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POPULATION DATA AND AGRICULTURAL

PLANNING IN UGANDA

Note: Rural Development Research papers are written
as a basis for discussion in the Makerere
Rural Development Research Seminar.   They are
not publications and are subject to revision.

This paper is a part of the study of Agricultural
Statistics in Uganda. The main purpose of the paper is
to describe the availability of population data, the
nature of the existing sources and applicability of the
existing data to agricultural development planning. As
agricultural development has to be planned as an integral
part of the whole economy, in view of the interdependence
among sectors, the data and information will also be
useful for non-agricultural sector.

'Bad' statistics are possibly worse than
no statistics, when viewed in terms of
the role statistics can play in planning.
It would be a grave error to formulate a
plan that is heavily dependent on statistical
series when these series admittedly are of
poor quality.

Krause Walter,
Eco. Dev.: The Underdeveloped
World and the American Interest,
P. 208.

Uses and Needs of the Data:

The size and nature of the population and its
elements of change (e.g., births and deaths) are basic
factors in the economic and social setting for development
efforts and enter into determining /the magnitude and character
of the demand for goods and services and the size and
quality of the labour resources for producing these goods
and services. The data mentioned in the paper are useful
in determining some of the important resources, problems
and goals for development efforts as well as some of the
changes in the course of implementation of programmes.
Comparisons, on a country-wide and regional basis, of the
size of population against amount of available land and
capital can be made in order to gauge whether the population
is too large or too small to attain desired levels of living.
Figures of the rate of growth of population are utilized to
ascertain the rate at which the output of crops, goods, and
services, are rising to provide for rising levels of living.
Demographic data can point out changes occuring in the course
of agricultural development and discover intensity of
population pressure, the geographical distribution of the
population to solve new problems that might be arising out
of internal and international migration, and educational
levels of the population to determine improvement in labour
capacities.

The size of population and its distribution by age
and sex and into households can be used to evaluate current
levels of consumption and future needs with regards to
food, clothing, housing, health, education and other needs.
The data are also useful in compiling per capita figures
of income, savings and other aggregates for development

planning.

Availability of accurate and reliable data is a
primary requisite of decision making. Fundamental to all
else, it is necessary to know total population, size, rate
of growth, the patterns of fertility, mortality, distribution,
density, migration, and the role of agricultural population
in the economy. In referring to agricultural development
often more concern is shown with increase in the volume of
cash crops and food crops, while often the problem of rural
population is ignored. Planning for growth requires the
best possible knowledge of the characteristics and prospects
of population being that is being planned for.

However, Data is not a 'free good'. Costs involved
in data collection are enormous in terms of resources
available. For example Staff list Uganda Government Vacancies
of Planners and Statisticians clearly indicate this.

(See Appendix I for the basic
needs for planning.)

Statistically, a population can be anything that
forms a category of enquiry. Here the term is used to mean
human population. In Uganda, existing sources of population
data are restricted to censuses, sample-surveys and special
enquiries. A census has been defined as "the total process
of collecting, compiling and publishing demographic data
pertaining, at a particular time, to all persons in a defined
territory".[1]   Enumerations are so frequently mentioned in
the Old Testament as to suggest that the principle was
established and practised in Biblical times. The earliest
modern censuses of countries took place in Scandinavia and
some Germanic and Italian states during the eighteenth
century. The first general census of the United States
occured in 1790. In 1801 Britain and France held their
first censuses. Throughout the 19th century all European
countries initiated periodic population censuses. During
this century, especially since the Second World War, the
census has extended to most countries of the world.

Past Censuses in Uganda: The early censuses were taken
in 1911, 1921 and 1931. "They were unreliable and it is
impossible to have an accurate idea of what population
then really was".[2]   They were carried out by the Administra-
tion without professional statistical planning. A heavy

reliance upon the Lukiko, chiefs, and sub-chiefs was put
for the task of obtaining the information. Hence they cannot
be comparable in quality with the recent censuses of 1948,
1959 and 1969. According to Kucznynski[5] the 1911 to 1931
censuses are unreliable for use in long term population
analysis. This has been shown to be so by the 1959 and the
preliminary results of the 1969 censuses (see   Appendix III).

