POPULATION SIZE IN AFRICAN COUNTRIES: AN EVALUATION

Volume II

Paris
1988
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BURUNDI

SYLVESTRE BARANDEREKA
AUREL BERCIU

JUNE 1981
I. INTRODUCTION

1) Geographical Environment

Burundi, often called the 'Heart of Africa', is located between
latitudes 2°45' and 4°28' South and longitudes 28°50' and 30°53' East, and
is bordered by the Republic of Rwanda in the north, Lake Tanganyika and
Zaire in the West and Tanzania in the east and south.

Burundi is a land of high plateaus (almost all exceed 1,000 meters)
hemmed in among the Great Lakes of Central Africa.

It has a high-altitude tropical climate with four seasons:
- a major dry season from June to October;
- a minor rainy season from October to December;
- a minor dry season from January to February (this is not a true dry
  season, as it does rain, but less than during the minor rainy season);
- a major rainy season from March to May.

Temperatures and rainfall vary, however, with altitude.

2) Administration

At the end of 1979, Burundi was composed of 8 provinces, each one
divided into two or three districts (18 in all) subdivided into communes;
the provinces and the communes form the backbone of the administration.
There are 79 communes in all, including the urban commune of Bujumbura, and
each province has between 5 and 15 communes.

The communes are in turn split up into a certain number of 'census
hills', varying between 11 and 68 per commune. Most communes have 20 to 40
census hills divided into two or three 'zones'.

The size of these census hills varies a great deal, ranging from a few
hundred inhabitants to several thousand. They are often divided into a
varying number of 'sub-hills' (generally two or three). The census hill, of
which there are approximately 2,500 in all, is the smallest administrative
unit and may group several geographical sub-hills. (The census hills of
Burundi correspond to the villages found in other countries).

3) Population

The traditional system of rural settlement in Burundi is based on the
individual. Apart from a few commercial centres, villages are non-existent.
The Burundese live in huts grouped together in 'rugos', which are compounds
generally delimited by a hedge and containing one or several huts: living
quarters for the traditional head of the family and his direct descendants,
living quarters for his parents/relatives, kitchen, storehouse. The rugos are scattered over the hill-slopes, surrounded by banana plantations and a variety of other crops.

This traditional system has changed in recent years and in certain areas (particularly the most densely populated) the rugos have disappeared, being gradually replaced by individual houses built in brick or clay.

However, whether people live in separate houses or in rugos, the population is always dispersed and the 'centres' are often nothing but a few stores situated around the square where the weekly market is held.

The inhabitants of Burundi all speak the same language: Kirundi, which is the national tongue. French, introduced by the Belgian administration before Independence, remains the official language.

As in the other East African countries, Swahili is commonly used for trading.

The influence of the Catholic and Protestant Churches is strong in Burundi: they continue to play an important role in the socio-economic and cultural development of the country.

II. DATA SOURCES

1) Historical Estimates

Until 1960, information on the population of Burundi is generally provided by data grouping RWANDA and URUNDI, these territories being considered by the colonizers as a single administrative entity.

The first data on the demographic situation of RWANDI-URUNDI go back to the early XXth century. The only sources are reports made by explorers at the time of the German government and information provided by missionaries.

In 1907, the population of these territories was estimated at 4 million inhabitants by FUCHS, and in 1914, at 5 million by MYER. The same year, the population of RWANDA alone was estimated at 3 million by RHODL, whereas CZEKANOWSKI, an ethnographer, put it at 1.5 million in 1907.

Concerning the methods used at the time for evaluating the population, only CZEKANOWSKI's is know: he estimated the population density by counting the number of huts in a region, an obviously very rough method of estimation.

The only indication concerning population growth is given by VAN DER BURGHT, who in a publication in 1903 merely stated that births exceeded deaths. This upward trend is confirmed for the next ten years by several missionaries.

If this growth had been maintained, the population size would currently be much larger than it is, but successive mortality crises due to famines and epidemics seriously reduced the population.

The changeability of the climate and the consequences on subsistence crops still regularly create serious problems for the authorities.
In 1922, when the League of Nations entrusted the government of RWANDA-URUNDI to Belgium, the latter immediately set up a registration system restricted to the able-bodied male adults (HAV) subject to taxation. Applied until 1931, this registration system, with its unavoidably incomplete coverage, provided extremely unreliable estimates of total population size.

From 4 million in 1922, the population estimate falls to 3 million in 1923, rises to 5 million from 1924 to 1927, then drops back down to 3,750,000 in 1928. The inaccuracy of this type of registration during the first years of Belgian government must be borne in mind, and that slight variations in the quality of successive censuses are sufficient to produce a high degree of error.

In 1931, the registration system restricted to able-bodied male adults was extended and transformed into a card registration system covering all males, whether able-bodied or not, and their families.

A new source of population data was introduced at that time: population surveys focusing, for each territory, on a certain number of groups considered as representative. The observations thus obtained were extended to the total population.

