# Groupe de Démographie Africaine

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# POPULATION SIZE IN AFRICAN COUNTRIES: AN EVALUATION

Volume II

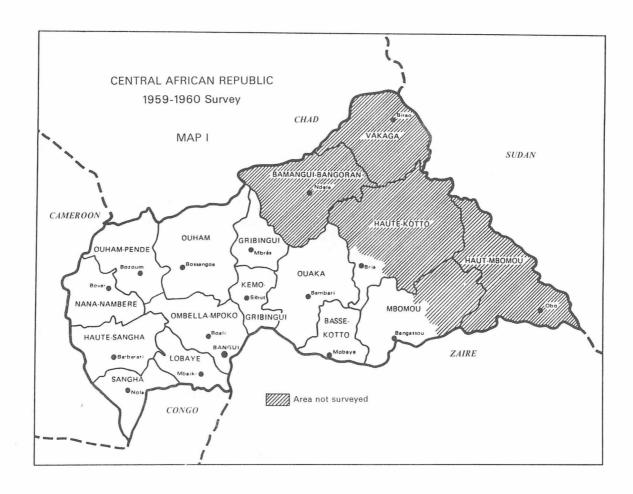
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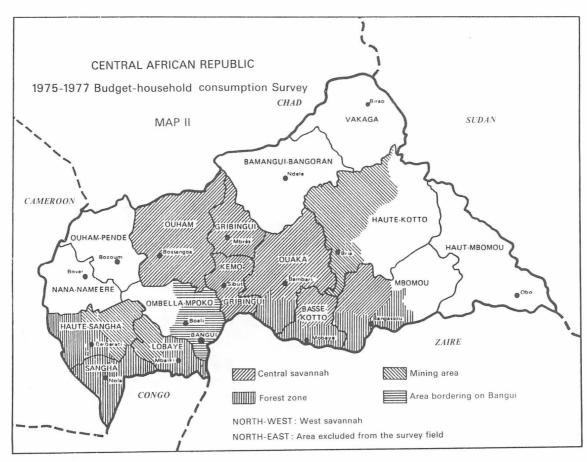
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CENTRAL AFRICAN REPUBLIC

DANIEL PANTOBE





#### CENTRAL AFRICAN REPUBLIC

#### I. INTRODUCTION

The Central African Republic is a non-coastal country of Equatorial Africa.

Covering an area of 623,000 km2 it is bounded on the west by Cameroon, on the north by Chad, on the south by Zaire and Congo and on the east by Sudan.

Its geographical features consist of a vast dorsal plateau which runs from east to west with an average altitude of 300 to 500 metres, bounded on the north-west by the Massif of Yadé at the boundary of the Adamaoua plateau of Cameroon and on the north-east by the Massif of Fertyt (approximately 1.400m). Numerous water sources which have given their name to almost all the administrative districts of the country take their source from this plateau and run northwards towards the Chari basin and Lake Chad, and southwards towards that of Oubangui and M'Bomou. In the extreme east the Sudan border runs along the watershed with the Nile basin.

This explains why the former French colony was named Oubangui-Chari.

The ecology is directly linked to the rainfall pattern, marked by a dry period and a major rainy season which are more or less clearly differentiated according to the latitude. The dry season, which centres on January, lasts longer as the northern area is approached. The rainy season starts towards the month of March and ends in November with the heaviest rainfall in August and September in all areas. The annual rainfall varies from 1,000 mm to 1,600 mm. The climate is therefore equatorial in the south, intertropical in the central area and sub-Sahelien in the extreme north. Apart from the southern forest areas, most of the land is a more or less woody savannah area.

This country, which became officially independent on August 13th 1960, even though it had been declared the Central African Republic on December 1st 1958, was classified by the General Assembly of the United Nations as being one of the Lesser Developed Countries.

The GNP per inhabitant according to official estimates fell from 56.760 F (CFA) to 46.180 F at constant prices over the period from 1977 to 1980. It is at present estimated at 300 \$ US at current prices. Central Africans, the majority of whom live in villages of less than 200 inhabitants along the communication routes, devote themselves essentially to subsistence agriculture. The main subsistence crop is manioc, except in the north east where millet constitutes the basic diet. According to a household budget and consumption survey in 1975–1977, the daily food intake of the average Central African was approximately 1,635 calories.

Livestock farming has developed in the west and central east, but trypanosomiasis has slowed down the progress. The present herd of approximately 1,000,000 is kept by the Bororo nomads.

Central African Republic exports coffee, wood and diamonds, as well as cotton and tobacco. Being entirely enclosed by bordering countries proves an unfavorable factor for development. The port of Pointe-Noire in Congo is 1.800 km from Bangui, and Doula in Cameroon is 1.400 km away.

As a member of the UDEAC (Union Douanière et Economique de l'Afrique Centrale) along with the People's Republic of Congo, the United Republic of Cameroon and the Republic of Gabon, the Central African Republic forms part of the Lomé Convention between the 'ACP' countries and the EEC. The currency is the CFA (African Financial Community) franc.

# II. SOURCES OF POPULATION DATA

Various archeological indicators have revealed that the origins of the population of the Central African savannah go back far in the mists of time. Implements of the Pebble culture were excavated, traces of the lithic sangoan technology originating in Eastern Africa. For many years now a researcher has been studying the megalithic civilization of Bouar (Nana-Manbéré).

Historical rather than geographical factors explain the present location of the population.

