

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;
- Develop a “user-friendly” agricultural database to include major indicators for PRS and food security

1.2. Terms and Definition

- **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 (HoH)** - 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 2012 survey was a multi-stage sampling. It embodied 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.

Description of the Sampling Frame: For the first stage of sampling, the basic frame consisted of a list of Enumeration Areas (EAs) from the Liberia Institute 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 300 REAs for the country from the total of 4,500 rural EAs. The sample size was derived based on the amount of resources (time and money) available. However, the 2012 Crop Survey was conducted in only five (5) of the fifteen (15) counties (the southeastern region) with a total of 37 EAs due to

the un-disbursement of funds from the government of Liberia. Projection was the only necessary option to include the remaining ten (10) counties.

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 twenty-four (24) holders for cash crop and twenty holders for food crops were taken. The holders selected constituted the sample of farming households that were interviewed.

For the third stage sampling, the basic frame consisted of rice, cassava, Cocoa, Coffee and Rubber farms for holders selected at the second stage. From the listing record of rice and cassava farms, a sample of ten (10) farms for rice and eight (8) farms for cassava were selected for area measurement. From the listing of cash crops, eight (8) holders each for coffee, cocoa and rubber 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 eight (8) farms for rice and five (5) 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 radius of 5 feet long for rice and 7 feet long for cassava. 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. The formula used for estimating production per unit area (Yield) is:

$$Yd = (Z \div \pi R^2) \times W;$$

Where

Y_d = Yield per acre

Z = Acreage equivalent from square feet

πR^2 = Area of the Sample plot in square feet

W = Weight of the crops harvested from the sample plot. In the case of the rice, it is the dry weight and fresh weight for cassava

Estimation of Characteristics

The objective is to estimate the value Y_c of the characteristics for each county in which the survey was conducted. In each county there are N enumeration areas (EAs) and a systematic sample of n EAs was taken. The frame and selection of primary sampling units (n) are based on the 2008 population and housing census data. Unfortunately, some localities listed in the sample EAs were found non-existent and some of sample units are urban EAs. Thus, the formula to estimate Y_c of the total value of the characteristics y_{ij} for the first stage sample for the county Y_c is:

$$Y_c = (N/n) (F_c) \sum \sum y_{ij},$$

Where

N = Total number of sample enumeration areas (EAs) in a county

n = Number of sample enumeration areas (EAs) in a county (PSU)

F_c = Value of the adjustment factor within county

y_{ij} = True value or variable from objective measurement in the j th household of the i th primary sample unit .

At the level of secondary and tertiary sample units, the method of ratio estimation was used. The primary objective of this method is to obtain perfect precision by taking advantage of the correlation between two variables. In addition, it solved the problem of calculating a proportion or factor of compensating the loss information caused by non-respondent households

Part 2: Analytical Overview - National Estimates

2.1. Evolution of Rice and Cassava Production 2012

Rice is the preferred staple food for the Liberian people with cassava as the major substitute. As shifting or slashing and burn cultivation on upland soil dominates the way in which rice and cassava are produced in the Country, Table 2.1 below presents the production data for both paddy rice and fresh cassava in Liberia for 2012 crop season. According to the data, a total production (both rice and cassava) was estimated at 782,380 metric tons. This estimate was 0.3 percent less than the average of (2010-2011) and 0.1 percent more than the average of (2008-2009).

The volume of paddy rice produced was estimated at 297,190 Metric tons during the 2012 crop season. This estimate was 1.3 percent more than the average of (2010-2011) and 3.9 percent more than the average of (2008-2009) . An estimated land area of paddy harvested was 246,380 hectares with an average yield of 1,206 kilograms per hectare. The estimated hectare of paddy rice was 0.6 percent more than the average of (2010-2011) and 4.8 percent more than the average of (2008-2009).

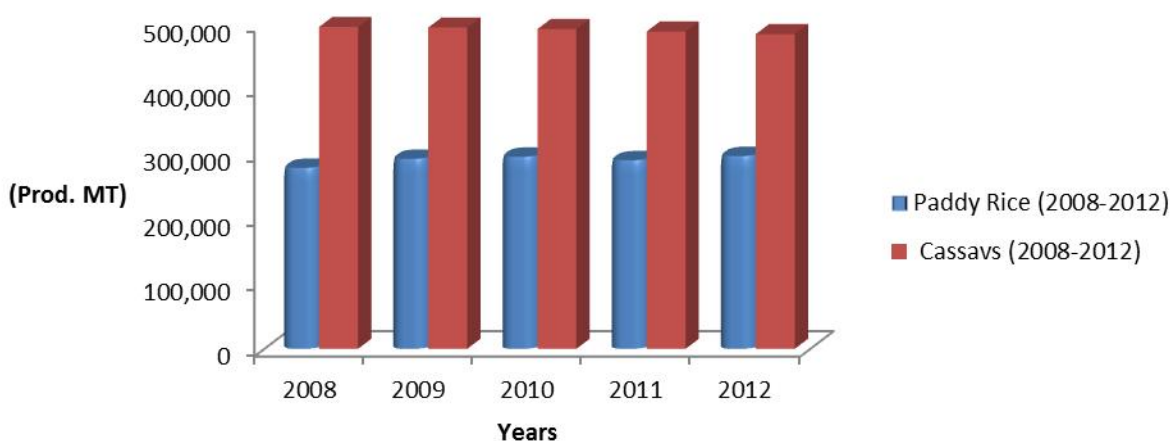
Cassava production in 2012 was estimated at 485,190 metric tons. This estimate was 2.1 percent less than the average of the past two years (2008-2009) when 495,795 metric tons were produced. It is also 1.2 percent less than the average of (2010-2011) when 491,135 metric tons were produced. Area of cassava harvested was estimated at 61,050 hectares with an average yield of 7,947 kilograms. This estimate was 1.3 percent and more than the average of (2008-2009) and 0.3 percent less than the average of (2010-2011)

Table 2.1 also depicts the data on the total number of farms (both rice and cassava) which was estimated at 362,460 during the 2012 crops season. with an increase of 1.3 on the average of (2008-2009) and a decrease of 0.1 percent on the average of (2010-2011). According to the results of the survey, the total number of rice farms reported was 241,750. This estimate was 1.3 percent more than the average of (2008- 2009) and 0.1 percent less than the average of (2010-2011) when 238,745 and 242,055 rice farms were cultivated respectively. The average farm size for rice was approximately 1.0 hectare. The number of cassava farms reported in 2012 was estimated at 120,710. This estimate was 1.3 percent more than the average of (2008-2009 and 0.2 percent less than the average of (2010-2011).

Table 2.1 Trends of Rice and Cassava Hectares, Yields and production 2012

Description	Unit	Year					Percent Change	
		2012	2011	2010	2009	2008	Average (010-011)	Average (09-08)
PRODUCTION								
Paddy Rice	MT	297,190	290,650	296,090	293,000	279,000	1.3	3.9
Fresh Cassava	MT	485,190	489,270	493,000	495,300	496,290	-1.2	-2.1
Total	MT	782,380	779,920	789,090	788,300	775,290	-0.3	0.1
AREA HARVESTED								
Rice	HA.	246,380	238,780	251,230	247,580	222,760	0.6	4.8
Cassava	HA,	61,050	61,040	61,470	63,210	57,360	-0.3	1.3
Total	HA.	307,430	299,820	312,700	310,790	280,120	0.4	4.1
YIELDS PER HA,								
Rice	KG	1,206	1,217	1,179	1,183	1,253	0.7	-1.0
Cassava	KG	7,947	8,016	8,020	7,835	8,652	-0.9	-3.6
FARMS								
Rice	NUM	241,750	242,800	241,310	245,840	231,650	-0.1	1.3
Cassava	NUM	120,710	122,520	119,370	120,560	117,730	-0.2	1.3
Total		362,460	365,320	360,680	366,400	349,380	-0.1	1.3

Trends of Rice and cassava Production in Metric tons



2.2 Evolution of Livestock and Poultry Production

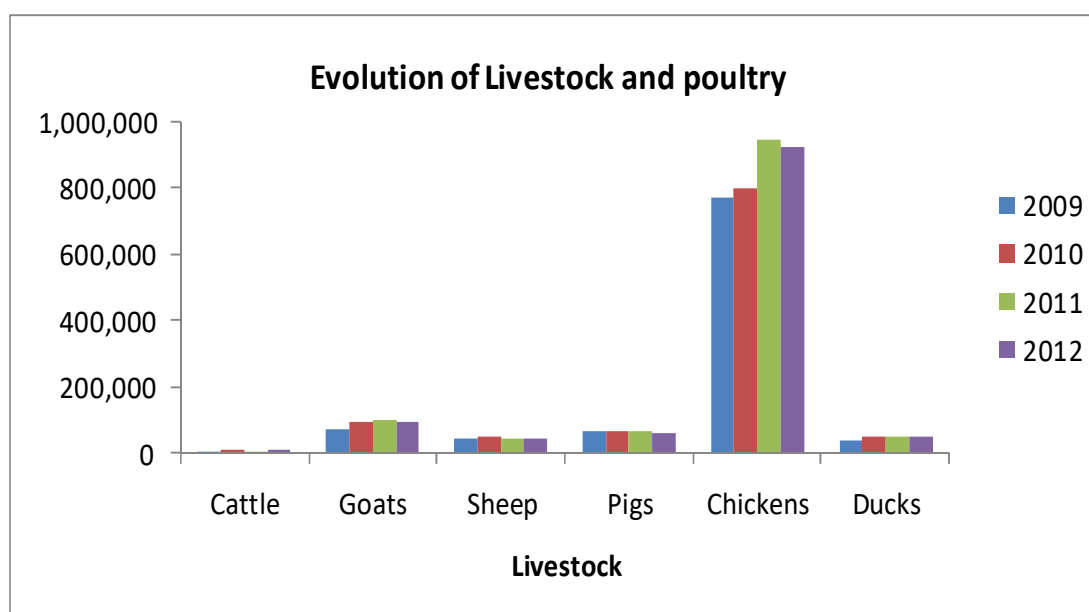
The livestock and poultry on which data were collected included cattle, goats, sheep, pigs, chickens and ducks. The bulk of these animals are produced by households in the back yards and through the free range system. Table 2.2 below presents the results of the survey on livestock and poultry production. According to the data, total heads of livestock were estimated at 214,730 in 2012. This estimate was 2.1 percent less than 2011 and 2.8 percent less than 2010 when 219,400 and 220,840 heads of livestock were respectively reported.

The number of cattle reared was estimated at 10,440. The estimates of other livestock included 96,400 heads of goats, 46,680 sheep and 61,210 heads of pigs. The heads of cattle estimated were 49.1 percent more than 2011 and 2.0 percent less than 2010. The heads of goats estimated decreased by 3.6 and 0.4 percent when compared to 2011 and 2010 respectively. The heads of sheep also followed the same trend as the goats with a decrease of 1.1 percent and 3.7 percent when compared to 2011 and 2010 respectively. The heads of pigs estimated were 6.1 percent less than 2011 and 5.8 percent less than 2010.

