

# 1979 LIVESTOCK AND CROP SURVEY

# AGRICULTURAL STATISTICS UNIT

# PLANNING AND STATISTICS MINISTRY OF AGRICULTURE

Publised by the Central Statistics Office Ministry of Finance & Development Planning

December, 1979

Printed by Government Printer



### PREFACE AND ACKNOWLEDGEMENTS

The 1979 Agricultural Livestock and Crop Survey is a continuation of a series of annual surveys since 1967. This survey is part of the overall Agriculture Statistics Unit program to provide accurate and timely agricultural data needed for policy decisions and planning purposes.

The major changes in this 1979 Agricultural Livestock and Crop Report, compared to previous years' reports, are the following additions:

- 1. Estimates are shown by Agricultural Extension Regions and Districts.
- 2. Estimates for freehold and traditional farms are included into one report.
- 3. Births, deaths, sales, home slaughter, and purchases are presented for sheep and goats and, the first time since 1972, for cattle.
- 4. Numerous distributions by size of holdings are included for both crops and livestock.
- 5. Estimates of herd composition are shown for sheep and goats.
- 6. Planted area, harvested area, total production and average production are published for groundnuts, sunflowers, millet and beans, in addition to sorghum and maize.
- 7. The coefficient of variation is presented for the estimates of country totals.

The sample size is the largest used to date, thus helping reduce sampling errors. However, the major emphasis was placed upon reducing non-sampling errors through training schools and improved techniques, increased quality control and supervision, and improved edit and summary procedures and programs.

A major survey such as this can be accomplished only with the dedication of all who are associated with it. Grateful acknowledgement is due to M. G. Singh, the Agricultural Statistics Units Head, without whose cooperation and effort the survey would not have been completed. Also, to Jeff Hinchliffe, Systems Analyst/Programmer, who wrote all the generalized edit and analysis programs, and to Sue Jones, who typed this report. Special thanks are also due to Large Charumbira and Brian Mabongo, and to all of the supervisors, enumerators, and clerks.

WILLIAM F. KELLY Statistician

### 1979 LIVESTOCK AND CROP SURVEY

### Table of Contents

		Page
Methodology Training, Da Interpretati	erage  ata Collection and Summarization  ion of Data  efinitions	· 1 · 3 · 4
<u>Tables</u>		
Sample Siz	<u>re</u> :	
Table 1:	Sample Size of Blocks and Holders for Traditional Farms by Agricultural Districts and Regions	- 6
Summary:		
Table 2:	Summary of Traditional, Freehold, and Total Livestock Estimates with the Coefficient of Variation	- 7
Table 3:	Summary of Traditional, Freehold, and Total Crop Estimates with the Coefficient of Variation	s - 8
Farm Numbe	ers:	
Table 4:	Total Number of Farms, Crop Farms, Cattle Farms, Sheep Farms, Goat Farms, Other Livestock Farms by Districts and Regions	- 9
<u>Cattle</u> :		
Table 5:	Cattle Farms, Total Cattle, and Average Size by Districts and Regions	- 11
Table 6:	Cattle Farms, Total Number of Cattle, and Average Size Herd by Size of Cattle Holding	- 13
Table 7:	Cattle Herd Composition (Bulls, Oxen, Cows, Tollies, Heifers, Calves) by Districts and Regions	- 14
Table 8:	Cattle Herd Composition (Bulls, Oxen, Cows, Tollies, Heifers, Calves) by Size of Cattle Holding	- 16
Table 9:	Cattle Born, Died, Sold, Home Slaughtered, and Purchased by Districts and Regions	- 17
Table 10:	Cattle Born, Died, Sold, Home Slaughtered, and Purchased by Size of Cattle Holding	- 18

		Page
Sheep:		
Table 11:	Sheep Farms, Total Sheep, and Average Size of Herd by Districts and Regions	19
Table 12:	Sheep Farms, Total Number of Sheep, and Average Size of Herd by Size of Sheep Holding	21
Table 13:	Sheep Herd Composition (Male and Female 1 Year and Over, and Male and Female Under 1 Year) by Districts and Regions	22
Table 14:	Sheep Herd Composition (Male and Female 1 Year and Over, and Male and Female Under 1 Year) by Size of Sheep Holding	24
Table 15:	Sheep Born, Died, Home Slaughter, and Purchased by Districts and Regions	25
Table 16:	Sheep Born, Died, Sold, Home Slaughter, and Purchased by Size of Sheep Holding	26
Goats:		
Table 17:	Goat Farms, Total Goats, and Average Size by Districts and Regions	27
Table 18:	Goat Farms, Total Number of Goats, and Average Size Herd by Size of Goat Holding	29
Table 19:	Goat Herd Composition (Male and Female 1 Year and Over, and Male and Female Under 1 Year) by District and Region	30
Table 20:	Goat Herd Composition (Male and Female 1 Year and Over, and Male and Female Under 1 Year) by Size of Goat Holding	
Table 21:	Goats Born, Died, Sold, Home Slaughter and Purchased by Districts and Regions	- 33
Table 22:	Goats Born, Died, Sold, Home Slaughter, and Purchased by Size of Goat Holding	- 34
Other Liv		
Table 23:	Mule/Donkey, Horse, and Pig Farms, Number of Animals and Average Size by Districts and Regions	- 35
Table 24:	Mule and Donkey Farms, Total Mules and Donkeys, and Average Herd Size by Size of Mule/Donkey Holding	- 36
Table 25:	Chickens and Other Birds (Ducks, Turkeys, etc.) Farms, Number of Birds, and Average Size by Districts and Regions	- 37



		Page
Table 26:	Chicken Farms, Total Chickens, and Average Flock Size by Size of Chicken Holding	38
Crops:		
Table 27:	Farms with Land and Crops Planted, Total Area Planted, and Area Harvested by Districts and Regions	39
Table 28:	Number of Crop Farms, Area of Crop Land Planted, and Average Size Classified by Size of Crop Land Planted	41
Table 29:	Area Planted to Sorghum, Maize, Millet, Beans/Pulses, Sunflowers, Groundnuts, Other Crops, and Total Crops, by Districts and Regions	42
Table 30:	Area Harvested to Sorghum, Maize, Millet, Beans/Pulses, Sunflowers, Groundnuts, Other Crops, and Total Crops by Districts and Regions	43
Sorghum:		
Table 31:	Sorghum Farm Numbers, Areas Planted and Harvested, Total Production, and Average Production by Districts and Regions	45
Table 32:	Sorghum Farm Numbers, Area of Crop Land, and Average Size Classified by Size of Area Planted	48
<u>Maize</u> :		
Table 33:	Maize Farm Numbers, Area Planted and Harvested, Total Production, and Average Production by Districts and Regions	49
Table 34:	Maize Farm Numbers, Area of Crop Land, and Average Size Classified by Size of Area Planted	52
Millet:		
Table 35:	Millet Farm Numbers, Area Planted and Harvested, Total Production, and Average Production by Districts and Regions	53
Table 36:	Millet Farm Numbers, Area of Crop Land, and Average Size Classified by Size of Area Planted	56
Beans/Puls	es:	
Table 37:	Beans/Pulses Farm Numbers. Area Planted and Harvested, Total Production, and Average Production by Districts and Regions	57
Table 38:	Beans/Pulses Farm Numbers, Area of Crop Land, and Average Size Classified by Size of Area Planted	60

		Page
Other Crops		
Table 39:	Groundnut Farm Numbers, Area Planted, Area Harvested, Total Production, and Average Yields by Regions	61
Table 40:	Sunflower Farm Numbers, Area Planted, Area Harvested, Total Production, and Average Yields by Regions	62
Figures		
Farm Number	<u>s</u> :	
Figure 1:	Traditional Farms by Regions and Total Freehold Farms	10
<u>Cattle</u> :		
Figure 2:	Traditional Cattle Farms by Regions and Total Freehold Cattle Farms	12
Figure 3:	Traditional Cattle by Regions and Total Freehold Cattle-	12
Figure 4:	Cattle Herd Composition, Traditional and Freehold Farms-	15
Sheep:		
Figure 5:	Traditional Sheep Farms by Regions and Total Freehold Sheep Farms	20
Figure 6:	Traditional Sheep by Regions and Freehold Sheep	20
Figure 7:	Sheep Herd Composition, Traditional and Freehold	23
Goats:		
Figure 8:	Traditional Goat Farms by Regions and Total Freehold Goat Farms	- 28
Figure 9:	Traditional Goats by Regions and Total Freehold Goats	- 28
Figure 10:	Goat Herd Composition, Traditional and Freehold	- 31
All Crops:		
Figure 11:	Traditional Crop Farms by Region and Freehold Crop Farm	s 40
Figure 12:	Traditional Hectares Planted by Region and Freehold Hectares Planted	- 40
Figure 13:	Total Hectares Planted by Crops, Traditional and Free-hold	- 44
Figure 14:	Total Hectares Harvested by Crops, Traditional and	- 44

			Page
Sorghu	<u>m</u> :		
Figure	15:	Traditional Sorghum Farms by Regions and Freehold Sorghum Farms	<mark>4</mark> 6
Figure	16:	Traditional Sorghum Hectares Planted by Regions and Freehold Sorghum Planted	46
Figure	17:	Traditional Sorghum Hectares Harvested by Regions and Freehold Sorghum Harvested	47
Figure	18:	Traditional Sorghum Production by Regions and Freehold Sorghum Production	47
<u>Maize</u> :			
Figure	19:	Traditional Maize Farms by Regions and Freehold Maize Farms	50
Figure	20:	Traditional Maize Hectares Planted by Regions and Freehold Maize Planted	50
Figure	21:	Traditional Maize Hectares Harvested by Regions and Freehold Maize Hectares Harvested	51
Figure	22:	Traditional Maize Production in Metric Tons by Regions and Freehold Maize Production	51
Millet			
Figure	23:	Traditional Millet Farms by Regions and Freehold Millet Farms	54
Figure	24:	Traditional Millet Hectares Planted by Regions and Freehold Millet Hectares Planted	54
Figure	25:	Traditional Millet Hectares Harvested by Regions and Freehold Millet Hectares Harvested	55
Figure	26:	Traditional Millet Production in Metric Tons by Regions and Freehold Millet Production	55
Beans/F	ulse	<u>s</u> :	
Figure	27:	Traditional Beans/Pulses Farms by Regions and Freehold Beans/Pulses Farms	58
Figure	28:	Traditional Beans/Pulses Hectares Planted by Regions and Freehold Beans/Pulses Hectares Planted	58
Figure	29:	Traditional Beans/Pulses Hectares Harvested by Regions and Freehold Beans/Pulses Hectares Harvested	59
Figure	30:	Total Production of Beans/Pulses in Metric Tons by Regions and Freehold Beans/Pulses in Metric Tons	59

### 1979 LIVESTOCK AND CROP SURVEY

### Area of Coverage

The 1979 Agricultural Livestock and Crop Survey covered the traditional tribal farms in the Agricultural Administrative Regions and all freehold and commercial farms in the country. The area of coverage for traditional farmers includes the five Agricultural Extension Regions comprised of 16 districts. These regions and districts are shown in the following map. This is the first time that data from both the traditional and freehold farm sectors were collected in one survey peiod and published in one report.

The 1979 estimates represent the most comprehensive coverage to date. However, excluded from the estimates are data on the traditional farms in the Western Region in the Administrative Districts of Kgalagadi and Ghanzi, and traditional farms located in freehold land areas. The number of traditional farms in these areas is estimated at about 5 percent of the total number of farms.

### Methodology

The 1979 Agricultural Livestock and Crop Survey is a multiple frame survey. That is, a list of names was used for the freehold farms, and small areas of land, called blocks, were used for traditional farms.

