REPUBLIC OF LIBERIA

PRODUCTION ESTIMATES OF MAJOR CROPS AND ANIMALS – 2008

NOVEMBER 2009
MONROVIA, LIBERIA

PRODUCTION ESTIMATES OF MAJOR CROPS AND ANIMALS – 2008

Ministry of Agriculture (MOA)
Liberia Institute of Statistics & Geo-information Services (LISGIS)
United Nations Food and Agriculture Organization (FAO)
Catholic Relief Services (CRS)
Samaritan Purse

TABLE OF CONTENTS

Foreword	i
Acknowledgement	ii
Fact Sheet	iii
List of Tables and Figures	iv
Acronyms	v
Executive Summary	vi
Introduction	vii
Part 1: **Survey Objectives and Methodology**	1
1.1. Objectives	1
1.2. Terms and Definition	1
1.3. Methodology	2
Part 2: **National Estimates**	4
2.1. Rice and Cassava Production	4
2.2. Livestock and Poultry Production	5
2.3. Agricultural Households	6
2.4. Heads of Agricultural Households	7
2.5. Members of Agricultural Households	7
2.6. Rice Balance Sheet	9
Part 3: **County and Regional Estimates**	11
3.1. Introduction	11
3.2. Rice Production	11
3.3. Cassava Production	13
3.4. Rice and Cassava Producing Households	15
3.5. Livestock and Poultry Rearing Households	16
3.6. Heads of Livestock	19
3.7. Household Raising Poultry and Number of Heads	20
3.8. Heads of Agricultural Households	22
3.9. Members of Agricultural Households	25

2008 CROP SURVEY

FOREWORD

In any developing country agriculture plays a very important role in the economic life of her people. Liberia is no exception. The bulk of the population in the country derives its means and sources of livelihood from agricultural activities. The nation depends on agricultural production for the accomplishment of food security. Because of the unique position agriculture holds in the life of the country, its promotion has been one of the primary concerns of the Government. Now, for success in promoting agriculture, planning is absolutely necessary. No planning is meaningful and useful unless supported or backed by statistical information.

Planning for agricultural development usually requires a wide range of statistical data covering the different sectors of the economy relevant to agricultural productivity. Thus, regular collection of agricultural data is significant. Since the establishment of the Division of Statistics in the Ministry of Agriculture, there have been series of Annual Agricultural Surveys for major crops up to 1989. The Division had provided reliable agricultural statistics that satisfied demands for data. Unfortunately, no such surveys have been conducted up to 2000 because of the civil war and its consequences.

With the relative peace in 2001, the Government decided to rehabilitate the Agricultural Statistical System. Under the Technical Cooperation Program (TCP) of the United Nations Food and Agriculture Organization (UNFAO), appropriate methodologies for agricultural annual surveys were developed and a baseline survey was conducted in 2001 aimed at rehabilitating the agricultural surveys. As a consequence of the 2003 civil crisis, the established system was collapsed.

Considering the ardent need for agricultural statistics, efforts were made to reactivate the system of agricultural data collection. This report presents the results of the 2008 crop survey, the 16^{th} of the series and the first since the democratically elected Government of Unity Party, headed by Her Excellency Madam Ellen Johnson-Sirleaf.

Dr. Florence A. Chenoweth
MINISTER OF AGRICULTURE

ACKNOWLEDGEMENT

The Ministry of Agriculture (MOA) through its Division of Statistics conducted 2008/2009 Annual Production Survey with the primary objective of providing relevant statistics for agricultural development planning. A nation-wide survey of this type requires a great deal of efforts, cooperation, a high level of commitment and technical as well as administrative support.

Many individuals have made some contributions from the planning stage, data collection and towards publication of the results. Accordingly, we wish to sincerely extend our thanks and appreciations to those who have contributed in making the 2008 Agricultural survey a very successful one. We are particularly grateful to the Former Minister of Agriculture, Dr. J. Chris Toe and Mr. Joseph Boiwu, Assistant FAO Representative for Program who exerted some efforts in mobilizing resources, which enabled the survey team to accomplish the first phase of the survey. We are very fortunate to have worked with people who recognized the usefulness of statistics. Thus, we owe a great deal to Dr. Florence A. Chenoweth, the current Minister of Agriculture and Hon. James B. Logan, Deputy Minister for Planning and Development for their administrative and moral support.

Special mention is due to Dr. T. Edward Liberty, Director-General for Liberia Institute of Statistics and Geo-Information Services (LISGIS) for his technical advice and administrative guidance during the data collection and summarization as well as analytical process of the survey results. Special mention is made of Dr. Winfred Hammond, FAO Representative in Liberia for his consistent commitment and support to the activities of the survey. Gratitude is expressed to CRS and Samaritan Purse for their logistical support and the provision of field personnel.

We are indebted to the Local Government Authorities who assisted our field personnel in the form of interpreting, logging, escorting and introducing them to the farmers. Principal contributors were the selected farmers who have cooperated, opened to dialogue about their agricultural as well as basic socio-economic activities. They deserve credit. Gratitude is expressed to the field personnel of the Ministry of Agriculture (MOA) whose dedication and sacrifices have made the field activities of the 2008 Agricultural Survey possible despite of several constraints. So many people have contributed to this report, and it is difficult and impossible to thank them individually. However, we extend thanks and appreciation to those individuals and Institutions, time does not permit us to mention one by one.

Mr. Reginald W. Fannoh
DIRECTOR, STATISTICS DIVISION
MINISTRY OF AGRICULTURE

Fact Sheet

DESCRIPTION	BOTH SEXES		MALE	FEMALE	PERCENT	
	Number	Percent			Male	Female
1. Agricultural Population	1,567,650	100.0	785,400	782,250	50.1	49.9
Age Category						
< 10 Years	442,080	28.2	216,010	226,070	48.9	51.1
10 - 19 Years	402,880	25.7	212,790	190,090	52.8	47.2
20 - 39 Years	468,730	29.9	217,630	251,100	46.4	53.6
40 - 59 Years	184,980	11.8	100,500	84,480	54.3	45.7
60 Years +	68,980	4.4	38,470	30,510	55.8	44.2
2. Heads of Agric. Households	**274,070**	100.0	**197,580**	**76,490**	72.1	27.9
Age Category						
< 20 Years	6,850	2.5	4,740	2,110	69.2	30.8
20 - 39 Years	117,850	43.0	87,720	30,130	74.4	25.6
40 - 59 Years	106,890	39.0	77,060	29,830	72.1	27.9
60 Years & over	42,480	15.5	28,060	14,420	66.1	33.9
3.Primary occupation, 10 yrs+	**1,125,570**	100.0	**569,390**	**556,180**	50.6	49.4
Farmer	566,160	50.3	270,460	295,700	47.8	52.2
Farmhand	128,320	11.4	55,230	73,090	43.0	57.0
Fishing	2,250	0.2	1,140	1,110	50.7	49.3
Agro-processing	2,250	0.2	1,140	1,110	50.7	49.3
Trader	24,760	2.2	7,970	16,790	32.2	67.8
Artisan	7,880	0.7	5,690	2,190	72.2	27.8
Civil Servant	22,510	2.0	15,940	6,570	70.8	29.2
Unskilled Labor	5,630	0.5	2,850	2,780	50.6	49.4
Student	365,810	32.5	208,970	156,840	57.1	42.9

	Number	% Agric Hh
4. Agricultural Households	274,070	
Rice producing households	231,370	84.4
Cassava producing households	117,730	43.0
Livestock rearing households	65,470	23.9
Poultry raising households	117,120	42.7
	Number	**% Tot. Area**
5. Area Under Food Crops	280,030	100.0
Rice Area in Hectares	222,670	79.5
Cassava Area in Hectares	57,360	20.5
	Metr tons	**% Tot. Prod**
6. Food Crop Production	775,290	100.0
Paddy rice	279,000	36.0
Fresh cassava	496,290	64.0
	Number	**% Tot. Head**
7. Livestock and Poultry	1,063,600	100.0
Heads of Livestock	234,920	22.1
Heads of Poultry	828,680	77.9

LIST OF TABLES AND FIGURES

Table 2.1: Rice and Cassava Production

Table 2.2: Livestock and Poultry Production

Table 2.3: Food Crops and Animal Farming Households

Table 2.4: Heads of Agricultural Households by Age and Sex

Table 2.5: Members of Agricultural Households by Age and Sex

Table 2.6: Members of Agric. Households 10 years and over by Primary Occupation and Sex

Table 2.7: Cereal (Rice) Balance Sheet

Table 3.1: Area under Rice Cultivation, Yields per Hectare and Production by County

Table 3.2: Area under Cassava Cultivation, Yields per Hectare and Production by County

Table 3.3: Rice and Cassava Producing Households by County

Table 3.4: Livestock and Poultry Rearing Households by County

Table 3.5a&b: Households Rearing Livestock by Type and County

Table 3.6: Heads of Livestock by Type and County

Table 3.7: Households Raising Poultry and Number of Heads by County

Table 3.8: Rural and Agricultural Households by County

Table 3.9: Heads of Agricultural Households by Sex and by County

Table 3.10: Members of Agricultural Households by Sex and by County

Figure 2.1: Percent Distribution of Household Members 10 Yrs+ by Primary Occupation and Sex

Acronyms

AH	Agricultural Household
AP	Agricultural Population
HoH	Heads of Household
HRF	Holder's Rice Farm
EA	Enumeration Area
FAO	Food and Agriculture Organization
LH	Livestock Household
LISGIS	Liberia Institute of Statistics and Geo-Information Services
MOA	Ministry of Agriculture
PH	Poultry Holder
PSU	Primary Sampling Unit
RH	Rice Household
SSU	Secondary Sampling Unit
TCP	Technical Cooperation Program
UNFAO	United Nations Food and Agriculture Organization

Executive Summary

Introduction

Statistical information on agricultural production, prices and market conditions play a central role in the Liberian economy in terms of contribution to income generation, employment and food security for most families. This is precisely why the Ministry of Agriculture (MOA) in collaboration with Liberia Institute of Statistics and Geo-Information Services (LISGIS) exerted significant efforts to revive the activities of agricultural survey. This summary provides an insight into all major components of the 2008 agricultural survey results. The document highlights major characteristics of agricultural activities including production of food crops and livestock.

Objective

The overall objective of the publication is to provide statistics on food and agriculture for effective planning and the monitoring of agricultural sector for policy and administrative decisions.

Main Source of Data

The main source of data for the publication was the 2008 agricultural sample survey which used the conventional method with a well-prepared questionnaire.

Methodology

The sample design for the 2008 survey was a multi-stage sampling with: (a) Enumeration Areas (EAs) as the primary sampling units (PSUs), (b) Agricultural Holders (Ahs) within EA as the secondary sampling units (SSUs), (c) Holders' Rice Farms (HRFs) as the tertiary sampling unit, and (d) Experimental plots for crop-cutting in selected farms as the ultimate stage-sampling unit. The sampling design was adopted with each county as domain of study.

Three (3) sets of questionnaires were developed and administered, namely: Households listing questionnaire, Holders' questionnaire and Field and Yields measurement questionnaires. These questionnaires were used to probe only those households with member participating in agricultural activities. Each completed questionnaire was scrutinized in the field and further scrutiny was done in the central office. Range and internal consistency checks were adopted.

Key Findings

Member of Agricultural Households: The population that lived in agricultural households was estimated at 1,567,650 with 785,400 (50.1 %) male and 782,250 (49.9 %) female. The age group 0 – 19 accounted for more than half (53.9 %) of the total population. By contrast, the elderly age group 60 years and over accounted for 4.4 percent, while the active labor force (20 – 59) accounted for 41.7 percent. This shows that the bulk of the populations in agricultural households were children and young adults and the least were elderly.

Agricultural Households: The total number of agricultural households was 274,040, which constituted 85.3 percent of the rural households. Of this number 70.6 percent involved in rice production, 35.9 percent in cassava production, 23.9 percent in livestock production and 42.7 percent in the production of poultry. This analysis depicts that more households engaged in rice farming. Nearly all of the livestock and poultry are produced by households through the free range system.

Rice and Cassava Production: The production of rice was estimated at 279,000 metric tons. This estimate was 6.6 percent less than pre-war (1988) and 27.4 percent more than 2001. Cassava production was estimated at 496,290 metric tons. This estimate was above pre-war (1988) and 2001 by 21.1 percent and 32.9 percent respectively.