Poultry is raised in the backyards by most families engaged in agriculture activities. It consists of the most common domestic birds reared in the country and are mainly used for household consumption and cash. They are chickens and ducks. Heads of poultry in 2012 were estimated at 977,700. This estimate was 2.7 percent less than 2011 but 15.1 percent more than 2010. Heads of chickens raised were estimated at 924,700. This was 2.8 percent less than 2011 but 15.5 percent more than the production in 2010. Heads of ducks raised were estimated at 53,000. This estimate was also 0.7 percent less than 2011 but 9.1 percent more than 2010.

Table 2.2: Evolution of Livestock and Poultry Production

Description	Unit	Year				Percent Change		
		2012	2011	2010	2009	2011	2010	2009
LIVESTOCK								
Cattle	Head	10,440	7,000	10,650	8,370	49.1	-2.0	24.7
Goats	Head	96,400	100,000	96,750	75,330	-3.6	-0.4	28.0
Sheep	Head	46,680	47,200	48,450	43,470	-1.1	-3.7	7.4
Pigs	Head	61,210	65,200	64,990	68,000	-6.1	-5.8	-10.0
TOTAL	Head	214,730	219,400	220,840	195,170	-2.1	-2.8	10.0
POULTRY								
Chickens	Head	924,700	951,260	800,780	774,960	-2.8	15.5	19.3
Ducks	Head	53,000	53,350	48,580	39,210	-0.7	9.1	35.2
TOTAL	Head	977,700	1,004,610	849,360	814,170	-2.7	15.1	20.1



2.7 Number of Heads of Rice Producing Households by Gender 2012

Table 2.7 shows the distribution of rice producing households by county and gender. According to the data, the total number of rice producing households was estimated at 208,570. Of this number, male-headed households were 158,560 (76.0 %) while female-headed households were 50,010 (24.0 %). Between counties, Female-headed rice producing households were relatively high in three counties, namely: Lofa with 11,650 (23.3 %), Nimba with 10,780 (21.6 %) and Bong with 7,640 (15.3 %). Next were Grand Gedeh with 3,020 (6.0 %), Grand Kru with 2,560 (5.1 %), Gbarpolu with 2,070 (4.1 %) and River Gee with 2,040 (4.1 %); followed by Grand Bassa with 1,800 (3.6 %) and Cape Mount with 1,420

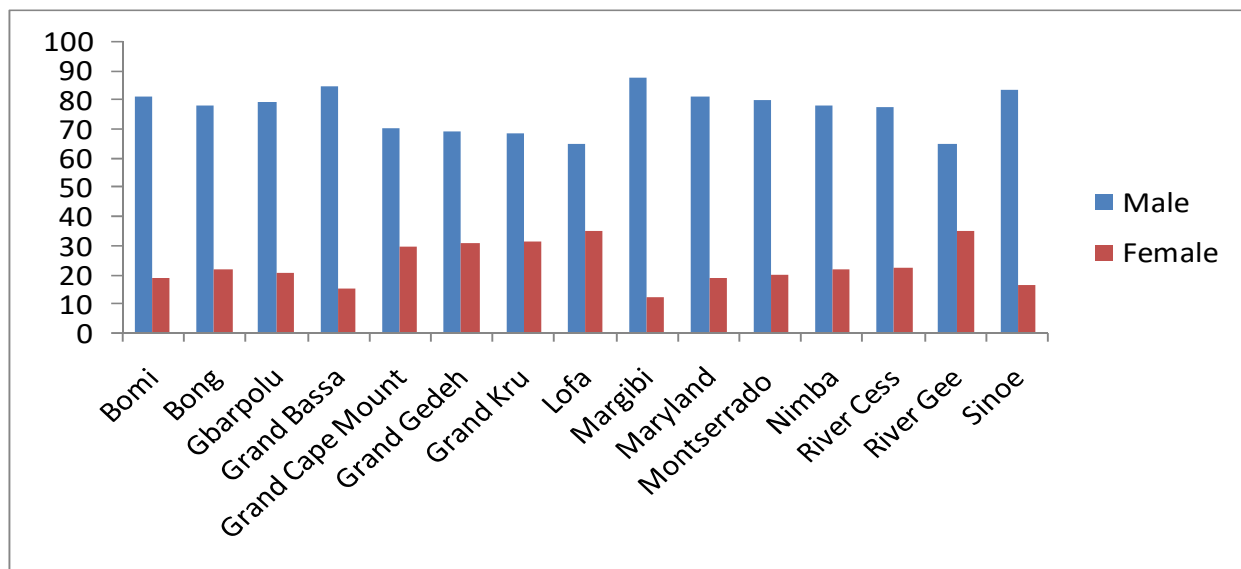
(2.8 %). The counties with the least female-headed rice producing households were Margibi and Bomi with 1.5 and 2.0 percent respectively.

Of the total number of male-headed rice producing households, Nimba County ranked the highest with 38,680 (24.4 %) ; followed by Bong with 27,920 (17.6 %) and Lofa with 21,830 (13.8%). For the rest of the male-headed rice producing households, the remaining counties ranged from 3,800 (2.4 %) to 9,990 (6.3 %). According to the data, the male-headed rice producing households exceeded the female-headed rice producing households by 52.0%. The data further reveals that the male-headed rice producing households dominated the female-headed rice producing households in all counties.

Table 2.7 Number of Heads of Rice Producing Households by Gender 2012

County	Both Sexes		Male		Female		Percent	
	Number	% of Tot.	Number	% of Tot.	Number	% of Tot.	Male	Female
TOTAL	208,570	100.0	158,560	100.0	50,010	100.0	76.0	24.0
Bomi	5,300	2.5	4,320	2.7	980	2.0	81.5	18.5
Bong	35,560	17.0	27,920	17.6	7,640	15.3	78.5	21.5
Gbarpolu	10,070	4.8	8,000	5.0	2,070	4.1	79.4	20.6
Grand Bassa	11,790	5.7	9,990	6.3	1,800	3.6	84.7	15.3
Grand Cape Mount	4,770	2.3	3,350	2.1	1,420	2.8	70.2	29.8
Grand Gedeh	9,800	4.7	6,780	4.3	3,020	6.0	69.2	30.8
Grand Kru	8,160	3.9	5,600	3.5	2,560	5.1	68.6	31.4
Lofa	33,480	16.1	21,830	13.8	11,650	23.3	65.2	34.8
Margibi	6,540	3.1	5,770	3.6	770	1.5	88.2	11.8
Maryland	7,400	3.5	6,040	3.8	1,360	2.7	81.6	18.4
Montserrado	6,700	3.2	5,350	3.4	1,350	2.7	79.9	20.1
Nimba	49,460	23.7	38,680	24.4	10,780	21.6	78.2	21.8
River Cess	5,930	2.8	4,610	2.9	1,320	2.6	77.7	22.3
River Gee	5,840	2.8	3,800	2.4	2,040	4.1	65.1	34.9
Sinoe	7,770	3.7	6,520	4.1	1,250	2.5	83.9	16.1

Heads of Rice Producing Households by Gender and County 2012



Part 3 County and Regional Estimates

3.1. Introduction

With the agricultural sector being the main source of income and major contributor to employment for rural population, questions asked during the 2012 agricultural survey included but not limited to rice and cassava cultivation, tree crop production, 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

Rice is the staple diet of Liberians. Shifting or slash and burns cultivation dominate rice farming in the country. Most of the rice produced during the 2012 harvest season (about 95%) was done through shifting cultivation on upland soil. Table 3.5 presents the quantity of paddy rice produced and area cultivated for rice in 2012. According to the data, a total of 297,190 metric tons was produced, which is about 99.52 percent of its pre-war (1988) level when production was estimated at 298,630 metric tons. The estimate shows that the quantity of paddy rice produced in 2012 increased by 2.3 percent as compared to 2011 production estimate, when 290,650 metric tons of paddy rice was reported.

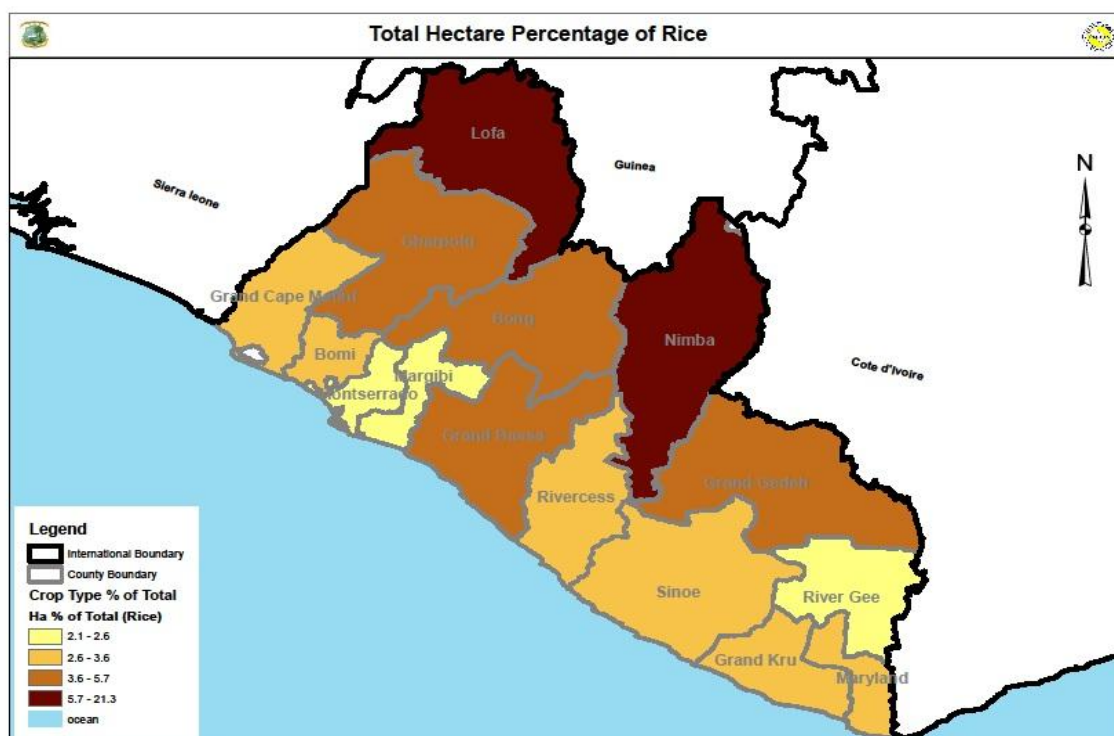
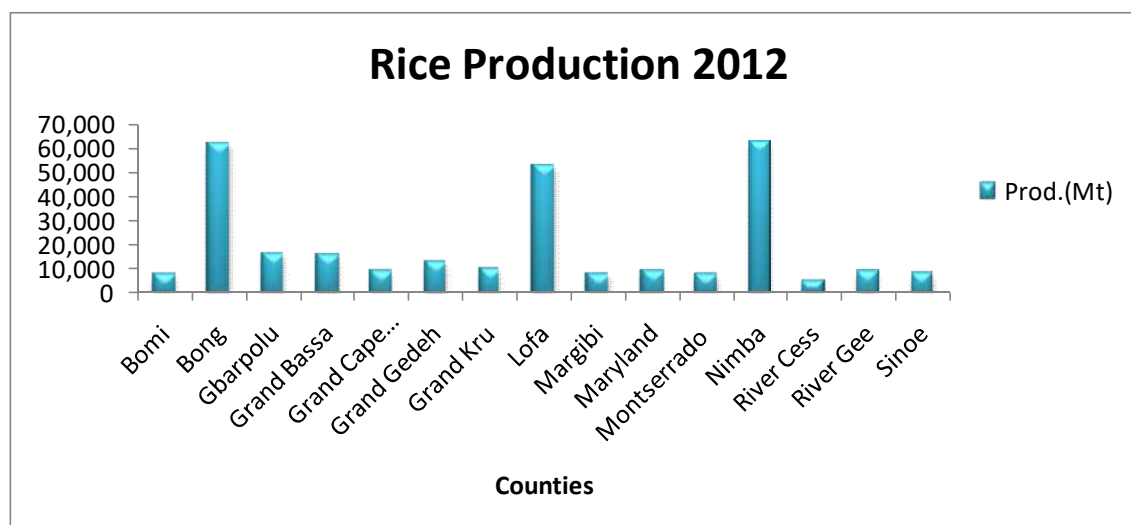
The table reveals that Nimba, Bong and Lofa counties ranked the highest in the 2012 rice production with 63,080 (21.2 %), 62,370 (21.0 %) and 52,660 (17.7 %) metric tons respectively. The combined estimates of these three counties accounted for 59.9 percent of the total production, followed by Gbarpolu with 16,140 (5.4 %) metric tons and Grand Bassa with 15,500 (5.2 %) metric tons. Grand Gedeh and Grand Kru Counties came next with 13,000 (4.4 %) metric tons and 10,420 (3.5%) metric tons respectively. The least county was Rivercess with 5,230 (1.8 %) metric tons. The rest of the counties had a level of production ranging from 7,570 (2.5 %) to 9,200 (3.1 %) metric tons.