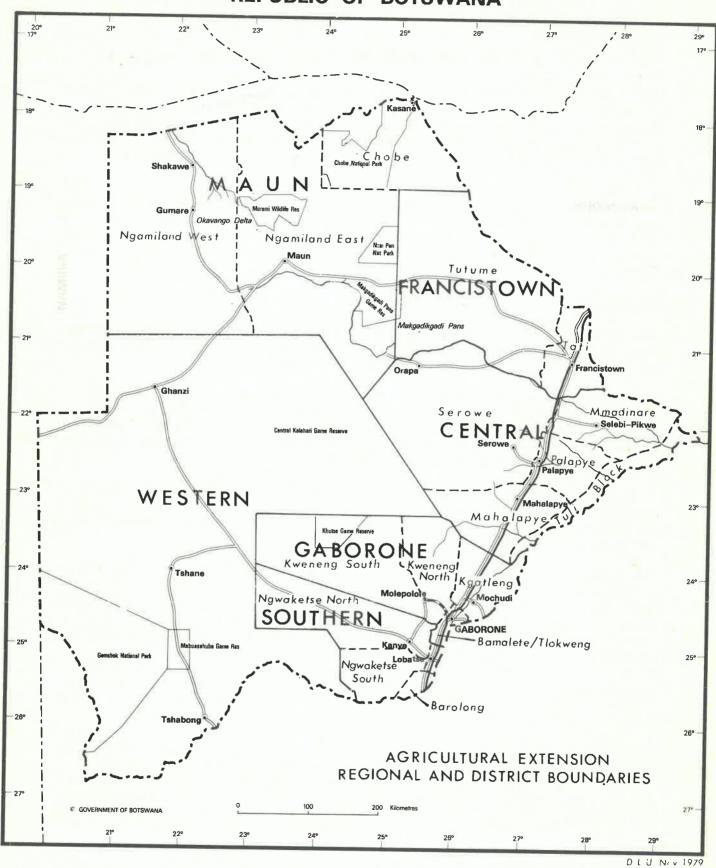
A list of freehold and commercial farm operations was obtained from the Central Office of Statistics. All farm operations were mailed a letter questionnaire and return envelope on June 22, 1979, followed by a second mailing three weeks later. After three more weeks, a random sample of one in four of the non-responses was selected.

A questionnaire was required from every operation selected in the non-response sample and these data were obtained through personal interviews in August. The total number of questionnaires obtained from the mail returns and follow-up was 141 out of 360 farms.

The traditional farms were selected by using an area sample. The land area of the country is stratified according to cattle posts, lands and villages, and these are divided into smaller areas of land called blocks. The blocks were the primary sampling unit and were selected from each district according to the probability proportional to their estimated number of agricultural households. The secondary sampling unit was the agricultural holders "living" within the blocks, and they were selected randomly. Shown by regions and districts in Table lare the population of blocks, the sample number of blocks, and sample number of farm householders. About one out of loo farm householders were sampled in this Survey.

The measure of the precision for individual country estimates is stated in terms of the relative standard error called the Coefficient of Variation (C.V.). The standard error may be calculated by multiplying the estimate by the coefficient of variation. The coefficients of variation are shown in summary Tables 2 and 3 for the total individual national estimates.

## REPUBLIC OF BOTSWANA



### Training, Data Collection and Summarization

Emphasis was placed upon training schools, supervision, and quality control in order to reduce non-sampling errors.

Two separate training schools were held. The first school was conducted in April 1979 on livestock, area planted, and measurement of areas. The second school held in May 1979 was conducted on area harvested, production, and freehold farms. The supervisors received additional training and instructions at the training schools. The three manuals used in the instructions of the school are available upon request. 1/

The data collection was carried out by five field teams, each consisting of a supervisor, four enumerators, and one driver with vehicle.

The survey was conducted in four different stages, which are as follows:

- Stage I January-May: Listing of names in sample blocks.
- Stage II April-May: Enumeration of crops planted, livestock data, and measurements of crop areas for traditional farmers.
- Stage III June-July: Enumeration of crops harvested and crop production for traditional farmers.
- Stage IV June-August: Collected freehold and commercial farm data for crops planted, crops harvested, production and livestock.

Supervisors made a final review of all completed questionnaires before leaving a block. Upon completion of a block, the questionnaires were mailed to the Gaborone central office. The questionnaires were checked and then edited and coded upon arrival in the office. The survey teams were contacted immediately when questions or apparent problems with data were found.

Data were then entered directly from the questionnaire into the computer through terminals. A comprehensive machine edit was used on the data before they were summarized. These data were available within weeks after the completion of the survey. The edit and summary programs are generalized programs that will be used to summarize last year's data (1978), and will be used for future surveys.

<sup>1/&</sup>quot;Enumerators Manual 1979 Agricultural Crop and Livestock Survey," April 1979, Agricultural Statistics Unit, Ministry of Agriculture.

<sup>&</sup>quot;Enumerators Manual 1979 Crops Harvested and Crop Production," June 1979, Agricultural Statistics Unit, Ministry of Agriculture.

<sup>&</sup>quot;Supervisory Enumerators Manual," June 1979, Agricultural Statistics Unit, Ministry of Agriculture.

### Interpretation of Data

An understanding of the data and their limitations are needed for correct interpretation for policy and planning purposes. Some of the limitations in these data are as follows:

- 1. District estimates were published because of the need for small area statistics. The user should realize that the standard errors for the district estimates are relatively large. However, as a time series is developed and in the case of next year when sample size will be increased, the district estimates will become more reliable.
- 2. Individual farm data were assigned to the district where the farmer was "living" at the time of the interview. The livestock or crops might be located in a different district causing some distortion in "true" district totals.
- 3. All national estimates exclude data from traditional farms located in the Western Region and traditional farms located in freehold farm areas.
- 4. A point system was used to determine whether a marginal holder qualified as a farm (see below). This definitional change of a farm resulted in about a 2,000 decrease in farm numbers from the definition used in 1977.
- 5. Areas for mixed crops were divided into equal proportions.

### Terms and Definitions

<u>Farm</u>: A minimum of 50 total points is required to qualify a household as a farm. Point values are as follows:

	<u>Points</u>
Fallow land per hectare	50 100 100 100 100 400 200 200 100
Cattle per head Pigs per head Horses per head Mules per head Goats per head Chickens, geese, ducks per head	40 25 20 20 15 4

Agricultural Holder: The person in the household who makes the day-to-day decisions for the farm.

Livestock farms: Agricultural holders were classified according to specific livestock farms if they own, manage, or operate one or more animals of a species.

Other livestock farms: these include farms with mules, donkeys, horses, chickens, and/or other birds (ducks, turkeys, geese).

Crop farm: A farm with crops planted during the 1979 crop year.

Mixed crop: Two or more crops interplanted in the same field.

Bull: A full grown male that is used for breeding (usually over three years of age).

Oxen: A full grown male that has been castrated (usually over three years of age).

Cow: A full grown female (usually over three years) that has calved.

Heifer: A young female that has not yet calved but is at least one year old and less than three years of age.

Tolly: A young male that is at least one year old and less than three years of age.

Calf: A male or female which is under one year of age.

<u>Chickens</u>: A general term used to define hens, roosters, chicks, pullets, etc.

FOOTNOTES One standard set of footnotes is used for the tables and are defined as follows:

- 1/ Excludes traditional farms in Western Region.
- <u>2</u>/ Less than 50.
- 3/ Regional estimates only.
- 4/ Included in total.
- 5/ Less than .5 metric ton.



TABLE 1: Sample Size of Blocks and Holders for Traditional Farms by Agricultural Districts and Regions1/

Agricultural Districts/Regions	Blocks in the Population	Blocks Selected	Holders Selected
	Number	Number	Number
Barolong	38	9	42
Ngwaketse South	139	12	54
Ngwaketse North	277	15	77
SOUTHERN REGION	454	36	173
Bamalete/Tlokweng	85	8	36
Kweneng South	284	17	80
Kweneng North	139	15	66
Kgatłeng	232	14	69
GABORONE REGION	740	54	251
Mahalapye	243	17	83
Palapye	179	12	59
Serowe	273	10	50
Mmadinare	134	11	37
CENTRAL REGION	829	50	229
Tati	161	12	59
Tutume	123	11	54
FRANCISTOWN REGION	284	23	113
Ngamiland West	167	11	58
Ngamiland East	154	9	40
Chobe	15	4	21
MAUN REGION	336	24	119
ГОТAL	2643	187	885

TABLE 2: Summary of Traditional, Freehold, and Total Livestock Estimates with the Coefficient of Variation

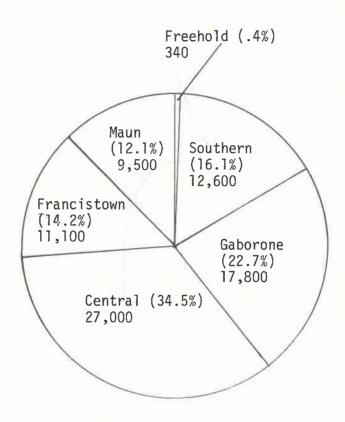
Category	Traditional	Freehold	Total	Coefficient of Variation
		-Number-		Percent
NUMBER OF FARMS	78,000	340	78,340	7.7
Cattle -				= 0
Cattle farms	60,000	320	60,320	7.6
All cattle	2,400,000	440,000	2,840,000	8.5
Bulls	43,000	6,000	49,000	10.0
Oxen	325,000	56,000	381,000	10.3
Cows	982,000	153,000	1,135,000	8.9
Tollies	258,000	68,000	326,000	8.4
Heifers	309,000	71,000	_380,000	9.3
Calves	483,000	86,000	569,000	8.9
Born	573,000	97,000	670,000	8.9
Died	261,000	16,000	277,000	19.0
Sold	218,000	118,000	336,000	9.7
Purchased	28,000	44,000	72,000	21.5
Home slaughter	22,000	4,000	26,000	22.4
Sheep			3.4.300	11.0
Sheep farms	14,000	120	14,120	11.3
All sheep	95,000	13,000	108,000	14.3
Males one year & over	11,200	2,200	13,400	19.0
Females one year & over	64,500	7,000	71,500	13.9
Males under one year	8,700	1,800	10,500	18.7
Females under one year	10,600	2,000	12,600	18.7
Born	32,000	4,400	36,400	
Died	37,000	2,000	39,000	
Sold Sold	5,500	900	6,400	
Purchased	2,300	900	3,200	
Home slaughter	4,300	1,800	6,100	22.1
Goats	46 000	1.40	46 140	9.5
Goat_farms	46,000	140	46,140 557,000	
All goats	545,000	12,000	70,600	
Males one year & over	69,100	1,500	332,300	
Females one year & over	325,300	7,000 1,700	71,200	
Males under one year	69,500	1,800	82,900	
Females under one year	81,100 229,300	4,400	233,700	
Born	250,000	2,100	252,100	
Died	31,300	900	32,200	
Sold	14,800	300	15,100	
Purchased	34,000	1,300	35,300	
Home slaughter Other Livestock	34,000	1,000	00,000	
	26,000	90	26,090	13.2
Mule/Donkey farms Mules/donkeys	125,000	1,000	126,000	
Horse farms	5,500	200	5,700	
Horses	14,000	3,700	17,700	
Pig farms	4,000	30	4,030	
Pigs	5,000	1,300	6,300	
Chicken farms	63,500	130	63,630	
Chickens	710,000	30,000	740,000	
Other bird farms	3,500	35	3,535	13.7
Other birds	10,000	300	10,300	

TABLE 3: Summary of Traditional, Freehold, and Total Crop Estimates with the Coefficient of Variation

Category	Traditional	Freehold	Total	Coefficient of Variation
TOTAL ORDER		-Number-		Percent
TOTAL CROPS Farms with land Farms with crops planted Total area planted (hectares) Total area harvested	66,600 43,000 171,000 92,200	340 115 8,000 5,700	66,940 43,115 179,000 97,900	7.5
Sorghum Farms Area planted (hectares) Area harvested (hectares) Total production (metric tons) Average production (kg/hectare)	36,400 66,500 41,000 3,750 91	25 1,400 1,300 550 423	36,425 67,900 42,300 4,300	8.2 10.1
Maize Farms Area planted (hectares) Area harvested (hectares) Total production (metric tons) Average production (kg/hectare)	31,600 49,500 19,000 1,600 84	60 2,600 2,100 650 310	31,660 52,100 21,100 2,250 107	8.4 10.8
Millet Farms Area planted (hectares) Area harvested (hectares) Total production (metric tons) Average production (kg/hectare)	8,800 13,000 8,000 900 112	-	8,800 13,000 8,000 900 112	16.7 22.7
Beans/Pulses Farms Area planted (hectares) Area harvested (hectares) Total production (metric tons) Average production (kg/hectare)	20,400 26,000 13,700 960 70	30 400 200 40 200	20,430 26,400 13,900 1,000 72	9.8 12.6
Groundnuts Farms Area planted (hectares) Area harvested (hectares) Total production (metric tons) Average production (kg/hectare)	2,600 3,700 2,400 171 71	15 800 200 49 245	2,615 4,500 2,600 220 85	26.7 31.4
Sunflowers Farms Area planted (hectares) Area harvested (hectares) Total production (metric tons) Average production (kg/hectare)	1,500 4,600 4,000 560 140	25 1,400 1,100 340 309	1,525 6,000 5,100 900 176	26.7 28.4

