.

3.3.3 Proportion of schools with functional latrines and washing facilities

The table 1.9 shown below summarizes the results about the presence of functional latrines and hand washing facilities at the schools. Functionality of the latrines was assessed by the presence of a wall with a roof and shutters. 6(33% [28.1-37.9]) schools had functional latrines for boys and girls. 4(22% [16.8-27.2]) schools had hand washing facilities.

Table 1.9: Presence of functional latrines and hand washing facilities at schools	
Functional latrines for boys and girls	
Schools with functional latrines for boys and girls	6 (33%)
Schools without functional latrines for boys and girls	10 (67%)
Hand washing facilities	
Schools with hand washing facilities	4 (22%)
Schools with out hand washing latrines	14(78%)

3.3.4 Proportion of schools with functioning SMCs, mobilized for SHN

Table 2.0 shows the results of the schools with regard to SMCs mobilized for SHN. 8(44% [39.2-48.8]) schools were found to have SMCs mobilized for School Health and Nutrition. This was evidenced by the minutes of the SMCs.

Table 2.0: School Management Committees (SMCs) Mobilized for SHN		
Presence of SMC	Yes	14(78%)
	No	4(22%)
SMC meets regularly	9 (50%)	
SMC does not meet regularly	4 (56%)	
SMC does not meet at all	1 (6%)	
SMC review school health and nutrition issues	8(44%)	

3.3.5 Percentage of community leaders¹⁷ who have advocated for the Safe House in the past year

All the sampled community leaders around the sampled program schools did not know about the concept of “safe house” and therefore they could not advocate for them. This in line with the findings from five focus group discussions where pupils reported that; none of the community leaders or school staff has ever talked to them about the safe house and its use with in or outside school.

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

With regard to safe sexual behaviours, 138 (44.1% [39-49.2]) pupils reported that; their parents talked to them about delaying sex in the past month. 170 (48.3%) pupils reported having not had any talk with their parents about delaying sex and 5 (1.4%) were not sure of the appropriate response to the interview.

3.3.7 Qualitative Data Report

Core infection with Malaria:

The respondents reported that pupils quite often fall sick while at school with the following common ailments: fever, cough, abdominal pain, and headache and body injuries resulting from falls or fights. The majority of schools do not have any facilities to cater for these common ailments. Where some exist, the facilities are either scanty or they cater for only a specific section of the school population. Pupils are either sent home or they are referred to the nearest health unit. Most schools do not have a meaningful collaboration with the nearest health unit. Accessing services from nearby health units is constrained by a wide range of problems such as lack of transport, poor drug supply and long distances from school.

Health and nutrition behaviors of school going children:

A number of children reported sleeping under or near a mosquito net. They report the use of mosquito nets in the community and could describe the process of treating a mosquito net. Few pupils regularly wash hands after visiting the toilet. Pupils reported the irregularity in the availability of water and soap/ash outside the latrines even where hand washing facilities exist.

Most pupils reported that some upper class pupils engage in intimate relationships with the opposite sex. This is mostly outside the school compound. A number of pupils are involved in intimate relationships with older members of the community like secondary school students and local traders. Both sexes are reportedly involved in these sexual relationships.

Community/Social Support:

A good number of parents talk to pupils about sexuality issues. This is done at the individual family level. The pupils targeted are usually 10 years and above. There are special people in the community who are supposed to talk about sexuality issues. A good number of schools reported having a senior woman teacher to talk to pupils about sexuality issues. Fewer schools reported having a senior man teacher.

¹⁷ Refers to Local council chairpersons (LCI-III)

Most schools have functional School Management Committees which meet regularly. However, the majority of these committees are not mobilized for child health, hygiene, girl education or safe houses.

School Attendance

All respondents reported many pupils who miss schools mainly due to sickness, economic activities like herding cattle, watering animals and participating in market day activities and attending to cultural activities like burials. Pupils are most concerned about school attendance when it comes to the promotional term.

