



PROSPER: PROMOTING A SUSTAINABLE AND FOOD SECURE WORLD

GHANA

Baseline Survey Report

September 2017



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ACRONYMS AND ABBREVIATIONS

CAHR	Children at High Risk of Child Labour
CAPI	Personal Assisted Computer Interviewing
CARE	Cooperative for Assistance and Relief Everywhere
CL	Child Labour
FCUBE	Free and Compulsory Universal Basic Education
GLSS	Ghana Living Standard Survey
HCL	Hazardous Child Labour
HH	Household
IFPRI	International Food Policy Research Institute
ILO	International Labour Organisation
PROSPER	Promoting Sustainable and Food Secure Communities
VSLA	Village Savings and Loans Associations
WEAI	Women's Empowerment in Agriculture Index
WEI	Women's Empowerment Index
PPI	Progress out of poverty index
FIES	Food insecurity experience scale

EXECUTIVE SUMMARY

Introduction

This report presents findings of the baseline study of the third phase of Cargill and CARE's global partnership in Ghana labelled PROSPER, Promoting a Sustainable and Food Secure World. The PROSPER project is a component of Cargill's global Cocoa Promise, a corporate social responsibility initiative aimed at sourcing cocoa sustainably by improving the livelihoods of individuals living in cocoa-growing communities and supporting community development. The components of Cargill's Cocoa Promise include: farmer education, community development, farm development, and farmer cooperative formation. The PROSPER Ghana project seeks to improve the livelihoods of individuals in cocoa growing communities and enhance the capacity of existing local structures to own and lead the development processes of the community. The project, which will run for 3 years, was launched in April 2017 and is focused on enhancing access to education with the provision of school infrastructure, while also improving nutrition behaviour, strengthening women's empowerment, as well as building the capacity of people living in cocoa-farming communities for sustainable development.

The PROSPER project is targeting 5,900 cocoa farmers and is currently operational in 108 communities across four cocoa districts in the Western region of Ghana: Sefwi Wiawso, Asawinso, Anhwiaso, and Awaso. The baseline study is meant to systematically collect, analyse, and report on baseline data based on PROSPER indicators to be able to measure progress and impact within project communities. In other words, the purpose of the study is to provide an information base against which to monitor and assess the project's progress and effectiveness during implementation and through project completion. To achieve the objectives of this survey, a household survey was conducted with a representative sample of 423 farmer households and 1,179 children aged 5 to 17 years living in the households. The survey was conducted between July and September 2017.

Key Findings

The study has the following key findings:

- 52 percent of household members are below 18 years of age. Of these, 42 percent range from 5 to 17 years old. Household membership is split between males (50.7%) and females (49.3%).
- The average household size in project districts is 5.85 with a higher household size in male-headed households (6.03) than in female-headed households (4.82). The highest average household size was recorded in Wiawso (7.62) and the lowest in Asawinso (5.29).
- About 82 percent of households have basic education which includes some/completed primary school and some secondary school. Only 13 percent of the population have completed a secondary level of education.
- About 67 percent of children age 5-17 have some primary education, and close to one-fifth (23%) have attained some secondary education.
- While 37 percent of household members surveyed can read an entire sentence, about 38 percent cannot read at all.
- About 55 percent of households use cement/concrete blocks, landcrete, stone, and/or burnt brick as the main construction material for outer wall.
- 63 percent of households use public toilets or pit latrines while a quarter (25.3%) of households use private toilet (KVIP or W.C) facilities.
- The majority (90%) of households use wood, crop residue, sawdust, and/or animal waste as the main fuel for cooking.
- About 24 percent of households fall below the national poverty line, with Awaso having the highest proportion of households that fall below the poverty line.
- The leading months in the year in which households did not have enough food to meet family needs are July (71.9%), June (59%), and August (50.8%).

- The main source of household income is crop sales (98.4%), followed by small business activities (34%), and seed selling (20.6%).
- Households earn an average annual gross income of GH¢ 6,798.51 (US\$ 1,581). Households in Awaso recorded the highest average annual income at GH¢ 8112.17 (US\$ 1,887) while those in Anhwiaso recorded the lowest at GH¢ 6,298.43 (US\$ 1,465).
- Male-headed households (GH¢ 7,308.30 or US\$ 1,700) earn more than double what female-headed households (GH¢ 3,622.77 or US\$ 843) earn in a year. Cargill kuo households (GH¢ 7,926.77 or US\$ 1,844) earn a higher annual income than non-Cargill kuo households (GH¢ 5,401.08 or US\$ 1,256).
- A mean household dietary diversity of 5.03 was attained by households, suggesting on average households consume 5 food groups out of 12 daily. In addition, a mean women’s dietary diversity of 5.12 was recorded, implying that women on average consume slightly more than 5 food groups daily.
- The proportion of households that are moderately or severely food insecure is 84.1 percent with the Awaso district having the highest proportion.
- Most households own agricultural land (98%), cell phones (94.6%), non-mechanized farm equipment (88%), small consumer durables (76.6%), and large consumer durables (51%).
- About 47 percent of women reported that they own household assets, followed by 41.7% who own assets jointly with their spouses. Most assets in female-headed households are solely owned by women (80.3%) while in male-headed households, most assets are jointly owned by women and their spouses (52.9%).
- Apart from “decisions regarding the raising and managing of livestock” (37.7%), “the purchase of women’s clothes” (58.2%) and “the decision to spend money women have worked for” (52.1%), all other household decisions are not made independently by women. Most decisions are made jointly between the woman and her spouse.
- About 45 percent of women are active members of community groups with the highest proportion recorded in Anhwiaso (81.8%) and the lowest in Asawinso (18.9%). Most of these groups are religious groups (32.9%) and are the most popular among women.
- About 81 percent of women always seek permission from their husbands or other family members before leaving the house. Only about 9 percent do not seek permission. Approximately 31 percent of women agree to at least one situation in which a husband is justified in hitting his wife, with the highest proportion observed in Awaso (50%) and the lowest observed in Wiawso (14.6%). A higher proportion of women in female-headed households (36.1%) agree to at least one situation in which a husband is justified in hitting his wife than in male-headed households (31.1%).
- About 37 percent of women know why it is bad to have too many sugary foods and 31 percent of women know what can lead to being overweight or obese.
- Less than half (42.9%) of women know that the cause of anaemia in the human body is a lack of a consumption of iron. 40 percent of women stated that they do not know the cause of anaemia.
- 36 percent of households indicated that participating in community groups has made them better off than 4 years ago, with close to a quarter (23.6%) of households revealing that participation in groups has made them somewhat better off than 4 years ago.
- 86 percent of children are involved in household work and 63 percent of children are engaged in agricultural activities. Nearly 3 out of 5 (59.6%) children are engaged in cocoa activities, with a higher proportion of boys than girls.
- 82.5 percent of children aged 5 to 17 years are either engaged in child labour activities or are at high risk of engaging in child labour.
- 54 percent of children are involved in hazardous child labour activities.

1. Introduction

1.1 PROJECT BACKGROUND

CARE and Cargill share a commitment to promote opportunity and create lasting change for families living in extreme poverty. With Cargill's support, CARE is implementing the third phase of global programming dubbed PROSPER: Promoting a Sustainable and Food Secure World, to promote sustainable food security and good nutrition around the world. The PROSPER project is a component of Cargill's global Cocoa Promise Community Support, a corporate social responsibility initiative aimed at sourcing cocoa sustainably by improving the livelihoods of individuals living in cocoa-growing communities and supporting community development. The components of Cocoa Promise include: farmer education, community development, farm development, and farmer cooperative formation.

The PROSPER project (April 2017-August 2019) seeks to improve the livelihoods of individuals in cocoa-growing communities and enhance the capacity of existing local structures to own and lead the development processes of the community. The community-based intervention is focused on enhancing access to education through the provision of school infrastructure, improving nutrition behaviour, strengthening women's empowerment, and building the capacity of people living in cocoa-farming communities for sustainable development. It involves leadership and vocational training, construction and refurbishment of school structures, good nutrition and community development.

1.2 PROJECT GOAL AND OBJECTIVES

CARE and Cargill are working together to meet one global goal: *Gender Equitable Food Security & Resilience to Climate Change*. In PROSPER Ghana, CARE seeks to achieve the following specific objectives:

1. Enhanced women's participation in decision-making processes
2. Strengthened inclusive governance
3. Improved nutrition behaviours
4. Increased access to education and improved child protection

PROSPER is targeting at least 5,900 cocoa farmers and is currently operational in 108 communities across four cocoa districts in the western region of Ghana: Sefwi Wiawso (26 communities), Asawinso (21 communities), Anhwiaso (31 communities) and Awaso (30 communities). The project communities are within the following political districts: Bibiani-Anhwiaso-Bekwai district, Sefwi- Wiawso Municipality, Akontombra district, and Juaboso district.

1.3 RATIONALE OF THE STUDY

The survey is meant to systematically collect, analyse, and report on baseline data based on PROSPER Ghana indicators to measure progress and project impact within project communities. In other words, the purpose of the study is to provide an information base against which to monitor and assess the project's progress and effectiveness during implementation and through project completion.

1.4 TERMS OF REFERENCE

The terms of reference addressed the following specific issues:

- Review existing tools and develop survey methodology in collaboration with the CARE-Cargill project team.
- Use the selected sample template that meets international standards.
- Develop the survey implementation protocol questionnaires and training curriculum as well as procure materials for the field teams.

- Develop and implement a quality assurance protocol that outlines how data quality will be ensured at different phases of the survey.
- Organize recruitment, training, contracting, and payment of several experienced enumerators and supervisors.
- Train field teams, including field testing of the survey instrument.
- Develop a work plan for the field teams to cover the survey sample efficiently.
- Deliver a report on the outcome of enumerators' training.
- Conduct data gathering exercises and submit report on the data collection process, detailing challenges and how they were overcome.
- Analyse data in collaboration with CARE-Cargill project team.
- Deliver the syntax used to analyse the data either in SPSS or STATA format.
- Deliver final report (two bound copies and electronic copy).

1.5 ORGANISATION OF THE REPORT

The rest of the report is organised as follows: chapter 2 provides an insight into the survey methodology and research design, as well as the survey's implementation. The development and piloting of survey instruments are also outlined in chapter 2. Further, the chapter discusses the data collection technique, quality assurance, and data analysis. Chapter 3 discusses the results of the survey. This chapter provides analyses on households' demographic characteristics and socioeconomic characteristics. Chapter 3 also assesses survey indicators such as food and nutrition security, livelihood resilience, economic poverty reduction, and women's empowerment. The fourth and final chapter provides concluding remarks and recommendations for programming based on the findings of the study.

2. Baseline Methodology

2.1 SURVEY DESIGN

To draw a useful sample that facilitates generalization to the population while maintaining cost effectiveness, the survey adopted a combination of different probability sampling strategies. The resulting design could be described as a stratified sampling design, permitting all sampling units to have a known, a non-zero, or a calculable chance of being selected. To achieve a sample as representative of the population as possible, the random selection of sampling units at all levels was done proportionate to size of respective strata or in line with the population distribution pattern.

2.2 TARGET POPULATION

The population for the survey includes famer households of Cargill Kuo farmers and non-Cargill Kuo farmers in project communities in the four districts of Sefwi Wiawso, Asawinso, Anhwiaso and Awaso. The population of farmer households was obtained from Cocoboard/CARE (in the case of the Cargill Kuo farmers) to form the sample frame for identifying and randomly selecting Cargill farmers.

2.3 SAMPLE SIZE DETERMINATION

In view of the purpose of the survey, a sample size that ensures a high level of precision and confidence was considered appropriate. To this end, a precision level of +/- 5 and confidence level of 95% was adopted in the determination of the sample size for farmer households. To ensure a more conservative sample size and a highly heterogeneous population, a maximum degree of variability (0.5) was assumed. The implication is that if the study is conducted repeatedly using different participants from the same population but selected in line with the sampling method, we are 95% sure that observations made by other studies will be within a range or interval of +/-5% of the observation made in this survey. Employing the above criteria and formula below, an initial sample size of **384** households was selected. This was further adjusted by 10% non-response and non-availability; bringing the final sample size to **423** farmer households. However, the total number of respondents achieved was 441 because of over sampling.

Sample size (N) required to estimate prevalence with 95% confidence limit:

$$N = \frac{1.96^2 \times P(1-P)}{d^2} \times \text{deft}$$

1.96 = Z value for $\alpha = 0.05$ or 95% confidence limits

P = estimated prevalence (varies, set at 0.5)

d = desired precision (0.05 for $\pm 5\%$)

deft = design effect = 1 (estimate) - is related to the fact that we are using a stratified random sampling method; **d** is a function of the intra-cluster correlation.

$$N = \frac{1.96^2 \times (0.5) (1-0.5)}{0.05^2} \times 1 = 384 \text{ (HH) per district}$$

The final sample size derived from this formula is corrected for expected refusals and unavailability of HHs, (10%) = 38. This brings the total sample size to **423** HH.

2.4.1 Sampling Process

A stratified random sampling method was used in the selection of communities. As a first step, a list of cocoa farmers in the target communities was collected from CARE and Cocoboard to form the sample frame for the households. Ten of the project communities were randomly selected from the list of all project communities in each of the four districts provided. Following the selection of communities, 11 households within each of the communities were also randomly selected based on the list of Cargill and non-Cargill households provided. Enumerators conducted a minimum of 11 interviews per each of the 40 sampled communities.

A household in this survey is defined as a unit of people who share the same “food pot,” as opposed to people who share the same roof. This was verified by the interviewers asking questions about the number of people who live under the same roof and eat together. Each community has a list of Cargill Kuo farmers and non-Cargill Kuo farmers. The team systematically sampled from the list and proceeded to interview the farmer households accordingly.

In each household, **one adult male/female farmer** was interviewed to complete the household roster questionnaire, while women were also interviewed using a women’s questionnaire. All children aged 5-17 years were also interviewed within the households. The questionnaire was administered to the selected respondents in accordance with the survey implementation and quality assurance protocols developed for the survey. The sample was split between Cargill Kuo farmers and non-Cargill Kuo farmers.

Table 1. Achieved Sample

	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Overall	110	111	110	110	441
Male	77	74	73	71	295
Female	33	37	37	39	146
Cargill farmers	61	62	60	61	244
Non-Cargill farmers	49	49	50	49	197

2.5 DATA COLLECTION METHODS AND SURVEY TOOLS USED

A quantitative method was adopted for the survey. Two sets of tools were used for the survey: a quantitative household farmer survey questionnaire and a quantitative child survey questionnaire based on project data requirements. The quantitative tools contained information on socio-demographic characteristics of beneficiary household members, income and expenditure sources, and production information, among others. The design of the detailed instrument was informed by the project indicators and contextual information needed to assess project outcome and impact. Baseline data collection for the PROSPER Ghana project took place within a period of two weeks in August 2017 in the four project districts. Enumerators interviewed project households and children between 5-17 years using the SurveyCTO Collect software on mobile tablets.

2.6 TRAINING OF ENUMERATORS AND PRE-TESTING

JMK recruited and trained 20 enumerators and 4 supervisors for the survey. A 3-day training programme was organised for data collectors and supervisors for the baseline survey. Enumerators were taken through the questionnaire, question by question, and were made to understand the importance of each question and the kind of responses that were needed for each question. A mock interview was carried out in which one of the enumerators assumed the role of respondent while the other assumed the role of interviewer.

On the final day of training, a pre-testing exercise was carried out across more than 20 households in Suhum, a cocoa growing community in the Eastern region. The pre-testing was carried out to identify questions that did not make sense or were not applicable to children or farmer household members. Other issues with the

questionnaire that were likely to lead to biased responses were flagged and addressed accordingly. Further, the pre-testing was used to improve the list of key terminologies in the questionnaire as well as to assess the survey flow and skip logics using the SurveyCTO data collection software on android tablets.

2.7 DATA QUALITY ASSURANCE AND SUPERVISION

In implementing the survey, several quality control measures were implemented to ensure consistency and accuracy of field data. To guarantee the reliability, integrity, and usability of data collected from the field survey, three key quality assurances measures were implemented by data collectors, supervisors, and project managers. This included:

- Spot Checks: One supervisor accompanied each interviewer team to conduct spot checks in the field. The supervisor also conducted 100% consistency checks on completed CAPI tablets prior to remitting the data onto the server. In addition, the supervisor observed 5 interviews a day using the enumerator shadowing form to ensure that data collectors were strictly adhering to the survey implementation protocols in eliciting information from respondents.
- Consistency Checks: Randomized consistency checks were conducted for consistency and clarity at the end of each working day. The supervisor also checked for outlier figures, observation of skip patterns, etc.
- Back Checks: When a supervisor found inconsistency in the information provided on a CAPI, a follow up visit was made by the supervisor. The supervisor (based on the report from the consistency checks) returned to interview 4% of the respondents.

2.8 DATA PROCESSING AND ANALYSIS

The analysis of data was informed by the demands of the specific survey questions and baseline indicators as defined in the project logical framework. Although the data collection software had built-in control checks that blocked wrong entries to reduce errors and enhance data quality during data entry, the keyed data was concatenated and exported to STATA for further cleaning. Data analysis was done using STATA. Data was organized using graphs and other descriptive statistics including cross tabulations to analyse trends within and between the various sub-groups or user categories.

3. Survey Findings

3.1 INTRODUCTION

This section presents the main results of the survey. This includes the demographic and socio-economic characteristics of households including age and sex composition, educational attainment, literacy level, household assets, and amenities. The section further presents and discusses the PROSPER project indicators, namely: food and nutrition security, women’s empowerment, women’s food consumption and nutrition knowledge, prevalence of child labour, hazardous child labour, and children at high risk of child labour.

3.2 DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLDS

This section presents a descriptive digest of demographic characteristics of households sampled for the survey. It covers household-specific characteristics such as sex, age, educational attainment, school enrolment, and household size.

3.2.1 Age and sex structure of households

Table 3.1 presents data on the household distribution by age, gender, and district. Out of 441 households surveyed, 2,796 members are domiciled in these households. Of this number, household membership is almost evenly split between males (49.3%) and females (50.7%). Comparing this result to national demographic data, the proportion of males in cocoa-growing households in the project districts is slightly higher.¹

The table also show that households are dominated by children below 18 years of age. Particularly, 42 percent of household members range from 5 to 17 years old with an additional 10 percent being children 4 years old and below. This type of population structure may impose a heavy burden on the economic income and food consumption of the surveyed households. With regards to children between 5 to 17 years, the data shows that of the 1,179 children, there are slightly more boys (50.8%) than girls (49.2%).