These surveys, based on the statistical sampling method, were conducted until 1950.

Theoretically a good idea, in practice these surveys proved disappointing: ill-chosen and insufficient population groups, inadequacy of the formulas used for calculating the estimates, technically deficient field operations were major errors.

The population estimates available for RWANDA-URUNDI (global figures for the whole territory) between 1922 and 1949 are presented in Table 19.

2) Administrative Censuses

Administrative censuses were conducted annually by enumerators dependent on each commune. As is the case for other African countries, the data they yielded are of very limited statistical value, because of well-known problems of coverage and accuracy. These censuses were originally carried out for administrative and in particular fiscal purposes; now that the 'personal tax' has been abolished, there is no longer any reason for them to be held.

The data collection procedure adopted for these administrative censuses was the following:

- the basic unit was the 'census hill', but several hills are grouped together administratively to form a 'zone'; information is therefore available at the zone level.
### Table 19 - Burundi Population Estimates 1922-1949 (Global Figures for Rwanda-Burundi)

<table>
<thead>
<tr>
<th>YEAR (a)</th>
<th>POPULATION</th>
<th>YEAR (a)</th>
<th>POPULATION</th>
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<tr>
<td>1922</td>
<td>4,000,000</td>
<td>1939</td>
<td>3,775,335</td>
</tr>
<tr>
<td>1923</td>
<td>3,000,000</td>
<td>1940</td>
<td>3,814,854</td>
</tr>
<tr>
<td>1924/1927</td>
<td>5,000,000</td>
<td>1941</td>
<td>3,843,436</td>
</tr>
<tr>
<td>1928</td>
<td>3,750,000</td>
<td>1942</td>
<td>3,830,101</td>
</tr>
<tr>
<td>1929/1931</td>
<td>3,450,000</td>
<td>1943</td>
<td>3,768,002</td>
</tr>
<tr>
<td>1932</td>
<td>3,451,000</td>
<td>1944</td>
<td>3,378,396</td>
</tr>
<tr>
<td>1933</td>
<td>3,244,000</td>
<td>1945</td>
<td>3,386,362</td>
</tr>
<tr>
<td>1934</td>
<td>3,165,000</td>
<td>1946</td>
<td>3,596,997</td>
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<tr>
<td>1935</td>
<td>3,385,583</td>
<td>1947</td>
<td>3,718,185</td>
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<td>1936</td>
<td>3,506,094</td>
<td>1948</td>
<td>3,793,922</td>
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<td>1937</td>
<td>3,693,304</td>
<td>1949</td>
<td>3,808,191</td>
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<td>1938</td>
<td>3,752,742</td>
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(a) Sources: 1922-1931 [7], 1932-1934 [5], 1935-1949 [6].

The enumeration was conducted by the zone officer, who recorded the information on green cards four inches long; one for each able-bodied male adult (HAV) in the census hill. A few cards were added for women or old men living alone and not dependent on a HAV.

Each card contained the following information:

1. Name and age (date of birth) of the HAV;
2. Name and age of his spouse(s) and other dependents;
3. Male under-18's (at 18 they become HAVs) and unmarried females, classified by sex and age;
4. The number of adult cattle was noted on the back of the card.

For certain zones, the information on these cards was copied into notebooks, but often the totals per hill were calculated only once a year, directly from the cards, and sent to the commune.

The officers of each commune sent the data per census hill once a year to the provincial authorities.
This administrative registration system whereby population data were recorded on cards has now been abandoned. It is to be replaced by a system of registration of vital events in the framework of a new project.

3) Statistical Censuses

Burundi's first General Population Census was conducted between August 16th and 30th 1979.

The project of holding a general population census was first made in 1970, when the African Census Program was set up at the request of a certain number of African countries unable, for technical and financial reasons, to participate in the series of population censuses before this date.

A U.N.F.P.A. mission was sent to Burundi to evaluate the needs in population and other data and elaborate a project of assistance.

Following this mission, the U.N.F.P.A. appointed an Expert in 1972 and the preparatory work for the population census was initiated.

Unfortunately, a variety of reasons caused the project to be interrupted.

In 1977, a new request was made by the Government of Burundi to the U.N.F.P.A. The project was revised and the preparatory work got off the ground again, this time with two United Nations experts (a chief expert and an expert in cartography).

The mapwork necessary for the census lasted 18 months. A pilot survey was conducted in August 1978.

The actual population census was conducted between August 16th and 30th 1979. After manual processing, the provisional results of the first General Population Census of Burundi were published in early 1980. Some general data are presented in Tables 23 and 24.

The Central Census Bureau, the organism in charge of conducting the census, is presently involved in continuing the data processing and preparing the information for analysis and the publication of the final results.

4) Vital Registration

Prior to 1980, Burundi had a vital registration system operating at the commune level. A monthly statement was to be sent to the Department of Population, which drew up an annual statement of the country's natural increase.

