



**IMPERIAL ETHIOPIAN GOVERNMENT  
CENTRAL STATISTICAL OFFICE**

**REPORT ON A SURVEY  
OF  
KEFA PROVINCE**

ADDIS ABABA

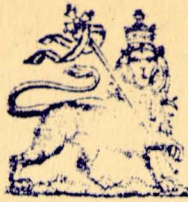
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**NATIONAL SAMPLE SURVEY**

**REPORT NO 10**

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CENTRAL STATISTICAL OFFICE

REPORT ON A SURVEY  
OF  
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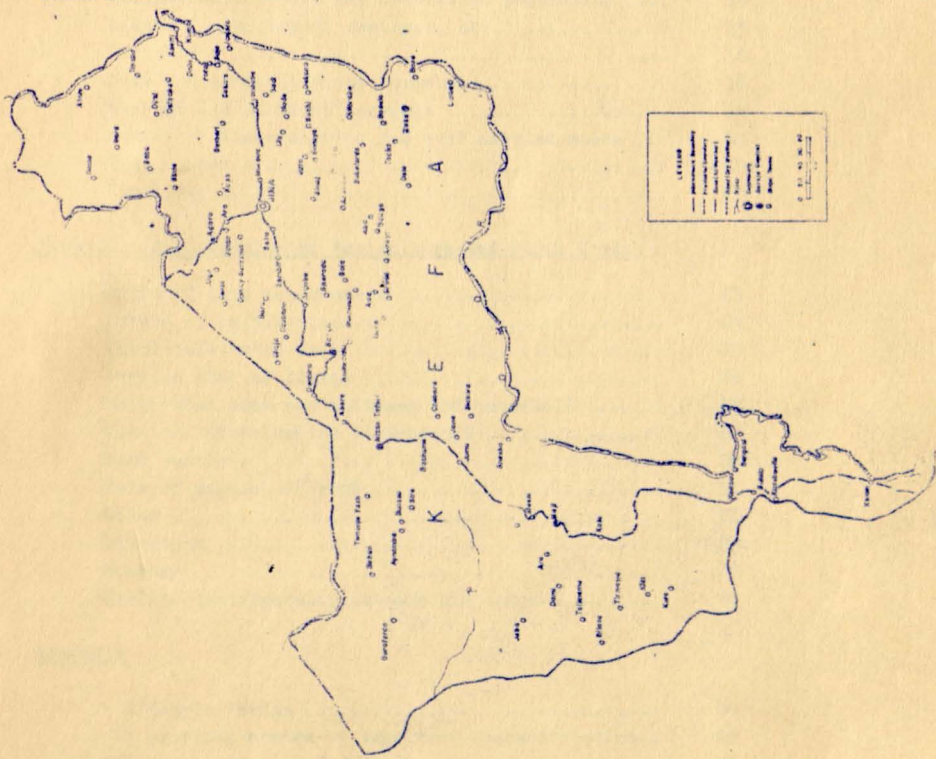
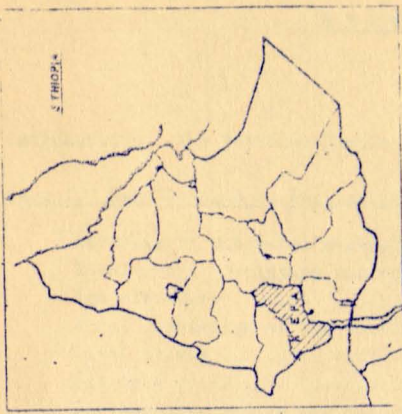
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NATIONAL SAMPLE SURVEY  
REPORT No 10

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S. THROCKMOR



**LEGEND**

- Boundary
- River
- Road
- Station
- Village
- Town
- City
- District
- State
- Country

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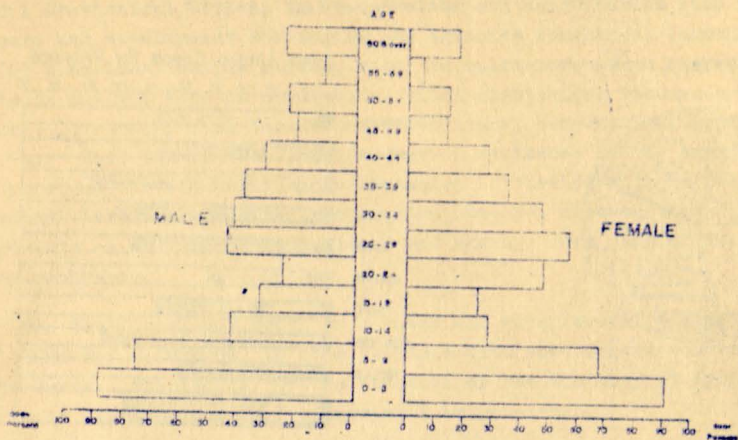


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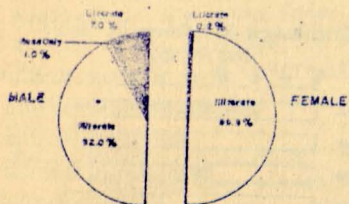
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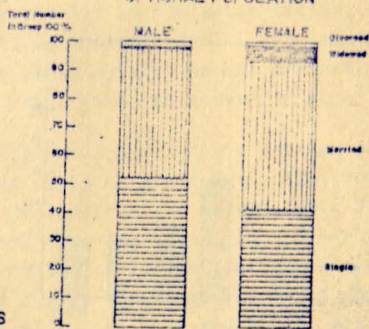
## RURAL POPULATION BY AGE GROUP AND SEX



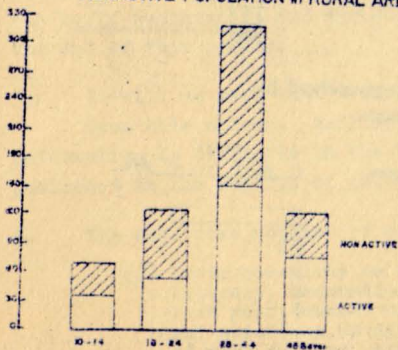
### LITERACY of POPULATION in RURAL AREAS



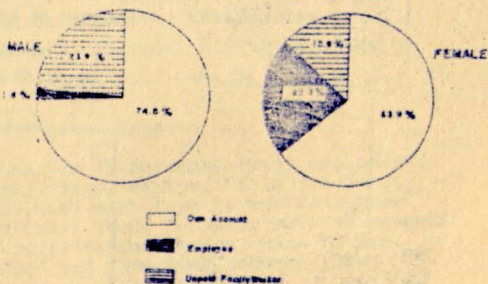
### CIVIL STATUS of RURAL POPULATION



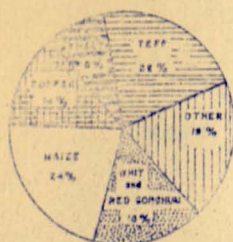
### ECONOMICALLY ACTIVE and NONACTIVE POPULATION in RURAL AREAS



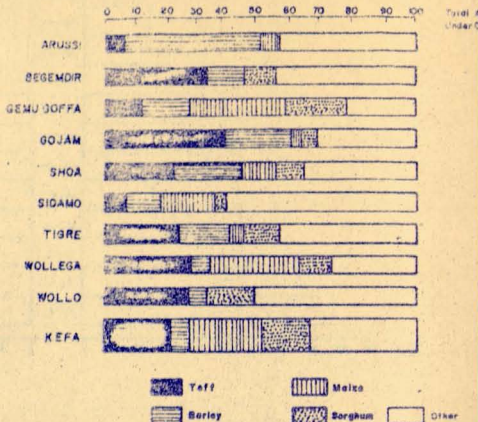
### STATUS of ECONOMICALLY ACTIVE POPULATION



### Area Under Crops



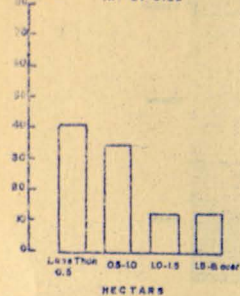
### Area Under Crops By Province



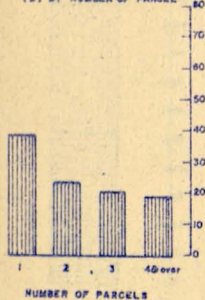
### Distribution of Holdings

% of Total Holdings

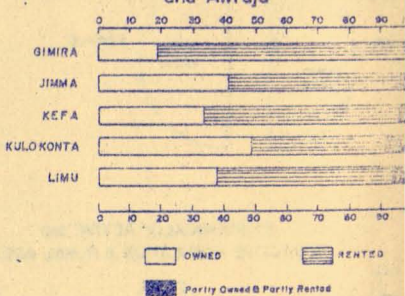
(A) BY SIZE



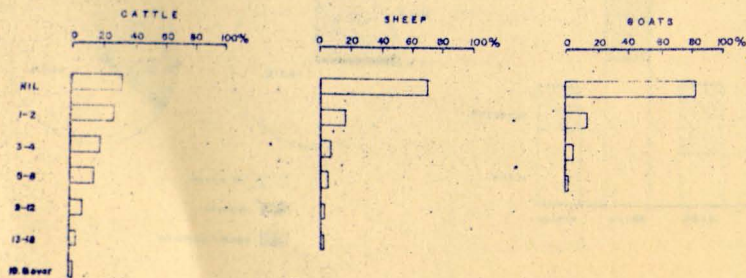
(B) BY NUMBER OF PARCEL



### Distribution of Holdings by Tenure and Awraja



### Percentage Distribution of Household by Number of Livestock



## NATIONAL SAMPLE SURVEY

1. To fill gaps in the basic statistics of Ethiopia and to provide a scientific basis for future economic development plans, the Central Statistical Office, in co-operation and consultation with most economic and development Ministries and agencies concerned, launched in 1963 a National Sample Survey, which is multi-purpose in character and is to collect data on population, vital statistics, labour, agriculture, livestock, cash income and expenditure, consumption, marketing, etc. This survey will provide overall estimates on the Awraja (sub-province) level, but the more detailed statistics will be for provincial level only. Rural consumption studies, crop cutting experiments as well as urban censuses and surveys form part of the survey programme.
2. The field work was begun on a pilot and experimental scale in 1956 E.C. (1953/64) in Shoa Province with the limited resources of the Central Statistical Office and that of the Ministry of Agriculture. Reports in respect of each Province will be published.
3. Coverage: The survey is planned to cover the whole Empire of Ethiopia. For the rural survey this will be done province by province the number being covered each year will depend on resources available. The urban areas will be covered in the rainy season, July to September, and here the work will be concentrated on largest towns first working down until all municipal (urban) areas are covered. The remainder of this document will deal with the survey in rural areas.
4. Collection of Data: A full instruction manual containing definitions and some eleven different types of forms for collection of information has been developed for the surveys and is available for those who are technically interested. The forms used in the early surveys for Shoa, Gojam and Arrusi contained fundamentally the same information as the later redesigned forms. Forms 43 and 45 on which the basic demographic and agricultural information are given, are at the end of this report.
5. It will be seen that a wide range of information is available from this survey. Much more descriptive and interesting information is available in the Central Statistical Office than can be published in the reports of general information.
6. The enquiries consist of three general types:-
  - (1) basic questions on the number of persons, their age, sex, literacy, occupation, employment status, birth and deaths last year, number of children ever born to married women and questions on agricultural land, tenancy, mode of payment of rent on land, areas under various crops, size of the holding, its fragmentation and livestock number. (See appendices).

- (ii) General information about each sub-district on its accessibility major ethnic groups, type of farming, important crops with harvesting dates, schools and medical facilities, water supply, measurement units used, etc.
- (iii) A market questionnaire for obtaining the prices of main commodities in the local market on the day of visit.

