



The Republic of Uganda

**REPORT**

**ON**

**UGANDA NATIONAL CENSUS**

**OF**

**AGRICULTURE AND LIVESTOCK**

**(1990 - 1991)**

**VOLUME IV: LIVESTOCK CHARACTERISTICS**

MINISTRY OF AGRICULTURE,  
ANIMAL INDUSTRY AND FISHERIES  
P.O. BOX 102,  
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THE REPUBLIC OF UGANDA

REPORT

ON

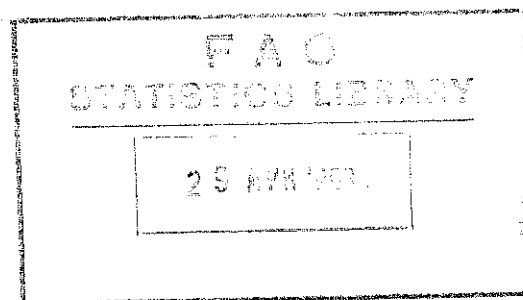
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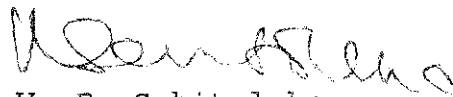
FOREWORD

This is the fourth volume in the sequence of the National Census of Agriculture and Livestock Report after publishing Volume I: "Methodology of the Census", Volume II: "Holding Characteristics" and Volume III: "Crop Area, Yield and Production". This particular volume gives data related to livestock characteristics like: cattle numbers, goats, sheep, pigs and poultry and their distribution by holdings and districts.

As in Volumes II and III, the data presented in this volume is for 26 districts where field data collection was successfully undertaken in 1990/91. The districts of Gulu, Kitgum, Kotido, Kumi, Moroto and Soroti representing about 11 percent of Uganda's rural population were excluded due to the then prevailing security situation. Kampala district, which is predominantly urban, was also excluded from the census coverage.

In the past, the planners in the Animal Sub-Sector have depended on the subjective estimates from the field staff returns whose reliability has been limited. During 1986/87, an Agricultural Sector Survey was carried out by the then Ministry of Animal Industry and Fisheries and provided livestock estimates. The data contained in this volume is based on objective counts and are therefore considerably more reliable than the previous estimates. It is hoped that these data will form a good baseline for future series necessary for sound planning in this sub-sector.

The Government of the Republic of Uganda is grateful to the UNDP and FAO, who respectively funded and executed the Census of Agriculture and Livestock. In addition, the government extends its gratitude to the census staff both at the headquarters and in the field for the effective manner they conducted the census enabling publication of the results. Significant appreciation is extended to the farmers in the rural areas whose co-operation contributed immensely to the success of the field data collection.



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Date: 5 - 02 - 93



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**Explanatory Notes:**

1. Rounding off: After applying sampling expansion factors to the values, the resulting estimates were rounded off to the nearest unit.
  
2. Level of Data aggregation: The estimates are tabulated at the district level and summaries for 26 districts given. Due to the nature of the sample design, it is not possible to give estimates at lower administrative units e.g. a county.

(x)

## Chapter 1

### INTRODUCTION

#### Background

1.01 This volume is the fourth in the sequence of the Report on the Uganda National Census of Agriculture and Livestock (1987-1991). It presents the results of livestock numbers in Uganda during the reference period 1990 and date of enumeration as June/July, 1990.

1.02 The last Census of Agriculture was carried out in 1963 during which a special survey was carried out in the then Karamoja District. For quite a long time before the 1990 Census, livestock statistics were based on rough estimates provided by field staff in their annual reporting of the livestock performance. The reliability of such data was questionable and this had a bearing on the planning for the livestock sector. In 1986/87 an Agricultural Sector Survey was carried out. This provided among other statistics, livestock estimates which also suffered from lack of reliability.

1.03 Since the Ugandan small-scale holder practices mixed farming, the need for reliable livestock data is obvious. These are required for proper planning for animal protein security for the population and surplus for export.

1.04 The data presented in this report were based on a probability sample while the data collection method involved objective counting of livestock. The data are therefore considered to be comparatively better than earlier estimates based on subjective methods.

### Scope

1.05 The items covered on livestock were obtained from the livestock variables suggested during the Data Users and Producers Workshop held at Jinja in November 1987. Due to logistical problems however, some proposed variables were included in the questionnaire while others were left out. (See Appendix I)

### Coverage

1.06 The data presented in this report are for 26 districts where field data collection was successfully undertaken. The districts of: Gulu, Kitgum, Kotido, Kumi, Moroto and Soroti representing about 11 percent of the rural population in Uganda, were not covered due to the then existing security situation. Kampala district was excluded from the census coverage because it is predominantly urban.

1.07 It is relevant to point out that among the districts that were not covered, Moroto, Kotido, Soroti and Kumi also happen to be the large cattle areas. No attempt was made to quantify the amount of livestock omitted in the excluded districts. Data from the 1992/93 follow-up annual agriculture and livestock survey which covers all 37 rural districts in Uganda should bridge this gap.