These data did not, however, ensure complete coverage of the population and were inadequate for estimating demographic rates (birth, death and growth rates). They had many shortcomings, the more important of which were:

- non-integration of the systems of statement by the informant and registration: lack of control at a central level over the communes, and at the commune level over the informants (population):
several links were missing in the communication chain (collection and transmission of information) and the checking of the field operations;

- lack of motivation among the population.

With Decree No. 1 of January 15th 1980 establishing a Code of the Individual and the Family, the regular registration of vital events became mandatory in Burundi.

Title IV of the new code deals with vital events. A system of registration of vital events has been set up gradually since April 1st 1980, when the new code came into effect.

Presently, the Ministry of the Interior, Department of Population, has taken the following measures:

- creation of a national registration Office;
- appointment of registrars;
- creation and setting up of registration offices for each province;
- creation and setting up of registration offices for each commune;
- preparation and printing of registers of vital events (births, marriages and deaths), and of certificates and statistical reports;
- recruiting, training and setting up of registration officers at the central, provincial and commune levels;
- a widespread operation for motivating the public which is ongoing throughout the country.

All these activities took place in 1980, firstly in 14 pilot communes, then extended in the last quarter to the whole of the country.

A study for evaluating the operation is ongoing.

This action for improving the vital registration system was designed and conducted with the aid of the United Nations, in the framework of a new UNFPA project following the 1979 population census: Improvement of Vital Registration in Burundi, five-year project BDI/78/P02.

5) **Demographic Sample Surveys**

A number of demographic sample surveys have been conducted in Burundi since the beginning of the century and, until 1965, all were single-round surveys, therefore retrospective.

However, the data most frequently used for estimating the population of Burundi were provided by two better-known surveys carried out in 1965 and 1970-1971:
a) **The 1965 Demographic Sample Survey**

The 1965 demographic survey yielded good-quality data within a reasonable time, considering the resources in personnel and equipment available.

The field operations were conducted between March 1st and July 31st 1965 and the report was finalized in June 1966. This survey therefore had the advantage of yielding results fairly rapidly; but there were also several omissions:

- there were no questions on the census hill (existence of a school, a clinic ...);
- there were no questions on the rugo (number of huts, water supply ...);
- the births occurring over the last 12 months were not linked to the mothers;
- the months of birth and death were not indicated;
- there were no questionnaires for women.

There were two sampling schemes: for rural areas, two-stage sampling was used with a mean sampling fraction of 1/50; for Bujumbura, houses were first listed then a 1/10 sample was drawn.

The 1965 survey covered a sample of 10% of the population of Bujumbura and 2% of the rest of the population. The survey which consisted mainly in a check of the data yielded by the last administrative census, revealed a roughly 24% underestimation of the total population.

The population of Burundi as estimated from this survey amounted to 3,210,000 inhabitants, with a rate of natural increase of 2.0% (a birth rate of 46 per 1,000 and a death rate of 25.8 per 1,000).

The results of this survey were considered incomplete, and the error for the data collected was estimated at 5-10% (see the main results in Table 21).

b) **1970-1971 Multi-Round Survey**

The lack of precision in the data yielded by the administrative censuses and the 1965 demographic survey, as well as the necessity to obtain the characteristics and demographic rates of the rural population, led the national authorities to conduct another survey on population and settlement in Burundi.

This multi-round demographic survey was prepared and carried out by the Department of Statistics, assuming the population of Burundi in 1970 to be 3,500,000. A sample of 30,000 inhabitants was selected, or 24 primary units (P.U.) of 1,250 each. The primary units were chosen using the newly adopted administrative divisions: 8 provinces, 18 districts, 79 communes, 2,427 census hills.

The division into provinces gives an approximation of the population and the list of census hills by province and district.
The primary units were distributed proportionally to the population of each province. Thus at least one primary unit was chosen per province; furthermore, because of population movement within or between provinces, it was necessary to have one primary unit per district. This gave 18 primary units: the other 6 were distributed among the districts according to population size.

The survey was conducted over 14 months, from April 1970 to June 1971, so as to observe population change over 12 complete months.

The notables and representatives of the census hills to be covered by the survey were first of all informed of its aims by the interviewer; when their consent had been obtained, a meeting was organized for all the population concerned.

The interviewer questioned everyone who had spent the night preceding his visit in the rugo, until he reached the limit of 1,250 inhabitants per census hill.

Six schedules were used:

D1: **inventory** : enumeration of the 1,250 people to be interviewed by each field worker.

D2: **household** : to be filled in by each household; provides information on civil status, occupation and education.

D3: **age** : enables age of respondents to be known as precisely as possible, for constructing a population pyramid.

D4: **females** : to be filled in by each woman of fertile age; used for commuting fertility, birth and infant mortality rates.

D5: **settlement** : provides information on dwelling conditions of households.

D6: **population change** : provides information on the demographic changes occurring in the household in the course of the census year.

The principal results of this survey are presented in Table 22.

6) **Other Sources of Population Data**

Because there was no national organism for collecting and processing statistical population data, various institutions and organizations have over the years attempted to conduct surveys or partial censuses providing more or less reliable information.