7. Over the years, as information accumulated, the sample design has gone considerable changes.

7.1 To describe the initial design, a list was made of all sub-districts within a sub-province and a 50% sample of these primary sampling units (psu's) was selected systematically with a random start. The enumerators made lists of the administrative sub-divisions (second stage units) into which each sample psu was divided up. For 8 the randomly selected sub-divisions lists of households (third stage units) were made based on the memory of the officials concerned, For two of these sub-divisions (selected at random) actual lists of households were made by visiting the area. A systematic sample of 16 households was taken from each of these lists and information collected on population and agriculture by interviewing the household heads. Land operated by six households (randomly selected) was measured by chain and compass.

7.2 It was later discovered that there were three basic disadvantages associated with the above design. In the analysis of the data different multipliers were needed for the various sub-divisions which considerably slowed down the work of tabulation. Secondly, the presence of memory lists (or households) acted as a temptation to the enumerators not to visit the areas but select a sample from the memory lists. Although the use of memory lists did reduce sampling errors, enumerators had to spend a disproportionate amount of time over waiting for the officials to arrive and help make these lists. Thirdly, the sampling errors were found to be rather high since the psus, although varying considerably in size, were selected with equal probability.

7.3 The present design takes care of the above three points. Within each sub-province, population estimates based on previous counts are obtained for each sub-district. The sub-districts (psu's) are allocated at random to groups of two each and one psu is selected with probability proportionate to its relative measure of size (population) in the group. Within selected psu's a list is made of its administrative sub-divisions

along with the estimated population of each and two sub-divisions are selected with probability proportionate to size. The sub-divisions in the sample are actually visited and an accurate list of households made by combing the area. A systematic sample of households is selected from each sub-divisions, the sampling interval being so determined that the sample becomes self-weighting for an expected over-all sampling fractions of 1 in 200. One third of the selected households are used for land measurement.

8. The number of field teams has been increased as the work has proceeded.

By 1966 the Central Statistical Office had ten teams in the field, each consisting of four enumerators. There are two supervisors who review the work of the teams and control their performance. There is a statistician at headquarters who analyses the data with the help of five assistants. The results are processed mechanically on I.B.M. equipment for which separate staff is available. The enumerators working in the field are well-qualified for their job. As a minimum they have the high school diploma to their credit. They are hired on a permanent basis.

9. Some idea could be given of the sampling errors of important characteristics to which the estimates were subjected. In the province of Kefa in which 77 sample subdivisions were in the sample 3,315 households were interrogated. The relative standard error for the total number of persons was 7.6%, for number of households 7.2%, for parcels of land 7.9% and for total cultivated area 6.8.

MAIN RESULTS ON POPULATIONESTIMATE OF THE TOTAL POPULATION

An estimate of the total population of Kefa province for early 1967 has been built up from the following components:

1. The results of the rural sample survey conducted by the Central Statistical Office in December 1966 to March 1967.
2. An estimate of the population of Maji awraja - which was not covered by the rural survey - based on the 1956 Ministry of Interior population reporting.
3. The results of urban surveys carried out in a total of 6 towns, one in 1965, 4 towns in 1966 and one in march 1967 by the Central Statistical Office.
4. Estimate of another town based on the 1956 Ministry of Interior population reporting.

Table 1  
POPULATION OF KEFA

	MALE	FEMALE	TOTAL
1. Rural Areas	492,550	476,550	969,100
2. Maji Awraja*	35,290	34,270	69,560
3. Surveyed Towns	23,380	24,460	47,840
4. Other Towns**	1,420	1,320	2,740
Total Population	552,640	536,600	1,089,240

Thus estimated, the total population of the province is 1,089,240 of whom 552,640 are males and 536,600 females. By far, the vast majority (over 95%) of the total population live in rural areas. This estimate of the total population of Kefa province is much higher than the estimate based on the 1956 Ministry of Interior Population Reporting.

\*From a figure for 1962 based on the 1956 Ministry of Interior population reporting raised by 1.6% per annum for 1963 and 1964 and by 1.8% for 1965 and 1966 by 2% for 1967.

\*\*Estimates varying between 1956 and 1962 increased by 10% to get an estimate for 1965 and then raised by 1.8% for 1966 and by 2% for 1967.

As already mentioned above, Maji awraja has not been covered by the rural sample survey and the estimate for its population included in the above table is derived from the 1956 Ministry of Interior Population Reporting. The accuracy of this estimate could not be easily calculated.

Apart from this, the accuracy of the estimate of other Towns (item 4, in fact only one town in this case) has not been determined. But the population estimate of this town is so small (accounting for only less than 0.3% of the total)<sup>50</sup> that it should not be considered to affect the reliability of the total estimate to any significant degree. Standard error has been calculated for the surveyed rural areas only and of the present estimate, the population in these surveyed rural areas account for some 89% so that, unless the population of Maji awraja has been grossly underestimated, the standard deviation for the total estimate should not be very far off from that of the surveyed rural population which is correct within the limits of .12%

The rest of Part 1 of the report will deal with characteristics of the population in the surveyed rural areas only, that for the urban areas has been treated in separate reports.

#### KEFA PROVINCE POPULATION IN RURAL AREAS

##### TOTAL RURAL POPULATION AND SEX RATIO

The distribution of the population, in the surveyed rural areas of Kefa province, by five years age groups and by sex is shown in the following Table.

Table 2

##### RURAL POPULATION OF KEFA PROVINCE BY AGE GROUP AND SEX

Age - Group	M A L E		F E M A L E		T O T A L	
	Number	%	Number	%	Number	%
0 - 4	87,950	17.9	91,100	19.1	179,050	18.5
5 - 9	74,900	15.2	68,450	14.4	143,350	14.8
10 - 14	42,150	8.6	29,300	6.1	71,450	7.4
15 - 19	32,100	6.5	24,500	5.1	56,600	5.8
20 - 24	23,550	4.8	47,950	10.1	71,500	7.4
25 - 29	43,200	8.8	57,350	12.0	100,550	10.4
30 - 34	41,350	8.4	46,850	9.8	88,200	9.1
35 - 39	37,600	7.6	35,150	7.4	72,750	7.5
40 - 44	31,300	6.4	27,900	5.9	59,200	6.1
45 - 49	19,900	4.0	13,300	2.8	33,200	3.4
50 - 54	22,800	4.6	13,500	2.9	36,300	3.8
55 - 59	10,900	2.2	3,900	0.8	14,800	1.5
60 & Over	24,850	5.0	17,300	3.6	42,150	4.3
Total	492,550	100.0	476,550	100.0	969,100	100.0

According to the present survey, the rural population of the province (excluding Maji awraja) is 969,100 of whom 492,550 are males and 476,550 are females. This estimate, though much higher than an estimate based on the 1956 Ministry of Interior Population Reporting, is nevertheless considered to be correct within the limits of .12% as already mentioned above.

The ratio of males to females is some 103.4 per 100. By age group, sex ratio varies from as high as 279.5 for the 55-59 years age group to as low as 49.1 for the 20-24 years age group and this constantly changing exaggerated variation of sex ratio by age groups is probably largely due to age misreporting. On the whole, as already indicated above males predominate in number and this predominance, in number, of males over the females is maintained throughout most of the age groups except in the young adult age groups of 20-34 years and to a less extent in the age group of 0-4 years where women outnumber men. Such predominance of males in the rural areas together with the fact that women outnumber men in almost all surveyed towns should probably suggest that generally more women than men migrate to towns. But the sudden drop of the relative number of males in the early adult age groups of 20-34 years possibly indicates that in these age groups more men than women migrate to towns probably in search of jobs and other opportunities. To some extent, the last statement may be supported by the fact that over 85% of the residents absent from their localities or subdivisions at the time of the survey were males and that out of these male absentees over half (51.7%) were in the age groups of 25-34 years.

#### AGE STRUCTURE

Some inaccuracies in age reporting seem to be apparent. The original tabulation of Reported "Population by Individual Ages" shows considerable fluctuation of population size with increasing age. The reported number of those aged 1 year (3,450) is, for instance, shown to be much smaller than the number of those aged 2 years (42,450). In fact the reported number of those aged 1 year is so small that it is enormously less than the number of those in much higher ages, say 22 years (12,200) or 28 years (22,300) or even 32 years (10,350) not to speak of those in the noughts and fives years. This could not be considered to be usual in a population which is reasonably stable like that of the rural population of this province.

Clustering of the population around the fives and noughts years is also evident in the original tabulation of reported tabulation of "Reported Population by Individual Years". This has happened in all the provinces so far covered and is probably the result of a tendency to approximate ages to fives and noughts years by people who do not know their exact ages. To get a smoother curve and a better spread

f the population over all the ages, a cumulative graph of the five years age groups (as given in Table 2) was made and the number of people in each age read from the graph.

The result of this exercise (i.e. population by individual years and by five years age groups as read from the smoothed curve) is shown in the following table.

Table 3  
RURAL POPULATION BY INDIVIDUAL YEARS

Age and Age-Group	Number	%	Age and Age-Group	Number	%	
Under	1	35,000	3.6	30	29,000	1.5
	1	33,000	3.4	31	13,500	1.4
	2	33,000	3.4	32	13,500	1.4
	3	34,000	3.5	33	10,500	1.1
	4	33,000	3.4	34	14,000	1.4
0-4	168,000	17.3	30-34	65,000	6.7	
	5	30,000	3.1	35	12,500	1.3
	6	32,000	3.3	36	12,500	1.3
	7	25,000	2.6	37	12,000	1.2
	8	26,500	2.7	38	11,500	1.2
	9	26,500	2.7	39	10,500	1.1
5-9	140,000	14.4	35-39	59,000	6.1	
	10	22,000	2.3	40	10,500	1.1
	11	24,000	2.5	41	9,500	1.0
	12	23,000	2.4	42	9,500	1.0
	13	20,500	2.1	43	9,500	1.0
	14	19,500	2.0	44	9,000	0.9
10-14	109,000	11.3	40-44	48,000	5.0	
	15	18,500	1.9	45	8,500	0.9
	16	20,000	2.1	46	8,500	0.9
	17	18,500	1.9	47	8,000	0.8
	18	17,500	1.8	48	8,000	0.8
	19	17,500	1.8	49	7,000	0.7
15-19	92,000	9.5	45-49	40,000	4.1	
	20	17,250	1.8	50	7,000	0.7
	21	17,250	1.8	51	6,000	0.6
	22	16,500	1.7	52	6,500	0.7
	23	14,500	1.5	53	6,500	0.7
	24	14,500	1.5	54	6,000	0.6
20-24	80,000	8.3	50-54	32,000	3.3	
	25	14,500	1.5	55	5,000	0.5
	26	13,500	1.4	56	5,000	0.5
	27	14,000	1.4	57	5,000	0.5
	28	14,500	1.5	58	4,500	0.5
	29	13,500	1.4	59	4,450	0.5
25-29	70,000	7.2	55-59	23,950	2.5	
			60 & Over	42,150	4.3	
			Total	969,100	100.0	

From the above table, it can be seen that over two-fifth (some 4%) of the total population are children under 15 years of age, while more than half (52.5%) of the total are under 20 years of age. School aged children (i.e. 5-14 years of age) alone account for some 25.7% of the entire rural population. Nearly 43% of the total fall in the economically active age groups of 15-44 years and almost 10% in the age groups of 45-59 years leaving only 4.3% above 59 years of age. The normally dependent population (i.e. those under 15 years of age and those above 59 years taken together) alone account for over 47% of the total rural population.

The population distribution by age within each sex, as taken from the original age reporting, is given in Table 2. Cumulative graph of the five years age groups was made only for the total population. But taking similar exercises for the populations of both sexes would have given distributions by age similar to that in Table 3 with probably a slightly more concentration of population in the younger ages in the case of females and in the older ages in the case of males.

#### RURAL POPULATION OF THE PROVINCE BY AWRAJAS

The distribution of the surveyed rural population by awrajas is set out in the following table.

Table 4  
POPULATION OF KEFA BY AWRAJAS

Awrajas	Male	Female	T O T A L	
			Number	%
Gimira	39,100	35,500	74,600	7.7
Jimma	169,500	168,900	338,400	34.9
Kefa	78,900	76,200	155,100	16.0
Kulo Konta	48,300	47,500	95,800	9.9
Limu	156,750	148,450	305,200	31.5
Total	492,550	476,550	969,100	100.0

The largest awraja is Jimma with some 35% of the surveyed rural population. Limu is a close second accounting for some 31.5%. The other awrajas are relatively small and the least populated is Kulo Konta forming some 10% of the surveyed rural population.