1.08 Since 1990, six new districts were created, namely: Kalangala, Kibale, Kiboga, Kisoro, Pallisa and Ntungamo which were at the time, parts of Masaka, Hoima, Mubende, Kabale, Tororo and Mbarara/Bushenyi districts respectively. No adjustment for these changes was made as the sampling design was made for the then existing districts.

1.09 The nature of the sample design used enumerated the typical small-scale agricultural holdings operated mainly by peasant farmers. The number of large-scale or institutional farms are few and were covered through a separate frame where complete enumeration was done. The results for these are given in a stand-alone report.

#### **Accuracy of estimates**

1.10 The livestock numbers, like estimates produced for other items in the previous substantive volumes, were rounded internally in the computer to the nearest unit. Since a probability method was used in selecting the sample, the estimates were subject to sampling errors. Therefore, last digits of data shown in the tables at the end of the chapters lack any significance and the figures have to be interpreted with this in mind.

1.11 As was mentioned in Volume I: Methodology of the Census, the taxpayers list was used as a measure of size for selecting the primary sampling units or sub-parishes with the hope that the number of taxpayers would be positively correlated with the number of agricultural holdings. It is likely that the design was biased in favour of crops and against livestock. Furthermore, because of the possibility of other non-sampling errors not examined, no sampling errors were calculated for livestock estimates.





## Chapter 2

### CATTLE

2.1 Cattle numbers and their geographical distribution are of a structural nature and so were covered in the Census. All cattle found on the selected holdings were recorded regardless of ownership. Cattle which were temporarily away from the holding for say a day, were also recorded. However, cattle which were in transit and were temporarily on the holding were not recorded.

#### 2.2 Comments on tables

**Table 2.1** The total number of holdings which reported cattle was 341,000 out of the 1.7 million holdings estimated in the 26 districts. Of the 341,000 holdings, Tororo had the highest number of 52,000 holdings reporting at least one head of cattle while Kasese had the least number with 700 holdings.

The results show that in the 26 districts there were about 3.4 million heads of cattle. On the average, considering only those holdings which reported cattle, there were 10 heads of cattle per holding. This average varied considerably from 58 heads per holding in Masaka to 3 heads per holding in Mbale.

Mbarara district had the highest number (607,000) of heads of cattle being 18% of all cattle estimated in the 26 districts. Masaka had 528,000 heads or 16% while Kasese district reported the least number of 14,000 heads.

**Table 2.2** This table shows the number of holdings reporting and number of cattle by breed. All the 26 districts reported presence of indigenous cattle which accounted for 3.2 million heads or 97% of all cattle from the 26 districts. The number of exotic cattle was estimated at 25,000 heads while the number of improved cattle was 84,000.

Exotic cattle were mostly found in Bushenyi (10,000 heads), Kamuli (6,000 heads) and Mpigi (4,000 heads) while the improved cattle were mostly found in Mbarara (25,000 heads), Bushenyi (18,000 heads) and Mukono (17,000 heads).

**Table 2.3** The distribution of cattle by breed and type is an important aspect to planners in the livestock sector. This table shows that out of an estimated number of 25,000 exotic heads of cattle, dairy type were 22,000 or 89 percent of all exotics. There were 7 percent of exotics for beef and 4 percent for dual purposes. As regards improved cattle, out of an estimated number of 84,000 heads, 43,000 were for dairy and 38,000 heads were kept for dual purposes while only 3,000 heads or 4 percent of improved were for beef.

From this table, it can be concluded that most exotics were mainly kept for dairy while the improved cattle were mainly for both dairy and dual purpose.

**Table 2.4** This table shows the number of cattle by sex and type. From the data presented, the male to female sex ratio for cattle was 37 to 100 i.e. for every 100 females, there were 37 male cattle. Thus, female cattle outnumbered male cattle by nearly 3 times.

Out of the nearly 900,000 heads of male cattle, the largest number (408,000 heads or 45% of males) were bull calves followed by 193,000 heads or 21% of breeding bulls while steers, which are castrated bulls for commercial beef production, numbered 168,000 heads or 19% and oxen, which are male cattle castrated for ploughing, numbered 130,000 heads or constituted 14% of all male cattle.

As for the female cattle, out of nearly 2.5 million heads, heifers and heifer calves were estimated at 1.1 million making up 45% of all female cattle. Dry cows and cows in milk were estimated at 678,000 and 676,000 heads respectively.

**Table 2.5** As has already been pointed out in TABLE 2.1 nearly 1.4 million holdings, or 82% reported no cattle, implying that 341,000 or only about 18% holdings reported presence of cattle. According to the size of holding classification adopted, it is seen that the number of holdings reporting cattle was negatively correlated with size of cattle herd i.e. the larger the size of cattle herd defined, the fewer the number of holdings falling in that class. Thus, the number of holdings reporting 1 to 2 heads of cattle was estimated at 129,000 whereas at the extreme end, there were only 10,000 holdings with at least 51 heads.

Another interesting feature of this table is that in the 26 districts, holdings with fewer heads of cattle were common in Eastern Uganda while those with large herds were common in Western Uganda. Thus, the number of holdings with 5 heads or less was estimated at 38,000 in Mbale, 37,000 in Tororo and 20,000 in Iganga (all 3 districts in Eastern) while, the number of holdings with 21 heads or more was 8,000 in Mbarara, 3,000 in Masaka and 2,000 in Bushenyi (all latter 3 in Western).