Introduction and Organization of the Report

A five-year National Strategy for the Development of Statistics (NSDS) has been launched in Liberia with the primary objectives of strengthening capacity for the production of quality data and improving coordination of statistical activities within the national statistical system. As one of the key ministries, the Ministry of Agriculture participated in the process and five major activities were identified and planned for the period 2008 to 2012. The activities are aimed at rehabilitating agricultural surveys and the production of reliable statistics. One of the major activities planned is Annual Crop Production Survey. Crop production data are considered to be the most important agricultural information for the monitoring of the Poverty Reduction Strategy (PRS) and Millennium Development Goals (MDGs). This publication presents results of the 2008/2009 crop survey.

The report is organized into three parts. Part one discusses the objectives and methodology of the survey. The second part provides national estimates for major items, including rice, cassava, livestock and poultry production, agricultural households, heads of agricultural households, members of agricultural households and cereal (rice) balance sheet. Part three provides estimates at the county level, which include rice and cassava production, rice and cassava producing households, livestock and poultry rearing households, heads of livestock and poultry, agricultural households, heads and members of agricultural households differentiated by gender.

PART 1: **Survey Objectives and Methodology**

1.1. Objectives

The **immediate objectives** of the survey are as follows:

- Assess the current levels of farming households and population;
- Provide gender-disaggregated agricultural statistics on key agricultural activities;
- Provide statistics for locally produced commodities, mainly food and livestock;
- Provide basic statistics on major agricultural import and export commodities and
- Develop a "user-friendly agricultural database to include major indicators for food security

1.2. Terms and Definitions

- **Enumeration Area (EA)-** a geographical area delineated by the Liberia Institute for Statistics and Geo-Information Services (LISGIS) in the 2008 National Population and Housing Census. Each EA may contain one or more towns/villages with 75 – 125 households.
- **Building-** any kind of structure or house made of bricks, stone, timber /wood, cement, mat or mud with a roof made of thatch, zinc, concrete where People live or may live.
- **Town/Village**- one or more building grouped together having a distinct name and a chief.
- **Household -** a group of persons living together and eating from the same pot regardless of whether they live in one building and are responsible to the Same head. .
- **Head of Household (H/H)-**the person responsible for providing the daily needs **for** members households. In the decision of food security, they share with their spouse (if any) the long- term hopes and fears for the availability of household supplies.
- **Agricultural Household (AH)-**a household in which any member is actively growing crop(s) or raising livestock or poultry**.**
- **Agricultural Population (AP)**- all people residing permanently in the agricultural households including those temporarily absent for less than three months and excluding visitors in the household for less than three months.
- **Livestock Holder (LH)-** any holder raising five or more heads of livestock (cattle, goats, sheep, pigs,)
- **Poultry Holder (PH)-** any holder raising ten or more heads of poultry (Chicken, ducks)
- **Holder-**any member of a household who operates a farm in his or her own right (means that the person is independent in making decisions concerning the operations regardless whether he/she owns the land, rent it from others or squats on it).

- **Respondent-** any reliable or knowledgeable member of the household who is in the position to answer survey questions. He/she might be the head of the household or any member appointed by him/her. There may be more than one respondent answering different set of questions in consultation with each other.
- **Holding (Farm)-** a piece of land used for agricultural production operated or managed by one person/holder or in some cases jointly operated or managed by two or more holders.
- **Field**- a piece of cultivated land carrying one crop or mixture of crops. It may be a parcel or part of land. It may make up an entire holding or only part of the holding. In some cases farm may be used.
- **Crop Mixture**- a combination of crops planted within the same plot. They do not need to be planted and harvested at the same time.
- **Plot**- part of a field (farm) used for yield measurement or density studies.

1.3. Methodology

The sample design for the 2008 survey was a multi-stage sampling with the following features: (a) Enumeration Areas (EAs) as the primary sampling units (PSUs), (b) Agricultural Holders (Ahs) within EA as the secondary sampling units (SSUs), (c) Holders' Rice Farms (HRFs) as the tertiary sampling unit, and (d) Experimental plots for crop-cut in selected farms as the ultimate stage-sampling unit. The sampling plan was adopted with each county as domain of study. The survey was designed purposely to collect rice data

Description of the Sampling Frame: For the first stage of sampling, the basic frame consists of a list of Enumeration Areas (EAs) from Liberia Institution of Statistics and Geo-Information Services (LISGIS). These EAs were delineated as a result of the 2008 National Population and Housing Census. According to the 2008 frame, number of households for each EA was indicated, and from this list, EAs were selected within county using systematic sampling. The sample was designed with a total sample size of 110 EAs for the country from the total of 4,512 rural EAs. The sample size was derived based on the amount of resources (time and money) available.

For the second stage of sampling, the basic frame consisted of a list of holders. Enumeration areas, which were selected at the first stage of sampling, were canvassed; that is agricultural households counts were made within EA and recorded on a listing form. Based on the quick canvassing operations, a list of holders was prepared and the number of farms for each holder recorded. From the listing record of holders for each sample EA, a systematic sample of fifteen (15) holders was taken. The holders selected constituted the sample of farming households that were interviewed.

For the third stage sampling, the basic frame consisted of rice and cassava farms for holders selected at the second stage. From the listing record of rice and cassava farms a

sample of eight (8) farms for rice and five (5) farms for cassava were selected for area measurement. The selection of these farms was done using systematic sampling.

For the ultimate stage of sampling, the basic frame consisted of a list of rice and cassava farms selected at the third stage for measurement. A sample of five (5) farms for rice and three (3) farms for cassava was taken using simple random sampling without replacement. The farms selected constituted the sample of farms for yield estimates. Conventional survey method was used with a well-prepared questionnaire and forms including field manual. Different forms and questionnaires used include Enumeration Area Listing Form, Farm Measurement Form, Holders and Crop Cutting Questionnaires

Area and Yield Measurements: Enumerators were provided with GPSs. which were used to take measurements of the farms by taking coordinates of the parameters of the farms. Circular plots were laid using a twine of 5 feet long for rice and 7 feet long for cassava as radius of the circle. The entire crops in the sample plots in each farm were carefully harvested in single day. The total harvests were weighed and the weight recorded using drying method for rice. Fresh weight for cassava was taken.

PART 2: **National Estimates**

2.1. Rice and Cassava Production

Table 2.1 below presents the production for both paddy and fresh cassava in Liberia for 2008/2009. According to the table, total production (both rice and cassava) was estimated at 775,290 metric tons with an increase of 30.9 percent on the total of 592,430 metric tons in 2001 and of 9.4 percent on the total of 708,470 metric tons during the pre-war (1988).

The production of rice was estimated at 279,000 Metric tons (paddy) during the 2008/2009 crop season in Liberia. This estimate was 6.6 percent less than pre-war (1988) when 298,630 metric tons were produced and 27.4 percent more than 2001 when 219,040 metric tons were produced. An estimated land area of rice harvested was 222,670 hectares with an average yield of 1,253 kilograms per hectare. This estimate was 30.6 percent more than 2001 and 5.6 percent less than pre-ward (1988) when 170,480 and 235,760 hectares were harvested respectively.

The production of cassava was estimated at 496,290 metric tons during the 2008/2009 crops season. This estimate was 21.1 percent and 32.9 percent more than pre-war (1988) and 2001 when 409,840 metric tons and 373,390 metric tons were produced respectively. Area of cassava harvested was estimated at 57.360 hectares with an average yield of 8,652 kilograms. This estimate was 19.7 percent and 10.0 percent more than 2001 and pre-war (1988) when 47,930 and 52,160 hectares were harvested respectively.

Table 2.1 further shows that total number of farms (both rice and cassava) was 349,380 with an increase of 43.5 percent on the total of 243,450 farms in 2001 and of 18.4 percent on the total number of 295,060 farms during the pre-war (1988). According to the results of the survey, the total number of rice farms reported was 231,650. This estimate is about 61 percent of 2001 and 28 percent of pre-war (1988). The average farm size for rice is about 1.2 hectares. The number of cassava farms reported in 2008 was estimated at 117,730. This estimate is about 18.7 percent and 3.2 percent more than 2001 and pre-war (1988) respectively.

Table 2.1: **Rice and Cassava Production, Liberia**

CROPS/AREA	UNIT	YEAR			PERCENT CHANGE	
		2008	2001	1988	2001	1988
Production						
Paddy Rice	Metric tons	279,000	219,040	298,630	27.4	(6.6)
Fresh Cassava	Metric tons	496,290	373,390	409,840	32.9	21.1
Total	Metric tons	775,290	592,430	708,470	30.9	9.4
Area Harvested						
Rice	Hectares	222,670	170,480	235,760	30.6	(5.6)
Cassava	Hectares	57,360	47,930	52,160	19.7	10.0
Total	Hectares	280,030	218,410	287,920	28.2	(2.7)
Yields per Hectare						
Rice	Kilograms	1,253	1,285	1,270	(2.3)	(1.6)
Cassava	Kilograms	8,652	7,790	7,860	5.0	4.1
Farms						
Rice Farms	Number	231,650	144,240	181,030	60.6	28.0
Cassava Farms	Number	117,730	99,210	114,030	18.7	3.2
Total	Number	349,380	243,450	295,060	43.5	18.4

2.2. **Livestock and Poultry Production**

Animal rearing in Liberia is not well institutionalized. Most of the livestock and poultry enumerated were produced in the backyards of the traditional farmers. The table 2.2 below shows the results of the survey on livestock and poultry production. According to the table, total heads of livestock were estimated at 234,920. This estimate was 8.4 percent less than pre-war (1988) when 256,500 heads of livestock were reported.

The heads of cattle reared were estimated at 8,370. Other estimates included 63,460 heads of goats, 43,270 sheep, 77,720 pigs and 42,100 rabbits. The heads of cattle estimated were 43.6 percent less than pre-war (1988), heads of goats estimated were 50.7 less, and heads of sheep were 28.6 percent less than pre-war (1988). On the other hand, there was a significant increase as compared to pre-war (1988) in the number of pigs by 48.2 percent.

Poultry is raised in the backyards by most farm families on a free range basis. It is the most common domestic birds reared in the country mainly for household consumption and for cash. The most common poultry are chickens and ducks. Heads of poultry were estimated at 828,680 showing an increase of 8.7 percent as compared to pre-war (1988). Heads of chickens raised were estimated at 785,010, indicated 8.5 percent more than pre-war when 723,390 heads were reported and heads of ducks raised were estimated at 43,670 with an increase of 11.4 percent compared to pre-war (1988) when 39,190 heads were reported.

Table 2.2: **Livestock and Poultry Production**

Animal	Unit	YEAR		% Change(1988)
		2008	1988	
Livestock				
Cattle	Heads	8,370	14,830	(43.6)
Goats	Heads	63,460	128,670	(50.7)
Sheep	Heads	43,270	60,560	(28.6)
Pigs	Heads	77,720	52,440	48.2
Rabbits	Heads	42,100	0	-
Total	**Heads**	**234,920**	**256,500**	**(8.4)**
Poultry				
Chickens	Heads	785,010	723,390	8.5
Ducks	Heads	43,670	39,190	11.4
Total	**Heads**	**828,680**	**762,580**	**8.7**

2.3. **Agricultural Households**

Number of households in which at least a member is actively growing crop(s) or raising livestock or poultry is given in Table 2.3. The overall total agricultural household in 2008 excluding peri-urban was estimated at 274,070. Of this number, the household reported producing rice was estimated at 231,370, producing cassava was estimated at 117,730 and reported rearing livestock and poultry were 65,470 and 117,120 respectively. In addition, the table shows percent change between 2008 and 2001 as well as pre-war (1988). There was significant increase in the number of agricultural households, rice producing households and households reported growing cassava as compared to 2001 by 80.4 percent, 82.4 percent and 31.3 percent, respectively. The table further shows that the estimate of agricultural household, rice producing household, cassava producing household, livestock and poultry rearing households were 52 percent, 49.1 percent, 14.2 percent, 41.2 percent and 21.6 percent respectively, more than pre-war (1988). This significant difference is expected, because during the 2008/2009 crop season Government in collaboration with FAO provided over 100 metric tons of rice seed to small-scale farmers, which served as encouragement.