The table further portrays area of rice harvested during the 2012 crop year. According to the data, area of rice harvested was estimated at 246,380 hectares with an average farm size of 1.0 hectare. Nimba, Bong and Lofa counties had the largest harvested areas of rice with 52,520 (21.3 %) hectares, 49,070 (19.9 %) hectares and 41,760 (16.9 %) hectares, respectively. Next were Grand Bassa with 14,070 (5.7 %), Gbarpolu with 12,690 (5.2 %) and Grand Gedeh with 10,780 (4.4%) hectares; followed by Grand Kru with 8,980 (3.6 %) and Sinoe with 8,080 (3.3 %) hectares. The county with the least harvested area was River Cess with 5,120 (2.1 %) hectares. Figure 3.1 portrays the intensity of rice production by means of percentage share by county.

Table 3.2 Rice Hectares, Yield per hectare and production by county

County	Rice					
	Hectare		Ha/Farm	Yield/Ha(Kg)	Prod.(Mt)	% of Tot.
	Number	% of Tot.				
TOTAL	246,380	100.0	1.0	1,206	297,190	100.0
Bomi	7,260	2.9	1.2	1,043	7,570	2.5
Bong	49,070	19.9	1.2	1,271	62,370	21.0
Gbarpolu	12,690	5.2	1.1	1,272	16,140	5.4
Grand Bassa	14,070	5.7	1.1	1,102	15,500	5.2
Grand Cape Mount	7,550	3.1	1.3	1,211	9,140	3.1
Grand Gedeh	10,780	4.4	1.0	1,206	13,000	4.4
Grand Kru	8,980	3.6	1.0	1,160	10,420	3.5
Lofa	41,760	16.9	1.0	1,261	52,660	17.7
Margibi	6,360	2.6	0.9	1,212	7,710	2.6
Maryland	7,920	3.2	1.0	1,162	9,200	3.1
Montserrado	6,520	2.6	0.9	1,161	7,570	2.5
Nimba	52,520	21.3	0.8	1,201	63,080	21.2
River Cess	5,120	2.1	0.8	1,021	5,230	1.8
River Gee	7,700	3.1	1.1	1,182	9,100	3.1

Sinoe	8,080	3.3	1.0	1,052	8,500	2.9
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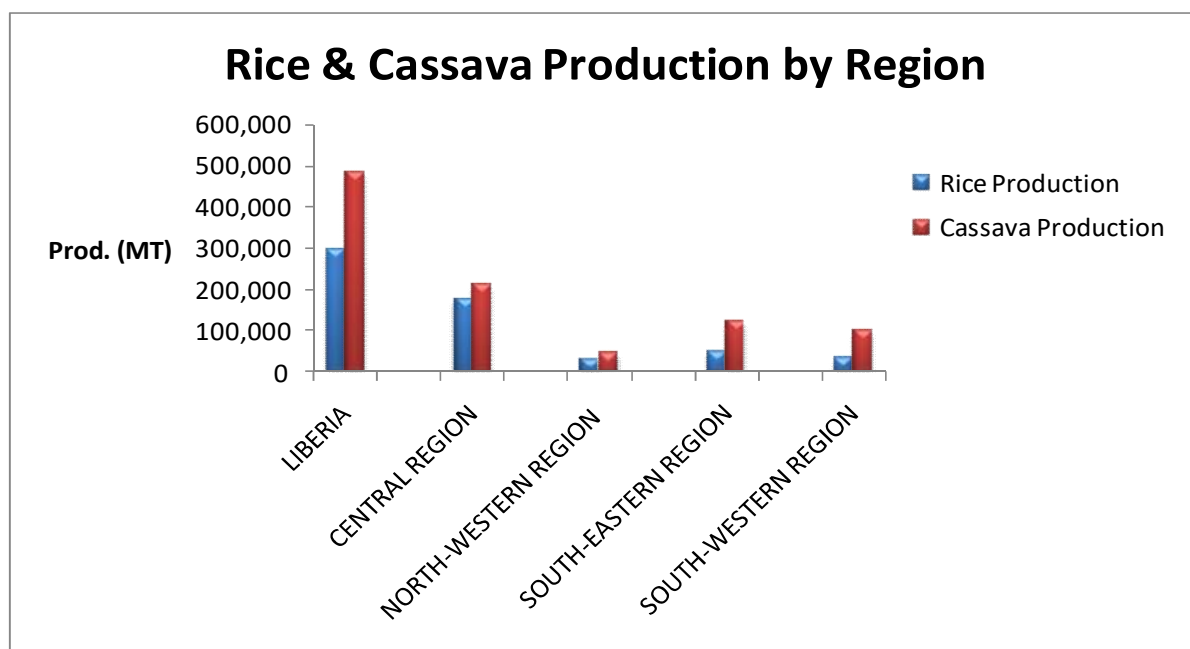
3.3 Rice and Cassava production by Region and County 2012

For the production of rice and cassava by region and country for 2012, the percent distributions are shown in Table 3.5 below. On regional basis, 59.9 percent of paddy rice was produced by Central Region followed by the South- Eastern Region with 16.9 percent. The South-Western Region and the North-Western Region had percentage shares of 12.1 and 11.1 percent respectively. The data in the table further revealed that the counties in the Central Region produced the bulk of the rice in the Country. These Counties included Nimba (21.2%), Lofa (17.7%), and Bong (21.0%). Other Counties included Gbarpolu (5.4%) from the North-Western Region, Grand Gedeh and Grand Kru with (4.4%) and (3.3%) respectively from the South-Eastern Region.

A little over two-fifth (44.3%) of the total Cassava produced in Liberia for 2012 also came from the Central Region and was again followed by South-Eastern Region with little over one-fourth (25.5%) of the total fresh cassava produced. The South-Western Region followed next with 20.7 percent. Two counties, Nimba (21.4%) and Bong (14.8%) both from the Central Region accounted for more of the cassava produced. Other Counties whose efforts can be appreciated for the production of cassava included Maryland (6.7%) from the South-Eastern Region, Lofa (8.1%) from the Central Region and Grand Bassa (7.6%) from the South-Western Region.

Table 3.3 Rice and Cassava Production by Region

Description	Rice Production		Cassava Production	
	Qty(Mt)	Percent	Qty(Mt)	Percent
LIBERIA	297,180	100.0	485,190	100.0
CENTRAL REGION	178,110	59.9	214,820	44.3
Bong	62,370	21.0	71,660	14.8
Lofa	52,660	17.7	39,300	8.1
Nimba	63,080	21.2	103,860	21.4
NORTH-WESTERN REGION	32,850	11.1	46,490	9.6
Bomi	7,570	2.5	14,530	3.0
Grand Cape Mount	9,140	3.1	17,910	3.7
Gbarpolu	16,140	5.4	14,050	2.9
SOUTH-EASTERN REGION	50,210	16.9	123,580	25.5
Grand Gedeh	13,000	4.4	20,400	4.2
Grand Kru	10,410	3.5	28,500	5.9
Maryland	9,200	3.1	32,450	6.7
River Gee	9,100	3.1	20,500	4.2
Sinoe	8,500	2.9	21,730	4.5
SOUTH-WESTERN REGION	36,010	12.1	100,300	20.7
Grand Bassa	15,500	5.2	37,080	7.6
Margibi	7,710	2.6	21,440	4.4
Montserrado	7,570	2.5	21,440	4.4
River Cess	5,230	1.8	20,340	4.2



3.4 Cassava Production

Cassava production is one of the most important sources of income for rural farmers. Many farmers produce large quantities of cassava and by hand, process the cassava into value addition products including farina, fufu, starch, and deeper,

which generate income to help supplement the farmers' household expenditure. Table 3.2 depicts the quantity of fresh cassava produced and area cultivated in 2012. According to the data, a total of 485,190 metric tons were produced. This shows an increase of 19.4 percent points when compare to pre-war (1988) cassava production, which was estimated at 409,840 metric tons and 0.8 percent point less than 2011 when production was estimated at 489,270 metric tons.