**Table 2.6** The table shows the distribution of holdings by source of water for cattle. Holdings whose water source was well/spring numbered 143,000 followed by those whose source of water for cattle as swamp numbering 87,000 while for river/lake was 73,000. Approximately 40% of the holdings which reported valley dams were from Mbarara district. Holdings which reported piped water as a main source of water for cattle were insignificant in numbers.

**Table 2.7** The number of cattle whose water source was wells/springs were 1 million and accounted for 30% of all the cattle, followed by 834,000 heads of cattle whose water source was valley dam. The four sources namely: well/spring, valley dams, river/lake and swamps were the main sources serving some 3.3 million or 98% of all cattle in the 26 districts. These figures and those in the previous TABLE 2.6 are not surprising for Uganda which has a large water mass.

**Table 2.8** This table shows the number of holdings by livestock system. Sedentary pastoral system is the livestock system where the holder with indigenous breeds uses traditional management practices. The number of holdings practising this system was estimated at 306,000 which was about 90% of all holdings reporting cattle. In this system, the largest number of holdings were to be found in Tororo (48,000 holdings) and Mbale with 41,000 holdings.

In the nomadic (or totally pastoral) system, the holder having no fixed or permanent settlement moves with the cattle from place to place in search of pastures whereas in the semi-nomadic (or semi-pastoral) system, the holder stays in the same place for some time (months or years) before moving on. The semi-nomadic livestock system recorded 20,000 holdings accounting for 6% of the total number of holdings reporting cattle.

The largest number of holdings reporting dairy livestock system were in Mukono (2,400 holdings), Bushenyi (1,800 holdings) and Mpigi with 1,400 estimated holdings.

**Table 2.9** This table reports the number of holdings by the animal husbandry system practised. The number of holdings which reported communal grazing husbandry system was 161,000 or 47% of all holdings reporting cattle, followed by tethering with 151,000 holdings or 44%. The two systems accounted for 91% of the holdings which reported cattle. Holdings which had paddocking were 21,000 or 6% of all the holdings which reported cattle.

TABLE 2.1 Number of Holdings and Cattle

DISTRICT	ALL HOLDINGS	HOLDINGS NOT REPORTING CATTLE	HOLDINGS REPORTING CATTLE	CATTLE
Apac	54245	46298	7947	41992
Arua	92103	68376	23727	116287
Bundibugyo	13012	12142	870	46835
Bushenyi	78091	60714	17377	161278
Hoima	60530	57896	2634	22424
Iganga	110395	85659	24736	110914
Jinja	22828	19684	3143	14031
Kabale	81944	67032	14912	84280
Kabarole	68519	60396	8123	113784
Kamuli	70628	52584	18044	128648
Kapchorwa	15899	6536	9363	64738
Kasese	20749	20050	699	13637
Lira	79835	75357	4478	22268
Luwero	44593	40922	3671	27193
Masaka	73776	64739	9037	528017
Masindi	23169	21420	1750	51833
Mbale	103897	62217	41680	109390
Mbarara	108572	82748	25824	607396
Moyo	20166	18240	1926	21417
Mpigi	82609	65174	17435	222896
Mubende	85807	77477	8330	66835
Mukono	127642	107513	20129	81294
Nebbi	43448	33094	10354	90044
Rakai	45174	38437	6737	240487
Rukungiri	39622	33860	5762	43350
Tororo	137468	85081	52388	325341
TOTAL	1704721	1363646	341075	3356609

TABLE 2.2 Number of Holdings Reporting and Cattle by Breed

DISTRICT	INDIGENOUS		EXOTIC		IMPROVED	
	Holdings	Cattle	Holdings	Cattle	Holdings	Cattle
Apac	7947	41992	-	-	-	-
Arua	23727	116287	-	-	-	-
Bundibugyo	847	46767	23	68	-	-
Bushenyi	14991	133265	2057	9948	1399	18064
Hoima	2634	22424	-	-	-	-
Iganga	23998	107448	512	2558	227	908
Jinja	2804	10970	214	723	532	2339
Kabale	14609	82032	-	-	303	2248
Kabarole	8123	113784	-	-	-	-
Kamuli	17583	122354	461	5856	272	437
Kapchorwa	9363	64090	38	76	312	572
Kaseese	699	12356	45	90	157	1192
Lira	4478	22268	-	-	-	-
Luwero	3671	27193	-	-	-	-
Masaka	8707	527494	193	193	330	330
Masindi	1750	51800	8	33	-	-
Mbale	39979	106443	201	201	2036	2746
Mbarara	25162	581889	223	223	1785	25284
Moyo	1926	21417	-	-	-	-
Mpigi	16703	215236	575	4380	818	3280
Mubende	8330	66835	-	-	-	-
Mukono	18780	63182	382	695	1385	17417
Nebbi	10354	90044	-	-	-	-
Rakai	6550	238129	45	45	307	2312
Rukungiri	5626	39263	-	-	414	4087
Tororo	51494	322662	-	-	893	2679
TOTAL	330833	3247626	4977	25088	11170	83895

