

Persistence of Traditional High Fertility in Tropical Africa: The Case of the Democratic Republic of Congo

Anatole Romaniuk, University of Alberta

Introduction

It is by now something of a truism that as a country takes the road of modernisation – however loosely the term is defined – its fertility, high traditionally, sets on the course of decline. In the second half of the Twentieth century scores of developing countries in Asia, South America, and more recently North Africa, joined the historical core of European nations which have long completed their demographic transition. Sub-Saharan Africa, however, has not yet followed suit. Few countries in this region seem to have entered the transition, while several are at its very early stage, many more have not yet even begun it. Prominent in the latter category of the non-starters is the Democratic Republic of Congo. If anything, its fertility has been on the rise in the second half the 20th century. The fundamental question is why the long sought demographic transition has so far eluded much of Tropical Africa, and specifically the D. R. of Congo. Some of the answers to this question will evolve through an examination of observed fertility trends and their determinants. But first a brief recall of the historical background, to be followed by a note on data sources.

Historical background

Colonial period

The very beginning of Belgian colonial rule can be traced back to 1879: the year Henry Morton Stanley completed his epic crossing of the "Dark Continent" and what was to become the Independent State of Congo and personal fiefdom of King Leopold I by 1885. However, it was only at the turn of the century that large scale economic development started in earnest and the particular brunt of disruptive effects began to be felt. The massive transfer of the male labour force from rural to emerging centres of economic activity led to severe sex imbalance and family disruption in rural areas exposed to male out migration, and in the labour camps, where single men predominated along with a contingent of so-called free women. Mass migration, marital instability, and relaxation of sexual control facilitated the spread of venereal diseases. Such state of affairs continued unabated, only to worsen, until the Second War, with evidence that in some regions sterility went up and fertility down.

After World War II, and until the end of colonial rule in 1960, the country experienced astounding economic and social progress, and what may generally be called modernisation. The rural drift to the cities did not slow down but rather accelerated at par with the economic expansion. By 1960, 22% of the population was urban or semi-urban. Many more were exposed to an urban environment through repeated stays in urban centres. At the same time, colonial rule shifted from its pre-war mercantile to a more welfare-oriented economy. Life improved markedly in the urban centres, and to some extent in the rural subsistence economy. Education, though still only at elementary levels, was rapidly expanding. However, it is in health that the most remarkable achievements were made. Many diseases, in particular the sleeping diseases responsible for heavy losses in population, and which kept it historically at low levels, were

eradicated or brought under control. Mortality, particularly infant, still high by western standards, was rapidly declining. Due to massive housing construction and the introduction of family allowances for wage earners and generally higher standards of living, cities, formerly single male dominated, turned into family habitat. Venereal diseases in traditionally endemic areas, including cities, if not eradicated, were kept at bay owing to massive prophylactic and curative campaigns. These developments are mirrored in the higher birth rate which rose, nationally, from less than 40 in the inter-war years to about 45 per 1,000 population by the late fifties. Urban fertility surpassed rural fertility by a significant margin.

Post-colonial period to present day

The period since the country's independence from colonial rule, June 30, 1960, has been marked by political and socio-economic volatility and disruption. Health services were the first to be hit with the departure of the Belgian medical corps. It took several years before home grown medical personnel were able to compensate at least partly for the loss. Likewise, almost suddenly, the economy collapsed, setting off massive urban unemployment. Half a century after independence, the country is still struggling to recover a semblance of normalcy. As the government has abdicated much of its responsibility in the basic spheres of public life, much thereof is left to the ingenuity and creativity of individuals, their family and various Ingo's. As a result, the social safety net is largely based on various forms of mutual assistance and solidarity from extended family to neighbourhood and church associations. The formal economy has largely been replaced by the informal economy. The Congolese have dubbed the type of economy they live in as *wangling economy (l'économie de débrouille)*. The book, published under Théodore Trefon, under the evocative French title "*Ordre et désordre à Kinshasa: Réponse populaire à la faillite de l'État*", is a fascinating reading as it depicts how individuals, their families and the society at large are coping with every day difficulties of survival in Kinshasa, dubbed a jungle of a city, with a population of 7-million: "*À Kinshasa la vie tient du miracle*" (life in Kinshasa is a miracle). But Congolese society is not a static one, many 'modern' features of life do emerge, as reveals an excellent study on the conditions of children and women, by Mupasi Lututala and his colleagues, and as we shall see in the course of this presentation. Notwithstanding all the adversity, mortality has decreased, but fertility still remains high, at its traditional level. The quote from Daniel Sala-Diakanda "...le Congo....est entré dans la troisième millénaire sans quasiment avoir engagé sa transition démographique..."(2002:163), captures succinctly the country's demographic state of affairs at the turn of the millennium. The natural demographic growth is in the vicinity of 3 per cent per *annum* according to a study by Ngondo, Saint Moulin, and Tambashe (1992). By 2050 the Congo could reach an unthinkable 200 million inhabitants (according to the UN medium projection) and thus face the colossal challenge of demographic growth.