According to table 3.2, Nimba ranked the highest in the production of cassava during the year with 103,860 metric tons, which represented 21.4 percent of the total volume of fresh cassava produced. This was closely followed by Bong County with 71,660 metric tons (14.8%) Three other counties registered high figures: Lofa with 39,300 metric tons (8.1%), Grand Bassa with 37,080 metric tons (97.6%) and Maryland with 32,450 metric tons (6.7%). The combined estimates of these five (5) counties accounted for a little less than two-third (59%) of the total volume of cassava produced in 2012. Next were: G rand Kru with 28,500 metric tons (5.9%), Sinoe with 21,730 metric tons (4.5%), Montserrado with 21,440 metric tons (4.4%), Margibi with 21,440 metric tons (4.4%), Grand Gedeh with 20,400 metric tons (4.2%), and River Cess with 20,340 metric tons (4.2). The rest of the counties had estimates that ranged from 2.9% to 3.7%

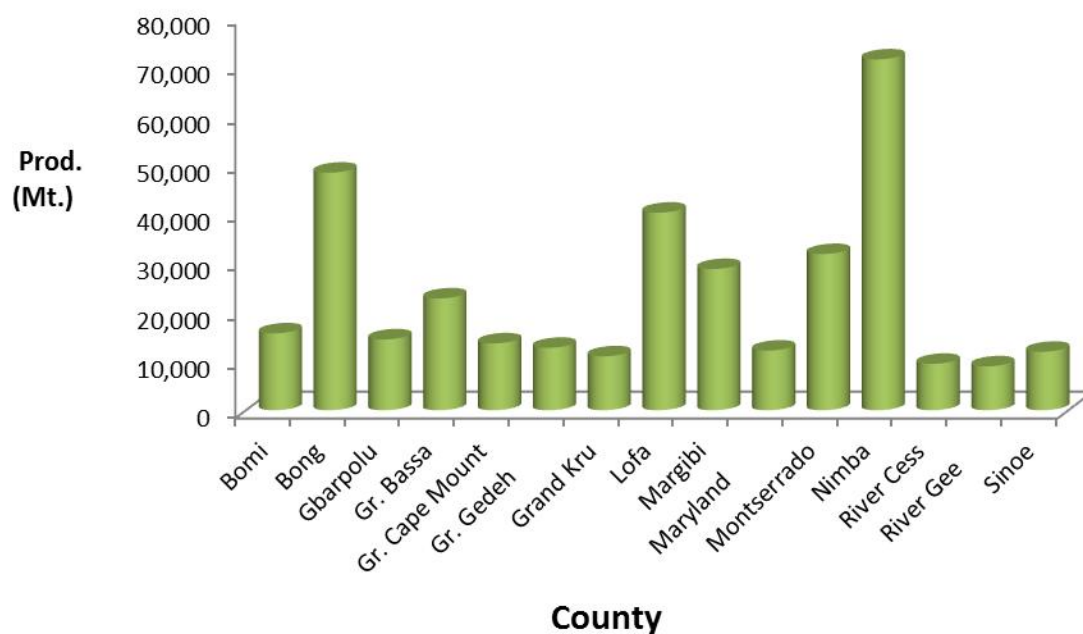
The total area harvested during the 2012 crop year was estimated at 61,050 hectares with an average farm size of 0.5 hectare. Nimba and Bong recorded the largest harvested area with 12,190 hectares (20%) and 8,490 hectares (13.9%) respectively. Next were: Bassa 4,990 hectares (13.9%), Lofa 4,570 hectares (7.5%) and Maryland with 4,500 hectares (7.4%). The rest of the counties recorded cassava hectares that ranged from 2,030 (0.4%) to 3,900 (6.4%).

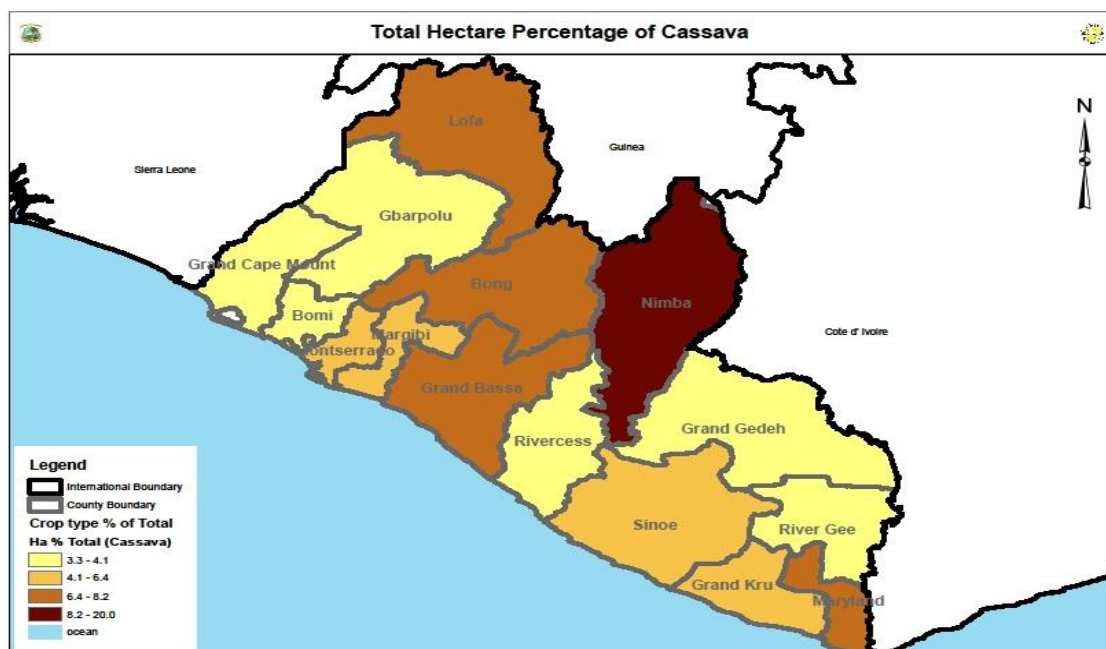
Table 3.4 : Cassava Hectares, Yields per Hectare and Production by County, 2012

County	Cassava					
	Hectares		Ha/Farm	Yields/Ha(Kg)	Prod.(Mt)	% of Tot.
	Number	% of Tot.				
TOTAL	61,050	100.0	0.5	7,947	485,190	100.0

Bomi	2,070	3.4	0.6	7,020	14,530	3.0
Bong	8,490	13.9	0.4	8,440	71,660	14.8
Gbarpolu	2,030	3.3	0.4	6,920	14,050	2.9
Grand Bassa	4,990	8.2	0.5	7,430	37,080	7.6
Grand Cape Mount	2,410	3.9	0.6	7,430	17,910	3.7
Grand Gedeh	2,000	3.3	0.6	9,700	20,400	4.2
Grand Kru	3,900	6.4	0.4	7,310	28,500	5.9
Lofa	4,570	7.5	0.5	8,600	39,300	8.1
Margibi	3,050	5.0	0.5	7,030	21,440	4.4
Maryland	4,500	7.4	0.5	7,210	32,450	6.7
Montserrado	3,050	5.0	0.5	7,030	21,440	4.4
Nimba	12,190	20.0	0.6	8,520	103,860	21.4
River Cess	2,240	3.7	0.5	9,080	20,340	4.2
River Gee	2,500	4.1	0.8	10,000	20,500	4.2
Sinoe	3,060	5.0	0.7	7,100	21,730	4.5

Cassava Production by County, 2012





3.5 Rice and Cassava Producing Households

The foremost food crop in Liberia is rice with cassava as the closest substitute. Table 3.6 portrays the cultivation of rice and cassava by county. According to the table, the number of rice producing households was estimated at 208,570. This figure represents 68.2 percent of the total agricultural households. Comparatively, agricultural households reported growing rice were significantly high in five counties: Grand Gedeh (88.3 %), Lofa (84.2 %), Grand Kru (80.0%), Bong (79.6 %) and Sinoe (78.4). This signifies that 12 to 21 percent of the agricultural households in these counties did not cultivate rice farm. Next were Gbarpolu (75.6 %), Nimba (74.6 %), River Gee (72.2 %), Maryland (72.1 %), and River Cess Counties. As shown in the table, Montserrado County recorded the lowest percent of agricultural households growing rice. The rest of the five counties ranged from 27 to 59 percent.

Table 3.6 also depicts households reported growing cassava as percentage of total agricultural households. Number of cassava producing households was estimated at 113,710, representing 37.2 percent of the total agricultural households. The percent share of the agricultural households engaged in cassava production was noticeably high in two counties: Grand Kru and Maryland with 78.4% and 68% respectively; this was followed by River Cess and Grand Bassa Counties with 51.2% and 49.6% correspondingly. Montserrado County registered the lowest

percent (23.9%) of agricultural households growing cassava while the other counties ranged from 24.7% to 46.4 %.

Table 3.5 :Rice and Cassava Producing Households, 2012

County	Rice Household		Cassava Household	
	Number	As % Agric	Number	As % Agric Hh
TOTAL	208,570	68.2	113,710	37.2
Bomi	5,300	46.7	3,310	29.1
Bong	35,560	79.6	20,730	46.4
Gbarpolu	10,070	75.6	5,570	41.8
Grand Bassa	11,790	59.2	9,880	49.6
Grand Cape Mount	4,770	46.6	4,210	41.1
Grand Gedeh	9,800	88.3	3,330	30.0
Grand Kru	8,160	80.0	8,000	78.4
Lofa	33,480	84.2	9,800	24.7
Margibi	6,540	35.9	5,170	28.4
Maryland	7,400	72.1	6,980	68.0
Montserrado	6,700	27.8	5,770	23.9
Nimba	49,460	74.6	19,000	28.6
River Cess	5,930	71.3	4,260	51.2
River Gee	5,840	72.2	3,240	40.0
Sinoe	7,770	78.4	4,460	45.0

Cash Crop Producing Households

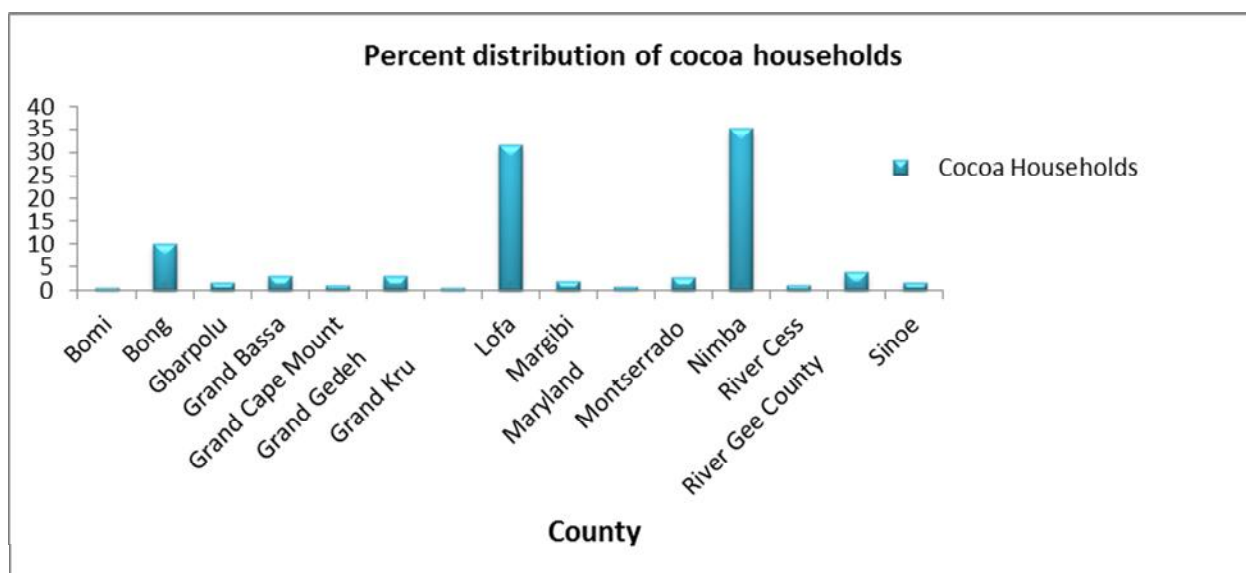
3.6a: Agricultural Households Reported Growing Cocoa and Coffee by County, 2012

Cocoa is a priced cash crop that grows well in Liberia. The crop is exclusively a foreign exchange earner for some farmers in the country. Table 3.7a shows the number of households involved in cocoa production during the survey period. From a total of 38,350 households involved in growing cocoa throughout the country, Nimba county registered the highest number of households (13,470) engaged cocoa production. This figure constitutes 35.1% of the total number of cocoa growing households in the country. Next was Lofa County with 12,120 cocoa growing households representing approximately 32% of cocoa producers in the country. This was followed by Bong County with 3,930 (10.2%) household growing cocoa. Grand Bassa, Grand Gedeh, and Montserrado counties reported an

average of 1,137 households that were involved in cocoa production. Five (5) other counties, namely: Grand Kru, Maryland, Grand Cape Mount, Gbarpolu, and Sinoe recorded cocoa producing households ranging from 260 to 670. Bomi County registered the lowest number of households growing cocoa with only 250, representing 0.7 % cocoa producers in the country.