The distributions, by five year age groups and sex, of the rural population of the different awrajas are set out in Table.

Table 5  
POPULATION BY AWRAJAS AND AGE GROUP & SEX

Age Group	G I M I R A			J I M M A		
	Male	Female	Total	Male	Female	Total
0 - 4	11,300	8,300	19,600	28,800	36,200	65,000
5 - 9	4,900	6,300	11,200	26,000	23,800	49,800
10 - 14	3,100	1,000	4,100	14,700	9,500	24,200
15 - 19	2,100	800	2,900	10,400	7,800	18,200
20 - 24	1,100	4,200	5,300	8,200	17,400	25,600
25 - 29	2,200	4,500	6,700	13,800	19,500	33,300
30 - 34	3,300	3,300	6,600	16,300	17,000	33,300
35 - 39	3,100	2,300	5,400	11,700	11,400	23,100
40 - 44	1,800	2,400	4,200	11,000	10,100	21,100
45 - 49	2,000	900	2,900	6,800	4,700	11,500
50 - 54	2,000	1,100	3,100	9,800	4,900	14,700
55 - 59	500	-	500	2,700	700	3,400
60 & Over	1,700	400	2,100	9,300	5,900	15,200
Total	39,100	35,500	74,600	169,500	168,900	338,400

Age-Group	K U L O K O N T A			K E P A			L I M U		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0 - 4	8,400	8,600	17,000	15,200	16,800	32,000	24,250	21,200	45,450
5 - 9	9,900	8,300	18,200	12,500	11,100	23,600	21,600	18,950	40,550
10 - 14	5,200	4,100	9,300	6,700	3,600	10,300	12,450	11,100	23,550
15 - 19	3,100	3,500	6,600	6,000	4,100	10,100	10,500	8,300	18,800
20 - 24	3,100	4,200	7,300	4,000	7,500	11,500	7,150	14,650	21,800
25 - 29	2,400	2,200	4,600	8,700	11,000	19,700	16,100	20,150	36,250
30 - 34	2,100	5,300	7,400	5,200	5,100	10,300	14,450	16,150	30,600
35 - 39	3,500	4,800	8,300	5,400	4,800	10,200	13,900	11,850	25,750
40 - 44	4,100	3,000	7,100	4,200	4,100	8,300	10,200	8,300	18,500
45 - 49	1,700	800	2,500	3,300	1,800	5,100	6,100	5,100	11,200
50 - 54	2,500	800	3,300	2,600	2,800	5,400	5,900	3,900	9,800
55 - 59	900	500	1,400	1,700	300	2,000	5,100	2,400	7,500
60 & Over	1,400	1,400	2,800	3,400	3,200	6,600	9,050	6,400	15,450
Total	48,300	47,500	95,800	78,900	76,200	155,100	156,750	148,450	305,200

CIVIL STATUS

Each respondent was required to indicate whether he (or she) was single, married, divorced or widowed without further probes into details regarding the types and forms of common practices. Any union reported as married or any separation reported as divorced was accepted as so; single referred to persons who have never been married. The results for the rural areas of the province as a whole are set out in the following table.

**Table 6**  
**CIVIL STATUS BY SEX**

	M A L E		F E M A L E		T O T A L	
	Number	%	Number	%	Number	%
Single	257,900	52.4	198,950	41.8	456,850	47.1
Married	224,450	45.6	240,850	50.5	465,300	48.0
Widowed	4,900	0.9	28,550	6.0	33,450	3.5
Divorced	5,300	1.1	8,200	1.7	13,500	1.4
Total	492,550	100.0	476,550	100.0	969,100	100.0

Nearly half (48%) of the total surveyed rural population were reported married, some 47% single, 3.5% widowed and only 1.4% divorced. This means that the number of singles is considerably less than the number of those aged under 20 years and is due to first marriages at typically early ages. This province has the highest proportion of married people of all the provinces so far covered.

Like in all provinces so far covered, a larger number of men (some 56.5% of all singles or 52.4% of all males compared to only 41.8% in the case of females) than women have been reported to be single. This is because women marry at earlier ages than men as can be seen from the following table which shows civil status by five years age group and sex. Conversely more women than men were reported to be married.

The number of women reported as widowed and divorced are much larger than men, some 86.5% of all widowed and 60.7% of all divorced being women. The situation in all the provinces so far covered is similar.

That women marry at earlier ages than men can be clearly seen from Table 11 below, which sets out civil status by five years age groups for each of the sexes.

Table 7  
CIVIL STATUS BY AGE GROUP

Age - Group	Single	Married	Widowed	Divorced	Total
<u>M A L E</u>					
0 - 4	87,950	-	-	-	87,950
5 - 9	74,900	-	-	-	74,900
10 - 14	42,100	50	-	-	42,150
15 - 19	31,900	150	-	50	32,100
20 - 24	14,700	8,450	100	300	23,550
25 - 29	5,200	35,950	600	1,450	43,200
30 - 34	800	39,350	500	700	41,350
35 - 39	50	36,150	600	800	37,600
40 - 44	-	29,400	1,100	800	31,300
45 - 49	150	19,150	400	200	19,900
50 - 54	150	21,900	500	250	22,800
55 - 59	-	10,650	150	100	10,900
60 & Over	-	23,250	950	650	24,850
Total	257,900	224,450	4,900	5,300	492,550
<u>F E M A L E</u>					
0 - 4	91,100	-	-	-	91,100
5 - 9	68,450	-	-	-	68,450
10 - 14	28,200	1,100	-	-	29,300
15 - 19	8,800	14,900	-	800	24,500
20 - 24	1,900	44,550	150	1,350	47,950
25 - 29	450	55,600	300	1,000	57,350
30 - 34	50	45,100	1,050	650	46,850
35 - 39	-	32,450	1,750	950	35,150
40 - 44	-	24,250	3,050	600	27,900
45 - 49	-	9,100	3,150	1,050	13,300
50 - 54	-	8,050	4,900	550	13,500
55 - 59	-	1,750	1,700	450	3,900
60 & Over	-	4,000	12,500	800	17,300
Total	198,950	240,850	28,550	8,200	476,550

The condition of civil status of the rural population in each of the surveyed awrajas is set out in the following table.

Table 8

## CIVIL STATUS OF RURAL POPULATION BY AWRAJA

Awraja	Single	Married	Widowed	Divorced	Total
<u>M A L E</u>					
Gimira	22,700	16,000	200	200	39,100
Jimma	86,100	79,400	2,800	1,200	169,500
Kefa	43,700	33,100	900	1,200	78,900
Kulo Konta	28,700	19,100	100	400	48,300
Limu	76,700	76,850	900	2,300	156,750
Total	257,900	224,450	4,900	5,300	492,550
<u>F E M A L E</u>					
Gimira	15,800	19,200	500	-	35,500
Jimma	72,600	86,600	7,500	2,200	168,900
Kefa	33,500	35,400	5,300	2,000	76,200
Kulo Konta	23,200	20,800	2,700	800	47,500
Limu	53,850	78,850	12,550	3,200	148,450
Total	198,950	240,850	28,550	8,200	476,550

LITERACY

In accordance with international practice literacy is here shown only for those people who are 10 years of age and over. Moreover, a person is classified literate only if he (or she) can both read and write in any language. However, in the following table, which sets out literacy by sex, those who reported ability to read only are shown separately in order to meet that part of the traditional educational practice in Ethiopia where people learn to read only.

Table 9

## LITERACY FOR RURAL AREAS

	<u>M A L E</u>		<u>F E M A L E</u>		<u>T O T A L</u>	
	Number	%	Number	%	Number	%
Literate	22,950	7.0	550	0.2	23,500	3.6
Read only	3,450	1.0	100	-	3,550	0.6
Illiterate	303,300	92.0	316,350	99.8	619,650	95.8
Total	329,700	100.0	317,000	100.0	646,700	100.0

Of all the provinces so far covered, literacy in the rural areas of this province is among the lowest, only 3.6% of the total population aged 10 years and over having been reported literate. A further 0.6% have indicated ability to read only while the remaining 95.8% are illiterate.

Typical of the situation in all the provinces so far covered, there is a great discrepancy between the numbers of male and female literates, only some 2.3% of the total literate population being females. A negligible number (100) of women have reported ability to read only.

By sex, among the males aged 10 years and over, 7% are literate, 1% are able to read only leaving a vast majority of 92% illiterate. Practically all (99.8%) of the women at the ages of 10 years and over have been reported to be illiterate.

By awraja, literacy varies from as high as 5.8% in Limu to as low as 0.9% in Gimira. In terms of absolute numbers also, Limu has the largest number of literates (12,800). It is followed by Jimma with 5,300 reported literates. The awraja with the smallest number of literates is again Gimirá (only 400 literates). Further detail about condition of literacy in each of the awrajas is entered in Table 10, below.

Table 10  
LITERACY BY AWRAJA

	M A L E		F E M A L E		T O T A L	
	Number	%	Number	%	Number	%
<u>GIMIRA</u>						
Literate	400	1.7	-	-	400	0.9
Read only	-	-	-	-	-	-
Illiterate	22,500	98.3	20,900	100.0	43,400	99.1
Total	22,900	100.0	20,900	100.0	43,800	100.0
<u>JIMMA</u>						
Literate	5,300	4.6	-	-	5,300	2.4
Read only	1,000	0.9	-	-	1,000	0.4
Illiterate	108,400	94.5	108,900	100.0	217,300	97.2
Total	114,700	100.0	108,900	100.0	223,600	100.0
<u>KEFA</u>						
Literate	2,900	5.7	200	0.4	3,100	3.1
Read only	400	0.8	100	0.2	500	0.5
Illiterate	47,900	93.5	48,000	99.4	95,900	96.4
Total	51,200	100.0	48,300	100.0	99,500	100.0
<u>KULO KONTA</u>						
Literate	1,900	6.3	-	-	1,900	3.2
Read only	200	0.7	-	-	200	0.3
Illiterate	27,900	93.0	30,600	100.0	58,500	96.5
Total	30,000	100.0	30,600	100.0	60,600	100.0
<u>LIMU</u>						
Literate	12,450	11.2	350	0.3	12,800	5.8
Read only	1,850	1.7	-	-	1,850	0.9
Illiterate	96,600	87.1	107,950	99.7	204,550	93.3
Total	110,900	100.0	108,300	100.0	219,200	100.0

## ECONOMIC CHARACTERISTICS OF POPULATION

### Economically Active and Non-active Populations

Although it is a common practice in many countries to take 15 years as the lower age limit for the economically active population, in developing and agricultural countries like Ethiopia, children whose ages are substantially below 15 years form part of the economically useful labour force. In fact, in this province, some children under 10 years of age (a total of 6,700, all of them aged 5-9 years) have been reported as economically active, most of them working as unpaid family workers and a few as employees. It therefore, does not sound unreasonable to take 10 years as the lower age limit for economic activity.

The following table shows the classification of the population at 10 years of age and over by sex and broad age groups into active and non-active categories.

Table 11

#### ECONOMICALLY ACTIVE AND NOT ACTIVE POPULATION IN RURAL AREAS BY AGE GROUP & SEX (10 YEARS AND ABOVE)

	ACTIVE			NOT ACTIVE			Total in Age Group
	Male	Female	Total	Male	Female	Total	
10 - 14 No.	33,950	1,700	35,650	8,200	27,600	35,800	71,450
%	47.5	2.4	49.9	11.5	38.6	50.1	100.0
15 - 24 No.	50,700	2,200	52,900	4,950	70,250	75,200	128,100
%	39.6	1.7	41.3	3.9	54.8	58.7	100.0
25 - 44 No.	150,200	4,100	154,300	3,250	163,150	166,400	320,700
%	46.8	1.3	48.1	1.0	50.9	51.9	100.0
45 & Over No.	74,100	3,350	77,450	4,350	44,650	49,000	126,450
%	58.6	2.6	61.2	3.5	35.3	38.8	100.0
Total	308,950	11,350	320,300	20,750	305,650	326,400	646,700
%	47.8	1.7	49.5	3.2	47.3	50.5	100.0

Just under half (49.5%) of the population aged 10 years and over are economically active; and of the economically active only some 3.5% are females. Economically active women account for some 3.6% of all women aged 10 years and over while economically active men account for close to 94% (93.7%) of all men aged 10 years and over.