TABLE 2.3 Number of Cattle by Breed and Type

DISTRICT	EXOTIC			IMPROVED			INDIGENOUS	TOTAL
	Dairy	Beef	Dual	Dairy	Beef	Dual		
Apac	-	-	-	-	-	-	41992	41992
Arua	-	-	-	-	-	-	116287	116287
Bundibugyo	-	-	68	-	-	-	46767	46835
Bushenyi	9187	761	-	17557	-	507	133265	161278
Hoima	-	-	-	-	-	-	22424	22424
Iganga	2558	-	-	-	-	908	107448	110914
Jinja	440	-	283	1687	185	467	10970	14031
Kabale	-	-	-	174	-	2074	82032	84280
Kabarole	-	-	-	-	-	-	113784	113784
Kamuli	5856	-	-	-	-	437	122354	128648
Kapchorwa	76	-	-	44	-	528	64090	64738
Kasese	45	-	45	22	-	1169	12356	13637
Lira	-	-	-	-	-	-	22268	22268
Luwero	-	-	-	-	-	-	27193	27193
Masaka	-	193	-	137	-	193	527494	528017
Masindi	33	-	-	-	-	-	51800	51833
Mbale	-	-	201	-	241	2505	106443	109390
Mbarara	-	223	-	10977	242	14064	581889	607396
Moyo	-	-	-	-	-	-	21417	21417
Mpigi	3512	554	314	1874	1092	314	215236	222896
Mubende	-	-	-	-	-	-	66835	66835
Mukono	626	-	69	8546	1243	7628	63182	81294
Nebbi	-	-	-	-	-	-	90044	90044
Rakai	-	-	45	-	-	2312	238129	240487
Rukungiri	-	-	-	1766	-	2321	39263	43350
Tororo	-	-	-	-	-	2679	322662	325341
TOTAL	22333	1731	1024	42785	3004	38106	3247626	3356609



TABLE 2.4 Number of Cattle by Sex and Type

DISTRICT	MALES					FEMALES					TOTAL
	Bull calves	Breeding bulls	Steers	Oxen	Sub-total	Heifer calves	Heifers	Dry cows	Cows in milk	Sub-total	
Apac	5360	4114	1009	2204	12687	6934	6871	7032	8468	29305	41992
Arua	19209	16270	754	302	36535	14670	20234	23371	21478	79753	116287
Bundibugyo	5458	2388	1691	64	9601	5711	11422	9480	10621	37234	46835
Bushenyi	22306	6607	6600	1656	37168	24318	35905	32685	31201	124109	161278
Hoima	3484	1828	685	-	5999	2725	4700	5548	3453	16426	22424
Iganga	15368	7328	2663	3640	28999	14910	22599	22327	22081	81916	110914
Jinja	2311	677	626	478	4092	2470	2291	2350	2828	9939	14031
Kabale	10427	4717	2328	519	17991	10689	19131	19460	17009	66289	84280
Kabarole	16234	5731	2086	2635	26686	19753	16646	26584	24116	87099	113784
Kamuli	17311	13449	5971	6210	42942	13628	24620	24295	23163	85706	128648
Kapchorwa	7835	2704	105	16290	26934	7150	11687	8303	10664	37804	64738
Kasese	2210	386	40	-	2635	1872	2631	2994	3505	11002	13637
Lira	3944	682	1045	5177	10849	2112	2554	1528	5226	11419	22268
Luwero	4414	1003	1674	811	7902	4045	5851	4651	4745	19291	27193
Masaka	46303	8068	33534	961	88865	86941	118656	131505	102049	439151	528017
Masindi	5502	2964	1925	720	11110	5490	12376	11851	11005	40722	51833
Mbale	13911	12824	215	5406	32356	12137	23975	22568	18354	77034	109390
Mbarara	69544	28683	44385	2050	144663	68506	123032	134721	136475	462733	607396
Moyo	3400	1740	216	897	6253	3626	3377	2585	5574	15164	21417
Mpigi	28296	6073	26900	20614	81883	27635	26495	36148	50735	141012	222896
Mubende	9138	4394	4498	4826	22857	10448	9830	11111	12589	43978	66835
Mukono	8610	5548	1924	2145	18227	11979	14750	17787	18551	63067	81294
Nebbi	8813	9817	2223	393	21246	9620	16660	23614	18904	68798	90044
Rakai	24766	16140	20343	743	61991	22566	66178	41557	48195	178496	240487
Rukungiri	7152	2485	-	-	9637	6603	8261	7749	11100	33713	43350
Tororo	46716	26558	4639	51137	129050	37217	58826	46092	54156	196292	325341
TOTAL	408024	193177	168079	129877	899157	433754	669556	677895	676247	2457452	3356609