Table 2.3: **Food Crops and Animal Farming Household**

Particulars	YEAR			Percent Change	
	2008	2001	1988	2001	1988
Agricultural Household	274,070	151,940	180,290	80.4	52.0
Rice Producing Household	231,370	126,840	155,180	82.4	49.1
Cassava Producing Household	117,730	89,680	103,050	31.3	14.2
Livestock Rearing Household	65,470	N/A	46,350	N/A	41.2
Poultry Raising Household	117,120	N/A	96,330	N/A	21.6

2.4. **Heads of Agricultural Households**

The total number of heads of agricultural households was estimated at 274,070 excluding peri-urban farmers. Of the total heads, 197,580 persons were males (72.1 %) and 76,490 persons were females (27.9 %). Ages of agricultural households' heads were collected and analyzed. Table 2.4 below depicts the age distribution. According to the table the age group 30 – 39 years had the largest proportional share to the total with 24.7 percent, followed by the age group 40 – 49 years with 23.8 percent and age group 20 – 29 years (18.3 %). As expected, young people below age 20 years had the smallest proportion of agricultural household heads (2.5 %)

The Table further depicts the percentage share of male and female heads of households within age group. Of the total households' heads age less than 20, males were 69 percent and females 31 percent. For the ages 20 – 29 years males were 76 percent and females 24 percent, 30 – 39 years, males were 73 percent and females 27 percent, 40 – 49 years males were 74 percent and females 26 percent and 50 – 59 years males were 70 percent and females 30 percent

Table 2.4: **Heads of Agricultural Households by age and sex, Liberia**

Liberia/Age Category	Agricultural Households Heads							
	Both Sexes		Male		Female		Male - Female Ratio (%)	
	Number	Percent	Number	Percent	Number	Percent	Male	Female
Total	**274,070**	**100.0**	**197,580**	**100.0**	**76,490**	**100.0**	72.1	27.9
< 20 Years	6,850	2.5	4,740	2.4	2,110	2.8	69.2	30.8
20 -29 Years	50,160	18.3	38,130	19.3	12,030	15.7	76.0	24.0
30 - 39 Years	67,690	24.7	49,590	25.1	18,100	23.7	73.3	26.7
40 - 49 Years	65,230	23.8	48,010	24.3	17,220	22.5	73.6	26.4
50 - 59 Years	41,660	15.2	29,050	14.7	12,610	16.5	69.7	30.3
60 Years & over	42,480	15.5	28,060	14.2	14,420	18.9	66.1	33.9

2.5. **Members of Agricultural Households**

The population living in agricultural households was collected and analyzed. Table 2.5 below presents the results. Overall, members of the agricultural households were estimated 1,567,650. Of this estimate, 50.1 percent were males and 49.9 percent females. The table depicts the broad age distribution of the households' members. According to the table members with age less than 10 years accounted for 28.2 percent of the total agricultural members, followed by the age groups 10 – 19 years with 25.7 percent and 20 – 29 years with 18.3 percent. On the other hand, the age groups with fewer members in relative terms are 50 – 59 years, 60 years+, 30 – 39 years and 40 – 49 years. These groups combined accounted for 27.8 percent.

The table further depicts that the female members of the households ranked the highest within the age groups 30 – 39 years, 20 – 29 years and age group less than 10 years with 53.8 percent, 53.4 percent and 51.1 percent respectively of the total agricultural household members.

Table 2.5: **Members of Agric. Households by age and sex, Lib**

Age Category	Agricultural Population						Percent	
	Both Sexes		Male		Female			
	Number	Percent	Number	Percent	Number	Percent	Male	Female
Total	1,567,650	100.0	785,400	100.0	782,250	100.0	50.1	49.9
0 - 9 Years	442,080	28.2	216,010	27.5	226,070	28.9	48.9	51.1
10 - 19 Years	402,880	25.7	212,790	27.1	190,090	24.3	52.8	47.2
20 - 29 Years	286,880	18.3	133,560	17.0	153,320	19.6	46.6	53.4
30 - 39 Years	181,850	11.6	84,070	10.7	97,780	12.5	46.2	53.8
40 - 49 Years	123,840	7.9	64,390	8.2	59,450	7.6	52.0	48.0
50 - 59 Years	61,140	3.9	36,110	4.6	25,030	3.2	59.1	40.9
60 Years +	68,980	4.4	38,470	4.9	30,510	3.9	55.8	44.2

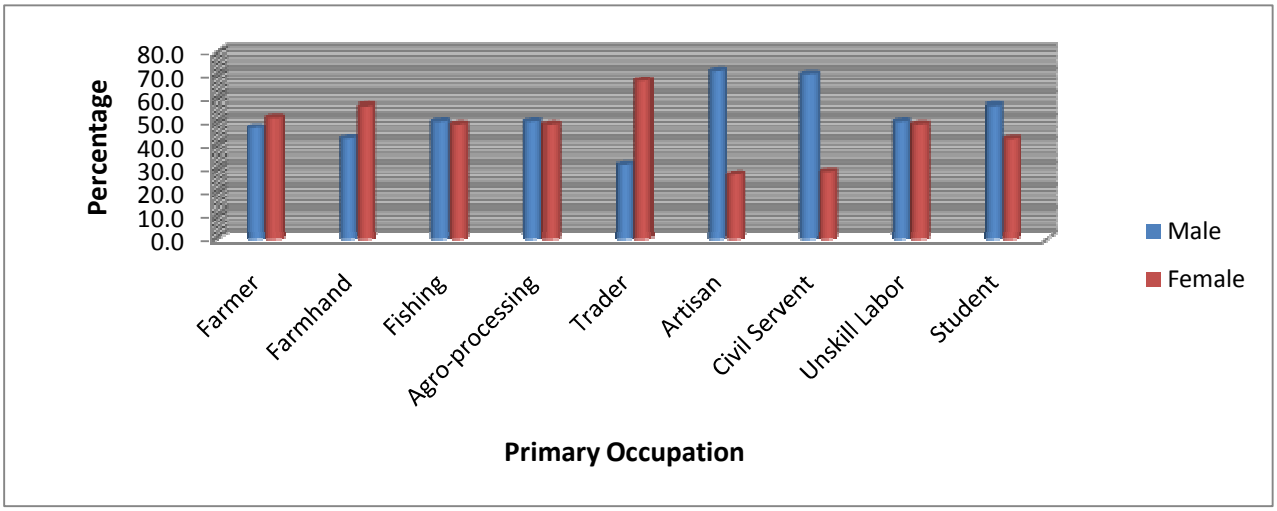
The survey considered nine (9) major primary occupations in terms of livelihood of agricultural households' members 10 years old and above. These included farmer, farmhand, fishermen, agro-processor, trader, artisan, civil servant, unskilled labor and student. Table 2.6 shows the results of the survey on the section of primary occupation. According to the table number of households' members with a primary occupation of farming is estimated at 566,160, which constituted 50.3 percent of the total agricultural households members with the age of 10 years and above. Next is the number of students with an estimate of 365,810 or 32.5 percent of the total countrywide, followed by farmhand estimated at 128,320 persons or 11.4 percent, trading with an estimate of 24,760 or 2.2 percent and civil servant estimated at 22,510 or 2.0 percent of the total. The least are fishing and agro-processing with an estimate of 2,250 persons or 0.2 percent each.

Table 2.6: **Members of agric. households 10 yrs+ by primary occupation and sex,**

Liberia/Primary Occupation	Both Sexes		Male		Female		Percent	
	Number	Percent	Number	Percent	Number	Percent	Male	Female
Total	**1,125,570**	**100.0**	**569,390**	**100.0**	**556,180**	**100.0**	**50.6**	**49.4**
Farmer	566,160	50.3	270,460	47.5	295,700	53.2	47.8	52.2
Farmhand	128,320	11.4	55,230	9.7	73,090	13.1	43.0	57.0
Fishing	2,250	0.2	1,140	0.2	1,110	0.2	50.7	49.3
Agro-processing	2,250	0.2	1,140	0.2	1,110	0.2	50.7	49.3
Trader	24,760	2.2	7,970	1.4	16,790	3.0	32.2	67.8
Artisan	7,880	0.7	5,690	1.0	2,190	0.4	72.2	27.8
Civil Servant	22,510	2.0	15,940	2.8	6,570	1.2	70.8	29.2
Unskilled Labor	5,630	0.5	2,850	0.5	2,780	0.5	50.6	49.4
Student	365,810	32.5	208,970	36.7	156,840	28.2	57.1	42.9

Figure 2.1 displays the percent of male and female household members having primary occupation. Of the household members involved in farming, female accounted for more than half (52.2 %) and males were 47.8 percent. For the farmhand, females 57 percent and males were 43 percent; fishing, males 50.7 percent and females 49.3 percent; trading, females 67.8 percent and males 32.2 percent; civil servant, males 70.8 percent, females 29.2 percent and for unskilled labor, males 50.6 percent and females 49.6 percent. Clearly, in relative terms there were more females in farming, farmhand and trading compared to males. On the other hand, there were more males in fishing, agro-processing, artisan and civil servant than females.

Figure 2.1: **Percent Distribution of Agric. Household Members by Primary Occupation**



2.6. **Cereal (Rice) Balance Sheet**

Table 2.7 below presents information on the account of rice utilization and supply, imports and consumption in 2008. Of the total rice consumption in 2008, Liberian farmers supplied 38.3 percent and the balance 61.7 percent was imported. The volume of rice imported for the period from January to December in 2008 was recorded at 341,284.5 metric tons. Of this quantity, 6,194.15 metric tons were non-commercial, and the balance 335,090.35 metric tons were commercial.

From the total of actual harvested production, losses and seed rice for the following year were calculated. An average of 10 percent of the actual harvest (rough rice) never reached to the process of milling, which represented post harvest losses. In addition, average of 2 percent of the available paddy is retained for seed. Thus, after seed retention and losses, paddy rice available for consumption was estimated at 245,520 metric tons. Using the milling rate of 65 percent, quantity of local rice milled was calculated at 159,590 metric tons, which constituted 38.3 percent of total requirement

for rice. Total requirement was estimated at 417,190 metric tons; thus, the balance 257,190 metric tons were made available from imported rice. The closing stock as of December 30th 2008 was 83,684.5 metric tons. All of this quantity was kept by business traders.

Table 2.7: Cereal **(Rice) Balance Sheet**

ITEMS	UNIT	2008
Population	Number	3,476,608*
DISPOSITION		
Total Production (Paddy)	Metric tons	279,000
Losses (10%)	Metric tons	27,900
Seed Rice Retention (2 %)	Metric tons	5,580
Paddy available for consumption	Metric tons	245,520
Local rice milled (65% of paddy)	Metric tons	159,590
Per Capita Consumption	Kilograms	120***
Needs – Requirement for 2008	Metric tons	417,190
Deficit (61.7 %)	Metric tons	257,600
IMPORTATION**		
Commercial	Metric tons	335,090.35
Non-commercial	Metric tons	6,194.15
Total	Metric tons	341,284.5
Consumption	Metric tons	257,600
Balance stock	Metric tons	83,684.5

* LISGIS, ** Ministry of Commerce

*** Average annual consumption of rice producers, urban dwellers and both Urban and rural dwellers

PART 3: **County Estimates**

3.1: **Introduction**

The agricultural sector remains the most sustainable source of income and major contributor to employment for rural population. A specific question was asked about rice and cassava cultivation, livestock and poultry rearing and rural households involved in agricultural activities at the county level. The results of the analysis are presented in this section

3.2. **Rice Production**

Table 3.1 shows volume of paddy produced and area cultivated for rice in 2008. According to the table, a total of 279,000 metric tons of rough rice (paddy) was produced in 2008, which is about 93.4 percent of its pre-war level when production was estimated at 298,760 metric tons. Rice, Liberian principal staple food is produced at a subsistence level primarily for consumption.

The table shows that Nimba, Bong and Lofa counties ranked the highest in the 2008 rice production with 55,880 (20.0 %) metric tons, 46,760 (16.8 %) metric tons and 41,710 (14.9 %) metric tons respectively. The combined estimates of these three counties accounted for more than half (51.7%) of the total production, followed by Gbarpolu with 5.5 percent and Grand Gedeh with 5.0 percent of the total production. Next to these counties were Grand Bassa (4.7 %), Bomi (4.6 %), Sinoe (4.4 %) and Maryland (4.1 %). The rest of the counties have a percent share of the total production ranging from 2.4 percent to 3.8 percent.

Overall average production per rice household was estimated at 1.2 metric tons. According to the table, rice production per rice household was relatively high in Bomi, Bong and Gbarpolu counties with 1.5 metric tons each. Next were four counties: Lofa, Maryland, River Gee and Sinoe with 1.4 metric tons each followed by Grand Cape Mount and Grand Gedeh counties with 1.3 metric tons each. The least were Montserrado and Margibi counties with 0.8 metric tons each. The rest of the counties ranged from 0.9 to 1.1 metric tons.