These other operations carried out to obtain population data include:
a) Census of the Zege Pilot Zone for the Popularization of Farming Techniques

A first round conducted in 1970, followed by a second one in early 1971, provided, in addition to data on 'households' and settlement, certain information on population change. This partial census covered 3,000 inhabitants.

b) Census of the KABEZI-KISINGWE Area

In the framework of an irrigation and rural development project, a partial census of the population of the area concerned was carried out in May 1970; 12,000 people living in 1,800 rugos were enumerated. Unfortunately, the data have not been processed.

c) Census of the NYANZA-LAKE Area

Like the Kabezi-Kisingwe census mentioned above, and using the same questionnaires, a partial census was conducted in the framework of a development project. Almost 20,000 people living in the Nyanza-Lake area were interviewed in December 1971, but the data have not been processed.

d) Statistical Survey (Demography, Economy) of the RUMONGE Area

A study of the structures of the population and the farms in the Rumonge area was conducted in early 1977 (January-March). A random sample of one household out of five was drawn from a complete census of the households in the area to form the survey population.

Over 5,000 out of a total of 26,230 inhabitants were interviewed.

The data obtained have been partially processed.

e) The 1969 Socio-Economic Survey in Bujumbura

In 1969, a survey was undertaken in Bujumbura in order to determine the main characteristics of the civilian labour force.

This survey was extended to the following fields:

- economy (employment status, economic activity, income of respondents);
- demography (population pyramid, nuptiality, migration);
- living conditions and sociology (housing structure, health status, social dynamics, religion ...).

Over 15,000 out of the 50,000 inhabitants of 4 districts of Bujumbura were interviewed. The statistical data obtained were not processed or analyzed in the framework of this survey, but were used to complete the rural survey data.

f) Primary Census of the Population of Bujumbura (late 1971)

In order to prepare a consumption survey, a primary census of the population of Bujumbura was conducted at the end of 1971. A list was drawn up of the parcels and dwelling units in 8 districts. Then a first sample
enabled population estimates to be made and provided the following characteristics for each respondent: sex, age group, marital status, nationality, kinship with the 'head of the household'.

The data obtained for over 10,000 respondents filled out the information provided by the 1969 socio-economic survey, and revealed disparities between the rural and urban areas.

g) Census of the Primary Units Selected for the Agricultural and Food/Budget Surveys

To prepare the second-stage sampling, several censuses of primary units (census hills) were conducted in the provinces of GITEGA, NGOZI, MUYINGA, RUYIGI and BURURI between 1967 and 1970.

These censuses, completed with less precise data, provided the stratified population estimates of 1970.

These different partial censuses gave, for the hills selected, the following information:
- differentiation of the 'rugos' according to their composition;
- for each hut in the rugo:
  . the population (number, sex, age group and marital status of the head of the household);
  . the existence of a farming unit (and/or a kitchen);
  . possession of coffee trees and/or cattle;
  . etc.

Furthermore, as the 46 'census hills' selected for the food/budget survey were the same as those used for the agricultural surveys (conducted in NGOZI and MUYINGA), a comparison of the data from these two sources was possible.

7) Population Studies

In the field of population research, attention should be drawn to two important socio-demographic studies conducted in 1973 and 1974, which are described briefly below:

a) Population Problems in Burundi, Results of a Survey on the Demographic Motivations of the Barundikazi (Burundese Women)

This survey, which covered 2,400 women living in the provinces of Bubanza and Ngozi, was conducted between February and May 1973 by the Faculty of Economic and Social Sciences of the University of Bujumbura, in close collaboration with the Union of Barundikazi women and with the technical and financial assistance of the Pathfinder Fund (Boston, EVA).

The aim of the survey was to acquire information on questions of fertility, nuptiality and family size and on knowledge of and attitudes towards birth spacing.
b) Family and Fertility in Burundi (Sociological Approach)

This is the title of "a systematic study of the present-day family in Burundi" carried out in 1974 by the Center for Socio-religious research at the request of the Episcopal Assembly of Burundi, and financed by the Pathfinder Fund (Boston, EVA). The results were published in 1977 by the Centre for Socio-religious Research of the Episcopate of Burundi and the Faculty of Economic and Administrative Sciences of the University of Burundi-Bujumbura.

The target of this study was "to provide objective elements of information in a domain which has so far been approached in an overly empirical and prejudiced manner".

The study focussed on "marriage, the importance attached to childbearing, the role of the child within the family group, the family unit and contraception".

Approximately 6,000 respondents (3,000 men and 3,000 women) from both urban and rural areas were interviewed.

Unfortunately, the results of these two socio-demographic surveys prove difficult to compare, in particular as the former was restricted to the rural population.

c) Future Research

Population research in forthcoming years will focus on the analysis of the results of the 1979 General Population Census and of the post-enumeration survey.

These will be completed by statistical data from the vital registration system the government intends to improve and extend.