The 1959 Census:

        The census was planned for 1958, ten years after
the previous one, but was postoned for a year because it
would have clashed with the first election to Legislative
Council. The Census was conducted in three distinct stages:
First the urban population was counted (in March), then there
was a general census for the rural population (in August)--
by hut count, and this was followed by 5 per cent sample
census (in September) to collect more information on the
characteristics of the population, and also to act as a
coverage check on the general census.

        The main reason given for carrying out the separate
census of non-Africans was that, if they were enumerated
in August, an unusually large proportion of the normal
European population would be on home leave.[4] However, as
Europeans constitute only about 0.1/percent of the total population
this reason does not sound justified. This mistake was not
repeated in the 1969 census.

        The cost of the general census (1959) was £40,000
(Uganda) while for the 5 per cent census about £5,000 (Uganda).

                        See the Appendix II for Methods
                        used in the Census (1959).

Coverage and type of Inquiry:

Primary data: For the complete enumeration, demographic
characteristics-- name, relationship, sex, age, race and
tribe, birth place, marital status was covered. Other
socio-economic characteristics like education, income-level,
occupation and information on household was covered on
5 per cent sample basis. Apart from the population growth
and distribution, data on estimates and projections for
the inter-censal growth and prediction of growth were made
available through the census.

Secondary and derieved data:

The results are available in the published form.[5]
The Statistical Abastracts,[6] Uganda also gives current
population data estimated from the 1948 and 1959 censuses.
Various other future projections of growths for towns,
districts, provinces, and regional by tribes, by races and
by religion are available.

Inter-censal growth rate:

Inter-censal growth is calculated from the past
censuses. Example:

Census Year	Population	
1948	4,917,555	Estimated growth
1959	6,449,559	rate 2.5 percent per year.

Based on the above census was done population projection
for August 1969. It was estimated at 2.5 per cent per year
at 8,256,000. (Based on the present growth rate it is
estimated that Uganda's population will double itself
in 20 to 30 years-- if the present growth is maintained.)
However, the Provisional results of the 1969 census are
just out[7] and the actual figure is higher than the estimated.
It is 9,526,237. Under-enumeration of the previous censuses
and large number of unrecorded influx of refugees from
neighbouring countries could partly explain for this. For
example, the 1959 census estimated at just below 200,000
refugees, though actual figures are clearly larger than this.

The accuracy of the growth-rate very much depends
upon the reliability of the past two censuses, on net-growth
rate and on correct reporting of migrations. The calculation
of inter-censal growth on district basis become fairly
unreliable because of two main factors:

i) No records of natural increases are kept in
   Uganda, except by non-African population.
   Birth and death registration are lacking to
   form a trustworthy basis for the construction
   of annual population estimates.

ii) Lack of data on Internal and International
   migrations of the people also make it difficult
   to estimate the inter-censal growth.

Natural increase can also be derived from fertility and
mortality figures.

For population projections, assumptions of birth-rates
and death rates that give Natural increase figures, play a
big part. Different figures would be derived at if population
projected with constant, increasing or decreasing birth rate
or death rates. From the 1948 census, a decrease in the
death rate of 20 per cent from 25 to 20 deaths per 1000
population occured while the birth rate remained stable.
This is consistent with the world situation. Generally, the
crude birth rates and eath rates of 42 and 20 per thousand
of population respectively seem to correspond well with the
inter censal growth 1948-1959.