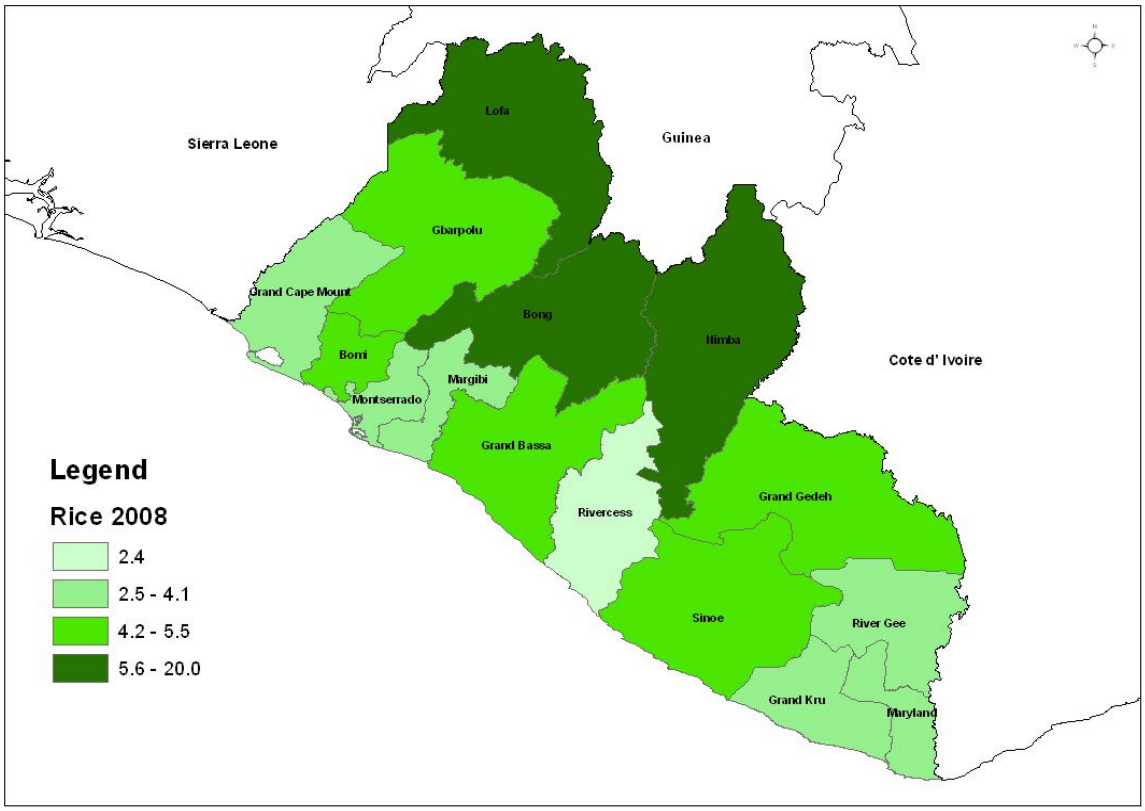
The table further presents the total number of rice farms and hectares. According to the table, number of rice farms was estimated at 231,650. Of this number three (3) counties cultivated the highest number of farms, namely: Nimba, Bong and Lofa reported having 56,570, 30,270 and 29,970 farms respectively. The combined estimates of the three counties constitute 50.4 percent of the total number of farms. Next was Grand Bassa with 14,660, Montserrado with 11,400 and Margibi with 11,150 farms, followed by Gbarpolu and Grand Gedeh with 10,700 and 10,500 farms respectively. The least was River Cess County with 6,320 farms. The rest of the counties reported number of farms ranged from 7,240 to 9,060.

The Area of rice harvested during the 2008 crop year was estimated at 222,670 hectares with an average farm size of 1.2 hectares. Nimba, Lofa and Bong counties had the largest harvested areas of rice with 46,180 (20.7%) hectares, 34,190 (15.4%) hectares and 34,130 (15.3%) hectares respectively. Next were Gbarpolu and Grand Bassa counties with 12,440 (5.6%) hectares each, followed by Grand Gedeh with 11,230 (5.0%) hectares, Bomi 9,730 (4.4%) hectares and Sinoe with 8,950 (4.0%). The county with the least harvested area was River Cess with 5,960 (2.7%) hectares.

Table 3.1: **Area under Rice Cultivation, Yields per Hectare, and Production by County**

	RICE						% of Tot. Prod.	Prod per rice Household(mt)
COUNTY	**Hectares**	**% of Tot.**	**Farm**	**Ha/Farm**	**Yields/Ha(Kg)**	**Prod. (Mt)**		
Bomi	9,730	4.4	8,780	1.25	1,310	12,740	4.6	1.5
Bong	34,130	15.3	30,270	1.31	1,370	46,760	16.8	1.5
Gbarpolu	12,440	5.6	10,700	1.43	1,240	15,430	5.5	1.5
Grd. Bassa	12,440	5.6	14,660	1.14	1,050	13,060	4.7	0.9
Cape Mount	8,370	3.8	8,470	1.32	1,280	10,710	3.8	1.3
Grd. Gedeh	11,230	5.0	10,500	1.18	1,230	13,810	5.0	1.3
Grd. Kru	7,350	3.3	8,500	1.13	1,360	9,990	3.6	1.2
Lofa	34,190	15.4	29,970	1.37	1,220	41,710	14.9	1.4
Margibi	7,520	3.4	11,150	0.9	1,240	9,320	3.3	0.8
Maryland	8,270	3.7	8,060	1.21	1,380	11,410	4.1	1.4
Montserrado	7,920	3.6	11,400	0.88	1,180	9,350	3.4	0.8
Nimba	46,180	20.7	56,570	1	1,210	55,880	20.0	1.0
River Cess	5,960	2.7	6,320	1.15	1,120	6,670	2.4	1.1
River Gee	7,990	3.6	7,240	1.31	1,240	9,900	3.5	1.4
Sinoe	8,950	4.0	9,060	1.18	1,370	12,260	4.4	1.4
TOTAL/AV.	**222,670**	**100.0**	**231,650**	**1.18**	**1,253**	**279,000**	100.0	1.2

Figure 3.1: Percent Distribution of Rice Production by County



3.3. **Cassava Production**

Table 3.2 presents the volume of fresh cassava produced and area cultivated for 2008. According to the table, a total of 496,290 metric tons was produced in 2008, which is 21.1 percent more than the level of pre-war when production was estimated at 409,840 metric tons. Cassava is a major substitute for rice and is produced for both households' consumption and cash income.

The table depicts that Nimba and Grand Bassa counties ranked the highest in the 2008 cassava production with 132,200 (26.6 %) metric tons and 51,950 (10.5 %) metric tons respectively. The combined estimates of these two counties accounted for more than one-third (37.1%) of the total production. Next to these two counties were Montserrado with 7.4 percent, Bong with 7.3 percent and Grand Gedeh with 7.0 percent, followed by Lofa with 6.6 percent, Margibi with 6.0 percent and Grand Kru with 5.0 percent of the total production. The county with least cassava production was Gbarpolu with the share of 1.9 percent. The rest of the counties had the estimates ranged from 2.6 to 4.6 percent of the total production

Countrywide, average production per cassava household was estimated at 4.2 metric tons. According to the table, cassava production per cassava household in relative terms was high in Grand Gedeh (7.2 mt), Montserrado (5.8 mt), Bomi (5.3 mt) and Nimba and River Cess (5.0 mt each). Next were five counties: Grand Bassa, Lofa, River

Gee, Margibi and Grand Kru with 4.8 metric tons, 4.6 metric tons, 4.5 metric tons, 4.4 metric tons and 4.3 metric tons respectively; followed by Maryland and Grand Cape Mount counties with 3.5 metric tons and 3.4 metric tons respectively. The least were Gbarpolu with 2.0 metric tons, Bong with 2.1 metric tons and Sinoe with 2.4 metric tons.

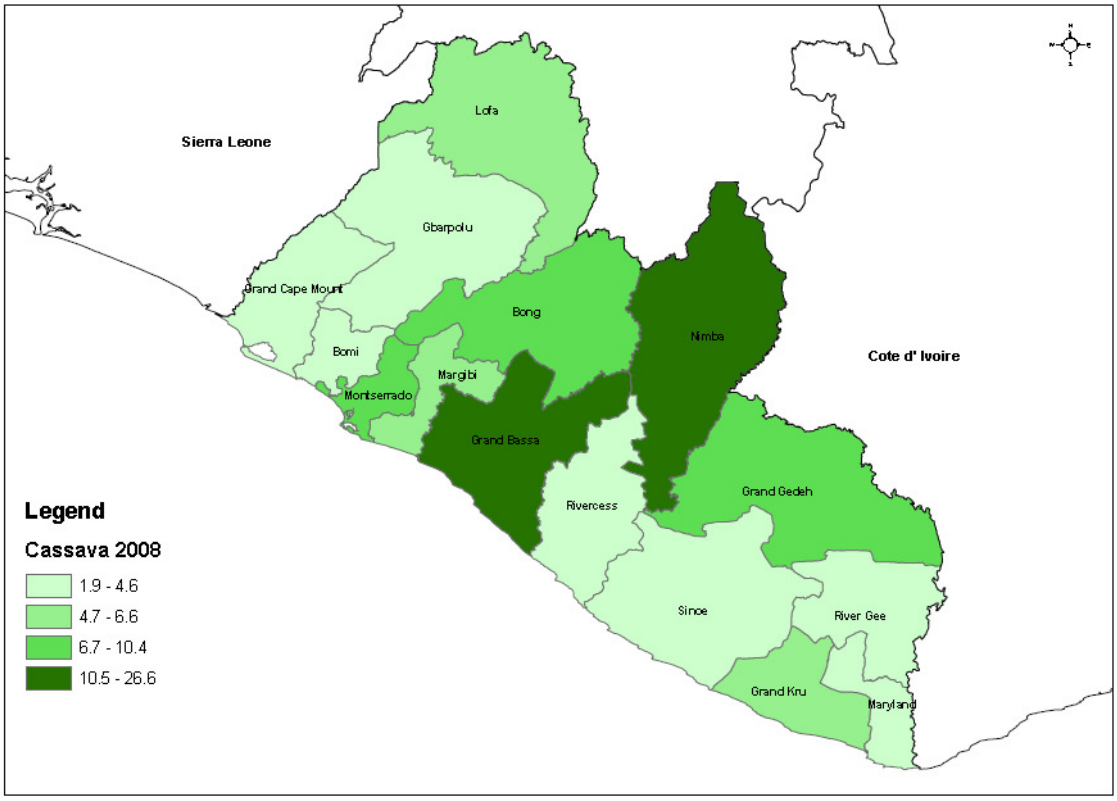
The table further presents the total number of cassava farms and hectares. According to the table, number of cassava farms cultivated was estimated at 117,730. Of this number three (3) counties cultivated the highest number of farms, namely: Nimba, Bong and Grand Bassa reported having 26,530, 17,480 and 10,790 farms respectively. The combined estimates of the three counties constituted more than two-fifth (46.5 %) of the total number of farms. Next were Lofa with 7.020 farms, Margibi 6,830 farms and Montserrado with 6,290 farms, followed by Grand Kru, Maryland and Sinoe counties with 5,760, 5,490 and 5,300 farms respectively. The County with the least number of farms was River Gee with 3,490 farms.

The Area harvested for cassava during the 2008 crop year was estimated at 57,360 hectares with an average farm size of 0.5 hectares. Nimba and Grand Bassa counties had the largest harvested areas of cassava with 13,530 (23.6 %) hectares and 6,040 (10.5 %) hectares. Next were Bong, Grand Gedeh and Montserrado counties with 5,070 (8.8 %) hectares, 3,990 (7.0 %) and Montserrado with 3,900 (6.8 %), followed by Lofa with 3,300 (5.8) hectares, Margibi with 3,140 (5.5 %) and Grand Kru with 2,590 (4.5 %) hectares. The counties with the least harvested areas were River Cess and Sinoe with 2,110 (3.7%) hectares and 2,120 (3.7 %) hectares respectively.