III. CRITICAL STUDY OF DATA SOURCES

1) General Points

It is a widely acknowledged fact that to devise an economic and social development plan and apply it successfully, knowledge of basic demographic data is essential.

Many factors make it very difficult to take stock of the various sources of population data in Burundi.

- Firstly, most of the statistical demographic studies which have been undertaken in this country have collected masses of data which have never been analyzed in depth. Consequently, there is a wealth of information which has not yet been exploited.

- It is also important to note that all the population estimates published from the beginning of the century on are very rough, generally only the result of vague assessments. A small group for scientific research in population studies has only recently been set up, with the financial and technical assistance of the UNFPA.
- As mentioned above, the information available until 1960 generally concerns the combined territory of Rwanda-Urundi, and distinguishes between the customary and the non-customary populations.

- Under Belgian trusteeship, after World War I, there was no real progress until 1936, when the first estimate of the population of Burundi was made following the setting up of an improved administrative system of vital registration.

After this date, estimates of the population of Burundi were obtained regularly from the 'administrative censuses' based on the notion of able-bodied male adult (HAV) subject to taxation; they were also based on vital records and reports by missionaries and health officials.

For Burundi as for all developing countries, three sources of population data exist, as we have seen above: censuses, vital registration and demographic surveys. Concerning their quality, the following remarks can be made:

2) **Population Censuses**

These are known to be a very costly source of population data, requiring a considerable amount of financial, material and human resources, which moreover frequently exceed the possibilities of developing countries.

So far only the provisional results of the General Population Census of 1979 have been published by sex and administrative unit (provinces, communes and hills); the final data will be forthcoming at a later date.

Prior to 1979, all the population data published by various organisms were based on the 'administrative censuses'; they were often underestimated.

3) **Demographic Surveys**

As observed earlier, only two demographic sample surveys have been conducted in Burundi, in 1965 and 1970-1971.

These surveys indicated that the data yielded by the administrative censuses were largely underestimated. They remained the only source of demographic data until 1979, when the first General Population Census was held in Burundi.

4) **Vital Registration**

With regard to vital registration, as stated above, the decree of July 25th 1961 made birth, death and marriage registration obligatory in Burundi. Before this date, registration was very incomplete and vital statistics were inadequate for calculating demographic rates.

5) **Assessment and Future Prospects**

Prior to the 1979 General Population Census, the most recent population data were based essentially on the 1965 and 1970-1971 surveys, which provided a total population estimate of 3,210,000 inhabitants in 1970, with an annual growth rate of 2.2%.
A critical assessment of the various sources of demographic data available in Burundi leads us to observe that, in most cases, they have been sufficiently exploited, although they could have been useful tools for preparing either a national population survey or a census.

This is due to the fact that Burundi has no central organism or national institute covering all fields of statistics and supervising all the stages of a demographic operation, from planning and data collection to processing, analysis and finally publication of results.

Further evaluation of the various sources of population data in Burundi cannot be made until the recent improvements to the vital registration system (1980) have borne fruit and the final results of the country's first General Population Census have been published. Until then, the existing data should be used with a great deal of caution.

In our opinion, only the final Population Census data can prove satisfactory with regard to completeness and quality. The analysis and publication of the census data are scheduled for 1982.

The ongoing improvements to the vital registration system may moreover rapidly produce population data of a higher standard.

A national demographic survey, the project for which has been accepted by the UNFPA, is to be conducted in 1983.

In the meantime, the existing data sources, despite their deficiencies, are the only ones available for studying the population of Burundi.

IV. CONCLUSION

This list of the sources of population data in Burundi is not complete, yet it shows that, prior to the country's first General Population Census in 1979, there was a permanent concern about the need for demographic data, obtained through a variety of procedures.

Among the different sources mentioned above, it is noteworthy that no source predominates over the others. There are many reasons for this, since the choice of a method of data collection depends not only on technical criteria, but involves other factors such as:

- political decisions;
- financial problems, recruitment of employees.

In Table 20, we present the estimates of the population of Burundi between 1936 and 1979 obtained from the different sources.

These data are the only ones known and used until the final results of the 1979 General Population Census became available.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>POPULATION SIZE (thousands)</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1936</td>
<td>1 746.5</td>
<td>[6]</td>
</tr>
<tr>
<td>1941</td>
<td>1 923.8</td>
<td>[6]</td>
</tr>
<tr>
<td>1944</td>
<td>1 854.7</td>
<td>[6]</td>
</tr>
<tr>
<td>1946</td>
<td>1 910.9</td>
<td>[6]</td>
</tr>
<tr>
<td>1949</td>
<td>2 012.0</td>
<td>[6]</td>
</tr>
<tr>
<td>1954</td>
<td>1 982.2</td>
<td>[7]</td>
</tr>
<tr>
<td>1959</td>
<td>2 213.5</td>
<td>[7]</td>
</tr>
<tr>
<td>1960</td>
<td>2 234.4</td>
<td>[7]</td>
</tr>
<tr>
<td>1963</td>
<td>2 471.3</td>
<td>Administrative census</td>
</tr>
<tr>
<td>1965</td>
<td>3 210.0</td>
<td>[3]</td>
</tr>
<tr>
<td>1970</td>
<td>3 350.0</td>
<td>[4]</td>
</tr>
<tr>
<td>1975</td>
<td>3 735.9</td>
<td>[2]</td>
</tr>
<tr>
<td>1979</td>
<td>4 021.9</td>
<td>[10]</td>
</tr>
</tbody>
</table>
** BURUNDI **

