Groupe de Démographie Africaine

IDP_INED_INSEE_MINCOOP_ORSTOM

POPULATION SIZE IN AFRICAN COUNTRIES: AN EVALUATION

Volume I

Paris 1986

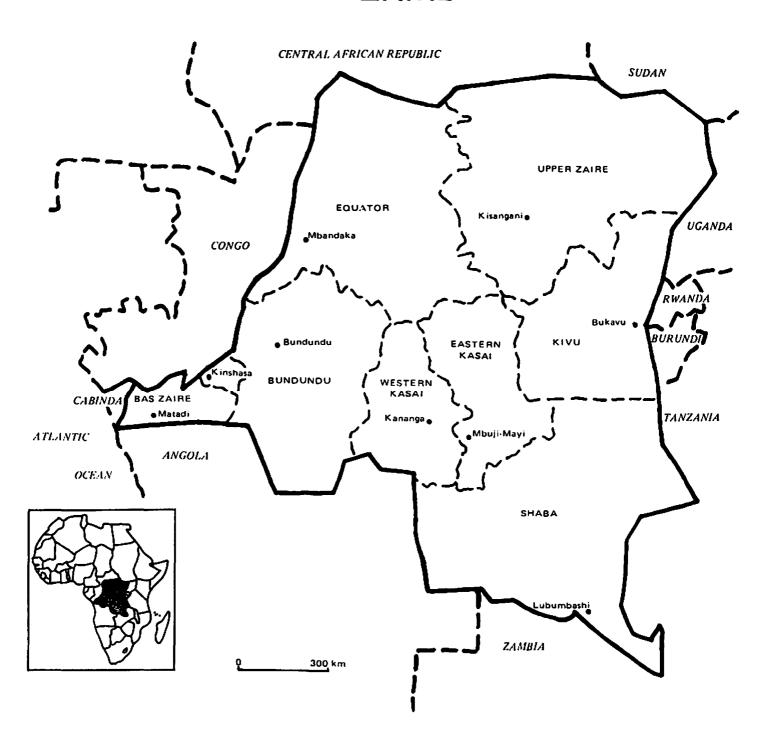
TABLE OF CONTENTS

	Page
Introduction by F. GENDREAU	I
Angola by C.A. DA COSTA CARVALHO	1
Cameroon by A. NKOUNGOUROU EBONGUE and E. FOTSO	13
Chad by O.G. NASSOUR	33
Djibouti by A GUILLAUME	57
Egypt by F. DROSSO	67
Ethiopia by H. TESFAGHIORGHIS	89
Gambia by M.A. GIBRIL	105
Ivory Coast by F. BINET and C. PAULET	117
Kenya by Z.S. MUGANZI	127
Liberia by A.Z. MASSALEE	137
Madagascar by T. RABETSITONTA	149
Mali by H. SOW	183
Mauritius by E. VILQUIN	193
Mozambique by C.A. DA COSTA CARVALHO and M. FERREIRA DA SILVA	201
Namibia by by N.B. GOUWS	209
Niger by M. ROSET-CASENAVE	217
Nigeria by A. ADEPOJU and J.A. EBIGBOLA	233
Reunion by R. CLAIRIN	241
Rwanda by S. NIYIBIZI	267
Sierra Leone by A. THOMAS	279
Togo by T. LOCOH	293
Zaire by J. BOUTE and L. DE SAINT MOULIN	311
Zambia by M.S.C. MULENGA	335
Contributors	351
List of Tables	353
List of Charts	361
List of Maps	363

ZAIRE

Joseph Boute Léon De Saint Moulin

ZAIRE



ZAIRE

The history of Zaire is usually divided into three periods:

- from the first expedition to annexation by Belgium
- the Belgian colonisation
- from political independence to the present

I. FROM THE FIRST EXPLORATIONS TO THE ANNEXATION BY BELGIUM

The estimates of population of Zaire at the end of the last century are derived mainly from narrative accounts or from summary and very limited observations. They are in any case very biased. The opponents of colonisation minimised the population of Central Africa: "Four million negroes running around naked, who neither work nor need to, this is what, if we are to believe the Congo bters is going to save out trade....and our coal fields" [34, p.141]. On the contrary, explorers and colonial agents underlined the importance of their discoveries or of their role by stating very high population figures. As far as Zaire is concerned, the most influential estimate has been that of Stanley. In 1885, he gave a table of inhabitants encountered on the shores of rivers he had explored from 1879 to 1884. At the bottom of a list of 94 figures he proposes a total of 806 300 people for an area stretching 2 422 kilometres (1 515 miles) in length and 16 kilometres (10 miles) in breadth. Reckoning there to be a comparable density in the whole of the upper basin of Zaire, estimated at 1 744 000 km2 (1 090 000 square miles) he concluded there to have been a total population of 29 million inhabitants. The unrealistic nature of this estimate is all the more obvious as the shores of rivers are usually more heavily populated than inland areas. Furthermore, no one seems to have noticed a calculation error (1 515 x 2 = 2 030) which, in the English edition brings the population of Zaire to 43 294 000 (1). It is nonetheless certain that Zaire was relatively highly populated around 1880. The degree of technical progress as well as the importance of certain socio-political organisations are good indicators of this. The decline of the population until the 1920s is also well established.

Another established fact is that the population density around 1880 was already more or less structured as it is today, apart from the towns. This can be ascertained by examining the brief docu-

⁽¹⁾ This error, silently corrected in the conversion into kilometres in the French translation, was mentioned by J. Stengers [30].

ment already published in 1898 in a geography of Congo [1, p.55]. This similarity is linked with a territorial organisation which was to be largely adopted by the colonial authorities. Thus, the mining area of Shaba contained 74 active mines on a map of 1907, whereas the famous "Union Minière du Haut-Katanga" had only been set up one year before, and the railway line which allowed the colonial "development" of this part of Zaire only reached its capital Lubumbashi in 1910. Besides, this industrial basin was already linked in the precolonial period by a network of tracks to the nuclei of dense population of Kasai and around Dilolo [1].