Table 3.6a: Agricultural Household Reported Growing Cocoa by County, 2012

County	Cocoa Household		
	Number	% of Tot.	As % Agric.
Liberia	38,350	100	12.5
Bomi	250	0.7	2.2
Bong	3,930	10.2	8.8
Gbarpolu	670	1.7	5
Grand Bassa	1,200	3.1	6
Grand Cape Mount	430	1.1	4.2
Grand Gedeh	1,150	3	10.4
Grand Kru	260	0.7	2.5
Lofa	12,120	31.6	30.5
Margibi	820	2.1	4.5
Maryland	330	0.9	3.2
Montserrado	1,060	2.8	4.4
Nimba	13,470	35.1	20.3
River Cess	460	1.2	5.5
River Gee County	1,530	4	18.9
Sinoe	670	1.7	6.8



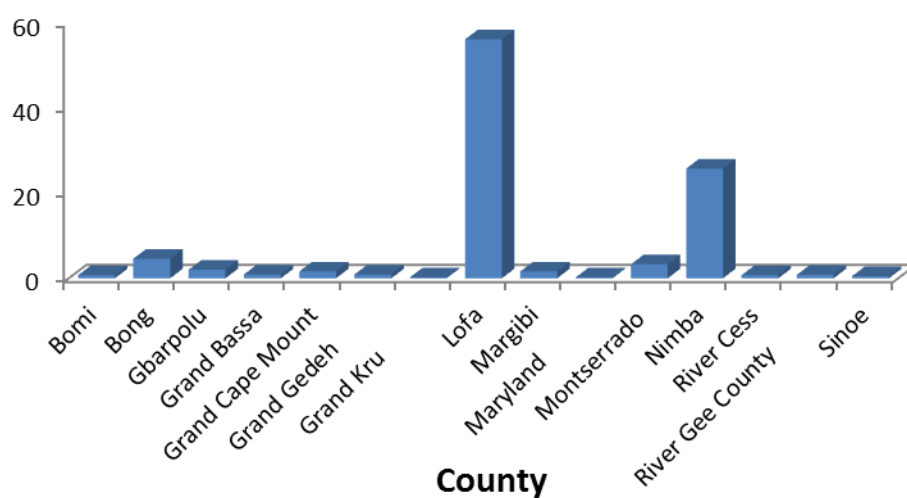
3.6b: Agricultural Household Reported Growing Coffee by County, 2012

Coffee production is another source of income generation for a lot of farmers in Liberia. The crop is exported in its raw state and is later introduced on the Liberian market as finished product where it fetches huge income for the rest of the world (international Businesses) relative to its raw-state price. Table 3.7b depicts the number of coffee producing households in Liberia during the survey period. Out of a total of 24,390 households that were engaged in coffee production, Lofa county reported the highest number of household (13,710) producing the crop. The number of households growing coffee in Lofa represents 56.2% of the total coffee producing households in the country. It is also interesting to note that the percentage of coffee growing households in Lofa County alone (56.2%) exceeds the combined percentage (48.3%) of households producing coffee in the rest of the fourteen (14) counties. Nimba and Bong were the two counties after Lofa that registered higher number of households involved in the coffee production with 6,300 and 1,120 constituting 25.8% and 4.6% respectively. The rest of the counties except Maryland and Grand Kru recorded coffee growing households ranging from 160 to 800. Maryland and Grand Kru registered the lowest number of households growing coffee with just 50 and 60 respectively, representing 0.2% each of coffee producers in the country.

Table 3.6 b: Agricultural Household Reported Growing Coffee by County, 2012

	Coffee Household		
	Number	% of Tot.	As % Agric.
Liberia	24,390	100	8
Bomi	160	0.7	1.4
Bong	1,120	4.6	County 2.5
Gbarpolu	480	2	3.6
Grand Bassa	220	0.9	1.1
Grand Cape Mount	400	1.6	3.9
Grand Gedeh	230	0.9	2.1
Grand Kru	60	0.2	0.6
Lofa	13,710	56.2	34.5
Margibi	400	1.6	2.2
Maryland	50	0.2	0.5
Montserrado	800	3.3	3.3
Nimba	6,300	25.8	9.5
River Cess	160	0.7	1.9
River Gee County	190	0.8	2.3
Sinoe	110	0.5	1.1

Percentage Distribution of Coffee Producing Households by County,



3.7 Livestock Rearing Households

Several rural families engage in livestock farming as a source of protein and additional income generation to care for other households' expenditure. With the advent of the civil strife in the country, livestock production plummeted considerably. Given the level of economic recovery attained thus far, the process of replenishing livestock across the Country is fast progressing and dividends are being realized as shown in Table 3.8. Table 3.8 shows a total of 66,460 households (21.7% of Agricultural households) that were reported rearing livestock. Of this total, male-headed households engaged in rearing livestock were estimated at 54,180 (81.5 %); while female-headed households rearing livestock were reported at 12,280 (18.5 %). On a gender disaggregated scale, Nimba County recorded the highest number of both male and female headed households reported rearing livestock with 24,600 and 5,780 respectively. Two other counties with substantial number of female-headed households involved in rearing livestock were Lofa and Grand Kru counties with 1,530 and 1000 respectively. Bomi and Gbarpolu counties recorded the lowest number of female-headed households engaged in livestock rearing with 70 each.

Over all, Nimba County recorded the highest number of livestock rearing households with 30,380 (45.8%), followed by Bong and Lofa Counties with 8,360 (18.7%) and 6,360 (16.0%) respectively. Next were: Grand Bassa with 4,460 (22.4 %), Grand Kru with 3,570 (18.6%), Grand Gedeh with 3,560 (8.0%) and Sinoe with 1,940 (3.9%). Bomi recorded the lowest number of households raising livestock with 280 while households in other counties reported rearing livestock ranged from 350 to 1,060.

Table 3.7 Livestock Rearing Households by County and Gender

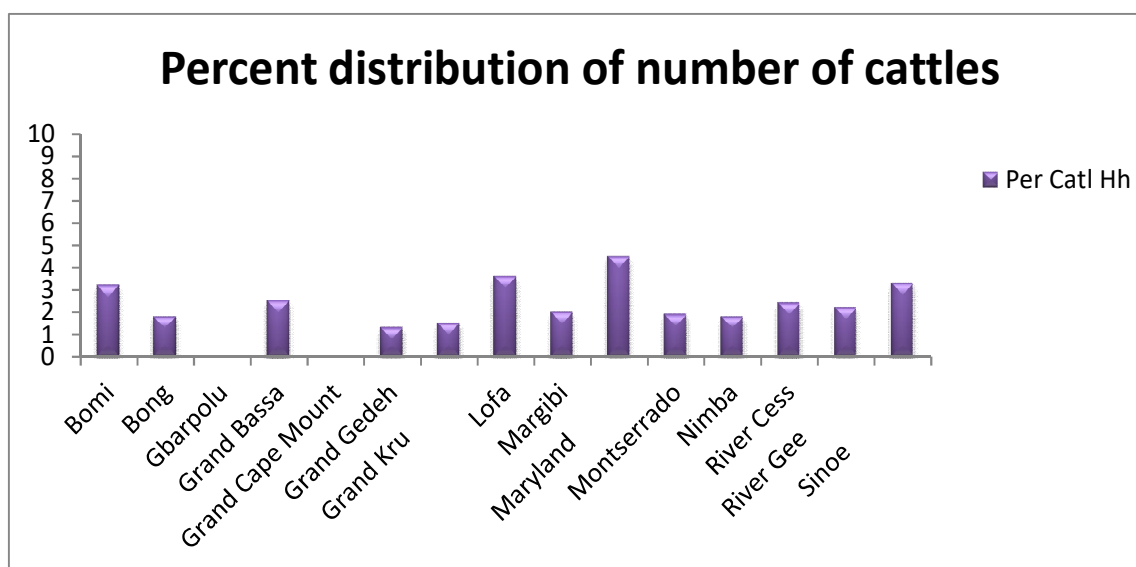
County	Both Sexes		Male-Headed Hh		Female-Headed Hh		Percent	
	Number	% Agric Hh	Number	% of Tot.	Number	% of Tot.	Male	Female
TOTAL	66,460	21.7	54,180	100.0	12,280	100.0	81.5	18.5
Bomi	280	2.5	210	0.4	70	0.6	75.0	25.0
Bong	8,360	18.7	7,460	13.8	900	7.3	89.2	10.8
Gbarpolu	350	2.6	280	0.5	70	0.6	80.0	20.0
Grand Bassa	4,460	22.4	4,050	7.5	410	3.3	90.8	9.2
Grand Cape Mount	940	9.2	750	1.4	190	1.5	79.8	20.2
Grand Gedeh	3,560	8.0	2,840	5.2	720	5.9	79.8	20.2
Grand Kru	3,570	18.6	2,570	4.7	1,000	8.1	72.0	28.0
Lofa	6,360	16.0	4,830	8.9	1,530	12.5	75.9	24.1
Margibi	550	3.0	360	0.7	190	1.5	65.5	34.5
Maryland	1,780	54.6	1,480	2.7	300	2.4	83.1	16.9
Montserrado	1,060	4.4	760	1.4	300	2.4	71.7	28.3
Nimba	30,380	45.8	24,600	45.4	5,780	47.1	81.0	19.0
River Cess	480	5.8	440	0.8	40	0.3	91.7	8.3
River Gee	2,030	25.1	1,570	2.9	460	3.7	77.3	22.7
Sinoe	2,300	23.2	1,980	3.7	320	2.6	86.1	13.9

3.8 Cattle Rearing Household and Number of Heads of Cattle

Cattle are very pivotal to the farming system and rural households in Liberia. They generate income and serve as sources of food (protein intake). They also provide farm labor (plowing of the soil), serve as economic security, and a store of wealth. Table 3.9 shows the number of heads of cattle across the country. According to the table, 10,440 heads of cattle were estimated, representing 11.2 percent of livestock in country. Nimba County reported having the highest number of heads of cattle with 4,360 (41.8%) of the total number of heads of cattle. This was followed by Bong and Grand Kru Counties with 1,920 (18.4%) and 1,570 (15%) accordingly. Next was Grand Gedeh with 740 (7.1%). No cattle were recorded in Grand Cape Mount County. The rest of the counties except Grand Bassa registered heads of cattle ranging 120 (1.1%) to 360 (3.4%). Grand Bassa recorded only four cattle, representing 0.1% of the total number of cattle across the country.