Table 3.1 Age and sex structure of households

	Anhwiaso	Asawinso	Awaso	Wiawso	Count	Overall
Male	50.2	49.0	50.1	48.0	1,378	49.3
Female	49.8	51.0	49.9	52.0	1,418	50.7
Total	643	587	728	838	2,796	100
0 – 4 yrs	11.0	5.6	11.0	12.0	284	10.2
5-17 yrs	38.0	42.6	44.1	43.4	1,179	42.2
18 – 24 yrs	13.5	11.4	10.6	12.1	332	11.9
25 – 34 yrs	11.0	9.2	8.5	11.1	280	10.0
35 – 44 yrs	10.7	9.4	11.8	7.4	272	9.7
45 – 54 yrs	7.5	10.6	9.2	8.1	245	8.6
55 yrs +	8.2	11.2	4.8	6.0	204	7.3
Number (5-17 years)						
Boys	129	123	165	182	599	50.8
Girls	115	127	156	182	580	49.2
Total	244	250	321	364	1,179	100
Percent distribution (5-17 years)						
Boys	52.9	49.2	51.4	50.0	599	50.8
Girls	47.1	50.8	48.6	50.0	580	49.2

The composition of the Ghanaian household reflects the social structure of the population. For the purposes of the survey, a household is defined as a person or group of related or unrelated persons who live together in the same housing unit, sharing the same housekeeping and cooking arrangements, and are considered as one unit who acknowledge an adult male or female as the head of the household. The results of the survey indicate

¹ According to GLSS 6, males constitute 48.3% of household members while females constitute 51.7%.

that the average number of persons living in a household is 5.85, with the highest in Wiawso district (7.62). The table shows a higher household size in male-headed households (6.03) than female headed households (4.82). Non-Cargill kuo household size (5.96) was found to be slightly higher than that of Cargill kuo households (5.75).

This finding indicates that household sizes in project communities are higher than the national average, which currently stands at 4.0 and a rural average of 4.5.² This higher average household size is symptomatic of a high fertility rate prevailing in rural communities in Ghana (4.0 per woman)³ and the practice of adult children with offspring staying with their parents.

Table 3.2 Household size

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Overall	5.85	5.29	6.62	7.62	5.85
Male-headed households	6.03	5.48	6.65	7.54	6.03
Female-headed households	4.82	4.28	6.30	8.06	4.82
Cargill kuo households	5.75	5.37	6.77	7.41	5.75
Non-Cargill kuo households	5.96	5.18	6.44	7.88	5.96

3.2.2 Educational level of household members

Education is an important aspect of societal development. It is the process of acquiring knowledge, skills, values, and attitudes to fully develop individual capacities for societal wellbeing. Statistics on educational attainment help in knowing the present educational levels of the adult population as well as availability of skilled manpower for various types of economic activity. Table 3.3 shows the level of educational attainment of household members who are 5 years and older. The results suggest low educational attainment levels of household members, with about 82 percent of households with basic education.⁴ The results also show that about 13 percent of the population has completed a secondary level of education. Across sex, the table shows that 17 percent of males have completed secondary education, as compared to 9 percent of females. More than twice as many male household members than females have completed or have some higher education (Table 3.3).

Table 3.3 Educational level of household members (male=m, female=f)

District	Anhwiaso		Asawinso		Awaso		Wiawso		Overall			
	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	Count (N)	Total (%)
Some primary	36.1	41.0	36.1	42.8	42.2	25.3	44.7	47.5	40.1	46.1	959	43.0
Completed primary	5.4	4.9	6.2	8.1	9.2	11.5	13.8	18.2	9.0	11.2	224	10.0
Some secondary	36.4	41.4	29.1	34.8	33.3	29.8	17.7	18.2	28.6	30.1	654	29.3
Completed secondary	16.4	9.8	21.3	11.4	12.6	5.3	18.8	12.0	17.2	9.7	305	13.7
Some higher education	3.2	1.6	1.9	1.3	2.0	1.2	2.7	3.1	2.5	1.9	49	2.2
Completed higher education	2.5	0.8	3.5	1.3	0.7	0.0	1.8	0.6	2.1	0.7	31	1.4
Education for adults	0.0	0.4	0.8	0.0	0.0	0.0	0.0	0.0	0.2	0.1	3	0.1
Professional school	0.0	0.0	1.16	0.4	0.0	0.0	0.6	0.3	0.4	0.2	7	0.3

On the educational level of children (5-17 years), data in table 3.4 indicates that 67 percent of children have some primary education. Close to one fifth (23%) have attained some secondary education.

² Ghana Living Standards Survey round six (GLSS6)

³ The birth rate in Ghana 4.2 children per woman per the Ghana Demographic and Health survey 2014

⁴ Basic Education includes some/completed primary school and some secondary school.

Table 3.4 Educational level of children (5-17 years) in the household

District	Anhwiaso		Asawinso		Awaso		Wiawso		Overall			
	Boy (%)	Girl (%)	Boy (%)	Girl (%)	Boy (%)	Girl (%)	Boy (%)	Girl (%)	Boy (%)	Girl (%)	Count (N)	Total (%)
Some primary	71.1	65.2	66.4	60.2	69.8	66.0	72.8	67.2	70.3	65.0	784	67.7
Completed primary	6.3	4.4	9.6	9.8	6.9	7.8	3.3	7.3	6.3	7.4	79	6.8
Some secondary	21.1	30.4	18.0	26.0	22.6	26.0	20.0	21.5	20.5	25.5	266	23.0
Completed secondary	1.6	0.0	4.4	4.1	0.6	0.0	2.2	1.1	2.0	1.2	19	1.6
Some other education	0.0	0.0	1.6	0.0	0.0	0.0	1.8	2.3	0.9	0.7	9	0.8

Table 3.5 presents data on the literacy level of household members. For the purposes of this survey, literacy is defined as the ability to read and write a short, simple statement in English and any Ghanaian language with understanding. Literacy is widely acknowledged as benefiting both the individual and society. Literacy is associated with several positive outcomes, including health and nutrition benefits, particularly among women. The data shows that about a third of household members are not literate; 38 percent of household members reported that they cannot read at all. This is followed closely by 37 percent of household members who can read an entire sentence and another 23 percent who can read some parts of a sentence.

Table 3.5 Literacy level of household members

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
%						
Cannot read at all	37.2	33.6	47.7	35.8	972	38.7
Can read some parts of the sentence	30.9	26.4	15.7	22.5	591	23.5
Can read the entire sentence	30.6	40.1	35.7	41.6	935	37.2
Not available in language	0.1	0.0	0.9	0.0	7	0.3
Blind / Visually Impaired	1.2	0.0	0.0	0.0	7	0.3

3.3 SOCIO ECONOMIC CHARACTERISTICS OF HOUSEHOLDS

Presented in this section are the socio-economic characteristics of households. These include the physical construction and amenities that define households. This section also measures households' poverty levels as it relates to the physical nature, amenities, and assets owned by households using the Progress out of Poverty tool. The section also highlights the income characteristics of households in the project districts

3.3.1 Household assets and amenities

Table 3.6 presents data on assets and amenities owned by households that are used as a key measure of the poverty levels of households. The results show that majority (55.8%) of households use cement/concrete blocks, landcrete, stone, and/or burnt brick as the main materials for construction of the outer wall. Regarding

the type of toilet facilities most commonly used, the table shows that most households use private toilets (25.3%) and public toilets (24%). The results also show that households mostly use wood, crop residue, sawdust, and/or animal waste (90%) as the main source of fuel for cooking. About 71 percent of households surveyed own a working box or electric iron, while close to 60 percent of households own a video player, such as a VCD, DVD, MP3, MP4 player, iPod or satellite dish. On the number of working mobile phones owned by household members, the table indicates that the majority (37.2%) of household members own two (2) working mobile phones, while 34 percent own three (3) or more working phones. Related to transportation, 21 percent own a motor cycle (regardless of bicycle), with 17 percent owning only a bicycle.

Table 3.6 Assets and amenities owned by households

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Main construction materials used for outer wall						
Mud bricks/earth, wood, bamboo, metal sheet/ asbestos, palm, etc.	52.7	23.4	56.4	44.6	195	44.2
Cement/concrete blocks, landcrete, stone, burnt brick	47.3	76.6	43.6	55.5	246	55.8
Types of toilet facilities used						
No toilet facility (bush, beach)	4.6	19.8	13.6	4.6	47	10.7
Pit latrine, bucket/pan	5.5	36.9	33.6	80.0	172	39.0
Public toilet (e.g. W.C, KVIP, pit pan)	35.5	18.0	31.8	10.9	16	24.0
Private toilet (KVIP or W.C)	54.6	25.3	20.9	4.6	116	25.3
Main source of fuel for cooking						
None, No cooking	0.0	0.0	0.0	0.0	0.0	0.0
Wood, crop residue, sawdust, animal waste	92.7	86.5	99.1	81.8	397	90.0
Charcoal, kerosene	3.6	11.7	0.9	15.5	35	7.9
Gas, electricity	3.6	1.8	0.0	2.7	9	2.0
Households owning a working box or electric iron	68.2	73.9	71.8	70.0	313	71.0
Households owning major electrical gadgets						
None	26.4	32.4	30.0	35.5	137	31.1
Own only television	5.5	27.9	14.6	8.2	62	14.1
Own video player, VCD/DVD/MP3/MP4 player/ iPod, satellite dish	68.2	39.6	55.5	56.4	242	54.9
Number of working mobile phones owned by household members						
None	1.8	3.6	2.7	1.8	11	2.5
One	24.6	29.7	21.8	27.3	114	25.9
Two	30.9	37.8	43.6	36.4	164	37.2
Three or more	42.7	28.8	31.8	34.6	152	34.5
Households owning means of transport						
No transport means	58.2	48.7	65.5	73.6	271	61.5
Only bicycle	18.2	28.8	12.7	8.2	75	17.0
Motor cycle or car (regardless of bicycle)	23.6	22.5	21.8	18.2	95	21.5

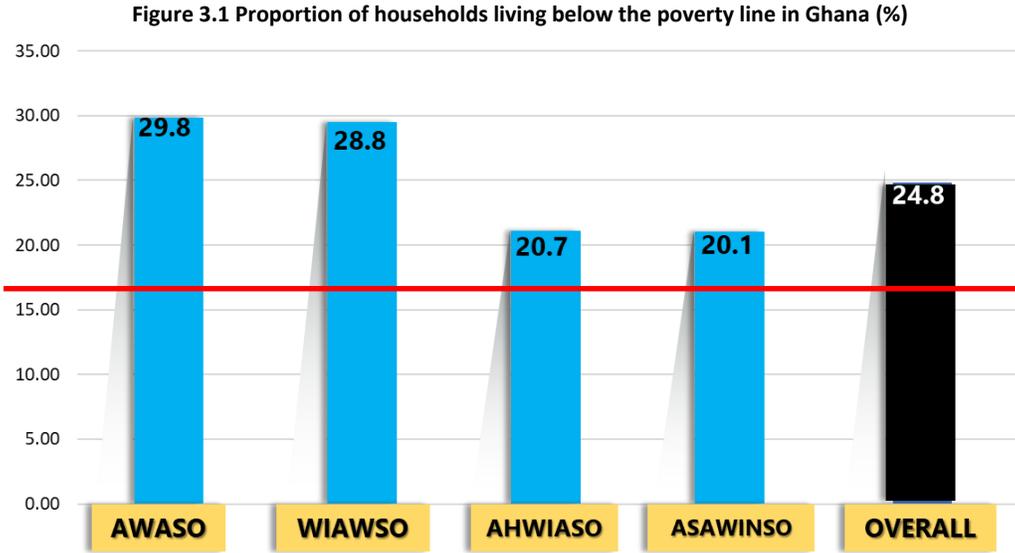
3.3.2 Progress out of Poverty Index (PPI)

The PPI provides estimates to capture snapshots of poverty levels and is also used to track changes in poverty levels over time. The measurement tool, comprised of ten questions about the household's characteristics and asset ownership, is scored to compute the likelihood that the household is living below or above the poverty line in a particular country.⁵ The benchmark for indicating the poverty levels is country specific and is updated

⁵ <http://www.progressoutofpoverty.org/country/ghana>

regularly to reflect the changing economic levels of people living in that country. In Ghana, the latest version of the PPI was created in March 2015 based on results from the 2012/2013 Living Standards Survey. In calculating this indicator, each household’s total score computed from information in Table 3.6 was converted to the Ghana-specific 100% national poverty likelihood rates before completing the analysis for disaggregation across districts and households.

Based on results from the PPI computation, the average PPI index score is 41.37 across households⁶. Figure 3.1 presents the proportion of households living below the national poverty line in the project districts. The figure shows that overall, 24.8 percent of the households are living below the national poverty line, which is higher than the national rate of 16.4 percent.⁷ The figure further illustrates that Awaso and Wiawso have a higher proportion of households living below the poverty line compared to Ahwiaso and Asawinso.



Note: Redline indicates the proportion of households living below the poverty line in Ghana based on national survey statistics (16.4%)

Results from Table 3.7 further indicate that overall, more female-headed households live below the poverty line compared to male-headed households. Further, households who are not members of Cargill Kuo are slightly more likely to be living further below the poverty line than households who are Cargill Kuo members.

Table 3.7 Proportion of household living below the poverty line by household headship

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Male-headed households	21.0	20.5	28.6	27.4	24.4
Female-headed households	18.9	18.2	41.6	37.4	27.3
Cargill households	18.6	19.5	28.8	28.6	26.1
Non-Cargill households	23.2	20.9	31.0	29.2	23.8
Overall	20.7	20.1	29.8	28.8	24.8

⁶ Please note that in the computation of the poverty rates average index of scores are not converted to poverty rates. Rather, each households index scores are converted to poverty rates and then averaged for all households

⁷ Country poverty rate data for December 2016; <http://www.progressoutofpoverty.org/>

3.3.4 Household Income

Household income is a proxy measure of household wealth and measures the economic health of a household. This income is comprised of both farm income sources and non-farm income sources. Data from the PROSPER Ghana baseline survey indicates that farm income is the primary source of household income. Specifically, about 98 percent of households derive their income from crop sales (own cultivation), while 34 percent also generate income from small income generating activities. Income from seed selling (cereals, vegetables, herbs) is the third highest source of household income (20.6%). A similar trend is observed across districts (Table 3.8).

Table 3.8 Sources of household income by districts

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count (N)	Total (%)
Farm income sources						
Crop sales (own cultivation)	99.1	99.1	99.1	96.4	434	98.4
Seed selling (cereals, vegetables, herbs)	28.2	44.1	7.3	2.7	91	20.6
Sales of livestock and livestock products (milk, meat, etc.)	21	19.8	18.2	12.7	79	18
Nursery products (vegetables, fruits, etc.)	1.8	18.9	8.2	7.3	40	9.1
Other farm sources	6.4	3.6	12.7	10	36	8.2
Fishing, poultry etc.	4.6	2.7	0	10	19	4.3
Aquaculture (fist shrimp, clams etc.)	1	0	0	0	1	0.2
Non-farm income sources						
Small business activities (street vending, shop-keeping)	38.2	16.2	40	41.8	150	34.0
Agriculture wage labour	5.5	11.7	14.6	21.8	59	13.4
Skilled labour (e.g., Architects, Engineers, etc.)	13.6	9	7.3	13.6	48	10.9
Remittances (foreign & domestic)	3.6	14.4	10	6.4	38	8.6
Non-agriculture: wage labour	5.5	4.5	10	4.6	27	6.1
Formal employment (Gov't. NGO, private etc.)	1	5.4	1	3.6	21	4.8
Firewood/charcoal sales	1	2.7	11	1.8	18	4.1
Handicrafts sale	0	2.7	0	3.6	7	1.6

A key indicator is the proportion of households with three or more different sources of household income. Based on the results from Table 3.8.1, more than half (54.4%) of households have at least three sources of income for the household. Asawinso (62.2%) had the highest proportion of households with three or more income sources. Also, male headed households had a higher proportion of income sources compared to female headed households.

Table 3.8.1 Households with at least 3 different sources of income

	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	Total (%)
All households	60.0	62.2	49.1	46.4	240	54.4
Male headed households	60.2	65.6	49.0	50.0	213	56.1
Female headed households	58.8	44.4	50.0	25.0	27	44.3
Cargill kuo households	65.6	62.9	53.3	47.5	140	57.4
Non-Cargill kuo households	53.1	61.2	44.0	44.9	100	50.8

The survey sought to determine the household income of PROSPER Ghana households. PROSPER households were therefore asked about their income earned from both farm related activities as well as non-farm activities. Gross income of households is comprised of income from employment, agricultural and non-farm

activities, remittances, and income from other sources. In Ghana, the national average annual gross household income is about GH¢ 16, 645⁸, about US\$ 3,870⁹. For households in the lowest quintile, the average household income is GH¢ 6, 571.80, about US\$ 1,528¹⁰. Table 3.9 shows that PROSPER households earn an average annual income of GH¢ 6,798.51 (US\$ 1,581), which is almost even with the national average for poorest households¹¹. Households in Awaso (GH¢ 8112.17 or US\$ 1,887) recorded the highest average annual income, while those in Anhwiaso (GH¢ 6,298.43 or US\$ 1,465), recorded the lowest. The results also revealed that PROSPER households earn an average annual farm income of GH¢ 5,480.29 (US\$ 1,275) from seven income sources and an average annual non-farm income of GH¢ 1,318.22 (US\$ 307) from eight income sources. This finding confirms that farm income is the dominant source of household income.

Table 3.9 Average annual household income (GH¢)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Sale of crops (own crop)	3,254.42	4,869.40	6,210.35	5,609.93	4,984.63
Other farm sources	778.57	500	2,696.15	3,598.64	2,345.29
Sale of seeds (cereals, vegetables, herbs)	2916.94	523.77	1,720.63	233.33	1,455.14
Aquaculture (shrimp, clams, tilapia)	1,000.00	0	0	0	1,000.00
Nursery products (vegetables, fruits / forest products, seedlings)	1,900.00	797.4	1,244.44	505.71	907.58
Sale of small livestock or livestock derived products (milk, meat etc.)	997.27	564.14	653.15	1025	791.85
Fishing, breeding of chickens, etc.	420	250	0	160	247.22
Average annual farm income	4,358.61	4,801.14	6,818.24	5,949.35	5,480.29
Agricultural wage labour	2,441.67	552.31	620	755.83	845.59
Formal employment (NGO, government employment, private enterprise, etc.)	6,560.00	4,516.67	3,000.00	1,425.00	4,828.57
Skilled labour	2,283.33	3,656.25	2,250.00	1,833.33	2,369.57
Small business activities (street vending, store maintenance / care)	1,961.43	1,602.35	2,033.82	1,132.70	1,685.99
Sale of handicrafts	0	1,073.33	0	1,600.00	1,374.29
Non-agricultural: wage labour	1,733.33	184	1,015.00	703.8	961.12
Remittances (foreign and domestic)	1,425.00	584.38	658.18	742.86	723.42
Sale of firewood / charcoal	400	833.33	377.92	150	429.72
Average annual non-farm income	1,939.82	961.80	1,293.94	1,080.57	1,318.22
Average household income	6,298.43	5,762.95	8,112.17	7,029.92	6,798.51

Table 3.10 presents data on the average annual income by household headship. The table shows that male-headed households (GH¢ 7,308.30 or US\$ 1,700) earn an annual income that is more than double what female-headed households (GH¢ 3,622.77 or US\$ 843) earn in a year. Between Cargill kuo households and non-Cargill kuo households, the data shows that Cargill kuo households (GH¢ 7,926.77 or US\$ 1,844) earn a higher annual income than non-Cargill kuo households (GH¢5,401.08 or US\$ 1,256).