The carrying forward of trends of birth and death
rates as discussed above, is the type of forcasting that can
be employed in Uganda. This approach was used by the Kampala-
Mengo Regional Planning Mission in estimating total population
of Uganda until the year 2000.[8]

As seen above, Intercensal growth can be calculated
from i) two censuses ii) by natural increase from fertility
and mortality figures, and when the two agree fairly closely
as they do in Uganda, we can be sure about the figures. No data
about gross reproduction rates and expectation of life are
available in Uganda.
Population distribution density:

Population density is the ratio of total number of
people inhabiting an area, or a short hand expression of
man-land relationship. The concept was first used in 1837
by Henry Drury Harness in a series of maps for the commission
considering the railways of Ireland, it has since developed
as a means partly of existing and potential densities. The
population densities by counties and sub-counties are
available in Uganda. The densities have been calculated by
adding the results of the 1948 and 1959 censuses and dividing
the total by the land areas, excluding the uninhabited areas
of Mount Elgon, and Mt. Ruwenzori over 7,000 feet.*

Water and
swamp areas are excluded. Other small uninhabited areas
have no substantial effect on densities.[9]

The accuracy of population-density statistics depend
upon many factors:

    i)   Accuracy of the total population.

   ii)   Reliable calculation of available land, whether
       game parks, swamps, steep slopes is considered

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* It is felt that 7,000 feet may be rather a low limit.

> as inhabitable etc. An inhabitable land because of Tse Tse fly can be made habitalbe by clearing and vice-versa.
>
> iii) Reliability of the growth rate figured according to districts.
>
> iv) Estimation of internal migrations.

The Department of Agriculture, Uganda, every year estimates population figures and revises cultivable land figures. (See table 1, Population and Availability of land- 1964). Author considers Coale's[10] discussion on increase in density very important for long term development planning.

Planning on a national development basis is generally concerned with aggregate situations, often population density is merely used for descriptive purposes and historical studies. It is necessary to re-assess the relevance of population density to see whether more attention might be given to its role in regional planning considerations.[11]

Population carrying capacity:

It is difficult to forecast the population carrying capacity of the rural areas in the different provinces of Uganda. Such an attempt was made by Etherington to forecast the population carrying capacity of the capacity of the rural areas in Kenya.[12] These estimates asame the continuation of the present subsistence-based Farming System, albeit, with higher levels to husbandry and labour inputs being applied than is currently the case. For Kenya, maximum population 1328 persons per square mile has been assumed. Etherington introduces figure of 1,000 persons which seems rather realistic, given his assumptions. Already in parts of Central Province this number has been exceeded and arithmatic of population growth and forecasts suggest that still increasing density will be absorbed in future. No such figures have been calculated for Uganda. It was seriously thought by the Department of Agriculture in 1953 that in Kigezi more than 100,000 people needed to be shifted* because of heavy density of population and serious soil erosion. But the recent preliminary census (1969) result (See the Appendix III) shows that today there are already 642,000 people in the district. Hence the concept of carrying capacity varies with time and technology.

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* D.G.R. Belshaw, 1963, An outline of resettlement policy in Uganda 1945-1963. (Mimeo). Also see, Population-growth Absorption Policy in East Africa, with special reference to the Employment of Youth. (Mimeo)

The Uganda plan investigates the population-resource relationship less fully than Kenya or Tanzania-- giving little attention to population pressure and none at all to over-population.[13]

Migration:

Population movement is an old phenomenon in Uganda. "In spite of the unreliability of early population censuses, the survey of distribution of migrants, both internal and international originating outside Uganda, has shown that there is a constant rise in the volume of migration between the first days of British Administration and 1959 census.[14] The majority of migrants in Uganda are well established and could be considered 'defacto' citizens. The integration of these groups is made easier by the fact that they have their tribesmen in Uganda. The Uganda-Rwandans are in Kigezi, the Alur, Lugbara, Kakwa and Madi are in West Nile and Madi, and the Acholi in Acholi.

There has been no comprehensive frontier control of migration with the neighbouring territories. And there are of course, practical difficulties involved. There are no records kept of international migration for/the majority of the people, though existing refugee camps do give some indication. Indigenous people are not required to fill in immigration forms and the only people appearing in the regular migration statistics are sea and air travellers. Lack of migration statistics can and does bring a substantial error in the calculation of population growth rate.

The migration statistics of non-Africans are fairly complete.