TABLE 4: Total Number of Farms, Crop Farms, Cattle Farms, Sheep Farms, Goat Farms, Other Livestock Farms By Districts and Regions

Districts/ Regions	Total Number of Farms	Crop Farms	Cattle Farms	Sheep Farms	Goat Farms	Other Livestock Farms
TRADITIONAL			-Number-			
Barolong	1,500	800	900	600	1,000	7 400
Ngwaketse South	3,800	1,500	3,400	1,400	2,200	1,400 3,200
Ngwaketse South	7,300	2,700	5,200	700	3,400	
SOUTHERN REGION	12,600	5,000	9,500	2,700	6,600	6,400 11,000
Bamalete/Tlokweng	2,200	600	800	100	1,100	1,800
Kweneng South	8,000	3,400	6,400	1,200	3,900	6,400
Kweneng North	2,600	900	2,000	300	1,200	2,300
Kgatleng Korth	5,000	2,800	3,600	600	3,500	4,800
GABORONE REGION	17,800	7,700	12,800	2,200	9,700	15,300
Mahalapye	8,100	4,500	6,700	2,000	5,000	7,300
Palapye	6,400	3,800	4,800	1,700	3,900	5,400
Serowe	7,700	3,900	6,200	1,200	5,100	7,000
Mmadinare	4,800	2,700	4,000	1,000	3,700	4,700
CENTRAL REGION	27,000	14,900	21,700	5,900	17,700	24,400
Tati	6,800	4,000	5,400	1,500	4,500	5,800
Tutume	4,300	3,900	3,900	1,100	2,700	4,000
FRANCISTOWN REGION	11,100	7,900	9,300	2,600	7,200	9,800
Ngamiland West	4,700	3,700	3,100	400	2,200	3,300
Ngamiland East	4,000	3,100	3,200	200	2,200	3,500
Chobe	800	700	400	2/	400	700
MAUN REGION	9,500	7,500	6,700	600	4,800	7,500
TOTAL TRADITIONAL	78,000	43,000	60,000	14,000	46,000	68,000
TOTAL FREEHOLD	340	115	320	120	140	250
TOTAL	78,340	43,115	60,320	14,120	46,140	68,250

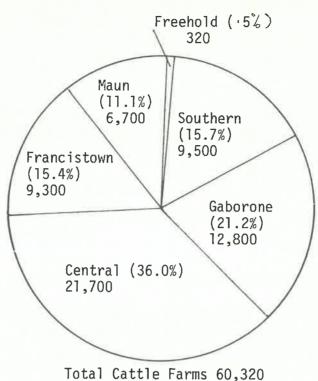


Total Farms 78,340

Figure 1: Traditional Farms by Regions and Total Freehold Farms

TABLE 5: Cattle Farms, Total Cattle, and Average Size by Districts and Regions

Districts/ Regions	Ca++10	Farms	Total	Cattle	Avenage Size
Neg 10113	Number				Average Size
TRADITIONAL	Nullber	Percentage	Number (000)	Percentage	Number —
Barolong	900	1.5	28.0		21 1
Ngwaketse South	3,400	5.6	140.0	1.0 4.9	31.1 41.2
Ngwaketse North	5,200	8.6	192.0	6.8	36.9
SOUTHERN REGION	9,500	15.7	360.0	12.7	37.9
Bamalete/Tlokweng	800	1.3	8.0	.3	10.0
Kweneng South	6,400	10.6	224.0	7.9	
Kweneng South Kweneng North	2,000	3.3	63.0	2.2	35.0 31.5
Kgatleng	3,600	6.0	110.0	3.9	30.6
GABORONE REGION	12,800	21.2	405.0	14.3	31.6
	6,700		284.0		42.4
Mahalapye Balanya		11.1 8.0		10.0	
Palapye Serowe	4,800		170.0	6.0	35.4
Mmadinare	6,200	10.3	215.0	7.6	34.7
	4,000	6.6	158.0	5.5	39.5
CENTRAL REGION	21,700	36.0	827.0	29.1	38.1
Tati	5,400	8.9	194.0	6.8	35.9
Tutume	3,900	6.5	232.0	8.2	59.5
FRANCISTOWN REGION	9,300	15.4	426.0	15.0	45.8
Ngamiland West	3,100	5.1	200.0	7.0	64.5
Ngamiland East	3,200	5.3	176.0	6.2	55.0
Chobe	400	.7	6.0 -	.2	15.0
MAUN REGION	6,700	11.1	382.0	13.4	57.0
TOTAL TRADITIONAL	60,000	99.5	52,400.0	84.5	40.0
TOTAL FREEHOLD	320	.5	440.0	15.5	1,375.0
TOTAL	60,320	100.0	2,840.0	100.0	47.1



Total Cattle Family 60,320

Figure 2: Traditional Cattle Farms by Regions and Total Freehold Cattle Farms

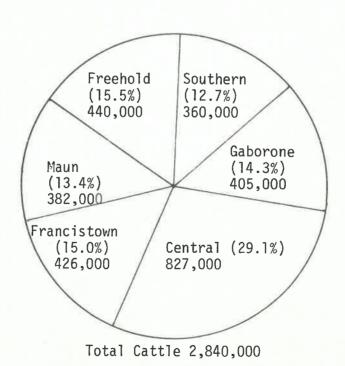


Figure 3: Traditional Cattle by Regions and Total Freehold Cattle

1979 Livestock and Crop Survey

TABLE 6: Cattle Farms, Total Number of Cattle, and Average Size Herd by Size of Cattle Holding

Cattl Number	e Farms Percentage	Total Number (000)	Cattle Percentage	Average Size Number	
		Number			
		TRADITIONAL			
10,000	16.7	60.5	2.5	6.0	
15,000	25.0	238.1	9.9	15.9	
11,100	18.5	292.1	12.2	26.3	
		304.9	12.7	36.7	
1,900	3.2	412.1	17.2	216.9	
60,000	100.0	2400.0	100.0	40.0	
		FREEHOLD			
41	12.8	2.5	.6	61.0	
20	6.3	209.1	47.5	10,455.0	
320	100.0	440.0	100.0	1,375.0	
60,320		2,840.0		47.1	
	15,000 11,100 8,300 2,500 3,200 5,000 3,000 1,900 60,000 41 120 64 75 20 320	15,000	15,000	15,000 25.0 238.1 9.9 11,100 18.5 292.1 12.2 8,300 13.8 304.9 12.7 2,500 4.2 114.4 4.8 3,200 5.3 181.8 7.6 5,000 8.3 396.6 16.5 3,000 5.0 399.5 16.6 1,900 3.2 412.1 17.2 60,000 100.0 2400.0 100.0  FREEHOLD  41 12.8 2.5 .6 120 37.5 32.1 7.3 64 20.0 43.8 10.0 75 23.4 152.5 34.6 20 6.3 209.1 47.5	15,000       25.0       238.1       9.9       15.9         11,100       18.5       292.1       12.2       26.3         8,300       13.8       304.9       12.7       36.7         2,500       4.2       114.4       4.8       45.8         3,200       5.3       181.8       7.6       56.8         5,000       8.3       396.6       16.5       79.3         3,000       5.0       399.5       16.6       133.2         1,900       3.2       412.1       17.2       216.9         60,000       100.0       2400.0       100.0       40.0         FREEHOLD         41       12.8       2.5       .6       61.0         120       37.5       32.1       7.3       267.5         64       20.0       43.8       10.0       684.4         75       23.4       152.5       34.6       2,033.3         20       6.3       209.1       47.5       10,455.0         320       100.0       440.0       100.0       1,375.0

TABLE 7: Cattle Herd Composition (Bulls, Oxen, Cows, Tollies, Heifers, Calves) by Districts and Regions

Districts/ Regions	Bulls	0xen	Cows	Tollies	Heifers	Calves	Total Cattle
TRADITIONAL			-Numbe	er (000)-			
Barolong	.6	6.2	0.7				
Ngwaketse South	2.7	16.5	9.7	2.4	3.5	5.6	28.0
Ngwaketse North	5.0		60.5	9.8	16.8	33.7	140.0
SOUTHERN REGION	8.3	27.2	78.3	15.0	27.5	39.0	192.0
Bamalete/Tlokweng	.2	49.9	148.5	27.2	47.8	78.3	360.0
Kweneng South		1.3	2.9	1.0	1.1	1.5	8.0
Kweneng North	4.1	40.5	85.5	21.7	23.8	48.4	224.0
Kgatleng	1.3	10.7	24.6	6.6	8.4	11.4	63.0
GABORONE REGION	1.9	17.6	45.2	9.1	15.8	20.4	110.0
Mahalanus	7.5	70.1	158.2	38.4	49.1	81.7	405.0
Mahalapye	6.0	32.1	117.3	35.8	35.5	57.3	284.0
Palapye	2.2	20.2	70.7	20.4	23.1	33.4	170.0
Serowe	3.0	36.1	88.6	21.7	24.7	40.9	
Mmadinare	3.5	20.2	64.8	16.0	21.5	32.0	215.0
CENTRAL REGION	14.7	108.6	341.4	93.9	104.8	163.6	158.0
Tati	3.5	19.0	83.0	25.8	29.5	33.2	827.0
Tutume	3.5	25.6	98.6	28.3	31.2	44.8	194.0
FRANCISTOWN REGION	7.0	44.6	181.6	54.1	60.7		232.0
Ngamiland West	3.0	26.0	81.0	23.4	25.4	78.0	426.0
Ngamiland East	2.3	24.6	69.2	20.4	20.4	41.2	200.0
Chobe	.2	1.2	2.1	.6		39.1	176.0
MAUN REGION	5.5	51.8	152.3	44.4	.8	1.1	6.0
TOTAL TRADITIONAL	43.0				46.6	81.4	382.0
	75.0	325.0	982.0	258.0	309.0	483.0	2,400.0
TOTAL FREEHOLD	6.0	56.0	153.0	68.0	71.0	86.0	440.0
TOTAL	49.0	381.0	1135.0	326.0	380.0	569.0	2,840.0

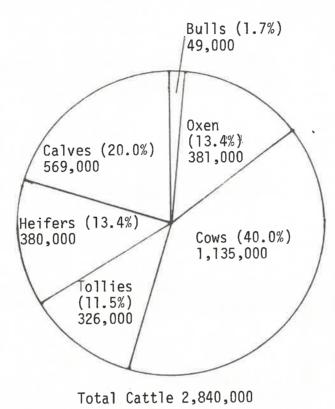


Figure 4: Cattle Herd Composition, Traditional and Freehold Farms

-16

1979 Livestock and Crop Survey

TABLE 8: Cuttle Herd Composition (Bulls, Oxen, Cows, Tollies, Heifers, Calves) by Size of Cattle Holding