Table 3.10 Average annual income by household headship (GH¢)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Male-headed households	6,601.31	6,519.71	8,575.84	7,439.53	7,308.30
Female-headed households	4,641.47	1,853.00	3,475.50	4,623.44	3,622.77
Cargill kuo households	6,717.79	7,671.76	9,299.32	8,044.90	7,926.77
Non-Cargill kuo households	5,776.37	3,347.71	6,687.60	5,766.37	5,401.08
Overall	6,298.43	5,762.95	8,112.17	7,029.92	6,798.51

⁸ GLSS 6 Ghana Statistical Service, 2013

⁹ Exchange rate as at survey period, GH¢4.3 = 1US\$

¹⁰ GLSS 6, GSS 2013

¹¹ Ibid

3.4 FOOD SECURITY AND NUTRITIONAL KNOWLEDGE

One of the thematic areas of focus for the PROSPER project is improved consumption of diverse, quality, and micronutrient-rich foods for households, women, and children through increased access to micronutrient-rich food and increased knowledge of the importance of diversified diets and best nutrition practices. In this section of the report, food security of households is measured and determined using the Food Insecurity Experience Scale (FIES).

3.4.1 Food and nutritional security of households

According to the Food and Agriculture Organization (FAO), “food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”¹². The 1996 World Food Summit recognized the basic human right to have safe access to safe and nutritious food, and the importance of fighting against hunger was reaffirmed by the development declaration with the resolution to halve the proportion of the world’s people who suffer from hunger by 2015¹³. However, one of the measures used to track progress towards the 2015 hunger target (prevalence of undernourished) was useful for measuring national and regional trends but failed to identify who was undernourished and where they lived. To help fill this gap, FAO launched the Voice of the Hungry Project and the Food Insecurity Experience Scale (FIES). The FIES provides information about the adequacy of people’s access to food and the severity of their food insecurity by asking them directly about their experiences¹⁴.

One of the key objectives of the PROSPER Ghana project is to increase gender equitable food security and resilience to climate change. To achieve this, a key indicator of the baseline survey was measurement of the prevalence of the population with moderate or severe food insecurity. To measure this indicator, a list of eight questions were asked to evaluate the extent to which respondents: worry about their ability to obtain food, compromise quality and variety of food, reduce or skip meals, and/or experience hunger.

Table 3.11 provides the raw output of the scores by districts. Based on information collected, about 8 out of every 10 respondents in a household either worried they would run out of food (83.7%) or ate less than they thought they should because of lack of money or other resources (83.2%) during the last 12 months. For both measurements indicated, Awaso reported the highest number of respondents, with 88.2 percent and 90 percent respectively. About 10% of the respondents also reported going without food for a whole day because of lack of money in the last 12 months. In Anhwiaso, this figure was the lowest, with only 1.8% of the households reporting having not eaten for a whole day.

Table 3.11 Raw scores (Food Insecurity Experience Scale)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
All households						
Proportion of respondents worried they would run out of food or other resources	82.7	81.1	88.2	82.7	369	83.7
Proportion of respondents who ate less than they thought they should because of lack of money or other resources	83.6	76.6	90.0	82.7	367	83.2
Proportion of respondents who ate only a few kinds of foods because of a lack of money or other resources?	65.5	78.4	89.1	83.6	349	79.1
Proportion of respondents unable to eat healthy and nutritious food because of lack of money or other resources	56.4	77.5	85.5	84.6	335	76.0

¹² FAO World Food Summit, 1996, 2001

¹³ https://unstats.un.org/unsd/gender/Mexico_Nov2014/Session%201%20FAO%20paper.pdf

¹⁴ Measuring food insecurity: how the FIES Scale was born; <https://www.youtube.com/watch?v=cVnbjabLs80>

District	Anhwiaso	Asawinso	Awaso	Wiwaso	Overall	
					Count	%
Proportion of respondents who skipped meal because there was not enough money or other resources	46.4	66.7	75.5	77.3	293	66.4
Proportion of respondents whose household ran out of food because of a lack of money or other resources	48.2	73.9	62.7	67.3	278	63.0
Proportion of respondents who were hungry but did not eat because there was not enough money or other resources	21.8	59.5	52.7	59.1	213	48.3
Proportion of respondents who went without eating for the whole day because of lack of money or other resources	1.8	16.2	6.4	16.4	45	10.2

Figure 3.2 provides results of the output from the computation of the FIES module by district. Overall, 84 percent of the respondents experience moderate or severe food insecurity, while 9.1 percent reported feeling food secure. Across all the districts, Awaso reported the highest proportion of respondents (90.9%) who are moderately or severely food insecure followed by slightly lower percentages in Wiwaso (85.4%).

Figure 3.2 Food insecurity severity levels of respondents

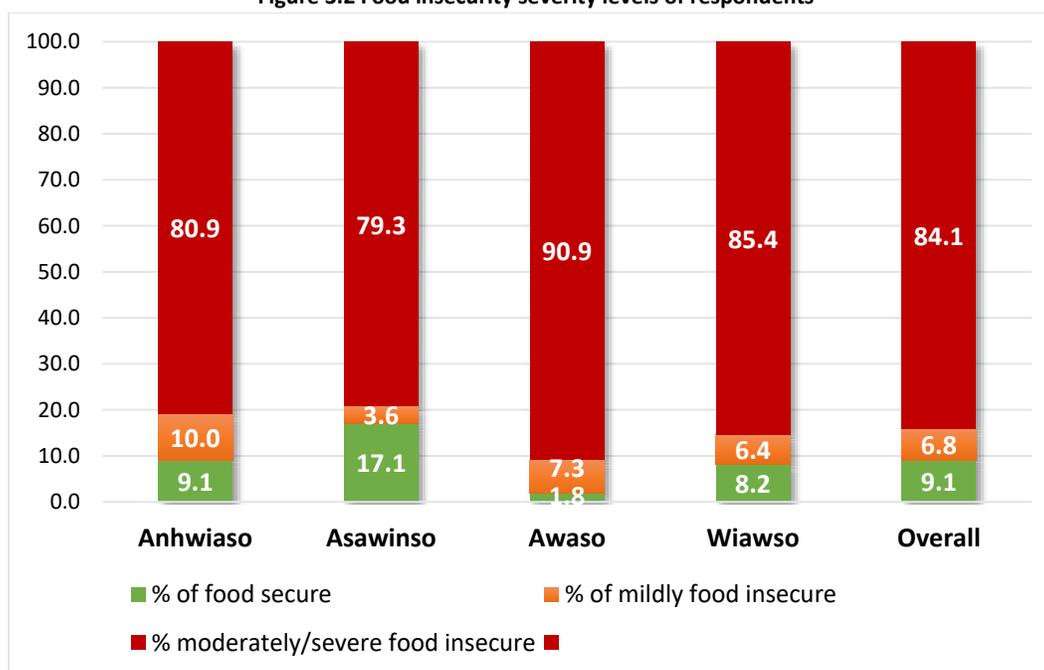


Table 3.12 also provides further analysis on the prevalence of food insecurity across gender and household headship. It can be observed that among the male and female respondents interviewed, the incidence of moderate or severe food insecurity is similar (84.1% and 84.2% respectively) overall and across districts. However, female-headed households reported slightly higher percentages (90.1%) compared with male-headed households (83.2%). This suggests that households headed by a female have a higher likelihood of experiencing moderate to severe hunger compared with households headed by males. Results from the annual income of the households also serves as evidence to the disparity between the two households. Respondents from non-Cargill kuo households (88.4%) also reported higher prevalence of moderate or severe food insecurity compared to Cargill kuo households (80.7%).

Table 3.12 Food Insecurity Experience Scale (Raw scores)

District	Anhwiaso	Asawinso	Awaso	Wiwaso	Overall	
					Count	%
Male respondents						
% of men who are food secure	9.1	17.6	1.4	5.6	25	8.5
% of men who are mildly food insecure	10.4	2.7	8.2	8.5	22	7.4
% moderately/severely food insecure	80.5	79.7	90.4	85.9	248	84.1
Female Respondents						
% of women who are food secure	9.1	16.2	2.7	12.8	15	10.3
% of women who are mildly food insecure	9.1	5.4	5.4	2.6	8	5.5
% of women who are moderately/severely food insecure	81.8	78.4	91.9	84.6	123	84.2
Household Headship						
Male-headed household						
% of food secure households	9.7	18.3	1.0	8.5	35	9.2
% of mildly food insecure households	10.8	4.3	8.0	7.5	29	7.6
% moderately/severely food insecure households	79.6	77.4	91.0	84.0	316	83.2
Female-headed households						
% of food secure households	5.9	11.1	10.0	6.2	5	8.2
% of mildly food insecure households	5.9	0.0	0.0	0.0	1	1.6
% moderately/severely food insecure households	88.2	88.9	90.0	93.8	55	90.1
Cargill kuo households						
% of food secure households	11.5	19.4	1.7	11.5	27	11.1
% of mildly food insecure households	9.8	6.5	6.7	9.8	20	8.2
% moderately/severely food insecure households	78.7	74.1	91.6	78.7	197	80.7
Non-Cargill kuo households						
% of food secure households	6.1	14.3	2	4.1	13	6.6
% of mildly food insecure households	10.2	0.0	8.0	2.0	10	5.1
% moderately/severely food insecure households	83.7	85.7	90	93.9	174	88.4

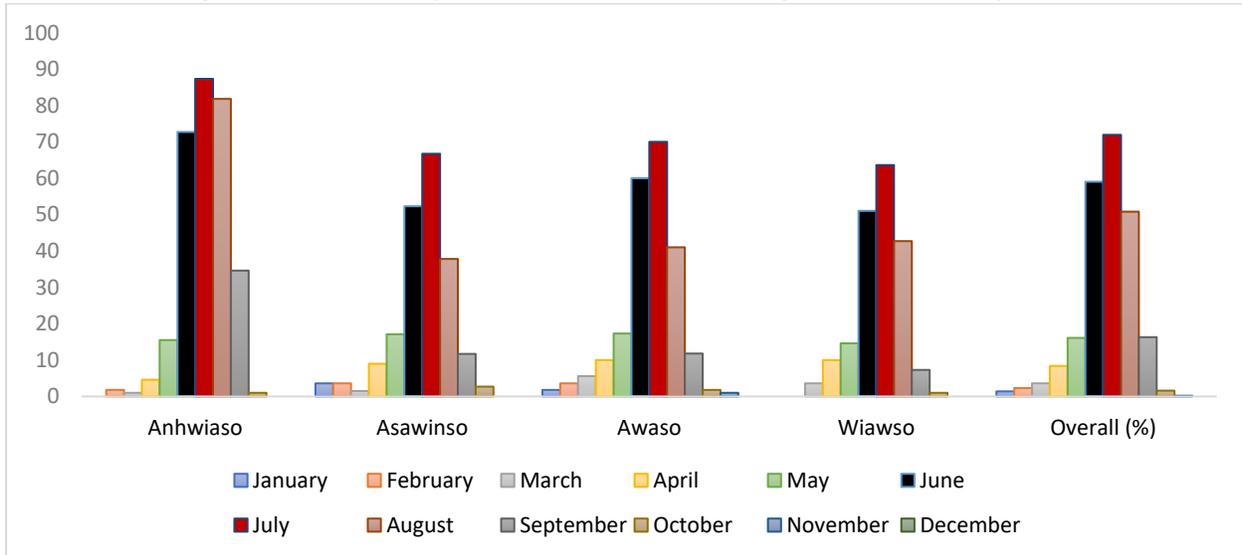
The survey also sought to determine the average number of months of adequate household food provisioning. As observed in Table 3.13, households reported an average of 9.7 months during which food was adequate. Across districts, Wiwaso (10.06) has the highest number of months of adequate food provision in the year followed by Asawinso (9.90). Male-headed households have higher adequacy compared with female-headed households. Also Cargill kuo households fare better on food provision compared with non-Cargill kuo households.

Figure 3.3 also provides information on the months during the year that households did not have enough food to meet family needs using the Months of Adequate Household Food Provisioning indicator (MAHFP). As depicted in figure 3.3, respondents revealed July (71.9%), June (59%) and August (50.8%) as the leading months in the year in which households did not have enough food to meet family needs. A similar trend was observed across districts.

Table 3.13 Months of adequate household food provisioning (MAHFP)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
All households	9.00	9.90	9.76	10.06	9.68
Male-headed households	9.04	9.89	9.79	10.09	9.71
Female-headed households	8.76	9.94	9.50	9.94	9.54
Cargill kuo households	9.02	9.87	9.83	10.23	9.74
Non-Cargill kuo households	8.98	9.94	9.68	9.86	9.1

Figure 3.3 Months in the year households did not have enough food to meet family needs



3.4.2 Household and Women’s dietary diversity score

One of the key outcomes of the project is to improve consumption of diverse, quality, and micronutrient-rich foods for women and children. To achieve this, the survey assessed the household and women’s food consumption and nutrition behaviour using two indicators: the mean household dietary diversity score (HDDS) and women’s dietary diversity score (WDDS). Using the HDDS tool, the main food preparer was asked to report on 12 different food groups consumed by any household member over a 24-hour period (the day and night prior to the interview). The responses produce a score between 0 and 12, where 0 means that no food was consumed over the period and 12 means that all the food groups were present in the meals consumed within the previous 24-hour period.

Overall, surveyed households obtained an average HDDS of 5.03 suggesting that all households, on average, consume 5 food groups (out of the possible 12) daily. Households in Anhwiaso (7.71) consume the highest number of different food groups while those in Awaso (3.80) consume the least. With regards to gender dimension of households, the table shows that both male-headed households (5.02) and female-headed households (5.07) consume meals composed of 5 food groups daily (See Table 3.14). When compared in terms of Cargill kuo and non-Cargill kuo households, the results indicate that members in Cargill households (5.14) consume slightly more diverse food groups than those in non-Cargill households (4.89).

The study also sought to determine the proportion of households eating at least seven food groups per day, the recommended number of food groups for daily household consumption. From the results of the study, we observe that about a fifth (19.7%) of households eat at least seven food groups per day. Anhwiaso (70.9%) reported the highest number of households while none of the households in Awaso reported eating at least seven food groups.

Table 3.14 Household dietary diversity score (HDDS)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
All households	7.71	4.12	3.80	4.49	5.03
Male-headed households	7.68	4.17	3.78	4.55	5.02
Female-headed households	7.88	3.83	4.00	4.13	5.07
Cargill kuo households	7.75	4.19	3.97	4.64	5.14
Non-Cargill kuo households	7.65	4.02	3.60	4.31	4.89
% households eating at least 7 food groups					
All households	70.9	3.6	0.0	4.6	19.7
Male-headed households	69.9	4.3	0.0	5.3	19.5
Female-headed households	76.5	0.0	0.0	0.0	21.3
Cargill kuo households	70.5	3.2	0.0	4.9	19.7
Non-Cargill kuo households	71.4	4.1	0.0	4.1	19.8

Like the HDDS, in determining women's dietary diversity score (WDDS), the main food preparer was asked to report on 10 different food groups consumed by any woman between the ages of 15 to 49 years over a 24-hour period (the day and night prior to the interview). Table 3.15 shows a mean WDDS of 5.12 suggesting that women, on average, consume 5 food groups (out of the possible 10) daily. Women in the Anhwiaso (7.97) district consume the highest number of different food groups while those in Awaso (3.92) consume the least. In terms of gender dimension of households, women in both male-headed households (5.16) and female-headed households (5.07) consume meals containing 5 food groups daily. The results also indicate that women in Cargill households (5.46) consume more diverse food groups than those in non-Cargill households (4.85).

The study also sought to determine the proportion of women eating at least five food groups per day. From the results of the study, we observe that almost half (48.6%) of women eat at least five food groups per day. Anhwiaso (97.0%) reported the highest number of households while Awaso (18.9%) reported the least number of households eating at least five food groups.

Table 3.15 Women's dietary diversity score (WDDS)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
All women	7.97	4.46	3.92	4.49	5.12
Women in male-headed households	8.06	5.05	3.89	4.74	5.16
Women in female-headed households	7.88	3.83	4.00	4.13	5.07
Women in Cargill kuo households	7.89	4.38	4.42	4.56	5.46
Women in non-Cargill kuo households	8.07	4.52	3.68	4.43	4.85
% women eating at least 5 food groups					
All women	97.0	43.2	18.9	41.0	48.6
Women in male-headed households	100.0	63.2	22.2	52.2	54.1
Women in female-headed households	94.1	22.2	10.0	25.0	41.0
Women in Cargill kuo households	100.0	43.8	41.7	38.9	58.5
Women in non-Cargill kuo households	92.9	42.9	8.0	42.9	40.7

The study went further to evaluate the most common food group that households consumed over the 24-hour period. As shown in table 3.16, cereals (96.4%) is the most common food group consumed by households followed by fish and seafood (89.1%) and vegetables (88.2%). Spices, condiments, and beverages (7.3%), followed by sweets and ready-made snacks (4.5%) were the least consumed food groups by households.

It is also observed from the table that the most common food groups consumed by women are cereals (97.3%), fish and sea food (91.1%) and vegetables (89.0%) while the least consumed food groups are milk and dairy products (10.3%) and spices (7.5%)

Table 3.16 Food groups consumed by households/women

District	Anhwaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Food groups consumed by households over the last 24 hours						
Cereals	100.0	92.8	94.6	98.2	425	96.4
Fish and seafood	94.6	87.4	92.7	81.8	393	89.1
Vegetables	93.6	73.9	91.8	93.6	389	88.2
White tubers and roots	87.3	71.2	54.6	38.2	277	62.8
Oil and fats	93.6	25.2	0.9	33.6	169	38.3
Flesh meat	81.8	27.0	18.2	23.6	166	37.6
Fruits	65.5	3.6	11.8	12.7	103	23.4
Nuts, seeds and legumes	43.6	9.0	0.9	36.4	99	22.5
Eggs	56.4	10.8	4.6	13.6	94	21.3
Milk and other products	27.3	8.1	5.5	4.6	50	11.3
Spices, condiments and beverages	19.1	1.8	3.6	4.6	32	7.3
Other sweets and ready-made snacks	8.2	0.9	0.9	8.2	20	4.5
Food groups consumed by women over the last 24 hours						
Cereal	100.0	94.6	94.6	100.0	142	97.3
Fish and other see foods	93.9	94.6	91.9	84.6	133	91.1
Vegetables	93.9	75.7	91.9	94.9	130	89.0
White tubers and roots	93.9	73.0	59.5	38.5	95	65.1
Oil and fats	100.0	32.4	2.7	38.5	61	41.8
Fish/Flesh meat	84.9	27.0	21.6	10.3	50	34.3
Fruits	72.7	8.1	16.2	15.4	39	26.7
Eggs	60.6	16.2	5.4	15.4	34	23.3
Nuts, seeds and legumes	45.5	5.4	0.0	35.9	31	21.2
Milk and other products	27.3	10.8	5.4	0.0	15	10.3
Spices, condiments and beverages	18.2	5.4	2.7	5.1	11	7.5
Other sweets and ready-made	6.1	2.7	0.0	10.3	7	4.8

3.4.3 Food consumption and nutritional knowledge

A key outcome of the project is to measure the proportion of the impact population who usually ate fruits and vegetables at least once per day over the last 30 days. To measure this, various food consumption characteristics of households and respondents were surveyed. Results from Table 3.17 indicate that in the past month prior to the survey, about half (50.3%) of respondents reported eating fruits and vegetables once per day, 13 percent of respondents reported consuming fruits and vegetables three times or more a day (13.4%), while a quarter (25.4%) indicated that they do not consume fruits and vegetables every day. Analysis by gender shows that males (15.3%) reported consuming fruits and vegetables three or more times a day more often than women (9.6%). The survey further found that most respondents consume fruits and vegetables because they are rich in vitamins (25.2%) and because they grew them (18.2%). A majority (71%) of respondents accessed fruits and vegetables from homestead gardens. However, approximately one quarter (27.4%) of respondents said they did not have access to fruits and vegetables. The table indicates that most households consume the vegetables grown in gardens (73.0%), while 23 percent of households sell these vegetables for income.