Statistical background

There are four principle sources of data used in this study. First and most up-to-date is the survey on the conditions of children and women (*Etude sur la situation des enfants ET des femmes dans la R. D. du Congo*) carried out in 2001 under the direction of Mumpasi Lututala (2002). Its merit is that it provides at the national level information relevant to living conditions, health, sexuality, contraception and other data relevant to procreative behaviour of Congolese peoples, by residence, educational level, social status etc. The second is the comprehensive national census of

population in 1984. It is regrettable that this rich source of statistical data has remained to the best of my knowledge unanalysed for quality and substance. The third is the demographic survey, carried out in collaboration with the University of Louvain in 1975/76, known under the acronym EDOZA, which, however, covers only the western half of the Congo. Finally, the fourth is the national socio-demographic survey, carried out during the late colonial years, 1955/57, and with which the author of this paper has had the privilege of being associated. Based on a sample of almost 15 per cent of the population, at that time 13 million, this survey provides a wide range of data, demographic, cultural and economic, at the national and sub-national, down to the territory. The data have been thoroughly tested for quality and analysed for substance as part of the *Princeton African Project* (see Brass *et al*, 1968). As such they serve as a reliable baseline to gauge demographic developments which preceded and which followed the survey. It captures well the demographic state of affairs at the mid-20th century, at the juncture of the country's transition from colonial rule to independence.

The basic statistical parameters relevant to this study at the three points in time are presented in Table 1.

Table 1 : Socio-demographic profile of D. R. of Congo for indicated years

| Specifications/Indicators | Demographic survey 1955-57 | Population census 1984 | Survey on children and women 2001 |
|---|----------------------------|------------------------|-----------------------------------|
| Total population (in thousands) | 13.135 (1) | 30.731.(1) | 54.976. |
| Natural growth rate % | 2.0 | 3.1 | 3.2 |
| Urban population in % | 22.4 (2) | 28.0 | 31.0 |
| Procreation-related indicators: | - | - | - |
| Children 0-4 % | 16.9 | 18.6 | 18.9 |
| Children 0-14 % | 39.4 | 45.9 | 48.0 |
| Birth rate ‰ | 45.2 (3) | 48.1 | 48.5 |
| Total fertility per woman | 5.9 | 6.7 | 7.1 (7.3) (3a) |
| Childless women (25-34) in % (3b) | 22.2 | 9.1 | n.a. |
| Mean age of maternity | 27.0 | 26.9 | 30.1 |
| Adolescent fertility (15-19) | 26.0 | n.a. | 20.1 |
| Mortality | - | - | - |
| Crude death rate per 1000 | 25.5 (4) | 16.8 | 18.3 (4a) |
| Infant mortality 1Qo per 1000 | 173 | 137 | 126 |
| Child mortality 5Qo per 1000 | 291 | 213 | 213 |
| Expectancy of life at birth male & female | 38.0 | 47.0 | 46.2 (4b) |
| Marital status: | - | - | - |
| Single women age 20-24 | 9.9 | 9.4 | 32.3 |
| Mean age at first marriage female | 18.3 | 20.0 | 21.0 |
| Mean age at first marriage male | 24.3 | 24.9 | 26.0 |
| Polygynous female (+15 age) % (5) | 31.0 | 29.1 (5a) | 25.5 (5a) |

| | | | |
|---------------------------------|------------|------------|--------------|
| Polygynous male (+15 age) % (5) | 16.7 | 16.5 | 14.6 |
| Education (in %) | - | - | - |
| Primary boys (6) | 33.4 (5-9) | 45,9 (5-9) | 54.8 (6-11) |
| Primary girls (6) | 16.7 (5-9) | 37,7 (5-9) | 48.6 (6-11) |
| Post-primary male (6a) | 1.86 (10+) | 3.5 (5+) | 47.0 (15+) |
| Post-primary female (6a) | 0.31 (10+) | 1.4 (5+) | 25.4 (15+) |
| No education male | 63,7 (10+) | 12.1 (5+) | 12.1 (15+) |
| No education female | 93.2 (10+) | 23.4 (5+) | 34.3 (15+) |
| Economics (7) | - | - | - |
| Wage earners males % | 29.6 (15+) | 13.6 (10+) | 12.0 (15-64) |
| Wage earners females % | s.n. | 1.3 (10+) | 2.8 (15-64) |

Sources: Information therein is taken from the following sources: (1) L'enquête démographique 1955-57 (see reference: Anatole Romaniuk, 1961); (2) Le recensement de population 1984 (see Institut National de la Statistique); (3) L'enquête nationale sur la situation des enfants et des femmes, (see Lututala *et al*)