Bulls	0xen	Cows	Tollies	Heifers	Calves	Total Cattl
		-Numb	er (009)-			
		TRAD	ITYONAL			
7	6.0					
				9.3	12.6	60.5
				35.2		238.1
		110.0	33.5			292.1
	52.3	119.8				304.9
2.8	13.3					
						114.4
						181.8
						396.6
						399.5
J.0	45.8	1/8./	49.3	49.5	83.0	412.1
43.0	325.0	982.0	258.0	309.0	483.0	2,400.0
		FREE	HOLD			\
1	0					
• [				.6	.4	2.5
• 5	3.2	11.5		5.5	6.3	32.1
./			7.0	7.0		43.8
		62.2	23.6			152.5
2.7	34.1	62.7	32.0	37.7	39.9	209.1
6.0	56.0	153.0	68.0	71.0	86.0	440.0
49.0	381.0	1,135.0	326.0	380.0	569.0	
	.7 4.4 5.4 6.2 2.8 2.7 6.1 8.9 5.8 43.0	.7 6.2 4.4 35.1 5.4 43.2 6.2 52.3 2.8 13.3 2.7 27.0 6.1 50.4 8.9 51.7 5.8 45.8  43.0 325.0  .1 .2 .5 3.2 .7 5.2 2.0 13.3 2.7 34.1 6.0 56.0	-Numb  TRAD  .7 6.2 24.5 4.4 35.1 90.3 5.4 43.2 110.0 6.2 52.3 119.8 2.8 13.3 41.3 2.7 27.0 76.6 6.1 50.4 175.8 8.9 51.7 165.0 5.8 45.8 178.7  43.0 325.0 982.0  FREE  .1 .2 .9 .5 3.2 11.5 .7 5.2 15.7 2.0 13.3 62.2 2.7 34.1 62.7  6.0 56.0 153.0	-Number (000)-  TRADITIONAL  .7 6.2 24.5 7.2 4.4 35.1 90.3 27.2 5.4 43.2 110.0 33.5 6.2 52.3 119.8 34.8 2.8 13.3 41.3 12.2 2.7 27.0 76.6 15.2 6.1 50.4 175.8 41.7 8.9 51.7 165.0 36.9 5.8 45.8 178.7 49.3  43.0 325.0 982.0 258.0  FREEHOLD  .1 .2 .9 .3 .5 3.2 11.5 5.1 .7 5.2 15.7 7.0 2.0 13.3 62.2 23.6 2.7 34.1 62.7 32.0  6.0 56.0 153.0 68.0	-Number (000)-  TRADITIONAL  .7 6.2 24.5 7.2 9.3 4.4 35.1 90.3 27.2 35.2 5.4 43.2 110.0 33.5 41.1 6.2 52.3 119.8 34.8 37.7 2.8 13.3 41.3 12.2 22.6 2.7 27.0 76.6 15.2 20.2 6.1 50.4 175.8 41.7 41.4 8.9 51.7 165.0 36.9 52.0 5.8 45.8 178.7 49.3 49.5  43.0 325.0 982.0 258.0 309.0  FREEHOLD  .1 .2 .9 .3 .6 .5 3.2 11.5 5.1 5.5 .7 5.2 15.7 7.0 7.0 2.0 13.3 62.2 23.6 20.2 2.7 34.1 62.7 32.0 37.7  6.0 56.0 153.0 68.0 71.0	-Number (000)-  TRADITIONAL  .7 6.2 24.5 7.2 9.3 12.6 4.4 35.1 90.3 27.2 35.2 45.9 5.4 43.2 110.0 33.5 41.1 58.9 6.2 52.3 119.8 34.8 37.7 54.1 2.8 13.3 41.3 12.2 22.6 22.2 2.7 27.0 76.6 15.2 20.2 40.1 6.1 50.4 175.8 41.7 41.4 81.2 8.9 51.7 165.0 36.9 52.0 85.0 5.8 45.8 178.7 49.3 49.5 83.0  43.0 325.0 982.0 258.0 309.0 483.0  FREEHOLD  .1 .2 .9 .3 .6 .4 .5 3.2 11.5 5.1 5.5 6.3 .7 5.2 15.7 7.0 7.0 8.2 2.0 13.3 62.2 23.6 20.2 31.2 2.7 34.1 62.7 32.0 37.7 39.9  6.0 56.0 153.0 68.0 71.0 86.0

Districts/ Regions	total	Born		Deaths		Sold	Home Slaughter	Purchased
				-1	Number	(000)-		
TRADITIONAL								
Barolong		6.0		. 2.0	B-D	3.3	.2	1.0
Ngwaketse South		37.5		11.0		14.1	1.4	3.6
Ngwaketse North		48.5		21.0		18.4	1.0	5.7
SOUTHERN REGION	360	92.0	.16	34.0	58	35.8	2.6	10.3
Bamalete/Tlokweng		2.0		1.0		.3	.1	.1
Kweneng South		54.0		27.0		24.0	4.0	1.9
Kweneng North		14.0		7.6		3.8	1.0	. 4
Kgatleng		25.0	-mark	15.4		10.8	1.3	.9
GĂBORONE REGION	405	95.0	11.	51.0	44	38.9	6.4	3.3
Mahalapye		68.0		26.0		28.0	3.5	3.8
Palapye		41.0		19.0		16.0	1.7	2.5
Serowe		48.0		23.0		15.0	2.2	1.1
Mmadinare		38.0		18.0		22.0	.9	.6
CENTRAL REGION	753	195.0	, 13	86.0	101	81.0	8.3	.8.0
Tati	-	41.0		24.0		27.0	1.6	1.1
Tutume		57.0		35.0		19.0	1.3	2.0
FRANCISTOWN REGION	.426	98.0	.09	59.0	31	46.0	2.9	3.1
Ngamiland West		48.5		18.0		10.0	.9	1.7
Ngamiland East		43.0		12.0		6.2	.8	1.5
Chobe		1.5		1.0		.1	.1	
MAUN REGION	725	93.0	16	31.0	67	16.3	1.8	3.3
TOTAL TRADITIONAL		573.0		261.0		218.0	22.0	28.0
TOTAL FREEHOLD	400	97.0		16.0	%[	118.0	4.0	44.0
TOTAL		670.0		277.0		336.0	26.0	72.0

-18

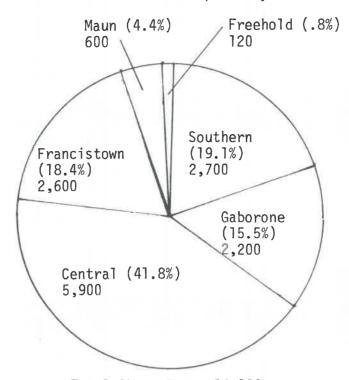
1979 Livestock and Crop Survey

TABLE 10: Cattle Born, Died, Sold, Home Slaughter , and Purchased by Size of Cattle Holding

Herd Size	Born	Deaths	So1d	Home Slaughter	Purchased
		-Numb	er (000)-		
		TRAD	ITIONAL		
0 1-10 11-20 21-30 31-40 41-50 51-60 61-100 101-150 151+	2/ 17.2 56.7 67.0 68.8 26.4 47.0 96.8 96.8 96.3	.1 12.7 36.2 33.0 32.6 11.7 21.8 29.8 27.1 56.0	.9 10.2 28.3 23.1 24.0 10.0 10.9 38.5 33.6 38.5	.3 .7 2.5 4.2 3.8 .4 2.1 4.0 2.9 1.1	.4 4.0 4.4 3.5 3.6 1.0 2.3 .8 2.2 5.8
		FRI	EEHOLD		20.0
1-100	C	-			
101-500 501-1000 1001-5000 5000+	.6 7.4 9.7 33.9 45.4	.4 2.0 2.5 6.0 5.1	.7 18.1 20.3 39.3 39.6	2/ .T .2 .9 2.8	.1 4.7 12.1 10.8 16.3
TOTAL FREEHOLD	97.0	16.0	118.0	4.0	44.0
TOTAL	670.0	277.0	336.0	26.0	72.0

TABLE 11: Sheep Farms, Total Sheep, and Average Size Herd by Districts and Regions

Districts/						
Regions .	Sheep	Farms	Total	Sheep	Average Size	
TRADITIONAL	Number	Percentage	Number (000)	Percentage	Number	
Barolong	600	4.2	10.0	9.3	16.7	
Ngwaketse South	1,400	9.9	15.0	13.9	10.7	
Ngwaketse North	700	5.0	8.0	7.4	11.4	
SOUTHERN REGION	2,700	19.1	33.0	30.6	12.2	
Bamalete/Tlokweng	100	.7	.5	.5	5.0	
Kweneng South	1,200	8.5	7.5	6.9	6.3	
Kweneng North	300	2.1	2.0	1.9	6.6	
Kgatleng	600	4.2	4.0	3.7	6.7	
GABORONE REGION	2,200	15.5	14.0	13.0	6.4	
Mahalapye	2,000	14.2	11.0	10.2	5.5	
Palapye	1,700	12.0	13.0	12.0	7.6	
Serowe	1,200	8.5	5.0	4.6	4.2	
Mmadinare	1,000	7.1	4.0	3.7	4.0	
CENTRAL REGION	5,900	41.8	33.0	30.5	5.6	
Tati	1,500	10.6	7.0	6.5	4.6	
Tutume	1,100	7.8	4.0	3.7	3.6	
FRANCISTOWN REGION	2,600	18.4	11.0	10.2	4.2	
Ngamiland West	400	3.0	3.0	2.8	7.5	
Ngamiland East	200	1.4	1.0	.9	5.0	
Chobe	2/		2/		2/	
MAUN REGION	600	4.4	4.0	3.7	6.7	
TOTAL TRADITIONAL	14,000	99.2	95.0	0.88	6.8	
TOTAL FREEHOLD	120	.8	1,3.0	12.0	108.3	
TOTAL	14,120	100.0	108.0	100.0	7.6	



Total Sheep Farms 14,120

Figure 5: Traditional Sheep Farms by Regions and Total Freehold Sheep Farms

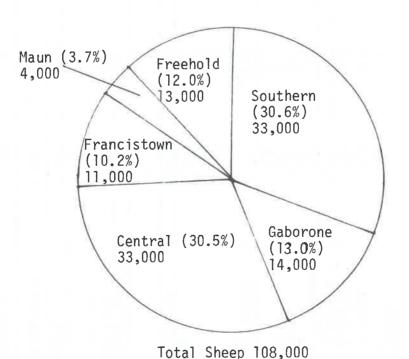


Figure 6: Traditional Sheep by Regions and Freehold Sheep

TABLE 12: Sheep Farms, Total Number of Sheep, and Average Size Herd by Size of Sheep Holding

Herd Size	Sheep	Farms	Total	Sheep	Average Siz
	Number	Percentage	Number (000)	Percentage	Number
			TRADITIONAL		
1-10 11-20 21-30 31+	12,100 1,000 500 400	86.4 7.2 3.5 2.9	47.2 15.5 11.4 20.9	49.7 16.3 12.0 22.0	3.9 15.5 22.8 52.2
TOTAL TRADITIONAL	14,000	100.0	95.0	100.0	6.8
			FREEHOLD		
1-50 51-100 101-150 151-200 200+	42 30 13 13 22	35.0 25.0 10.8 10.8 18.4	.8 2.1 1.6 2.1 6.4	6.2 16.2 12.3 16.2 49.1	19.1 70.0 123.1 161.5 290.9
TOTAL FREEHOLD	120	100.0	13.0	100.0	108.3
TOTAL	14,120	-	108.0	-	7.6

TABLE 13: Sheep Herd Composition (Male and Female 1 Year and Over, and Male and Female Under 1 Year) by Districts and Regions

Districts/ Regions	Male Sheep 1 Year & Over	Female Sheep 1 Year & Over	Male Sheep Under 1 Year	Female Sheep Under 1 Year	Tota Sheep
TRADITIONAL		-Number	(000)-		·
Barolong	7	7 0			
Ngwaketse South	.7 1.8	7.3	.8	1.2	10.0
Ngwaketse North	1.2	10.8	.9	1.5	15.0
SOUTHERN REGION	3.7	5.0	.8	1.0	8.0
Bamalete/Tlokweng		23.1	2.5	3.7	33.0
Kweneng South	1.0	.3	$\frac{2}{.7}$	.1	. 5
Kweneng North	1.3	4.7	.7	.8	7.5
Kgatleng	. 3	1.2	.2	.3	2.0
GABORONE REGION	.4	2.8	. 4	. 4	4.0
Mahalapye	2.1	9.0	1.3	1.6	14.0
Palapye	1.3	7.0	1.4	1.3	11.0
Serowe	1.7	8.4	1.3	1.6	13.0
Mmadinare	.4	3.8	. 4	.4	5.0
CENTRAL REGION	.3	2.8	. 4	.5	4.0
Tati	3.7	22.0	3.5	3.8	33.0
Tutume	.9	4.9	.6	.6	7.0
FRANCISTOWN REGION	.4	2.9	.3	. 4	4.0
Ngamiland West	1.3	7.8	.9	1.0	11.0
Ngamiland East	.3	1.9	. 4	. 4	3.0
Chobe	.1	.7	.1	.1	1.0
MAUN REGION	2/	2/	2/	2/	2/
TOTAL TRADITIONAL	.4	2.6	.5	.5	4.0
	11.2	64.5	8.7	10.6	95.0
TOTAL FREEHOLD	2.2	7.0	1.8	2.0	13.0
ΓΟΤΑL	13.4	71.5	10.5	12.6	108.0