The decline of the population at the end of the 19th century and at the beginning of the 20th century was largely a result of diseases introduced or spread through Arab penetration and colonial Sleeping sickness and smallpox were spread in virulent occupation. waves from endemic areas by the colonisers and wiped out entire vil-In Zaire, sleeping sickness developed on an alarming scale from 1897, probably starting from the Equator, and remained a constant danger until after 1930 [8], [24, pp. 132-133]. Venereal diseases played a less well known, though considerable, role. They caused a decline in fertility which was catastrophic in the central basin and on the plateau of Uele until the 1950s [20], [23]. More generally, the exploitation techniques of the Independent State of the Congo (1885-1908, especially from 1892 onwards) hindered demographic growth. A land law of 1 July 1885 gave colonial domain status to all "vacant" territory not actually occupied at that time by Africans. This often resulted in inhabitants being dispossessed of their best land and it allowed the state to co-opt their labour for itself or for private com-These measures led to the neglect of staple food cultivation and to local famines. Besides, the more or less forced recruitment of the young, male and healthy population to satisfy the growing need for soldiers and workers, separated temporarily numerous couples and debilitated the population. The situation is described in gloomy terms in an official report of 1920:

"The continuous depopulation of Central Africa since it has been occupied by Europeans is a very real fact (...) I believe that sleeping sickness is the main cause of depopulation in the Congo basin (...) It is by opening communication paths from the coast towards the hinterland that Europeans unwittingly spread the disease (...) The war compelled the Government to interrupt its fight against the disease in many places (...) But the picture is even gloomier. Our occupation and the introduction of trade have altered the lifestyle of the native population in many regions and has diminished their vitality (...). Since the beginning of the European occupation, the population of Congo has been steadily decreasing as a consequence of a high mortality (...) to such an extent that it would not be an exaggeration to say that it has been reduced by half". [18, pp. 652, 653, 657 and 660].

A few years later, a very observant doctor confirmed this analysis:

"Everyone is talking of a steady decrease in the population of Congo. In the absence of any complete or reliable census on one hand, and of any civil registration on the other, this decrease cannot be scientifically demonstrated. It nevertheless remains an obvious fact for many observers who have lived a long time in certain regions of Congo. If, despite this steady decrease, we reckon there are more natives than is believed, this only means that there were formerly so many people that despite their decrease there remain at the moment many more than we suspected. What are the causes of this depopulation? We have noted that the commonly acknowledged causes of low natality, high mortality and polygamy are not proven and do not stand up to critical analysis. There remain epidemic diseases and foremost sleeping sickness which has depopulated and still does entire regions of the Colony. Everyone knows that this disease has been spread in the colony as a result of European penetration. But what is not commonly known, and is not admitted by those who do know it, is that the main cause of the depopulation of Congo is the European penetration itself. The natives cannot put up with the 'European civilisation' and its consequences: porterage, permanent work, sudden change in diet, transplantation into new surroundings, in short, the recruitment of workers from one area into another. This is where the cause of depopulation lies" [27, pp. 322-323].

This obsession with depopulation persisted a long time in the colonial world. The organisation of the large demographic surveys of 1955-1957 was spurred by the dread of labour shortage. It is not possible to produce numerical evidence, but if one supposes, as will be suggested, that the population of Zaire was of the order of 10 million inhabitants in 1930, it seems certain that it must have reached 15 to 20 million towards 1880. The introduction of modern medical techniques, the halting of tribal struggles, the banning of trials by ordeal or other practices leading to avoidable mortality were of little significance compared to the factors of demographic regression mentioned above during the existence of the Independent State of the Congo. The recovery took place during the colonial period proper, at different times in the various regions.

II. BELGIAN COLONISATION 1908-1960

During the Belgian colonisation, a system of data collection was introduced and progressively reinforced which essentially comprised three kinds of operations: administrative censuses, civil registration and sample surveys. The characteristics of these sources have often been described [15, pp. 566-567], [24]. It would be appropriate to add here medical sources, often used to confirm the former but also often in complete disagreement with them. These various sources will only be mentioned to underline some aspects necessary to a critical appraisal.

1) Administrative censuses

In principle, an administrative census must be able to produce every year an accurate picture of the population. Unfortunately, the yearly updating of the records was associated with conscription, tax-levying, the checking of the progress of forced labour projects and the recruitment of workers for commercial enterprises. It was in the interest of people who were breaking the law not to make their presence obvious. Finally, the distribution between children and adults was based on ill-defined criteria [10, pp. 249-259]. Despite these shortcomings, a general table of the colony's population was presented every year from 1914 onwards in the Report of the Minister for Colonies to the Belgian Legislative Chambers. Up to 1947, figures were usually given by district; from 1948 onwards, they were given by territory.

Table 94 shows the results obtained from 1914 to 1960, normally at the end of each year. The variation of each total figure compared to the previous one is indicated in percentage terms. Up to 1947, the recorded growth mainly reflect. shifting administrative activities. The progress is essentially the consequence of an improved coverage of the real situation. The case is very obvious in the first ten years. It is equally certain for all the data from 1925 to 1937, where the population figures indicate a mean annual increase of 2.39%. Such a high rate does not tally with either the sanitary conditions of the time or the observations of contemporaries mentioned above. Negative recorded growth rates are almost always the consequence of a slackening of operations, notably during the 1940-45 war, or of a more rigourous approach, as in 1947, when a general check of population records led to the elimination of numerous cards which either no longer corresponded to people present or were duplicates. From 1948 onwards, on the contrary, it was generally considered that the system of enumeration had reached a degree of satisfactory quality. Progress was slower in the field of vital events registration which is not thought to have covered 95% of the population until 1958.