Notes: (1) Resident population. (2) Urban and semi-urban. (3) Estimate derived from children 0-4 proportion by the Coale/Demeny Stable Population Model North. (3a) 7.3 in the bracket is parity for women 45-49. (3b) Percentage of women in the indicated ages who never conceived a live child. (4) For mortality estimates for 1955/57 see Romaniuk 1968. (4a) and (4b) are estimates based on the reported 5Qo and child proportion of 0-4 using of Coale/Demeny Life Table Model North (level 12)(1966). (5) Percentage of spouses in a polygamous union. (5a) For 1984 and 2001 estimates of percentage of women in polygamous unions have been adjusted assuming that numbers of women living in monogamous marriages and in monogamous de facto unions must equal those of males in the same marital arrangements. (6) Percentage of children in indicated ages in primary schools. It should be noted that 52 per cent of children 10-14 years old attended primary schools, according to the 1955/57 demographic survey, and 71 per cent attended school either primary or secondary in the same age group, according to the 1984 census. The percentage for the 2001 survey refers to the ratio of children 6 to 11 years old, who were attending primary school at the time of the survey, to the number of children in the same age group. (6a) The percentage show the proportion of those who attend or ever have attended a secondary or higher school as of population in indicated in the brackets ages. For additional comments on the education statistics see section "education". (7) Wage earners as percentage of the population indicated in brackets ages

Fertility trends

National birth rate and age at first marriage

The birth rate has been growing over the second half of the 20th century from about 40 per 1000, if not less, in the inter-war years, to about 45 by mid-1950s and so on, close to 50 per 1000 at the turn of the century. Paradoxically, during the same period the age at which women enter wedlock increased by almost two years, from 18.3 to 21.0. Such "ageing" of marriage is noticed much across tropical Africa (Westoff, 2003). Hailed as a first step towards fertility transition, its real significance calls for cautious interpretation. First, marriage still remains young and universal. Nor is it a precondition to childbearing in much of sub-Saharan Africa as

evidenced by a rather high rate of premarital conception and a high percentage of single mothers in the Congo as in many African populations. So an increase in the age of marriage among sexually active youngsters may not mean too much unless it is accompanied by contraception, which may likely be the case among those eager to pursue education (Caldwell *et al*, 1992). Second, the delay of one or two years in marriage and childbearing from the traditional 16 or 17, hardly out of puberty, largely prevalent in traditional Africa, may in fact improve women's biological potentials for life fertility. Finally, one may ask to what extent is the trend real and to what extent is it a statistical artefact, an upward systematic bias, due to changes in the definition or more exactly in the perception by the people concerned of what the marriage is in a society in which it was and still is a multistage process (Meekers, 1992).

Regional fertility differentials: upward convergence

With the upward increase of the birth rate nationally, we witness also a regional convergence thereof. This is shown by provinces in Table 2. In fact the regional differences in the past were much larger when one looks at the smaller territorial units, districts, and even more so, territories. In 1955/57 the birth rate was as low as 22 per 1000 in the district of Bas Uele (Oriental Province) and as high as 60 per 1000 in the Sud-Kivu district.

Table 2: Crude birth rate by provinces according to the 1955/57 socio-demographic survey and the 1985 census of population, D. R. of Congo

| Provinces in 1955/57 | Provinces in 1984 | BR 1955/57 | BR 1984 |
|----------------------|-------------------|------------|---------|
| Leopoldville (city) | Kinshasa (city) | 53.5 | 51.5 |
| Leopoldville | Bas Zaire | 49.0 | 52.8 |
| | Bandundu | | 50.4 |
| Equateur | Equateur | 38.8 | 44.7 |
| Province Orientale | Haut Zaire | 32.2 | 37.1 |
| Kivu | Kivu | 53.4 | 52.8 |
| Katanga | Shaba | 51.9 | 53.2 |
| Kasai | Kasai Oriental | 45.2 | 52.5 |
| | Kasai-Occidental | | 50.2 |
| Congo | Zaire | 45.2 | 48.1 |

The chief factor in both the upward fertility trends and the narrowing down of regional differences is the reduction in sterility, particularly in the traditional infertility belt in central (Mongo) and northeast (Azande) regions of the Congo, as we shall see next. The phenomenon is indeed of such capital demographic importance that we should pay it a closer attention.

Sterility/childlessness

Excessive infertility in central Congo, and more specifically among the Mongo people, has been observed early in the century and its causes, and remedies to it, were subject to a variety of speculations, some more outlandish than others, such as racial degeneration, psycho-endocrinal trauma and self-inflicted denial of maternity, caused by the shock of colonialism (for an interesting discussion of this piece of history see Hunt, 2004). It was only with the 1955/57 demographic survey that its extent was more fully measured and more exactly localised in space.