5 Discussion of the Results

The quality and usefulness of data from the baseline survey depended largely on the procedures that were used to select and recruit schools and pupils for participation. Because surveying every school and student is costly, often impossible, and almost always unnecessary, samples were selected. Standardized procedures were established to ensure quality, credibility and usefulness of the baseline survey data. The results are from a scientifically selected and carefully documented sample and therefore can be generalized to the wider population from which it was drawn. The survey yielded an overall response rate of 72% (school response rate of 90% and pupil response rate of 80%) which is similar to the overall response rate of 69% (school response rate of 90% and pupil response rate of 76%) for the 2003 Uganda Global Student Based School Health survey.¹⁸ Both surveys used a two stage sampling design and common school based methodology in order to obtain representative data.

In Uganda, the estimated net enrollment rate for primary school-age children is 87% as a result of Universal Primary Education (UPE) initiated by the government in 1997. While it is commendable that now so many children have access to schooling, it is a fact that many of those children come to school with significant health or nutrition problems which affect their ability to learn. In order to support the provision of quality universal basic education, SHN services should be provided as part of the minimum health care package.¹⁹ However, formulation and implementation of a good SHN project needs to be based on good scientific data. There is very little consolidated data on school health in recent times. Therefore, baseline and final survey of SHN projects implemented by SC/US were considered in order to generate data for evaluating these projects.

In the developing world, health and nutrition problems in school-aged children are commonplace. Malaria is the most common health problem in school-age children throughout the country and only 8% of children under 18 years usually sleep under a mosquito net.²⁰ This differs greatly from the findings of this survey (19.4% of sampled pupils sleep under a treated net and 11.3% sleep under any net) as well as the 2005 UPHOLD LQAS²¹ survey finding of 9.5%. The National School Health Policy document of the Ministry of Health and Ministry of Education and Sports, estimated that approximately

¹⁸ 2003 Hand book for conducting the Global School-Based Student Health Survey by CDC and WHO.

¹⁹ Ministry of Health. National Health Policy 2000.

²⁰ Uganda National Health Survey (UNHS) 2002/3.

²¹ LQAS is a sampling method that; can be used locally, at the level of a "supervision area," to identify priority areas or indicators that are not reaching average coverage or an established benchmark; and can provide an accurate measure of "coverage" or service quality at a more aggregate level (e.g., entire program area).

60% of absenteeism is due to illness and 40% of pupils have malaria at any one point in time.

Anaemia is one of the commonest child hood illnesses. The level of hemoglobin concentration in the blood was used as an indicator to estimate the prevalence of anaemia in the sampled population. The anaemia prevalence is used as an indicator of iron deficiency, which is a function of the bioavailability of iron in the average diet. Requirements for iron determine which members of the population are affected. In this regards, young children are at risk because of the increased need related to growth. The prevalence rate of anaemia among the sampled pupils (20% [16.8-28.2]) is similar to the findings of the 2001-2003 Uganda Demography and Health Survey (24%). Anaemia was found to be more prevalent among the female children. The effects of iron deficiency and anaemia in young children manifest later as impaired cognitive development that leads to reduced mental capacity, lower school retention, attendance and enrolment. The high prevalence of anaemia is considered to be one of the contributory factors to the low mean attendance rate (63%) among the sampled children.

Malaria is a major problem in school-age (6-14 years) children, especially in sub-Saharan Africa, where as much as 15-20% of mortality in school-age children is due to malaria.²² The prevalence of malaria cases in the last 30 days (54.3%) is similar to what was found in the baseline health survey in Ugandan primary and secondary schools 2001/02 (61%). However, these findings contrast with UPHOLD Lot Quality Assurance Survey (LQAS) findings of 42.6% and 37.4% for 2004 and 2005 respectively (reported only for the under 5s). Less than a half (12.6%) of the children who reported infection with fever in the last 30 days also reported taking malaria medications within 24 hours. This is different from the UPHOLD LQAS survey findings of 21.7% and 22.5% for 2004 and 2005 respectively. This is reported for the under 5s who had fever in the last 2 weeks preceding the survey receiving recommended treatment within 24 hours.