Table 3.17 Fruit and vegetable consumption characteristics

District	Anhwaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
In the past month, how often did respondents consume fruits and vegetables?						
Once per day	40.9	40.5	68.2	51.8	222	50.3
Twice per day	0.0	6.3	16.4	20.9	48	10.9
Three or more times per day	4.6	18.0	6.4	24.6	59	13.4
I do not consume fruits and vegetables everyday	54.6	35.1	9.1	2.7	112	25.4

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
In the past month, how often did men consume fruits and vegetables?						
Once per day	40.3	40.5	67.1	53.5	148	50.2
Twice per day	0.0	8.1	13.7	15.5	27	9.2
Three or more times per day	3.9	20.3	9.6	28.2	45	15.3
I do not consume fruits and vegetables everyday	55.8	31.1	9.6	2.8	75	25.4
In the past month, how often did women consume fruits and vegetables?						
Once per day	42.4	40.5	70.3	48.7	74	50.7
Twice per day	0.0	2.7	21.6	30.8	21	14.4
Three or more times per day	6.1	13.5	0.0	18.0	14	9.6
I do not consume fruits and vegetables everyday	51.5	43.2	8.1	2.6	37	25.3
Reasons respondents consume fruits and vegetables						
They are rich in vitamins	78.0	19.4	5.0	23.4	83	25.2
I grew them	44.0	1.4	15.0	20.6	60	18.2
They are good for me	44.0	6.9	7.0	5.6	40	12.2
They were given to me	8.0	2.8	5.0	2.8	14	4.3
Other	4.0	2.8	1.0	1.9	7	2.1
How respondents accessed fruits and vegetables						
Homestead Garden	40.9	55.0	95.5	92.7	313	71.0
Did not have access	59.1	33.3	4.6	2.7	110	24.9
Community Garden	0.0	2.7	0.0	8.2	12	2.7
School Garden	0.0	9.0	0.0	0.9	11	2.5
How male-headed households accessed fruits and vegetables						
Homestead Garden	43.0	55.9	95.0	91.5	273	71.8
Did not have access	57.0	31.2	5.0	3.2	90	23.7
Community Garden	0.0	3.2	0.0	9.6	12	3.2
School Garden	0.0	9.7	0.0	1.1	10	2.6
How female-headed households accessed fruits and vegetables						
Homestead Garden	29.4	50.0	100.0	100.0	40	65.6
Did not have access	70.6	44.4	0.0	0.0	20	32.8
School Garden	0.0	5.6	0.0	0.0	1	1.6
What respondents do with the vegetables grown in their garden(s)						
Consumed by household members	40.9	59.5	95.5	96.4	322	73.0
Sell	9.1	25.2	42.7	17.3	104	23.6
Share with neighbors or relatives	24.6	31.5	19.1	13.6	98	22.2
Other	0.9	0.9	0.9	0.9	4	0.9

With respect to respondent's sugar consumption characteristics, Table 3.18 shows that 59 percent of respondents sometimes limit the amount of sugar they consume, while 29 percent of them always do. More than half (57.8%) of respondents reduce the amount of sugar they consume by putting less sugar in coffee or not adding any. About 40 percent put less sugar in the natural juices or no longer add them, and 21 percent drink less soda or cola.

Table 3.18 Sugar consumption characteristics of respondents

	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Do respondents limit the amount of sugar they consume?						
Always	40.0	73.0	15.2	8.4	97	29.3
Sometimes	57.8	25.7	65.7	78.5	198	59.8
Never	2.2	1.4	19.1	13.1	36	10.9
How respondents reduce the amount of sugar they consume						
I put less sugar in the coffee or I do not add it	72.7	55.0	34.6	69.1	255	57.8
I put less sugar in the natural juices or no longer add them	68.2	36.9	20.9	35.5	178	40.4
I drink less soda or cola	8.2	46.9	11.8	20.0	96	21.8

	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Others	2.7	8.1	15.5	0.9	30	6.8
I do not know	2.7	4.5	16.4	0.9	27	6.1

Table 3.19 shows that 42% of respondents consume animal protein one or more times per day, followed by 40 percent who consume animal protein 3 to 5 times per week. Results in the table also indicate that nine out of ten (91.6%) respondent surveyed consume fish or seafood, followed by beef (52.6%), chicken (49.2%), and egg (44.9%).

Table 3.19 Protein consumption characteristics of respondents

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
In the past week, how often respondents consume animal proteins						
One or more times per day	40.9	17.1	72.7	37.3	185	42.0
1 to 2 days per week	7.3	13.5	14.6	28.2	70	15.9
3 to 5 times per week	51.8	69.4	10.9	30.0	179	40.6
I did not consume animal proteins	0.0	0.0	1.8	4.6	7	1.6
Kinds of animal protein consumed						
Fish or Seafood	97.3	95.5	95.5	78.2	404	91.6
Beef	86.4	32.4	30.0	61.8	232	52.6
Chicken	86.4	20.7	26.4	63.6	217	49.2
Egg	76.4	34.2	26.4	42.7	198	44.9
Dairy products (milk, cheese, etc.)	27.3	0.9	3.6	6.4	42	9.5

The survey also sought to ascertain the proportion of respondents who engage in exercise. The results from Table 3.20 show that most respondents work on the farm (83.7%) and walk (68.7%) as a form of exercise. About half (50.5%) respondents revealed that, in the past week prior to the interview, they exercised once per day.

Table 3.20 Proportion of respondents engaged in exercise

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
What kinds of exercise did you do in the last week?						
Work on the farm	97.3	52.3	89.1	96.4	369	83.7
Walk	91.8	52.3	64.6	66.4	303	68.7
Run	13.6	18.9	5.5	15.5	59	13.4
I did not exercise	0.9	19.8	1.8	0.9	26	5.9
Riding a bicycle	8.2	7.2	2.7	2.7	23	5.2
Sports (soccer, basketball, etc)	3.6	0.9	0.9	2.7	9	2.0
In the past week how often did you exercise?						
None	0.0	0.0	2.8	0.9	4	1.0
Once per day	30.3	36.1	89.8	43.1	208	50.5
Twice per day	0.0	4.7	2.8	16.5	25	6.1
1-2 times per week	18.4	17.4	2.8	7.3	46	11.2
3-4 times per week	51.4	41.9	1.9	32.1	129	31.3

Table 3.21 presents results on the proportion of respondents who know specific facts about nutrition and healthy life styles related to a balanced diet. For this indicator, for a respondent to be deemed as knowledgeable, the respondent should have answered seven out of nine questions correctly. As observed in the table, 14 percent of the respondents could respond correctly to questions on nutrition and healthy lifestyles. Wiawso scored slightly higher compared to other districts while there were no marked differences between male and female respondents.

Table 3.21 Proportion of respondents who know at least seven specific facts about nutrition and healthy lifestyle

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
All respondents	14.6	17.1	0.0	24.6	62	14.1
Men	13.0	17.6	0.0	25.4	41	13.9
Women	18.2	16.2	0.0	23.1	21	14.4

Table 3.22 provides specific details on the nutritional and healthy lifestyle responses provided by respondents. The results reveal that respondents in survey districts possess some level of nutritional knowledge. Thus, 37 percent think it is bad to have too many sweets because it can cause both tooth decay and interfere with appetite. About 28 percent of respondents interviewed think that too many sweets can cause tooth decay only. When inquiring about foods and drinks that have added sugar, the results indicate that 43 percent of respondents think foods and drinks such as sodas, candies and juices contain added sugar. About 27 percent of respondents also responded that only sodas have added sugar while another 16 percent think that only candies contain added sugar.

On testing respondents' knowledge about the cause of weight gain, the results indicate that 40% of respondents believe that only high amounts of oil and fat in food preparation can lead to being overweight. This is followed by 31 percent of respondents who believe that both lack of daily exercise and high amounts of oil and fat in food preparation can lead to being overweight. On the perception of daily exercise recommended for adults, 46 percent of interviewed respondents believe an average of 30 minutes per day of exercise is recommended for adults while a little over 23 percent of respondents would recommend an average exercise of once a week for adults. On respondent's perception of the importance of Vitamin A in foods like papaya, mangos, spinach, and carrots, 45 percent of respondents stated that it helps the skin stay healthy. About 18 percent believe Vitamin A in foods is important because it helps fight against infections. Another 12 percent believed that Vitamin A in foods helps us to see better, helps our skin to stay healthy, and helps in fighting infections.

On the frequency of eating fruits and vegetables, the survey results revealed that the majority (62.8%) of respondents think fruits and vegetable should be eaten daily; another 17 percent responded stating that fruits and vegetables should be eaten three times a week. The table shows that 94 percent of respondents think that egg is a source of animal protein with only 3 percent stating that they don't know a source of animal protein. On the importance of protein (or animal protein) for children, the survey results reveal that 92 percent of respondents believe that protein is important for growth and development of children. Regarding possible causes of anaemia, less than half of respondents (42.9%) of respondents know that a lack of iron in food can cause anaemia. Forty percent of respondents stated that they do not know what causes anaemia. To determine respondents' knowledge on good hand washing practice and hygiene, the survey asked respondents to state whether true or false to the statement: "if you have washed your hands once today, you do not need to wash your hands before you prepare food." Most respondents (98.9%) agreed to the statement.

The survey also asked respondents how they determine whether water is safe to drink. About 35 percent of respondents interviewed believed that water is safe to drink if it comes straight from the tap. Nearly a third (29.9 %) of respondents stated that they believe that water is safe to drink if it looks clean. Thirty-two percent of respondents stated that water is safe if it has been boiled or filtered before drinking.

Table 3.22 Nutritional knowledge of respondents

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Why is it bad to have too many sweets, sugary drinks, and candies?						
Because they can cause tooth decay (1)	21.8	38.7	38.2	15.5	126	28.6
Because they interfere with appetite (2)	8.2	16.2	16.4	3.6	49	11.1
Both reasons (1) and (2) above	50.0	22.5	2.7	73.6	164	37.2
There is no reason not to eat sweets, sugary drinks or candies	2.7	3.6	8.2	4.6	21	4.8
I do not know	17.3	18.9	34.6	2.7	81	18.4
Which foods and drinks do you think have added sugar?						
Sodas, candies and Juices	43.6	44.1	10.9	76.4	193	43.8
Sodas	31.8	21.6	48.2	10	123	27.9
Candies	13.6	26.1	16.4	8.2	71	16.1
Juices	4.6	4.5	4.6	1.8	17	3.9
None	6.4	0	2.7	0	10	2.3
I do not know	0	0	8.2	0.9	10	2.3
Mangoes	0	2.7	2.7	2.7	9	2
Other	0	0.9	6.4	0	8	1.8
Which of the following can lead to overweight?						
Lack of daily exercise (1)	5.5	13.5	24.6	9.1	58	13.2
Watching television everyday (2)	1.8	3.6	2.7	0.9	10	2.3
High amounts of oil and fat in food preparation (3)	41.8	3.6	45.5	41.8	176	40.0
Options (1) and (2) only	0.9	6.3	1.8	10.0	21	4.8
Options (1) and (3) only	46.4	41.4	2.7	36.4	140	31.8
Other	3.6	0.9	13.6	0.9	21	4.8
I do not know	0.0	3.6	9.1	0.9	15	3.4
What is the daily exercise recommendation for adults?						
Adults do not need exercise	0.0	1.8	1.8	0.0	4	0.9
30 minutes per day	71.8	43.2	32.7	36.4	203	46.0
Once a week	17.3	23.4	21.8	32.7	105	23.8
Only on the weekends	8.2	9.9	5.5	10.0	37	8.4
Other	0.9	2.7	16.4	20.0	44	10.0
I do not know	1.8	18.9	21.8	0.9	48	10.9
Why is the Vitamin A in foods like papaya, mangos, spinach and carrots important for us?						
Helps us to see better (1)	1.8	20.7	0.9	3.6	30	6.8
Helps our skin stay healthy (2)	49.1	36.0	46.4	50.9	201	45.6
Helps fight infections (3)	17.3	19.8	18.2	18.2	81	18.4
Options (1), (2) and (3) above	20.0	17.1	1.8	9.1	53	12.0
Other	11.8	2.7	3.6	12.7	34	7.7
I do not know	0.0	3.6	29.1	5.5	42	9.5
How many times should you eat fruits and vegetables in a week?						
Once a week	13.6	15.3	8.2	10.9	53	12.0
3 times a week	36.4	16.2	6.4	12.7	79	17.9
Every day	49.1	57.7	70.9	73.6	277	62.8
Not at all	0.0	5.4	0.0	0.0	6	1.4
Other	0.9	0.0	1.8	2.7	6	1.4
I do not know	0.0	5.4	12.7	0.0	20	4.5
Which of the following is a source of animal protein?						
Egg	94.6	99.1	88.2	95.5	416	94.3
Rice	1.8	0.0	0.0	0.0	2	0.5
Beans	1.8	0.0	0.0	4.6	7	1.6
Orange	0.9	0.0	0.0	0.0	1	0.2
Other	0.9	0.0	0.0	0.0	1	0.2
I do not know	0.0	0.9	11.8	0.0	14	3.2
Why is protein (or animal protein) important for children?						

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
For growth and development	99.1	91.9	81.8	95.5	406	92.1
I do not know	0	3.6	8.2	1.8	15	3.4
Other	0	3.6	4.6	0.9	10	2.3
To make you see better	0.9	0.9	2.7	0	5	1.1
To help fight malaria	0	0	1.8	1.8	4	0.9
To run faster	0	0	0.9	0	1	0.2
The lack of which of the following micronutrients causes anaemia?						
Iron	42.7	55.9	6.4	66.4	189	42.9
I do not know	42.7	18.9	77.3	23.6	179	40.6
Calcium	9.1	7.2	9.1	5.5	34	7.7
Sodium	2.7	9	0	2.7	16	3.6
Iodine	2.7	5.4	0.9	1.8	12	2.7
Other	0	3.6	6.4	0	11	2.5
If you have washed your hands once today, you do not need to wash your hands before you prepare food.						
True	100.0	98.2	100.0	97.3	436	98.9
False	0.0	1.8	0.0	2.7	5	1.1
How do you know that water is safe to drink?						
It comes straight from the tap	59.1	16.2	36.4	29.1	155	35.2
It looks clean	23.6	18.9	54.9	21.8	132	29.9
It is boiled before drinking	8.3	37.9	6.2	30.9	92	20.9
It is filtered before drinking	9.1	21.6	0.9	17.3	54	12.2
Other	0	3.6	0.9	0	5	1.1
I do not know	0	1.8	0	0.9	3	0.7

3.5 WOMEN'S EMPOWERMENT

3.5.1 Women's asset ownership and access to productive capital

Over the past decade, development economists have increasingly advocated the use of assets to complement income and consumption-based measures of welfare and wealth in developing countries¹⁵. The analysis of assets and their accumulation is intended to complement such measures by extending the understanding of the multi-dimensional character of poverty and the complexity of the processes underlying poverty reduction¹⁶. Assets also provide households with a cushion to adjust to shortfalls in incomes or sudden increases in necessary expenditures. Thus, households with a higher asset index are less vulnerable than households with lower asset index values.

From Table 3.23, we observe that the average asset index for household in Anhwiaso is relatively higher compared to other districts. Male-headed households also have a higher asset index compared with female-headed households. Similarly, Cargill kuo households also have a higher average index compared with non-Cargill kuo households.

Table 3.23 Mean asset index of households

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
All households	79.83	76.38	71.55	69.34	74.28
Male-headed households	80.55	76.74	72.52	70.06	74.91
Female-headed households	75.88	74.50	61.90	65.06	70.34
Cargill kuo households	80.26	77.68	76.05	71.41	76.36
Non-Cargill kuo households	79.29	74.73	66.16	66.76	71.71

¹⁵ Carter and May 2001; Filmer and Pritchett 2001

¹⁶ Adato, Carter and May 2006

The survey sought to ascertain the proportion of assets owned by households. On household assets ownership, Table 3.24 shows that most households own agricultural land (98%), cell phones (94.6%), and non-mechanized farm equipment (88%). About 76 percent of households own small consumer durables (such as a radio, cookware, or iron for pressing clothes), while more than half (51%) of households own large consumer durables such as refrigerators, TVs, sofas, coolers or air conditioners. Similar patterns were observed across districts.

Table 3.24 Household assets ownership

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Agricultural land (acres)	100.0	97.3	97.3	97.3	432	98.0
Cell phone	98.2	95.5	92.7	91.8	417	94.6
Non-mechanized farm equipment (, e.g. hoes, machete, sickle)	99.1	87.4	78.2	87.3	388	88.0
Small consumer durables (radio, cookware, iron for pressing clothes)	92.7	80.2	83.6	50.0	338	76.6
Large consumer durables (refrigerator, TV, sofa, cooler, air conditioner)	70.9	46.0	58.2	29.1	225	51.0
House (and other structures)	63.6	56.8	36.4	34.6	211	47.9
Chickens, ducks, turkeys, pigeons	36.4	48.7	23.6	24.6	147	33.3
Small livestock (goats, sheep)	30.0	24.3	30.9	39.1	137	31.1
Motorcycle, car, etc.	25.5	21.6	21.8	12.7	90	20.4
Bicycle	21.8	31.5	10.9	9.1	81	18.4
Other land not used for agricultural purposes (residential or commercial land)	10.0	24.3	2.7	10.9	53	12.0
Non-farm business equipment	10.0	20.7	6.4	6.4	48	10.9
Farm equipment (mechanized e.g. tractors, mills, etc.)	5.5	0.0	0.9	4.6	12	2.7
Large livestock (oxen, cattle)	0.9	1.8	0.9	0.9	5	1.1
Fish ponds or Fishing equipment	2.7	0.0	0.0	0.9	4	0.9

Table 3.25 shows that, on the average, households within PROSPER Ghana districts own 6.99 acres of agricultural land, with households in the Anhwiaso district owning the largest (9.78 acres) and those in the Wiawso district owning the smallest (7.18 acres). Further, the results indicate that the mean size of agricultural land owned by male-headed households (8.66 acres) is larger than that of female-headed households (5.96 acres) by almost 1.5 times. Also, the average size of agricultural land owned by Cargill households (9.29 acres) is larger than that of non-Cargill households (6.99 acres).