TABLE 2.5 Number of Holdings by Size of Cattle Herd

DISTRICT	HOLDINGS WITH:							TOTAL
	No cattle	1-2 heads	3-5 heads	6-10 heads	11-20 heads	21-50 heads	51 heads and over	
Apac	46298	2843	2206	1806	873	220	-	54245
Arua	68376	8916	7653	4681	2253	224	-	92103
Bundibugyo	12142	33	50	3	284	249	250	13012
Bushenyi	60714	4416	4307	4081	2579	1775	218	78091
Hoima	57896	376	1186	626	223	223	-	60530
Iganga	85659	13629	6680	2123	1701	417	185	110395
Jinja	19684	1435	1169	196	253	90	-	22828
Kabale	67032	6675	4446	2637	578	118	457	81944
Kabarole	60396	1113	2193	979	2447	1051	340	68519
Kamuli	52584	6770	5148	3388	1495	1119	124	70628
Kapchorwa	6536	3204	2392	1847	1349	572	-	15899
Kasese	20050	79	64	53	268	212	22	20749
Lira	75357	1572	1924	717	127	139	-	79835
Luwero	40922	1398	1248	321	416	185	102	44593
Masaka	64739	1947	2193	1471	775	746	1906	73776
Masindi	21420	83	217	280	336	521	313	23169
Mbale	62217	26857	11012	3360	291	160	-	103897
Mbarara	82748	2184	5615	3697	5904	5067	3356	108572
Moyo	18240	199	399	480	656	157	35	20166
Mpigi	65174	7867	5205	1705	797	870	991	82609
Mubende	77477	2664	2310	1095	1787	265	210	85807
Mukono	107513	11098	5512	2117	830	572	-	127642
Nebbi	33094	3340	3347	1444	1355	531	336	43448
Rakai	38437	625	1128	1374	1565	1536	509	45174
Rukungiri	33860	1517	1735	1573	672	140	124	39622
Tororo	85081	17717	18978	7193	6782	879	837	137468
TOTAL	1363646	128558	98316	49247	36597	18039	10318	1704721

TABLE 2.6 Number of Holdings by Water Source for Cattle

DISTRICT	HOLDINGS NOT REPORTING CATTLE	CATTLE HOLDINGS WITH SOURCE OF WATER AS:							TOTAL
		Encatchment	Bore holes	Valley dam	Swamp	Well/spring	River/Lake	Piped	
Apac	46298	-	116	445	5182	874	1331	-	54245
Arua	68376	193	359	436	5671	6035	11033	-	92103
Bundibugyo	12142	-	11	-	-	545	313	-	13012
Bushenyi	60714	1355	-	-	1129	12890	2003	-	78091
Hoima	57896	-	115	-	342	1560	618	-	60530
Iganga	85659	182	563	295	11163	12350	185	-	110395
Jinja	19684	75	151	-	1531	1260	121	6	22828
Kabale	67032	303	617	265	848	5601	7278	-	81944
Kabarole	60396	-	-	2290	2405	1869	1559	-	68519
Kamuli	52584	555	178	547	8347	4332	4085	-	70628
Kapchorwa	6536	-	-	-	-	3852	5435	76	15899
Kasese	20050	-	-	-	-	216	483	-	20749
Lira	75357	-	-	621	2596	1122	139	-	79835
Luwero	40922	527	286	413	1214	952	279	-	44593
Masaka	64739	473	82	1830	2050	3755	847	-	73776
Masindi	21420	-	88	176	240	204	1042	-	23169
Mbale	62217	272	1660	403	321	22989	16035	-	103897
Mbarara	82748	-	-	10304	2736	11400	1384	-	108572
Moyo	18240	-	113	-	-	870	943	-	20166
Mpigi	65174	1230	704	1080	3658	10764	-	-	82609
Mubende	77477	1066	-	1204	1544	2937	1579	-	85807
Mukono	107513	1110	-	1632	2946	12357	2085	-	127642
Nebbi	33094	-	-	1269	1549	1380	6156	-	43448
Rakai	38437	-	45	1586	1340	2677	1089	-	45174
Rukungiri	33860	-	-	-	-	4293	1469	-	39622
Tororo	85081	-	834	461	30197	15829	5067	-	137468
TOTAL	1363646	7341	5920	25255	87004	142914	72558	82	1704721

TABLE 2.7 Number of Cattle by Main Water Source

DISTRICT	SOURCE OF WATER FOR CATTLE AS:							TOTAL
	Encatchment	Bore holes	Valley dam	Swamp	Well/spring	River/Lake	Piped	
Apac	-	807	1796	29550	3981	5858	-	41992
Arua	193	359	643	27555	20965	66573	-	116287
Bundibugyo	-	289	-	-	26408	20138	-	46835
Bushenyi	12759	-	-	5596	120043	22880	-	161278
Hoima	-	115	-	1587	16728	1995	-	22424
Iganga	1093	3311	3868	40241	47810	14591	-	110914
Jinja	151	1583	-	7192	4204	890	11	14031
Kabale	303	5242	794	2216	48883	26842	-	84280
Kabarole	-	-	50142	26889	27455	9298	-	113784
Kamuli	1031	178	2245	46745	18223	60225	-	128648
Kapchorwa	-	-	-	-	23747	40763	228	64738
Kasese	-	-	-	-	3039	10599	-	13637
Lira	-	-	3779	10543	3223	4723	-	22268
Luwero	2227	1090	4974	7462	3251	8190	-	27193
Masaka	9689	246	416181	12948	26475	62478	-	528017
Masindi	-	660	2594	2281	3096	43201	-	51833
Mbale	544	5027	1208	481	53212	48918	-	109390
Mbarara	-	-	267043	39633	273233	27487	-	607396
Moyo	-	1915	-	-	8783	10719	-	21417
Mpigi	11918	3527	10933	130477	66040	-	-	222896
Mubende	2403	-	11529	13778	11907	27218	-	66835
Mukono	5289	-	12383	11293	40032	12296	-	81294
Nebbi	-	-	10233	31144	6175	42492	-	90044
Rakai	-	1308	19942	14444	61874	142918	-	240487
Rukungiri	-	-	-	-	32390	10960	-	43350
Tororo	-	2102	13817	192468	57788	59166	-	325341
TOTAL	47600	27759	834105	654524	1010965	781417	239	3356609