For the recent historical period, the present configuration of the population shows that it has been marked by numerous migrations, population impacts and invasions, the last being that of French colonization which began during the last quarter of the 19th century. The ethnic division at the time in Central Africa was more or less the same as that of today. Bayas and Mandjias in the west, Bandas in the centre neighbouring with the riverside groups of Oubangui (Banziris, Sangos, Yakomas....). Nzakaras and Zandés in the east on the banks of the MBomou. The north and north eastern areas, now almost empty of inhabitants, were no doubt populated by Banda tribes who were decimated by the razzias of the 'Sultan' slavers of Dar-E! Kouti in the north (the most famous being Senoussi and Rabah). The south was populated by Nzakaras and Zandés; the most famous, Bangassou, Rafaï and Zemio, gave their name to the towns in the area.

## 1) Before Independence

In 1906, the Ministry of the Colonies in Paris assessed the population of Oubangui-Chari to be 2 million inhabitants: Georges Bruel [1 p.350], administrator of the colonies and former head of the geographical department of the 'AEF' from 1909 to 1911, estimated the population to be 1.375,000 in 1911. This was based on the 407,900 inhabitants enumerated (excluding children) in the areas actually controlled by France: areas which, in the first years of colonization, only covered a small part of the land. It should be noted that at this time, the surface area of the colony was appreciably less than the area of the Central African Republic today, given that part of the land had been handed over to Germany following the Convention of November 4th 1911.

The administrative censuses of the Central African populations were organized from the very beginning of colonization in the 'pacified' areas (consequently subject to taxation). In the areas where the French authorities exerted 'a certain influence', they made indirect estimates from information obtained by their native agents. The unsubjugated regions.

which they entered only by chance and with arms, underwent quite arbitrary assessments. The census was however carried out carefully in the districts where it was organized, as the extract from a letter which dates back to 1910 given in annex 1 shows.

Administrative censuses were the only source of population data in the Central African Republic right up to the 1959-1960 Demographic Sample Survey.

#### 2) After Independence

At this time, collection procedures multiplied.

- <u>Principal sources</u>: the 1959-1960 Population Survey together with the 1960-1961 Agricultural Survey, the General Census of December 8th-22nd 1975, and the 1976-1977 Budget-Consumption Survey:
- <u>Secondary sources</u>: these include the improved administrative censuses, said to be 'exhaustive' or 'instantaneous', agricultural sample surveys, enumerations of major endemics.

## a) Improved Administrative Censuses

After Independence, especially between 1960 and 1970, the Government of the Central African Republic endeavoured to establish an improved administrative census which was intended to replace the former system of the village monographs. This new census was tested in the central area at the time of the preparatory operations of the 1959-1961 sample surveys.

In this new system, the census register gave way to individual schedules grouped together in compound schedules which in turn constituted a village file.

In the individual schedule the following information was recorded: complete civil status, dependents, economic activity, education, cultivation and firearms held.

The objective pursued by these 'exhaustive censuses' was to constitute a basis for civil registration so as to deliver birth and death certificates at the time of annual updatings. It was also to establish electoral lists, conscription lists and, finally, to help economic and social planning.

The census procedure consisted of covering the whole territory village by village. Enumeration was conducted hut by hut for residents only. The enumerators and an inspector were expected to cover approximately 20,000 people over a period of 3-5 months.

Several 'exhaustive' censuses of this type were undertaken. Besides that of 1959 in the central area, there was also the unfinished 1961-1963 census. Its only aim was to give figures for the eastern area where there had been no survey in 1959-1960. Unfortunately the district of NDélé (now Bamingui Bangoran) was not enumerated. Then came the so-called 'instantaneous' censuses of 1965 and 1968 for which it is impossible to find the slightest methodological information. except that there was nothing 'instantaneous' about them.

These operations enabled the population size of the Central African Republic to be officially determined at 2.088.000 inhabitants in 1965 (Bangui 237.971) and 2.255.536 in 1968 (Bangui: 301.793). It is generally thought that the figures actually obtained were increased by 50% for Bangui and 25% for the rest of the country.

The first signs of population inflation date from this period and show their effects over the entire period reviewed in this report.

# b) The Agricultural Surveys

Annual agricultural sample surveys have existed since 1963. From 1963-1981 results have been published regularly.

TABLE 34 - CENTRAL AFRICAN REPUBLIC - EVOLUTION OF POPULATION SIZE BETWEEN 1906 AND 1976 (DEC. 31ST OF EACH YEAR)

YEAR	POPULATION (thousands)	YEAR	POPULATION (thousands)	YEAR	POPULATION (thousands)
1906 1911 1921 1926 1931 1936 1939 1944 1945 1946 1947 1948	2 000 (1) 1 375 (2) 756 857 871 940 975 8 1 054.7 1 039.0 1 069.7 1 062.0 1 073.4 1 067.0	1950 1951 1952 1953 1954 1955 1956 1957 1958 1959	1 075,1 1 078,8 1 088,8 1 089,0 1 098,9 1 113,7 1 134,6 1 139,5 1 171,2 1 187,1 (3) 968,9 (4) 1 016,9 (5) 1 154,9 (6) 1 202,9 (7)	1960 1961 1962 1963 1964 1965 1966 1968 1975	1 227,2 1 244.8 1 279.6 (8) 1 306.0 (8) 1 338.0 2 088.0 (9) 1 437.0 [4] 2 255.0 (10) 1 833.3 (11) 1 822.4 (12) 1 817.8 (13) 2 057.0 (14) 2 088.0 (15) 1 771,7 (16)

- (1) First evaluation of the Ministry of the Colonies.
- (2) Estimate by G. Bruel.
- (3) Administrative census.
- (4) 1959-1960 survey: de facto population actually recorded.
- (5) 1959-1960 survey; resident population actually recorded.
- (6) 1959-1960 survey; de facto population including the areas where the survey was not conducted.
- (7) 1959-1960 survey; resident population including the areas where the survey was not conducted (official figure).
- (8) 1961-1963 general population census.
- (9) Instantaneous census of 1965 overestimated; 4 give 1.370.0.
- (10) Instantaneous census of 1968 overestimated.