Table 3.25 Average size of agricultural land owned by households (acres)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Overall	9.78	7.37	8.63	7.18	6.99
Male-headed households	10.42	7.65	8.83	7.40	8.66
Female-headed households	6.32	5.42	6.20	5.88	5.96
Cargill households	10.86	8.15	9.43	8.48	9.29
Non-Cargill households	8.42	6.18	7.52	5.59	6.99

Research by the World Bank shows that women are less likely to own assets than men¹⁷. To determine women's asset ownership, the survey asked adult female respondents: "Who in the household owns most of the household assets?" As shown in table 3.26, 47 percent of women indicated that household assets are "owned by themselves," followed by 41.7 percent of women who stated that assets are "owned by themselves and

¹⁷The World Bank, August 2007. "Collecting gender data on access to and ownership of economic assets." By Lucia Fort

their spouses.” Most assets in female-headed households are solely owned by women (80.3%) while in male-headed households, most assets are jointly owned by women and their spouses (52.9%). Thus, the proportion of women who own most household assets by themselves in female-headed households (80.3%) is significantly higher than for women in male-headed households (12.9%). The proportion of women who own household assets in Cargill kuo households (41.5%) is slightly higher than women in non-Cargill kuo households (40.7%).

Table 3.26 Women’s response to ownership of household assets

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Response from all women						
Owned by myself & other HH members	6.1	0.0	13.5	7.7	10	4.3
Owned by spouse	12.1	16.2	24.3	20.5	27	6.1
Owned by myself & spouse	30.3	21.6	37.8	43.6	49	41.7
Owned by myself	51.5	62.2	24.3	28.2	60	47.6
Response by women in male-headed households						
Owned by myself & other HH members	6.3	0.0	3.7	0.0	2	2.4
Owned by spouse	25.0	31.6	33.3	34.8	27	31.8
Owned by myself & spouse	62.5	36.8	51.9	60.9	45	52.9
Owned by myself	6.3	31.6	11.1	4.4	11	12.9
Response by women in female-headed households						
Owned by myself & other HH members	5.9	0.0	40.0	18.8	8	13.1
Owned by spouse	0.0	0.0	0.0	0.0	0	0.0
Owned by myself & spouse	0.0	5.6	0.0	18.8	4	6.6
Owned by myself	94.1	94.4	60.0	62.5	49	80.3
Response by women in Cargill kuo households						
Owned by myself & other HH members	5.3	0.0	8.3	11.1	4	6.2
Owned by spouse	10.5	18.8	16.7	16.7	10	15.4
Owned by myself & spouse	31.6	18.8	66.7	38.9	24	36.9
Owned by myself	52.6	62.5	8.3	33.3	27	41.5
Response by women in non-Cargill kuo households						
Owned by myself & other HH members	7.1	0.0	16.0	4.8	6	7.4
Owned by spouse	14.3	14.3	28.0	23.8	17	21.0
Owned by myself & spouse	28.6	23.8	24.0	47.6	25	30.9
Owned by myself	50.0	61.9	32.0	23.8	33	40.7

3.5.2 Women’s influence and household decision making

One indication of empowerment is the ability to contribute to key household decision making. The survey assessed the level of women’s influence and their ability to make and participate in productive household decisions. Table 3.27 presents findings on women’s contribution to household decision making. Women will have “meaningfully participated in decision making spaces” if they answered “Myself”, “Myself and Spouse”, or “Myself and other HH members” to at least 12 of the 15 questions pertaining to meaningful participation.

We observe from the table that overall, 72.6 percent of women contributed to meaningful decision making in the household. Wiawso had the highest (82.1%) proportion of women contributing while Anhwiaso (48.5%) had the least. With regards to specific household decisions, about 44 percent of respondents indicated that the decisions on which crops to grow primarily for household food consumption is made jointly by women and their spouses; 37.7% indicated that the decision is made by women only. A similar pattern was observed across districts; more women in Awaso (56.8%) than in other districts reported that decisions on which crops to grow are made by “myself and my spouse.” Regarding who decides which cash crops are grown primarily for sale in the market, the results indicate that nearly half of women make such decisions with their spouses (43.2%) while over a third indicated they are the sole decision makers (39.7%). Across districts, a higher proportion of women in Anhwiaso (51.5%) and Asawinso (51.4%) indicated that they are the sole decision makers.

Table 3.27 Contribution to household decision making by district

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Proportion of women who make decisions in the household (Aggregate)						
Decision made jointly/myself only	48.5	78.4	78.4	82.1	106	72.6
Who decides which crops to grow primarily for household food consumption						
Decided by other HH members	3.0	0.0	0.0	0.0	1	0.7
Decided by myself & other HH members	3.0	10.8	13.5	7.7	13	8.9
Decided by spouse	0.0	8.1	8.1	12.8	11	7.5
Decided by myself & spouse	45.5	32.4	56.8	43.6	65	44.5
Decided by myself	48.5	48.7	21.6	33.3	55	37.7
No one	0.0	0.0	0.0	2.6	1	0.7
Who decides which cash crops are grown primarily for sale in the market						
Decided by other HH members	3.0	0.0	0.0	0.0	1	0.7
Decided by spouse & other HH members	0.0	2.7	0.0	0.0	1	0.7
Decided by myself & other HH members	3.0	5.4	10.8	7.7	10	6.9
Decided by spouse	9.1	5.4	8.1	7.7	11	7.5
Decided by myself & spouse	33.3	35.1	54.1	48.7	63	43.2
Decided by myself	51.5	51.4	24.3	33.3	58	39.7
No one	0.0	0.0	2.7	2.6	2	1.4
Who decides to raise or manage livestock						
Decided by other HH members	0.0	2.7	0.0	2.6	2	1.4
Decided by spouse & other HH members	0.0	5.4	10.8	7.7	9	6.2
Decided by myself & other HH members	15.2	2.7	8.1	5.1	11	7.5
Decided by spouse	12.1	16.2	24.3	43.6	36	24.7
Decided by myself & spouse	21.2	37.8	13.5	18.0	33	22.6
Decided by myself	51.5	35.1	43.2	23.1	55	37.7
Who decides when to or who takes products to the market						
Decided by other HH members	3.0	0.0	2.7	0.0	2	1.4
Decided by myself & other HH members	3.0	2.7	8.1	7.7	8	5.5
Decided by spouse	0.0	2.7	8.1	5.1	6	4.1
Decided by myself & spouse	42.4	29.7	54.1	51.3	65	44.5
Decided by myself	51.5	64.9	27.0	35.9	65	44.5
Who decides to engage in a non-farm business activity						
Decided by other HH members	6.1	2.7	0.0	0.0	3	2.1
Decided by spouse & other HH members	0.0	0.0	0.0	2.6	1	0.7
Owned by myself & other HH members	0.0	2.7	10.8	10.3	9	6.2
Decided by spouse	12.1	8.1	21.6	12.8	20	13.7
Decided by myself & spouse	12.1	16.2	24.3	30.8	31	21.2
Decided by myself	33.3	43.2	21.6	35.9	49	33.6
No one	36.4	27.0	21.6	7.7	33	22.6
Who decides what inputs to buy for agricultural production?						
Decided by other HH members	3.0	0.0	0.0	0.0	1	0.7
Decided by myself & other HH members	0.0	5.4	10.8	7.7	9	6.2
Decided by spouse	15.2	8.1	13.5	15.4	19	13.0
Decided by myself & spouse	30.3	35.1	48.7	48.7	60	41.1
Decided by myself	51.5	51.4	27.0	28.2	57	39.0
Who decides major household expenditures? (large appliances, etc.)						
Decided by myself & other HH members	6.1	5.4	8.1	5.1	9	6.2
Decided by spouse	6.1	10.8	10.8	12.8	15	10.3
Decided by myself & spouse	36.4	37.8	54.1	51.3	66	45.2
Decided by myself	24.2	46.0	27.0	23.1	44	30.1
No one	27.3	0.0	0.0	7.7	12	8.2
Who decides minor household expenditures? (such food for daily consumption or other household needs)						
Decided by other HH members	0.0	0.0	2.7	0.0	1	0.7

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Decided by myself & other HH members	6.1	5.4	10.8	7.7	11	7.5
Decided by spouse	0.0	2.7	2.7	5.1	4	2.7
Decided by myself & spouse	42.4	35.1	56.8	46.2	66	45.2
Decided by myself	51.5	56.8	27.0	41.0	64	43.8
Buyer negotiations						
Decided by other HH members	3.0	0.0	2.7	0.0	2	1.4
Decided by myself & other HH members	3.0	2.7	10.8	7.7	9	6.2
Decided by spouse	24.2	0.0	8.1	10.3	15	10.3
Decided by myself & spouse	18.2	27.0	40.5	41.0	47	32.2
Decided by myself	51.5	70.3	35.1	38.5	71	48.6
No one	0.0	0.0	2.7	2.6	2	1.4
Buying clothes for yourself?						
Decided by myself & other HH members	3.0	2.7	2.7	5.1	5	3.4
Decided by spouse	3.0	2.7	2.7	5.1	5	3.4
Decided by myself & spouse	30.3	18.9	43.2	46.2	51	34.9
Decided by myself	63.6	75.7	51.4	43.6	85	58.2
Spending money that you have earned						
Decided by myself & other HH members	15.2	0.0	2.7	7.7	9	6.2
Decided by myself & spouse	36.4	27.0	48.7	51.3	60	41.1
Decided by myself	48.5	73.0	46.0	41.0	76	52.1
No one	0.0	0.0	2.7	0.0	1	0.7
Spending money that your spouse has earned						
Decided by spouse & other HH members	3.0	0.0	0.0	0.0	1	0.7
Decided by myself & other HH members	0.0	0.0	0.0	7.7	3	2.1
Decided by spouse	12.1	40.5	13.5	5.1	26	17.8
Decided by myself & spouse	36.4	24.3	59.5	56.4	65	44.5
Decided by myself	0.0	10.8	16.2	28.2	21	14.4
No one	48.5	24.3	10.8	2.6	30	20.6
Children's education						
Decided by myself & other HH members	3.0	0.0	5.4	7.7	6	4.1
Decided by spouse	9.1	2.7	13.5	5.1	11	7.5
Decided by myself & spouse	42.4	51.4	56.8	59.0	77	52.7
Decided by myself	45.5	46.0	24.3	28.2	52	35.6
Seeking medical treatment for your children or yourself						
Decided by myself & other HH members	3.0	0.0	5.4	7.7	6	4.1
Decided by spouse	9.1	5.4	10.8	2.6	10	6.9
Decided by myself & spouse	39.4	51.4	59.5	61.5	78	53.4
Decided by myself	48.5	43.2	24.3	28.2	52	35.6
Whether to use family planning (including contraception) to space or limit births						
Decided by myself & other HH members	0.0	0.0	2.7	7.7	4	2.7
Decided by spouse	0.0	8.1	0.0	2.6	4	2.7
Decided by myself & spouse	21.2	51.4	59.5	33.3	61	41.8
Decided by myself	3.0	24.3	13.5	7.7	18	12.3
No one	75.8	16.2	24.3	48.7	59	40.4

Additional survey data examining the level of women's input into household decision making across districts is listed in Table 3.28. The study found that overall, 44 percent of women make inputs into all decisions made in the household. The most common household issue women are more likely to be involved in is "spending money women have earned" (53.4%) and "decision on seeking medical treatment for children" (51.4%). About 1 out of every 10 (11.5%) women in the household do not make any inputs regarding decisions made in the household. With regards to the most common issue in which women are less likely to make inputs, "inputs into spending of spouse's income" (34.9%) emerged the highest.

Table 3.28 Women's input into household decision making

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Crops grown primarily for household food consumption						
No input	3.0	2.7	2.7	5.1	5	3.4
Input into some decision	36.4	16.2	21.6	20.5	34	23.3
Input into most decision	21.2	21.6	32.4	30.8	39	26.7
Input into all decision	39.4	59.5	43.2	43.6	68	46.6
Crops grown primarily for sale in the market						
No input	3.0	2.7	2.7	5.1	5	3.4
Input into some decision	30.3	16.2	21.6	25.6	34	23.3
Input into most decision	27.3	21.6	29.7	25.6	38	26.0
Input into all decision	39.4	59.5	46.0	43.6	69	47.3
To raise and manage livestock						
No input	48.5	29.7	35.1	23.1	49	33.6
Input into some decision	24.2	13.5	13.5	20.5	26	17.8
Input into most decision	3.0	16.2	21.6	25.6	25	17.1
Input into all decision	24.2	40.5	29.7	30.8	46	31.5
When to or who takes products to the market?						
No input	3.0	0.0	2.7	5.1	4	2.7
Input into some decision	36.4	10.8	13.5	28.2	32	21.9
Input into most decision	18.2	29.7	37.8	23.1	40	27.4
Input into all decision	42.4	59.5	46.0	43.6	70	48.0
Non-farm business activity?						
No input	45.5	29.7	21.6	10.3	38	26.0
Input into some decision	15.2	5.4	10.8	12.8	16	11.0
Input into most decision	15.2	16.2	32.4	30.8	35	24.0
Input into all decision	24.2	48.7	35.1	46.2	57	39.0
What inputs to buy for agricultural production?						
No input	15.2	5.4	2.7	7.7	11	7.5
Input into some decision	33.3	18.9	21.6	23.1	35	24.0
Input into most decision	6.1	21.6	35.1	25.6	33	22.6
Input into all decision	45.5	54.1	40.5	43.6	67	45.9
Major household expenditures? (large appliances, etc.)						
No input	21.2	10.8	5.4	18.0	20	13.7
Input into some decision	39.4	13.5	24.3	23.1	36	24.7
Input into most decision	9.1	24.3	27.0	20.5	30	20.6
Input into all decision	30.3	51.4	43.2	38.5	60	41.1
Minor household expenditures? (such as food for daily consumption or other household needs)						
No input	0.0	0.0	2.7	5.1	3	2.1
Input into some decision	36.4	16.2	8.1	18.0	28	19.2
Input into most decision	27.3	29.7	43.2	33.3	49	33.6
Input into all decision	36.4	54.1	46.0	43.6	66	45.2
Buyer negotiations						
No input	3.0	0.0	10.8	10.3	9	6.2
Input into some decision	39.4	10.8	18.9	15.4	30	20.6
Input into most decision	9.1	40.5	35.1	30.8	43	29.5
Input into all decision	48.5	48.7	35.1	43.6	64	43.8
Buying clothes for yourself?						
No input	0.0	0.0	5.4	5.1	4	2.7
Input into some decision	27.3	10.8	5.4	12.8	20	13.7
Input into most decision	24.2	37.8	37.8	35.9	50	34.3
Input into all decision	48.5	51.4	51.4	46.2	72	49.3
Spending money that you have earned?						
No input	0.0	0.0	2.7	5.1	3	2.1
Input into some decision	12.1	2.7	8.1	15.4	14	9.6

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Input into most decision	42.4	35.1	35.1	28.2	51	34.9
Input into all decision	45.5	62.2	54.1	51.3	78	53.4
Spending money that your spouse has earned?						
No input	54.6	54.1	18.9	15.4	51	34.9
Input into some decision	36.4	16.2	24.3	25.6	37	25.3
Input into most decision	0.0	2.7	32.4	20.5	21	14.4
Input into all decision	9.1	27.0	24.3	38.5	37	25.3
Children's education						
No input	3.0	2.7	2.7	5.1	5	3.4
Input into some decision	42.4	16.2	13.5	25.6	35	24.0
Input into most decision	15.2	24.3	32.4	28.2	37	25.3
Input into all decision	39.4	56.8	51.4	41.0	69	47.3
Seeking medical treatment for your children or yourself						
No input	3.0	5.4	2.7	5.1	6	4.1
Input into some decision	39.4	18.9	13.5	25.6	35	24.0
Input into most decision	15.2	16.2	21.6	28.2	30	20.6
Input into all decision	42.4	59.5	62.2	41.0	75	51.4
Whether to use family planning (including contraception) to space or limit births?						
No input	72.7	10.8	10.8	18.0	39	26.7
Input into some decision	21.2	16.2	5.4	15.4	21	14.4
Input into most decision	3.0	8.1	16.2	18.0	17	11.6
Input into all decision	3.0	64.9	67.6	48.7	69	47.3

3.5.3 Women's civic participation and access to community groups

One of project outcomes of CARE's PROSPER Ghana intervention is increased women's participation and leadership in community groups. Table 3.29 shows that 76 percent of women are aware of organised groups in their communities, with the highest proportion in Anhwiaso (90.9%) and the lowest in Asawinso (59.5%). The proportion of women who are aware of organised groups in their community in male-headed households (77.7%) is more than women in female-headed households (73.8%). Also, the proportion of women in Cargill kuo households aware of organised groups (83.1%) is higher than women in non-Cargill households (70.4%).

The results also show that across the four districts, 45 percent of women are active members of groups, with the highest proportion recorded in Anhwiaso (81.8%), and the lowest in Asawinso (18%). The proportion of women who are active members of groups is significantly higher in Cargill households (75.4%) than in non-Cargill households (21.0%).

Table 3.29 Awareness and participation of groups by district

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Proportion of women aware of organised groups in their communities						
All women	90.9	59.5	83.8	71.8	111	76.0
Women in male-headed households	100.0	52.6	85.2	73.9	66	77.7
Women in female-headed households	82.4	66.7	80.0	68.8	45	73.8
Women in Cargill households	89.5	56.3	100.0	88.9	54	83.1
Women in non-Cargill households	92.9	61.9	76.0	57.1	57	70.4
Proportion of women who are active members of groups						
All women	81.8	18.9	35.1	48.7	66	45.2
Women in male-headed households	93.8	10.5	44.4	52.2	41	48.2
Women in female-headed households	70.6	27.8	10.0	43.8	25	41.0
Women in Cargill kuo households	84.2	37.5	100.0	83.3	49	75.4
Women in non-Cargill kuo households	78.6	4.8	4.0	19.1	17	21.0

Data presented in Table 3.30 shows that 32.9 percent of women are actively involved in religious groups, and 32.2 percent of women are actively involved in a Cargill kuo. About 22 percent of women are actively involved in a producer group for agricultural, livestock, and/or fishing (including marketing and marketing groups).

Table 3.30 Groups women are actively involved in, by district

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Religious Group	72.7	13.5	21.6	28.2	48	32.9
Cargill Kuo	48.5	10.8	32.4	38.5	47	32.2
Producer group for agricultural / livestock / fishing (including marketing and marketing groups)	39.4	10.8	18.9	23.1	33	22.6
Women's group (only if it does not fit into one of the above categories)	0.0	2.7	2.7	10.3	6	4.1
Other	0.0	0.0	5.4	7.7	5	3.4
Civic groups (improving community) or charitable groups (helping others)	0.0	0.0	0.0	5.1	2	1.4
Local government, community elders, village council	0.0	0.0	0.0	2.6	1	0.7

3.5.4 Women's mobility

The survey also sought to measure the mobility status of women in the households. To determine this, the average mobility index score for the households was computed. Based on information from Table 3.31.3, the average mobility score of women is at 11.51. Awaso had the highest index score compared to other districts. Women in female headed households had a significantly higher score compared to women in male headed households.