During the FGDs, the majority of pupils revealed that most schools do not have facilities to cater for common ailments including malaria. Where some exist, the facilities are either scanty or they cater for only a specific section of the student population. Pupils are either sent home or they are referred to the nearest health unit. It was also discovered in the FGDs, that most schools do not have a meaningful collaboration with the nearest health unit. Lack of transport, poor drug supply and long distances from the school prevents pupils from accessing health care services from nearby health units.

In addition to malaria, intestinal worms and micronutrient deficiencies are also major health/nutrition problems affecting primary school-age children across the country. Both water-borne and soil-transmitted parasites are common throughout Uganda. These parasitic worms infect the intestines or blood and are a major source of disease in school-age children and can result in anemia, general malnutrition, diarrhea, and general malaise in addition to severe long-term health problems. These are responsible for high rates of school absenteeism. Also from the Uganda Demography and Healthy Survey 2002/3, diarrhea has been identified as the fourth most important cause of morbidity. Statistics show that the proportion of people who have reported an episode of diarrhea during the last 30 days is nearly twice as high among children as in adults.

The prevalence of helminth (24.5%) that was found in this survey is similar to the findings of the baseline health survey in Ugandan primary and secondary schools 2001/02 (24%).

²² THE LANCET, Vol. 361, February 15, 2003, pgs 577-78.

Intestinal parasites (particularly *Ascaris Lumbricoides* and *Enterobius Vermicularis* with prevalence of 6.53% and 5% respectively) lead to anaemia in children in addition to aggravating the micronutrient deficiencies. This ultimately leads to school absenteeism. When children do not show up for class, their capacity to learn can be greatly diminished and performance declines. Poor performance may cause children to repeat grades 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 survey findings indicated that few pupils had knowledge of three or more abstinence strategies with more girls (10%) reporting sexual activity night of the year than boys (5%). 65% of the sampled pupils reported feeling confident refusing unwanted sex. During the FGDs, most pupils reported that some upper class pupils engage in intimate relationships with the opposite sex. This is mostly outside the school compound. A considerable number of pupils of boxes sexes are involved in intimate relationships with older members of the community like secondary school students and local traders. 40% of parents of pupils talk with them about delaying sex. During FGDs, many pupil's reported that parents talk to them about sexuality issues. This is done at the individual family level. The pupils targeted are those who are about 10 years and above. Many pupils highlighted the presence of special people in the community who are supposed to talk to them about sexuality issues. A considerable number of schools reported having a senior woman teacher who talks to pupils about sexuality issues. There are very few schools which reported having a senior man teacher. Therefore, opportunities for youth to access HIV/AIDS knowledge and develop strategies for prevention are critical. Pre-adolescent youth is a group often ignored in many HIV/AIDS education projects. It is important to facilitate dialogue among young children 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.

Very few schools (22%) had hand washing facilities with soap or ash for cleansing. 33% of the sampled pupils reported washing of hands with soap or ash after visiting the toilet. These findings are similar to the findings of the 2001/02 baseline health survey in Ugandan primary and secondary schools (21% of the schools had functional hand washing facilities with soap for use after toilet. Most of the latrine floors and walls were soiled with feaces and urine.

Even when schools are available and children want to attend, the schools offer unsafe, even hostile environments, particularly for girls.¹⁸ Few schools attempt to address the special needs of adolescent girls for example; this survey found that only 33% of the sampled schools had functional and separate latrines for boys and girls as well as hand washing facilities.

With regard to child safety, none of the sampled pupils and community leaders could conceptualize the meaning of "safe house" and therefore none of the sampled pupils and community leaders could name its location with in and outside the school. 44% of the sampled schools have functional school management committees that are mobilized for child health, hygiene, girl education or safe houses.