- (11) 1975 census: de facto population and institutional population on December 15th.
- (12) 1975 census; total crude de facto population on Dec.15th.
- (13) 1975 census; de facto population corrected for rural sample bias on December 15th.
- (14) 1975 census; de facto population on December 31st, official figure.
- (15) 1975 census; resident population on December 31st, official figure.
- (16) Budget-consumption survey, population estimate for the survey field on January 30th.

These surveys give estimates of the population living in rural areas except, for the most part, for the eastern area. The town of Bangui and the cattle breeding areas are also excluded from the survey field. This makes it hardly possible to use the figures obtained, given the uncertainties concerning the population in these areas. Furthermore, there were considerable sampling errors. These surveys, useful as far as agriculture is concerned, are of very little help for the problem we are interested in. The world agricultural census which was carried out in Central Africa in 1973 presents almost the same drawbacks.

# c) Enumerations of the Great Endemics

This source does not reveal anything new, since in their medical prospecting the mobile teams use figures from the administrative censuses to assess the rate of coverage. It is likely that in some areas the figures are better than those of the administrative census, but for other areas, this is not the case. It all depends on the coverage, which tends moreover, to decrease regularly. Furthermore, although for a certain period, the entire territory was covered in two years, the length of time taken has tended to increase considerably over the last few years.

Table 34 gives the crude results of the different administrative and statistical collections which were carried out in the Central African Republic up to 1975.

#### III. CRITICAL STUDY OF SOURCES

This is limited to the main sources.

#### 1) Before Independence

The population statistics for the entire country were obtained from the compiling of the results of the administrative censuses (in theory, annual), annexed to the economic reports of the district chiefs. The state of the population was drawn from village monographs (or population or village registers) which were brought up-to-date during the rounds. As these rounds were carried out at irregular intervals, often figures of previous years (in some cases as much as five years) would be repeated several times. However, in the Central African Republic the well-known weaknesses of the administrative censuses were made worse by continual modifications of the country's administrative boundaries, both external and internal.

As regards bordering countries not under French sovereignty, problems with England and Belgium were settled between 1885 and 1908 (1). On the other hand, the frontiers with the neighbouring territories of Chad and Mid-Congo which formed part of the "AEF", were constantly changing. The frontier areas of each of these territories were governed by one or the other of the colonies according to the period.

The internal boundaries of the administrative districts and their designations were constantly changing. PENEL [8] calculated that in 54 years, from 1904 to 1958, there was a total of 239 texts in Oubangui-Chari bearing modifications to the boundaries and designations of one or several of the administrative districts, an average of more than four per year. There were only eight years without texts ordering territoria! modifications: 1908, 1924, 1927, 1941, 1942, 1949, 1953 and 1955. After the Second World War the external borders were only finally consolidated in 1950. Internal modifications continued after Independence. The most recent date back to 1976-1977.

It is clear that the administrative censuses could but suffer on account of these disorders in a country where many villages bear the same name. and, furthermore, where there is so much mobility of populated areas. Several tens of villages disappeared, or were created, or changed their name and/or administrative district each year.

# 2) After Independence

# a) The 1959-1960 Population Survey

\* The programme of the fieldwork for this operation, coupled with the 1960-1961 agricultural survey, was as follows:

Central Oubangui area from July 6th to October 30th 1959. - Western area, April 1960 to July 30th 1960.

\* The method was a two-stage random sample with a stratification of the study area according to ethnic group and cultivation: the demographic sample corresponded to the first-stage sample and the agricultural sample to the second.

The sampling frame was constituted by the list of villages in the country, updated during the first semester of 1959 during the experimentation of a new type of 'improved' administrative census.

The sample covered approximately 102,000 people out of the total of 960,000 estimated by the improved administrative census for the survey field. This was taken after the constitution of primary units of 250

The Franco British agreement in 1889 and the Franco-Belgian one in 1894 enabled the eastern frontier to be fixed with Sudan and the southern one with Belgian Congo (now Zaire).

<sup>(1)</sup> Apart from the Convention of November 4th 1911, in force until 1918, which acknowledged that an area of approximately 46,000 km² west of Oubangui-Chari was under German authority.

people, which necessitated the grouping together of small villages (the most numerous) and the division of those of a larger size.

\* The survey field was limited to the afore-mentioned areas. The town of Bangui and the entire eastern area were excluded, that is to say, the prefectures which are now known as Bamingui-Bangoran, Vakaga, Haute-Kotto (apart from the sub-prefecture of Bria), Haut-MBomou, the sub-prefecture of Rafaï, a total of more than 264,000 km² out of the 622,436 km² in the territory.