TABLE 2.8 Number of Holdings by Livestock System

DISTRICT	HOLDINGS NOT REPORTING CATTLE	CATTLE HOLDINGS PRACTICING LIVESTOCK SYSTEM AS:					TOTAL
		Nomadic	Semi- nomadic	Sedentary pastoral	Ranching	Dairy	
Apac	46298	129	-	7681	137	-	54245
Arua	68376	-	-	23727	-	-	92103
Bundibugyo	12142	-	843	27	-	-	13012
Bushenyi	60714	190	1187	14203	-	1796	78091
Hoima	57896	338	655	1641	-	-	60530
Iganga	85659	-	1345	22985	406	-	110395
Jinja	19684	-	278	2472	52	341	22828
Kabale	67032	290	131	14144	-	347	81944
Kabarole	60396	-	944	6970	-	210	68519
Kamuli	52584	214	1544	15791	-	496	70628
Kapchorwa	6536	-	203	9160	-	-	15899
Kasese	20050	83	22	593	-	-	20749
Lira	75357	-	-	4478	-	-	79835
Luwero	40922	-	470	3201	-	-	44593
Masaka	64739	-	83	8326	299	330	73776
Masindi	21420	-	883	823	-	44	23169
Mbale	62217	-	1132	40548	-	-	103897
Mbarara	82748	-	2524	23032	-	268	108572
Moyo	18240	-	177	1749	-	-	20166
Mpigi	65174	806	2706	11823	727	1373	82609
Mubende	77477	-	807	6999	-	524	85807
Mukono	107513	260	1080	15851	521	2417	127642
Nebbi	33094	41	770	9542	-	-	43448
Rakai	38437	-	201	6537	-	-	45174
Rukungiri	33860	124	153	5485	-	-	39622
Tororo	85081	2438	1619	48330	-	-	137468
TOTAL	1363646	4914	19758	306116	2141	8147	1704721

TABLE 2.9 Number of Holdings by Husbandry System

DISTRICT	HOLDINGS NOT REPORTING CATTLE	CATTLE HOLDINGS PRACTISING HUSBANDRY SYSTEM AS:					TOTAL
		Zero grazing	Paddocking	Tethering	Communal grazing	Other	
Apac	46298	-	-	657	7290	-	54245
Arua	68376	193	-	20421	3113	-	92103
Bundibugyo	12142	27	23	-	820	-	13012
Bushenyi	60714	-	7118	1389	8870	-	78091
Hoima	57896	-	225	590	1820	-	60530
Iganga	85659	171	235	18203	6127	-	110395
Jinja	19684	75	271	1978	819	-	22828
Kabale	67032	637	289	794	13192	-	81944
Kabarole	60396	210	627	539	6747	-	68519
Kamuli	52584	364	468	10571	6642	-	70628
Kapchorwa	6536	611	22	2545	6057	128	15899
Kasese	20050	-	45	-	654	-	20749
Lira	75357	1302	-	1439	1736	-	79835
Luwero	40922	266	71	1908	1425	-	44593
Masaka	64739	339	794	1096	6808	-	73776
Masindi	21420	-	264	119	1368	-	23169
Mbale	62217	1844	555	34240	5041	-	103897
Mbarara	82748	-	4057	581	21088	97	108572
Moyo	18240	-	-	-	1926	-	20166
Mpigi	65174	391	1328	9825	5891	-	82609
Mubende	77477	54	304	4365	3607	-	85807
Mukono	107513	677	3816	11683	3569	383	127642
Nebbi	33094	-	-	640	9714	-	43448
Rakai	38437	84	125	222	6306	-	45174
Rukungiri	33860	136	667	263	4696	-	39622
Tororo	85081	230	-	26918	25240	-	137468
TOTAL	1363646	7610	21305	150986	160566	608	1704721

## Chapter 3

### GOATS, SHEEP AND PIGS

3.1 Goats, sheep and pigs are an important source of animal protein. All goats, sheep and pigs which were found on the holding were recorded regardless of ownership. Like the case with cattle, the goats, sheep and pigs which were temporarily away from the holding were included.

#### 3.2 Comments on tables

**Table 3.1** This table shows the number of holdings and goats. Out of the 1.7 million holdings, 749,000 or 44% reported having goats. The average for the reporting holdings was 5 goats per holding with the highest number in Kapchorwa and Moyo at 8 and least in Jinja, Mpigi and Mukono with 3 goats per reporting holding.