** TABLE 21 - BURUNDI - MAIN RESULTS OF THE 1985 DEMOGRAPHIC SURVEY **
(1) All the people living in a same dwelling unit

- Total population : 3 210 000 inhabitants
- Mean population density : 115 inhabitants/km²
- Urban population (Bujumbura) : 71 000
- Rural population : 3 139 000

- Age/sex distribution per 1,000

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 14 years</td>
<td>234</td>
<td>234</td>
</tr>
<tr>
<td>15 - 59 years</td>
<td>233</td>
<td>240</td>
</tr>
<tr>
<td>Over 60 years</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>493</td>
<td>507</td>
</tr>
</tbody>
</table>

- Birth rate : 46 °/o
- Death rate : 26 °/o
- Infant mortality rate : 150 °/o

- Life expectancy at birth : - males : 35 years
  - females : 38.5 years

- Illiteracy rate (over 15s) - urban : 67.9 %
  - rural : 96.7 %

- School enrolment rate (under 15s) - urban : 61.9 %
  - rural : 15.4 %

- Mean family size (1) : - urban : 3.7 persons
  - rural : 6.6 persons

- Economically active population as % of total population
  - urban - males : 44.8 %
    - females : 14.0 %
  - rural - males : 49.3 %
    - females : 52.0 %
** BURUNDI **

TABLE 22 - BURUNDI - MAIN RESULTS OF THE 1970-1971 DEMOGRAPHIC SURVEY

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population of Burundi on January 1st 1971</td>
<td>3,400,000</td>
</tr>
<tr>
<td>Broad age groups (per 1,000 both sexes)</td>
<td></td>
</tr>
<tr>
<td>0 - 14 years</td>
<td>441</td>
</tr>
<tr>
<td>15 - 59 years</td>
<td>518</td>
</tr>
<tr>
<td>60 years and over</td>
<td>41</td>
</tr>
<tr>
<td>Rural population (scattered dwellings)</td>
<td>95 %</td>
</tr>
<tr>
<td>Urban population (groups of at least 1,000 inhabitants)</td>
<td>5 %</td>
</tr>
<tr>
<td>Mean number of persons:</td>
<td></td>
</tr>
<tr>
<td>per rugo</td>
<td>5.7</td>
</tr>
<tr>
<td>per family</td>
<td>4.4</td>
</tr>
<tr>
<td>Mean number of families per rugo</td>
<td>1.3</td>
</tr>
<tr>
<td>Birth rate</td>
<td>42.0 %</td>
</tr>
<tr>
<td>Death rate</td>
<td>20.4 %</td>
</tr>
<tr>
<td>Rate of natural increase</td>
<td>2.2 %</td>
</tr>
<tr>
<td>Rate of population growth (including external migration)</td>
<td>1.7 %</td>
</tr>
<tr>
<td>Current fertility rate (per 1,000 women aged 15-49)</td>
<td>171 %</td>
</tr>
<tr>
<td>Total fertility, women aged 50 and over</td>
<td>6.0</td>
</tr>
<tr>
<td>Gross reproduction rate</td>
<td>2.9</td>
</tr>
<tr>
<td>Net reproduction rate</td>
<td>1.8</td>
</tr>
<tr>
<td>Mean age of mothers at childbirth</td>
<td>30 years</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td></td>
</tr>
<tr>
<td>males</td>
<td>40 years</td>
</tr>
<tr>
<td>females</td>
<td>43 years</td>
</tr>
</tbody>
</table>
TABLE 23 - BURUNDI - GENERAL POPULATION CENSUS (16-30 AUGUST 1979): MAIN INDICATORS

I. TERRITORIAL ADMINISTRATIVE UNITS

Provinces 8 - Districts 18 - Communes 79 - Census Hills 2 460 -

II. CENSUS UNITS

Districts 540 - Areas 4 021

III. CENSUS STAFF

1. Central Bureau of the census
   15
2. Provincial representatives of the Central Bureau
   25
3. Supervisors of communes
   86
4. Supervisors of census districts
   540
5. Enumerators
   4 000

IV. PROVISIONAL RESULTS OF THE POPULATION CENSUS

1. Total population recorded or enumerated
   4 111 310
   of which
   - residents, present
     3 902 730
   - residents, absent
     119 180
   - visitors
     89 400

2. De jure or resident population (RP + RA)
   4 021 910
   of which
   - males
     1 944 620 or 48.4%
   - females
     2 077 290 or 51.6%