Various nomadic groups such as the Babinga pygmies and the Bororo livestock farmers in the districts of the central region (Bambari, Ippy, Alindao, Mobaye) and the west (Bouar, Baboua, Bocaranga) were also excluded.

The results published per area of settlement (population centres and the Bush) and per region (Centre, River, West) were globally the following for December 31st 1959.

# Area surveyed:

Residents present		964	040		
Residents absent		52	870		
- 'De jure' population	1	016	910		
Visitors				4	900
<ul><li>'De facto' population</li></ul>				968	940

# Areas not surveyed:

	Town of Eastern	Bangui			80	888
•	Eastern	area			66	000
٠	Nomags,	miscellaneous			40	000
	٧	TOTAL			186	000
		OVERALL 7	<b>POTAL</b>	1	202	910

#### 1 154 940

The figures for the areas where the survey was not conducted are, as a rule, equal to those of the improved administrative census increased by 6%, which is the overall rate of underestimation for the previous administrative census revealed by the survey.

Finally, the 1959-1960 population survey only focussed on 60% of the territory and 80% of the population of the Central African Republic.

In order to assess the significance of the figure put forward (1,200,000), the validity of the figure given for the area where the survey was conducted and of the estimates made for areas where the survey was not conducted, must be considered.

\* The factors liable to have influenced the quality of the collection result from the combination of conducting the survey in two parts, its length, 114 days for the central area, 90 days for the western area, and its coupling with the agricultural survey, which led to proceeding during the rainy season. This period is when travelling the most difficult, but also when a significant part of the population of the villages and the

largest centres disperses to go and cultivate the fields, to hunt or to fish.

The provisional survey report for the Central-Oubangui area points out this great mobility. It assessed the proportion of inhabitants possessing two residences at 15%. Thus, Bambari, Alindo, Bangassou,... had a floating population, who, towards the month of July, returned to their semi-permanent farming villages so as to be spared from long walks.

TABLE 35 - CENTRAL AFRICAN REPUBLIC - RESULTS OF THE ADMINISTRATIVE CENSUSES FROM 1954 TO 1962 (thousands)

DISTRICTS	SURFACE AREA KM2	1954	1955	1956	1957	1958	1959	1960	1961	1962
NDELE	58 200	17.9	17.5	19.1	17.2	17.1	17.0	18.6	18.6	18.6
BIRAO	45 500	7.7	7.7	7. 1	7.7	8.0	7.8	8,1	8,5	9.7
YALINGA	43 689			• • •	5.4	5.6	5.3			5,1
OUADDA	32 389	7.3	7.1	8.5	3.6	3.1	2,9	• • •	•••	3.8
RAFAI	27 885	10.8	10.7	10.1	10, 2	9.0	9.7	• • •		9.6
OBO ZEMIO	56 630	21.8	20.7	20.3	20.1	18.6	18.6	18.6	18.6	18.6
TOTAL	264 293	65. 5	63.7	65.1	64.2	62.9	61,3	•••	• • •	65, 4

There is no doubt that all these factors played a role in the difference observed between the figure for absent residents and the one for visitors. This indicates errors in the collection, since the proportion of Central Africans who left their country was extremely low. In fact, 2.8% of the residents absent were declared as being out of the Central African Republic. Therefore if it is certain that the visitors, who represented 9.2% of the absent residents, were wrongly recorded, it is also very likely that there were omissions or double counts, without however being able to say which prevailed.

The areas where the survey was not conducted in the east are shown in the following table, in which the results of the administrative censuses from 1954 to 1962 are given. The 1975 surface areas, valid for 1959-1960, are indicated.

Inasmuch as these figures can be considered reliable, the assessment made in 1959-1960 seems to be correct, although slightly too low.

TABLE 3	36	-	CENTRAL	AFRICA	AN RE	PUBLIC	<u> </u>	POP	JLATION	OF	THE	TOWN	OF	BANGUI	FROM
			1900 TO	1967	DEC.	31ST (	P	EACH	YEAR)						

YEAR	POPULATION	YEAR	POPULATION	YEAR	POPULATION	YEAR	POPULATION
1900	2 000	1936	24 000	1950	60 000	1957	80 000
1916	8 000	1937	20 000	1951	66 000	1958	85 000
1922	15 506	1939	23 000	1952	72 000	1959	80 000
1927	20 166	1940	23 912	1953	80 000	1960	83 000
1930	22 232	1944	21 595	1954	80 000	1961	83 000
1931	20 000	1945	25 648	1955	72 000(a)	1962	89 000
1932	16 000	1948	45 000	1956	80 000	1964	127 000
						1967	140 300

## a) African Census, December 15th 1955

The given figure of 80,000 inhabitants for the town of Bangui also seems to be slightly underestimated, as shown in the Table 36. A figure of 90,000 inhabitants would have probably been closer to reality.

For the Bororo nomadic livestock farmers and the Babinga pygmies, there is no evidence available to judge the plausibility of the figure given. The estimate provided has to be accepted.

In all, it can be considered, as the authors of the report suggest [7], that the 1959-1960 survey gave a 'de jure' population with an approximation of 5% - no doubt an underestimation - for the population of the areas where the survey was conducted. This population represented approximately 80% to 85% of the total population present in the territory on December 31st 1959.

#### b) The 1975 Census

This census, covering the entire territory of the Central African Republic, was financed and supervised by the United Nations. Since this has already been the subject of a methodological monograph [12], the main characteristics only will be mentioned.