6 Conclusions

This survey has shown that there is an urgent need for a high impact SHN project in Luwero and Nakaseke districts because all the SHN indicators are below average (50%). It is therefore recommended that SC/US implements a comprehensive SHN programme that addresses the following:

- Promotion of girls' retention and responsible sexuality. The SHN project should focus on promoting enrollment, completion and achievement of girls. Efforts should be taken to reduce particular constraints/barriers to effective learning that girl's experience.
- Support for improved school environments related to hygiene and girls' retention. Poor hygiene is another leading cause of illness and malnutrition among primary school children, and yet simple measures such as encouraging proper use of latrines and the promotion of hand-washing can have a dramatic impact. Participatory tools should be used to identify the most promising approaches to improved hygiene and sanitation from the community and ways to promote their widespread use. Children should be educated using a child-to-child approach to serve as health and hygiene promoters in their homes and communities.
- Development and implementation of a cross-cutting health and nutrition behavior-centered strategy that will include skills-based education, communications, as well as training and support for community involvement. Pre-adolescent youth are often ignored in many HIV/AIDS education projects. The project should target specifically 9-15 year old adolescents, including both those that are and are not yet sexually active, in order to promote the adoption of healthful behaviors, including abstinence, delaying sexual debut, and avoiding risky situations such as going out alone at night, going to a teacher's home alone, and sleeping with a relative of the opposite sex. This will also help girls speak up about fears and assert themselves in cases of unwanted advances. This should entail a combination of life skills around communication and decision-making as well as visible changes in the community.
- Anemia reduction through treatment and prevention of helminth and malaria. The treatment and prevention of common nutrition and health problems will contribute to reduction in school absenteeism.

Appendix B: Individual Questionnaire

Respondent: Pupil

District	County	Sub-County	Parish	School	Gender	Location
Luwero				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 #			School Enrolment <input style="width: 100px; height: 20px;" type="text"/>			
School Records: Program Records, School Enrollment records, School Management Committee Records and Target Area Records)						
The different school records will be reviewed in order to determine; the level of school attendance, Level of access to safe houses, availability of safe water and sanitary facilities and existing policy environment with regard to school health and nutrition						
S1	Total Number of students enrolled in your school this year					<input type="text"/>
S2	Total Number of functioning school days in your school this year					<input type="text"/>
S3	Total number of days each student absents from school by end of October 2005					<input type="text"/>
S4	Does the school have safe house			1=Yes 2=No		<input type="text"/>
S5	Presence of separate / functioning latrines for girls and boys			1=Yes 2=No 3=Yes but not functional		<input type="text"/>
S6	Presence of hand washing facilities			1=Yes 2=No		<input type="text"/>
	Presence of soap or ash for cleansing outside the latrines			1=Yes 2=No		<input type="text"/>
S7	Functioning School Management Committee (SMC) , mobilized for school health and nutrition			1=Yes 2=No		<input type="text"/>
S8	Number of leaders in communities near program schools					<input type="text"/>
S9	Number leaders in communities near program schools advocating for safe houses in schools					<input type="text"/>

Appendix C: Key Informant Questionnaire

Respondent: Head teacher / Member of School Management Committee / Community Leader

County	Sub county	Parish	Category	Support	Gender	Type
	1 = Kalagala 2 = Kamira 3 = Ngoma 4 = Kinyogoga 5 = Wakyato		1= Formal 2= Non formal	1 = Gov't 2 = Private 3 = SCF (Chance sch)	1=Boys 2=Girls 3=Mixed	1=Boarding 2=Day 3=Mixed
Date						
Name of School						
School code						
Interviewers name						
Questionnaire Completed 1=Yes 2=No						
If not complete, reason						
Identification Number (must be completed)						
School #			Pupil # (to be given in the field)			
CORE Community Support Systems and Policy Environment Related to School Health and Nutrition						
The questions below are intended to determine the existing community support systems and policy environment related to school health and nutrition						
C1	Does your school have School Management Committee (SMC)?					<input type="checkbox"/>
	How often does it meet?					
	When did it last meet? (<i>see minutes</i>)					
	What are some of the issues you have discussed in the school management committee? Probe for children health – prevention and treatment of common illnesses like malaria, worms. Hygiene at school. Ensure availability of hand washing facilities. Girl education – retention in schools Safe houses					
C2	Does the School Management Committee advocate for improved school health and nutrition services?			1=Yes 2=No		<input type="checkbox"/>
C3	Do community leaders in the area surrounding your school visit the school			1=Yes 2=No		<input type="checkbox"/>