Maps:

Topographical maps assist the enumerators to know the boundaries and the country. In case of difficulty, chiefs and sub-chiefs usually accompany enumerators during the course of the enumeration. For administration-- a clearer picture of the distribution and location of the field staff could be obtained. For such a purpose a large-scale map of each district (1:250,000) is necessary and upon which boundaries, counties, Parishes would be inserted. If the list of enumeration Areas is used as a frame for further sample surveys, maps might constitute the most practicable form of permanently recording the boundaries

of these areas. And also for census in Urban Areas, Enumeration Area Maps are very essential.

As far as coverage of maps is concerned the whole country is now covered by 1:50,000 maps on which clusters of dwellings have been marked together with division boundaries for most of the districts.

Availability of Population Maps, Density Maps and Maps on Landuse, Uganda.

Population Maps:

(1) Population density map of E.A. In the East African Royal Commission Report, 1953-55. The scale is 1:3,000,000. Population density is represented in dot system. 1 dot represents 5,000 people. The density is represented in the natural environment and hence depicts agricultural population in relation to agricultural potential area. The map was prepared by the Colonial Surveys from the information supplied by the Commission, based on the 1958 census.

(2) Atlas Map: Population densities by sub-counties: Scale 1:1.500,000. Calculated by estimating habitable areas by the number of people during, 1959 census year.

(3) Population density map-- In 1959 Population Census Report (see bibliography). Scale 1:1.25,000 (⌐ 1":20 miles). Constructed and drawn by Lands and Survey Department from the census results supplied by the Statistical Department. The density calculated in the same way as done for the Atlas map. The density is calculated by Provinces, Districts, Counties and Gombololas. This is an excellent map so far available on population density.

(4) Cultivation density: This map (1:1.500,000) shows the percentage of the land area of each county based on estimated land under cultivation in 1958. The land areas of counties were calculated by the Lands and Surveys Department. The figures used in constructing the map exclude open water, swamps, National Parks and areas over 8,000 feet of Mt. Ruwenzori and Mt. Elgon. The county acreages of crops grown were adjusted to allow for the effects of double-cropping of the same land, the inter-planting of crops, residual crops such as cassava, in the ground from previous years. The basis for these adjustments was the empirical formulae, designed by the district agricultural officers to approximate

to local practices. Figures are thus not reliable. Forests
were not excluded from the county land areas used for this
map. Roughly 13 per cent of the total land surface of
Uganda was under cultivation in 1958. This national average
conceals great contrasts in the intensity of agriculture in
the various parts-- over 70 per cent in Bugishu and 1.3 per
cent in the Karamoja district. The revised map, with figures
from 1963-1964 Agricultural Census is compiled for the second
edition of the Atlas.

(5) Maps on Agricultural land: Four maps of scale
1:3,000,000 each appear in the Atlas of Uganda, second edition.
The information was derived from the Agricultural Census of
Uganda based on structural, measured sample of holdings con-
ducted in the year 1963/64. The sampling was devised for
rating up to district level. The census was not able to
cover cultivation in the districts of Toro and Karamoja.
Much help was offered by Mr. D.J.L. Casley, F.A.O., Agricul-
tural Statistician on the census programme, in preparing
the four maps.

(i) Uganda Agricultural holding 1963-64. Percentage
of land area and average area of holding (in areas) shown.
No account of uncultivated bush and fallow is taken, in
West Nile/Madi so this accounts for low figure in the area.
Cannot be comparable with other districts.

(ii) Uganda cultivated land (1963-64). Actual per-
centage of land area cultivated and average acreage under
cultivation per holder shown. The percentages mapped
represent acreages in crops in the given year. There is
no double-counting of mixed stands, they are attributed only
to crops considered dominant. However, these aggregates do
count the same area twice if it was cropped twice in the
year. The actual areal extent of cultivation as a percentage
of total land area may still be overstated.

(iii) The separate parcels of land in Agricultural
holdings. This map gives an indication of regional contrasts
in the compactness or fragmentation, of the typical holding.
No dates are available for Karamoja.

(iv) Perennial and Seasonal Crops: (Cropping in
pure and mixed stands, 1963-64).