Table 3.2: **Area under Cassava Cultivation, Yields per Hectare, and Production by County**

	CASSAVA							
COUNTY	**Hectares**	**% of Tot.**	**Farm**	**Ha/Farm**	**Yields/Ha(Kg)**	**Prod.(Mt)**	% of Tot. Production.	Prod/ cassava Hhold(MT)
Bomi	2,200	3.8	4,310	0.51	7,110	23,050	4.6	5.3
Bong	5,070	8.8	17,480	0.29	7,160	36,320	7.3	2.1
Gbarpolu	2,190	3.8	4,660	0.47	7,790	9,300	1.9	2.0
Grd. Bassa	6,040	10.5	10,790	0.56	8,600	51,950	10.5	4.8
Cape Mount	2,510	4.4	4,830	0.52	6,510	16,350	3.3	3.4
Grd. Gedeh	3,990	7.0	4,810	0.83	8,650	34,480	7.0	7.2
Grd. Kru	2,590	4.5	5,760	0.45	9,640	24,990	5.0	4.3
Lofa	3,300	5.8	7,020	0.47	9,900	32,540	6.6	4.6
Margibi	3,140	5.5	6,830	0.46	9,500	29,830	6.0	4.4
Maryland	2,470	4.3	5,490	0.45	7,860	19,410	3.9	3.5
Montserrado	3,900	6.8	6,290	0.62	6,220	36,710	7.4	5.8
Nimba	13,530	23.6	26,530	0.51	9,770	132,200	26.6	5.0
River Cess	2,110	3.7	4,140	0.51	9,730	20,560	4.1	5.0
River Gee	2,200	3.8	3,490	0.63	7,250	15,830	3.2	4.5
Sinoe	2,120	3.7	5,300	0.4	7,050	12,770	2.6	2.4
TOTAL/AV.	**57,360**	**100.0**	**117,730**	**0.512**	**8,183**	**496,290**	100.0	4.2

Figure 3.2: Percent Distribution of Cassava Production by County



3.4. Rice and Cassava Producing Households

The most important food crop in Liberia is rice and second most is cassava. Table 3.3 displays indicators on rice and cassava cultivation by county. According to the table, number of rice producing households was estimated 231,370, constituting 84.4 percent of the total agricultural household. In relative terms, agricultural households who reported growing rice were significantly high in seven counties: Sinoe (87.2 %), Lofa (86.9 %), River Gee (85.4 %), Gbarpolu (83.6 %), Grand Gedeh (82.7 %), Nimba (82.4 %) and Grand Kru (81.6 %). This indicates that only few of the agricultural households in these counties did not involve in rice production. Next to these counties were Bong (78.2 %), River cess (75.3 %) and Maryland (74.2 %). Montserrado County had relatively small proportion of agricultural households reported growing rice, which was estimated at 31.6 percent. The rest of counties reported between 39.3 – 69.0 percent.

The table further displays agricultural households reported growing cassava. Number of cassava producing households was estimated at 117,730 representing 43 percent of the total agricultural households. Percent share of the agricultural households involved in cassava production during the 2008 crop season was relatively high in four counties, namely: Grand Kru (55.4 %), Grand Bassa and Sinoe (51.1 % each) and Maryland (50.6 %); followed by River Cess (49.3 %) and Bong (45.2). The County with the lowest proportion was Montserrado with 17.6 %. The rest of the counties reported between 20 – 41 %.

Table 3.3: **Rice and Cassava Producing Households by County**

COUNTY	RICE			CASSAVA		
	Households		Farn/100 HH	Households		Farm/100 HH
	Number	As % Agric		Number	As % Agric HH	
Bomi	8,760	62.8	100	4,310	30.9	100
Bong	30,260	78.2	100	17,480	45.2	100
Gbarpolu	10,630	83.6	101	4,660	36.7	100
Grand. Bassa	14,550	69.0	101	10,790	51.1	100
Grd Cape Mount	8,460	67.9	100	4,830	38.8	100
Grand. Gedeh	10,490	82.7	100	4,810	37.9	100
Grand. Kru	8,490	81.6	100	5,760	55.4	100
Lofa	29,960	86.9	100	7,020	20.4	100
Margibi	11,140	39.3	100	6,830	24.1	100
Maryland	8,050	74.2	100	5,490	50.6	100
Montserrado	11,400	31.6	100	6,290	17.5	100
Nimba	56,570	82.4	100	26,530	38.6	100
River Cess	6,320	75.3	100	4,140	49.3	100
River Gee	7,240	85.4	100	3,490	41.2	100
Sinoe	9,050	87.2	100	5,300	51.1	100
TOTAL/AV.	**231,370**	**84.4**	**100**	**117,730**	**43.0**	**100**

3.5. **Livestock and Poultry Rearing Households**

Nearly all of the livestock and poultry are produced in the backyards through the system of free range. There are few livestock importers who are primarily importing for immediate slaughtering. These importers were not considered in the data collection and analysis. Table 3.4 presents the number of traditional households reported rearing livestock and raising poultry. According to the table, number of agricultural households rearing livestock was estimated at 65,470, constituting 23.9 percent of the total agricultural households. Proportions of the agricultural households rearing livestock were relatively high in Grand Kru, Nimba and Grand Gedeh counties. More than half (57.6 %) of the agricultural households reported rearing livestock in Grand Kru County and more than two-fifth (43.4 %) and (40.6 %) of the agricultural households reported rearing livestock in Grand Gedeh and Nimba respectively, followed by Bong (31.9 %), Sinoe (31.6 %) and River Gee (26.6 %). Counties with the least proportions were Bomi (2.4 %), Gbarpolu (4.2 %), Grand Bassa (4.7 %) and River Cess (5.9 %). The rest of the counties reported between 6 – 20 %.

Poultry raising is very popular in the rural communities. As a traditional poultry, it is primarily used to supplement household diet and sometimes sold for cash. According to the table, the number of households reported raising poultry was estimated at 117,120, representing 42.7 percent of the total agricultural households. Percent share of agricultural households raising poultry was significantly high with 94.6 percent, followed by Grand Kru and Sinoe with 79 percent and 68.7 percent respectively. The

County with the lowest proportion was Bomi (2.1 %). The rest of the counties reported between 13 – 58 %.

Table 3.4: **Livestock and Poultry Rearing Households by County**

COUNTY	Livestock Households		Poultry Households		Number of Animals	
	Number	% of Agric Hh	Number	% Agric Hh	Livestock	Poultry
Bomi	260	2.4	230	2.1	1,080	1,620
Bong	10,890	31.9	19,880	58.2	37,570	102,310
Gbarpolu	480	4.2	2,950	25.7	2,180	15,760
Grd. Bassa	850	4.7	2,340	13.0	2,860	17,220
Grd Cape Mount	1,160	11.8	3,340	34.1	3,040	24,830
Grd. Gedeh	4,610	40.6	10,740	94.6	14,040	76,760
Grd. Kru	5,240	57.6	7,190	79.0	15,040	52,950
Lofa	3,760	11.4	12,620	38.1	13,430	91,740
Margibi	980	6.1	5,460	33.8	4,990	39,570
Maryland	1,960	20.0	2,170	22.1	7,600	16,310
Montserrado	3,320	13.7	12,880	53.2	9,610	94,640
Nimba	26,290	43.4	24,590	40.6	102,540	180,360
River Cess	440	5.9	1,480	20.0	2,100	10,460
River Gee	2,160	26.6	4,590	56.5	6,520	57,240
Sinoe	3,070	31.6	6,660	68.7	12,320	46,910
TOTAL/AV.	**65,470**	**23.9**	**117,120**	**42.7**	**234,920**	**828,680**

Tables 3.5a & 3.5b display the number of household rearing livestock by type. Of the total livestock households, proportions of households reported rearing cattle were high in Bomi (26.9 %) and Grand Kru (21.6 %), followed by Margibi (14.3 %), Bong (13.3 %), River Cess (11.4 %) and Nimba (11.0 %). The counties with the least proportions were Montserrado (2.4 %) and River Gee (3.2 %). The rest of the counties reported between 4.3 – 9.4 %.

Proportions of livestock households reported rearing goats were significantly high in Grand Bassa (85.9 %) and Grand Gedeh (84.6 %), followed by River Gee and Maryland with 78.7 percent and 71.4 percent respectively. The county with the least proportion of goat households was Grand Cape Mount with 4.3 percent of livestock households. Half (50.0 %) of the livestock households reported rearing sheep in Gbarpolu County, which was relatively the highest proportion. Next were three counties: Bomi (38.5 %), Maryland (35.7 %) and Margibi (31.6 %). Counties with the least proportions were Grand Bassa (3.5 %) and Grand Cape Mount (7.8 %).

The proportions of livestock households reported rearing pigs were relatively high in Montserrado (60.5 %), Lofa (56.4 %), Bong (55.6 %), Margibi (54.5 %) and Grand Bassa with 50.6 percent. The percent shares of livestock households reported rearing rabbits were relatively high in River Cess, Grand Cape Mount and Gbarpolu with 45.5 percent 42.2 percent and 39.6 percent respectively. Next were Bong county with 21.9 percent

and Sinoe with 21.2 percent, followed by Grand Kru (17.4 %), Maryland (14.4 %) and Lofa (14.1 %).

Table 3.5a: **Households Raising Livestock by Type and by County**

COUNTY	Cattle Households		Goats Households		Sheep Households	
	Number	As % of Lstk Hh	Number	As % of Lstk Hh	Number	% of Lstk Hh
Bomi	70	26.9	30	11.5	100	38.5
Bong	1450	13.3	4,020	36.9	2,270	20.8
Gbarpolu	0	0.0	240	50.0	240	50.0
Grd. Bassa	0	0.0	730	85.9	30	3.5
Grd Cape Mount	50	4.3	50	4.3	90	7.8
Grd. Gedeh	320	6.9	3,900	84.6	980	21.3
Grd. Kru	1130	21.6	2,560	48.9	820	15.6
Lofa	270	7.2	2,160	57.4	730	19.4
Margibi	140	14.3	330	33.7	310	31.6
Maryland	140	7.1	1,400	71.4	700	35.7
Montserrado	80	2.4	440	13.3	680	20.5
Nimba	2890	11.0	11,840	45.0	6,350	24.2
River Cess	50	11.4	100	22.7	50	11.4
River Gee	70	3.2	1,700	78.7	570	26.4
Sinoe	290	9.4	840	27.4	390	12.7
TOTAL/%.	6950	10.6	30,340	46.3	14,310	21.9

Table 3.5b: **Households Raising Livestock by Type, Co. cont.**

COUNTY	Pigs Households		Rabbits Households	
	Number	As % of Lstk Hh	Number	% of Lstk Hh
Bomi	30	11.5	30	11.5
Bong	6,060	55.6	2,380	21.9
Gbarpolu	0	0.0	190	39.6
Grd. Bassa	430	50.6	-	0.0
Grd Cape Mount	0	0.0	490	42.2
Grd. Gedeh	280	6.1	270	5.9
Grd. Kru	770	14.7	910	17.4
Lofa	2,120	56.4	530	14.1
Margibi	534	54.5	30	3.1
Maryland	540	27.6	280	14.3
Montserrado	2,010	60.5	80	2.4
Nimba	12,760	48.5	2,180	8.3
River Cess	160	36.4	200	45.5
River Gee	80	3.7	210	9.7
Sinoe	1,470	47.9	650	21.2
TOTAL/%	**27,244**	**41.6**	**8,430**	**12.9**

3.6. **Heads of Livestock**

Table 3.6 shows the number of heads (traditional) of livestock. According to the table a total of 234,920 heads of livestock was estimated. Of this estimate, 33.1 percent was pigs, 27 percent goats, 18.4 percent sheep, 17.9 percent rabbits and 3.6 percent cattle. Nimba County reported having more animals than the other counties with 43.6 percent of the total, followed by Bong County with 16.0 percent. The estimates of these two counties accounted for 59.6 percent. Next higher livestock rearing counties in relative term were Grand Kru with 6.4 percent, Grand Gedeh with 6.0 percent and Lofa with 5.7 percent of total animals.

Nimba County ranked the highest for the county reported rearing cattle with 3,080 heads, goats with 25,440 heads, sheep with 19,090 heads and pigs with 44,080. For the county reported rearing rabbits, Bong County ranked the highest with 11,950 heads, followed by Nimba with 10,850 heads, Grand Kru with 4,550 heads and Sinoe with 3,230 heads.