#### \* Schedule

- 1972, elaboration of the main lines for the project.
- From March to December 1973, preliminary work.
- From December 1973 to October 1974, cartographic work.
- January 1975, pilot census.

- March 18th 1975, interruption in the census work by order of the Government of the Central African Republic, when it was at the final preparations stage, the field enumeration being intended for April 1st-15th 1975.
- May 9th 1975, resumption of the work.
- December 8th-22nd 1975, general enumeration of the popu-lation.
- January 1976 September 1978, data processing.
- March 1977 1st semester 1981, evaluation of the census, partial publication of the results. Decision to interrupt the work by the United Nations during the 1st semester 1981.

#### \* Methodology

A general census of the total population. The reference population was the 'de facto' population: residents present plus visitors; absent residents were not enumerated.

Enumeration: the household sheet had 19 columns. It was decided that the procedure would be the following:

- the first ten columns on the household sheet would concern the total population of the country, whatever the place of residence (name and forenames, sex, age, place of birth, nationality, marital status, literacy and education);
- the following nine columns (migration, fertility, economic activity) concerned the entire urban population and a sample of 1/10 of the Rural Enumeration Areas (R.E.A.)
- \* There were numerous factors which were likely to have influenced the quality of the collection.

#### Before Enumeration

The cartography is considered to have been of a good standard, although it underwent certain difficulties which led to the dismissal of the first teams followed by a new recruitment and also a change in the method used, to accelerate the work.

Interruption of the census work was originally due to an 'error' committed by the enumerators of the Budget-Consumption survey (which was being conducted at the same time) who questioned the sister of the Head of State on her income. This interruption, which arose when all equipment, documents and fuel reserves were prepared, completely disorganized the logistics and the personnel on site and was prejudicial to the enumeration of December 1975, which took place almost a year and a half after the cartography.

#### **During Enumeration**

The DESERT report [3] put forward the following factors of omission:

- The dry season is when population groups of hunters and fishermen move and settle together around water points which are almost impossible to find. It is also the time of rest and free time for cultivators, the time for travelling:
- Ignorance of the dwelling places of many nomadic groups who were not approached at the right time;
- Existence of pygmy groups outside the socio-economical structure of the country, a minority of whom were contacted;
- Extremely inopportune visits to certain prefectures of the country by employees of the tax offices led to a part of the population fleeing:
- A lack of pirogues to take the enumerators to the riverside localities;
- Transfer, organized by local authorities, of certain population groups of a prefecture, to greet the Head of State on visit;
- The existence of quite large population groups said to be 'hostile', making it impossible for these settlements to be visited.

The report also shows that the atmosphere was extremely unfavourable. Regional authorities, in certain cases, refused to collaborate and put great pressure on the personnel to obtain fuel. As for the Government, it did not offer any vehicles for the census.

#### After the Enumeration

- The premises of the central census bureau were too cramped to correctly organize the coding:
- The data processing capacity of the National Office of Data Processing (ONI) of the Central African Republic was insufficient. Consequently, to accelerate the pace of work, punch cards were not checked.
- Lack of training for the computer specialists of the ONI in the processing of population data. The first tables were completely erroneous due to discrepancies which were not detected in the columns punched on the coding card.
- Contesting of the provisional figures by the Government, hence pressure to increase data at all levels for fear of dissatisfying the authorities.

# Factors Revealed by the Assessment Analysis

H. SIMONET, a demographic analyst, brought many planning errors and important negative statistical factors to the fore. The most noteworthy concerned the actual realization of the enumeration and the extraction of collected data.

- H. SIMONET studied the consequences of using two successive sampling procedures (instead of one as was originally intended) for the observation, then the coding of data in rural areas.
- Firstly, the observation of <u>all</u> the questions on the household schedule planned for 1/10th of the 'REA', (Rural Enumeration Areas) was only approximate. Only the first ten columns of the household schedule were completed for the sub-prefecture of Baboua, which formed part of the sample (approximately 42,000 people).
- After the 'REA' sample was drawn, which took place before the census, 32 communes and 5 sub-prefectures were not represented. This was only discovered after the census. It was therefore decided to draw an additional sample so that the rural zone of each sub-prefecture was represented by at least one 'REA'. However, this was not possible for the rural part of the sub-prefecture of Ouadda-Djallé (Vakaga), where any hope of a census was put off by floods. In any case, the 'REA' represented in this additional sample could only give the characteristics in the first ten columns of the household sheet, since they did not form part of the first sample drawn.
- The extraction of data, for various reasons (cost, lack of premises enabling the correct running of an office of a reasonable size for coding, and a lack of capacity in computer processing) was exhaustive (620,000 people) for the urban areas but only dealt with the 'REA's covered by the two samples drawn, approximately 100,000 people. The incomplete information collected in the other 'REA's' (9/10 of the total) was, contrary to what was originally intended, purely and simply abandoned. Furthermore, 30 files on Rural Enumeration Areas were stolen in July 1976, 16 of which had not been coded (one 'REA' and 15 urban 'EA's (Enumeration Areas), nine of which were in Bangui). They were replaced by geographically neighbouring 'EA's which were doubled.
- H. SIMONET unambiguously showed that the 'REA' sample was not representative, by taking the sex and age data from the household schedules of the 9/10 of the Rural Enumeration Areas initially abandoned.