Of the economically active population some 11.1% are in the age group of 10-14 years; 16.5% in the age groups of 15-24 years, 48.2% in the age groups of 25-44 years and 24.2% in the ages of 45 years and above.

It is interesting to note that the reported most active part of the population, aged 10 years and over, should be the oldest, (aged 45 years and over) and followed by those in the young age group of 10-14 years. Over 61% of those at the ages of 45 years and over were reportedly active and of those in the ages of 10-14 years some 50% were indicated to be active. The corresponding percentages for those in the age groups of 15-24 years and 25-44 years are 41.3% and some 48% respectively.

Status (as employer, employee, etc.)

The following table shows the classification of the economically active population by status into employer, own account worker, employee, unpaid family worker.

Table 12  
STATUS OF ECONOMICALLY ACTIVE POPULATION BY SEX  
(10 Years of age and over)

STATUS	M A L E		F E M A L E		T O T A L	
	Number	%	Number	%	Number	%
Own Account	230,200	74.5	7,250	63.9	237,450	74.1
Employer	-	-	-	-	-	-
Employee	4,850	1.6	2,550	22.5	7,400	2.3
Unpaid Family Worker	73,900	23.9	1,550	13.6	75,450	23.6
Total	308,950	100.0	11,350	100.0	320,300	100.0

Like in other provinces so far covered, almost three-fourth (74%) of the economically active population are own account workers. A further 23.6% are unpaid family workers and employees account for 2.3%. No employers have been reported to exist.

By sex, own account workers form the majority among both the male and the female economically active populations accounting for 74.5% and almost 64% of each sex respectively. Unpaid family workers come second accounting for some 24% of the active male population; but among the females, employees rank second accounting for some 22.5% of the female active population.

The economically active population is further classified by broad age groups as well as by status and sex in Table 13. The vast majority (97.2%) of the economically active in the age group of 10-14 years are unpaid family workers and almost all of the remaining are employees.

The number of female unpaid family workers declines sharply after the age of 14 years while in the case of males it starts to fall in big numbers after the age of 24 years and even then not so sharply. The relative number of own account workers tends to grow with increasing age for both sexes. Of course it is clear from the above table that the number of female own account workers is much less than that of men. Employees tend to concentrate in the young adult ages for both sexes.

Table 13  
ECONOMICALLY ACTIVE POPULATION BY STATUS AND AGE GROUP  
(10 Years old and above)

Age-Group	Own Account Worker		Employer		Employee		Unpaid Family Worker	
	Male	Female	Male	Female	Male	Female	Male	Female
10 - 14	100	-	-	-	500	400	33,350	1,300
15 - 24	13,650	450	-	-	1,750	1,600	35,300	150
25 - 44	142,800	3,650	-	-	2,200	450	5,200	-
45 & Over	73,650	3,150	-	-	400	100	50	100
Total	230,200	7,250	-	-	4,850	2,550	73,900	1,550

#### Occupation

In the following table the economically active population has again been classified by occupation.

Table 14  
ECONOMICALLY ACTIVE POPULATION BY OCCUPATION AND SEX  
(10 Years old and above)

Occupation	Male	Female	TOTAL	
			Number	%
Farmer	800	300	1,100	0.4
Cultivator	87,350	750	88,100	27.5
Share cropper	132,750	2,250	135,000	42.2
Agricultural Labourer	53,850	-	53,850	16.8
Non Agricultural Labourer	5,900	6,550	12,450	3.9
Herder	26,600	950	27,550	8.6
Merchant	1,500	550	2,050	0.6
Weaver	200	-	200	-
Total	308,950	11,350	320,300	100.0

Typical of the situation in all other provinces so far covered, agriculture is by far the main stay of the rural population of this province with some 95.5% of the economically active population engaged in occupations pertaining to agriculture. Over 42% of the active population are share croppers, some 27.5% cultivators, nearly 17% agricultural labourers, 8.6% herders and 0.4% farmers. The remaining consist of almost 4% non-agricultural labourers, 0.6% merchants and

a very small number of weavers. Distinction is here made between a farmer, a cultivator and share cropper. A farmer refers to a person who cultivates his land mainly with hired labour. A person who cultivates his own land without hired labour is referred to as a cultivator. A person who undertakes the cultivation of another persons's land on a crop sharing basis is referred to as a share cropper.

As might have been expected, most of the harders are very young people over 85% of them being under 15 years of age and over 97% of them under 20 years of age. Agricultural labourers also tend to concentrate in the younger age groups.

The most important occupation among the males is that of share croppers accounting for some 43% of the total male economically active population. Second and third, in number, come the cultivators and agricultural labourers forming some 28.3% and 17.4% of the male active population respectively. Among the females, however, non-agricultural labourers are the most numerous accounting for well over half (57.7%) of the female active population and second come share croppers accounting for close to 20%.

#### SIZE AND COMPOSITION OF HOUSEHOLD

The total number of reported households in the surveyed rural areas of the province was 246,000. The following table shows the classification of the rural population by relationship and sex, while Table 16 sets out the average size of household by awraja.

Table 15  
COMPOSITION OF HOUSEHOLDS BY RELATIONSHIP TO HEAD

	Male	Female	Total
Head of household	236,650	9,350	246,000
Husband	50	-	50
Wife	-	236,650	236,650
Son	223,900	-	223,900
Daughter	-	185,600	185,600
Step children	3,600	2,050	5,650
Other relations	23,100	39,200	62,300
Visitor	-	-	-
Servant	4,650	3,150	7,800
Others	600	550	1,150
Total	492,550	476,550	969,100

Comparison of the above table with Table 16 (Civil Status by sex) reveals that the number of reported male heads of households (236,650) is larger than the number of married males (224,450) and even than the number of ever married males (234,650) indicating the presence of a number of never married male heads of households.

The total number of female heads of households (9,350) is much less than the number of widowed and divorced women taken together (36,750) or even than the number of widows only (28,550) showing that not all widowed and divorced women are heads of households. Further details about the composition of household in the rural areas of the province are entered in the above table.

As regards size of household, the average for the surveyed rural areas of the province is about 3.94 persons (or individuals) to a household; and variations between the awrajas range from as low as 3.57 for Limu to as high as 4.52 for <sup>Gimira</sup> further details are shown in the following table.

Table 16  
SIZE OF HOUSEHOLD BY AWRAJA

Awraja	Number of Households	Number of Persons	Average size of Household
Gimira	16,500	74,600	4.52
Jimma	85,600	338,400	3.95
Kefa	36,300	155,100	4.27
Kulo Konta	22,100	95,800	4.33
Limu	85,500	305,200	3.57
Total	246,000	969,100	3.94

AVERAGE AGE AT FIRST MARRIAGE

Information regarding age at first marriage was sought from all ever married women. Out of a total of 277,600 ever married women 41,900 (15.1%) were not able to state their ages at first marriage and no woman was reported to have first married under the age of 19 years. The following table sets out the detail.

Table 17  
AGE AT FIRST MARRIAGE FOR WOMEN

Age	Under 10 Years	10 - 19 Years	20 - 29 Years	30 Years and over	Not stated	Total
Number	-	209,850	25,850	-	41,900	277,600
%	-	75.6	9.3	-	15.1	100.0

The age of first marriage for women of this province seems to be among the highest. No first marriage has been reported at any age below 10 years. Although the age with the highest reported number of first ages is 15 years (with some 19% of all ever married women) it could not really be said that first marriages are concentrated at any single age. Instead most of first marriages are spread roughly evenly over the ages of 14-20, with 74.4% of all ever married women (or 87.6% of those women who gave their ages at their first marriage) having reported to have been first married at these ages. The calculated average age of first marriage for those ever married women who gave ages at their first marriage is about 16 years (or 16 years and some 4 months).

The number of first marriages falls sharply after the age of 20 and continues to fall until the age of 28 years after which no first marriage was reported.

NUMBER OF TIMES MARRIED FOR EVER MARRIED WOMEN

In Table 18 below, the 277,600 ever married women of the surveyed rural areas of the province have been classified according to the number of times they have been married.

Table 18

NUMBER OF TIMES MARRIED FOR MARRIED WOMEN

	NUMBER OF TIMES MARRIED						Total
	1	2	3	4	5	6 & Over	
Number of women	183,750	72,400	16,150	3,700	1,100	500	277,600
%	66.2	26.1	5.8	1.3	0.4	0.2	100.0

Almost two-thirds (66.2%) of the ever married women have been married only once and some 26% of them twice. Those who have been married three times form 5.8% of the total ever married women and only 1.9% of them have been married 4 or more times.

VITAL RATES

To determine vital rates, the numbers of births and deaths (by age at death) that occurred in the 12 months preceding the date of survey were sought. Variations of calculated vital rates between the awrajas were considerable, but the overall figures for the rural parts of the province are shown in the following table.

### VITAL RATES

	Number per 1000 persons
Birth	54.1
Death	25.9
Natural increase	28.2
Infant mortality	84.9

With a crude birth rate of 54.1 per 1000 persons the province has the highest birth of all the provinces so far covered and the death of 25.9 per 1000 persons is also among the highest such rates for the provinces so far covered. The natural increase rate of 28.2 per 1000 persons is also among the very highest such rates of provinces so far covered. The crude birth rate of 84.9 per 1000, though not probable high enough, is none - the - less among the highest such results so far found.

The recording of vital events from memory spreading back over a long period (12 months) is a difficult problem and, generally under reporting of such events should be suspected. Apart from sampling errors, these estimates may suffer because of the difficulty of obtaining a record for an exact 12 months period so that, for example, some women may tell about births during the previous thirteen months and others about births during the previous eleven or ten months only, with no assurance that the average period reported is exactly twelve months. Some mothers may also feel reluctant to tell strangers about infant deaths, especially when the child dies within a short period after birth.

#### FERTILITY

The number of females and of ever married women at the ages of 10 years and above by five years age groups and by total live births and total number of children reported alive at the time of survey is set out in the following table.

Table 20  
 FEMALES POPULATION 10 YEARS OF AGE AND OVER BY AGE GROUP  
 NUMBER OF CHILDREN BORN AND NOW ALIVE

Age Group	Number of Female		Total Children	
	In Age Group	Ever Married	Born Alive	Now Alive
10 - 14	29,300	1,100	250	200
15 - 19	24,500	15,700	8,700	6,800
20 - 24	47,950	46,050	68,450	52,300
25 - 29	57,350	56,900	133,950	99,750
30 - 34	46,850	46,800	142,650	102,800
35 - 39	35,150	35,150	126,600	87,250
40 - 44	27,900	27,900	109,900	71,300
45 - 49	13,300	13,300	48,600	31,550
50 - 54	13,500	13,500	55,850	32,500
55 - 59	3,900	3,900	15,350	9,750
60 & Over	17,300	17,300	76,450	40,600
Total	317,000	277,600	786,750	534,800

The total number of children to a total of 277,600 ever married women, in the indicated age groups, is 786,750 and this gives an average of some 2.8 live births per ever married woman. Relative to other provinces, this average is very low and is very difficult to reconcile with the fact that the above indicated crude birth rate for this province is the highest. Of these children, 534,800 (i.e. only 68%) were reported to be alive at the time of the survey giving an average of some 1.9 living children per ever married woman. Calculations are made in reference to only ever married women, because information on fertility was collected only for such women.