Table 3.8: Household and Heads of Cattle

County	Cattle					
	Household	% of Tot.	% of Lstk	Head	% of Tot.	Per Catl Hh
TOTAL	5,824	100.0	11.2	10,440	100.0	1.8
Bomi	100	1.7	35.7	320	3.1	3.2
Bong	1,080	18.5	13	1,920	18.4	1.8
Gbarpolu	-	0.0	0.0	-	0.0	
Grand Bassa	4	0.1	0.1	10	0.1	2.5
Grand Cape Mount	-	0.0	0.0	-		
Grand Gedeh	560	9.6	43.8	740	7.1	1.3
Grand Kru	1,050	18.0	46.2	1,570	15.0	1.5
Lofa	100	1.7	1.6	360	3.4	3.6
Margibi	90	1.5	16.4	180	1.7	2.0
Maryland	60	1.0	3.4	270	2.6	4.5
Montserrado	70	1.2	6.6	130	1.2	1.9
Nimba	2,490	42.8	8.2	4,360	41.8	1.8
River Cess	50	0.9	10.4	120	1.1	2.4
River Gee	90	1.5	4.4	200	1.9	2.2
Sinoe	80	1.4	3.5	260	2.5	3.3



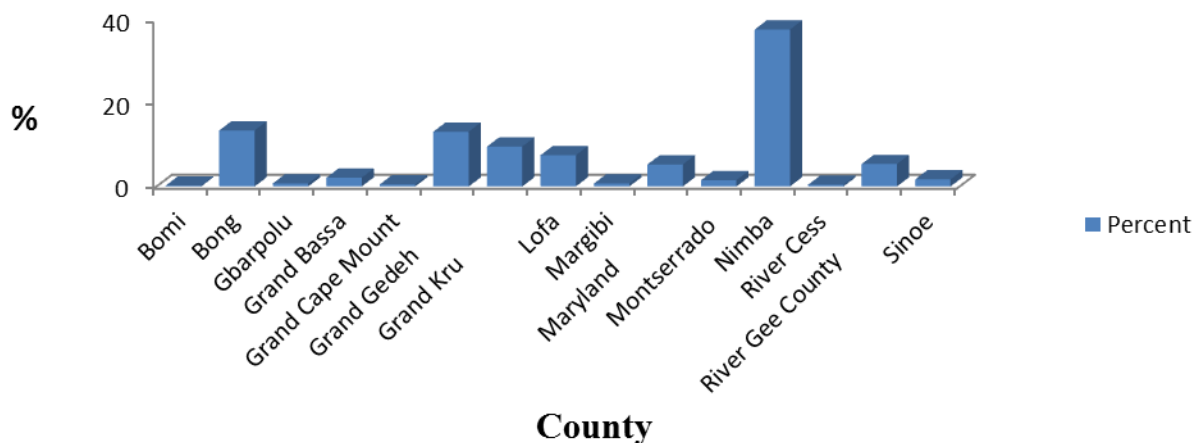
3.9: Goats Rearing Households and Number of Heads of Goats

Table 3.10 portrays the number of agricultural households reported rearing goats and the stock or heads of goats in the country. According to the table, the number of households reported rearing goats and the heads of goats were estimated at 31,750 and 96,400 respectively. The number goat rearing households represent about 48 percent of the total livestock households in the country. Nimba County registered the highest number of households (13,000) reported rearing goats with 36,400 heads of goats constituting almost 38% of the total stock of goats in the country. Four other counties recorded higher number of goat rearing households and heads of goats. The counties were: Bong with 4,200 households and 13,020 heads of goats representing 13.5%, Grand Gedeh with 3,190 households and 12,760 heads of goats (13.2%), Grand Kru with 3,070 households and 9,210 heads of goats (9.2%), and Lofa with 2,400 households and 7,200 heads of goats (7.5%). River Gee and Maryland recorded 1,570 and 1,540 goat rearing households with 5,180 and 5,080 heads of goats denoting 5.4% and 5.3% respectively. The rest of the counties except Bomi recorded goat rearing households ranging from 120 to 900 and heads of goats ranging from 360 to 2,070. Bomi recorded the lowest number of goat rearing households and heads of goats with only 60 and 150 respectively.

Table 3.9: Number of Goats reported Rearing by County, 2012

County	Goats					
	Househo	% of Tot	As % Ls	Head	% of Tot	Per Goat Hh
Liberia	31,750	100	47.8	96,400	100	3
Bomi	60	0.2	21.4	150	0.2	2.5
Bong	4,200	13.2	50.2	13,020	13.5	3.1
Gbarpolu	310	1	88.6	680	0.7	2.2
Grand Bassa	900	2.8	20.2	2,070	2.1	2.3
Grand Cape Mount	130	0.4	13.8	460	0.5	3.5
Grand Gedeh	3,190	10	89.6	12,760	13.2	4
Grand Kru	3,070	9.7	86	9,210	9.6	3
Lofa	2,400	7.6	37.7	7,200	7.5	3
Margibi	240	0.8	43.6	720	0.7	3
Maryland	1,540	4.9	86.5	5,080	5.3	3.3
Montserrado	480	1.5	45.3	1,440	1.5	3
Nimba	13,000	40.9	42.8	36,400	37.8	2.8
River Cess	120	0.4	25	360	0.4	3
River Gee	1,570	4.9	77.3	5,180	5.4	3.3
Sinoe	540	1.7	23.5	1,670	1.7	3.1

Figure 3.9: Percentage Distribution of Heads of Goats by County, 2012

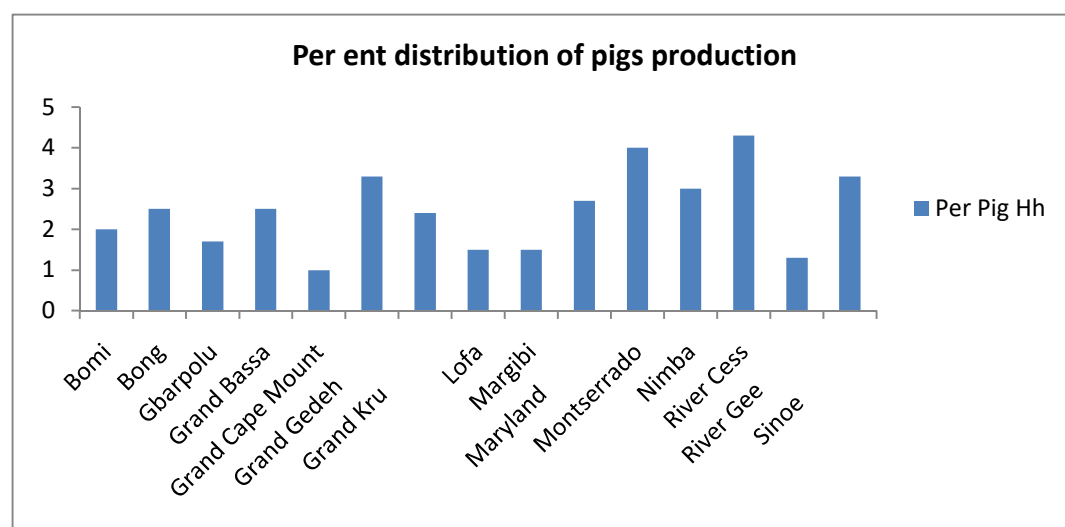


3.10: Pigs Rearing Households and Number of Heads of Pigs

The number of agricultural households reported rearing goats and the stock or heads of goats in the country are depicted in Table 3.11. According to the table, the number of households reported rearing pigs and the heads of pigs were estimated at 22,530 and 61,210 respectively. The number of households reported rearing pigs constitute almost 38 percent of the total livestock households in the country. Nimba County again recorded the highest number of households (13,000) reported rearing pigs with 39,000 heads of pigs constituting 63.7% of the total stock of pigs in the country. Two other counties recorded higher number of pig rearing households and heads of pigs. The counties were: Bong with 2,900 households and 7,300 heads of pigs constituting 11.9 % and Lofa with 2,500 households and 3,750 heads of pigs representing 6.1%. The rest of the counties excluding Bomi and Gbarpolu recorded pigs rearing households ranging from 110 to 700 and heads of pigs ranging from 3,210. Bomi and Gbarpolu registered the least number of pigs rearing households with only 40 and 50 with 80 and 90 heads of pigs constituting just 0.1 each of the stock of pigs in the country.

Table 3.10: Number of pigs Reported Rearing by County, 2012

County	Pigs					
	Househo	% of Tot	As % Ls	Heads	% of Tot	Per Pig Hh
Liberia	22,530	100		61,210	100	2.7
Bomi	40	0.2	14.3	80	0.1	2
Bong	2,910	12.9	34.8	7,300	11.9	2.5
Gbarpolu	50	0.2	14.3	90	0.1	1.7
Grand Bassa	700	3.1	15.7	1,750	2.9	2.5
Grand Cape Mount	120	0.5	12.8	120	0.2	1
Grand Gedeh	300	1.3	8.4	990	1.6	3.3
Grand Kru	560	2.5	15.7	1,340	2.2	2.4
Lofa	2,500	11.1	39.3	3,750	6.1	1.5
Margibi	310	1.4	56.4	460	0.8	1.5
Maryland	430	1.9	24.2	1,160	1.9	2.7
Montserrado	500	2.2	47.2	2,000	3.3	4
Nimba	13,000	57.7	42.8	39,000	63.7	3
River Cess	110	0.5	22.9	470	0.8	4.3
River Gee	300	1.3	14.8	390	0.6	1.3
Sinoe	700	3.1	30.4	2,310	3.8	3.3