In order to correct the data of censuses prior to 1952, an adjustment curve was calculated the following year by regressive extrapolation back to 1925 [6]. The series devised in this way probably follows more closely the population movement than the data from the administrative census. But it assumes an annual growth which would have risen progressively from 5.3% in 1926 to 10.2% in 1952, when in fact, there is no evidence to support continuous growth since 1925 and the growth rate was certainly higher in 1952. The present authors believe that demographic recovery took place relatively late and at a much quicker pace than suggested in the previous hypothesis. probably happened mainly in the period after the Second World War, at a time when general conditions were greatly improved by the widesspread use of DDT, antibiotics, motor transport and rapid socioeconomic progress. The initial estimate of 9.5 million in 1925 resulting from the adjustment suggested in 1953, is in agreement with the numerous observations concerning the incomplete nature of censuses at that

Table 94

ZAIRE - RESULTS OF ADMINISTRATIVE CENSUSES FROM 1914 TO 1959
(excluding the non-indigenous population)

YEAR	MALE	FEM ALE	BOYS	GIRLS	TOTAL	Growth in %
1914	 !				4 618 254	
1915	!			l	4 654 853	0.79
1916	1 709 006	1 838 150		6 994	5 146 150	10.55
1917	1 954 058	2 038 826	1 98	2 577	5 975 461	16.11
1918	i			ì	-	
1919	j	j		i	•	
1920	ļ			ļ	6 558 374	9.75
1921				ļ	7 152 779 7 000 000	9.06 - 2.14
1922 1923	2 480 330	2 500 453	2 74	6 453	7 727 316	10.39
1924	2 400 300	2 300 433		1	7 938 206	2.73
1925	2 515 683	2 533 575	2 64	3 315	7 692 573	- 3.09
1926	2 537 775	2 695 780		1 895	7 955 450	3.42
1927	2 584 208	2 652 119		4 867	8 121 194	2.08
1928	2 648 959	1 754 236		5 986	8 419 181	3.67
1929	2 742 737	2 840 304	3 09	1 045	8 674 086	3.03
1930	2 779 452	2 845 411	3 17	8 559	8 803 442	1.49
1931	2 769 445	2 817 714		9 722	8 680 681	0.88
1932	2 751 460	2 890 105		4 888	8 956 462	0.85
1933	2 719 945	2 679 422		2 916	8 872 283 9 282 991	- 0.94 4.63
1934	2 810 475	2 947 693		4 823		
1935	2 908 996	3 088 565	1 970 429	1 807 201	9 775 191	5.30
1936	2 976 438	3 176 496	2 025 277	1 868 520	10 946 731 10 217 408	2.78 1.70
1937	3 032 608	3 214 977 3 226 519	2 060 674 2 092 007	1 909 149 1 949 289	10 304 084	0.85
1938 1939	3 036 269 3 014 301	3 226 519	2 113 219	1 978 260	10 328 409	0.24
Į		3 224 324	2 113 445	1 995 803	10 353 909	0.25
1940 1941	3 000 337 3 036 372	3 262 858	2 175 304	2 033 015	10 507 549	1.48
1941 1942	3 048 884	3 250 558	2 180 799	2 050 205	10 530 446	0.22
1943	3 053 352	3 208 689	2 177 213	2 046 B37	10 486 291	- 0.42
1944	3 043 820	3 182 979	2 169 878	2 045 681	10 442 356	- 0.42
1945	3 064 506	3 195 509	2 186 528	2 061 906	10 503 449	0.63
1946	3 094 268	3 240 016	2 229 046	2 103 737	10 667 087	1.51
1947	3 122 571	3 274 636	2 250 876	2 113 270	10 761 353	0.88
1948	3 129 581	3 340 575	2 292 247	2 151 805	10 914 208	1.42
1949	3 166 552	3 394 748	2 329 645	2 182 366	11 073 311	1.46
1950	3 206 725	3 478 960	2 403 516	2 242 592	11 331 793	2.33
1951	3 278 315	3 542 656	2 469 308	2 303 215	11 593 494 11 788 711	2.31 1.68
1952	3 320 233	3 580 744	2 524 463 2 594 669	2 363 271 2 432 083	12 026 159	2.04
1953 1954	3 362 588 3 416 119	3 637 819 3 697 848	2 684 038	2 519 321	12 317 326	2.42
i	i	i	-	2 602 786	12 562 631	1,99
1955	3 457 921	3 736 341 3 794 695	2 765 582 2 862 464	2 692 583	12 843 574	2.24
1956	3 493 832 3 519 120	3 794 695	2 987 421	2 806 907	13 174 883	2.58
1957 1958	3 564 937	3 934 024	3 116 251	2 924 970	13 540 182	2.77
1599	3 602 986	3 995 889	3 220 959	3 036 587	13 864 421	2.39

Source [17]

time. It is however probably underestimated in so far as the figure of 10.5 million agreed upon for 1940 cannot really be the result of a substantial g wth during the preceding years. It must probably be accepted that the figures for the colonial period were more seriously underestimated than is usually acknowledged.

The corrected figures thus suggested tally with the data provided for the most recent period; on the other hand, they suggest for 1956 a growth rate higher than that based on the probability sample demographic survey of 1955-1957. Table 95 shows in three columns the results of administrative censuses, the adjustment suggested in 1953, and a possible correction of that adjustment.

2) Demographic surveys prior to 1955

As it was keen to see an improvement in the trend of the demographic evolution after criticism at home and abroad at the beginning of the century, the Belgian colonial administration endeavoured to identify the components of natural movement through surveys carried out every year. Started in 1925, they were interrupted by the war in 1940 and recommenced only in 1948. They were aimed at tribal communities chosen purposely according to criteria established by the administration; exclusion of villages where an important chief lived, or situated near a mission, or under the influence of a trading centre. From 1948 onwards, the sample was to remain the same from one year to another in order to facilitate identification of trends. If the evolution of the death-rate shows a slow decrease, on the other hand, the interpretation of the birth-rate published annually is not easy [17], [22, Table 4-6, p.151]. Its sequence does not give a clear picture of the way in which fertility has evolved.

The statistical study of fertility trends which is based on the data from demographic surveys in correlation with the statistics on children given by the administrative censuses and the rate of sterility among women born between 1890 and 1910, leads to the conclusion that the situation was not static during the first decades of the century: during the inter-war years and among the populations of the central basin and of the Uele, the trend continued at a slower pace. But from 1945 onwards, the fertility curve showed an upward movement all over the country [23, pp. 136-167].