**Table 3.2** In this table the goat numbers are shown by sex and age-groups. The male to female sex ratio was 38 to 100. In the age groups: less than 6, 6 to 9 and over 9 months, the sex ratios were respectively 78, 47 and 18 suggesting that there were more female goats in the older age groups.

Mbarara district had the largest number of goats (478,000 heads) being 12% of all goats, followed by Arua with 440,000 representing 11%. Jinja had the least number of 37,000 goats of all the 26 districts.

**Table 3.3** This table shows the distribution of holdings by size of goat herd. There were 264,000 holdings that had between 3-5 goats. Of the 749,000 holdings reporting goats, the median number of goats was 4 i.e half the number of holdings reporting 4 goats or less.

**Table 3.4** The data in the table show that out of 1,700,000 holdings 219,000 holdings (or 13%) reported presence of sheep. Arua district had the highest number of 104,000 sheep accounting for 14% of all sheep followed by Kabale with 80,000. Jinja district had the least number with only 400 holdings reporting 700 sheep.

**Table 3.5** This table shows sheep numbers broken down by sex and age-group. Male sheep numbered 201,000 and these formed only 27 percent of all sheep. Females on the other hand were 542,000 and accounted for 73% of all sheep. The sex ratios for the under 6, 6 to 9 and over 9 months were 77, 43 and 24 respectively. Like in the case of the goats, this again shows that there are more female than male sheep in the older age groups.

**Table 3.6** Seventy thousand (70,000) holdings out of 219,000 holdings reported a herd size of 3 to 5 sheep. This number was 32% of all the holdings which reported sheep. The median number of sheep per holding reporting sheep was 2 i.e 50% of all holdings reporting sheep had 2 or less sheep.

**Table 3.7** There were 256,000 holdings that reported pigs, representing 15% of all holdings estimated in the 26 districts. Mukono with 32,000 holdings, Mubende with 23,000 and Mpigi with 22,000 were the districts with the highest number of holdings reporting pigs.



Mukono had 77,000 pigs which was the highest number, followed by Lira with 73,000, Mubende with 69,000 and Kabale with 4,000 had the least number of pigs.

The "All-Districts" average was 3 pigs per holding reporting pigs. This average varied from district to district with 2 pigs in several districts such as Apac and Kasese to 7 pigs per reporting holding in Kapchorwa and Moyo.

**Table 3.8** This table shows pig numbers by sex and age-group. There were 249,000 males as compared to 423,000 females. The percentage of males and females were 37 and 63 respectively. The sex ratio for the pigs in the age groups under 6 and over 6 months was respectively 79 and 35.

**Table 3.9** The data in this table show holdings distributed by size of pig herd. The holdings with 1 pig were 117,000 which was the highest number accounting for 46 percent of all holdings with pigs. Holdings with 11 pigs and over were 7,000 and represented only 3 percent. The number of holdings which had 1 pig were highest in Mukono with 16,000 holdings followed by Mpigi with 13,000 holdings.

TABLE 3.1 Number of Holdings and Goats

DISTRICT	NUMBER OF :			
	All Holdings	Holdings not reporting goats	Holdings reporting goats	Goats
Apac	54245	28394	25851	145927
Arua	92103	29669	62433	440429
Bundibugyo	13012	4486	8526	45911
Bushenyi	78091	34045	44046	257467
Hoima	60530	30769	29761	156495
Iganga	110395	58935	51460	215495
Jinja	22828	11860	10967	37246
Kabale	81944	52103	29842	167643
Kabarole	68519	31637	36882	228955
Kamuli	70628	40632	29997	108692
Kapchorwa	15899	7208	8691	73493
Kasese	20749	8962	11787	51445
Lira	79835	65506	14329	72553
Luwero	44593	36483	8109	43802
Masaka	73776	48775	25002	115459
Masindi	23169	10598	12571	78169
Mbale	103897	67572	36325	117546
Mbarara	108572	41549	67023	478365
Moyo	20166	13349	6817	59306
Mpigi	82609	64213	18396	58913
Mubende	85807	58587	27220	151409
Mukono	127642	80779	46863	148797
Nebbi	43448	15223	28224	159619
Rakai	45174	27358	17816	110966
Rukungiri	39622	18423	21199	86243
Tororo	137468	68178	69290	270068
TOTAL	1704721	955292	749428	3880412