Table 3.31.1 Average mobility index score

	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Overall	12.0	12.5	12.8	8.8	11.51
Women in Male-headed households	8.0	9.7	11.0	8.1	9.21
Women in Female-headed households	33.9	26.8	31.0	13.1	25.87
Women in Cargill kuo households	12.7	10.8	10.5	8.2	10.56
Women in Non-Cargill kuo households	11.1	14.5	15.5	9.6	12.70

The survey further assessed the proportion of women with the freedom of mobility in their households. To measure this indicator, women's scores were aggregated over specific questions relating to their freedom on mobility based on a likert scale. A who scores a minimum of 16 is classified as mobile while women who scored less than 16 are classified as immobile. Based on information from Table 3.31.2, 16.6 percent of women are mobile with the highest number coming from Awaso (21.8%). Women in female headed households are more mobile compared to women in male headed households.

Table 3.31.2 Proportion of women who scored a minimum of 16 on mobility score

	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Overall	17.3	19.8	21.8	7.3	73	16.6
Women Male-headed households	3.2	11.8	15.0	6.4	35	9.2
Female-headed households	94.1	61.1	90.0	12.5	38	62.3
Cargill households	16.4	14.5	8.3	8.2	29	11.9
Non-Cargill households	18.4	26.5	38.0	6.1	44	22.3

Table 3.31.3 shows that, on average, 81 percent of women always seek permission from their husbands or other family members before leaving the house, while 9 percent indicate that they never have to. Across the four districts, Wiawso has the highest proportion of women who ask permission while Anhwiaso has the lowest proportion of women who seek permission. With regards to types of activities that always require a woman to

ask permission, “going outside the village” and “visiting a health care provider” came up highest, both with 86.1%. About 10 percent of the women reported that they do not need to ask permission when attending to religious activities.

Table 3.31.3 Proportion of women who seek permission from husbands or other family members¹⁸

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Average %						
Yes, always	73.6	80.4	81.4	91.8	360	81.6
Yes, often	2.7	5.9	5.3	2.8	19	4.3
Yes, only now and then	9.0	2.9	4.7	3.5	22	5.0
No, never have to	14.8	10.7	8.6	2.0	40	9.1
Seek permission to go to the market						
Yes, always	75.0	77.1	79.0	92.9	291	80.8
Yes, often	5.0	6.3	6.0	2.4	18	5.0
Yes, only now and then	5.0	3.1	9.0	3.6	19	5.3
No, never have to	15.0	13.5	6.0	1.2	32	8.9
Seek permission to visit a female friend’s house in the village						
Yes, always	76.3	79.2	87.0	90.5	300	83.3
Yes, often	5.0	7.3	3.0	1.2	15	4.2
Yes, only now and then	7.5	3.1	4.0	6.0	18	5.0
No, never have to	11.3	10.4	6.0	2.4	27	7.5
Seek permission to go to the home of a member of your family						
Yes, always	78.8	83.3	84.0	94.1	306	85.0
Yes, often	1.3	5.2	5.0	2.4	13	3.6
Yes, only now and then	7.5	2.1	5.0	2.4	15	4.2
No, never have to	12.5	9.4	6.0	1.2	26	7.2
Seek permission to go to church or mosque						
Yes, always	35.0	77.1	81.0	92.9	261	72.5
Yes, often	2.5	5.2	4.0	1.2	12	3.3
Yes, only now and then	42.5	5.2	8.0	4.8	51	14.2
No, never have to	20.0	12.5	7.0	1.2	36	10.0
Seek permission to attend a public village meeting						
Yes, always	77.5	78.1	73.0	90.5	286	79.4
Yes, often	3.8	6.3	5.0	3.6	17	4.7
Yes, only now and then	3.8	3.1	6.0	3.6	15	4.2
No, never have to	15.0	12.5	16.0	2.4	42	11.7
Seek permission to attend a meeting of any group/association of which you are a member						
Yes, always	72.5	78.1	73.0	92.9	284	78.9
Yes, often	1.3	7.3	6.0	2.4	16	4.4
Yes, only now and then	7.5	3.1	3.0	1.2	3.6	3.6
No, never have to	18.8	11.5	18.0	3.6	47	13.1
Seek permission to go outside your village						
Yes, always	81.3	84.4	88.0	90.5	310	86.1
Yes, often	2.5	5.2	4.0	3.6	14	3.9
Yes, only now and then	5.0	1.0	2.0	4.8	11	3.1
No, never have to	11.3	9.4	6.0	1.2	25	6.9
Seek permission to undertake revenue generating activities						
Yes, always	80.0	80.2	79.0	91.7	297	82.5
Yes, often	1.3	8.3	9.0	3.6	21	5.8
Yes, only now and then	5.0	2.1	5.0	2.4	13	3.6
No, never have to	13.8	9.4	7.0	2.4	29	8.1
Seek permission to attend a local social event (fair, festivals, etc.)						

¹⁸ For the analysis of women’s mobility, female respondents (n=146) were combined with spouses of male respondents (n= 214) who were available to be interviewed. So the total number for women in this section is 360.

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Yes, always	80.0	81.3	82.0	91.7	301	83.6
Yes, often	1.3	5.2	7.0	3.6	16	4.4
Yes, only now and then	2.5	4.2	3.0	2.4	11	3.1
No, never have to	16.3	9.4	8.0	2.4	32	8.9
Seek permission to see a health care provider						
Yes, always	80.0	85.4	88.0	90.5	310	86.1
Yes, often	2.5	3.1	4.0	3.6	12	3.3
Yes, only now and then	3.8	2.1	2.0	3.6	10	2.8
No, never have to	13.8	9.4	6.0	2.4	28	7.8

3.5.5 Women's perception on partner violence

This section presents findings on men and women's perception on partner violence. Table 3.32 shows that 84 percent of men and 69 percent of women disagree to all situations where a husband is justified hitting his wife. Across situations tested on, men were more likely to disagree with justification to hit their wives compared with women. About 22 percent of women were more likely to agree that a husband is justified hitting his wife if she neglects their children.

Table 3.32 Proportion of men/women who disagree to a husband hitting his wife in specific situations, by district¹⁹

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Proportion of men/women who disagree to all situations where a husband is justified in hitting his wife						
Men	77.3	85.6	80.9	92.7	371	84.1
Women	70.9	68.5	50.0	87.3	305	69.2
Is he justified in hitting his wife, if she goes out without telling him?						
Men	87.3	91.0	87.3	97.3	400	90.7
Women	81.8	74.8	66.4	93.6	349	79.1
Is he justified in hitting his wife, if she neglects their children?						
Men	86.4	89.2	86.4	96.4	395	89.6
Women	77.3	77.5	64.6	94.6	346	78.5
Is he justified in hitting his wife, if she argues with him?						
Men	94.6	91.9	91.8	95.5	412	93.4
Women	92.7	83.8	70.0	93.6	375	85.0
Is he justified in hitting his wife, if she refuses to have sex with him?						
Men	95.5	93.7	95.5	98.2	422	95.7
Women	93.6	86.5	83.6	96.4	397	90.0
Is he justified in hitting his wife, if she did not cook the food properly?						
Men	99.1	97.3	96.4	99.1	432	98.0
Women	98.2	88.3	91.8	97.3	414	93.9

3.5.6 Women's perception on gender roles

The survey sought to examine women's perception on gender roles. The survey therefore asked women whether they agree with statements on gender specific roles. As depicted in table 3.33, 56 percent of women agree to the assertion that most household decisions should be made by the man. Across districts, the highest proportion of women who agree to that assertion was recorded in Wiawso (73.6%) and the lowest in Anhwiaso (39.1%). A higher proportion of women in female-headed households (63.9%) than in male-headed households (54.7%) think that most household decisions should be made by the man. A higher proportion of women in

¹⁹ In this section, 146 female respondents were combined with 295 spouses of male respondents who were interviewed making a total count of 441 women.

non-Cargill kuo households (60.4%) than in Cargill kuo households (52.5%) think that most household decisions should be made by the man.

The table also shows that 47 percent of women think that there is men’s work and women’s work and that one should not ever do the work of the other. Analysis across districts reveals that the highest proportion of women who agreed to this statement was recorded in Wiawso (64.6%) and the lowest in Awaso (26.4%). A higher proportion of women in female-headed households (60.7%) than in male-headed households (45%) think that there is men’s work and women’s work and that one should not ever do the work of the other. A slightly higher proportion of women in non-Cargill households (48.2%) than in Cargill households (52.5%) agree to this assertion. The survey asked female respondents whether they agree with the idea that if a woman works outside the home, her husband should help with child care and household chores. Most women disagreed, with only 9 percent of women interviewed agreeing to this statement (See table 3.22). The survey further found that only 4 percent of women think that a husband should spend his free time with his wife and children. Only 3 percent of women think that a husband and wife should decide together about the kind of family planning to use.

On gender based violence, a majority (70.3%) of women revealed that they think there are times in which a woman deserves to be hit. Across districts, most women (89.1% in both districts) in Anhwiaso and Wiawso agree to this statement on gender based violence. A slightly higher proportion of women in Cargill kuo households (72.5%) than those in non-Cargill kuo households (67.5%) think that there are times when a woman deserves to be hit. More than half (58.1%) of women in the project districts reported that they think a woman must tolerate violence to maintain stability in the family, with the highest proportion recorded in Anhwiaso (91.8%) and the lowest in Asawinso (24.3%). The results show that a higher proportion of women in households headed by females than in male-headed households agree that a woman must tolerate violence to maintain stability in the family.

Table 3.33 Proportion of women who agree with specific gender roles²⁰

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Personally, I think that most household decisions should be made by the man						
All women	39.1	69.4	41.8	73.6	247	56.0
Women in male-headed households	36.6	68.8	41.0	73.4	208	54.7
Women in female-headed households	52.9	72.2	50.0	75.0	39	63.9
Women in Cargill households	32.8	62.9	43.3	70.5	128	52.5
Women in non-Cargill households	46.9	77.6	40.0	77.6	119	60.4
Personally, I think that there is men’s work and women’s work and that one shouldn’t ever do the work of the other						
All women	60.0	37.8	26.4	64.6	208	47.2
Women in male-headed households	58.1	34.4	25.0	63.8	171	45.0
Women in female-headed households	70.6	55.6	40.0	68.8	37	60.7
Women in Cargill households	60.7	29.0	31.7	63.9	113	46.31
Women in non-Cargill households	59.2	49.0	20.0	65.3	95	48.2
Personally, I think that if a woman works outside the home, her husband should help with child care and household chores						
All women	3.6	3.6	18.2	13.6	43	9.8
Women in male-headed households	2.2	4.3	19.0	12.8	37	9.7
Women in female-headed households	11.8	0.0	10.0	18.8	6	9.8
Women in Cargill households	3.3	3.2	16.7	16.4	24	9.8
Women in non-Cargill households	4.1	4.1	20.0	10.2	19	9.6

²⁰ In this section, 146 female respondents were combined with 295 spouses of male respondents who were interviewed making a total count of 441 women.

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Personally, I think that a husband should spend his free time with his wife and children.						
All women	2.7	0.9	3.6	9.1	18	4.1
Women in male-headed households	1.1	1.1	4.0	7.5	13	3.4
Women in female-headed households	11.8	0.0	0.0	18.8	5	8.2
Women in Cargill households	3.3	0.0	5.0	13.1	13	5.3
Women in non-Cargill households	2.0	2.0	2.0	4.1	5	2.5
Personally, I think a husband and wife should decide together about what kind of family planning to use						
All women	2.7	0.9	3.6	7.3	16	3.6
Women in male-headed households	3.2	1.1	4.0	7.5	15	4.0
Women in female-headed households	0.0	0.0	0.0	6.3	1	1.6
Women in Cargill households	1.6	1.6	5.0	9.8	11	4.5
Women in non-Cargill households	4.1	0.0	2.0	4.1	5	2.5
Personally, I think there are times when a woman deserves to be hit						
All women	89.1	56.8	46.4	89.1	310	70.3
Women in male-headed households	87.1	59.1	46.0	91.5	268	70.5
Women in female-headed households	100.0	44.4	50.0	75.0	42	68.9
Women in Cargill households	93.4	64.5	40.0	91.8	177	72.5
Women in non-Cargill households	83.7	46.9	54.0	85.7	133	67.5
Personally, I think a woman must tolerate violence to maintain stability in the family						
All women	91.8	24.3	50.9	65.5	256	58.1
Women in male-headed households	90.3	22.6	49.0	64.9	215	56.6
Women in female-headed households	100.0	33.3	70.0	68.8	41	67.2
Women in Cargill households	91.8	25.8	38.3	65.6	135	55.3
Women in non-Cargill households	91.8	22.5	66.0	65.3	121	61.4

Table 3.34 shows that, on average, women have 2.54 hours available each day for leisure activities. Women in Anhwiaso reported having the highest number of hours available for leisure activities at 3.49 hours, followed by Asawinso (2.80), Awaso (1.93) and then Wiawso (1.92). Women in female-headed households have a slightly higher average number of hours for leisure activities than those male-headed households. Also, women in non-Cargill kuo households have a slightly higher number of hours available for leisure activities than those in Cargill kuo households.

The table also shows that 78 percent of women are satisfied with their available leisure time. It is interesting to note that, even though women in Wiawso recorded the least number of hours available for leisure activities, they recorded the highest satisfaction with their available leisure time. A slightly higher proportion of women in male-headed households (79.1%) than those in female-headed households (77.2%) claim to be satisfied with their available leisure time. A higher proportion of women in Cargill kuo households (79.7%) reported to be satisfied with their available leisure time than those in non-Cargill kuo households (68.9%) (See Table 3.23).

Table 3.34 Average number of hours available to women for leisure activities each day

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Average leisure hours						
All women	3.49	2.80	1.93	1.92	441	2.54
Women in male-headed households	3.52	3.35	3.26	3.78	110	2.48
Women in female-headed households	2.87	2.44	2.85	2.73	111	2.62
Women in Cargill kuo households	1.71	4.2	1.88	1.98	110	2.49
Women in non-Cargill kuo households	1.93	1.94	1.85	2.02	110	2.84
Proportion of women satisfied with their available leisure time						
All women	64.6	78.4	75.5	94.6	345	78.2
Women in male-headed households	65.6	75.8	80.0	95.1	193	79.1
Women in female-headed households	63.3	81.6	70.0	93.9	152	77.2

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	
Women in Cargill kuo households	67.7	80.7	77.0	93.6	303	79.7
Women in non-Cargill kuo households	47.1	66.7	60.0	100.0	42	68.9

3.6 PROJECT ATTRIBUTION

The survey sought to investigate the changes that have occurred in survey households because of community activities. To determine this, respondents were asked who within the household has participated in various community groups or activities in the past 4 years. As shown in table 3.35, only 11 percent of respondents have individually (self) participated in VSLA/Self Help Group/Communities Collective Groups. Thus, the majority (85%) of household members have not participated in VSLA/Self Help Group/Communities Collective Groups in the last 4 years. On community producer groups, the table shows that the majority (79%) of household members have not participated, with only 14 percent of respondents revealing that they themselves have participated in community producer groups. The results also indicate that a majority (94.8%) of household members have not engaged in any agriculture cooperative, with only 3 percent responding in the affirmative for self.

In terms of community market groups, a majority (96.8%) of household members have not participated, with only 14 percent of respondents revealing that they themselves have participated a community marketing group. On trainings regarding learning or using new agricultural practices, 32 percent of respondents revealed that they have individually (self) participated, with another 19 percent responding positively that they and their spouse jointly have participated. However, 44 percent of respondents stated that none of the household members have participated in trainings related to improved agricultural practices. On adult literacy trainings, only 2 percent of respondents revealed that they have participated in such activities by themselves. The results further indicate that only 3 percent of respondents are male motivators or part of a champion group; 9 percent indicated that they participate in community discussions about gender roles or responsibilities.

Table 3.35 Household members who have participated in community groups

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Participated in VSLA/Self Help Group/Communities Collective Group						
Self	4.6	20.7	4.6	14.6	49	11.1
Self and spouse jointly	1.8	0.9	0.9	2.7	7	1.6
Spouse	0.9	0.9	0.0	5.5	8	1.8
Self & other HH member	0.9	0.0	0.0	0.9	2	0.5
Other HH member	0.0	0.0	0.0	0.0	0	0.0
None of the HH members	91.8	77.5	94.6	76.4	375	85.0
Community Producer group						
Self	33.6	3.6	11.8	8.2	63	14.3
Self and spouse jointly	7.3	2.7	9.1	3.6	25	5.7
Spouse	0.9	0.9	0.0	0.0	2	0.5
Self & other HH member	0.9	0.0	0.0	0.0	1	0.2
Other HH member	0.0	0.9	0.0	0.0	1	0.2
None of the HH members	57.3	91.9	79.1	88.2	349	79.1
Agriculture cooperative						
Self	0.9	0.0	10.0	1.8	14	3.2
Self and spouse jointly	0.0	0.0	3.6	2.7	7	1.6
Spouse	0.0	0.0	0.0	0.0	0	0.0
Self & other HH member	1.8	0.0	0.0	0.0	2	0.5
Other HH member	0.0	0.0	0.0	0.0	0	0.0
None of the HH members	97.3	100.0	86.4	95.5	418	94.8
Community Marketing group						
Self	0.9	1.8	0.0	4.6	8	1.8

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Self and spouse jointly	1.8	0.9	0.0	0.0	1	0.9
Spouse	0.0	0.9	0.0	0.0	1	0.2
Self & other HH member	0.0	0.0	0.0	0.9	1	0.2
Other HH member	0.0	0.0	0.0	0.0	0	0.0
None of the HH members	97.3	96.4	99.1	94.6	427	96.8
Learning/using new agriculture practices						
Self	38.2	10.8	30.0	49.1	141	32.0
Self and spouse jointly	14.6	13.5	23.6	24.6	84	19.1
Spouse	4.6	0.9	0.9	1.8	9	2.0
Self & other HH member	1.8	0.0	0.0	6.4	9	2.0
Other HH member	0.0	0.0	0.0	0.0	0	0.0
None of the HH members	40.9	74.8	45.5	18.2	198	44.9
Adult literacy trainings						
Self	3.6	1.8	0.0	2.7	9	2.0
Self and spouse jointly	0.9	0.9	0.9	0.0	3	0.7
Spouse	1.8	0.0	0.0	0.0	2	0.5
Self & other HH member	0.0	0.0	0.0	0.0	0	0.0
Other HH member	0.0	0.0	0.0	0.0	0	0.0
None of the HH members	93.6	97.3	99.1	97.3	427	96.8
Male motivator/ champion group						
Self	0.9	3.6	0.0	10.9	17	3.9
Self and spouse jointly	0.0	0.0	1.8	1.8	4	0.9
Spouse	0.0	0.0	0.0	1.8	2	0.5
Self & other HH member	0.0	0.0	0.0	0.9	1	0.2
Other HH member	0.0	0.0	0.0	0.0	0	0.0
None of the HH members	99.1	96.4	98.2	84.6	417	95.6
Community discussions about gender roles/ responsibilities						
Self	25.5	5.4	0.9	6.4	42	9.5
Self and spouse jointly	12.7	3.6	3.6	0.9	23	5.2
Spouse	0.9	0.9	0.9	0.0	3	0.7
Self & other HH member	0.0	0.0	0.0	0.0	0	0.0
Other HH member	0.0	0.0	0.0	0.0	0	0.0
None of the HH members	60.9	90.1	94.6	92.7	373	84.6

As shown in Table 3.36, about 36 percent of households claim that participating in community groups has made them better off than 4 years ago. Close to a quarter (23.6%) of households revealed that participating in community groups has made them somewhat better off than 4 years ago.