The birth-rate drawn from demographic surveys certainly remains underestimated: from 1948 to 1952 it is given as 33 per 1 000. However, already in 1932-34, the birth-rate estimated at 32 per 1 000 by the administration was considered to be 44 per 1 000 by the medical authorities [33, p.8].

Table 95

ZAIRE - RESULTS OF THE ADMINISTRATIVE CENSUSES AND ADJUSTMENTS

	ADMINISTRATIVE	1953 ADJU	STMENT	CORRECTE	DADJUSTMENT
YEAR	CENSUS	Population	Growth rate	Population	Annual growth rate per period in %。
1925 1926 1927 1928 1929	7 692 573 7 955 450 8 121 194 8 419 181 8 674 086	9 565 000 9 616 000 9 670 000 9 725 000 9 783 000	5.3 5.6 5.7 6.0	10 175 167	- 1.0
1930 1931 1932 1933 1934	8 803 442 8 880 881 8 956 462 8 872 283 9 282 991	9 843 000 9 905 000 9 969 000 10 036 000 10 104 000	6.1 6.3 6.5 6.7 6.8	10 124 393	- 0.2
1935 1936 1937 1938 1939	9 775 191 10 046 731 10 217 408 10 304 084 10 328 409	10 176 000 10 249 000 10 325 000 10 403 000 10 484 000	7.1 7.2 7.4 7.6 7.8	10 114 272 10 144 615 10 190 266 10 251 407 10 328 293	3.0 4.5 6.0 7.5
1940 1941 1942 1943 1944	10 353 909 10 507 549 10 530 446 10 486 291 10 442 356	10 567 000 10 653 000 10 742 000 10 834 000 10 928 000	7.9 8.1 8.4 8.6 8.7	10 421 247 10 520 250 10 614 931 10 699 851 10 785 450	9.0 9.5 9.0 8.0 8.0
1945 1946 1947 1948 1949	10 508 449 10 667 087 10 761 353 10 914 208 11 073 311	11 025 000 11 125 000 11 228 000 11 333 000 11 442 000	8.9 9.1 9.3 9.4 9.6	10 882 519 10 989 167 11 108 949 11 242 257 11 390 655	9.0 9.8 10.9 12.0 13.2
1950 1951 1952 1953 1954	11 331 793 11 593 494 11 788 711 12 026 159 12 317 326	11 555 000 11 670 000 11 789 000	9.9 10.0 10.2	11 558 097 11 745 338 11 953 231 12 181 538 12 430 041	14.7 16.2 17.7 19.1 20.4
1955 1956 1957 1958 1959	12 562 631 12 843 574 13 174 883 13 540 183 13 864 421			12 697 287 12 981 706 13 286 776 13 610 973 13 951 248	21.5 22.4 23.5 24.4 25.0

Source of 1953 adjustment: [6]

These surveys display fairly serious flaws:

- "the general pessimism about the demographic situation" in the country after the first World War led to "purposive choice" being exercised in the groups which were to be monitored more closely;
- the quota method led to biases and impaired the representativeness of the sample;
- as the population became more and more urbanised, there was a move away from real data since natural movement was calculated on the basis of exclusively rural samples of which in addition the representativeness was doubtful due to the unscientific nature of sampling methods. Urban areas were excluded from sampling until 1953;
- the proportion of the population submitted to the sample variable according to the regions always remained around 3.6% of the total on average. This size must be considered as being too restricted in view of the variability of the demographic characteristics to be studied;
- finally, there was no provision for a supervision system of the interviewers in the field or for the co-ordination and standardisation of procedures, each province being responsible for the surveys carried out on its territory.

3) The Probability Sample Demographic Survey of 1955-1957

Carried out since 1953, this survey differs from all those which preceded it above all in relation to the technical means employed in order to counteract the shortcomings of the system in use until then. This consisted of a survey of the whole of the country, reaching all levels, with a sampling plan appropriate to each environment and a sample large enough to ensure the representativeness of the rarer characteristics. One of the outstanding features of this survey, which was carried out on 1 360 062 inhabitants, i.e. 10.7% of the population [22, Table 6.1, p.246], is its constant endeavour to check the collected data against data from other sources; identity papers, baptism forms, age of the children of the same generation, etc.

This survey has been the object of thorough analysis, first by means of an elaborate presentation of its gross figures [30] then by means of more rigorous analysis [22, p.528]. The critical appraisal to which the data were subjected underlines the consistency of the results obtained by district and by province with those of the administrative censuses of the time, thus confirming their value. As the Princeton study is very readily available, it is not necessary here to go through its tables in detail [22, Table 6.1, p.245 and 649, p.339].

As a consequence of the small size of the team of interviewers: about a hundred Congolese and six Europeans, field work was spread over three years. This distorts slightly the proportions from one region to another. An attempt has been made (Table 96) to make