C4	Do they regularly visit your school?	1=Yes 2=No	<input type="checkbox"/>
C5	Do they advocate for safe houses in the school?	1=Yes 2=No	<input type="checkbox"/>
Infection with Common Childhood Illness (for example malaria)			
C6	How soon is fever treated among pupils?	1=With in one day 2=After two days 3=After more than two days 4=Do not know	<input type="checkbox"/>
C7	Where do the pupils get the treatment from?	1=Self-medication 2=Drug shop 3=Traditional herbalist 4=Health unit outside the school (clinic, health centre, hospital) 5=School health clinics 6=Others	<input type="checkbox"/> <input type="checkbox"/>
Health and Nutritional behaviors of school age children			
C8	What do pupils do when they fall sick with fever while at school?	1=Nothing 2= Ask for permission to go home 3=Wait for the day to end 4=Go to the school nurse 5=I do not know	<input type="checkbox"/>
C9	Do pupils wash their hands after visiting the toilets while at school?	1=Never 2=Once in a while 3=If water is available 4=Always 5 Not sure	<input type="checkbox"/>
C10	What do pupils use to wash their hands after visiting the toilet at school?	1=Only water 2=Water + soap 3= Water +ash 4=Not sure 5= Other (specify).....	<input type="checkbox"/>
C11	Do pupils have relationships with the opposite sex?	1= Yes 2=No 3=Not sure	<input type="checkbox"/>
C12	If yes, do they have intimate relations with them?	1=Yes (we do) 2= No 3=Not sure	<input type="checkbox"/>
C13	Where is the nearest safe house?	1=Present 2=Absent 3=Do not know	<input type="checkbox"/>
Knowledge of, attitudes towards and skills of Key behaviors Related to Health, Nutrition and High Risk Practices			
C14	What would girl pupils say / do if a boy / man approached them for sex and yet they do not want?	1=Say my Parents do not approve 2=They will beat me 3=Boldly say No 4= Fight him 5= Report him to my parents / teacher 6=Other(explain)	<input type="checkbox"/>
C15	Did parents talk to pupils about delaying sex in the past one month?	1=Yes 2= No 3= Not Sure	<input type="checkbox"/>

Appendix C: Observational Checklist

District	County	Sub-County	Parish	School	Gender	Location
Luwero				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						
If not complete, reason						
Identification Number (must be completed)						
School #			School Enrolment <input style="width: 100px; height: 20px;" type="text"/>			
School Records: Program Records, School Enrollment records, School Management Committee Records and Target Area Records)						
The different school records will be reviewed in order to determine; the level of school attendance, Level of access to safe houses, availability of safe water and sanitary facilities and existing policy environment with regard to school health and nutrition						
S1	Total Number of students enrolled in your school this year					<input type="text"/>
S2	Total Number of functioning school days in your school this year					<input type="text"/>
S3	Total number of days each student absents from school by end of October 2005					<input type="text"/>
S4	Does the school have safe house			1=Yes 2=No		<input type="text"/>
S5	Presence of separate / functioning latrines for girls and boys			1=Yes 2=No 3=Yes but not functional		<input type="text"/>
S6	Presence of hand washing facilities			1=Yes 2=No		<input type="text"/>
	Presence of soap or ash for cleansing outside the latrines			1=Yes 2=No		<input type="text"/>
S7	Functioning School Management Committee (SMC) , mobilized for school health and nutrition			1=Yes 2=No		<input type="text"/>
S8	Number of leaders in communities near program schools					<input type="text"/>
S9	Number leaders in communities near program school advocating for safe houses in schools					<input type="text"/>