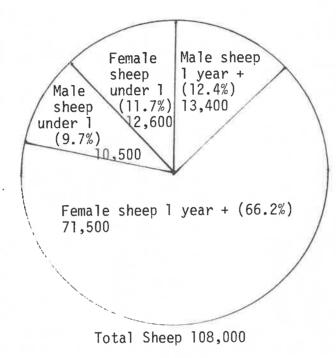


Figure 7: Sheep Herd Composition, Traditional and Freehold

TABLE 14: Sheep Herd Composition (Male and Female 1 Year and Over, and Male and Female Under 1 Year) by Size of Sheep Holding

Herd Size	Male Sheep 1 Year & Over	Female Sheep 1 Year & Over	Male Sheep Under 1 Year	Female Sheep Under 1 Year	Total Sheep
		-Number	(000)-		
		TRADIT	IONAL		
1-10 11-20 21-30 31+	5.7 1.1 2.1 2.3	33.7 10.0 8.3 12.5	3.4 2.2 .5 2.6	4.4 2.2 .5 3.5	47.2 15.5 11.4 20.9
TOTAL TRADITIONAL	11.2	64.5	8.7	10.6	95.0
		FREE	IOLD		
1-50 51-100 101-150 151-200 201+	.1 .2 .5 .6	.5 1.3 .7 1.0 3.5	.1 .3 .2 .2	.1 .3 .2 .3 1.1	.8 2.1 1.6 2.1 6.4
TOTAL FREEHOLD	2.2	7.0	1.8	2.0	13.0
TOTAL	13.4	71.5	10.5	12.6	108.0

TABLE 15: Sheep Born, Died, Sold, Home Slaughter , and Purchased by Districts and Regions

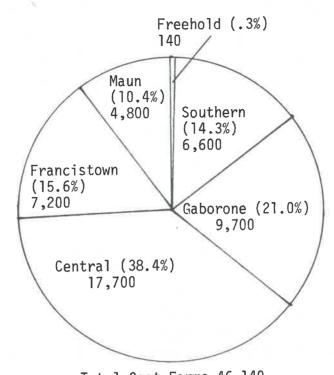
Districts/				Home	
Regions	Sheep Born	Deaths	Sold	Slaughter	Purchased
		-Numbe	er (000)-		
TRADITIONAL					
Barolong	3.5	2.5	.9	.5	.4
Ngwaketse South	4.5	5.0	.5	.7	.2
Ngwaketse North	2.5	1.5	.2	.2	.1
SOUTHERN REGION	10.5	9.0	1.6	1.4	.7
Bamalete/Tlokweng	.2	.2	.1	21	2/
Kweneng South	2.1	3.5	. 2	<u>2</u> / .2	.1
Kweneng North	.7	.8	.2 .2	.1	.1
Kgatleng	1.5	2.0	.2	i i	i
GABORONE REGION	4.5	6.5	.7	.4	.3
Mahalapye	4.2	5.0	.3	.7	.4
Palapye	4.5	5.0	1.2	.8	.i
Serowe	1.6	2.5	.4	.2	.2
Mmadinare	1.7	3.0	.2	.2	.ī
CENTRAL REGION	12.0	15.5	2.1	1.9	.8
Tati	2.0	3.0	.4	.2	.2
Tutume	1.5	2.0	. 4	.3	.2
FRANCISTOWN REGION	3.5	5.0	.8	.5	.4
Ngamiland West	1.2	.7	.2	.1	.1
Ngamiland East	.3	.3	.1	2/	2/
Chobe	<u>2</u> /	<u>2</u> /	<u>2</u> /	2/ <u>2</u> /	<u>2/</u>
MAUN REGION	1.5	1.0	<u>2</u> /	.]	.ī
TOTAL TRADITIONAL	32.0	37.0	5.5	4.3	2.3
TOTAL FREEHOLD	4.4	2,0	.9	1.8	.9
TOTAL	36.4	39.0	6.4	6.1	3.2

1979 Livestock and Crop Survey

TABLE 16: Sheep Born, Died, Sold, Home Slaughter , and Purchased by Size of Sheep Holding

Herd				Home	
Size	Born	Deaths	So1d	Slaughter <sup>,</sup>	Purchase
		-Numbe	r (000)-		
		TRADI	TIONAL		
0 1-10 11-20 21-30 31+	1.5 17.0 5.9 1.0 6.6	4.5 27.9 1.9 1.4 1.3	.9 1.9 .8 .7 1.2	2.7 .4 .3 .9	2.1 .1 .2/ .1
TOTAL TRADITIONAL	32.0	37.0	5.5	4.3	2.3
		FRE	EHOLD		
0 1-50 51-100 101-150 151-200 201+	2/ .3 .8 .4 .5 2.4	2/ .2 .4 .2 .2	$\frac{\frac{2}{2}}{\frac{\frac{2}{2}}{\frac{2}{7}}}$	.1 .2 .2 .2 .5	.1 .3 <u>2/</u> 2/ .5
TOTAL FREEHOLD	4.4	2.0	.9 /	1.8	.9
TOTAL	36.4	39.0	6.4	6.1	3.2

Districts/ Regions	Goat	Farms	Total	Goats	Average Size
	Number	Percentage	Number (000)	Percentage	Number
TRADITIONAL Barolong	7 400				
	1,000	2.2	16.0	2.9	16.0
Ngwaketse South	2,200	4.8	40.0	7.2	18.2
Ngwaketse North	3,400	7.3	36.0	6.4	10.6
SOUTHERN REGION	6,600	14.3	92.0	16.5	13.9
Bamalete/Tlokweng	1,100	2.4	8.0	1.4	7.3
Kweneng South	3,900	8.4	37.0	6.7	9.5
Kweneng North	1,200	2.6	11.0	2.0	9.2
Kgatleng	3,500	7.6	28.0	5.0	8.0
GABORONE REGION	9,700	21.0	84.0	15.1	8.6
Mahalapye	5,000	10.8	52.0	9.3	10.4
Palapye	3,900	8.5	51.0	9.2	13.1
Serowe	5,100	11.1	46.0	8.3	9.0
Mmadinare	3,700	8.0	42.0	7.5	11.4
CENTRAL REGION	17,700	38.4	191.0	34.3	10.8
Tati	4,500	9.8	39.0	7.0	8.7
Tutume	2,700	5.8	32.0	5.7	11.6
FRANCISTOWN REGION	7,200	15.6	71.0	12.7	9.9
Ngamiland West	2,200	4.8	52.0	9.3	23.6
Ngamiland East	2,200	4.8	52.0	9.3	
Chobe	400	.9	3.0	.6	23.6
MAUN REGION	4,800	10.4	107.0	19.2	7.5
TOTAL TRADITIONAL	46,000	99.7	545.0	97.8	22.3
TOTAL FREEHOLD	140	.3	12.0	2.2	85.7
TOTAL	46,140	100.0	557.0	100.0	12.1



Total Goat Farms 46,140

Figure 8: Traditional Goat Farms by Regions and Total Freehold Goat Farms

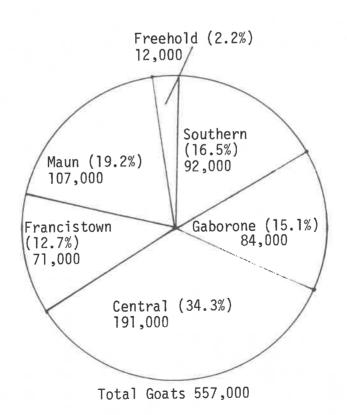


Figure 9: Traditional Goats by Regions and Total Freehold Goats

1979 Livestock and Crop Survey

TABLE 18: Goat Farms, Total Number of Goats, and Average Size Herd by Size of Goat Holding

Herd Size	Goat	Farms	Total	Goats	Average Siz
	Number	Percentage	Number (000)	Percentage	Number
		TRADI	TIONAL		
1-10 11-20 21-30 31-40 41-50 51+	29,000 10,900 2,600 1,900 700 900	63.0 23.5 5.7 4.2 1.6 2.0	157.8 162.9 65.3 65.4 33.5 60.1	29.0 29.9 12.0 12.0 6.1 11.0	5.4 15.0 25.1 34.4 47.9 66.8
ΓΟΤΑL TRADITIONAL	46,000	100.0	545.0	100.0	11.8
		FREE	HOLD		
1-50 51-100 101-150 151-200 201+	61 30 26 10 13	43.6 21.4 18.6 7.2 9.2	1.5 2.3 2.7 1.8 3.7	12.5 19.2 22.5 15.0 30.8	24.6 76.7 103.8 180.0 284.6
TOTAL FREEHOLD	140	100.0	12.0	100.0	85.7
TOTAL	46,140	•	557.0		12.1

TABLE 19: Goat Herd Composition (Male and Female 1 Year and Over, and Male and Female Under One Year) by District and Region

District/ Region	Male Goats 1 Year & Over	Female Goats 1 Year & Over	Male Goats Under 1 Year	Female Goats Under 1 Year	Total Goats
Region	i icai a ove:		r (000)-	Officer 1 Tear	doucs
TRADITIONAL		Hamber	(000)		
Barolong	1.7	9.0	2.4	2.9	16.0
Ngwaketse South	4.8	25.2	4.8	5.2	40.0
Ngwaketse North	5.4	19.4	5.4	5.8	36.0
SOUTHERN REGION	11.9	53.6	12.6	13.9	92.0
Bamalete/Tlokweng	1.4	4.0	1.2	1.4	8.0
Kweneng South	4.8	21.8	4.5	5.9	37.0
Kweneng North	1.5	6.1	1.7	1.7	11.0
Kgatleng	5.0	16.5	2.8	3.7	28.0
GABORONE REGION	12.7	48.4	10.2	12.7	84.0
Mahalapye	5.2	32.2	6.8	7.8	52.0
Palapye	4.1	31.6	7.1	8.2	51.0
Serowe	7.4	27.6	5.5	5.5	46.0
Mmadinare	4.2	25.6	5.9	6.3	42.0
CENTRAL REGION	20.9	117.0	25.3	27.8	191.0
Tati	3.9	25.3	3.9	5.9	39.0
Tutume	4.8	18.9	3.5	4.8	32.0
FRANCISTOWN REGION	8.7	44.2	7.4	10.7	71.0
Ngamiland West	6.2	30.2	7.3	8.3	52.0
Ngamiland East	8.3	30.1	6.3	7.3	52.0
Chobe	. 4	1.8	.4	. 4	3.0
MAUN REGION	14.9	62.1	14.0	16.0	107.0
TOTAL TRADITIONAL	69.1	325.3	69.5	81.1	545.0
TOTAL FREEHOLD	1.5	7.0	1.7	1.8	12.0
TOTAL	70.6	332.3	71.2	82.9	557.0

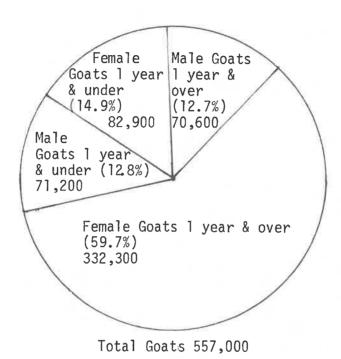


Figure 10: Goat Herd Composition, Traditional and Freehold

TABLE 20: Goat Herd Composition (Male and Female 1 year and over, and Male and Female Under One Year) by SizemofmGoat Holding