Table 3.6: **Heads of Livestock by Type and by County,**

	HEADS (Number) OF LIVESTOCK					TOTAL	
COUNTY	**Cattle**	**Goats**	**Sheep**	**Pigs**	**Rabbits**	Number	**Percent**
Bomi	450	70	290	110	160	1,080	0.5
Bong	1,450	8,830	6,790	8,550	11,950	37,570	16.0
Gbarpolu	0	480	730	-	970	2,180	0.9
Grd. Bassa	0	1,460	100	1,300	-	2,860	1.2
Grd Cape Mount	450	50	90	-	2,450	3,040	1.3
Grd. Gedeh	610	8,000	3,000	1,140	1,290	14,040	6.0
Grd. Kru	1,130	5,110	2,470	1,780	4,550	15,040	6.4
Lofa	330	4,330	2,760	3,350	2,660	13,430	5.7
Margibi	140	670	920	3,120	140	4,990	2.1
Maryland	140	2,870	2,030	1,160	1,400	7,600	3.2
Montserrado	80	880	2,040	6,210	400	9,610	4.1
Nimba	3,080	25,440	19,090	44,080	10,850	102,540	43.6
River Cess	150	200	100	660	990	2,100	0.9
River Gee	70	3,390	1,700	300	1,060	6,520	2.8
Sinoe	290	1,680	1,160	5,960	3,230	12,320	5.2
TOTAL	**8,370**	**63,460**	**43,270**	**77,720**	**42,100**	234,920	100.0
Percent of Total	**3.6**	**27.0**	**18.4**	**33.1**	**17.9**	**100.0**	

3.7. **Household Raising Poultry and number of Heads**

The types of poultry considered in 2008 survey were chickens and ducks. Table 3.6 presents percent shares of poultry households reported raising chickens and ducks and heads of poultry by type and county. According to the table, proportions of poultry households reported raising chickens were significantly high in River Gee (99.3 %), Grand Cape Mount (98.5 %), Grand Kru (97.6 %), Grand Bassa (97.4 %), Maryland (96.8 %) and Grand Gedeh (96.4 %), followed by Lofa and Montserrado (96.0 % each), Margibi (95.4 %), Nimba (93.5 %) and River Cess (93.2 %). The rest of the counties ranged between 84.5 to 87 percent.

The proportions of Poultry households reported raising ducks were relatively high in Sinoe (33.9 %) and Grand Gedeh (20.0 %). Next were Montserrado (18.6 %), Nimba (18.5 %), Margibi (18.3 %) and Bong County with 17.9 percent. Gbarpolu had the least agricultural households reported raising ducks having the proportional share of 1.7 percent. The rest of the county ranged from 2.4 to 13.5 percent.

Table 3.6 further provides number of heads of poultry by type and county. According to the table total number of chickens was estimated at 785,010. Of this number, Nimba County reported more with 21.3 of the total, followed by Bong, Montserrado and Lofa with 12.4 percent, 11.7 percent and 10.8 percent respectively. Bomi County reported raising the least with 0.2 percent of the total. The rest of the counties had the proportional shares ranged 1.2 to 9.3 percent. The number of ducks was estimated at 43,670. Compared to the rest of the counties, Nimba County had the highest with 30.9 percent, followed by Lofa with 16 percent and Bong with 10.7 percent. Next were Grand Gedeh with 8.7 percent, Margibi and Montserrado with 5.7 percent each and Sinoe with 5.2 percent. The least were Bomi and Gbarpolu with 0.1 percent each. The rest of the counties of the counties had the percent shares ranged from 1.8 to 4.1 percent.

Table 3.7: **Households Raising Poultry and Number of Heads by County**

COUNTY	Households Raising Chicken		Household Raising Duck		Chicken		Duck	
	Number	% Poultry Hh	Number	% of Poultry Hh	Number	Percent	Number	Percent
Bomi	200	87.0	30	13.0	1,590	0.2	30	0.1
Bong	16,790	84.5	3,550	17.9	97,620	12.4	4,690	10.7
Gbarpolu	2,510	85.1	50	1.7	15,710	2.0	50	0.1
Grd. Bassa	2,280	97.4	160	6.8	15,950	2.0	1,270	2.9
Cape Mount	3,290	98.5	450	13.5	23,050	2.9	1,780	4.1
Grd. Gedeh	10,350	96.4	2,150	20.0	72,980	9.3	3,780	8.7
Grd. Kru	7,020	97.6	910	12.7	51,870	6.6	1,080	2.5
Lofa	12,120	96.0	1,700	13.5	84,750	10.8	6,990	16.0
Margibi	5,210	95.4	1,000	18.3	37,060	4.7	2,510	5.7
Maryland	2,100	96.8	210	9.7	14,700	1.9	1,610	3.7
Montserrado	12,360	96.0	2,400	18.6	92,160	11.7	2,480	5.7
Nimba	22,980	93.5	4,550	18.5	166,860	21.3	13,500	30.9
River Cess	1,380	93.2	100	6.8	9,670	1.2	790	1.8
River Gee	4,560	99.3	110	2.4	56,390	7.2	850	1.9
Sinoe	6,370	95.6	2,260	33.9	44,650	5.7	2,260	5.2
TOTAL	109,520	93.5	19,630	16.8	785,010	100.0	43,670	100.0

3.7. **Agricultural Households**

Table 3.8 presents the number of agricultural households and its proportion of rural households. According to the table, the number of agricultural households was estimated at 274,070. This estimate is about 84 percent of rural households. In actual terms, Nimba, Bong and Lofa had a much higher number of agricultural households compared to the other counties with 60,640 (22.1 %), 34,170 (12.5 %) and 33,120 (12.1 %) respectively. Next were Montserrado with 8.8 percent and Grand Bassa with 6.6 percent, followed by Margibi with 5.9 percent, Gbarpolu with 4.2 percent and Grand Gedeh with 4.1 percent. The least was River Cess County with 2.7 percent.

According to the table, about 90 to 96 percent of the rural households in Gbarpolu, Margibi, River Gee and Lofa reported engaging in agricultural activities during the 2008 crop survey. Of these counties, Lofa ranked the highest with 96.1 percent, followed by River Gee with 95.9 percent, Maryland with 90.3 percent and Gbarpolu with 90.2 percent. Margibi and Montserrado ranked the least with 57 and 67.1 percent respectively. The rest of the counties ranged from 78.6 percent to 89.4 percent.

Table 3.8: **Rural and Agricultural Households by County, 2008**

COUNTY	Rural Household		Agricultural Household			Non-Agric. Household	
	Number	As % of Tot.	Number	As % of Rural	% of Tot.	Number	% of Tot.
Bomi	13,940	4.3	11,030	79.1	4.0	2,910	5.4
Bong	38,700	11.8	34,170	88.3	12.5	4,530	8.5
Gbarpolu	12,710	3.9	11,460	90.2	4.2	1,250	2.3
Grd. Bassa	21,100	6.4	18,030	85.5	6.6	3,070	5.7
Cape Mount	12,460	3.8	9,790	78.6	3.6	2,670	5.0
Grd. Gedeh	12,690	3.9	11,350	89.4	4.1	1,340	2.5
Grd. Kru	10,400	3.2	9,100	87.5	3.3	1,300	2.4
Lofa	34,480	10.5	33,120	96.1	12.1	1,360	2.5
Margibi	28,320	8.6	16,150	57.0	5.9	12,170	22.7
Maryland	10,850	3.3	9,800	90.3	3.6	1,050	2.0
Montserrado	36,040	11.0	24,200	67.1	8.8	11,840	22.1
Nimba	68,690	21.0	60,640	88.3	22.1	8,050	15.0
River Cess	8,390	2.6	7,400	88.2	2.7	990	1.8
River Gee	8,480	2.6	8,130	95.9	3.0	350	0.7
Sinoe	10,380	3.2	9,700	93.4	3.5	680	1.3
TOTAL	**327,630**	**100.0**	**274,070**	**83.7**	**100.0**	**53,560**	100.0

3.8. Heads of Agricultural Households

Table 3.9 depicts number of agricultural households' heads by gender. According to table number of agricultural households' heads was estimated at 274,070. Of this number, male-headed households were 223,500 and female-headed 50,570 constituted 82 percent and 18 percent respectively. This means that 18 percent of the agricultural households was headed by females while 82 percent headed by males. Female-headed agricultural households were relatively high in Grand Gedeh with 30.7 percent and Gbarpolu with 29.0 percent. Next were Bomi with 27.9 percent, Montserrado with 23.8 percent and Lofa with 23.2 percent, followed by River Gee and Grand Cape Mount counties with 22.2 percent and 20.0 percent respectively. The county with the least of female-headed agricultural households was River Cess with 2.0 percent. The rest of the counties ranged from 10 percent to 15 percent.

Of the total number of males who were heads of agricultural households between counties, Nimba County ranked the highest with 22.1 percent, followed by Bong with 13.1 percent and Lofa with 11.4 percent. The rest of the counties ranged from 7 percent to 3 percent of the total male-headed agricultural households. Of the female-headed agricultural households, Nimba County also ranked the highest with 22.4 percent, followed by Lofa with 15.2 percent and Montserrado with 11.4 percent.

Table 3.9: **Heads of Agricultural Households by sex and by county**

County	Both Sexes		Male		Female		Percent	
	Number	Percent	Number	Percent	Number	Percent	Male	Female
Bomi	11,030	4.0	7,950	3.6	3,080	6.1	72.1	27.9
Bong	34,170	12.5	29,210	13.1	4,960	9.8	85.5	14.5
Gbarpolu	11,460	4.2	8,140	3.6	3,320	6.6	71.0	29.0
Grd. Bassa	18,030	6.6	15,380	6.9	2,650	5.2	85.3	14.7
Cape Mount	9,790	3.6	7,830	3.5	1,960	3.9	80.0	20.0
Grd. Gedeh	11,350	4.1	7,870	3.5	3,480	6.9	69.3	30.7
Grd. Kru	9,100	3.3	8,190	3.7	910	1.8	90.0	10.0
Lofa	33,120	12.1	25,440	11.4	7,680	15.2	76.8	23.2
Margibi	16,150	5.9	15,000	6.7	1,150	2.3	92.9	7.1
Maryland	9,800	3.6	8,850	4.0	950	1.9	90.3	9.7
Montserrado	24,200	8.8	18,440	8.3	5,760	11.4	76.2	23.8
Nimba	60,640	22.1	49,300	22.1	11,340	22.4	81.3	18.7
River Cess	7,400	2.7	7,250	3.2	150	0.3	98.0	2.0
River Gee	8,130	3.0	6,320	2.8	1,810	3.6	77.8	22.2
Sinoe	9,700	3.5	8,330	3.7	1,370	2.7	85.9	14.1
TOTAL	**274,070**	**100.0**	**223,500**	**100.0**	**50,570**	**100.0**	**82.1**	**17.9**

3.10. **Members of Agricultural Households**

Table 3.10 displays the number of people that reported leaving in the households in which at least one person was involved in farming or agricultural activities by county. According to the table, members of agricultural households were estimated at 1,567,650. Of this number, male population was estimated at 784,500 (50.04 %) and the female population was estimated at 783,150 (49.96 %). Males present a slightly higher number compared to females in agricultural households during the 2008 agricultural survey.