The distortions in the total numbers were quite low (0.38%), but much more serious for the age-sex distribution of the prefectures and subprefectures. Although these biases could be put right for these two points at the administrative district level, a general rectification implied reviewing the entire data processing operation, which was of course ruled out.

Ultimately, the 1975 data collection in the Central African Republic was a poorly conceived and hybrid operation, having the characteristics of a census for urban areas and that of a non-representative sample for rural areas, but this was fortunately rectified.

However, and in anticipation somewhat of the third part of this report, it appears that despite what has been said above, valid figures were paradoxically obtained for the population actually recorded on the household schedules in 1975. The best proof is the result, recalled above, of the extraction of the 'REA's by the demographic analyst.

This should not come too much as a surprise. Firstly, since it was necessary to justify the concessions made to the Government, who exerted

extremely strong pressure, so as to obtain a figure which was as close as possible to the desired figure of 3,055,000 inhabitants. An attempt may also have been made to profit from the circumstances (which were objectively extremely difficult) so as to try to cover initial planning errors by insisting on certain factors rather than on others. Whatever the case, it seems prudent to keep all this in mind so as to more accurately assess the section devoted to factors having influenced the quality of the data collection.

Thus, the results of the 1975 census were the object of what has to be called various manipulations to satisfy the Head of State at the time.

In March 1975, a technical adviser of the United Nations "analyzed the figures" from the provisional results obtained by manual extraction, so as to obtain the most accurate figure for the population nominally recorded, with the aim of presenting it to the Government of The Central African Republic for official approval [3 p. 44]. Table 38 is the fruit of this analysis.

A more precise ulterior estimate gives the following:

Total population actually recorded 1,833,322

Including institutional population 10,943

Total 'de facto' population 1,822,379

TABLE 37 - CENTRAL AFRICAN REPUBLIC - OFFICIAL RESULTS OF THE CENSUS ON DECEMBER 15th 1975

RESIDENCE STATUS (a)	TOTAL	ENUMERATED	NON ENUMERATED
a) Residents, present	1 900 970	1 800 970	100 000
b) Residents, absent	184 930	0	184 930
c) Visitors	153 640	16 812	136 828
Resident Population (a + b)	2 085 900	1 800 970	284 930
Actual Population (a + b)	2 054 610	1 817 782	236 828

#### (a) Institutional population excluded.

Using these results and correcting the biases due to the rural survey, H. SIMONET obtained the following basic figures:

Total 'de facto' population 1,817,782

Including visitors 16,812

Residents present 1,800,970

From this corrected total, elements in Table 38 and certain ratios taken from the results of the 1959-1960 survey, H. SIMONET obtained the elements in Table 37 which were officially approved by the Government.

It would take too long to give a detailed explanation as to how these figures were obtained. One example will be taken. The absent residents who were not enumerated were obtained by multiplying the figure which was actually observed for visitors in 1975 (16,812 after correction) by the ratio observed in 1959-1960 between the absent residents and the 'visitors' (52,870/4,900 = 10.78 rounded to 11), giving a total of 184,930.

Based on an annual growth rate estimated at 2.47% H. SIMONET obtained, for December 31st 1975, the figures of 2,088,000 for the resident population and 2,057,000 for the 'de facto' poulation. The age-sex distribution of the resident and 'de facto' populations, established by the latter, after correction of the rural survey bias, can be found in Table 39.

# c) The Household Budget-Consumption Survey 1975-1977

This was a sample survey organized with the material and financial assistance of the United Nations Development Programme (UNDP).

- \* The programme for this survey, conducted in two rounds, was as follows:
- first round from September 1975 to June 1976
- second round from June 1976 to February 1977.

The survey was carried out in the town of Bangui from August 1975 to January 1977.

\* The methodology adopted was that of two-stage random sampling with a stratification of the survey area.

The census areas of the 1975 census, taken as Primary Units (PU) in this circumstance, served as a first-stage sampling frame. The Secondary Units were constituted by Budgetary Units defined in the household list of the Primary Units sample. The Budgetary Unit did not necessarily correspond to the household.

The survey area was first divided into six sectors including the town of Bangui. For five of these sectors, excepting that of Bangui, there was an urban stratum and a rural stratum. There was therefore a total of six urban strata and five rural strata.

The sampling ratio at the first stage was 1/10 in the urban areas and 1/15 in the rural areas. At the second stage, ten Budgetary units were selected at random in the field in each Primary Unit sample.

\* The geographical field of the survey did not include the East of the territory of the Republic of Central Africa except, however, the subprefecture of Ouadda in the prefecture of Haute Kotto which came under the fourth mining sector. The area of study was therefore larger by 32,389 km2 than that of the 1959-1960 survey and less than that of the 1975 census by 231,840 km2.

The 'de facto' population of this sub-prefecture was 5,386 inhabitants on December 15th 1975.

\* The factors which influenced the data collection and of interest in this report do not give rise to any particular comments, except the problem, which the report put forward, of finding in the field the Enumeration Areas of the 1975 census. This problem seems to have been solved satisfactorily and the sample seems to have been drawn accurately.

\* The results for the population were as follows:

Population for the area studied 1,771,679

Including: Rural areas 1,124,222

Urban areas 402,209

Town of Bangui 245,248

#### IV. CONSISTENCY BETWEEN THE DIFFERENT SOURCES

For reasons already mentioned, the figures from the administrative censuses could only give doubtful approximations for the population size of the Central African Republic. However, quite an impressive similarity can be seen between the 1959-1960 survey and the administrative census of 1959, for which the figure (1,187.1) was found to be between the two estimates given by the survey (1,154.9 and 1,202.9). It should, however, be recalled that these two operations were not independent. The first attempts at improving the administrative census had in fact begun in 1959, within the framework of the preparation of the surveys to follow.