Herd Size	Male Goats 1 Year & Over	Female Goats 1 Year & Over	Male Goats Under 1 Year	Female Goats Under 1 Year	Total Goats
		- Number	(000) -		
		TRADIT	IONAL		
1-10 11-20 21-30 31-40 41-50 51+	18.9 21.1 8.1 10.2 4.2 6.6	95.1 99.8 38.4 37.7 18.5 35.8	18.7 20.3 9.7 7.9 4.9 8.0	25.1 21.7 9.1 9.6 5.9 9.7	157.8 162.9 65.3 65.4 33.5 60.1
TOTAL TRADITIONAL	69.1	325.3	69.5	81.1	545.0
		FREEH	OLD		
1-50 51-100 101-150 151-200 200+	.2 .2 .3 .3	.8 1.3 1.6 .9 2.4	.2 .4 .4 .3	.3 .4 .4 .3 .4	1.5 2.3 2.7 1.8 3.7
TOTAL FREEHOLD	1.5	7.0	1.7	1.8	12.0
TOTAL	70.6	332.3	71.2	82.9	557.0

1979 Livestock and Crop Survey

TABLE 21: Goats Born, Died, Sold, Home Slaughter and Purchased by Districts and Regions

Districts/ Regions	Born	Deaths	So1d	Home Slaughter	Devenhannel
	20111	5000115			Purchased
TRADITIONAL			-Number	(000)-	
Barolong	7.0	6.0	1.2	.7	.4
Ngwaketse South	16.0	11.0	1.5	1.0	1.2
Ngwaketse North	14.0	11.0	2.0	3.0	1.8
SOUTHERN REGION	37.0	28.0	4.7	4.7	3.4
Bamalete/Tlokweng	3.0	2.0	. 4	.4	.3
Kweneng South	14.0	16.0	1.9	1.7	1.6
Kweneng North	5.0	5.0	.4	.9	.3
Kgatleng	9.0	12.0	1.5	2.0	1.3
GABORONE REGION	31.0	35.0	4.2	5.0	3.5
Mahalapye	26.0	34.0	3.4	3.8	2.9
Palapye	25.0	22.0	3.6	4.3	1.3
Serowe	18.0	19.0	2.3	3.0	.6
Mmadinare	21.0	25.0	2.7	4.0	.5
CENTRAL REGION	90.0	100.0	12.0	15.1	5.3
Tati	17.0	21.0	1.8	2.1	.6
Tutume	13.0	20.0	1.9	3.1	.4
FRANCISTOWN REGION	30.0	41.0	3.7	5.2	1.0
Ngamiland West	21.0	20.0	3.1	2.5	.6
Ngamiland East	19.0	25.0	3.5	1.4	1.0
Chobe	1.3	1.0	.1	.1	
MAUN REGION	41.3	46.0	6.7	4.0	1.6
TOTAL TRADITIONAL	229.3	250.0	31.3	34.0	14.8
TOTAL FREEHOLD	4.4	2.1	.9	1.3	.3
TOTAL	233.7	252.7	32.2	35.3	15.1

Herd Size	Born	Died	Sold	Home Slaughter	Purchased
		-1	Number (000)-		
		- :-	TRADITIONAL		
0 1-10 11-20 21-30 31-40 41-50 50+	4.6 72.7 61.9 27.3 23.6 14.0 25.2	11.5 103.8 65.6 26.7 20.4 5.7 16.3	2.7 13.8 4.5 3.4 3.3 1.3 2.3	.5 14.7 10.2 2.3 2.4 1.8 2.1	8.4 4.5 .7 .6 .6
OTAL TRADITIONAL	229.3	250.0	31.3	34.0	14.8
			FREEHOLD		4
0 1-50 51-100 101-150 151-200 201+	2/ .5 1.0 1.1 .6 1.2	.1 .2 .6 .8 .1	.3 .1 .2/ .1 .2	.1 .4 .2 .1	2/ .2/ .1 2/ 2/
TOTAL FREEHOLD	4.4	2.1	.9	1.3	.3
OTAL	233.7	252.1	32.2	35.3	15.1

TABLE 23: Mule/Donkey, Horse, and Pig Farms, Number of Animals and Average Size by Districts and Regions

District/	Mu	les and Do	nkeys		Horses			Pigs3/	
Region	Farms	Animals	Average	Farms	Animals	Average	Farms	Animals	Average
		(000)			(000)			(000)	
TRARITTONA					-Number-			(000)	
TRADITIONAL									
Barolong	650	4.8	7.4	50	.1	2.0	_	_	_
Ngwaketse South	1,350	7.6	5.6	600	.9	1.5	_	_	_
Ngwaketse North	3,000	11.9	4.0	150	.2	1.3	_	-	_
SOUTHERN REGION	5,000	24.3	4.9	800	1.2	1.5	4/	4/	4/
Bamalete/Tlokweng	250	1.3	5.2	2/	2/		<del></del>	<u>=</u> '	
Kweneng South	2,850	11.1	3.9	60 <u>0</u> ′	$1.\frac{2}{0}$	$\frac{2}{7}$	_	_	_
Kweneng North	650	2.6	4.0	50	.ĭ	2.0	_	_	_
Kgatleng	1,350	7.9	5.8	2/	2/	2/	_	_	_
GABORONE REGION	5,100	22.9	4.5	650	1.1	1.7	3,500	4.4	1.3
Mahalapye	2,700	14.3	5.3	100	.3	3.0	-	7.7	1.3
Palapye	900	3.9	4.3	50	.1	2.0	_	/ _	
Serowe	1,500	4.5	3.0	50	. i	2.0	_	= _ =	_
Mmadinare	2,900	14.4	5.0	2/	2/	2/	_	_	_
CENTRAL REGION	8,000	37.1	4.6	200	<u>2</u> /	<u>2/</u> 2.5	4/	4/	17
Tati	900	7.1	7.9	150	.3	2.0	4/		4/
Tutume	1,500	7.7	5.1	950	2.1	2.2	_	-	~
FRANCISTOWN REGION	2,400	14.8	6.2	1,100	2.4	2.2	17		- 7/
Ngamiland West	2,800	10.6	3.8	1,650	6.2	3.8	4/	4/	4/
Ngamiland East	2,400	14.5	6.1	1,100	2.5	2.3	_	-	-
Chobe	300	.8	2.7	2/	2/_	2.3	_	_	_
MAUN REGION	5,500	25.9	4.7	2,750	8.7	3.2	4/	4/	4/
TOTAL TRADITIONAL	26,000	125.0	4.8	5,500	(Î4.0	2.5	4,000	,	1.2
TOTAL FREEHOLD	90	1.0	11.1	200	3,7	18.5	30	1.3	43.3
TOTAL	26,090	126.0	4.8	5,700	17.7	3.1	4,030	6.3	1.6

TABLE 24: Mule and Donkey Farms, Total Mules and Donkeys, and Average Herd Size by Size of Mule/Donkey Holding

H <b>e</b> rd Size	Mule/Donk	ey Farms	Total Mul	e/Donkey	Average Size	
	Number	Percentage	Number (000)	Percentage	<u> </u>	
			TRADITIONAL			
1 - 5 5 - 10	18,700 5,100	71.9 19.7	52.6 37.4	42.1 29.9	2.8 7.3	
11 - 15 16 +	1,100 1,100	4.2 4.2	14.5 20.5	11.6 16.4	13.2 18.6	
TOTAL TRADITIONAL	26,000	100.0	125.0	100.0	4.8	

Districts/		Chickens			Other Birds3/	
Regions	Farms	Birds	Average	Farms	Birds	Average
		(000)	-Num	ber-	(000)	
TRADITIONAL						
Barolong	1,400	12.0	8.6	-	-	_
Ngwaketse South	2,900	35.0	12.1	-	-	_
Ngwaketse North	5,900	58.0	9.8	<del>-</del>	_	_
SOUTHERN REGION	10,200	105.0	10.3	300	.8	2.7
Bamalete/Tlokweng	1,700	20.0	11.8		_	-
Kweneng South	6,200	68.0	11.0	_	_	-
Kweneng North	2,000	18.0	9.0	-	-	_
Kgatleng	4,200	43.0	10.2	_	-	_
GĂBORONE REGION	14,100	149.0	10.6	400	1.2	3.0
Mahalapye	6,900	93.0	13.5	-	-	-
Palapye	5,300	76.0	14.3	_	-	_
Serowe	6,900	44.0	6.4	_	-	_
Mmadinare	4,700	69.0	14.7	<b>-</b>		470
CENTRAL REGION	23,800	282.0	11.9	1,509	4.1	2.7
Tati	5,400	60.0	11.1	_	-	_
Tutume	3,600	58.0	16.1		-	_
FRANCISTOWN REGION	9,000	118.0	13.1	1,200	3.5	2.9
Ngamiland West	2,900	27.0	9.3	-	-	-
Ngamiland East	2,800	22.0	7.9	_	_	_
Chobe	700	7.0	10.0	<u>-</u>	-	
MAUN REGION	6,400	56.0	8.8	100	.2	2.0
TOTAL TRADITIONAL	63,500	₹10.0	11.2	3,500	10.0	2.9
TOTAL FREEHOLD	130	30.0	230.8	35	.3	8.6
TOTAL	63,630	740.0	11.6	3,535	10.3	3.0

1979 Livestock and Crop Survey

TABLE 26: Chicken Farms, Total Chickens, and Average Flock Size by Size of Chicken Holding

Flock Size	Chicke	n Farms	Total Ch	ickens	Average Size	
	Number	Percentage	Number (000)	Percentage		
			TRADITIONAL			
1-5	20,400	32.1	69.6	9.8	3.4	
6-10	18,400	29.0	147.7	20.8	8.0	
11-15	12,000	18.9	160.5	22.6	13.4	
16-20	5,900	9.3	105.8	14.9	17.9	
21-25	2,100	3.3	48.3	6.8	23.0	
26-30	2,700	4.2	76.6	10.8	28.4	
31+	2,000	3.2	101.5	14.3	50.8	
TOTAL TRADITIONAL	63,500	100.0	710.0	100.0	11.2	

TABLE 27: Farms with Land and Crops Planted, Total Area Planted, and Area Harvested by Districts and Regions

Districts/ Regions	Farms with Land	Crop Farms	Crop Farms Compared to Farms with Land	Total Area Planted3/	Average Area Planted3/	Total Area Harvested3/	Area Harvested Compared with Area Planted3/
	Number	Number	Percentage	Hectares	Hectares	Hectares	Percentage
TRADITIONAL				(000)		(000)	
Barolong	1,300	800	61.5				
Ngwaketse South	3,000	1,500	50.0				
Ngwaketse North	5,100	2,700	52.9				
SOUTHERN REGION	9,400	5,000	53.2	24.8	5.0	12.7	51.2
Bamalete/Tlokweng	1,800	600	33.3	21.0	3.0	12.1	31.2
Kweneng South	7,300	3,400	46.6				
Kweneng North	2,200	900	40.9				
Kgatleng	3,900	2,800	71.8				
GABORONE REGION	15,200	7,700	50.7	35.6	4.6	16.6	46.6
Mahalapye	6,800	4,500	66.2				
Palapye	5,800	3,800	65.5				
Serowe	6,600	3,900	59.1				
Mmadinare	4,100	2,700	65.9				
CENTRAL REGION	23,300	14,900	63.9	49.6	3.3	22.9	46.2
Tati	5,700	4,000	70.2				
Tutume	4,200	3,900	92.9				
RANCISTOWN REGION		7,900	79.8	45.9	5.8	34.5	75.2
Igamiland West	4,600	3,700	80.4				
lgamiland East	3,400	3,100	91.2				
Chobe	800	700	87.5				
MAUN REGION	8,800	7,500	85.2	15.1	1.9	5.5	36.4
TOTAL TRADITIONAL	66,600	43,000	64.6	171.0	4.0	92.2	53.9
TOTAL FREEHOLD	340	115	33.8	8.0	69.6	5.7	71.2
ΓΟΤ <b>AL</b>	66,940	43,115	64.4	179.0	4.2	97 <b>.9</b>	54.7