In districts such as Bas and Haut Uele almost half of women were found to be childless. Districts of Tshupa, Equateur, Maniema and Sankuru, all in the central Congo, also suffered from abnormal sterility. Medical studies and statistical analysis of the regional variations in infertility as against prevalence of venereal infections in the Congo and elsewhere in Africa (Retel-Laurentin, 1974; Romaniuk, 1968) revealed that the excessive sterility has a pathological origin - venereal diseases, syphilis and gonorrhoea in particular. While we may speculate about how historically these pathologies have been brought into the Congo (it is believed that syphilis was brought initially by the slavery incursions from the east, while gonorrhoea from the west by Europeans), there is evidence that its spread took on a distinctly ethnic configuration. High sterility was confined to some ethnic groups, while some others in the same vicinity were spared of it, much depending on the prevailing sexual mores (Sala-Diakanda, 1980; Romaniuk, 1968 & 1968 a).

Although there were indications already in the 1950s of recovery in fertility in the traditional high sterility regions, the full extent thereof became apparent subsequently in light of the EDOZA demographic survey in 1975/76, and in the 1984 census. The comparable data are presented in Table 3 for the four districts which in the past exhibited the highest sterility rates. At first sight this writer was stunned by the significant shift in childlessness in a short span of 20 years. Was it real? A closer inspection of Table 3 leads us to believe that neither sampling error nor systematic bias in the reporting can account for the observed difference in the magnitude of childlessness. The best proof thereof is the fact that whereas both surveys and the 1984 census exhibit a wide difference in the proportion of childless women 25-34 years old, they yield a similar proportion of childlessness for women 45-54 years old.

Table 3: Percentage of childless women 25-34 and 45-54 year old, in the districts in the past with excessive infertility, for 1955/57, 1975/76 and 1984

| Region | Childless women 25-34 old | | | Childless women 45-54 old | | |
|-----------|---------------------------|---------|------|---------------------------|---------|------|
| | 1955/57 | 1975/76 | 1984 | 1955/57 | 1975/75 | 1984 |
| Equateur | 38.9 | 9.7 | 9.8 | 40.0 | 31.9 | 17.7 |
| Tshuapa | 42.3 | 13.0 | 12.1 | 33.0 | 37.5 | 21.6 |
| Bas-Uele | 49.8 | n.a. | 20.5 | 37.3 | n.a. | 34.2 |
| Haut-Uele | 47.2 | n.a. | 21.1 | 36.9 | n.a. | 35.2 |
| Congo | 22.2 | - | 9.1 | 20.5 | - | 13.0 |

Sources: Demographic Survey 1955/57; EDOZA 1975/76 Demographic Survey in Western Congo; The 1984 Census of Population

How a reduction of this magnitude in sterility actually occurred is still a matter of conjecture. One certain thing is that large scale antivenereal medical campaigns were conducted during the post-war years of the colonial regime (1945 to 1960), arguably with some success. Already during that time a measured recession of childlessness was noticed among women's younger generations. The level of infection fell drastically in Kinshasa according to a medical study carried out in 1957 (Bruaux *et al*). Another hypothesis worthwhile considering is that of a mutation in the agent-causing sterility losing its original virulence, after repeated medical treatments, from one to another host population. This is the typical case when an infection evolves from epidemic to become endemic. But while the camel's back was broken it has not

been totally incapacitated. It is not that venereal infections are no longer of concern as public *health* problem in the Congo. What is true is that sterility is no longer the *demographic* problem it once was.

An interesting feature of the childbearing of Congolese peoples is revealed by the rural/urban fertility differentials.

Rural/urban differentials

The series in Table 4 are not completely comparable, due to the fact that, as indicated in the note below, the reported figures stand for period fertility in 1955/57 and 2001 and parity (45-49) in 1957/76 and 1984. But the indisputable fact is that urban fertility remains high. Paradoxically, it used to exceed rural fertility by some margin. However, a reversal is apparent in light of the 2001 survey. Is this somewhat lower urban rate indicative of an incipient sustainable decline? Is it revealing of the emergence of "modern" attitudes towards procreation, the beginning of deliberate family planning by couples, or is it due to the contingency of life in the present day urban setting marred by various constraints on individual choice? We shall return to this question later when discussing urbanisation as a factor in procreative behaviours.

Table 4: Period total fertility (PTF) (1) or parity (P) (2) per woman by type of residence

| Type of residence | 1955/57 Survey (PTF) (1) | | | 1975/76 Survey (2))(3) (P) | 1984 Census (2) (3) (P) | 2001 Survey (1) (PTF) |
|-------------------|--------------------------|---------|-----------------|----------------------------|-------------------------|-----------------------|
| | All women | Married | Monogamous only | All women | All women Kinshasa (4) | All women |
| Rural | 4.77 | 5.92 | 6.50 | 6.02 | na | 7.4 |
| Mixed | 5.28 | 5.83 | 6.12 | - | - | - |
| Urban | 6.12 | 7.06 | 7.16 | 6.62 | 7.7 | 6.3 |

(1)The rates for the 1955/57 and 2001 refers to the period total fertility, that is the sum of the fertility rates by age observed in the 12 months preceding the survey. (2) In the case of the 1975/76 survey and the 1984 census are used the so called parity, that is the average number of children born to women 45-49 years old. (3) The 1975/67 cover only the western regions of Congo (Equateur, Kasai and the former Leopoldville province) that is about half of the country. (4) At the moment of writing the paper, the author did not have the brake-down rural/urban, so Kinshasa, the greatest and most "urban" city of the Congo, is used for illustration.