Two separate indications are added here to supplement
the general picture of cultivated land. Though separation
of cropping in pure and mixed stands is attempted on the map,

no distinction should be interpreted too rigidly. Mixed
cropping, denotes a more positive association of two or more
crops in appreciable quantities. Of the two major cash crops,
about 3/4 of the cotton was assessed as being grown in pure
stands and well over a third of the coffee. No data for
Karamoja.

　　　　There is much scope for Ethnic Maps of Uganda.
Professor Ominde has attempted such a map for Kenya but not
much work has been done on the subject in Uganda. A map
appears in the Atlas of Uganda. Scale 1:1,500,000. The
tribal and ethnic distribution is based on 1959 population
census. The information is rather old-- as it is based
on 1959 census.

Statistics and Family Planning:

　　　　Because of low increase in per-capita, high density
of population in some areas, prospects of out-migration are
little, and for increase in standard of living for the mass,
a family planning programme is highly recommended for Uganda.
Kenya is already ahead in this field.[15]

　　　　More data on vital statistics should be collected
to make easier the work of family planning. Without the
data it is difficult to demonstrate what is happening in
the programme. Without accurate figures on births/deaths
planning efforts cannot be stressed. Studies should be
undertaken on a sampling basis to collect deficient data and
to find out public opinion about the planning.

　　　　Many developed countries have emphasized the need
and are taking interest in assisting population problems
of developing countries. Hence funds may be available from
a number of agencies like the Ford Foundation, the U.N.O.,
the Rockefeller Foundation, the Swedish International
Development Authority ,   the Ministry of Overseas Develop-
ment, U.K. and the Population Council. Alarming statements
by experts or expatriates on high population growth rate
should not be given in the press. Such statements are often
misinterpreted by the masses. Therefore the problem
should be dealt delicately through leaders and especially
through women. For the policy of family planning programmes,
the following demographic features are important.

1. Population size.
2. Trends in population size, estimated rate
   of increase or decrease of population;
   national increase or decrease, net migration.
3. Age distribution of population.
4. Trends in age distribution of population.
5. Population density per unit of cultivated area.

Summary and Conclusion:

Uganda has been taking the censuses every ten years to find out the accurate information on the growth of the population and on its distribution. Accuracy of the population censuses have been increasing. The 1959 census was more reliable than the 1948 census. It is thought that 1969 census is a further improvement. Coverage for Uganda, up to district level is good. Data on inter-censal rate of growth is also good. From the 1969 census, it has been found out that the inter-censal rate of growth has been more than 2.5 per cent. The growth figures however seems to be little used for various decision-making in Uganda.

It is noted that data on birth, death, marriage, divorce etc., for majority of population are lacking. Data on migrations are also lacking. More migrants are entering Uganda every year, and in future Uganda will have to have more accurate data on the subject to solve the problem of refugees and of unemployment.

There is a great need for up-to-date large scale maps. Unlike Kenya, work on population maps is not extensively done. There is a need for a Ugandan density map co-relating with physical environments, to show the agrarian population and potential agricultural areas. Uganda being predominantly an agricultural country, attention should be focused towards this field of study. Perhaps Makerere University College could be used for a Centre for the work.

If family planning programme is to be made an official policy more data on vital statistics should be collected to make easier the work of family planning. Without the data it is difficult to demonstrate what is happening in the programme. Without accurate figures on births, deaths, fertility, mortality, planning efforts cannot be stressed. Studies should be undertaken on a sampling basis to collect deficient data and to find out public opinion about the planning. Many countries have emphasized the need and are taking interest in assisting population problems of developing countries. Family Planning Association of Uganda could also be helpfully utilized in collecting additional information on the subject. Free discussion in schools and colleges should be encouraged.

It is recommended that a complete registration system should be established. This may involve an extra

expenditure but investment without accurate data may lead
to waste of millions in ill-conceived programmes. With
birth and death registration throughout the country, a great
improvement in the population statistics could be achieved.
Age factor would be accurate with vital registration, and
if made compulsary now, the data would be very useful after
20 to 30 years.