Table 96 ZAIRE - ALIGNMENT OF THE DATA OF THE 1955-1957 SURVEY ON 30 JUNE 1956

Districts & provinces	Central Date (a)	Population enumerated (b)	Annual Growth (c)	Estimate at 30/6/56	Sex ratio
Kinshasa Cataractes Bas-Fleuve Bas-Zaire	25 May 1955 20 Aug.1955 30 Nov.1955	439 459	0.09035 0.0243 0.0216 0.0230	349 912 448 648 416 970 865 618	0.573 0.469 0.491 0.480
Lac Maindombe Kwili Kwango Bandundu	22 Oct.1956 18 Jan.1957	271 330 1 143 456 466 054 1 880 840	0.0254 0.0214 0.0215 0.0220	261 608 1 135 864 460 574 1 858 046	0.484 0.466 0.462 0.468
Equateur Mongala Ubangi Tshuapa Equateur	29 May 1957 6 Nov.1956 15 Nov.1956 19 Mar.1957	519 488 539 060 395 480 1 756 190	0.0154 0.0233 0.0204 0.0037 0.0157	297 975 515 245 534 934 394 432 1 742 586	0.488 0.486 0.483 0.493 0.487
Kisangani Ituri Bas-Vele Haut-Vele Haut-Zaire	5 Jun.1957 8 Nov.1957 15 Oct.1957 14 Dec.1957	651 044 467 632	0.0141 0.0086 -0.0064 0.0006 0.0086	626 717 643 517 471 508 581 453 2 323 195	0.502 0.497 0.482 0.492 0.494
North Kivu South Kivu Maniema <u>Kivu</u>	3 Dec.1956 19 Dec.1956 12 May1956	734 633 446 522 2 012 508	0.0221 0.0309 0.0112 0.0237	823 574 746 636 447 193 2 017 403	0.489 0.486 0.497 0.489
Labumbashi Tanganyika Lualaba Haut-Lomami Luapula Moëro	15	396 938 320 463 451 969	0.0426 0.0301 0.0292 0.0219 0.0347 0.0301	138 368 386 267 316 113 445 105 187 746 1 473 599	0.532 0.477 0.501 0.478 0.472 0.486
Sankuru Kabinda <u>East Kasaī</u> Lulua	29 Apr.1956 8 Aug.1956 - 9 Oct.1955	480 379 973 928	0.0174 0.0242 0.0208 0.0144	495 008 479 140 974 148 661 303	0.479 0.467 0.473 0.479
Kasaī West KasaI ZAIRE	15 Mar.1956 - -		0.0121 0.0134	494 610 1 155 913 1 12 760 420	0.473 0.476 0.486

Notes (a) weighting by territory from [31, pp. 119-124]

(b) source [22, p. 190]

(d) source [31, p. 152-153]

⁽c) from [21, p. 339] except for Kinshasa which went up from 318 317 on 25 May 1955 to 365 650 on 31 December 1956; for the Ituri, the rate for the whole of Upper-Zaïre has been used.

an adjustment by carrying the data back to 30 June 1956, with the help of the confirmed dates of survey for each territory [31, p.119-124] and growth rates extracted from the analysis [22] and by adding to them the sex ratio drawn from the survey [31, pp. 152-153].

The results of this survey were a source of astonishment as they revealed a level of fertility which confounded the rather pessimistic views which had prevailed until then. Without suggesting radical alterations on the geographical pattern of fertility - the area of low and high fertility remain the same - this survey confirms that after having displayed a fertility rate inferior to that of the rest of the country, urban areas were becoming places of high fertility. With its confirmation of a decrease in mortality, it shows that Zaire at the end of colonisation had entered a period demographic explosion.

4) Evolution of urbanisation

The rural exodus and the sex imbalance it created in rural areas started with the progressive flow of workers into areas not subject to a traditional form of jurisdiction. These new areas were administratively defined. Administrative censuses show the following evolution for the extra-customary population from 1930 to 1960.

Table 97

ZAIRE - EVOLUTION OF THE EXTRA-CUSTOMARY POPULATION

FROM 1930 TO 1960

Year	Total Population Extra-custo		ary population	
l 	Total Topulation	Population	% of total population	
1930	8 803 513	369 747	4.2	
1935	9 775 191	572 167	5.8	
1940	10 353 909	1 017 899	9.8	
1945	10 507 149	1 565 401	14.9	
1950	11 331 793	2 162 397	19.1	
1955	12 562 631	2 850 084	22.7	
1960	14 217 732	3 412 320	24.0	

Source: [17]

This concept of extra-customary population corresponds roughly to that of non-rural population at the time of the 1955-1957 survey, that is the population referred to as urban population (2 000 inhabitants or more, non-rural population) and mixed population (less than 2 000 inhabitants, non-farming activities). This survey shows 9.90% as urban population and 12.45% as mixed population, that is a total of 22.35% extra-customary population. Mainly on the basis of the data of this survey, Romaniuk devoted a whole chapter to fertility in urban areas. He proposes a total fertility rate of 5.91 for the whole country. But the distribution according to environment shows a rise from rural areas to more urbanised areas: 4.77 in rural areas, 5.28 in mixed areas and 6.12 in urban areas. So that the natural movement by environment, based on adjusted data of the 1955-1957 survey can be summarised as follows:

Table 98

ZAIRE - NATURAL MOVEMENT: ADJUSTED DATA (1955-1957)

per 1 000	Rural	Mixed	Urban	Total
Birth-rate (a)	 43 22	 51 01	55	45
Death-rate (b) Growth	28 ₁₅	21 30	16 39	26 19
Growth	15	30	39	19

Sources: (a) [23, p. 190] (b) [22, p. 311]

III. FROM INDEPENDENCE TO THE PRESENT DAY

Since 1960, the numerous disruptions in Zaire have been detrimental to the collection systems in operation. A strong central authority capable of supervising the operations has been missing most of the time. Even if Civil Registration offices never completely stopped registering births, marriages and deaths, the processing of this information and the control of completeners on a national scale were deficient. No publication of these statistics appeared. The same applies $\boldsymbol{\varpi}$ administrative censuses which the administration continued to carry out sporadically. The division of the country into small provinces in 1962 - up to 21 without counting Kinshasa - then their progressive grouping into a smaller number of provinces, from then on called regions, led to transfer and sharing of documents with resultant damage and losses. Troubles and rebellions were followed in some places by the complete disappearance of records and registers. sequently when President Mobutu came to power, the re-establishment of peace was an opportunity to examine the problem. The need was felt to reconstitute permanent records throughout the whole republic. From 1968 to 1970, orders, decrees and instructions appeared in order to prepare the way for this operation called the "General Census of Population" finally carried out from February to June 1970.

1) The Administrative Census of 1970

The available statistics show the distribution of population by region, district and territory, distinguishing nationals and foreigners; they separate males and females and show the adults (18 years and over) and children (under 18) of each sex [1] (1).