Likewise, the figure for the 'de facto' population actually recorded by the 1975 census (the bias of the rural survey having been corrected), was very close to the figure given by the budget-consumption survey of 1975-1977. These figures stood at 1,740,183 and 1,771,679 respectively for, of course, the part of the territory common to both operations. Taking differences in objectives, methods and definitions into account, it is a good result, but here again, the two collections were not independent.

In all, there are therefore two plausible population estimates separated by slightly less than 16 years, to which a third data can be added, the rate of natural increase given by the 1959-1960 survey.

According to this survey, the birth rate was 48 per 1,000 and the death rate 26 per 1,000, a rate which the authors of the survey report thought to be underestimated and probably closer to 30 per 1,000. As migration was insignificant, the crude rate of natural increase for 1959-1960 was set at between 18 and 22 per 1,000.

TABLE 38 - CENTRAL AFRICAN REPUBLIC - GENERAL POPULATION CENSUS (December 8th-22nd 1975): TOTAL POPULATION OF THE COUNTRY PER PREFECTURE (a)

PREFECTURES.			TION NOMII Merated (b		OMITTED	ESTIMATED	POPULATION IN DISTANT AREAS (e)	
NATIONAL CAPITAL AND DISTANT AREAS	TOTAL	Both sexes	Men	Women	POPULATION 8 % (c)	POPULATION (d)		
TOTAL	2 001 679	1 820 559	886 523	934 036	145 645	10 475	25 000	
Bamingui-Bangoran	24 778	22 665	10 874	11 791	1 813	300		
Bangui (Capitale)	278 238	251 475	125 596	125 879	20 118	6 645		
Basse-Kotto	156 345	144 764	68 286	76 478	11 581		[	
Gribingui-Economique	64 257	59 497	28 806	30 691	4 760			
Haut-Mbomou	27 278	25 257	11 924	13 333	2 021			
Haute-Kotto	41 723	38 632	19 888	18 744	3 091			
Haute-Sangha	173 285	160 449	80 797	79 652	12 836			
Kemo-Gribingui	64 060	59 315	28 493	30 822	4 745			
Lobaye	138 593	128 327	63 324	65 003	10 266			
Mbomou	106 009	98 156	46 651	51 505	7 853			
Nana-Mambere	154 188	142 767	70 600	72 167	11 421			
Ombella-Mpoko	101 975	94 421	46 064	48 357	7 554		ł	
Ouaka	170 451	157 825	75 446	82 379	12 626			
Ouham	211 078	194 952	93 459	101 493	15 596	530		
Ouham-Pende	201 357	183 664	87 226	96 438	14 693	3 000		
Sangha-Economique	44 933	41 605	20 897	20 708	3 328			
Vakaga	18 131	16 788	8 192	8 596	1 343			
Distant areas (e)	25 000	_	-	-	_	-	25 000	

- (a) Provisional data.
- (b) Population recorded on the household schedules used during the enumeration, including nomadic groups and other groups outside the socio-economic structure.
- (c) Population not enumerated for many different reasons.
- (d) Population known to be living there but not enumerated nominally, estimated using cartographic and additional data.
- (e) The way of life of these population groups did not enable them to be distributed by prefecture.

In time, and considering the 'inflationary' atmosphere which reigned in the country, it came to be accepted towards the end of the 1960s that the population of the Central African Republic was growing at a rate of approximately 25 per 1,000. Since this estimate was broadly used, it is certain that this data influenced all the results obtained in the country.

The study of the consistency of the figures available means examining doubtful estimates by comparing them to a third set of data which is itself uncertain. Differences in the geographical field, in objectives, in methods and in the definitions of the operations reviewed further complicate the study.

Leaving aside the comparison of the total 'de facto' populations estimated on 31.12.1959 (1,154,940) and on 31.12.1975 (2,057,000) which gives a totally absurd mean annual growth rate (3.67%), one can first endeavour to compare, for the territory common to the two operations, the total 'de facto' population actually enumerated on 15.12.1975 (1,481,702) with that resulting from the extrapolation of the 1959-1960 data (968,940 on 31.12.1959). The result is a mean annual growth rate slightly lower than 2.69%. This rate is too high; part of the natural increase of these areas had been absorbed by the town of Bangui (not surveyed in 1959-1960) which increased during the same period from 80,000 (estimate of 1959) to 253,095 (1975 census), that is, a growth rate higher than 7%.

If the overall estimate of 1959-1960 (1,202,910) is now compared to that of 1,817,782, the growth rate is seen to be 2.61%. Although the possibility of an increase between 1960 and 1975 in the rate of natural increase cannot be excluded, it is doubtful that it reached such a level. Taking the 1975 figure, it appears that the figure for 1959-1960 is underestimated by between 2 and 14% for values of between 1.8 and 2.5%. This is presuming the basic figure for 1975 (1,817,782) is correct and has in any case not been overestimated. The corrective work carried out by H. SIMONET on the bias due to the rural survey substantiated this hypothesis. However, there is still some doubt about the figure for the nominally enumerated population presented in Table 38 if one brings to mind the enormous pressure which the authorities of the time exerted in order to obtain 'suitable' figures and if one considers the planning errors and the quite disastrous conditions in which the census was conducted.