The table further depicts the percent share of male and female households' members within county. Proportions of female population are relatively high in six (6) counties namely: Bomi and Grand Kru (53.9 % each), Grand Bassa (53.0 %), Gbarpolu (52.5 %), Bong (51.4 %) and Grand Cape Mount (50.4 %). On the other hand proportions of male population were relatively high in eight counties. These counties include River Gee (54.9 %), Grand Gedeh & Maryland (53.1 % each), Sinoe (51.6 %), Margibi (51.2 %), Lofa (50.9 %) and Nimba (50.1 %). There is equal population for male and female in River Cess County (50.0 % each)

Table 3.10: **Members of agricultural households by sex and county**

COUNTY	Agricultu-ral Household	Agricultural Population				Percent	
		Both Sexes		Male	Female	Male	Female
		Number	Percent				
Bomi	11,030	57,360	3.7	26,470	30,890	46.1	53.9
Bong	34,170	192,430	12.3	93,520	98,910	48.6	51.4
Gbarpolu	11,460	58,410	3.7	27,730	30,680	47.5	52.5
Grd. Bassa	18,030	87,950	5.6	41,380	46,570	47.0	53.0
Cape Mount	9,790	54,970	3.5	27,260	27,710	49.6	50.4
Grd. Gedeh	11,350	83,230	5.3	44,230	39,000	53.1	46.9
Grd. Kru	9,100	54,600	3.5	25,160	29,440	46.1	53.9
Lofa	33,120	198,540	12.7	101,050	97,490	50.9	49.1
Margibi	16,150	75,900	4.8	38,860	37,040	51.2	48.8
Maryland	9,800	56,840	3.6	30,200	26,640	53.1	46.9
Montserrado	24,200	128,260	8.2	65,240	63,020	50.9	49.1
Nimba	60,640	363,840	23.2	182,150	181,690	50.1	49.9
River Cess	7,400	38,660	2.5	19,330	19,330	50.0	50.0
River Gee	8,130	51,670	3.3	28,360	23,310	54.9	45.1
Sinoe	9,700	64,990	4.1	33,560	31,430	51.6	48.4
TOTAL	274,070	1,567,650	100.0	784,500	783,150	50.0	50.0

Appendix Table 2.1: **Heads of Agricultural Households by age, sex and by county, 2008**

County/Age Catego	Agricultural Households Heads							
	Both Sexes		Male Headed		Female Headed		percent	
	Number	Percent	Number	Percent	Number	Percent	Male	Female
Total	**274,070**	**100.0**	**197,580**	**100.0**	**76,490**	**100.0**	72.1	27.9
< 20 Years	6,850	2.5	4,740	2.4	2,110	2.8	69.2	30.8
20 -29 Years	50,160	18.3	38,130	19.3	12,030	15.7	76.0	24.0
30 - 39 Years	67,690	24.7	49,590	25.1	18,100	23.7	73.3	26.7
40 - 49 Years	65,230	23.8	48,010	24.3	17,220	22.5	73.6	26.4
50 - 59 Years	41,660	15.2	29,050	14.7	12,610	16.5	69.7	30.3
60 Years & over	42,480	15.5	28,060	14.2	14,420	18.9	66.1	33.9
Bomi	**11,030**	**100.0**	**7950**	**100.0**	**3,080**	**100.0**	**72.1**	**27.9**
< 20 Years	250	2.3	130	1.6	120	3.9	52.0	48.0
20 - 29 Years	2,050	18.6	1,800	22.6	250	8.1	87.8	12.2
30 - 39 Years	3,340	30.3	2,300	29.0	1,040	33.8	68.9	31.1
40 - 49 Years	2,690	24.4	1,540	19.4	1,150	37.3	57.2	42.8
50 - 59 Years	1,030	9.3	770	9.7	260	8.4	74.8	25.2
60 Years & Over	1,670	15.1	1,410	17.7	260	8.4	84.4	15.6
Bong	**34,170**	**100.0**	**29,210**	**100.0**	**4,960**	**100.0**	**85.5**	**14.5**
< 20 Years	440	1.3	220	0.7	220	4.4	50.0	50.0
20 - 29 Years	7,420	21.7	6,740	23.1	680	13.7	90.9	9.1
30 - 39 Years	8,100	23.7	7,430	25.4	670	13.5	91.7	8.3
40 - 49 Years	9,230	27.0	7,880	27.0	1,350	27.2	85.4	14.6
50 - 59 Years	4,950	14.5	4,050	13.9	900	18.1	81.8	18.2
60 Years & Over	4,030	11.8	2,910	10.0	1,120	22.6	72.2	27.8
				100.0				
Gbarpolu	**11,460**	**100.0**	**8,140**	**100.0**	**3,320**	100.0	**71.0**	**31.2**
< 20 Years	720	6.3	370	4.5	350	10.5	51.4	48.6
20 - 29 Years	3,220	28.1	2,220	27.3	1,000	30.1	68.9	31.1
30 - 39 Years	1,790	15.6	1,480	18.2	310	9.3	82.7	17.3
40 - 49 Years	1,790	15.6	1,480	18.2	310	9.3	82.7	17.3
50 - 59 Years	1,430	12.5	1,110	13.6	320	9.6	77.6	22.4
60 Years & Over	2,510	21.9	1,480	18.2	1,030	31.0	59.0	41.0
Grand Bassa	**18,030**	**100.0**	**15,380**	**100.0**	**2,650**	**100.0**	**85.3**	**14.7**
< 20 Years	1,150	6.4	1,050	6.8	100	3.8	91.3	8.7
20 - 29 Years	5,080	28.2	4,500	29.3	580	21.9	88.6	11.4
30 - 39 Years	4,510	25.0	4,170	27.1	340	12.8	92.5	7.5
40 - 49 Years	3,250	18.0	3,000	19.5	250	9.4	92.3	7.7
50 - 59 Years	1,500	8.3	690	4.5	810	30.6	46.0	54.0
60 Years & Over	2,540	14.1	1,970	12.8	570	21.5	77.6	22.4

Grd Cape Mount	**9,790**	**100.0**	**7,830**	**100.0**	**1,960**	**100.0**	**80.0**	**20.0**
< 20 Years	610	6.2	450	5.7	160	7.7	73.8	26.2
20 - 29 Years	2,110	21.6	1,960	25.0	150	7.7	92.9	7.1
30 - 39 Years	2,560	26.1	2,410	30.8	150	7.7	94.1	5.9
40 - 49 Years	1,960	20.0	1,060	13.5	900	46.2	54.1	45.9
50 - 59 Years	1,200	12.3	900	11.5	300	15.4	75.0	25.0
60 Years & Over	1,350	13.8	1,060	13.5	290	15.4	78.5	21.5
Grand Gedeh	**11,350**	**100.0**	**7,870**	**100.0**	**3,480**	**100.0**	**69.3**	**30.7**
< 20 Years	310	2.7	150	1.9	160	4.3	48.2	51.8
20 - 29 Years	1,360	12.0	900	11.5	460	13.0	66.2	33.8
30 - 39 Years	2,580	22.7	1,970	25.0	610	17.4	76.4	23.6
40 - 49 Years	3,480	30.7	1,970	25.0	1,510	43.5	56.6	43.4
50 - 59 Years	2,420	21.3	1,820	23.1	600	17.4	75.2	24.8
60 Years & Over	1,200	10.6	1,060	13.5	140	4.4	88.3	11.7
Grand Kru	**9,100**	**100.0**	**8,190**	**100.0**	**910**	**100.0**	**90.0**	**10.0**
< 20 Years	560	6.1	310	3.8	250	27.5	55.4	44.6
20 - 29 Years	1,100	12.1	950	11.6	150	16.5	86.4	13.6
30 - 39 Years	1,930	21.2	1,570	19.2	360	39.6	81.3	18.7
40 - 49 Years	1,930	21.2	1,890	23.1	40	4.4	97.9	2.1
50 - 59 Years	2,480	27.3	2,530	30.8	(50)	-5.5	102.0	-2.0
60 Years & Over	1,100	12.1	940	11.5	160	17.6	85.5	14.5
Lofa	**33,120**	**100.0**	**25,440**	**100.0**	**7,680**	**100.0**	**76.8**	**23.2**
< 20 Years	1,424	4.3	890	3.5	530	6.9	62.5	37.2
20 - 29 Years	7,518	22.7	5,720	22.5	1,800	23.4	76.1	23.9
30 - 39 Years	9,307	28.1	8,060	31.7	1,250	16.2	86.6	13.4
40 - 49 Years	4,306	13.0	3,590	14.1	720	9.4	83.4	16.7
50 - 59 Years	4,306	13.0	2,700	10.6	1,610	21.0	62.7	37.4
60 Years & Over	6,260	18.9	4,480	17.6	1,780	23.1	71.6	28.4
Margibi	**16,150**	**100.0**	**15,000**	**100.0**	**1,150**	**100.0**	**92.9**	**7.1**
< 20 Years	420	2.6	320	2.1	100	9.1	76.2	23.8
20 - 29 Years	2,700	16.7	2,580	17.2	120	9.1	95.6	4.4
30 - 39 Years	2,580	16.0	2,380	15.9	200	18.2	92.2	7.8
40 - 49 Years	5,280	32.7	5,070	33.8	210	18.2	96.0	4.0
50 - 59 Years	3,310	20.5	3,000	20.0	310	27.2	90.6	9.4
60 Years & Over	1,860	11.5	1,650	11.0	210	18.2	88.7	11.3
Maryland	**9,800**	**100.0**	**8,850**	**100.0**	**950**	**100.0**	**90.3**	**9.7**
< 20 Years	640	6.5	380	4.3	260	26.40	59.4	40.6
20 - 29 Years	1,580	16.1	1,540	17.4	40	4.20	97.5	2.5
30 - 39 Years	1,900	19.4	1,540	17.4	360	37.90	81.1	18.9
40 - 49 Years	3,480	35.5	3,470	39.2	10	1.00	99.7	0.3
50 - 59 Years	630	6.4	380	4.3	250	26.30	60.3	39.7
60 Years & Over	1,580	16.1	1,540	17.4	40	4.20	97.5	2.5

Montserrado	**24,200**	**100.0**	**18,440**	**100.0**	**5,760**	**100.0**	**76.2**	**23.8**
< 20 Years	460	1.9	240	1.3	220	3.8	52.1	47.9
20 - 29 Years	3,920	16.2	3,410	18.5	510	8.9	87.0	13.0
30 - 39 Years	6,680	27.6	4,090	22.2	2,590	45.0	61.2	38.8
40 - 49 Years	5,080	21.0	4,780	25.9	300	5.2	94.1	5.9
50 - 59 Years	3,460	14.3	2,730	14.8	730	12.7	78.9	21.1
60 Years & Over	4,600	19.0	3,190	17.3	1,410	24.5	69.3	30.7
Nimba	**60,640**	**100.0**	**49,300**	**100.0**	**11,340**	**100.0**	**81.3**	**18.7**
< 20 Years	550	0.9	250	0.5	300	2.6	45.5	54.5
20 - 29 Years	8,000	13.2	7,000	14.2	1,000	8.8	87.5	12.5
30 - 39 Years	17,520	28.9	13,410	27.2	4,110	36.2	76.5	23.5
40 - 49 Years	14,980	24.7	12,370	25.1	2,610	23.0	82.6	17.4
50 - 59 Years	9,280	15.3	7,990	16.2	1,290	11.4	86.1	13.9
60 Years & Over	10,310	17.0	8,280	16.8	2,030	17.9	80.3	19.7
River Cess	**7,400**	**100.0**	**7,250**	**100.0**	**150**	**100.0**	**98.0**	**2.0**
< 20 Years	450	6.1	340	4.7	110	73.3	75.6	24.4
20 - 29 Years	1,510	20.4	1,510	20.9	-	0.0	100.0	0.0
30 - 39 Years	1,670	22.5	1,670	23.2	-	0.0	100.0	0.0
40 - 49 Years	1,810	24.5	1,810	25.6	-	0.0	100.0	0.0
50 - 59 Years	1,060	14.3	1,020	14.0	40	26.7	96.2	3.8
60 Years & Over	900	12.2	900	11.6	-	0.0	100.0	0.0
River Gee	**8,130**	**100.0**	**6,320**	**100.0**	**1,810**	**100.0**	**77.7**	**22.3**
< 20 Years	350	4.3	180	2.8	170	9.4	51.4	48.6
20 - 29 Years	350	4.3	180	2.8	170	9.4	51.4	48.6
30 - 39 Years	2,070	25.5	1,580	25.0	490	27.1	76.3	23.7
40 - 49 Years	2,770	34.0	2,450	38.8	320	17.7	88.4	11.6
50 - 59 Years	1,730	21.3	1,580	25.0	150	8.3	91.3	8.7
60 Years & Over	860	10.6	350	5.6	510	28.2	40.7	59.3
Sinoe	**9,700**	**100.0**	**8,330**		**1,370**	**100.0**	**85.9**	**14.1**
< 20 Years	320	3.3	210	2.5	110	8.0	65.6	34.4
20 - 29 Years	1,160	12.0	1,060	12.7	100	7.3	91.4	8.6
30 - 39 Years	2,000	20.6	1,900	22.8	100	7.3	95.0	5.0
40 - 49 Years	2,320	23.9	2,100	25.2	220	16.1	90.5	9.5
50 - 59 Years	1,900	19.6	1,690	20.3	210	15.3	88.9	11.1
60 Years & Over	2,000	20.6	1,370	16.5	630	46.0	68.5	31.5

Appendix Table 2.2: **Members of Agricultural Households by Age, Sex and County, 2008**