3. De facto or actual population (RP + VI)
   3 992 130

4. Number of rugos recorded (rural zone)
   626 480

5. Number of households recorded (rural zone)
   856 860

V. MEAN DATA

1. Mean number of persons
   - per census district
     7 610
   - per enumerator
     1 030
   - per census hill
     1 670

2. Mean number of households per rugo (rural zone)
   1.4

3. Mean number of persons
   - per rugo (rural zone)
     6.4
   - per household (rural zone)
     4.7

4. Mean number of males per 100 females
   94
VI. BUJUMBURA

1. De jure or resident population (RP + RA) of which
   - males 78 530 or 56.7%
   - females 65 510 or 44.3%

2. Number of parcels 11 590

3. Mean number of persons per parcel 11.6

4. Number of households 28 020

5. Mean number of persons per household 5.0

6. Mean number of males per 100 females 126

---

**TABLE 24 - BURUNDI - GENERAL POPULATION CENSUS (16-30 AUGUST 1979): RESIDENT POPULATION (BY SEX), AREA AND POPULATION DENSITY BY PROVINCE**

<table>
<thead>
<tr>
<th>PROVINCE</th>
<th>POPULATION</th>
<th>%</th>
<th>AREA</th>
<th>DENSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>M</td>
</tr>
<tr>
<td>BUBANZA</td>
<td>329 060</td>
<td>164 030</td>
<td>165 030</td>
<td>49.8</td>
</tr>
<tr>
<td>BUJUMBURA</td>
<td>460 310</td>
<td>238 530</td>
<td>221 780</td>
<td>51.8</td>
</tr>
<tr>
<td>BURURI</td>
<td>457 510</td>
<td>222 070</td>
<td>235 440</td>
<td>48.5</td>
</tr>
<tr>
<td>GITEGA</td>
<td>682 990</td>
<td>322 950</td>
<td>360 040</td>
<td>47.3</td>
</tr>
<tr>
<td>MURAMVYA</td>
<td>380 320</td>
<td>183 500</td>
<td>196 820</td>
<td>48.2</td>
</tr>
<tr>
<td>MUYINGA</td>
<td>546 390</td>
<td>256 430</td>
<td>289 960</td>
<td>46.9</td>
</tr>
<tr>
<td>NGOZI</td>
<td>773 330</td>
<td>369 380</td>
<td>403 950</td>
<td>47.8</td>
</tr>
<tr>
<td>RUYIGI</td>
<td>392 000</td>
<td>187 730</td>
<td>204 270</td>
<td>47.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4 021 910</td>
<td>1 944 620</td>
<td>2 077 290</td>
<td>48.4</td>
</tr>
<tr>
<td>Incl. BUJUMBURA-VILLE</td>
<td>141 040</td>
<td>78 530</td>
<td>62 510</td>
<td>55.7</td>
</tr>
</tbody>
</table>
** TABLE 25 - BURUNDI - DEMOGRAPHIC INDICATORS ESTIMATED BY THE UNITED NATIONS, 1950-2000 (MEAN VARIATION) **