Appendix D: Focus Group Discussion (FGD) Interview Guide

District	County	Sub-County	Parish	School	Gender	Location
Luwero				1=Boarding 2=Day 3=Mixed	1=Boys 2=Girls 3=Mixed	1=Formal 2=Informal
Date						
Name of School				School Code:		
Moderator's Name						
Recorder's Name						
Place of Discussion						
Language						
Start Time				End Time:		
Description of Participants						
Number of participants						
Other relevant characteristics						
Introduction						
<p>Good Morning/afternoon/evening participants: You are welcome to this discussion. We are a team of researchers from SFG International and UPHOLD. We would like to discuss with you issues related to school health and nutrition. The results of our discussion will be used by UPHOLD to determine the usefulness of the programs that are implemented by Save the Children Federation/US in your school.</p> <p>Feel free to discuss among yourselves and ask for clarification any time. All the information is strictly confidential and nothing will make us unhappy. I would like those speaking to be aloud in order for us not to miss that important information. I have a tape recorder that will help us not to miss that important information. The tape recorder will help us to capture that important information so that no single point is missed. May I use it? (moderator seeks consent)</p>						
1. How are children in this school who fall sick being taken care of? Probe for treated at school Probe for source of treatment Probe for duration with in which treatment is offered Probe for action taken in case when not treated at school						
2. Have you ever seen a mosquito net? Probe for use of a mosquito net at home Probe for treatment of the used nets						
3. Do pupils at this school engage in intimate relationships with the members of the opposite sex? Probe for engagement in sex and abstinence Probe for reason for not having sex in intimate relationships						
4. Do pupils at this school wash hands after visiting the toilet? Probe for regularity Probe for use of soap, water or ash Probe for presence of washing facilities near toilets						
5. Have you ever seen safe house? Probe for the presence of one in the school Probe for the presence of community leaders who come to school assemblies or public functions and advocate for their presence at school						
6. What are the main sexual practices among pupils in this school? Probe for types Probe for consequences						
7. Do parents/guardians at home ever talk to their children about sex? Probe for the nature of parental guidance/advice to the children						

Appendix E: Laboratory Results Form

District	County	Sub-County	Parish	School	Gender	Location
Luwero				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 and blood specimen						
Stool	Presence of intestinal Parasites	1=Yes 2=No			<input type="checkbox"/>	
	If yes, what type of worms (more than one answer accepted)	1=Ascaris 2=Hook worm 3=Schistosoma Mansoni 4=Amoeba 5=Others (Specify)			<input type="checkbox"/>	
	Egg count per type of parasiteeggs per microscope field			<input type="checkbox"/>	
Blood	Hemoglobin level in g/dl			<input type="checkbox"/>	
	Is the hemoglobin level consistent with anaemia	1=Yes 2=No			<input type="checkbox"/>	

Appendix F: Written Informed Consent for the Parents/Guardian

Survey Title: Baseline Evaluation Survey of School Health and Nutritional Projects that are supported by USAID through UPHOLD to SCF/US in Luwero and Nakaseke Districts.

Investigating Team: SFG International and UPHOLD

Study procedure.

If you allow your child to participate in the study, he/she will be asked some questions about school health and nutrition behaviors and practices. In addition, a stool sample and blood specimen of two milliliters will be drawn off from your child for analysis to determine whether your child is sick with intestinal parasites and anaemia.

Rights of the child as a Research volunteer

You have the right to allow or stop or withdraw your child from participating in the survey at any time.

Risks

No risks and harm to your child will result from the study. Your child may experience some anxiety or discomfort while being interviewed.

Potential benefits

If you allow your child to take part in this study, he/she will help researchers to improve on the well being of school age children in your community in future. There will be no payment to your child for participating in this study.

Confidentiality

The results will be kept confidential. Only the people working on the study will see personal information about your child.

Problems or questions.

If you have any questions, you may contact: Dr.Daniel Kibuuka-Musoke at the office SFG International in Nakasero, Kampala or mobile +256 77 587094.

Parent/Guardian's Consent.

..... has explained to me the purpose of the study, the study procedure, the rights of my child as a research volunteer, risks and benefits involved. He /she will be available to participate in the survey. I understand that my decision to allow my Child to participate in this study or not will not alter their usual academic or medical benefits.

Name

Signature.....

Witness.....

Signature.....

Date.....