TABLE 3.2 Number of Goats by Sex and Age-group

DISTRICT	MALES				FEMALES				TOTAL
	Under 6 months	6 - 9 months	Over 9 months	Total males	Under 6 months	6 - 9 months	Over 9 months	Total females	
Apac	13666	11522	21672	46860	13788	21708	63570	99066	145927
Arua	49218	28706	36745	114669	55963	67351	202445	325760	440429
Bundibugyo	7003	2391	2183	11577	9205	7304	17825	34334	45911
Bushenyi	32398	18404	11738	62540	44594	54360	95973	194927	257467
Hoima	22843	9241	8267	40351	31906	27327	56912	116144	156495
Iganga	29681	19016	19234	67930	31758	33226	82580	147564	215495
Jinja	5213	1958	2439	9610	6430	7745	13461	27636	37246
Kabale	13910	10410	16672	40992	28481	27212	70957	126651	167643
Kabarole	25335	18522	12519	56375	38858	37682	96039	172579	228955
Kamuli	10852	6952	6149	23953	17421	21639	45679	84739	108692
Kapchorwa	7748	7586	8701	24035	11854	13037	24566	49458	73493
Kasese	5257	3424	2443	11124	9196	7302	23823	40321	51445
Lira	7724	6012	9051	22788	12415	11138	26212	49766	72553
Luwero	5964	4886	4049	14898	5928	10352	12623	28903	43802
Masaka	17826	9515	7372	34713	20406	22022	38318	80746	115459
Masindi	10019	6373	6391	22783	12164	12025	31198	55386	78169
Mbale	12302	6158	8591	27050	19014	17466	54017	90496	117546
Mbarara	67139	32343	19547	119030	77073	80105	202157	359335	478365
Moyo	6807	5884	7153	19843	7630	9813	22019	39463	59306
Mpigi	7567	3851	4257	15674	9525	5973	27740	43239	58913
Mubende	18011	14915	14213	47140	26823	23960	53485	104269	151409
Mukono	23612	11788	9386	44786	21396	19837	62778	104011	148797
Nebbi	17636	12324	14281	44241	18944	26255	70179	115378	159619
Rakai	16099	10674	10779	37551	20056	17926	35433	73414	110966
Rukungiri	7492	5187	3913	16591	14108	17265	38279	69652	86243
Tororo	28403	32087	23682	84172	34129	42015	109752	185896	270068
TOTAL	469724	300127	291428	1061279	599064	642047	1578021	2819133	3880412

TABLE 3.3 Number of Holdings by Size of Goat Herd

DISTRICT	HOLDINGS NOT REPORTING GOATS	HOLDINGS WITH:						TOTAL
		1 goat	2 goats	3-5 goats	6-10 goats	11-20 goats	21 goats and over	
Apac	28394	2166	4596	8807	7154	2740	388	54245
Arua	29669	5968	7857	15838	18440	13321	1009	92103
Bundibugyo	4486	1324	1052	3210	2034	728	178	13012
Bushenyi	34045	4247	6586	17957	8543	5618	1094	78091
Hcima	30769	2340	5625	11396	7677	2473	250	60530
Iganga	58935	9254	6891	22738	10548	1661	369	110395
Jinja	11860	2455	2361	4395	1568	188	-	22828
Kabale	52103	4427	4767	8821	7840	3502	484	81944
Kabarole	31637	2572	5353	13457	9992	4878	630	68519
Kamuli	40632	6660	7934	10368	4090	748	197	70628
Kapchorwa	7208	1012	1559	2212	1265	1820	822	15899
Kasese	8962	2346	2801	3774	2121	524	222	20749
Lira	65506	1367	1903	5965	4116	980	-	79835
Luwero	36483	341	1006	4097	2108	372	185	44593
Masaka	48775	4585	4793	10948	3951	335	391	73776
Masindi	10598	894	1881	3924	4125	1517	232	23169
Mbale	67572	7753	10607	13715	3572	351	327	103897
Mbarara	41549	4078	10322	21631	16596	11944	2452	108572
Moyo	13349	715	486	1540	2322	1199	556	20166
Mpigi	64213	5216	5438	5221	1927	595	-	82609
Mubende	58587	2803	6379	8005	8236	267	1530	85807
Mukono	80779	11884	12159	16401	5871	549	-	127642
Nebbi	15223	2309	4494	10624	7962	2326	510	43448
Rakai	27358	2490	2572	5912	4001	2150	691	45174
Rukungiri	18423	2102	5349	8726	4403	620	-	39622
Tororo	68178	15630	14092	24301	12948	1901	419	137468
TOTAL	955292	106937	138862	263983	163410	63303	12933	1704721

TABLE 3.4 Number of Holdings and Sheep

DISTRICT	NUMBER OF :			
	All Holdings	Holdings not reporting sheep	Holdings reporting sheep	Sheep
Apac	54245	47250	6995	24719
Arua	92103	72945	19158	103839
Bundibugyo	13012	11843	1168	4167
Bushenyi	78091	57175	20916	57993
Hoima	60530	56285	4245	13481
Iganga	110395	103986	6409	17286
Jinja	22828	22383	444	726
Kabale	81944	58315	23629	79896
Kabarole	68519	56942	11577	44596
Kamuli	70628	68485	2144	7747
Kapchorwa	15899	11403	4496	38534
Kasese	20749	18316	2433	7473
Lira	79835	76124	3711	11622
Luwero	44593	43039	1554	3060
Masaka	73776	69362	4415	11842
Masindi	23169	22560	610	2121
Mbale	103897	93100	10797	24056
Mbarara	108572	93385	15187	68558
Moyo	20166	17437	2729	17401
Mpigi	82609	77588	5021	10892
Mubende	85807	74868	10939	28940
Mukono	127642	109820	17823	50449
Nebbi	43448	38553	4895	19740
Rakai	45174	40868	4306	24690
Rukungiri	39622	34118	5504	12286
Tororo	137468	110066	27402	57489
TOTAL	1704721	1486215	218506	743603