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population total (thousands)</td>
<td>2 435</td>
<td>2 564</td>
<td>2 908</td>
<td>3 210</td>
<td>3 350</td>
<td>3 785</td>
<td>4 288</td>
<td>4 904</td>
<td>5 618</td>
<td>6 407</td>
<td>7 180</td>
</tr>
<tr>
<td>Population males (thousands)</td>
<td>1 203</td>
<td>1 310</td>
<td>1 436</td>
<td>1 585</td>
<td>1 654</td>
<td>1 858</td>
<td>2 117</td>
<td>2 424</td>
<td>2 799</td>
<td>3 176</td>
<td>3 606</td>
</tr>
<tr>
<td>Population females (thousands)</td>
<td>1 232</td>
<td>1 344</td>
<td>1 472</td>
<td>1 626</td>
<td>1 696</td>
<td>1 906</td>
<td>2 170</td>
<td>2 481</td>
<td>2 839</td>
<td>3 240</td>
<td>3 674</td>
</tr>
<tr>
<td>Population aged 0-4 years as % of total population</td>
<td>17.5</td>
<td>17.4</td>
<td>17.3</td>
<td>17.3</td>
<td>17.3</td>
<td>17.9</td>
<td>18.2</td>
<td>17.9</td>
<td>17.6</td>
<td>17.0</td>
<td>16.0</td>
</tr>
<tr>
<td>Population aged 5-14 years as % of total population</td>
<td>24.9</td>
<td>25.1</td>
<td>25.2</td>
<td>25.2</td>
<td>25.2</td>
<td>25.7</td>
<td>25.7</td>
<td>26.6</td>
<td>28.9</td>
<td>28.9</td>
<td>26.6</td>
</tr>
<tr>
<td>Population aged 15-64 years as % of total population</td>
<td>54.5</td>
<td>54.4</td>
<td>54.6</td>
<td>54.6</td>
<td>54.7</td>
<td>54.1</td>
<td>53.2</td>
<td>52.5</td>
<td>52.4</td>
<td>53.0</td>
<td>54.1</td>
</tr>
<tr>
<td>Population aged 65 years and over as % of total population</td>
<td>3.0</td>
<td>3.1</td>
<td>2.9</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
<td>2.9</td>
<td>3.0</td>
<td>3.1</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Population aged under 20 years as % of total population</td>
<td>52.5</td>
<td>52.6</td>
<td>52.7</td>
<td>52.7</td>
<td>52.7</td>
<td>53.1</td>
<td>53.8</td>
<td>54.3</td>
<td>54.8</td>
<td>54.4</td>
<td>53.4</td>
</tr>
<tr>
<td>Women aged 15-49 years as % of females</td>
<td>46.8</td>
<td>46.7</td>
<td>46.9</td>
<td>47.0</td>
<td>47.0</td>
<td>46.4</td>
<td>45.6</td>
<td>45.0</td>
<td>45.0</td>
<td>45.6</td>
<td>46.6</td>
</tr>
<tr>
<td>Dependency ratio (%&lt;sub&gt;c&lt;/sub&gt;)</td>
<td>835.0</td>
<td>836.7</td>
<td>831.2</td>
<td>829.9</td>
<td>829.8</td>
<td>848.8</td>
<td>879.7</td>
<td>905.7</td>
<td>907.8</td>
<td>886.9</td>
<td>849.0</td>
</tr>
<tr>
<td>Child/women ratio (%&lt;sub&gt;c&lt;/sub&gt;)</td>
<td>74.1</td>
<td>73.5</td>
<td>72.7</td>
<td>72.7</td>
<td>72.6</td>
<td>71.5</td>
<td>70.7</td>
<td>70.2</td>
<td>71.5</td>
<td>71.7</td>
<td>71.9</td>
</tr>
<tr>
<td>Sex ratio</td>
<td>97.6</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
<td>97.5</td>
</tr>
<tr>
<td>Median age (years)</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
<td>18.4</td>
<td>18.1</td>
<td>17.8</td>
<td>17.7</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>Proportion of urban population (%)</td>
<td>1.4</td>
<td>1.6</td>
<td>1.9</td>
<td>2.2</td>
<td>2.3</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Population density (km&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>87.0</td>
<td>95.0</td>
<td>104.0</td>
<td>115.0</td>
<td>120.0</td>
<td>135.0</td>
<td>154.0</td>
<td>176.0</td>
<td>202.0</td>
<td>231.0</td>
<td>262.0</td>
</tr>
</tbody>
</table>

| Decadal Indices                        | 50-55      | 55-60      | 60-65      | 65-70      | 70-75      | 75-80      | 80-85      | 85-90      | 90-95      | 95-2000    |
|----------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Growth rate (%)                        | 1.72       | 1.83       | 1.98       | 0.54       | 2.33       | 2.60       | 2.59       | 2.72       | 2.66       | 2.52       |            |
| Rate of increase (%<sub>c</sub>)       | 17.2       | 18.3       | 18.7       | 21.7       | 23.3       | 26.6       | 25.8       | 27.1       | 26.5       | 25.2       |            |
| Crude birth rate (%<sub>c</sub>)       | 48.4       | 48.2       | 47.7       | 48.1       | 48.0       | 47.3       | 45.6       | 43.9       | 41.5       | 38.3       |            |
| Crude death rate (%<sub>c</sub>)       | 31.2       | 29.9       | 29.0       | 27.0       | 24.7       | 21.3       | 18.8       | 16.8       | 14.9       | 13.1       |            |
| Gross reproduction rate                | ...        | ...        | ...        | ...        | 3.10       | 3.10       | 3.04       | 2.94       | 2.75       | 2.48       |            |
| Net reproduction rate                  | ...        | ...        | ...        | ...        | 1.87       | 2.03       | 2.10       | 2.12       | 2.07       | 1.93       |            |
| Completed fertility                    | ...        | ...        | ...        | ...        | 6.293      | 6.293      | 6.165      | 5.974      | 5.583      | 5.029      |            |
| Fertility rate (%)                     | 204.7      | 203.4      | 200.6      | 202.2      | 203.2      | 203.0      | 199.3      | 193.3      | 181.2      | 164.6      |            |
| Life expectancy, male (years)          | 30.0       | 31.9       | 34.4       | 36.9       | 37.5       | 41.4       | 44.4       | 48.9       | 49.3       | 51.8       |            |
| Life expectancy, female (years)        | 32.6       | 35.1       | 37.6       | 40.1       | 40.6       | 44.6       | 47.6       | 50.2       | 52.7       | 55.3       |            |
| Life expectancy, total population (years) | 31.3       | 33.5       | 36.0       | 38.5       | 39.0       | 43.0       | 46.0       | 48.5       | 51.0       | 53.5       |            |

Source: [12]
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