Women aged 60 years and over have the highest live birth rate with an average of 4.2 live births per ever married woman. Second come women in the 50-54 years age group with 4.1 live births per ever married woman. All other age groups have live birth averages less than 4 per ever married woman. The average number of live births per ever married woman in every one of the age groups 30 years and over is above 3. The average for all ever married women 30 years of age and over is 3.6 live births per woman, and some 34.7% of the children born to these women have died.

Table 21 below gives the number of children born alive during the 12 months preceding the survey date and those of them reported alive at the time of the investigation by age of ever married women.

Table 21

## BIRTHS IN LAST 12 MONTHS

Age Group of women	Number of ever Married women	NUMBER OF CHILDREN	
		Born in last 12 months	Now Alive
10 - 14	1,100	-	-
15 - 19	15,700	3,950	3,800
20 - 24	46,050	14,100	13,800
25 - 29	56,900	16,000	15,600
30 - 34	46,800	9,650	9,450
35 - 39	35,150	5,500	5,000
40 - 44	27,900	2,700	2,500
45 - 49	13,300	300	300
50 - 54	13,500	100	100
55 - 59	3,900	100	100
60 & Over	17,300	-	-
Total	277,600	52,400	50,650

The reported number of children born alive to the 277,600 ever married women during the 12 months preceding the date of survey is 52,400 and 50,650 (or some 96.7%) of these infants were reported still alive at the time of the investigation. This gives an average of 1 live birth, during the 12 months, to every 5.3 ever married women. It is equivalent to saying that, on the average, every ever married woman gives birth to one child in over every 5 years. Considering only those ever married women between the ages of 20-44 years, the average rate of birth during these 12 months is 1 live birth to every 4.4 ever married women. The age group with the highest average birth rate during the 12 months is the 20-24 years with 1 live birth to every 3.3 ever married women. It is closely followed by the 25-29 years age group, with 1 live birth to every 3.6 ever married women. Reports of birth events, during the 12 months, to women at the ages of 55 years and over (or even 50 years and above) should be considered with some reservation.

## PART II

### MAIN RESULTS ON AGRICULTURE AND LIVESTOCK

1. General: Information on agriculture, livestock, land ownership and tenancy systems, agricultural credit, rural household loans, and agricultural storage systems is presented in this part of the report. The sample design is given in appendix I, estimates of errors of some characteristics in appendix II and definitions of important terms used in appendix III.

2. Coverage and time reference: The survey covered five out of the six awrajas (sub-provinces). The awraja of Madji was left out of the survey because it was inaccessible at the time. Within the five awrajas all rural areas and households had equal chances of being in the sample. But all municipal towns were excluded from the sample frame and were treated separately in what is known as the urban surveys. The Korro area was the administrative sub-division taken as a unit in which to work.

About ten teams simultaneously started actual field work in the provinces of Kēfa and Illubabor in December 1966. The work in the two provinces was completed around the middle of march 1967. The reference period for most of the agricultural questions asked was the last completed agricultural year.

3. The Sample: The sampling fraction used for the Awrajas of Gimira, Jimma, Kefa and Kulo-Konta was 1/100. The awraja of Limu, however, had a sampling fraction of 1/50. (See appendix I). On the whole there were a total of 3315 households in the sample for detailed interviewing.

4. Units of Land Measurement: The units of land measurement reported in Kefa province were the "timad, "Ken, "digging and boy".

There were a large number of fields whose land measurement units were not given. So this necessitated the determination of area under crops and total cultivated area by getting the average size of a field from the measured fields and multiplying this by the total number of fields both measured and unmeasured.

Table A1

## AREA UNDER CROPS

Awraja Crop	Gimira		Jimma		Kefa		Kulokonta		Limu		Total	
	Hect.	%	Hect.	%	Hect.	%	Hect.	%	Hect.	%	Hect.	%
Teff	.860	4	17,471	28	7,534	23	2,381	14	15,265	23	43,511	22
Wheat	-	-	884	1	294	1	329	2	250	-	1,751	1
Barley	543	3	1,793	3	3,387	10	1,494	9	1,195	2	8,412	4
White Sorghum	1,811	8	9,225	15	196	1	228	1	7,029	10	18,489	9
Red Sorghum	4,934	23	1,936	3	2,528	8	2,102	12	2,542	4	14,042	7
African Millet	-	-	693	1	221	1	-	-	5,181	8	6,095	3
Maize	6,700	31	16,491	26	6,847	21	1,824	11	17,432	26	49,294	24
Horse Beans	45	-	693	1	3,117	10	1,444	9	598	1	5,897	3
Peas	-	-	1,004	2	1,718	5	1,039	6	500	1	4,261	2
Coffee	2,671	12	5,162	8	3,607	12	2,609	15	12,599	19	26,648	14
Enset	3,350	15	2,032	3	1,791	5	2,153	13	514	1	9,840	5
Godere	589	3	4,493	7	368	1	380	2	472	1	6,302	3
Others	180	1	1,005	2	618	2	1,011	6	2,725	4	5,539	3
<b>Total</b>	<b>21,683</b>	<b>100</b>	<b>62,882</b>	<b>100</b>	<b>32,226</b>	<b>100</b>	<b>16,994</b>	<b>100</b>	<b>66,302</b>	<b>100</b>	<b>200,087</b>	<b>100</b>

5. Pattern of Cultivation: The area under different crops gave the total area by awrajas devoted to the growing of crops the last agricultural year. Accordingly maize was the most important crop with 24% of total area under crops. Teff was second with 22% of the area and coffee third with 14 percent.

Table A2

## AREA UNDER SELECTED CROPS BY PROVINCES

Province	Crops											
	Teff		Barely		Maize		Sorghum		Peas		Coffee	
	Hect.	%	Hect.	%	Hect.	%	Hect.	%	Hect.	%	Hect.	%
Wollo	103,036	27	65,672	6	-	-	53,301	15	27,958	8	-	-
Arussi	13,470	6	98,784	44	13,470	6	-	-	11,225	5	-	-
Gojam	109,983	39	59,222	21	8,460	3	14,100	5	11,280	4	-	-
Shoa	258,608	23	224,876	20	123,682	11	101,194	9	44,975	4	-	-
Tigre	68,496	24	46,035	16	8,712	3	32,739	12	-	-	-	-
Wollega	61,884	28	12,008	6	62,910	29	22,091	10	5,432	2	15,373	7
Gemu-Goffa	6,895	12	9,299	16	17,226	30	11,761	20	-	-	-	-
Begemdir	82,573	33	30,115	12	-	-	26,185	10	9,061	4	-	-
Sidamo	14,170	7	21,962	11	34,606	18	6,399	3	-	-	14,814	8
Kefa	43,511	22	8,412	4	49,294	24	32,531	16	4,261	2	26,648	14

Table A3

## TOTAL CULTIVATED AREA IN HECTARS

Awraja	Cultivated Area				Cultivated area outside as % of total Cultivated area
	Inside the sub-divisions	Outside the sub-divisions	Total	%	
Gimira	20,054	1,575	21,729	11	8
Jimma	61,566	1,434	63,000	31	2
Kefa	31,019	1,301	32,320	16	4
Kulo-Konta	15,578	1,824	17,402	9	10
Limu	61,950	5,348	67,298	33	8
Total	190,167	11,582	201,749	100	6

Table A4

## AVERAGE SIZE OF FIELD

Awraja	Fields		Cultivated area		Average Cultivated area per field (hectars)
	Number	%	(hectars)	%	
Gimira	48,000	6	21,729	11	0.45
Jimma	263,600	35	63,000	31	0.24
Kefa	131,700	18	32,320	16	0.25
Kulo Konta	68,700	9	17,402	9	0.25
Limu	242,250	32	67,298	33	0.28
Total	754,250	100	201,749	100	0.37

6. Total Cultivated area: To obtain total cultivated area, the areas under woods and forest, permanent pastures and meadows, and fallow land were added to the area under crops in each Awraja. From all indications these categories were under estimated by virtue of the fact that work was mainly concentrated on fields that had crops on them the preceding year.

According to this finding 33% of the total cultivated area was in Limu Awraja, 31% in Jimma, 16% in Kefa, 11% in Gimira and 9% in Kulo-Konta.

In Kulo-Konta 10% of the cultivated area was outside the sub-division and 8% each were outside in Gimira and Limu.

7. Average Size of Fields: There were 754,250 fields 35% of which were in Jimma, 32% in Limu, 18% in Kefa. 9% in Kulo-Konta and 6% in Gimira. The average size of a field varied from 0.45 hectares in Gimira to 0.24 in Kefa awraja. The overall average came to 0.37 of a hectare.

8. Cultivated Area Per Holding and Per Household: There were an estimated number of 246,000 households. Thirty-five percent each were from the awrajas of Limu and Jimma, 14% in Kefa 9% in Kulo-Konta and another 7% in Gimira. Out of the total number of households 224,050 operated some land. These are called holdings in this report.

Table A5

AVERAGE CULTIVATED AREA PER HOLDING AND PER HOUSEHOLD

Awraja	Households		Holdings		% of households reporting land	Cultivated Area (hect.)	
	Number	%	Number	%		per household	per holding
Gimira	16,500	7	15,900	7	96	1.32	1.37
Jimma	85,600	35	80,400	36	94	0.74	0.78
Kefa	36,300	14	32,500	15	90	0.89	0.99
Kulo-Konta	22,100	9	20,200	9	91	0.79	0.86
Limu	85,500	35	75,050	33	88	0.79	0.90
Total	246,000	100	224,050	100	91	0.82	0.90

The average cultivated area per household was 0.82 hectares and the average per holding came to 0.90 hectares. This average size of a farm operation per holding varied from 0.78 hectares in Jimma to 1.37 hectares in Gimira awraja.

Table A6

## COMPARISON OF SOME CHARACTERISTICS BY PROVINCE

Province	Average size of field (hectars)	Average Cultivated Area per household	Area (hectars) per holding
Tollo	0.30	0.84	0.97
Arussi	0.54	1.64	1.94
Shoa	0.48	1.58	0.67
Gojam	0.30	0.93	1.15
Tigre	0.33	1.02	1.27
Wollega	0.29	1.02	1.27
Gemu Goffa	0.18	0.45	0.54
Begemdir	0.41	1.00	1.40
Sidamo	0.24	0.48	0.52
Kefa	0.37	0.82	0.90

Comparing the figures in this table Arussi is so far the highest in the average size of fields, average cultivated area per household and per holding.

Table A7

## PERCENTAGE DISTRIBUTION OF HOLDINGS BY SIZE

Total holdings = 100%

Awraja	Size Group in '000 Square Meters							
	0-5	5-10	10-15	15-20	20-30	30-40	40-50	50+
Gimira	19	44	15	12	6	-	2	2
Jimma	45	33	11	7	3	1	7	-
Kefa	35	38	16	5	3	1	2	-
Kulo-Konta	50	31	8	8	4	-	-	-
Limu	44	34	12	6	6	1	-	-
Total	41	35	12	7	4	1	-	-

9. Size and Distribution of Holdings: The distribution of holdings according to size irrespective of the type of tenancy or land ownership showed that 41% of the holdings were less than or equal to half a hectare in size. Only 5% of the holdings were two or more hectares. It is very important to keep in mind that these estimates were based only on measured fields and as such the size were under estimated. This is because all fields belonging to a holding particularly if they were big fields were not measured.

Table A8

## PERCENTAGE DISTRIBUTION OF HOLDINGS BY SIZE AND PROVINCES

Total holdings = 100%

Province	Size Group in 1000 sq. meters					
	0-5	5-10	10-15	15-20	20-30	30+
Arussi	8	23	15	14	20	20
Gojam	27	27	18	12	10	6
Shoa	23	22	16	11	13	15
Tigre	45	23	16	5	6	5
Wollo	55	25	11	3	4	2
Wollega	29	36	14	10	7	4
Gemu Goffa	73	19	4	2	2	-
Begemdir	40	30	13	9	5	3
Sidamo	73	18	5	2	1	1
Kefa	41	35	12	7	4	1

Table A9

## PERCENTAGE DISTRIBUTION OF HOLDINGS BY NUMBER OF PARCELS

Total holdings = 100%

Awraja	Number of Parcels								
	1	2	3	4	5	6	7	8	9+
Gimira	54	19	20	5	1	1	-	-	-
Jimma	37	23	23	11	4	2	-	-	-
Kefa	28	18	20	16	10	5	1	1	1
Kulo-Konta	58	26	8	4	2	-	1	-	1
Limu	35	24	19	15	5	1	-	-	1
Total	38	23	20	12	5	2	-	-	-

A provincial comparison of the size of holdings with the constraint already mentioned in the preceding section showed that relatively less number of holdings were less than half a hectare in Arussi province compared to the provinces presented up to date. By the same argument Gemu Goffa and Sidamo had relatively more holdings in the less than half a hectare category in comparison to the other provinces.