Determinants and correlates of fertility

More than fifty years ago, Frank Lorimer, in his seminal work, *Culture and Population* (1954) pleaded for a closer exploration into culture in order to understand the procreative behaviour of the peoples of Tropical Africa. He placed the prevailing corporate kinship system at the very heart of the explanation of their high fertility. Yet, while some, more notably John Caldwell in his numerous writings did follow in the Lorimer's steps, many more persisted in their eurocentric mindset. If not fully dismissive, they take only a passing notice of traditions. The culture is

considered as a “given” whose content remains unanalysed, while modernity-related forces are the prime target in studying procreative behaviours therein. It is this author’s belief that both sides of the equation, culture/traditions and modernity-related factors, what pulls and what hinders the break with prevailing norms of childbearing, need to be explored without prejudice. The determinants which are to be examined thereafter by no means cover the entire field but a good portion thereof.

Tradition-related factors

Tradition-related factors, viewed here as important enough to retain our attention, are kinship, polygyny, postpartum sexual abstinence and lactation.

Kinship Systems

Anthropologists usually differentiate the kinship systems in Tropical Africa according to the prevailing rules of descent and residence (Murdock, 1960). The most typical are patrilineal and matrilineal rule of descent. What makes the important difference between the two is the allocation of the right over the woman's reproductive capacity. The offspring pertain to the husband's kin in the first case and to the wife's kin in the second case. Depending on the prevailing custom, whether the bride takes up residence with her husband's kin, or on the contrary, the groom resides with his bride's kin, one speaks of virilocal (patrilocal) or uxorilocal (matrilocal) rule of residence. Based on the 1958 survey this author has conducted in the Congo, the majority of inhabitants, slightly over 60 per cent were found to be patrilineal and virilocal (mostly forest regions), over 20 matrilineal and virilocal (mostly savannah regions) and only 3 uxorilocal, south-eastern corner of Katanga.

The kinship system, as just described, is expected to influence the fertility both directly, by creating a culture of fertility and indirectly, through matrimony. There is great pressure on couples to produce as many children as possible to enhance the power and insure the immortality of the lineage. The reference to the spirit of ancestors is *internalised* rather than explicitly evoked as justification for having as "many children as God's will". As a result of the children's integration into their father's kin and because of the strong sentimental bonds that exist between mothers and their children, a woman is more firmly tied to her husband's family under the matrilineal than under the patrilineal regime of descent. This has at least three implications for matrimony. First, because of the transfer of the reproductive rights to the husband's kin and the consequent relatively high compensation (bride price) paid to the wife's kin, a greater stability of marriage among patrilineates can be expected (Gluckman, 1964; Mitchell, 1961). Second, the practice of levirate and the inheritance of wives is much more frequent under patrilineal than matrilineal regimes. The woman by virtue of her marriage may become so thoroughly tied to her husband's kinfolk that even his death will not bring the union to an end. She may be required to continue procreating for her deceased husband or his male relative who inherits her. Third and most importantly, the patrilineates as guardians of children will find more 'lucrative' investing in polygyny as means of enhancing their kin's reproductive capacity, and therefore wealth and public influence.

Polygyny as nuptiality and procreation maximiser

Though invariably statistics show the polygamous spouses, on average, to be less prolific than monogamous, this is due to the selection process whereby of childless or less fertile spouses end in a polygamous union, and to a lesser extent to frequency of coitus and age difference between spouses. This fertility shortfall, at individual level, is however largely compensated at the collective level as result of more complete mobilisation of women into marriage and hence into reproductive process. Deeply rooted in the whole social fabric of African traditional society, polygyny remains a significant factor in marital and procreative behaviours, and it can be seen rightly as a device for maximising the reproductive capacity of the lineage.