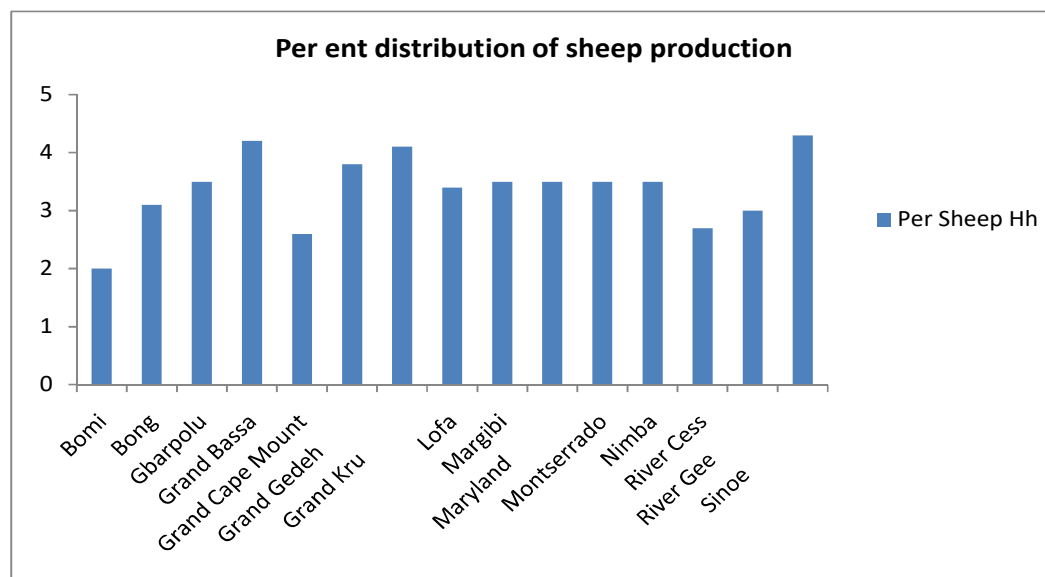


3.11: Sheep Rearing Households and Number of Heads of Sheep

The survey also gathered information on the stock of sheep and sheep rearing households in the country. Table 3.12 reveals that the number of households reported rearing sheep and the heads of sheep were estimated 13,630 and 46,680 respectively. Sheep rearing households represent approximately 21 percent of the total livestock households in the country. Nimba County once more recorded the highest number of households (6,440) reported rearing sheep 22,540 heads of sheep denoting 48.3% of the total stock of sheep in the country. This was followed by Bing County with 2,370 sheep rearing households and 7,350 heads of sheep representing approximately 16 percent of the sheep stock in the country. Lofa county registered 890 households reported rearing 3,030 (6.5%) heads of sheep. The rest of the counties except Grand Bassa, Grand Cape Mount, and River Cess recorded sheep rearing households ranging from 160 to 690 with heads of sheep ranging from 320 to 2,420. Grand Cape Mount, River Cess and Grand Bassa recorded the least sheep rearing households and heads of sheep with 50, 60 , and 70 with 210, 160, and 180 respectively.

Table 3.11: Sheep Rearing Households and Number of Heads Reported Rearing by County, 2012

County	Sheep					
	Household	% of Tot.	As % Lst	Heads	% of Tot	Per Sheep Hh
Liberia	13,630	100	20.5	46,680	100	3.4
Bomi	160	1.2	57.1	320	0.7	2
Bong	2,370	17.4	28.3	7,350	15.7	3.1
Gbarpolu	290	2.1	82.9	1,020	2.2	3.5
Grand Bassa	50	0.4	1.1	210	0.4	4.2
Grand Cape Mount	70	0.5	7.4	180	0.4	2.6
Grand Gedeh	400	2.9	11.2	1,520	3.3	3.8
Grand Kru	440	3.2	12.3	1,800	3.9	4.1
Lofa	890	6.5	14	3,030	6.5	3.4
Margibi	280	2.1	50.9	980	2.1	3.5
Maryland	650	4.8	36.5	2,270	4.9	3.5
Montserrado	690	5.1	65.1	2,420	5.2	3.5
Nimba	6,440	47.2	21.2	22,540	48.3	3.5
River Cess	60	0.4	12.5	160	0.3	2.7
River Gee	560	4.1	27.6	1,680	3.6	3
Sinoe	280	2.1	12.2	1,200	2.6	4.3



3.12 Poultry Households and Production by County

The collection of data on poultry at county level was essential in the 2012 Agriculture Survey. Information collected included households involved in raising chickens, ducks and the number of chickens and ducks raised by county. The raising of these birds is not institutionalized. However, they occasionally provide households with food supplements.

Table 3.13 presents the number of households reported raising poultry. According to the data, a total of 139,460 households were reported raising poultry. Out of this total, 104,190 (74.7%) were male-headed poultry raising households. Of the male-headed households' estimate, Nimba County ranked the highest with 25.1 percent followed by Bong with 20.4 percent, Lofa with 10.5 percent, Montserrado with 8.4 percent, Margibi with 5.2 percent and Grand Kru with 5.1 percent.

The next five counties included Sinoe with 5.0 percent, RiverGee and Maryland with 3.5 percent each, Gbarpolu with 2.9 percent and Grand Gedeh with 2.8 percent. The counties with the least male-headed poultry households were Bomi and Rivercess with 1.4 percent each.. The rest of the counties had male-headed poultry households ranging from 2.4 percent to 2.8 percent.

The total number of female-headed poultry raising households was estimated at 35,270 (25.3%). Of this total, Nimba County again ranked the highest with 20.4 percent, followed by Lofa with 16.0 percent, Montserrado with 13.8 percent, and Bong with 13.4 percent. Next to these counties were Grand Kru with 7.3 percent,

RiverGee with 5.8 percent and Margibi with 4.8 percent. Again Bomi with 1.1 percent was the county with the least female-headed poultry raising households. The rest of the counties had estimates ranging from 1.2 percent to 1.7 percent

Table 3.12: Number of Households Reported Raising Poultry

County	Both Sexes			Male-Headed Hh		Female-Headed Hh		Percent	
	Number	% of Tot.	% Agric Hh	Number	% of Tot.	Number	% of Tot.	Male	Female
TOTAL	139,460	100.0	45.6	104,190	100.0	35,270	100.0	74.7	25.3
					0.0				
Bomi	1,840	1.3	16.2	1,440	1.4	400	1.1	78.3	21.7
Bong	25,970	18.6	58.1	21,240	20.4	4,730	13.4	81.8	18.2
Gbarpolu	3,650	2.6	27.4	3,060	2.9	590	1.7	83.8	16.2
Grand Bassa	2,990	2.1	15.2	2,520	2.4	470	1.3	84.3	15.7
Grand Cape Mount	3,950	2.8	38.6	2,590	2.5	1,360	3.9	65.6	34.4
Grand Gedeh	3,950	2.8	35.6	2,890	2.8	1,060	3.0	73.2	26.8
Grand Kru	7,850	5.6	77.0	5,290	5.1	2,560	7.3	67.4	32.6
Lofa	16,540	11.9	41.6	10,900	10.5	5,640	16.0	65.9	34.1
Margibi	7,110	5.1	39.0	5,420	5.2	1,690	4.8	76.2	23.8
Maryland	4,710	3.4	45.9	3,640	3.5	1,070	3.0	77.3	22.7
Montserrado	13,600	9.8	56.4	8,740	8.4	4,860	13.8	64.3	35.7
Nimba	33,360	23.9	50.3	26,150	25.1	7,210	20.4	78.4	21.6
River Cess	1,850	1.3	22.2	1,410	1.4	440	1.2	76.2	23.8
River Gee	5,700	4.1	70.5	3,650	3.5	2,050	5.8	64.0	36.0
Sinoe	6,390	4.6	64.5	5,250	5.0	1,140	3.2	82.2	17.8

3.13 Chicken Raising Households and Production

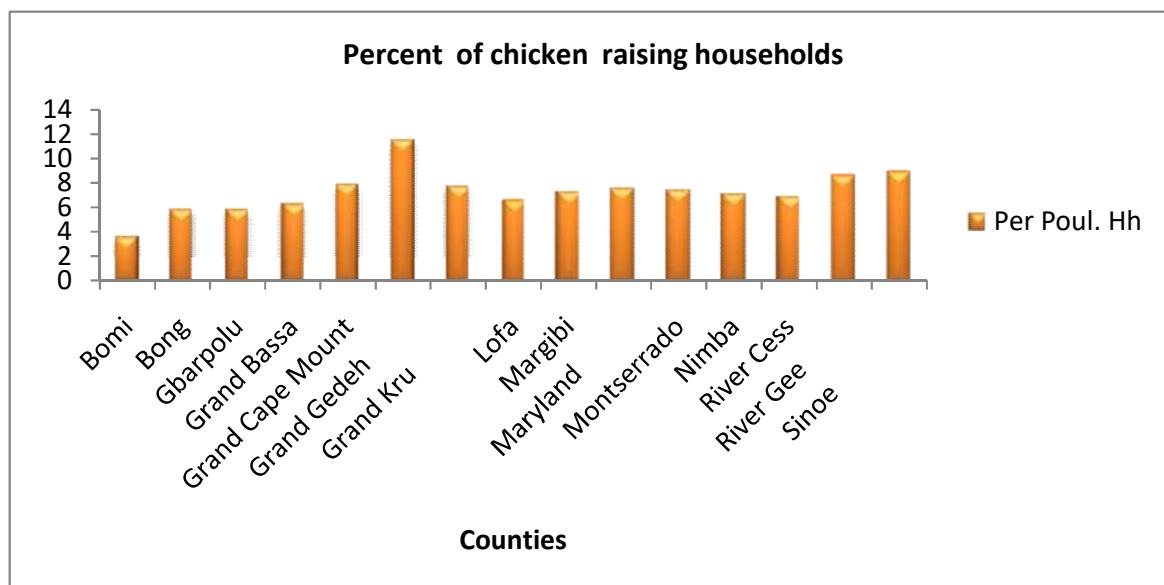
Chickens were enumerated for the 2012 Agricultural Survey. Data collected included households involved in raising chickens and the number of chickens raised. Table 3.14 presents the statistical information on chicken households. According to the data, the number of poultry households reported raising chickens was estimated at 131,060 with a total production of 924,700 chickens. This gave a ratio of 7.1 heads to a household.

Of this total production, Nimba ranked the highest with 219,940 heads followed by Bong with 129,860 heads and Lofa with 103,870 heads. The next five counties included Montserrado with 97,090, Grand Kru with 59,750, Sinoe with 53,770, Margibi with 48,820 and RiverGee with 48,520 heads respectively. The county

with the least number of Chickens was Bomi with 5,770. The rest of the counties had productions ranging from 11,660 to 34,270 heads.