Alternate method of collecting information should
also be tried. Voluntary method of collecting data through
Lukiko and chiefs is not reliable. It may be possible to do
away with expensive cnesuses, if sampling census done from
time to time, say at short intervals. Again to collect more
information on socio-economic side could best be done
through this approach.

In Tanzania a new method has been experimented. A
party leader of 10 houses appointed to find out all the
necessary information required by visiting houses once a
month.

Dr. Stallings has suggested another cheaper and
quicker way of collecting information through Group Survey
Approach. By this method a group of people are brought
together for extracting different information out of them,
instead of an ordinary farm to farm visit. This may be a
cheaper method but does not seem to be 'scientific' or
reliable. And it is not a good way of collecting demographic
statistics. It may be useful in getting socio-economic
aspects of information from different areas.

The population census is a primary and reliable source
of bench-mark data with its detailed breakdown by sex, age,
occupation, etc., but it is generally not a satisfactory
means of getting the statistics on quality of labour,
employment, income-level, etc., for which more sample-
censuses are needed from time to time.

It should be a national goal to collect 100 per cent
reliable statistics.

Stallings, J.L., 1968, The Group Survey Approach to Farm Management
Data Collection, Mongoro Agriculture College, Tanzania (Mimeo).

Table I   POPULATION AND AVAILABILITY OF LAND   1969

Region/District	Area of land excluding open water, swamps and reserved forests	Cultivated area	Population*	Population Density	Cultivated head of population	Estimated available land per head of population
	Sq. miles	1,000 acres		Per sq. mile	Acres	Acres
Buganda :-						
Mengo	9,221	1,199	1,499,000	163	0.8	4.1
Masaka	3,649	485	501,000	137	1.0	4.7
Mubende	2,570	185	107,000	42	1.7	15.4
Eastern:-						
Busoga	3,133	994	736,000	234	1.4	2.7
Bugisu, Sebei & Mbale Township	1,170	630	402,000	344	1.6	1.9
Bukedi	1,533	784	431,000	281	1.8	2.3
Teso	4,249	943	475,000	112	2.0	5.7
Karamoja	8,094	125	194,000	24	0.6	26.7
Northern:-						
Acholi	10,347	580	319,000	31	1.8	20.8
Lango	4,333	920	395,000	91	2.3	7.0
West Nile/Madi	5,252	788	481,000	92	1.6	7.0
Western:-						
Bunyoro	4,025	230	134,000	33	1.7	19.2
Toro	3,920	350	391,000	100	0.9	6.4
Ankole	5,378	553	592,000	110	0.9	5.8
Kigezi	1,689	546	538,000	319	1.0	2.0
TOTALS	68,563	9,312	7,195,000	105	1.3	6.1

*Estimates for January, 1964, based on 1959 Census of Population and inter-censal rates of growth.   This
calculation does not take into account internal migration between districts. Figures to nearest '000.
Source:- Annual Report, Dept. of Agriculture, 1964, Entebbe, Government Printer, 1968, p. 52

Appendix I

The following list of basic data should be made available and is recommended by U.N.O. for developing countries:

i) Total Population,   (Decennial)
   Marital status, sex and age,
   Type and level of education completed,
   Ethnic or nationality,
   Type and size of household.

ii) Number of live births occuring during the
    year, sex, order of live birth and age
    of mother.   (Annual)

iii) Number of deaths occuring during the year
     classified by sex, a ge and cause.
               (Annual)

iv) Number of immigrants and emigrants during
    the year for total country. (This can be
    a by-product of the admin istrative
    activities of the Immigration Department.)
              (Annual)

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* Statistical Series for the Use of Less Developed Countries
  in Programmes of Economic and Social Development, Stat.
  M. 31. U.N.O., New York, 1959.