Appendix G: Consent for the Child

Survey Title: Baseline Survey of School Health and Nutritional Projects that are supported by USAID through UPHOLD to SC/US in the Districts of Luwero and Nakaseke in Uganda.

Investigating Team: SFG International and UPHOLD

Study Procedure.

If you accept to participate in the study, you will be asked some questions about school health and nutrition behaviors and practises. In addition, a stool sample and blood specimen of two milliliters will be drawn off from you for analysis to determine whether you are sick with intestinal parasites and anaemia.

Rights of the Child as a Research Volunteer

You have the right to allow or stop or withdraw from participating in the survey at any time.

Risks

No risks and harm will result from participating in this study. You may experience some anxiety or discomfort while being interviewed.

Potential Benefits

If you allow you to take part in this study, you will help researchers to improve on the well being of school age children in your community. There will be no payment to you for participating in this study.

Confidentiality

The results will be kept confidential. Only the people working on the study will see personal information about you.

Problems or Questions

If you have any questions about this study you may contact: Dr.Daniel Kibuuka-Musoke at the office SFG International in Nakasero, Kampala or mobile +256 77 587094.

Child's Consent

..... has explained to me the purpose of the study, the study procedure, my rights as a research volunteer, risks and benefits involved. I will be available to participate in the survey. I understand that my decision to participate in this study or not will not alter my usual academic or medical benefits.

Name.....

Signature.....

Witness.....

Signature.....

Date.....

Appendix H: Oral Consent for Focus Group Discussion Participants

Date	
School Code	
Starting Time	
End Time	
Moderator	
Recorder	
Description of Participants	
Number of Participants	

Introduction:

Good Morning/afternoon/evening participants:

You are welcome to this discussion. We are a team of researchers from SFG International and UPHOLD. We would like to discuss with you issues related to school health and nutrition. The results of our discussion will be used by UPHOLD to determine the usefulness of the programs that are implemented by Save the Children Federation/US in your school.

Feel free to discuss among yourselves and ask for clarification any time. All the information is strictly confidential and nothing will make us unhappy. I would like those speaking to be aloud in order for us not to miss that important information. I have a tape recorder that will help us not to miss that important information. The tape recorder will help us to capture that important information so that no single point is missed. May I use it? (Moderator seeks consent)

Your role in the study

You are one of the few pupils selected for the FGD. The discussion will last about one hour. Together as a group we will discuss some issues related to this study under the guidance of a moderator. We would like you to speak loudly in order for us to capture all the information. We request you to allow us use a tape recorder to help us capture the entire discussion so that we don't miss any important information.

Confidentiality

If you accept to participate in this discussion. All the information obtained will be kept confidential; your name will not appear anywhere in the reports and publications. The tapes used in the recording will be destroyed after transcription.

Alternatives to participation

You can decide either to or not to take part in this discussion. Your decision will not affect your access to health and education services in this school.

Problems or Questions.

If you have any questions about this study you may contact: Dr.Daniel Kibuuka-Musoke at the office SFG International in Nakasero, Kampala or mobile +256 77 587094.

We have understood all that has been explained, we have allowed the moderator to use a tape recorder during the discussion and we have willingly agreed to participate in the discussion.

Name and Signature of the Moderator

Appendix I: School Health and Nutrition Indicators

SCHOOL HEALTH & NUTRITION INDICATORS	Data Requirements	Source	Target	Data Collection Method	Key Activities
Anemia		Hemoglobin analysis		Baseline & Final	
Rate of Anemia	Number of pupils who have anemia in a sample Total number of pupils sampled	Hemoglobin 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 behaviors 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 access to Safe Houses	Number of pupils enrolled in schools with Safe Houses Total number of pupils enrolled in program schools	Program records & enrollment records Enrollment 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)	Survey with observation	
	Total number of program schools	Enrollment records			
Percent of schools with hand washing facilities that have soap or ash for cleansing	Number of schools with hand washing facilities	Program records	75% (50% by year 1)	Survey with observation	
	Total number of pupils in program schools	Enrollment 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 survey 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 pupils sampled				