The value of this census has been cast in doubt for several reasons:

- It was necessary to renew the permanent records of administrative census. However, in several parts of this immense country, the new version of the form to be filled in did not arrive in time, nor in sufficient quantity. It was necessary to use old stock, or even materials at hand (pages of notebooks, etc.)
- The parents were to declare their children, but no guide was given as to the age of children to be declared. Certain offspring could have been counted as children with their parents and adults in their own household.
- As the place of residence of the child was not clearly defined, certain children could have been recorded once with their parents and then elsewhere (with an uncle, school, etc.)
- As operations were spread over several months, the loss of census certificates encouraged some people to be re-enumerated in order to avoid trouble during checks.
- The processing of forms had to be carried out on a local scale, by a manual process.
- The results were published very rapidly after the end of the census, which casts doubt on the relationship between the information collected and what was published.
- The census of 1970 was directly before the elections. It was inevitable that some figures would be manipulated for political purposes.

The value of the census could also be tested by cross-checking with other findings.

- * The total of 21 637 876, with 20 705 834 nationals, greatly exceeds the numbers predicted by various projections calculated previously:
- Those of the United Nations amount to 17 380 000 for the lower variant and 17 646 000 for the upper variant [2, p. 7] [3, p.809]. They make the mistake of assuming an unchanged growth rate from 1955 to 1965, as if the sporadic troubles had hindered the demographic progress of all parts of this huge country;

⁽¹⁾ These figures are given again in [22].

- the hypotheses of Fabri and Mayer nowhere lead to a total greatly in excess of 18 million [10];
- the projections of Romaniuk without using age distribution, but applying a static growth rate, lead to 17 696 000 in 1970. If the death rate diminished progressively, the increase in the growth rate, which went from 2.3 to 2.8%, would lead to 18 851 000 [21, p. 599].

Whatever the shortcomings may be of each of these projections, it must be noted that none arrives at a figure even close to the level suggested by the census data.

** Correlation with the last censuses of the colonial period gives an inter-censal growth rate which can be compared with the natural growth rate derived from the 1955-57 survey [25], or to the inter-censal rates of 1956-59 [2, p.28]. Between 1958 and 1970, the population of Zaire must have experienced a growth rate of 4.3%. The natural growth rate was estimated at 2.3% (raw data) and at 1.9% (after adjustment) for 1955-57. The mean annual inter-censal growth from 1956 to 1959 rose to 2.6%.

The growth rate therefore seems to have been changing. Migratory intake being negligible on a national scale, only a combination of the divergent evolution of birth and death rates could lead to such a high rate [3, p.809]. Fertility must have increased while the death rate was diminishing. If this rise in fertility can easily be accepted, it is not so easy to comment on the decrease in death rate. The infrastructure set up during the 1950s must have contributed to this diminution. But the habits of hygiene inculcated to the population during several decades were probably more significant, for the serious troubles which Zaire underwent between 1958 and 1967 militated against the upkeep and good condition of medical equipment.

It is wrong to generalise, as many regions of the country did not suffer greatly in a direct manner from disorders likely to change the pace of demographic evolution. In the end, even if the inter-censal rates are not dependent solely on the most recent census, it can be concluded that the general increase they show clearly exaggerates the real growth of population up to 1970.

*** This overestimation did not affect all districts, from now on referred to as sub-regions, in an identical way [13, pp.106-108]. For certain sub-regions, the inter-censal rates appear very plausible. On the whole, the regional disparity between growth rates remain as marked as before 1960, but they changed in level. Among the six sub-regions with the lowest growth rates (under 2.3%), can be found the districts with low fertility in 1955-57. The highest rates are found in the towns. This is explained by higher urban fertility, the predilection of foreigners for urban centres, and migration from rural areas. The latter on the other hand must have declined. But this does not show up in the census data.

The two Kasai show very high increases, despite the bloody struggles between the Lulua and Baluba since 1959. The sub-regions of Kasai (4.6%), Lulua (5.4%) and Kabinda (7.2%) are among those where growth is similar to that of towns. The town of Luluabourg experienced an annual increase of 12.7% despite the departure of the Baluba to their homeland. The fact that these conflicts might have prevented the successful carrying out of the census in 1959 could lead to the belief that results at the beginning of the inter-censal period were underestimated. But this is not enough to justify such an inflated inter-censal rate. Neither Western nor Eastern Kasai shelter refugees from neighbouring countries as is the case in Lower Zaire, Kivu or Shaba. Eastern Kasai must have received several thousand Baluba thrown out of Shaba. But none of these factors justify the suggested growth rate. Besides, political manipulation of Kasai data inevitably occurred.

**** The proportion of children in the population enumerated in 1970 exceeded everywhere the percentages recorded previously. This increased percentage indicates growth in fertility, but also a fall in death rate. However, in the majority of sub-regions the proportion of the population under 18 years old seems to be exaggerated by comparison with that obtained in 1970 in an agricultural sample survey on rural groups. Even if the absence of urban areas in the sample minimises the proportion of children in the population surveyed, the percentages obtained fit into a population growth trend since 1958 of a much more probable nature (1).

2) Estimate for 1975

A series of projections was drawn up in 1972 for the decade Taking as an obligatory base the total for each region given by the 1970 census, and based on the proportion of children under 18 and a hypothetical estimate of a reduced death rate since 1956, these projections lead to overestimated annual totals [14]. 1975, the total came to 25 million inhabitants in the middle of the After 1970, few administrative censuses were carried as far as the formal collation of all data for the country. That of 1975 was the most detailed, showing a population of more than 24 million on the 31 December 1975. It may well be asked whether some of the results of this census were not based on the 1972 projections. The most remarkable structural feature is the general rise in the proportion of under 18 year olds compared with 1970. It could be used for new projections taking 1975 as the point of departure. But the demographic figures by region do not appear to be very reliable: the inter-censal growth rates 1970-75 remained astonishingly low, even negative. This confirms the tendency of the 1970 census to exaggerate results, but does not show where we stand in 1975.

⁽¹⁾ Department of Agriculture, Kinshasa, 1970 (unpublished).

This is why in a fresh set of projections, extending from 1975 to 1985, the base population has been re-estimated for each region separately using the last colonial administrative censuses, the demographic sample survey of 1955-57, the administrative census of 1970, that of 1975, and the electoral rolls of 1977 [4]. The examination of the totals given for these various years as well as the mean annual growth rates they imply, has led to a preference for one or other of the following methods:

- to work from the population of mid-1977 taken from the list of adult electors, factored up based on the proportion of adults in the total population in 1975, and adding foreigners,
- to calculate a natural growth rate using the rules of internal consistency with the help of a model; adjusting this to obtain a mean annual increase incorporating the migration effect; applying this to the 31 December 1975 population.