Table 3.36 Impact of participating in community groups

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Worse off than 4 years ago	0.0	0.9	0.0	0.0	1	0.2
Same as 4 years ago	10.0	3.6	2.7	10.0	29	6.6
Somewhat better off than 4 years ago	23.6	16.2	26.4	28.2	104	23.6
Better off than 4 years ago	41.8	26.1	26.4	50.0	159	36.1

Investigating how participation has made households better off, the results from Table 3.37 show that most households are better off due to improved knowledge on nutrition (42.2%), improved crop yields (39.9%), increased agricultural income (28.8%), and improved knowledge of agricultural practices (24%). A similar trend was observed across districts.

Table 3.37 Reported household improvements as a result of community group participation

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Improved knowledge in nutrition	33.6	55.9	53.6	25.5	186	42.2
Improved crop yields	48.2	11.7	39.1	60.1	176	39.9
Increased agricultural income	30.9	14.4	17.3	52.7	127	28.8
Improved knowledge of agricultural practices	40	9	11.8	35.5	106	24
Improved access to agricultural services/inputs	39.1	12.6	9.1	9.1	77	17.5
Reduced exposure to risk	15.5	14.4	10	7.3	52	11.8
Improved communication between men and women	33.6	5.4	1.8	1.8	47	10.7
Improved attitudes toward gender equality	30	4.5	1.8	2.7	43	9.8
Improved participation in HH decision making	25.5	4.5	5.5	2.7	42	9.5
Improved participation in community groups or activities	23.6	7.2	2.7	1.8	39	8.8
Improved HH savings	7.3	9	0	16.4	36	8.2
Improved HH chores, help from men in the HH	16.4	2.7	0.9	1.8	24	5.4
Reduction in child labour	5.5	2.7	4.6	1.8	16	3.6
Improved access to credit	3.6	7.2	1.8	0.9	15	3.4
Increased non-farm income	1.8	0.9	0	5.5	9	2
Other	0	1.8	0	0	2	0.5

3.7 CHILD SECTION

3.7.1.1 Socio demographic characteristics of children interviewed

Table 3.38 presents data on distribution of children (5-17 years) in households by age and sex. Out of the 955 children surveyed, boys constitute 51 percent while girls constitute 49 percent. The results also show that that majority (62.2%) of children in households ranges from 5 to 12 years, followed by 15 to 17 years (33.3%) and 13 to 14 years (15.5%).

Table 3.38 Distribution of children (5-17 years) in households by age, sex and districts

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Overall	117	229	259	290	955	100.0
Boy	56.5	48.0	51.4	50.0	488	51.1
Girl	43.5	52.2	48.7	50.0	467	48.9
5-12 years	65.0	63.3	61.4	60.3	594	62.2
Boy	66.0	63.6	63.2	64.1	313	64.1
Girl	63.6	63.0	59.5	56.6	281	60.6
13-14 years	14.1	14.4	17.4	15.5	148	15.5
Boy	16.0	13.6	17.3	16.6	81	16.6
Girl	11.7	15.1	17.5	12.4	67	14.6
15-17 years	20.9	22.3	21.4	24.1	213	33.3
Boy	18.0	22.7	19.6	17.2	94	19.5
Girl	24.7	21.9	23.0	31.0	119	25.48

3.7.1.2 Children (5-17 years) currently enrolled in school

Children's education is a critical piece of achieving universal education, as stipulated in Ghana's 1992 constitution under the FCUBE programme. Decisions about the education of children are taken at the household level based on relative cost and benefits, resource availability, and other cultural and social characteristics. When children are enrolled in full education, the use of their time is geared toward studying, and therefore, they are less likely to be available for other activities. It is with this in mind that this section discusses the education of children within the child labour age bracket (5-17 years). The discussion centers on issues including school enrolment, level of education attainment, and literacy level of children. Table 3.39

presents results on the proportion of children currently enrolled in school. The results show that upwards of 96 percent of children are currently attending school, with no significant variance between boys and girls. Across age groups, all (100%) children in survey districts aged 5 to 12 years reported to be currently attending school, as compared to 97 percent of those aged 13 to 14 years and 86 percent of children aged 15 to 17 years.

Table 3.39 Proportion of children currently enrolled in school

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Overall	90.9	97.8	98.1	95.4	908	96.6
Boy	95.0	98.2	97.7	96.4	465	96.9
Girl	94.8	97.4	98.4	94.3	443	96.3
5-12 years	100	100	100	100	582	100.0
Boy	100	100	100	100	307	100.0
Girl	100	100	100	100	275	100.0
13-14 years	96.0	100	95.6	97.7	143	97.3
Boy	93.8	100.0	95.7	100.0	78	97.5
Girl	100.0	100.0	95.5	94.4	65	97.0
15-17 years	78.4	90.0	94.6	82.6	183	86.7
Boy	77.8	91.7	92.3	80.0	80	86.0
Girl	79.0	88.5	96.6	84.1	103	87.3

Table 3.40 shows educational attainment of children interviewed. The results show that a majority (70.2%) of children have attained some primary education. The proportion of boys (73.5%) that have attained some primary education is higher than girls (66.7%). The table shows that about one-fifth (21.2%) of children interviewed have attained some secondary level of education.

Table 3.40 Percentage distribution of children interviewed by highest level of educational attainment (boy=B, girl=G)

District	Anhwiaso		Asawinso		Awaso		Wiawso		Overall			
	B (%)	G (%)	B (%)	G (%)	B (%)	G (%)	B (%)	G (%)	B (%)	G (%)	Count (N)	Total (%)
Some primary	72.0	66.2	70.6	61.5	72.7	68.0	77.7	70.2	73.5	66.7	660	70.2
Completed primary	6.0	3.9	7.3	7.7	3.8	8.0	3.6	6.4	5.0	6.7	55	5.9
Some secondary	21.0	29.9	18.4	27.4	21.2	22.4	15.8	17.7	19.0	23.5	199	21.2
Completed secondary	1.0	0.0	3.7	3.4	0.0	0.8	2.2	5.0	1.7	2.6	20	2.1
Some higher Education	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.2	0.2	2	0.2
No Response	0.0	0.0	0.0	0.0	2.3	0.8	0.0	0.0	0.6	0.2	4	0.4

Table 3.41 shows that majority of children interviewed are literate. 71 percent of children can perform simple mathematic calculations, with a slightly higher proportion of boys than girls. A high proportion of children in Anhwiaso (86.4%) can perform simple calculations, followed by Wiawso (79.7%) and Asawinso (75.6%). Awaso recorded the lowest proportion of children who can perform simple calculations. The table also shows that 60 percent of children can write a short, simple statement in English (or any other language) with a slight difference between boys (59.4%) and girls (62.3%). Across districts, the results indicate that children in Wiawso (72.8%) recorded the highest proportion of those who can write a short simple statement; the lowest proportion was recorded in Awaso (51%). More than half (57%) of children can read a short, simple statement in English or any other language with a slight difference between boys (55.9%) and girls (58%). Across districts, children in Wiawso (63.1%) recorded the highest proportion of those who can read a short simple statement, and the lowest proportion was recorded in Awaso (51%).

Table 3.41 Literacy level of children interviewed in households

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Can perform simple calculations	86.4	75.6	50.2	79.7	687	71.9
Boy	90.0	79.1	49.6	80.0	328	73.6
Girl	81.8	72.3	50.8	79.3	328	70.2
Can write a short simple statement	57.6	59.4	51.0	72.8	581	60.8
Boy	58.0	61.8	48.1	69.0	290	59.4
Girl	57.1	57.1	54.0	76.6	291	62.3
Can read a short simple statement	52.0	59.4	51.4	63.1	544	57.0
Boy	53.0	59.1	52.6	58.6	273	55.9
Girl	50.7	59.7	50.0	67.6	271	58.0

The survey sought to determine the reasons why children missed school days in the 12 months prior to the study. As depicted in table 3.42, the main reason children cited for missing school days was illness (56.5%) with the highest recorded in Anhwiaso (67.8%), followed by Awaso (60.6%), Asawinso (55.9%) and Wiawso (46.6%). In the Asawinso district, about 8 percent of the children were not in school because they were injured.

Table 3.42 Reasons why children missed school days

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
I was ill	67.8	55.9	60.6	46.6	540	56.5
Other reasons	3.4	8.3	8.1	5.2	61	6.4
I was injured	6.8	8.3	2.7	1.0	41	4.3
I had to do farm work	3.4	3.1	3.1	2.8	29	3.0
I had to travel	1.7	3.1	1.2	4.5	26	2.7
The weather conditions were very bad	4.0	2.2	1.9	2.8	25	2.6
I was not interested in school	4.0	0.4	2.3	2.1	20	2.1
My family did not allow me to go to school	1.1	0.4	2.7	0.0	10	1.1
I had to help at home with household chores	2.3	0.0	1.2	0.3	8	0.8
School is too far	0.6	0.9	0.4	1.4	8	0.8
I was not very good in my studies	0.6	0.4	0.4	0.3	4	0.4
I wanted to learn a job/skill set instead	0.0	0.0	0.4	0.3	2	0.2
I worked for pay	0.0	0.4	0.4	0.0	2	0.2
An emergency happened in my family where I was needed	1.1	0.0	0.0	0.0	2	0.2
Education was not valuable to me	0.0	0.4	0.0	0.0	1	0.1
My school is / was not safe	0.6	0.0	0.0	0.0	1	0.1
I am disabled	0.0	0.0	0.0	0.3	1	0.1
I had given birth	0.0	0.0	0.0	0.3	1	0.1

3.7.1 CHILDREN'S ACTIVITIES

The ILO Convention 138 (Minimum Age Convention, 1973) sets 15 years as the age below which children should not be engaged in any form of work. In 1998, Ghana enacted the Children's Act, which prohibits children from engaging in any work that is exploitative or hazardous to the child's health, education, or development. However, available research shows that children as young as five years old in Ghana engage in economic activities²¹.

²¹ Ghana Child Labour Survey, GSS, 2003

3.1.4.1 Children Engaged in Household Work

Children’s engagement in household work in their homes, in reasonable conditions, and under the supervision of adult household members is an integral part of family life and of growing up, and is therefore seen as something positive. However, in some cases, excessive household work can interfere with children’s education and other activities, negatively affecting children’s development. The survey asked children (aged 5-17 years) whether they have been involved in any household work for at least one hour in a week during the past 12 months. The results from Table 3.43 reveal that the majority (86.6%) of children are engaged in household work in PROSPER Ghana districts with a slight difference between boys (85%) and girls (88.2%). Across age groups, almost all (99.5%) children aged between 15 to 17 years are engaged in household work activities, followed by children aged 13 to 14 years (98.7%) and children aged 5 to 12 years (79%). The table further shows that most children in PROSPER districts are involved in cleaning utensils/house (59.9%), washing clothes (58.5%), and shopping for the household (36%). The survey observed that children mostly work for their mother (67.4%) and to some extent their father (37.1%). The results also show that about 36 percent of children engage in household work for themselves with children in Anhwiaso (55.9%) dominating the sample.

Table 3.43 Proportion of children engaged in household work

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Overall	81.4	83.8	95.8	83.8	827	86.6
Boy	81.0	81.8	95.5	80.7	415	85.0
Girl	81.8	85.7	96.0	86.9	412	88.2
5-12 years	71.3	76.6	93.1	73.1	469	79.0
Boy	71.2	74.3	92.9	69.9	242	77.3
Girl	71.4	78.7	93.3	76.8	227	80.8
13-14 years	100.0	93.9	100.0	100.0	146	98.7
Boy	100.0	86.7	100.0	100.0	79	97.5
Girl	100.0	100.0	100.0	100.0	67	100.0
15-17 years	100.0	98.0	100.0	100.0	212	99.5
Boy	100.0	100.0	100.0	100.0	94	100.0
Girl	100.0	100.0	100.0	100.0	94	100.0
Type of HH work children are engaged in at least 1-hour in a week in past 12 months						
Cleaning Utensils/house	48.6	59.4	64.9	62.8	572	59.9
Washing clothes	62.2	64.6	59.1	51.0	559	58.5
Other household tasks	66.1	39.3	64.1	32.4	467	48.9
Shopping for households etc.	49.7	48.5	44.0	10.7	344	36.0
Cooking	33.9	41.9	32.1	35.2	341	35.7
Caring for children	15.8	21.8	20.1	9.7	158	16.4
Repairing any household equipment	0.0	4.4	0.0	0.3	11	1.2
Individuals whom children worked for in past 12 months doing HH work						
My mother	62.7	63.3	82.6	60.0	644	67.4
My father	47.5	30.1	42.1	31.7	354	37.1
Myself	55.9	34.9	40.5	21.7	347	36.3
My relative	48.0	10.0	6.6	14.1	166	17.4
Nobody	18.1	14.9	3.1	12.8	111	11.6
Other	7.9	12.2	1.5	9.3	73	7.6
Don't know	0.0	0.0	1.5	2.8	12	1.3
A friend of my mother and father	0.0	0.0	0.0	1.7	5	0.5

Table 3.44 shows that children in project districts work an average of 1.88 hours a day on household work, with girls (2.03 hours/day) completing more hours of household work as compared to boys (1.75 hours/day). Across districts, children in Wiawso (2.14 hours/day) reported the highest average number of hours on household work, with children in Asawinso (1.68 hours/day) recording the lowest. Across age categories, children aged 15 to 17 years reported the most working hours (2.22 hours/day), followed by those between 13 to 14 years (2.08

hours/day), and children aged 12 years and below (1.66 hours/day). This finding suggests that as children age, their hours of household work increase.

Table 3.44 Average hours children work in household work

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall mean
Overall	1.84	1.68	1.87	2.14	1.88
Boy	1.67	1.61	1.70	2.00	1.75
Girl	2.05	1.74	2.05	2.26	2.03
5-12 years	1.65	1.45	1.58	1.94	1.66
Boy	1.55	1.42	1.61	1.97	1.64
Girl	1.78	1.47	1.55	1.92	1.68
13-14 years	2.00	1.82	2.33	2.18	2.08
Boy	1.88	1.93	1.96	2.00	1.94
Girl	2.22	1.79	2.79	2.44	2.31
15-17 years	2.16	2.10	2.14	2.46	2.22
Boy	1.78	1.84	1.70	2.08	1.85
Girl	2.53	2.36	2.54	2.67	2.53

3.7.2 CHILDREN'S ENGAGEMENT IN AGRICULTURAL ACTIVITIES

The survey assessed children's engagement in agricultural activities by asking children (5 to 17 years) whether they have participated in agricultural work for at least one hour per week over the last 12 months. As shown in Table 3.45, 63 percent of children are engaged in agricultural activities, with a higher proportion of boys (67%) than girls (60.6%). The survey also inquired as to who children work for regarding involvement in agriculture. Results indicate that most of these children work for their fathers (39.1%) and mothers (36.8%), and to a smaller extent, another relative (8.7%). A similar pattern was observed across districts.

Table 3.45 Proportion of children engaged in agricultural activities

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	Total
Overall	65.4	54.6	66.8	67.6	610	63.9
Boy	66.0	58.2	71.4	69.7	327	67.0
Girl	63.6	51.3	61.9	65.2	283	60.6
5-12 years	49.6	40.0	49.7	53.7	288	48.5
Boy	53.0	42.9	56.0	61.3	169	54.0
Girl	44.9	37.3	42.7	45.1	119	42.4
13-14 years	92.0	69.7	93.3	84.4	126	85.1
Boy	93.8	73.3	100.0	81.5	71	87.7
Girl	88.9	66.7	86.4	88.9	55	82.1
15-17 years	97.3	86.3	94.6	91.4	196	92.0
Boy	94.4	92.0	96.2	88.0	87	92.6
Girl	100.0	80.8	93.1	93.3	109	91.6
Individuals whom children worked for in past 12 months doing agricultural work						
My father	42.9	33.6	45.6	35.2	373	39.1
My mother	44.6	21.8	44.4	36.9	351	36.8
My relative	19.2	4.8	5.4	8.3	83	8.7
Other	10.7	9.2	3.1	6.9	68	7.1
Nobody	0.6	0.9	3.1	3.5	21	2.2
Myself	0.6	0.9	0.8	0.3	6	0.6
A friend of my mother and father	0.6	0.4	0.0	1.0	5	0.5
My friend	1.1	0.0	0.0	0.0	2	0.2
Don't know	0	0	0.3	0.3	2	0.2

The survey also assessed the types of agricultural activities children have carried out over the last 12 months. As shown in table 3.46, the highest agricultural activity in which children reported engagement was pesticide spraying (44%), followed by harvesting overhead cocoa pods, palm fruits, and oranges (30.3%). A similar trend is observed across districts.

Table 3.46 Agricultural activities carried out by children between 5 to 17 years

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall
Being present or working in the vicinity of farm during pesticide spraying	49.2	34.9	42.9	49.0	44.0
Harvesting overhead cocoa pods, palm fruits, orange or with harvesting hook	41.8	25.8	37.5	20.3	30.3
Working with a motorized mist blower, knapsack sprayer, and/or chainsaw	15.3	11.4	11.2	4.1	9.8
Grafting in citrus and rubber farming	6.8	9.2	20.9	2.4	9.8
Working with agrochemicals	11.3	3.5	16.6	0.0	7.4
Clearing tree stumps	11.3	3.1	0.0	4.8	4.3
Bush burning	0.6	0.4	6.6	0.0	2.0
Using machetes/long cutlasses for weeding;	0.6	1.3	4.6	0.0	1.7
Carrying heavy load beyond permissible carrying weight	2.3	3.5	1.2	0.0	1.6
Climbing trees higher than 3 meters to cut mistletoe with cutlass	1.7	0.4	0.4	0.0	0.5
Clearing of forest and/or felling of trees	0.0	0.0	1.5	0.0	0.4
Clearing tree stumps	11.3	3.1	0.0	4.8	4.3

Table 3.47 shows that, on average, children work for 11.26 hours per week in agriculture with boys (11.82) working for more hours than their female (10.58) counterparts. Across districts, children in Wiawso work the most hours (14.54), while children in Anhwiaso work the least amount of hours on average (7.33). Analysis by age group reveal that children aged 15 to 17 years work for an average of 12.75 hours in agriculture, followed by children aged 13 to 14 years (11.48) and those aged 5 to 12 years (10.02). This result suggests that as children grow older, they are more likely to work longer hours in agriculture.

Table 3.47 Average number of hours children work in agriculture in a week

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall mean
Overall	7.33	8.68	14.48	14.54	11.26
Boy	6.93	8.20	16.26	15.87	11.82
Girl	7.89	9.16	12.21	13.06	10.58
5-12 years	7.16	7.27	11.53	14.13	10.02
Boy	6.51	7.31	10.71	4.61	7.29
Girl	8.30	7.23	12.68	13.40	10.40
13-14 years	6.78	9.68	14.11	15.35	11.48
Boy	6.40	9.60	19.14	16.10	12.81
Girl	7.50	9.75	7.88	14.29	9.86
15-17 years	7.92	9.86	18.63	14.59	12.75
Boy	8.24	8.61	21.32	18.43	14.15
Girl	7.63	11.30	15.53	12.89	11.84

Table 3.48 reflects the various time periods in which children work in agriculture. As depicted in the table below, most children work on weekends (39.5%) followed by school holidays, when schools are not in session (28.4%). One-quarter (25.5%) of children reported that they work in agriculture in the morning (6am to 11am). In Ghana, public school starts at 8am and closes officially at 2pm. Private schools, however, have different

starting and closing times, with some closing as late as 4pm. The shift system has been cancelled, and as such, children attend school only in the morning.