Appendix II

Methods used in Census (1959)

According to inter-territorial conference held in 1946 it was decided that the E.A. territories should take a uniform censuses and later on the Director of Statistics E.A., was made responsible for the planning and analysis of the census. Chief census officer was responsible for each government. Legal Notice No. 240 of 1957 was given in the Gazette announcing the date of census. Uganda divided into four provinces which are themselves split into districts. Within a district there are counties divided into divisions which consist of several parishes. Usually there is an even smaller administrative unit than the parish, namely the sub-parish. Maps were prepared by the Census Officer and Authorized Officers of all districts, showing county and divisional boundaries. Additional publicity was made-- including in vernacular languages. A large number of enumerators were employed and a satisfactory standard of enumeration was evident. The initial analysis, the compilation of the age-group by sex figures by provinces and districts, was done within eight weeks. The lending and the tribal information further processed by mechanical means took another two months. The rated up results and the demographic analysis were available by the end of October 1960.

Appendix III

CENSUS IN DETAIL*

Population of the Republic of Uganda

1959 Census results compared with Provisional

results from the 1969 Census

	1959 Population Census	Provisional Results 1969 Census	Percentage Increase 1959 - 1969
BUGANDA REGION			
West Mengo	{508,410	515,243	
Kampala		331,889	66.6
East Mengo	606,694	844,098	39.1
Masaka	440,180	641,403	45.7
Mubende	215,730	335,599	56.6
TOTAL	1,771,023	2,668,232	50.7
EASTERN REGION			
Teso	453,474	568,327	25.3
Bugisu	303,565	498,121	31.1
Bukedi	397,650	518,922	30.5
Busoga	{660,507	897,644	
Jinja		47,298	43.1
Sebei	49,320	64,290	30.4
Karamoja	171,945	283,356	64.8
Mbale	8,433	23,539	179.1
TOTAL	2,044,894	2,801,497	37.0
WESTERN REGION			
Kigezi	493,444	642,300	30.2
Ankole	529,712	855,155	61.4
Toro	347,479	571,006	64.3
Bunyoro	189,980	348,031	83.2
TOTAL	1,560,615	2,416,492	54.8
NORTHERN REGION			
West Nile	383,926	579,383	50.9
Madi	50,627	89,998	77.8
Acholi	285,530	465,417	63.0
Lango	352,943	505,218	43.1
TOTAL	1,073,026	1,640,016	52.8
TOTAL	6,449,558	9,526,237	47.7

*Source: Uganda Argus, 30/10/69.

REFERENCES

1. Clarke, J.I. (1965), _Population Geography_, Pergamon
        Press, Oxford.

2. _The Economic Development of Uganda_, 1961, The I.B.R.D
        Report, Government Printer, Entebbe.

3. Kuczynski, R.R., _Demographic Survey of the British
        of the British Colonial Empire_, Vol. II.

4. Blacker, J.C.D., 1969, Population Census of Uganda,
        Report on visit to Entebbe, 17/22 Dec.,
        1967. (Mimeo).

5. Uganda: General African Census, 1959. Vol. I and
        Vol. II. Government Printer, Entebbe.

6. Statistical Abstracts, Uganda.

7. Uganda Argus (Kampala) 30/10/69. See the Appendix

8. Ponzio, M. 1965, Population Forecasting and Urban Growth
        in Uganda, Kampala-Mengo Regional Planning
        Mission 1964-1966, Kampala, (Mimeo).

9. Uganda, Lands and Survey Department, 1968, _Atlas of
        Uganda_.

10. Coale, A.J., 1963. Population and Economic Development,
        Ch. 4 in Hauser, P.M., _Population and
        Economic Development_.

11. _People_ (Kampala), 27/7/69.

12. Etherington, D,M., Projected changes in urban and rural
        population in Kenya and the implications
        in development policy, _East African Economic
        Review_, Vol. II, 1965.

13. Thomas, I.D., 1968/1969, The Relevance of population
        density, U.S.S.C. Paper, M.I.S.R.,
        Kampala, (Mimeo).

14. Dak, O., 1968, _A geographical analysis of the distribution
        of migrants in Uganda_, Occasional Paper,
        No. 11, Department of Geography, Makerere
        University College.

15. Kenya Government, 1967, _Family planning in Kenya_,
        Ministry of Economic Planning and Develop-
        ment, Nairobi, Kenya.