The age structure in both cases, has been taken from the Princeton models using as parameters the proportion below 20 years and the expectation of life at birth. The absolute number of inhabitants by region turns out as follows for the middle of 1975:

Table 99

ZAIRE - POPULATION ESTIMATED AT 30 JUNE 1975 BY REGION

Region	Population	Region	Population
Kinshasa	1 679 091	Kivu	3 812 815
Lower Zaire	1 574 949	Shaba	2 961 990
Bandundu	3 068 845	Eastern Kasai	1 516 491
Equateur	2 619 693	Western Kasai	1 872 557
Upper Zaire	3 475 799	ZAIRE	22 582 230

To get an estimate of the population on 1 January 1975, it is only necessary to go back six months using for example the mean annual increase rate between the population of 30 June 1956 (12 760 420) and that of 30 June 1975 above; if this rate is 3.05%, the population of Zaire would have been 22 243 038 at the beginning of 1975.

The Edoza survey covered Lower Zaire, Kinshasa, Bandundu, Western Kasai and two of the four equatorial sub-regions [9]. The rural areas and smaller centres were surveyed under the auspices of the Demography Department of the Catholic University of Louvain, while the six largest towns were covered by Pr. Houyoux of the Sociological Research Centre of the same university.

The authors of the synthesis of this work have aligned the statistics collected to the 1 January 1976 which became the base date for all results. As population figures change rapidly, alignment was achieved, in some cases backwards by the application of the specific growth rates drawn from the survey itself for each territorial subdivision [9, Synthesis volume, p.2]. Edoza is concerned with the de jure population and did not try to isolate the de facto population. The concept of the presence or absence of household does not clearly identify absent people among the population of households present.

A comparison between Edoza and the Regional Demographic Perspectives for 1 January 1976 shows an excess of over 10% in the projections for Lower Zaire and Bandundu, but quite good agreement for Western Kasai and Kinshasa.

Table 100

ZAIRE - COMPARISON BETWEEN THE EDOZA RESULTS AND

THE PROJECTIONS FOR 1 JANUARY 1976

Region	Edoza (a)	Perspectives (b)	RDP/Edoza
Lower Zaire	1 421 383	1 593 388	1.12
Bandundu	2 796 540	3 108 492	1.11
Western Kasai	1 861 149	1 895 336	1.02
Kinshasa	1 724 696	1 742 026	1.01
Western Zaire	7 803 768	8 339 242	1.07

Sources: (a) [Synthesis volume, p.34] (b) [4, pp.24 et seq.]

The extent to which the figures given by the projections are greater than those of the Edoza survey shows how much the 1970 census exceeds reality, as the projections already reduce the 1970 data, as shown by Table 102.

3) The urban population in 1975-1976

An attempt at producing global projections for the towns from now until the year 2000 on a regional basis has underlined the value of researching in detail the population of each centre [26]. For certain towns, data are more reliable than for the regions, as a result of urban sample surveys carried out since 1967 either by the National Statistical Institute (INS), the Urban Planning Bureau (BEAU), or on behalf of the Society of Engineering Consultants for Industrial Planning (SICAI) [4, 15, notes 12 to 14]. By correlating information from as many sources as possible, the population of 419 centres of 2 000 inhabitants and above was able to be calculated [4, pp.69-73]. Undeniably,

the statistics of urban population should be treated with caution. Most derive from the administrative census of 1975, but some come from an administrative census in a neighbouring year [5, p.6]. The total population residing in centres of at least 2 000 inhabitants amounted to 7 148 510 and represented 31.7% of the mid-1975 population. The Edoza survey shows an order of magnitude very close to this for the three complete regions which were covered [7, Synthesis volume, p.35].

Table 101

ZAIRE - COMPARISON OF THE URBANISATION RATES ACCORDING TO

EDOZA AND THE PROJECTIONS FOR 1 JULY 1975

Region	Edoza %	Projections %
Lower Zaire	34.6	34.1
Bandundu	18.4	19.3
Western Kasai	28.0	30.1
Together	25.1	26.0

IV. CONCLUSIONS

The trend of the population of Zaire was downward at the end of the last century and the beginning of this, falling from a figure which could have reached 15 million. At some time during the 1920s or shortly afterwards, it started to grow again and it is probable that the population was never lower than 10 million. At 30 June 1980, the figure would have been 26.4 million, after progress which was slow at first but speeded up after 1945. A theoretical curve is shown in Table 102 from 1959 to 1980. The available information is not adequate to analyse in detail the slowdowns which occurred following the various troubles from 1959 to 1967. Neither is it possible to identify the acceleration resulting from the arrival of several major waves of immigrants from neighbouring countries. It is therefore clear that a new national effort towards a systematic census must be envisaged, with the intention of using the data as a base for renewed The National Statistical Institute is endeavouring to estimates. accomplish this in trying to develop high quality techniques with regard to the census planned for 1981.

Table 102 ZAIRE - POPULATION ESTIMATES FROM 1959 TO 1980 AT MID-YEAR

YEAR	POPULATION	YEAR	POPULATION
 1959 	13 951 248	1970 1971	19 427 024 20 020 660
1960	14 377 559	1972	20 632 435
1961	14 816 898	1973	21 262 905
1962	15 269 661	1974	21 912 641
1963	15 736 259	ĺ	i
1964	16 217 116	1975	22 582 230
1		1976	23 286 375
1965	16 712 666	1977	24 016 672
1966	17 223 358	1978	24 774 384
1967	17 749 656	1979	25 560 810
1968	18 292 036	ĺ	İ
1969	18 850 990	1980	26 377 260
		<u> </u>	J

Sources: 1959 cf. Table 25

1975 to 1980 [4] 1960 to 1974, linear interpolation according to exponential model.