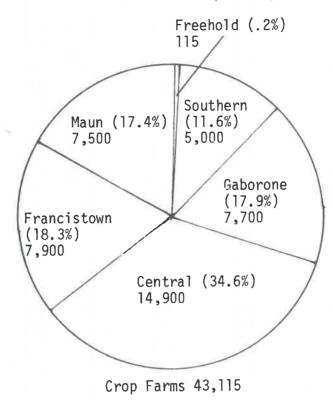
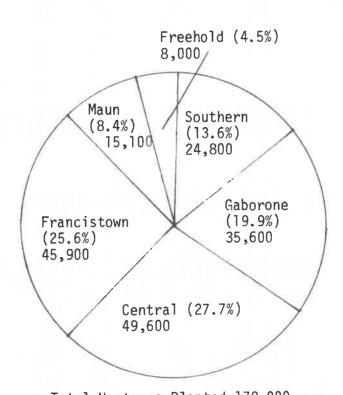


Figure 11: Traditional Crop Farms by Region and Freehold Crop Farms



Total Hectares Planted 179,000

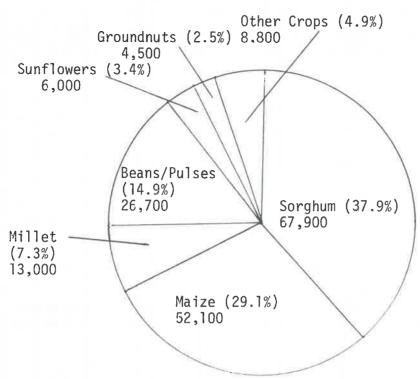
Figure 12: Traditional Hectares Planted by Region and Freehold Hectares Planted

TABLE 28: Number of Crop Farms, Area of Crop Land Planted, and Average Size Classified by Size of Crop Land Planted

Hectarage Size	Number	of Farms	Area of	Crop Land	Average Size
	Number	Percentage	Hectares (000)	Percentage	Hectares
			TRADITIONAL		
.1-1.0	6,000	14.0	3.8	2.2	.6
1.1-2.0	9,500	22.1	14.7	8.6	1.6
2.1-3.0	9,900	23.0	25.0	14.6	2.5
3.1-4.0	4,900	11.4	16.9	9.9	3.5
4.1-5.0	3,100	7.2	14.0	8.2	4.5
5.1-6.0	2,500	5.8	13.3	7.8	5.3
6.1-7.0	1,400	3.3	9.1	5.3	6.5
7.1-8.0	1,400	3.3	10.4	6.1	7.4
8.1-9.0	800	1.9	6.7	3.9	8.4
9.1-10.0	600	1.4	6.0	3.5	10.0
10.1-15.0	1,700	3.9	20.4	11.9	12.0
15.1+	1,200	2.7	30.7	18.0	25.6
OTAL TRADITIONAL	43,000	100.0	171.0	100.0	4.0

3

#### 1979 Livestock and Crop Survey



Total Hectares Planted 179,000

Figure 13: Total Hectares Planted by Crops, Traditional and Freehold

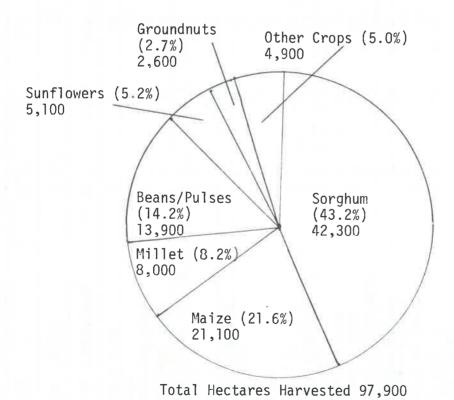
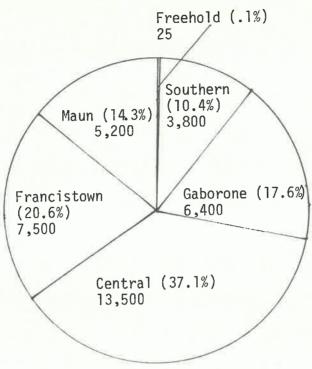


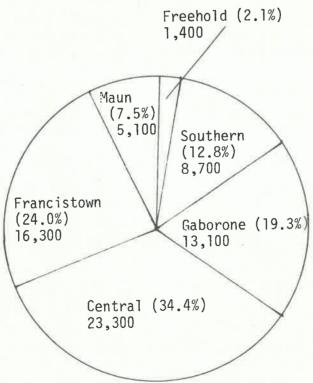
Figure 14: Total Hectares Harvested by Crops, Traditional and Freehold

Districts/	Farms	P	lanted A	reas	Harvested Area	Harvested Area as a Percentage	Total	Avanaga Viale
Regions		Pure	Mixed	Tota1	Total	of Planted Area	Production	Average Yield per Hectare
TRADITIONAL	Number			ectares	(000)	Percentage	Metric tons	Kilograms
Barolong	200	1.3	.2	1.5	1.3	87	105	81
Ngwaketse South	1,200	2.4	1.6	4.0	2.0	50	125	62
Ngwaketse North	2,400	.2	3.0	3.2	1.5	47	100	67
SOUTHERN REGION	3,800	3.9	4.8	8.7	4.8	55	330	69
Bamalete/Tlokweng	500	2/	.4	.4	.2	50	15	75
Kweneng South	2,600	1.2	4.2	5.4	2.8	52	230	82
Kweneng North	800	.6	1.1	1.7	.4	24	25	62
Kgatleng	2,500	2.5	3.1	5.6	4.0	71	430	108
GABORONE REGION	6,400	4.3	8.8	13.1	7.4	56	700	95
Mahalapye	4,300	6.1	3.1	9.2	6.9	75	640	93
Palapye	3,700	3.2	2.6	5.8	2.7	47	230	85
Serowe	2,900	2.2	2.4	4.6	1.5	33	130	87
Mmadinare	2,600	.3	3.4	3.7	1.6	: 43	150	94
CENTRAL REGION	13,500	11.8	11.5	23.3	12.7	55	1,150	91
Tati	3,700	.9	7.9	8.8	7.6	86	720	95
Tutume	3,800	2.4	5.1	7.5	6.2	83	680	110
FRANCISTOWN REGION	7,500	3.3	13.0	16.3	13.8	85	1,400	101
Ngamiland West	2,400	.3	1.2	1.5	.7	47	60	
Ngamiland East	2,200	2.1	1.0	3.1	1.2	39	80	86 67
Chobe	600	.3	.2	.5	. 4	80	30	75
MAUN REGION	5,200	2.7	2.4	5.1	2.3	45	170	74
TOTAL TRADITIONAL	36,400	26.0	40.5	66.5	41.0	61	3,750	91
TOTAL FREEHOLD	25	1.4	2/	1.4	1.3	93	550	423
TOTAL	36,425	27.4	40.5	67.9	42.3	62	4,300	102



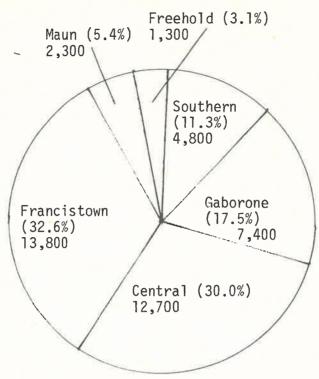
Total Sorghum Farms 36,425

Figure 15: Traditional Sorghum Farms by Regions and Freehold Sorghum Farms



Total Sorghum Hectares Planted 67,900

Figure 16: Traditional Sorghum Hectares Planted by Regions and Freehold Sorghum Planted



Total Sorghum Hectares Harvested 42,300

Figure 17: Traditional Sorghum Hectares Harvested by Regions and Freehold Sorghum Harvested

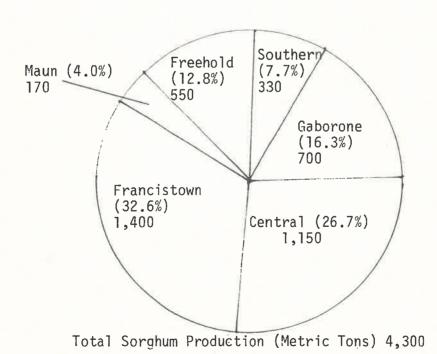


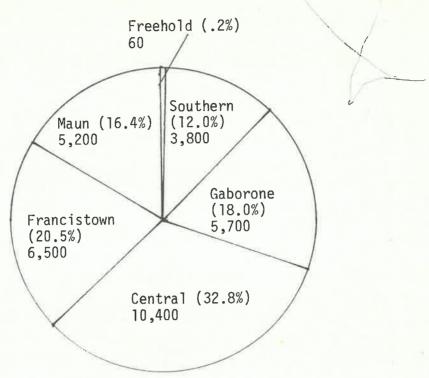
Figure 18: Traditional Sorghum Production by Regions and Freehold Sorghum Production

1979 Livestock and Crop Survey

TABLE 32: Sorghum Farm Numbers, Area of Crop Land, and Average Size Classified by Size of Area Planted

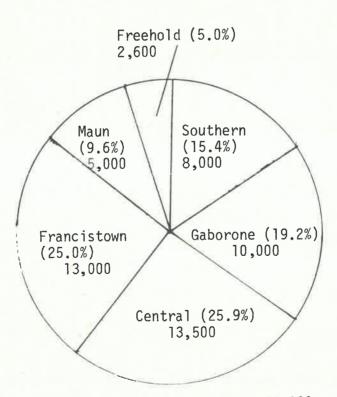
Hectarage Size	Number	of Farms	Area of	Average Size	
	Number	Percentage	Hectares (000)	Percentage	Hectares
		TRA	DITIONAL		
.1-1.0	14,600	40.1	8.1	12.2	.6
1.1-2.0	11,300	31.1	16.4	24.7	1.5
2.1-3.0	5,500	15.1	14.0	21.1	2.6
3.1-4.0	1,900	5.2	6.6	9.9	3.5
4.1+	3,100	8.5	21.4	32.1	6.9
TOTAL TRADITIONAL	36,400	100.0	66.5	100.0	1.8

Districts/	Farms	P1	anted Are	eas	Harvested Area	Harvested Area		
Regions		Pure	Mixed	Total	Total	as a Percentage of Planted Area	Total	Average Yield
TRADITIONAL	Number		Hectar			Percentage	Production Metric tons	per Hectare Kilograms
Barolong	500	1.3	. 4	1.7	1.2	71	00	7.5
Ngwaketse South	1,100	2.0	1.6	3.6	.8	22	90	75
Ngwaketse North	2,200	.5	2.2	2.7	.8	29	50	62
SOUTHERN REGION	3,800	3.8	4.2	8.0	2.8	35	45	56
Bamalete/Tlokweng	500	.1	.2	.3	.1	33	185	66
Kweneng South	2,800	1.7	3.4	5.1	1.2	23	6	60
Kweneng North	500	.1	.8	.9	.2	23 22	63	52
Kgatleng	1,900	1.7	2.0	3.7	1.4	37	8	40
GABORONE REGION	5,700	3.6	6.4	10.0	2.9		103	74
Mahalapye	2,900	2.2	1.6	3.8	2.1	29	180	62
Palapye	1,900	.4	2.1	2.5	.6	55	175	83
Serowe	3,100	1.5	2.5	4.0	.9	24	50	83
Mmadinare	2,500	.6	2.6	3.2		22	65	72
CENTRAL REGION	10,400	4.7	8.8	13.5	.8	25	65	81
Tati	3,200	4	7.0		4.4	32	355	81
Tutume	3,300	1.2	4.7	7.1	4.1	57	360	88
FRANCISTOWN REGION	6,500	1.3		5.9	3.3	55	370	112
Ngamiland West	2,300	9	11.7	13.0	7.4	56	730	99
Ngamiland East	2,300	1.9	.7	1.6	.5	31	50	100
Chobe	600		1.2	3.1	.8	25	60	75
MAUN REGION	5,200	2.9	.2	.3	.2	66	40	200
	5,200	2.9	2.1	5.0	1.5	30	150	100
TOTAL TRADITIONAL	31,600	16.3	33.2	49.5	19.0	38	1,600	84
TOTAL FREEHOLD	60	2.6	2/	2.6	2.1	81	650	310
TOTAL	31,660	18.9	33.2	52.1	21.1	40	2,250	107