10. Fragmentation of Holdings: The number of distinct parcels by holdings showed that 38% of the holdings had only one parcels of land, 23% two parcels, 20% three parcels and 2% six parcels. (See definition of parcel in appendix 4).

Table A 10

PERCENTAGE DISTRIBUTION OF HOLDINGS BY NUMBER OF PARCELS BY PROVINCES  
Total holdings = 100%

Province	Number of Parcels					
	1	2	3	4	5	6+
Wollo	19	24	23	14	9	11
Arussi	26	20	23	15	8	8
Gojam	26	27	24	12	6	5
Shoa	32	23	17	12	6	10
Tigre	16	25	20	16	7	16
Wollega	26	21	20	13	10	10
Gemu Goffa	47	32	14	5	2	-
Begemdir	19	25	27	16	8	5
Sidamo	65	23	8	3	1	-
Kefa	38	23	20	12	5	2

According to these findings land is relatively less fragmented in the provinces of Shoa, Wollega, Arussi, Gemu Goffa, Kefa and Sidamo. Fragmentation seems to be more evident in Tigre and Wollo provinces.

11. Summary on Holdings: In the five Awrajas of Kefa covered by the survey there were an estimated 246,000 households, and 224,050 holdings. There were 200,087 hectares of land under different kinds of crops and a total cultivated area of 201,749 hectares. There were 754,250 distinct fields under crops and the average size of a field was 0.37 of a hectare. The average size of a holding was 0.90 hectares and 91% of the households operated some land.

12. Land Tenure: Holdings by tenure classification showed that 38% were purely owned 59% rented and 3% partly owned and partly rented.

The distribution of households by tenure and number of parcels revealed that 9% of the households did not have any parcels of land or did not operate a farm. Thirty four percent of the households were land owners while 54% entirely rented their land, and 3% partly owned and partly rented.

Table A 11

## PERCENTAGE OF HOLDINGS BY TENURE

Awraja	Owned	Rented	Partly owned and partly rented	Total	Number of holdings reporting
Gimira	19	81	-	100	159
Jimma	41	57	2	100	804
Kefa	33	65	2	100	325
Kulo-Konta	49	44	7	100	202
Limu	37	59	4	100	1,501
Total	38	59	3	100	2,991

Table A12

## HOUSEHOLDS BY LAND TENURE AND NUMBER OF PARCELS

Tenure Group	% of households	Percent of Households with Number of parcels (Total holdings = 100%)									% of households owning livestock	
		0	1	2	3	4	5	6	7	8		9+
Owned Land	34	-	39	22	20	11	5	2	1	-	-	87
Rent land	54	-	40	22	18	13	5	2	-	-	-	70
Partly own and partly rent	3	-	6	31	34	12	6	7	2	2	-	82
No land	9	100	-	-	-	-	-	-	-	-	-	43
Total	100	9	35	21	18	11	4	2	-	-	-	73

Table A13

## RENTED HOLDINGS BY MODE OF PAYMENT OF RENT

Awraja	Supplied with	Mode of payment of rent					Total
		Crop	Cash	Crop cash	Service	Total	
Gimira	Oxen	-	-	-	-	-	-
	No oxen	200	12,400	-	-	-	12,600
Jimma	Oxen	4,000	1,100	200	-	-	5,300
	No oxen	13,800	24,800	2,200	-	-	40,800
Kefa	Oxen	2,800	1,600	800	-	-	5,200
	No oxen	700	15,300	200	-	-	16,200
Kulo Konta	Oxen	1,600	600	200	-	-	2,400
	No oxen	1,100	6,800	300	-	-	8,200
Limu	Oxen	6,550	500	500	-	-	7,550
	No oxen	11,900	24,400	2,300	-	-	38,600
Total	Oxen	14,950	3,800	1,700	-	-	20,450
	No oxen	27,700	83,700	5,000	-	-	116,400

13. Mode of Payment of Rent: In this province the most common mode of payment by tenants to their landlords was payment in cash. Payment in kind was also important. However payment in personal services was not reported. The majority of tenants were not provided with oxen or other draft animals by their landlords. Only 15% of the tenants were provided with oxen.

Table A14  
PURPOSE & AVERAGE AMOUNT OF LOANS

Purpose of Loan	Loans		Average Amount of loan (Eth.\$)
	Number	%	
Purchase of food	496	40	34.50
Purchase of seed	21	2	24.00
Payment of taxes	147	12	26.34
Purchase of clothes	149	12	29.41
Purchase of cattle	78	6	52.05
For Cermonies	85	7	60.00
Medical care	63	5	42.00
For trading	58	5	100.89
Construction (Building)	33	2	177.03
Others	110	9	86.00
Total	1,240	100	47.39

14. Loans: Loans from friends and local money lenders was the most common in Kefa province. Forty percent of the loans were used for the purchase of food and the average amount of loan used for this purpose was about 34 dollars. Loans for the purchase of cloth and the payment of taxes made 12% each of the total loans. Although there were fewer cases of loans for trading and construction work the average amount of loan was higher for these purposes. They were \$100 and \$177 respectively. For this province the average loan was worked out to be about \$47.

Table A15

## PERCENTAGE DISTRIBUTION OF LOANS BY SIZE

-Total number of loans = 100%

	Amount of Loans (Eth.\$)									No of Loans in the sample
	1-5	6-10	11-15	16-20	21-25	26-30	31-40	41-50	51+	
Gimira	6	8	-	6	-	10	-	17	53	11
Jimma	-	3	3	5	2	10	10	12	55	237
Kefa	1	4	5	4	3	11	14	17	41	87
Kulo Konta	2	8	8	13	1	10	9	11	38	73
Limu	-	3	2	6	3	6	8	7	65	832
Total	-	3	3	6	2	8	9	9	60	1,240

The percentage distribution of loans for Kefa showed that the majority 60% of loans were \$51 or over. The loans between 1 and 5 dollars made less than one percent of total loans.

Table A16

## PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY AMOUNT AND NUMBER OF LOANS

Number of Loans	Amount of Loan (Eth.\$)										No of households in the sample
	1-10	11-20	21-30	31-40	41-50	51-60	61-80	81-100	101+	Total	
One loan	19	21	15	9	8	4	3	6	7	92	1,044
Two loans	-	-	1	2	1	-	1	1	2	8	84
Three loans	-	-	-	-	-	-	-	-	-	-	9
Total	19	22	16	11	9	4	4	6	9	100	1,137

About 92% of the indebted households had only one loan at a time. None had said they had received loans from three sources at one time. Of the indebted households 19% had taken loans between 1 and 10 dollars, 22% between 11 and 20 dollars etc.

Table A17

## LOANS BY TYPE AND MODE OF REPAYMENT

Type of loan	Mode of Repayment							
	Cash		Crop		Other		Total	
	Number	%	Number	%	Number	%	Number	%
Cash	974	80	118	10	12	1	1,104	91
Crop	17	1	66	6	2	-	85	7
Others	15	1	2	-	16	1	33	2
Total	1,006	82	186	16	30	2	1,222	100

Loans by mode of repayment showed that 80% of the loans were in cash and paid back in cash, 10% was in cash but paid back in crops. Cash loans made 91% of total loans.

Table A18  
NUMBER OF CATTLE BY KIND

Awraja	Cows (Lam)	Heifers (Gidder)	Oxen (Bere)	Young Bulls (Weifen)	Calves (Tijja)	Total	
						Number	%
Gimira	5,000	900	1,600	800	2,900	11,200	2
Jimma	75,900	23,800	80,500	22,600	48,800	252,600	42
Kefa	36,500	13,600	31,700	12,300	18,400	112,500	19
Kulo Konta	31,000	11,100	12,100	6,300	15,700	76,200	13
Limu	11,250	24,000	56,550	17,700	37,250	146,750	24
Total	160,650	73,400	182,450	59,700	123,050	599,250	100

Table A19  
NUMBER OF SHEEP BY KIND

Awraja	Ewe (Set)	Young Stock (Tebot)	Ram (Mukut)	Lamb (Gilgel)	Total	
					Number	%
Gimira	4,200	200	-	1,600	6,000	3
Jimma	23,200	3,200	2,100	12,000	40,500	24
Kefa	41,400	8,700	3,000	28,300	81,400	47
Kulo Konta	5,800	1,600	100	1,700	9,200	5
Limu	19,750	4,450	1,200	9,850	35,250	21
Total	94,350	18,150	6,400	53,450	172,350	100

15. Livestock Numbers: There were a total of 599, 250 head of cattle, 172,350 Sheep, 90,850 goats, 11,700 Donkeys, 10,900 Horses and 22,700 mules. Eighty seven percent each of the donkeys and horses and 92% of the mules were actually doing some work at the time of asking.

As far as livestock distribution among the awrajas were concerned 42% of the cattle were found in Jimma awraja 24% in Limu etc. For the distribution of sheep Kefa awraja was highest with 47% followed by Jimma with 24 percent. Again Jimma awraja came first in goats with 34% followed by Limu 27 percent.

Table A20

## NUMBER OF GOATS BY KIND

Awraja	She goat (Set)	Young Stock (Tebot)	Buck (Wetete)	Kid (Gilgel)	Total	
					Number	%
Gimira	700	-	-	400	1,100	1
Jimma	16,200	2,300	1,600	10,400	30,500	34
Kefa	8,800	2,100	700	6,100	17,700	19
Kulo Konta	10,600	900	1,400	4,500	17,400	19
Limu	13,600	1,450	1,600	7,500	24,150	27
Total	49,900	6,750	5,300	28,900	90,850	100

Table A21

## NUMBER OF OTHER LIVESTOCK BY KIND AND PERCENTAGE WORKING

Awraja	Lonkey (Ahya)		Horse (Feres)		Mule (Beklo)		Poultry
	Owned	% Working	Owned	% Working	Owned	% Working	
Gimira	-	-	200	100	300	100	12,400
Jimma	5,900	81	4,100	88	7,900	80	38,800
Kefa	1,200	92	3,500	91	4,400	98	121,700
Kulo Konta	500	60	2,500	76	2,100	90	32,500
Limu	4,100	91	600	92	8,000	96	74,650
Total	11,700	87	10,900	87	22,700	92	280,050

Table A22

## NUMBER OF LIVESTOCK PER HOUSEHOLD

Name of Livestock	Gimira	Jimma	Kefa	Kulo Konta	Limu	Total
Cows	0.3	0.9	1.0	1.4	0.1	0.7
Heifers	0.1	0.3	0.4	0.5	0.3	0.3
Oxen	0.1	0.9	0.8	0.5	0.7	0.7
Young Bulls	0.04	0.3	0.3	0.3	0.2	0.2
Calves	0.2	0.6	0.5	0.7	0.4	0.5
TOTAL CATTLE	0.8	3.0	3.0	3.4	2.0	2.4
Sheep	0.4	0.5	2.0	0.4	0.4	0.7
Goats	0.07	0.4	0.5	0.8	0.3	0.4
Donkeys	-	0.07	0.03	0.02	0.05	0.05
Horses	0.01	0.05	0.1	0.1	0.07	0.04
Mules	0.02	0.1	0.1	0.09	0.09	0.09

Table A23

## NUMBER OF LIVESTOCK PER HOUSEHOLD BY PROVINCES

Province	Type of Livestock					
	Cattle	Sheep	Goats	Donkeys	Horses	Mules
Arussi	7.3	3.1	1.0	0.5	0.6	0.2
Begemdir	4.3	0.6	1.2	0.4	0.1	0.05
Gemu Goffa	2.3	0.4	0.3	0.1	0.1	0.1
Gojam	3.7	0.8	0.4	0.3	0.2	0.1
Wollo	2.6	1.7	1.3	0.5	0.1	0.1
Wollega	5.2	0.9	0.5	0.2	0.08	0.08
Tigre	3.6	1.2	2.8	0.5	-	0.1
Shoa	5.5	1.6	1.1	0.5	0.3	0.1
Sidamo	4.4	0.9	0.7	0.12	0.2	0.07
Kefa	2.4	0.7	0.4	0.05	0.4	0.09

16. Livestock Numbers per Household: The estimate on the number of different livestock per household showed that on the average a household had 2.4 head of cattle, 0.7 sheep, 0.4 goats, 0.05 donkeys, 0.04 horses and 0.09 mules. The awraja of Kulo-Konta had the highest number of cattle per household of 3.4.