Were polygyny no more than a means of achieving sexual gratification and economic exploitation of women by men, and were it not so tightly woven into the fabric of the kinship and culture of a society that is heavily procreation-oriented, it is doubtful that it would have survived, as it has, into the present. Yet polygyny in Tropical Africa has proven more resistant to modernisation than had generally been anticipated. It withstood the colonial order, the zeal of Christian missionaries, and the reform-minded post-colonial regimes (Romaniuk, 1988). Affordability seems however to be shifting from older to younger men and this may reflect the redistribution of wealth and influence brought by economic and social changes since the country gained political independence. Trends in the rejuvenation of polygyny have been found by Ngondo a Pitshandenge (1994). While there can be no doubt that the countervailing forces of modernisation will continue to undermine the institution, its adaptability to the changing social climate should not be underrated. In towns, poverty drives women into polygyny with the men who can afford it. The scare of AIDS forces promiscuous men to confine their sexual activities to a small quasi-polygynous circle of women. It remains that 25% to 30% of women in conjugal unions are polygynous (Table 1). Tropical Africa remains the land of predilection for polygyny with 50 and more per cent being married to polygynists in some West African countries (Westoff, 2003).

Post-natal sexual abstinence and lactation

African societies do not only promote high fertility, many of them make provisions for child spacing so as to maximise the chance of offspring's survival. Custom of long sexual abstinence associated with breastfeeding for infant's nutritional or immunological reasons are widespread in tropical Africa (Mhloyi, 1988; Adegbola *et al*, 1977). To illustrate the impact of the post natal absence and its possible erosion with the modernisation, I have constructed Tables 5 to compare birth intervals between two traditional populations, Bandibu (Bakongo) in the West, practising prolonged post-natal sexual abstinence, the other non-practising, the Bashi in the pastoral East (Kvu). Both Bashi and Bandibu are very prolific, the former's birth rate (60 per 1000) significantly exceeds the latter (50 per 1000); sterility is normal, 4 per cent, in both cases. The fact that the Bashi tend to marry younger than the Bandibu, at age 17.2 versus 21.4, could partly account for the observed difference in their birth rates, but the major factor seems to be the difference in child-spacing between the two groups. A third, Kinshasa, refers to an urban group, (many of whom are Bandibu), which apparently has undergone considerable erosion of abstinence customs. The records of their children's birth dates were excellent, so the data on birth intervals are highly reliable. The average birth interval of 26.5 months is substantially lower than that found for the rural Bandibu (34.7), and even somewhat lower than that for the Bashi (27.9) not practising any post-partum abstinence. Based in this comparative statistics, the total abolition

of this practice in populations similar to the Bandibu would result in a shortening of birth intervals by 15 to 20 per cent and consequent increase in total fertility.

Table 5:: Mean interval between successive live births in months, and average all intervals, Congo

| Population | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | all |
|---|------|------|------|------|------|------|-----------|------|------|------|
| Bandibu (rural prolonged post-natal abstinence) | 33.2 | 35.6 | 34.1 | 33.7 | 34.3 | 37.3 | 34.5 | 34.2 | 37.0 | 34.7 |
| Bashi (rural no post-natal sexual abstinence) | 28.3 | 28.6 | 26.2 | 26.0 | 25.2 | 25.5 | 34.0 (7+) | | | 27.9 |
| City of Kinshasa (1) | 26.0 | 27.9 | 25.6 | 28.2 | 25.4 | 26.3 | 19.8 | 26.2 | 33.5 | 26.5 |

'Source: A. Romaniuk, *La fécondité des populations congolaises*, Mouton, Paris, 1967.

(1) The survey in Kinshasa (Leopoldville) carried out in 1958, covered a group of 280 couples whose male members were working for the government mostly as low ranking support staff

Whereas post-natal sexual abstinence gives up grounds, particularly in cities, the prolonged breastfeeding continue to hold sway, as shown in Table 6: 92.4 per cent of mothers breastfeed their babies in the age bracket 12-15 months, and still slightly over half do so with babies 20 to 23 months old. It varies though with type of residence (rural-urban), and inversely with instruction and economic status. But, gone are the times, when breastfeeding, in full or in part, could go on to three years. There is however still considerable room for reduction, with the increase in fecundity as its consequence, should the economic conditions improve and the modern nursing become available to masses. At the time of the survey only 4 per cent of the infants were bottle-fed, and this rather intermittently at later stage of nursing.

Table 6: Percentage of babies under 24 months old still breastfed by social conditions and education of mothers, in 2001

| Characteristics | Percentage of babies 12-15 months old still breastfed | Percentage of babies 20-23 months old still breastfed |
|----------------------|---|---|
| Urban | 88.4 | 30.1 |
| Rural | 94.6 | 62.2 |
| Economic conditions: | | |
| Poorest | 95.4 | 63.3 |
| Poor | 96.0 | 57.2 |
| Middle | 95.1 | 60.3 |
| Rich | 90.8 | 46.5 |
| Richest | 85.7 | 28.6 |
| Education: | | |

| | | |
|---------------------|------|------|
| No education | 94.7 | 59.6 |
| Primary education | 94.6 | 53.8 |
| Secondary education | 87.9 | 40.4 |
| All country | 92.4 | 51.5 |
| Number of babies | 729 | 668 |

Source: Survey on Children and Women Conditions, carried out in 2001, by B. Lututala Mumpasi *et al* (see reference)