Total Maize Farms 31,660

Figure 19: Traditional Maize Farms by Regions and Freehold Maize Farms



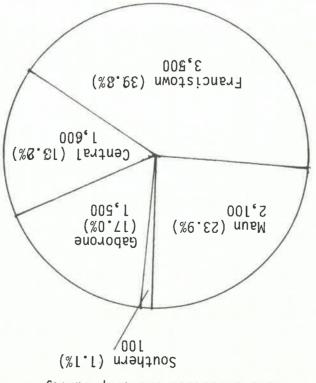
Total Maize Hectares Planted 52,100

Figure 20: Traditional Maize Hectares Planted by Regions and Freehold Maize Planted

TABLE 35: Millet Farm Numbers, Area Planted and Harvested, Total Production, and Average Production by Districts and Regions

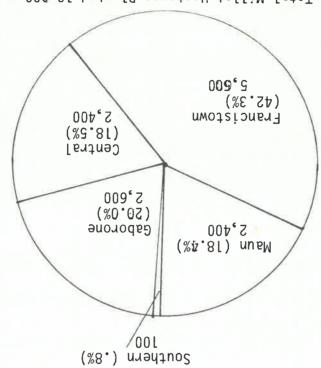
Districts/ Regions	Farms	Pla Pure <sup>4</sup> /	anted Are Mixed <sup>4</sup> /		Harvested Area Total	Harvested Area as a Percentage of Planted Area	Total Production	Average Yield per Hectare
TRADITIONAL	Number		Hectare	100		Percentage	Metric tons	Kilograms
Barolong	4/			4/	4/ 4/ 4/	-	$\frac{4}{4}$	-
Ngwaketse South	4/			4/	4/	•	4/	
Ngwaketse North	4/ 4/ 4/			4/ 4/ 4/	4/		4/	
SOUTHERN REGION	100			.1	.1	100	8	80
Bamalete/Tlokweng	2/			$\frac{2}{3}$	$\frac{2}{2}$	<u>-</u>	5/	-
Kweneng South	300			.3	.2	67	14	70
Kweneng North	100			.1	2/	-	2	_
Kgatleng	1,100			2.2	$1.\overline{5}$	68	144	96
GABORONE REGION	1,500			2.6	1.7	65	160	94
Mahalapye	400			.8	.1	12	11	110
Palapye	300			.7	.3	43	28	93
Serowe	300			.4	.1	25	9	90
Mmadinare	600			.5	.3	60	27	90
CENTRAL REGION	1 <b>G</b> 00			2.4	.8	33	75	94
Tati	1,800			3.2	2.5	78	300	120
Tutume	1,700			2.3	2.1	91	280	133
FRANCISTOWN REGION	3,500			5.5	4.6	84	580	126
Ngamiland West	1,400			9	. 4	44	41	- 102
Ngamiland East	700			1.5	.4	27	35	88
Chobe	2/			2/	2/	-		-
MAUN REGION	2,100			2.4	.8	33	77	96
TOTAL TRADITIONAL	8,800	3.5	9.5	13.0	8.0	62	900	112
TOTAL FREEHOLD	2/	2/	2/	2/	2/	-	5/	
TOTAL	8,800	3.5	9.5	13.0	8.0	62	900	112

1979 Livestock and Crop Survey



Total Millet Farms 8,800

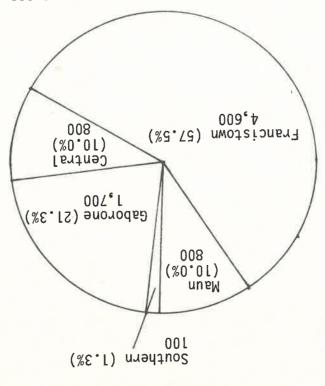
Figure 23: Traditional Millet Farms by Regions and Freehold Millet Farms



Total Millet Hectares Planted 13,000

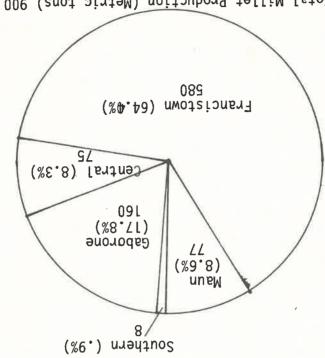
Figure 24: Traditional Millet Hectares Planted by Regions and Freehold Millet Hectares

1979 Livestock and Crop Survey



Total Millet Hectares Harvested 8,000

Millet Hectares Harvested Figure 25: Traditional Millet Hectares Harvested by Regions and Freehold



Total Millet Production (Metric tons) 900

Freehold Millet Production Figure 26: Traditional Millet Production in Metric Tons by Regions and

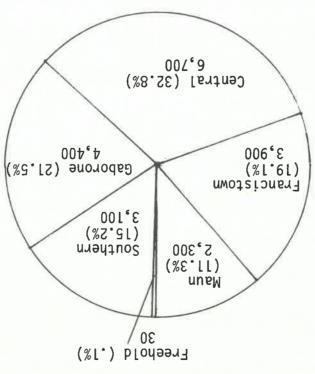
TABLE 36: Millet Farm Numbers, Area of Crop Land, and Average Size Classified by Size of Area Planted

Hectarage Size	Number	of Farms	Area of	Average Size	
	Number	Percentage	Hectares (000)	Percentage	Hectares
		TRA	DITIONAL		
.1-1.0	4,900	55.7	2.7	20.8	.6
1.1-2.0	2,500	28.4	3.6	27.7	1.4
2.1-3.0	500	5.7	1.2	9.2	2.4
3.1-4.0	300	3.4	1.1	8.5	3.7
4.1+	600	6.8	4.4	33.8	7.3
TOTAL TRADITIONAL	8,800	100.0	13.0	100.0	1.5

TABLE 37: Beans/Pulses Farm Numbers, Area Planted and Harvested, Total Production, and Average Production by Districts and Regions

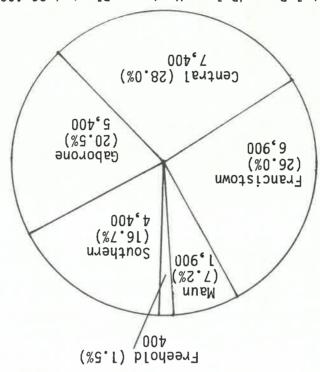
Districts/ Regions	Farms	Plane 4/	anted Are Mixed <sup>4/</sup>		Harvested Area	Harvested Area as a percentage	Total	Average Yield
	Number	Pure-	Hectare	Total es (000)	Total	of Planted Area	Production	per Hectare
TRADITIONAL	Nullipet		nectare	25 (000)		Percentage	Metric tons	Kilograms
Barolong	600			.9	.7	78	6	86
Ngwaketse South	700			1.1	.4	36	32	80
Ngwaketse North	1,800			2.4	. 9	38	54	60
SOUTHERN REGION	3,100			4.4	2.0	45	92	46
Bamalete/Tlokweng	500			.3	.1	33	8	80
Kweneng South	1,900			2.8	1.1	39	81	74
Kweneng North	500			.5	' ' '	20	5	50
Kgatleng	1,500			1.8	1.0	56	80	80
GABORONE REGION	4,400			5.4	2.3	43	174	76
Mahalapye	2,300			2.9	1.8	62	131	73
Palapye	1,600			1.9	.8	42	56	70
Serowe	1,700			1.9	.6	32	41	68
Mmadinare	1,100			.7	.3	43	19	63
CENTRAL REGION	6,700			7.4	3.5	47	247	71
Tati	2,300			4.3	3.2	74	241	75
Tutume	1,600			2.6	2.1	81	170	81
FRANCISTOWN REGION	3,900			6.9	5.3	77	411	78
Ngamiland West	1,200			.7	.3	43	17	57
Ngamiland East	900			1.1	.3	25	18	60
Chobe	200			.1	2/	-	7	604
MAUN REGION	2,300			1.9	.6	32	36	60
TOTAL TRADITIONAL	20,400	4.4	21.6	26.0	13.7	53	960	70
TOTAL FREEHOLD	30	.4	2/	.4	, 4°° .2	50	40	200
TOTAL	20,430	4.8	21.6	26.4	13.9	53	1,000	72

1979 Livestock and Crop Survey



Total Beans/Pulses Farms 20,430

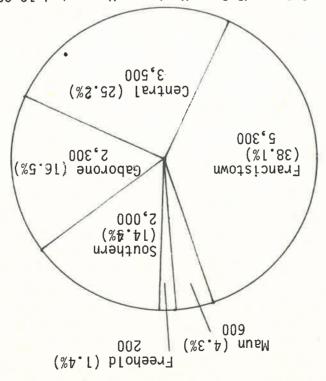
Figure 27: Traditional Beans/Pulses Farms by Regions and Freehold Beans/Pulses Farms



Total Beans/Pulses Hectares Planted 26,400

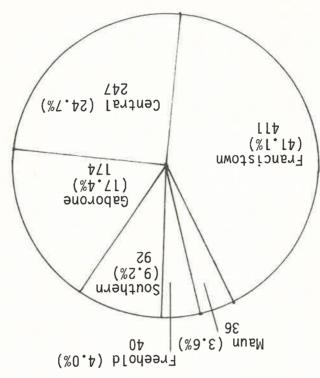
Figure 28: Traditional Beans/Pulses Hectares Planted by Regions and

1979 Livestock and Crop Survey



Total Beans/Pulses Hectares Harvested 13,900

Figure 29: Traditional Beans/Pulses Hectares Harvested by Regions and Freehold Beans/Pulses Hectares Harvested



Total Production of Beans/Pulses in Metric Tons 1,000

Figure 30: Total Production of Beans/Pulses in Metric Tons by Regions and Freehold Beans/Pulses in Metric Tons

TABLE 38: Beans/Pulses Farm Numbers, Area of Crop Land, and Average Size Classified by Size of Area Planted

Hectarage Size	Number	of Farms	Area of	Average Size	
	Number	Percentage	Hectares (000)	Percentage	Hectares
		TRAD	ITIONAL		
.1-1.0	10,800	52.9	5.8	22.3	.5
1.1-2.0	6,200	30.4	8.3	31.9	1.3
2.1-3.0	1,900	9.3	4.5	17.3	2.4
3.1-4.0	800	3.9	2.9	11.2	3.6
4.1+	700	3.5	4.5	17.3	6.4
TOTAL TRADITIONAL	20,400	100.0	26.0	100.0	1.3

Sax

109318.2

TABLE 39: Groundnut Farm Numbers, Area Planted, Area Harvested, Total Production, and Average Yields by Region

Region	Groundnut Farms	Area Planted	Area Harvested	Total Production	Average Production per Hectarage
	Number	Hectarage (000)	Hectarage (000)	Metric tons	Kilograms
			TRADITIONAL		
Southern Region	200	.5	.3	21	70
Gaborone Region	400	.5	.2	11 🧳	55
Central Region	800	.7	. 4	28	70
Francistown Region	1,000	1.8	1.4	105	75
Maun Region	200	.2	.1	6	60
TOTAL TRADITIONAL	2,600	3.7	2.4	171	71
TOTAL FREEHOLD	15	.8	.2	49	245
TOTAL	2,615	4.5	2.6	220	85

TABLE 40: Sunflower Farm Numbers, Area Planted, Area Harvested, Total Production, and Average Yields by Regions

Region	Sunflower Farms	Area Planted	Area Harvested	Total Production	Average Production per Hectarage
	Number	Hectarage (000)	Hectarage (000)	Metric tons	Kilograms
		TRADITI	ONAL		
Southern Region	1,000	3.0	2.6	375	144
Gaborone Region	200	.5	. 4	50	125
Central Region	100	.1	.1	15	150
Francistown Region	200	1.0	.9	120	133
Maun Region	. 2/	2/	2/	<u>5</u> /	- "
TOTAL TRADITIONAL	1,500	4.6	4.0	560	140
TOTAL FREEHOLD	25	1.4	1.1	340	309
TOTAL	1,525	6.0	5.1	900	176

-62