Table 3.13: Chicken Raising Households and Number of Heads Reported Raising by County, 2012

County	Chicken					
	Househo	% of Tot.	% Poultr	Heads	% of Tot	Per Chicken Hh
Liberia	131,060	100	94	924,700	100	7.1
Bomi	1650	1.3	90	5,770	0.6	3.5
Bong	22,390	17.1	86.2	129,860	14	5.8
Gbarpolu	3,320	2.5	91.1	19,250	2.1	5.8
Grand Bassa	2,860	2.2	95.7	17,730	1.9	6.2
Grand Cape Mount	3,880	3	98.3	30,260	3.3	7.8
Grand Gedeh	3,840	2.9	97.3	44,160	4.8	11.5
Grand Kru	7,760	5.9	98.8	59,750	6.5	7.7
Lofa	15,980	12.2	96.6	103,870	11.2	6.5
Margibi	6,780	5.2	95.3	48,820	5.3	7.2
Maryland	4,570	3.5	97	34,270	3.7	7.5
Montserrado	13,120	10	96.5	97,090	10.5	7.4
Nimba	31,420	24	94.2	219,940	23.8	7
River Cess	1,740	1.3	94.2	11,660	1.3	6.7
River Gee	5,640	4.3	99	48,500	5.2	8.6
Sinoe	6,110	4.7	95.6	53,770	5.8	8.8



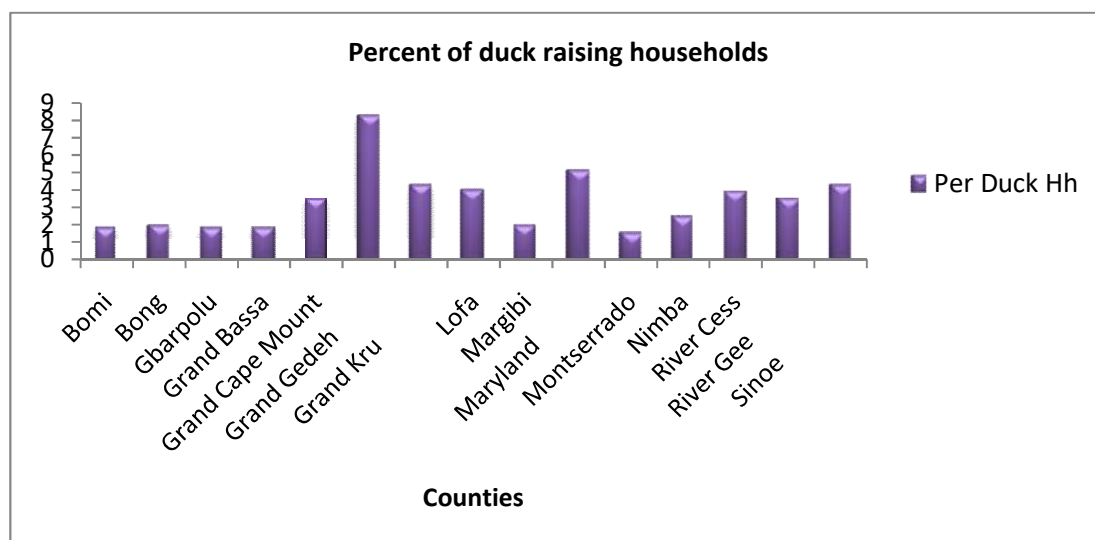
3.14 Ducks Raising Households and Production 2012

Information on households involved in the raising of ducks is presented in Table 3.28. The number of households reported raising ducks was estimated at 17,600 with a total production of 53,000. This gave a ratio of 3.0 heads to a household.

Of this total production, Nimba ranked the highest with 12,580 heads followed by Grand Gedeh with 8,280 heads, Bong with 6,960 heads and Lofa with 6,880 heads. The next five counties included Montserrado with 3,180, Grand Kru with 3,020, Sinoe with 2,270, Maryland with 2,240 and Margibi with 2,200 heads respectively. The Counties with the least number of ducks was Gbarpolu with 340 followed by Bomi and Grand Bassa with 430 and 450 heads respectively. The rest of the counties had productions ranging from 620 to 1,720 heads.

Table 3.14: Ducks Raising Households and Number of Heads Reported Raising by County, 2012

County	Duck					
	Household	% of Tot.	% Poultry Hh	Heads	% of Tot	Per Duck Hh
Liberia	17,600	100.0	12.6	53,000	100.0	3.0
Bomi	240	1.4	12.9	430	0.8	1.8
Bong	3,480	19.8	13.4	6,960	13.1	2.0
Gbarpolu	190	1.1	5.1	340	0.6	1.8
Grand Bassa	250	1.4	8.3	450	0.8	1.8
Grand Cape Mount	380	2.2	9.6	1,330	2.5	3.5
Grand Gedeh County	1,010	5.7	25.5	8,280	15.6	8.2
Grand Kru County	720	4.1	9.2	3,020	5.7	4.2
Lofa	1,720	9.8	10.4	6,880	13.0	4.0
Margibi	1,100	6.3	15.5	2,200	4.2	2.0
Maryland County	440	2.5	9.3	2,240	4.2	5.1
Montserrado	2,120	12.0	15.6	3,180	6.0	1.5
Nimba	5,240	29.8	15.7	12,580	23.7	2.4
River Cess	160	0.9	8.5	620	1.2	3.9
River Gee County	490	2.8	8.6	1,720	3.2	3.5
Sinoe County	660	3.8	10.4	2,770	5.2	4.2



3.15 Rural and Agriculture Households

Agricultural households are usually a subset of rural households. Table 3.16 illustrates the number of agricultural households and its percentages as part of rural households.

According to the table, the number of agricultural households was estimated at 305,820. This estimate was 86.7 percent of the total rural households (352,760) in the Country. Nimba County recorded the highest number of agricultural households with 66,330, which represents 93 percent of its rural households. This was followed by Bong County with 44,700 constituting 92.5 percent of its rural households. Next were: Lofa with 39,750 (98.9 percent) of its rural households, Montserrado with 24,114 constituting 75.9 percent of its rural households and Grand Bassa with 19,910 constituting 87.6 percent of its rural households. The County with the least agriculture households was River Cess with 7,750 representing 83.3 percent of its rural households.

From the total number of agriculture households in the Country, Nimba, Bong, and Lofa recorded the highest with 21.7 percent, 14.6 percent and 13.0 percent respectively. Next were Montserrado with 7.9 percent, Grand Bassa with 6.5 percent and Margibi with 6.0 percent. The rest of the Counties ranged from 2.7 percent to 4.4 percent.

Table 3.15: Rural and Agricultural Households by County, 2012

County	Rural Household		Agricultural Household			Non-Agric Household	
	Number	% of Tot.	Number	% of Tot.	As % Rural	Number	% of Tot.
TOTAL	352,760	100.0	305,820	100.0	86.7	46,940	100.0
Bomi	15,630	4.4	11,360	3.7	72.7	4,270	9.1
Bong	48,310	13.7	44,700	14.6	92.5	3,610	7.7
Gbarpolu	14,400	4.1	13,320	4.4	92.5	1,080	2.3
Grand Bassa	22,740	6.4	19,910	6.5	87.6	2,830	6.0
Grand Cape Mount	13,600	3.9	10,240	3.3	75.3	3,360	7.2
Grand Gedeh	12,700	3.6	11,100	3.6	87.4	1,600	3.4
Grand Kru	10,970	3.1	10,200	3.3	93.0	770	1.6
Lofa	40,180	11.4	39,750	13.0	98.9	430	0.9
Margibi	28,720	8.1	18,220	6.0	63.4	10,500	22.4
Maryland	12,130	3.4	10,260	3.4	84.6	1,870	4.0
Montserrado	31,770	9.0	24,110	7.9	75.9	7,660	16.3
Nimba	71,350	20.2	66,330	21.7	93.0	5,020	10.7
River Cess	9,440	2.7	8,320	2.7	88.1	1,120	2.4
River Gee	8,930	2.5	8,090	2.6	90.6	840	1.8
Sinoe	11,890	3.4	9,910	3.2	83.3	1,980	4.2

3.16 Heads of Agricultural Households

Agricultural data are collected on the premise of agricultural households. Therefore, it is important to scrutinize the data on the heads of agricultural households. Table 3.17 presents the number of agricultural households by gender. According to the data, the number of heads of agricultural households was estimated at 305,820. Out of this number, male-headed agricultural households were estimated 227,740 and female-headed agricultural households were recorded at 78,080. Comparatively, 74.5 percent of the agricultural households were headed by males while 25.5 percent were headed by females.

From the total number female-headed agricultural households in the country, River Gee County recorded the highest with 37.2 percent; followed by Grand Cape Mount and Nimba with 36.7 percent and 36.2 percent accordingly. Next Grand Kru with 33.2, Grand Gedeh with 30.1 percent, Montserrado with 24.8 percent, River Cess with 24.5 percent and Maryland with 24.2 percent. The county with the least

agricultural households headed by female was Grand Bassa County with 16.8 percent. The other Counties of the counties ranged from 17.5 to 23.4 percent

Table 3.17 depicts a dominant male-headed agricultural households compared to their counterpart, female headed households. Out of the total number of males who were reported heading agricultural households in the country, Grand Bassa County recorded the highest with 83.2 percent, followed by Margibi with 82.5 percent and Sinoe with 82.0 percent. Next were Bomi with 78.1, Gbarpolu with 77.6 percent, Nimba with 76.7 percent, Bong with 76.6 percent and Maryland, River Cess and Montserrado Counties with 75.8 percent 75.5 percent and 75.2 percent respectively. The other counties recorded male – headed agricultural households with value that ranged from 62.8 percent to 69.9 percent. Lofa County recorded the highest female – headed agricultural households while Grand Bassa County registered the highest male headed agricultural households. Grand Bassa and River Gee Counties recorded the lowest female and male headed agricultural households with 16.8 percent and 62.8 percent respectively.

Table 3.16 : Number of Heads of Agricultural Households by Gender, 2012

County	Both Sexes		Male		Female		Percent	
	Number	% of Tot.	Number	% of Tot.	Number	% of Tot.	Male	Female
TOTAL	305,820	100.0	227,740	100.0	78,080	100.0	74.5	25.5
Bomi	11,360	3.7	8,870	3.9	2,490	3.2	78.1	21.9
Bong	44,700	14.6	34,240	15.0	10,460	13.4	76.6	23.4
Gbarpolu	13,320	4.4	10,340	4.5	2,980	3.8	77.6	22.4
Grand Bassa	19,910	6.5	16,570	7.3	3,340	4.3	83.2	16.8
Grand Cape Mount	10,240	3.3	6,480	2.8	3,760	4.8	63.3	36.7
Grand Gedeh	11,100	3.6	7,760	3.4	3,340	4.3	69.9	30.1
Grand Kru	10,200	3.3	6,810	3.0	3,390	4.3	66.8	33.2
Lofa	39,750	13.0	25,360	11.1	14,390	18.4	63.8	36.2
Margibi	18,220	6.0	15,030	6.6	3,190	4.1	82.5	17.5
Maryland	10,260	3.4	7,780	3.4	2,480	3.2	75.8	24.2
Montserrado	24,110	7.9	18,130	8.0	5,980	7.7	75.2	24.8
Nimba	66,330	21.7	50,880	22.3	15,450	19.8	76.7	23.3
River Cess	8,320	2.7	6,280	2.8	2,040	2.6	75.5	24.5
River Gee	8,090	2.6	5,080	2.2	3,010	3.9	62.8	37.2
Sinoe	9,910	3.2	8,130	3.6	1,780	2.3	82.0	18.0

Gender Disaggregated Agric. Household by County, 2012