BIBLIOGRAPHY

- 1.- "Arrêté ministériel n° 1236 du 31 Juillet 1970 portant proclamation des résultats officiels du recensement général de la population de la République démocratique du Congo"
- 2._ BOUTE (J), "La physionomie démographique de la République démocratique du Congo en 1970", December 1970, Institut National de la Statistique, Etudes statistiques n° 6, Kinshasa
- 3.- BOUTE (J), "Le Zaire" in "Croissance démographique et évolution socio-économique en Afrique de l'Ouest', 1974, The Population Council, New York, pp. 803-828
- 4.- BOUTE (J) et DE SAINT MOULIN (L), "Perspectives démographiques régionales 1975-1385", 1978, Département du Plan, Kinshasa
- 5.- BOUTE (J), "La population du Zaire d'ici 1985", in "Zaire Afrique", January 1979, n° 131, pp. 5-13
- 6.- "Bulletin mensuel des statistiques générales du Congo belge et du Rwanda Urundi"
- 7.- "Carte de l'Etat indépendant du Congo au 1 000 000", 1907, Institut Justinus Perthes, Gotha, 11 sheets
- 8.- DASSAS DE WITTE (C), "La maladie du sommeil dans l'Etat indépendant du Congo de 1890 à 1910", 1963, thesis for bachelor degree in history, Free University of Brussels
- 9.- "EDOZA (Etudes démographiques de l'Ouest du Zaire)", SICAI, Rome Département de démographie et centre de recherches sociologiques de l'Université catholique de Louvain.
 - -"synthèse des études démographiques de l'Ouest du Zaire 1974-1977"
 - -"Tome 1 : méthodologie"
 - -"Tome 2 : structure de la population"
 - "fasc. 1 région du Bas Zaire"
 - "fasc. 2 région du Bandundu"
 - "fasc. 3 région du Kasai Occidental"
 - "fasc. 4 région de l'Equateur"
 - -"Tome 3 : mouvement de la population"
- 10.- FABRI (M) and MAYER (J), "La population future du Congo", 1979, Centre d'Etude des Problèmes Sociaux et Professionnels de la Technique, Brussels
- 11.- FOREAMI (Fonds Reine Elizabeth pour l'Assistance Médicale aux Indigène), annual reports

- 12.- GOFFART (F), "Traité méthodologique de géographie du Congo", 1898, C. Thibaut, Anvers, 2nd edition
- 13.- NGONDO a PITSHANDENGE, "Evolution et caractéristiques de la croissance démographique en République du Zaire", September 1974, Catholic University of Louvain, Demography Department, minithesis, in mimeo.
- 14.- "Perspectives démographiques provisoires pour la République du Zaire 1970-1980", 1972, Bureau de Président et Institut National de la Statistique, Kinshasa, mimeo.
- 15.- "La population congolaise en 1953", extrait du bulletin mensuel des statistiques générales du Congo belge et du Rwanda Urundi, nº 2, Secrétariat Général du Congo belge, section statistique
- 16.- "La population congolaise en 1959, Gouvernement Général, Direction des AIMO (Affaires Indigènes et Main d'Oeuvre)
- 17.- "Rapport annuel sur l'administration de la colonie, présenté aux chambres législatives", Brussels, Ministère des Colonies (until 1958), completed by "statistiques relatives à l'année 1959", Belgian Congo
- 18.- "Rapport du Roi de la commission instituée pour la protection des indigènes", Bulletin officiel du Congo belge, 1920, p.652-679
- 19.- "Recueil à l'usage des fonctionnaires et des agents du service territorial du Congo belge", 1930, Ministère des Colonies, Brussels
- 20.- RETEL J.AURENTIN (A), "Fécondité en Afrique Noire, maladies et conséquences sociales", 1974, Masson et Cie, Paris
- 21.- ROMANIUK (A), "Evolution et perspectives démographiques au Congo", in "Zaïre", XIII 6, pp. 563-626, 1979
- 22.- ROMANIUK (A), "The Demography of the Democratic Republic of the Congo", in "The Demography of Tropical Africa", 1968, Princeton University Press, pp. 239-339, 1968
- 23.- ROMANIUK (A), "La fécondité des populations congolaises", 1967, Paris, Mouton et Kinshasa, IRES, with a substantial bibliography, pp. 333 and 346
- 24.- SABAKINU Kivilu, "Les sources de l'histoire démographique du Zaïre", in "Etudes d'histoire africaine", VI, pp.119-136, 1974
- 25.- DE SAINT MOULIN (L), "Atlas des collectivités du Zaïre", 1976, Presses Universitaires du Zaïre, Kinshasa
- 26.- DE SAINT MOULIN (L), "Perspectives de la croissance urbaine au Zaïre" in Zaïre Afrique, January 1977, n° 111, pp. 35-52

- 27.- SCHWETZ (J), "Contribution à l'étude de la démographie congolaise" in "Congo, revue générale de la colonie belge", March 1923, pp. 297-340
- 28.- STANLEY (H.M.), "Through the Dark Continent", 1978, 2 vols., Harper and Bros., New York
- 29.- STANLEY (H.M.), "The Congo and the Founding of its Free State", 1885, 2 vols., Sampson Low, Martson, Searle and Rivington, London
- 30.- STENGERS (J), "E.D. Morel's Calculations of the Congo Population", in LOUIS (W.R.) and STENGERS (J), "E.D. Morel's History of the Congo Reform Movement", 1968, Clarendon Press, Oxford
- 31.- "Tableau général de la démographie congolaise, enquête démographique par sondage 1955-1957", 1961, Ministère du Plan et de la Coordination Economique et IRES, Kinshasa
- 32.- TABUTIN (D), "Tendances et niveaux de la fécondité au Zaïre", January 1979, communication presented to the Demographic Colloquium of Abidjan
- 33.- TROLLI and VAN NITSEN (Drs.), "La démographie de la population indigène et la natalité et la mortalité", 1939, Congrès National Colonial, Ve session, n° 7, Brussels
- 34.- WAUTERS (A.J.), "Referendum sur la population du Congo", in "Le mouvement géographique" from XII, 1895, p. 91 to XV, 1898, pp. 103-106