County/Age Category	Both Sexes		Male		Female		percent	
	Number	Percent	Number	Percent	Number	Percent	Mae	Female
Bomi	**57,360**	**100.0**	**26,470**	**100.0**	**30,890**	**100.0**	**46.1**	**53.9**
0 - 9 Years	15,030	26.2	6,170	23.3	8,860	28.7	41.1	58.9
10 - 19 Years	16,180	28.2	7,730	29.2	8,450	27.4	47.8	52.2
20 - 29 Years	10,900	19.0	4,740	17.9	6,160	19.9	43.5	56.5
30 - 39 Years	6,420	11.2	3,100	11.7	3,320	10.7	48.3	51.7
40 - 49 Years	4,760	8.3	1,980	7.5	2,780	9.0	41.6	58.4
50 - 59 Years	1,950	3.4	1,220	4.6	730	2.4	62.6	37.4
60 Years+	2,120	3.7	1,530	5.8	590	1.9	72.2	27.8
Bong	**192,430**	**100.0**	**93,520**	**100.0**	**98,910**	**100.0**	**48.6**	**51.4**
0 - 9 Years	57,540	29.9	26,750	28.6	30,790	31.1	46.5	53.5
10 - 19 Years	49,650	25.8	24,030	25.7	25,620	25.9	48.4	51.6
20 - 29 Years	36,370	18.9	17,110	18.3	19,260	19.5	47.0	53.0
30 - 39 Years	22,510	11.7	9,630	10.3	12,880	13.0	42.8	57.2
40 - 49 Years	12,890	6.7	8,140	8.7	4,750	4.8	63.1	36.9
50 - 59 Years	7,890	4.1	4,490	4.8	3,400	3.4	56.9	43.1
60 Years+	5,580	2.9	3,370	3.6	2,210	2.2	60.4	39.6
Gbarpolu	**58,410**	**100.0**	**27,730**	**100.0**	**30,680**	**100.0**	**47.5**	**52.5**
0 - 9 Years	12,560	21.5	4,440	16.0	8,120	26.5	35.4	64.6
10 - 19 Years	16,650	28.5	9,230	33.3	7,420	24.2	55.4	44.6
20 - 29 Years	11,850	20.3	5,910	21.3	5,940	19.4	49.9	50.1
30 - 39 Years	6,660	11.4	2,580	9.3	4,080	13.3	38.7	61.3
40 - 49 Years	3,680	6.3	2,240	8.1	1,440	4.7	60.9	39.1
50 - 59 Years	2,920	5.0	1,110	4.0	1,810	5.9	38.0	62.0
60 Years+	4,090	7.0	2,220	8.0	1,870	6.1	54.3	45.7
Grand Bassa	**87,950**	**100.0**	**41,380**	**100.0**	**46,570**	**100.0**	**47.0**	**53.0**
0 - 9 Years	33,950	38.6	16,390	39.6	17,560	37.7	48.3	51.7
10 - 19 Years	16,540	18.8	6,160	14.9	10,380	22.3	37.2	62.8
20 - 29 Years	16,090	18.3	6,870	16.6	9,220	19.8	42.7	57.3
30 - 39 Years	8,880	10.1	5,340	12.9	3,540	7.6	60.1	39.9
40 - 49 Years	5,540	6.3	3,140	7.6	2,400	5.2	56.7	43.3
50 - 59 Years	2,550	2.9	830	2.0	1,720	3.7	32.5	67.5
60 Years+	4,400	5.0	2,650	6.4	1,750	3.8	60.2	39.8
Cape Mount	**54,970**	**100.0**	**27,260**	**100.0**	**27,710**	**100.0**	**49.6**	**50.4**
0 - 9 Years	24,240	44.1	13,110	48.1	11,130	40.2	54.1	45.9
10 - 19 Years	9,010	16.4	4,230	15.5	4,780	17.3	46.9	53.1
20 - 29 Years	8,580	15.6	3,760	13.8	4,820	17.4	43.8	56.2
30 - 39 Years	5,110	9.3	2,700	9.9	2,410	8.7	52.8	47.2
40 - 49 Years	3,740	6.8	1,060	3.9	2,680	9.7	28.3	71.7
50 - 59 Years	2,310	4.2	1,040	3.8	1,270	4.6	45.0	55.0
60 Years+	1,980	3.6	1,360	5.0	620	2.2	68.7	31.3

Grand Gedeh	**83,230**	**100.0**	**44,230**	**100.0**	**39,000**	**100.0**	**53.1**	**46.9**
0 - 9 Years	17,810	21.4	7,920	17.9	9,890	25.4	44.5	55.5
10 - 19 Years	26,130	31.4	16,590	37.5	9,540	24.5	63.5	36.5
20 - 29 Years	16,570	19.9	8,140	18.4	8,430	21.6	49.1	50.9
30 - 39 Years	8,570	10.3	4,550	10.3	4,020	10.3	53.1	46.9
40 - 49 Years	7,910	9.5	3,230	7.3	4,680	12.0	40.8	59.2
50 - 59 Years	3,410	4.1	2,170	4.9	1,240	3.2	63.6	36.4
60 Years +	2,830	3.4	1,630	3.7	1,200	3.1	57.6	42.4
Grand Kru	**54,600**	**100.0**	**25,160**	**100.0**	**29,440**	**100.0**	**46.1**	**53.9**
0 - 9 Years	2,080	3.8	1,030	4.1	1,050	3.6	49.5	50.5
10 - 19 Years	11,570	21.2	4,600	18.3	6,970	23.7	39.8	60.2
20 - 29 Years	10,480	19.2	3,600	14.3	6,880	23.4	34.4	65.6
30 - 39 Years	9,990	18.3	4,630	18.4	5,360	18.2	46.3	53.7
40 - 49 Years	8,900	16.3	4,100	16.3	4,800	16.3	46.1	53.9
50 59 Years	7,920	14.5	5,140	20.4	2,780	9.4	64.9	35.1
60 Years +	3,660	6.7	2,060	8.2	1,600	5.4	56.3	43.7
Lofa	**198,540**	**100.0**	**101,050**	**100.0**	**97,490**	**100.0**	**50.9**	**49.1**
0 - 9 Years	55,590	28.0	28,600	28.3	26,990	27.7	51.4	48.6
10 - 19 Years	53,610	27.0	28,600	28.3	25,010	25.7	53.3	46.7
20 - 29 Years	38,520	19.4	18,690	18.5	19,830	20.3	48.5	51.5
30 - 39 Years	23,630	11.9	11,720	11.6	11,910	12.2	49.6	50.4
40 - 49 Years	11,710	5.9	4,850	4.8	6,860	7.0	41.4	58.6
50 - 59 Years	6,750	3.4	3,330	3.3	3,420	3.5	49.3	50.7
60 Years +	8,730	4.4	5,260	5.2	3,470	3.6	60.3	39.7
Margibi	**75,900**	**100.0**	**38,860**	**100.0**	**37,040**	**100.0**	**51.2**	**48.8**
0 - 9 Years	19,660	25.9	9,290	23.9	10,370	28.0	47.3	52.7
10 - 19 Years	19,580	25.8	11,110	28.6	8,470	22.9	56.7	43.3
20 - 29 Years	14,800	19.5	6,880	17.7	7,920	21.4	46.5	53.5
30 - 39 Years	8,120	10.7	3,150	8.1	4,970	13.4	38.8	61.2
40 - 49 Years	7,890	10.4	4,740	12.2	3,150	8.5	60.1	39.9
50 - 59 Years	3,420	4.5	2,370	6.1	1,050	2.8	69.3	30.7
60 Years +	2,430	3.2	1,320	3.4	1,110	3.0	54.3	45.7
Maryland	**56,840**	**100.0**	**30,200**	**100.0**	**26,640**	**100.0**	**53.1**	**46.9**
0 - 9 Years	3,350	5.9	1,720	5.7	1,630	6.1	51.3	48.7
10 - 19 Years	15,230	26.8	7,400	24.5	7,830	29.4	48.6	51.4
20 - 29 Years	14,040	24.7	7,970	26.4	6,070	22.8	56.8	43.2
30 - 39 Years	10,120	17.8	3,410	11.3	6,710	25.2	33.7	66.3
40 - 49 Years	7,900	13.9	6,280	20.8	1,620	6.1	79.5	20.5
50 - 59 Years	2,840	5.0	580	1.9	2,260	8.5	20.4	79.6
60 Years +	3,360	5.9	2,840	9.4	520	2.0	84.5	15.5

Montserrado	**128,260**	**100.0**	**65,240**	**100.0**	**63,020**	**100.0**	**50.9**	**49.1**
0 - 9 Years	38,990	30.4	21,990	33.7	17,000	27.0	56.4	43.6
10 - 19 Years	29,890	23.3	14,220	21.8	15,670	24.9	47.6	52.4
20 - 29 Years	22,960	17.9	10,960	16.8	12,000	19.0	47.7	52.3
30 - 39 Years	14,620	11.4	4,760	7.3	9,860	15.6	32.6	67.4
40 - 49 Years	11,030	8.6	6,650	10.2	4,380	7.0	60.3	39.7
50 - 59 Years	4,490	3.5	3,200	4.9	1,290	2.0	71.3	28.7
60 Years +	6,280	4.9	3,460	5.3	2,820	4.5	55.1	44.9
Nimba	**363,840**	**100.0**	**182,150**	**100.0**	**181,690**	**100.0**	**50.1**	**49.9**
0 - 9 Years	86,590	23.8	40,620	22.3	45,970	25.3	46.9	53.1
10 - 19 Years	106,610	29.3	60,290	33.1	46,320	25.5	56.6	43.4
20 - 29 Years	64,400	17.7	28,960	15.9	35,440	19.5	45.0	55.0
30 - 39 Years	45,840	12.6	19,850	10.9	25,990	14.3	43.3	56.7
40 - 49 Years	27,650	7.6	14,210	7.8	13,440	7.4	51.4	48.6
50 - 59 Years	13,460	3.7	8,740	4.8	4,720	2.6	64.9	35.1
60 Years +	19,290	5.3	9,480	5.2	9,810	5.4	49.1	50.9
River Cess	**38,660**	**100.0**	**19,330**	**100.0**	**19,330**	**100.0**	**50.0**	**50.0**
0 - 9 Years	16,860	43.6	8,310	43.0	8,550	44.2	49.3	50.7
10 - 19 Years	7,810	20.2	4,080	21.1	3,730	19.3	52.2	47.8
20 - 29 Years	4,370	11.3	1,660	8.6	2,710	14.0	38.0	62.0
30 - 39 Years	4,950	12.8	1,650	8.5	3,300	17.1	33.3	66.7
40 - 49 Years	2,430	6.3	1,660	8.6	770	4.0	68.3	31.7
50 - 59 Years	1,200	3.1	1,060	5.5	140	0.7	88.3	11.7
60 Years +	1,040	2.7	910	4.7	130	0.7	87.5	12.5
River Gee	**51,670**	**100.0**	**28,360**	**100.0**	**23,310**	**100.0**	**54.9**	**45.1**
0 - 9 Years	15,550	30.1	10,660	37.6	4,890	21.0	68.6	31.4
10 - 19 Years	13,180	25.5	6,860	24.2	6,320	27.1	52.0	48.0
20 - 29 Years	7,240	14.0	3,600	12.7	3,640	15.6	49.7	50.3
30 - 39 Years	5,580	10.8	2,720	9.6	2,860	12.3	48.7	51.3
40 - 49 Years	5,060	9.8	2,530	8.9	2,530	10.9	50.0	50.0
50 - 59 Years	2,530	4.9	1,620	5.7	910	3.9	64.0	36.0
60 Years +	2,530	4.9	370	1.3	2,160	9.3	14.6	85.4
Sinoe	**64,990**	**100.0**	**33,560**	**100.0**	**31,430**	**100.0**	**51.6**	**48.4**
0 - 9 Years	19,110	29.4	9,030	26.9	10,080	32.1	47.3	52.7
10 - 19 Years	14,560	22.4	7,720	23.0	6,840	21.8	53.0	47.0
20 - 29 Years	11,890	18.3	6,610	19.7	5,280	16.8	55.6	44.4
30 - 39 Years	7,210	11.1	3,690	11.0	3,520	11.2	51.2	48.8
40 - 49 Years	5,460	8.4	2,950	8.8	2,510	8.0	54.0	46.0
50 - 59 Years	2,990	4.6	1,780	5.3	1,210	3.8	59.5	40.5
60 Years +	3,770	5.8	1,780	5.3	1,990	6.3	47.2	52.8