Table 3.48 Time period children work in agriculture

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
On the weekends	54.2	40.2	42.1	27.6	377	39.5
During school holidays	29.9	14.1	36.7	31.0	271	28.4
In the morning (6am-11am)	45.8	10.9	50.6	2.1	243	25.5
Other periods	0.6	1.8	2.3	30.0	98	10.3
In the afternoon (12pm-6pm)	5.1	0.4	2.3	0.0	16	1.7
I usually don't do this kind of work	0.0	0.4	3.1	0.3	10	1.1
All day (6am- 6pm)	1.1	0.0	1.5	0.0	6	0.6
Don't know	1.1	0.9	0.4	0.0	5	0.5

3.7.3 CHILDREN ENGAGED IN COCOA ACTIVITIES

The survey also assessed the involvement of children in cocoa-farming activities. Data presented in table 3.49 indicates that 59 percent of children engaged in cocoa activities for at least one hour per week over the past 12 months. In terms of age, older children (aged 15-17 years) represented most children engaged in cocoa farming (88.3%). The proportion of children (59.6%) working in cocoa production reported in this study is higher than figures reported by the Tulane study of 2008/9 (46%) and 2013/14 (42%)²².

Table 3.49 Proportion of children engaged in cocoa activities

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Overall	58.2	56.8	59.1	63.1	569	59.6
Boy	62.0	60.0	67.7	65.5	313	64.1
Girl	53.3	53.8	50.0	60.7	256	55.8
5-12 years	38.3	42.1	43.4	48.0	258	43.4
Boy	45.5	44.3	52.4	54.8	156	49.8
Girl	28.6	40.0	33.3	40.2	102	36.3
13-14 years	92.0	78.8	82.2	82.2	123	83.1
Boy	93.8	80.0	91.3	77.8	69	85.2
Girl	88.9	77.8	72.7	88.9	54	80.6
15-17 years	97.3	84.3	85.5	88.6	188	88.3
Boy	94.4	92.0	96.2	92.0	88	93.6
Girl	100.0	76.9	75.9	86.7	100	84.0

Table 3.50 shows that, on average, children in project households work for 3.69 hours in cocoa activities per week. Across sex, both boys and girls work for a similar number of hours in cocoa activities. The number of hours children work in cocoa activities is higher in Wiawso (4.31) than all the other districts. In terms of age, older children (aged 15-17 years) work for a higher number of hours (3.87) in cocoa activities than children in younger age categories.

Table 3.50 Average number of hours children work in cocoa activities

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall Mean
Overall	3.40	3.76	3.27	4.31	3.69
Boy	3.30	3.81	3.40	4.40	3.73
Girl	3.56	3.71	3.13	4.22	3.66
5-12 years	3.26	3.51	3.12	4.52	3.60
Boy	3.07	3.41	2.88	4.54	3.48

²² Survey Research on Child Labour in West Africa Cocoa growing areas

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall Mean
Girl	3.64	3.60	3.56	4.48	3.82
13-14 years	3.39	4.00	3.00	4.11	3.63
Boy	3.33	3.67	3.52	4.43	3.74
Girl	3.50	4.31	2.31	3.69	3.45
15-17 years	3.58	3.98	3.75	4.16	3.87
Boy	3.65	4.39	4.00	4.09	4.03
Girl	3.53	3.47	3.42	4.21	3.66

Table 3.51 shows that most children in the four project districts work in cocoa activities when schools are not in session. Thus, children mostly work during school holidays (29.4%) and on the weekends (27.9%). However, close to one-fourth (23.2%) of children reported working in cocoa activities in the morning (6am to 11am) with children in Awaso (45.8%) and Anhwiaso (35%) constituting a greater portion of the sample (see table 3.46).

Table 3.51 Time period children work in cocoa activities

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
During school holidays	21.4	10.8	33.3	43.7	167	29.4
On the weekends	36.9	64.6	13.1	9.3	159	27.9
In the morning (6am-11am)	35.0	17.7	45.8	1.6	132	23.2
Other periods	1.0	1.5	2.6	44.8	89	15.6
I usually don't do this kind of work	1.0	2.3	3.3	0.0	9	1.6
In the afternoon (12pm-6pm)	3.9	0.0	0.7	0.0	5	0.9
Don't know	0.0	1.5	1.3	0.6	5	0.9
All day (6am- 6pm)	1.0	1.5	0.0	0.0	3	0.5
Late night (6pm-3am)	0.0	0.0	0.0	0.0	0	0.0

3.7.4 ESTIMATION OF CHILDREN ENGAGED IN CHILD LABOUR (CL)

According to ILO Convention numbers 138 and 182, child labour is a restricted category of children who are working legally. The global number of child laborers in these age groups (5 to 17 years) has dropped considerably from 215 million in 2008 (13.6%) to 168 million (10.6%) in 2012²³. Also reported by the ILO, in sub-Saharan Africa, 1 out of every 4 children aged 15-17 years is engaged in hazardous work. In Ghana, estimates from the Ghana Statistical Service indicate that more than 200,000 children are involved in hazardous child labour.

In this survey, child labour refers to any type of work that is mentally, physically, spiritually, socially and/or morally harmful to children and interferes with children's education by denying them an opportunity to attend

Box 1. PROSPER Project Definition of Child Labour

- a. Less than 12 years and involved in economic activity or
- b. Aged 12 to 14 years and involved in economic activities that are not defined as light work
- c. Less than 13 years of age and worked more than 1 hour per week
- d. Between 13 and 14 years old and engaged in work other than light work for more than 1 hour per week (per definition of children in employment above)
- e. Between 13 and 14 years old and worked more than 14 hours per week
- f. Any age, Hazardous Child Labour

Note: Definition from Ghana Child Labour Monitoring (GCLM)

²³ <http://www.ilo.org/ippecinfo/product/download.do?type=document&id=23015>

school, forcing them to leave school prematurely, or limiting their capacity to benefit from instruction. It also refers to any work that, when performed by the child, unduly reduces their present welfare or their future income earning capabilities. This definition applies to both male and female children. A child is engaged in child labour if she or he meets any one of the following criteria outlined in Box 1.

Table 3.52 presents results of children involved in child labour activity within the four project districts. The results show that a majority (61.9%) of children are engaged in child labour activities, with a higher proportion of boys (65.4%) than girls (58.2%). The rate of children involved in child labour in the project districts is below the national average of 66.8% recorded during the 2013/14 study conducted by Tulane University. The results also show that older children (13-17 years) are more involved in child labour compared to younger children (5-12 years). Across districts, the results indicate that more children in Wiawso (66.6%) are involved in child labour, followed closely by Anhwiaso (65%). Children in the Asawinso (55.9%) district, recorded the lowest engagement in child labour activity.

Table 3.52 Children engaged in child labour

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Children aged 5-17 engaged in CL (Overall)	65.0	55.9	59.9	66.6	591	61.9
Overall Boys	66.0	58.2	64.7	71.0	319	65.4
Overall Girls	63.6	53.8	54.8	62.1	272	58.2
Aged 5-12	47.8	38.6	39.6	49.1	260	43.8
Boys	51.5	38.6	45.2	58.1	153	48.9
Girls	42.9	38.7	33.3	39.0	107	38.1
Aged 13-14	96.0	97.0	95.6	97.8	143	96.6
Boys	93.8	93.3	100.0	96.3	78	96.3
Girls	100.0	100.0	90.9	100.0	65	97.0
Aged 15-17	97.3	78.4	89.1	90.0	188	88.3
Boys	94.4	92.0	96.0	92.0	88	93.6
Girls	100.0	65.4	82.8	88.9	100	84.0

3.7.5 ESTIMATION OF CHILDREN ENGAGED IN HAZARDOUS CHILD LABOUR (HCL)

Hazardous Child Labour, a subset of the Worst Forms of Child Labour, refers to employment in industries and occupations designated as hazardous, or, working for long hours and/or at night in industries and occupations not designated as hazardous. Per ILO Recommendation 190, work that possibly falls under the definition of HCL is:

- work which exposes children to physical, psychological, or sexual abuse;
- work underground, under water, at dangerous heights or in confined spaces;
- work with dangerous machinery, equipment, and tools, or work which involves the manual handling or transport of heavy loads;
- work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health; work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.

Section 58 (1) of the Labour Act stipulates that “a young person shall not be engaged in any type of employment or work likely to expose the person to physical or moral hazard.” Section 91 of the Children’s Act of 1998 stipulates that hazardous employment is prohibited for all children under 18 years of age and Section 87 forbids the engagement of a child in “exploitative child labour” that “deprives the child of its health, education or development” under all circumstances. As such, it supplements ILO Convention 182 and Recommendation 190. Ghana’s Hazardous Child Labour Framework for the cocoa sector, published by the Ministry of Manpower, Youth and Employment in June 2008, is specific to the cocoa sector; the 2012 Hazardous Child Labour Framework adds to the hazardous tasks specific to cocoa to include other hazardous tasks in all types of crop agriculture. In this survey, hazardous child labour is defined as a child, 5-17 years engaged in any of the following work activities on a cocoa farm or in other types of crop agriculture for at least one hour per week over the past 12 months (Box 2).

Box 2. Definition of Hazardous Child Labor (HCL)

- a) work which exposes children to physical, psychological, or any form of abuse;
- b) work underground, under water, at dangerous heights or in confined spaces;
- c) work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;
- d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health; work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.
- e) work which uses agrochemicals, burn bushes, or work for long hours

Table 3.53 presents results of the proportion of children engaged in hazardous child labour in PROSPER Ghana districts. The results reveal that 54 percent of children are involved in activities in the agricultural sector classified as hazardous to children. Across gender, the results reveal that boys are more involved in hazardous child labour (59.4%) than girls (48.4%). The results show that a majority (88.3%) of children engaged in hazardous child labour are within 15 to 17 years (See table 3.49). The prevalence rate of hazardous child labour in Anhwiaso (59.9%) is highest across the four districts, whereas children in Asawinso recorded the least involvement in hazardous child labour (42.8%).

Table 3.53 Children engaged in Hazardous Child Labour (HCL)

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Children aged 5-17 engaged in HCL (Overall)	59.9	42.8	55.6	57.9	519	54.0
Overall Boys	60.0	49.1	62.4	64.1	290	59.4
Overall Girls	59.7	37.0	48.4	51.7	226	48.4
Aged 5-12	41.7	22.8	34.6	38.9	204	34.3
Boys	43.9	28.6	41.7	52.7	133	42.5
Girls	38.8	17.3	26.7	23.2	71	25.3
Aged 13-14	88.0	75.8	88.9	82.2	124	83.8
Boys	87.5	73.3	100.0	77.8	69	85.2
Girls	88.9	77.8	77.3	88.9	55	82.1
Aged 15-17	97.3	78.4	89.1	90.0	188	88.3
Boys	94.4	92.0	96.2	92.0	88	93.6
Girls	100.0	65.4	82.8	88.9	100	84.0

3.7.6 CHILDREN AT HIGH RISK OF CHILD LABOUR (CAHR)

Children at high risk of involvement in child labour (CAHR) refers to children not currently in child labour, but who experience or are exposed to a set of conditions or living conditions that make them more likely to be working in child labour or those living in vulnerable households in proximity to economic activities prone to employing children. The survey sought to examine children at high risk of child labour in PROSPER districts. As shown in Table 3.54, 197 children representing over 20 percent of children interviewed in sampled communities are at high risk of child labour with a higher proportion of girls (23.6%) than boys (17.8%). The results also show that a higher proportion of children are at risk of child labour in Awaso (28.6%) followed by Wiawso (22.4%) than those in Asawinso and Anhwiaso (14.1%). Across age groups, adolescents (5 to 12 years) are more likely to be at high risk of child labour than children in other age categories.

Table 3.54 Children at high risk of child labor

District	Anhwiaso	Asawinso	Awaso	Wiawso	Overall	
					Count	%
Children aged 5-17 engaged in CAHR (Overall)	14.1	14.1	28.6	22.4	197	20.6
Overall Boys	14.0	13.6	23.3	18.6	87	17.8
Overall Girls	14.3	15.1	34.1	26.2	110	23.6
Aged 5-12	20.9	20.7	43.4	34.3	183	30.8
Boys	19.7	20.0	35.7	28.0	83	26.5
Girls	22.5	21.3	52.0	41.5	100	35.6
Aged 13-14	4.0	0.0	0.0	2.2	2	1.4
Boys	6.3	0.0	0.0	3.7	2	2.5
Girls	0.0	0.0	0.0	0.0	0	0.0
Aged 15-17	0.0	5.9	9.1	5.7	12	5.6
Boys	0.0	4.0	3.9	0.0	2	2.1
Girls	0.0	7.7	13.8	8.9	10	8.4

3.8 SUMMARY OF BASELINE INDICATORS

PROSPER PROGRAM GOAL (GLOBAL): Increased gender equitable food security and resilience to climate change

INDICATORS	BASELINE
Months of adequate household food provisioning (MAHFP)	Male-headed households = 9.71 Female-headed households= 9.54 Overall= 9.68
Poverty likelihood (based on the PPI index)	Average PPI index score = 41.37 Male-headed households = 24.4% Female-headed households= 27.3% Overall= 24.8%
Mean asset index	Male-headed households = 74.91 Female-headed households= 70.34 Overall= 74.28
Average annual household income (GH¢)	Male-headed households = 7,308.30 (USD\$ 1,700) Female-headed households= 3,622.77 (USD\$ 843) Overall= 6,798.51 (USD\$ 1,581)
Women mobility index	Women = 16.6
% of women who (report they) are able to equally participate in household financial decision-making	Women = 72.6%
% of households with three or more different income sources (from agriculture and/or non-farm income)	All households = 54.4%
Prevalence of population with moderate or severe food insecurity, based on the Food Insecurity Experience Scale (FIES)	Male-headed households = 83.2% Female-headed households = 90.1%

	Overall= 84.1%
Household Dietary Diversity Score (HDDS) Women's Dietary Diversity Score (WDDS) % of women who consume at least five out of ten defined food groups	HDDS = 5.03 WDDS = 5.12 % of women consuming 5 or more food groups = 48.6%
% of impact population who usually ate fruits and vegetables three or more times per day during the last 30 days	Men = 50.2% Women= 50.7% Overall= 50.3%
% of households accessing targeted micro nutrition-rich foods through homestead, community, or school gardens	Male-headed households = 71.8% Female-headed households= 65.6% Overall= 71.0%
% of impact population who know specific facts about nutrition and healthy life styles related to a balanced diet and how to ensure safe consumption of food and water	All households = 14.1%
Number of children participating in hazardous activities, defined as child labour as per ILO138, 182	<ul style="list-style-type: none"> ▪ Boys in Child labour = 319 (65.4%) ▪ Girls in Child labour = 272 (58.2%) ▪ Overall Child labour = 591 (61.9%) ▪ Boys in hazardous child labour = 290 (59.4%) ▪ Girls in hazardous child labour = 226 (48.4%) ▪ Overall hazardous child labour = 519 (54%)
Primary School Enrolment	Proportion of children currently enrolled in school = 908 (96.6%)

4. Conclusion and Recommendations

4.1 CONCLUSION

The purpose of the study was to provide an information base against which to monitor and assess the PROSPER Ghana project's progress and effectiveness during implementation and through project completion. This survey has investigated and provided detailed findings and analysis on the status of key project indicators on food and security, nutrition knowledge and behaviour, women's participation, and child protection to allow for comparison before and after program interventions.

The baseline findings indicate that the PROSPER objectives are relevant to the targeted communities and population. There appears to be ample opportunity to improve the income of households given that their main sources of income are directed mostly toward agricultural activities. There is also a need to enhance the income of women, especially given that female-headed households make about half as much income as their male-headed counterparts. This is also a reflection of the PPI poverty rate among female-headed households compared with male-headed households. Improvement in the income of households can be done by introducing post-harvest processing opportunities. However, such increases in income will not accrue to women directly until and unless they have greater mobility and control over the income generated from such activities, particularly from crop sales given that they play a key role in the production process. Such measures to empower women will improve women's abilities to contribute to increased household food security and resilience.

Respondents in survey districts possess some level of nutritional knowledge. Only 37 percent of respondents know why it is bad to have too many sweets, while 31 percent know what leads to overweight. While a majority (62.8%) of respondents know the number of times fruits and vegetables should be eaten, very few of them fully understand its importance. Only 12 percent of respondents know that Vitamin A in foods like papaya, mangos, spinach, and carrots is important because it helps us to see better, helps our skin to stay healthy, and helps in fighting infections. Less than half (42.9%) of respondents know that the cause of anaemia in the human body is a lack of iron in foods. About 40 percent of respondents stated that they do not know the cause of anaemia and only 20 percent know when water is safe for drinking.

The study further revealed that every 6 out of 10 children in the project communities are involved in child labor. It is also observed that children are continuously exposed to these activities as they grow older; this is evidenced by the fact that while children 5 to 12 years may work an average of 10 hours a week in agriculture, older children work an average of 13 hours. Other hazardous dangers children are exposed to include "being present where pesticide spraying is taking place" (44%). Also, despite the fact that over half the children indicated that they work only on weekends and on school holidays, about a quarter also reported working on the farm from 6am to 11am, which ultimately has adverse effects on their education. There is a need therefore, as is a key objective of the PROSPER Ghana project, to educate parents on the dangers of involving children in hazardous activities.

As evidenced in the report, households linked to Cargill kuos are significantly better off than households not linked to Cargill kuos. This further suggests that the objectives of the PROSPER project have a high likelihood of improving the livelihood and welfare of households in the project communities. While improved knowledge, skills, and access to productive capital and resources are a step in a positive path, they will not be sufficient for women and households to improve sustainably until increased focus is placed on continuous training, education, and awareness creation.

4.2 RECOMMENDATIONS

- CARE should sensitize households on the negative effect of involvement of children in activities such as household and agricultural work in project communities. These work activities are likely to interfere with children's education, health, and wellbeing.
- Considering the high prevalence of child labour, the project should consider intensifying community engagement and sensitization activities, including the formation of Child Right/Protection Clubs (CPCs) to sensitize both parents/caregivers and children on the negative effect of child labour and hazardous child labour on children's education, wellbeing, and prospects.
- The project should also ensure learner-centred and gender-responsive vocational training programs to stimulate the interests of older children above the minimum working age to pursue the identified vocation as a career. Vocational training should therefore create a welcoming environment for older child laborers to foster learning, accommodate different learning styles, and motivate students to accept responsibility for skills training.
- The project should provide training in other alternative sources of income-generating activities as a key strategy for making households more resilient, particularly because across districts, household annual income is dominated by farm income. These additional income-generating activities would serve as a cushion to support households, especially during the lean season.
- The project should deepen efforts on nutritional educational activities in project areas to increase women's knowledge and improve their nutrition behaviour.