Modernity-related factors

Reproductive health

No sooner have venereal diseases subsided, as demographic if not medical problem, as we have shown earlier, the country has been visited by another scourge, the AIDS. The UNAIDS 2000 estimates at 5 per cent of adults 15-49 to be infected by HIV/AIDS. But the rate of *seropositive* was found to be double that percentage among women 15-29, and the *seropositive* women in that age exceeds six folds that of the men. Though the pandemic did not reach the level of prevalence of Eastern and South Africa, the problem is serious nonetheless. The Congo was one of the first to launch countrywide campaign of awareness of AIDS pandemics. According to the *Children and Women Condition Survey* (2001), 90 per cent of adult women have heard about the danger of infection, 80 per cent know that one way to prevent the infection is to stay with the single partner not infected, but only 48 percent acknowledge the condom as means of prevention. The by-product of AIDS scare is a slower dissemination of other sexually transmitted infections, as the people tend to be more selective in choosing their partners.

If there is any relation between AIDS and fertility it is not a straightforward as in the case of venereal infections, but a more complex and subtle. The passage from HIV to AIDS's advanced stages is slow, but ultimately the ability of conceiving or of carrying the foetus to fruition does suffer with the degradation of health. As sexually active women are most likely to be infected and eliminated by death from the pool of procreative women, the birth rate stands to be affected. A longitudinal study by Ryder and his colleagues (2000), carried out in a large workforce in Kinshasa, has revealed that the annual rate of fertility was 140 per 1000 for persistently *seropositive* compared to 250 per 1000 for persistently *seronegative* women. HIV was responsible for nearly one half of all death in the workforce.

An important factor in the maternal health is the assisted delivery by qualified personal. By the end of the colonial regime (1960), every second child in the country side, and almost every child in the cities, was delivered in a hospital. Many mothers benefited as a matter of routine from the pre-natal and post-natal check up to detect any anomaly or infections, including venereal. No less was it an occasion of maternal learning in sexual hygiene and childcare. But much of the maternal services suffered the lot of so many other earlier social and health amenities in the wake of upheavals that followed the independence. The 2001 Survey on the Children and Women Conditions (Lututala *et al*, 2002) provides interesting statistics on the score (Table 7). Assistance by qualified personal stands at 83 per cent in urban as compared to 51 per cent in rural area. However, only in 8 and 2 per cent cases, respectively, was the physician assistance involved.

Table 7: Percentage distribution of mothers 15 to 49 old who had given birth to a child in the last 12 months, according to the type of assistance at delivery, by social conditions and education of mothers, in 2001, D.R. of Congo

| Characteristics | Personal assisting the delivery | | | | | | | Qualified person al (1) | Number of mothers |
|-----------------|---------------------------------|-------|-----------------|-----------------------|------------------|--------|------|-------------------------|-------------------|
| | Physi cian | Nurse | Trained midwife | Tradit ional midwi fe | Parent or friend | Othe r | None | | |
| Urban | 7.5 | 24.5 | 51.2 | 6.4 | 5.0 | 0.7 | 4.6 | 83.2 | 800 |
| Rural | 1.7 | 18.5 | 30.9 | 27.4 | 11.8 | 2.3 | 7.3 | 51.1 | 1.867 |
| Poorest | 1,8 | 16.8 | 26.5 | 31.1 | 13.5 | 3.3 | 6.9 | 45.2 | 564 |
| Poor | 0.9 | 14.4 | 28.1 | 30.3 | 16.3 | 3.2 | 6.7 | 43.4 | 554 |
| Middle | 1.2 | 19.9 | 38.6 | 24.0 | 8.1 | 0.6 | 7.7 | 59.7 | 565 |
| Rich | 3.0 | 22.6 | 45.5 | 13.8 | 7.1 | 1.3 | 6.7 | 71.1 | 540 |
| Richest | 11.9 | 30.1 | 48.9 | 2.3 | 2.5 | 0.4 | 3.9 | 90.9 | 443 |
| No education | 1.2 | 13.4 | 26.7 | 28.2 | 18.2 | 2,7 | 9.6 | 41.4 | 742 |
| Primary | 1.8 | 20.9 | 36.8 | 23.7 | 9.0 | 1.9 | 5.9 | 59.6 | 1,175 |
| Secondary + | 8.1 | 26.0 | 47.4 | 10.1 | 2.7 | 1.0 | 4.5 | 81.6 | 730 |
| All country | 3.4 | 20.3 | 37.0 | 21.1 | 9.8 | 1.8 | 6.5 | 60.7 | 2,666 |

Source: Survey on Children and Women Conditions, carried out in 2001, by Lututala Mumpasi *et al* (see reference)

Note (1) Qualified person means here physician, nurse or trained midwife

Education

It is widely recognised that education is one of the most powerful engines of fertility modernisation. While delaying family formation, it tends to further non-family roles. Those with higher education are likely to have a better knowledge of contraceptive methods and be more willing and able to use them effectively. Such in nutshell is the theory. The educational profile of the Congolese people falls, however, far short of the level susceptible of producing even remotely such effects at any significant scale.