Table A24

## PERCENTAGE OF HOUSEHOLDS REPORTING DIFFERENT NUMBER OF CATTLE

Total households = 100%

Awraja	Number of Cattle							
	0	1-2	3-4	5-8	9-12	13-18	19-30	31+
Gimira	65	29	4	2	-	-	-	-
Jimma	24	32	23	14	5	1	1	-
Kefa	32	26	19	15	4	2	1	1
Kulo Konta	18	33	27	14	5	2	1	-
Limu	44	24	15	12	3	1	1	-
Total	34	28	19	13	4	1	1	-

Table A25

## PERCENTAGE OF HOUSEHOLDS REPORTING DIFFERENT NUMBER OF SHEEP

Total households = 100%

Awraja	Number of Sheep					
	0	1-2	3-4	5-8	9-12	13+
Gimira	79	17	4	-	-	-
Jimma	79	15	5	1	-	-
Kefa	46	22	16	12	2	-
Kulo Konta	84	10	4	1	1	-
Limu	70	20	5	3	1	1
Total	71	18	6	3	1	1

Table A26

## PERCENTAGE OF HOUSEHOLDS REPORTING DIFFERENT NUMBERS OF GOATS

Total households = 100%

Awraja	Number of Goats					
	0	1-2	3-4	5-8	9-12	13+
Gimira	96	4	-	-	-	-
Jimma	85	10	4	1	-	-
Kefa	85	7	6	1	1	-
Kulo Konta	64	27	6	2	1	-
Limu	76	17	6	1	-	-
Total	81	13	5	1	-	-

A provincial comparison of livestock per household indicates that Arussi with 7.3 head of cattle was highest and Gemu Goffa with 2.3 the lowest.

17. Livestock Distribution: The distribution of different types of livestock by households showed that 34%<sup>of</sup> total households did not have or report any cattle, 71% no sheep, and 81% no goats. The majority of the cattle owning households had one or two cattle. Only 1% of the total households had 19 or more head of cattle.

Both for sheep and goats the majority of the households owned one or two heads.

Table A27

## NUMBER OF HOLDINGS BY TYPE OF STORAGE

Awraja	Type of Storage					
	Gottera	Dibignet	Gudguad	Stacks	Combination	Other
Gimira	5,700	-	-	7,200	-	900
Jimma	75,900	1,100	-	100	-	2,300
Kefa	20,700	100	-	1,700	-	6,100
Kulo Konta	7,600	1,400	-	3,700	100	4,600
Limu	57,750	2,500	-	1,450	1,150	9,700
Total	167,650	5,100	-	14,150	1,250	23,600

Table A28

## NUMBER OF HOLDINGS BY TYPE OF CROP AND REASON FOR STORAGE

Name of Crop	Food	Sale	Seed	Combination
Teff	10,000	150	300	57,650
Wheat	150	-	-	1,300
Barley	400	-	-	2,800
White sorghum	2,400	-	200	4,300
Red sorghum	1,200	-	-	4,800
African millet (Dagussa)	2,300	150	-	1,850
Maize	42,150	100	100	63,600
Horse beans	500	-	100	2,800
Others	400	1,300	-	2,000
Total	59,500	1,700	700	141,100

18. Storage: About 95% of the total holdings used some type of storage for their crops. Among the holdings which used any system of storage 79% used gottera, 2% dibignet, 7% stacks, 1% a combination of these and 11% other types of storage. It is interesting to note that in this province there does not seem to be any underground storage system for crops.

Table A29

## NUMBER OF HOLDINGS BY TYPE OF CROP AND CAUSES OF LOSS

Name of Crop	Causes of Loss					
	Insects	Rats	Damp	Combination	Others	Not stated
Teff	3,000	29,000	100	5,750	200	2,250
Wheat	-	-	-	1,000	-	300
Barley	-	1,500	-	800	-	200
White sorghum	100	850	-	3,500	-	-
Red sorghum	700	2,200	50	2,350	-	100
African millet (dagussa)	-	900	-	-	-	100
Maize	5,150	13,300	150	41,150	100	1,850
Horse beans	200	1,100	-	1,000	-	300
Others	-	400	100	200	100	-
Total	9,150	49,250	400	55,750	400	5,100

The type of crop stored and the reasons for storing these crops is presented in Table A28. It shows that 29% of these stored for consumption at a later date, about 1% for sale and about 70% for a combination of reasons indicated in the table.

It is of interest to note that coffee was not stored by the farmers. Apparently it is sold off by most of the farmers as soon as it was picked and dried.

Table A30

## NUMBER OF HOLDINGS REPORTING LOSS OF CROPS

Name of Crop	Percent Loss					
	-5	5-9	10-19	20+	Householdings with loss	
					Number	%
Teff	1,850	4,100	14,150	20,200	40,300	34
Wheat	-	-	700	600	1,300	1
Barley	200	300	600	1,400	2,500	2
White sorghum	100	650	1,400	2,300	4,450	4
Red sorghum	200	100	1,200	3,900	5,400	4
African millet (dagussa)	100	350	400	150	1,000	1
Maize	1,400	6,650	24,000	29,650	61,700	51
Horse beans	-	200	300	2,100	2,600	2
Others	300	100	100	300	800	1
Total	41,500	12,450	42,850	60,600	120,050	100

Insects and rats were the main causes of damage to crops in storage. Crop of about 22% of the total holdings were damaged by rats, 4% by insects and 25% by a combination of agents such as insects, rats and mice, damp etc.

Table A31  
HOUSEHOLDS BY TYPE OF LAND OWNERSHIP

Awraja	Resident Owner		Tenant		Part owner & Part tenant		Non-Agri-culturalists		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Gimira	3,100	19	12,800	78	-	-	600	3	16,500	100
Jimma	34,100	40	44,800	52	1,300	2	5,200	6	85,400	100
Kefa	10,800	30	21,400	59	500	1	3,800	10	36,500	100
Kulo Konta	9,900	45	8,900	40	1,400	6	1,900	9	22,100	100
Limu	27,700	32	44,150	52	3,200	4	10,450	12	85,500	100
Total	85,600	35	132,050	53	6,400	3	21,950	9	246,000	100

Maize was the crop that was most attacked by these damaging agents. Fifty one percent of the holdings that reported any damage indicated maize and 34% teff.

The extent of damage was rather severe. About 50% of the holdings had over 20% of the crop damaged in storage.

Table A32  
NUMBER OF HOLDINGS REPORTING UNUSED LAND BY TYPE OF OPERATOR

Awraja	Type of Operator						Total	
	Resident owner		Tenant		Part owner and Part tenant			
	Number	%	Number	%	Number	%	Number	%
Gimira	300	1	400	3	-	-	700	2
Jimma	13,400	56	6,400	42	400	50	20,200	50
Kefa	2,000	9	3,000	19	100	-	5,100	13
Kulo Konta	2,700	11	2,000	13	300	38	5,000	12
Limu	5,500	23	3,600	23	-	-	9,100	23
Total	23,900	100	15,400	100	800	100	40,100	100

19. Credit: In this section is presented information on rural credit, types and origins of land ownership and tenancy, labour migration, contractual arrangements for rented lands or holdings.

Land Ownership and Operation:

19.1 In Kefa province the number and percent of households by type of land ownership indicated that 35% of the households were resident owners, 53% pure tenants, 3% part owners and part tenants and 9% non-agriculturists.

Table A31 also shows the breakdown of the type of land ownership for the five awrajas. The 9% non farming households is consistent with the usual assumption that about 90% of the Ethiopian population is engaged in agriculture.

As indicated in Table A32 there were some 40,100 holdings which did have some unused land at the time of asking the question. Of these holdings 50% were from Jimma awraja, 23% from Limu, 13% from Kefa, 12% from Kulo-Konta and 2% from Gimira.

The origin and type of ownership of land showed that 93% were owned by single individuals, 7% by a community or jointly. Of course this type of land ownership excludes lands owned by the government and the church. As far as the origin of ownership of this type was concerned the acquisition was through purchase, inheritance and service compensation. The analysis on this type of land ownership for the province showed that 18% were owned through direct purchase, 75% through inheritance, 4% through service compensation, 2% through a combination of these reasons and 1% through other means.

Table A33

OWNED HOLDINGS BY ORIGIN AND TYPE OF OWNERSHIP

Origin of ownership	Holdings by type of Ownership					
	Single		Communal (joint)		Total	
	Number	%	Number	%	Number	%
Purchase	15,850	99	100	1	15,950	100
Inheritance	61,450	92	5,250	8	66,700	100
Service compensation	3,750	93	300	7	4,050	100
Combination (1.2 & 3)	1,700	89	200	11	1,900	100
Others	600	86	100	14	700	100
Total	83,350	93	5,950	7	89,300	100

Table A34

## NUMBER OF OWNED HOLDINGS BY ORIGIN OF OWNERSHIP OF LAND

Awraja	Purchase		Inheritance		Service Compan- sation		Combination		Other		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Gimira	200	7	1,800	58	1,000	32	-	-	100	3	3,100	100
Jimma	6,000	17	27,800	80	200	1	600	2	-	-	34,600	100
Kefa	2,000	18	7,800	69	1,100	10	-	-	400	3	11,300	100
Kulo Konta	1,000	9	8,500	82	600	6	100	1	200	2	10,400	100
Limu	6,750	22	20,800	70	1,150	4	1,200	4	-	-	29,900	100
Total	15,950	18	66,700	75	4,050	4	1,900	2	700	1	89,300	100

19.2 Farm Labour: The employment of labour (temporary and/or permanent) on farm holdings by type of land operators indicated that on the average a holding employed about 3.9 persons from within the awraja of residence and 2.4 persons from outside the awraja.

As indicated in the table resident owners hired a higher number of employees both within and outside their awraja than the partowners and part tenants, and the later in turn hired on the average more labour than the pure tenants.

The relatively high number of labour employed from outside the awraja seems to be consistent with the general observation that there are quite a few migrant labour to this province during the coffee season.

Agricultural advice was sought and presumably received by only 2% of the total holdings in the five awrajas.

Table A35

## HOLDINGS EMPLOYING LABOUR BY TYPE OF OPERATOR &amp; ORIGIN OF LABOUR

Type of operator	Number of operators	Number of employees	Average Number of employees per operator	Number of operators	Number of employees	Average Number of employees per operator
Resident owner	1,600	7,300	4.6	1,050	2,650	2.5
Tenant	300	300	1.0	250	350	1.4
Part owner & part tenant	200	600	3.0	100	400	4.0
Total	2,100	8,200	3.9	1,400	3,400	2.4

Table A36

## HOLDINGS SEEKING AGRICULTURAL ADVICE BY TYPE OF OPERATOR

Type of Operator	Agricultural Advice Sought					
	YES		NO		Total	
	Number	%	Number	%	Number	%
Resident owner	1,800	2	83,800	98	85,600	100
Tenant	3,200	2	128,850	98	132,050	100
Part owned & part tenant	200	3	6,200	97	6,400	100
Total	5,200	2	218,850	98	224,050	100

19.3 Contract and Rights on Land: The rights of landowners indicated that 91% of the owned holdings could be <sup>bequeathed and 89%</sup> mortgaged against a loan. But only 1% of these holdings were actually mortgaged at the time of interviewing. The big gap between 89% that could have been mortgaged and only 1% that actually was mortgaged at a point in time perhaps indicated the lack of credit facilities.