#### V. CONCLUSION

Taking into account all the uncertainties which sur-round the series of data proposed in this report , it is possible to claim that on December 31st 1975 the Central African Republic counted 1,820,000 inhabitants, as opposed to approximately 1,270,000 on December 31st 1959. The growth rate was therefore on average 2.27% per annum for these 16 years. Figures for periods preceding 1960 are very uncertain. Taking a figure of 960,000 inhabitants for 1939 and 1,080,000 for 1949, it can be calculated that the Central African population increased at a mean annual rate of 1.2% in the forties, 1.6% in the fifties, and a little less than 2.3% in the sixties, up to the mid-seventies. This evaluation seems plausible especially for the last period, when the superb work in health prospecting, carried out by the а of the 'Great Endemics Department', to certain counterbalanced the effects of the economic and social decline which the country had known since the end of the sixties.

As regards sources, it can only be hoped that a census or objective and serious survey will be organized as soon as possible in order to put an end to the uncertainties about total population size and natural increase in the Central African Republic. To this end, and so as avoid a re-edition of the errors committed in 1975, it is essential that there should be better integration between the collection and analysis stages of the operations undertaken. Unfortunately, the present economic situation of the country renders the realization of this unlikely. The situation risks becoming even more serious since the country does not at present seem to be capable of organizing the traditional administrative censuses. As for civil registration, it is futile to hope to obtain any result before many years, given the complexity of the problem and the administrative competence required.

TABLE 39 - CENTRAL AFRICAN REPUBLIC POPULATION ON DECEMBER 31ST 1975 BY SEX AND AGE

	RE	SIDENT POP	ULATION		AC'	ACTUAL POPULATION					
ACE GROUP	TO	TAL		%	T(	DTAL	%				
	Male	Female	Male	Female	Male	Female	Male	Fema <u>le</u>			
0 Year	36 917	38 087	1,77	1.83	36 912	38 950	1,79	1,90			
1-4	131 361	133 771	6.30	6.40	129 605	134 137	6,30	6,52			
5-9	158 784	155 547	7,61	7.45	151 805	151 123	7,38	7,35			
10-14	131 546	107 795	6.30	5,17	122 915	100 769	5,98	4.90			
15-19	103 448	107 436	4.95	5,15	96 364	105 573	4,68	5,13			
20-24	66 273	75 735	3.17	3,62	65 246	80 846	3.17	3.93			
25-29	69 543	83 315	3.33	3,99	68 928	91 517	3.35	4.45			
30-34	55 680	62 932	2,66	3.02	53 977	68 210	2.62	3.31			
35-39	63 373	78 355	3,04	3,75	62 295	82 012	3.03	3,99			
40-44	46 350	53 842	2.22	2.58	45 635	52 565	2,22	2.55			
45-49	52 480	60 514	2.51	2.89	49 614	58 822	2,41	2.86			
50-54	32 701	35 905	1.57	1.72	31 214	35 827	1.52	1.74			
55-59	34 897	35 980	1.67	1,22	33 800	35 255	1.64	1.71			
60-64	16 259	14 752	0.77	0.71	15 597	14 166	0.76	0.69			
65-69	13 030	12 110	0.63	0,58	12 737	12 251	0,62	0.60			
70 and+	10 486	8 796	0.50	0.42	9 783	8 550	0,48	0.42			
TOTAL	1023 128	1064 872	49 00	51 00	986 427	1070 573	47.95	52.05			
IOIAL	2 088	3 000	10	00	2 057	000	10	0			

#### ANNEX 1

Letter from the Lieutenant-Governor (pi) of Oubangui-Chari to the Commander of the district of MBomou in Bangassou, April 20th 1910, on the population census of his jurisdiction (Excerpt).

. . . . . . . . . .

In his note 296 of July 23rd 1909, writes Mr. Rogon, the Governor (...) indicated that the population count ought to be a condition for the Sultans (...) of the free disposal of the product of indigenous reserves. He added that the census work should be directed and controlled so as to present all the desirable guarantees of exactitude and give, as far as possible, for each ethnic group, village and tribe, a complete population assessment: adult men and women and children of both sexes.

I have noted with satisfaction that the Heads of the subdivisions of Ouango, Zémio and Rafaï conformed to these instructions. It does not seem that the Head of the subdivision of Bangassou took the same care in this task. This officer only gave the overall figure per village or group for the entire population, without distinguishing between adult men or women and children. It is therefore now difficult to properly appreciate the situation of this administrative district without the tax report.

. . . . . . . . . .

The Head of the District of M'Bomou clearly states in the column 'Observations' of his report on the population census for the subdivision of Bangassou that out of a total of 31,313 natives, the approximate figure for women was 10,000 and for children 7,000. There would therefore have been 14,000 men, 10,000 women and 7,000 children. It is interesting to remark that this low number of children in relation to women does not exist in the regions of Ouango, Rafaï and Zemio which were carefully enumerated, where the number of children is on the contrary higher than that for women. It would be interesting to investigate the reason for this difference.

The Governor General ordered that the census of the subdivision of Bangassou should be completed. If the Heads Labassou and Bangassou Kete (added the Superior Head of the colony), put up any resistance to carrying out this operation, "would you please care to defer their right to dispose of the product of the reserves".

Source: Archives of the Barthelemy BOGANDA Museum of Bangui.

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