The right of tenant farmers as to the compensation made for possible improvements made on the lands by them showed that 13% could be compensated for any improvements. An estimated 2800 tenants had the right to sublet all or part of their rented land.

Contractual arrangements between tenants and landlords the presence or absence of a fixed number of time for operating the land showed that less than 05% of the tenants with verbal contracts had fixed time. The same was true for those with written contracts.

There were much less number of holdings with written contracts as opposed to those with verbal contracts. In addition there were an estimated 7000 tenants households which did not specify the type of contract inspite of the fact that they were tenants.

Table A37

## NUMBER OF OWNER HOUSE-HOLDS BY TYPE OF RIGHTS TO LAND

Awraja	Right to				Mortgaged at the time	
	Bequeath		Mortgage			
	Number	%	Number	%	Number	%
Gimira	1,700	55	1,700	55	-	-
Jimma	31,500	91	29,900	86	300	1
Kefa	9,500	84	9,300	82	200	2
Kulo Konta	10,100	97	10,000	96	200	2
Limu	28,650	96	28,150	94	200	1
Total	81,450	91	79,050	89	900	1

Table A38  
NUMBER OF HOLDINGS BY RIGHTS TO IMPROVEMENTS ON LAND

Awraja	Compansated		Not Compansated		Total tenant Households		Rights to Sublet	
	Number	%	Number	%	Number	%	Number	%
Gimira	2,700	21	10,100	79	12,800	100	-	-
Jimma	5,200	11	41,700	89	46,900	100	800	29
Kefa	400	2	21,500	98	21,900	100	-	-
Kulo Konta	4,900	43	6,600	57	11,500	100	1,200	42
Limu	4,750	10	43,350	90	48,100	100	800	29
Total	17,950	13	123,250	87	141,200	100	2,800	100

Table A39  
RENTED HOLDINGS BY DURATION OF OPERATION AND TYPE OF CONTRACT

No of Years operated	VERBAL								
	None	Fixed	%	Not fixed	%	Stated not	%	Total	%
1- 5 Years	2,400	400	1	50,650	99	-	-	51,050	100
6-10 "	1,500	50	-	35,050	100	-	-	35,100	100
11-20 "	2,100	100	-	26,700	100	-	-	26,800	100
Over 20 "	700	-	-	13,850	100	-	-	13,850	100
Not stated	300	-	-	2,350	100	-	-	2,350	100
Total	7,000	550	-	128,600	100	-	-	129,150	100
WRITTEN									
1- 5 Years	-	-	-	3,200	100	-	-	3,200	100
6-10 "	-	-	-	750	100	-	-	750	100
11-20 "	-	-	-	650	100	-	-	650	100
Over 20 "	-	-	-	100	100	-	-	100	100
Not stated	-	-	-	100	100	-	-	100	100
Total	-	-	-	4,800	100	-	-	4,800	100

Sample Design

There were six awrajas (sub-provinces) in the province of Kefa. All of these with the exception of Maji awraja were covered by the National Sample Survey. The wereda (district) Shoa, Gimira in Kefa awraja was however not included in the survey because its population was mainly nomadic.

Each of the awrajas surveyed was stratified into weredas, and in those weredas, where there was only one mikitil (sub-district) in each wereda, all the mikitils were selected ( $P=1$ ) in the first stage sample. In each of the remaining weredas, 50% of the mikitils were selected ( $P=1/2$ ) at random, except in the cases of Limu and Gimira awrajas where all the mikitils were included in the first stage sample.

In each selected mikitil, an up to date list of subdivisions (Korro-area) was compiled. In the second stage usually two Korro areas were selected with equal probability in a selected mikitil, except in the case of Limu awraja where three Korro areas were selected in each Mikitil.

All the households in each of the selected subdivisions were listed completely, and a systematic sample of these were taken for detailed investigation at the third stage. The sampling intervals for the selection of the households at the third stage. The sampling intervals for the selection of the households at the third stage were to determined that the overall sampling fraction was  $1/50$  in the case of Limu awraja, and  $1/100$  in the remaining four awrajas.

Land measurements were carried out in roughly one-third of the households in the sample. The sample list is given below.

Table 1  
SAMPLE LIST FOR KEFA PROVINCE

Awraja	Number of Mikitil		Number of Subdivisions Selected	Number of Households in the sample
	Total	Number in Sample		
Gimira	5	5	10	165
Jimma	11	8	16	856
Kefa	11	9	18	363
Kulo Konta	7	6	12	221
Limu	7	7	21	1,710
Total	41	35	77	3,315

Estimation Procedure: Let  $n$  be the number of mikittils in the sample taken from any awraja, and let  $t_{ij}$  be the sample total for a characteristic  $y$  as obtained in the  $j$  the sample subdivision in the  $i$  th mikittil. Then an estimate of the total  $Y$  for the characteristic  $y$  for the awraja will be given by:

$$Y = R \sum_{i=1}^n \sum_{j=1}^{m_i} t_{ij}$$

$m_i$  being the number of sample subdivision selected in the  $i$ -th mikittil, and  $\frac{1}{n}$  being the overall sampling fraction for the awraja.

Approximate expressions for the estimate of the variance of  $\hat{Y}$  are given by:

a) When  $P = \frac{1}{2}$ , 
$$\hat{V}(\hat{Y}) = R^2 \frac{1}{n-1} \left[ n \sum_{i=1}^n \left( \sum_{j=1}^{m_i} t_{ij} \right)^2 - \left( \sum_{i=1}^n \sum_{j=1}^{m_i} t_{ij} \right)^2 \right]$$

b) When  $P = 1$ , 
$$\hat{V}(\hat{Y}) = R^2 \sum_{i=1}^n \frac{1}{m_i-1} \left[ m_i \sum_{j=1}^{m_i} t_{ij}^2 - \left( \sum_{j=1}^{m_i} t_{ij} \right)^2 \right]$$

## APPENDIX II

### Sampling Errors of Important Characteristics

Awraja	HOUSEHOLDS			PERSONS		
	Number	Standard error	Relative standard error %	Number	Standard error	Relative standard error %
Gimira	16,500	5,060	30.7	74,600	27,154	36.4
Jimma	85,600	10,441	12.2	338,400	45,346	13.4
Kefa	36,300	4,048	11.2	155,100	18,488	11.9
Kulo Konta	22,100	2,464	11.1	95,800	9,971	10.4
Limu	85,500	12,568	14.7	305,200	46,696	15.3
Total	246,000	17,751	7.2	969,100	73,588	7.6

Awraja	Cultivated Area(Hectares)			Parcels		
	Total	Standard error	Relative standard error %	Number	Standard error	Relative standard error %
Gimira	21,729	5,389	24.8	29,500	9,136	30.9
Jimma	63,000	2,741	11.5	184,800	25,609	13.8
Kafa	32,320	2,715	8.4	95,300	11,807	12.4
Kulo Konta	17,402	1,688	9.7	34,500	3,671	10.6
Limu	67,298	9,758	14.5	179,400	28,427	15.8
Total	201,749	13,674	6.8	523,500	41,234	7.9

APPENDIX III  
DEFINITIONS USED

**HOUSEHOLD.** A group of persons (related or not) who usually pass nights under the same roof and ordinarily take food from the same kitchens.

**HOLDING.** All land used wholly or partly for agricultural production and operated by members of one household.

**HOLDER.** The person who has the responsibility of operation of the agricultural holding.

**PARCEL.** All land entirely surrounded by land of other holdings or by land not forming part of any holding.

**AREA OWNED.** Land owned by members of a household over which they possess title of ownership plus land operated by the household in an ownerlike way without possessing title of ownership.

**CULTIVATED AREA.** Land under temporary or permanent crops, under temporary meadows and temporarily fallow.

NATIONAL SURVEY OF ETHIOPIA

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1. PROVINCE	2. AWRAJA	3. MIKITIL	4. SUB DIVISION	5. HOUSEHOLD REF.	CODE									
					2	3	4	5	6	7	8	9	10	11

HOUSEHOLD MEMBERS AND THEIR PERSONAL PARTICULARS															EVER MARRIED WOMEN						
6 ORDER NO.	7 NAME	8 SEX	9 RELATIONSHIP	10 PRESENT	11 AGE	12 MARITAL STATUS	13 LITERACY	14 INDUSTRIAL STATUS	15 OCCUPATION	16 NUMBER TIMES MARRIED	17 AGE AT FIRST MARRIAGE	18 CHILDREN BORN ALIVE		19 LAST 12 MT.							
												TOTAL	ALIVE NOW	TOTAL	ALIVE						
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
01																					
02																					
03																					
04																					
05																					
06																					
07																					
08																					
09																					
10																					
11																					
12																					

PARTICULARS OF LAND OPERATED										DEATHS IN LAST 12 MONTHS																							
20 NUMBER PARCELS LAND OPERATED	21 LAND TENURE		22 DO YOU OWN LIVESTOCK		23 SELECTED FOR LAND TO BE MEASURED		24 SQUARE METERS IF LAND MEASURED		25 SIZE OF HOUSE HOLD	26 NUMBER DEATHS	27		28		29		30		31		32												
	OWN	RENT	YES	NO	YES	NO					1st	AGE	SEX	AGE	SEX	AGE	SEX	AGE	SEX	AGE	SEX	AGE	SEX	AGE									
33	34	5		36		37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

SIGNATURES
INVESTIGATOR _____
FIELD SCRUTINEER _____
FIELD SUPERVISOR _____



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CODE	2	3	4	5	6	7	8	9	10	11
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CATTLE	TOTAL OWNED NOW		IN THE PAST 12 MONTHS NUMBER									
			PURCHASED		SOLD OR CONSUMED	DIED	BORN					
CARD NO.	1	3	12	13	14	15	16	17	18	19		
LAM												
GIDDER			20	21	22	23	24	25	26	27		
BERE			28	29	30	31	32	33	34	35		
WOIFEN			36	37	38	39	40	41	42	43		
TIJJA			44	45	46	47	48	49	50	51	52	53
TOTAL	54	55	56	57	58	59	60	61	62	63	64	

BEG.	TOTAL OWNED NOW		IN THE PAST 12 MONTHS NUMBER									
			PURCHASED		SOLD OR CONSUMED	DIED	BORN					
CARD NO.	1	4	12	13	14	15	16	17	18	19		
SET												
TEBOT			20	21	22	23	24	25	26	27		
MUKUT			28	29	30	31	32	33	34	35		
GILGEL			36	37	38	39	40	41	42	43	44	45
TOTAL	46	47	48	49	50	51	52	53	54	55	56	

FEYEL	TOTAL OWNED NOW		IN THE PAST 12 MONTHS NUMBER									
			PURCHASED		SOLD OR CONSUMED	DIED	BORN					
CARD NO.	1	5	12	13	14	15	16	17	18	19		
SET												
TEBOT			20	21	22	23	24	25	26	27		
WETETE			28	29	30	31	32	33	34	35		
GEL			36	37	38	39	40	41	42	43	44	45
TOTAL	46	47	48	49	50	51	52	53	54	55	56	

OTHER LIVESTOCK	TOTAL OWNED NOW		WORKING	NOT WORKING		
					CARD NO.	6
	12	13	14	15	16	17
AHYA						
FERES	18	19	20	21	22	23
BEKLO	24	25	26	27	28	29
GEMEL	30	31	32	33	34	35
TOTAL	36	37	38	39	40	41
DORRO	42	43	44			

NO. OF BEEHIVES

AMOUNT OF HONEY TAKEN LAST YEAR

NO \_\_\_\_\_

UNIT \_\_\_\_\_