The most recent data (Lututala *et al*, 2002) show that only 52 per cent of children 6 to 11 years old attend school, with 72 and 43 per cent for urban versus rural, respectively. This hardly can be called a quantum jump from the late colonial period when primary education made remarkable first strides. The survey reveals that 31 per cent, 35 and 28 respectively boys and girls in the same age had never attended primary school. Furthermore, only 25 per cent of children who enter primary school actually complete it (5 classes). The illiteracy remains still high, 19 and 44 per cent for men and women over age 15, respectively. Where real progress has been achieved with the independence is in two regards: first, the considerable narrow down of gender differential; and second, in the secondary and higher education (Boute,1973). But the numbers with secondary and with higher education, particularly among women, are still far too modest to make a real impact.

I was not able to access any recent data on fertility by level of education. The EDOZA survey covering Western Congo in 1975/76 did not reveal any significant differentials in fertility by education, even in the urban milieu, as per Table 8. If anything, women with primary education fair slightly better in this regard than illiterate, probably on the account of better reproductive health and reduction in the postpartum abstinence. But that was 30 years ago. A more recent data would have most likely revealed more significant differentials in the expected direction of a still high, but comparatively lesser, fertility among more educated women. The latter are those who, as we shall see later, actually make more use of modern contraceptives and are likely to espouse more readily prudential norms in the matters of childbearing.

Table 8: Average number of children born to married women by age and by level of education in urban population (for Bas Zaire, Bandundu and Kasai Occidental), EDOZA demographic Survey 1975/76

| Age | Illiterate | Primary | Secondary and higher |
|-------|------------|---------|----------------------|
| 15-19 | 0.76 | 0.76 | 0.83 |
| 20-24 | 1.83 | 2.14 | 1,84 |
| 25-29 | 3.81 | 3.94 | 3.45 |
| 30-34 | 5.35 | 5.42 | 5.66 |
| 35-39 | 6.31 | 6.73 | 7.30 |
| 40-44 | 7.24 | 7.92 | 6.86 |
| 50-54 | 6.63 | 7.66 | |
| 45-49 | 6.16 | 8,26 | |

Source: République du Zaire, Synthèse des études démographiques de l'ouest du Zaire 1974-1977, Louvain-la-Neuve, Table 7.1.4, p.116

Urbanisation

Urbanisation has grown over time, notwithstanding the lack of corresponding economic growth. Today 31% (2001) of the Congolese population lives in urban centres, up from 22% in 1955/57. Almost every one in ten Congolese lives in Kinshasa, a megalopolis of 7-million. It grew in size, but also in intensity: today, unlike in earlier days, most are urban born.

Was there a corresponding change in procreative behaviour? In theory, one would expect this to be the case. While promoting aspirations that are more work and consumption-oriented, urbanisation entails an array of disincentives for having large families. One is via exposure to a life-style typical of industrial/urban societies, a life-style that promotes alternative options to childbearing. Consumerism, the tastes and aspirations for material goods and comfort that city life promotes may also act as a deterrent to childbearing. Second, children's contribution to family wealth is likely to be minimal in the city. Their cost may well outweigh the benefit, and thus constitute a disincentive to childbearing. Another way in which rural/urban differentials come into being is via kinship relationships. The kinship support for raising children is more difficult to come by in an urban environment and the living and housing cost is higher as well.

In actuality the urban reality in the Congo as in many other African countries does not fit this description. Few women are wage earners in formal economy. Masses of women do combine housework and childcare with employment in the widespread informal sector of economy - petty

trade, husbandry, field cultivation, etc., not unlike in traditional subsistence economy. Lututala speaks of the "ruralisation" of Congolese cities, so many of their dwellers are engaged in agriculture and husbandry. The difficult dilemmas of the 'opportunity cost' of childbearing and incompatibility of the dual role of working and parenting are hardly issues in African urban society. The prevailing urban socio-economic ecology - vulnerability and insecurity - and enduring weight of traditional kinship combine to deter the emergence of the nuclear family, and by implication of a prudential attitude towards procreation. Arguably in situations of economic hardship the allocation of meagre household resources and care may shift by necessity from the extended to the nuclear family (as consumption unit). But, in the jungle of the city life, the mere survival requires co-operation, support and trust, and these are more readily available among one's kin folk. Even though, there is now a segment, albeit still small, of the urbanites who may exercise some birth control, there is also at the same time tendency among them to give up the practice of postpartum sexual abstinence or to curtail it significantly as well as to reduce somewhat breastfeeding, so the net effect on the overall urban fertility may be small.

Yet with all its tardiness, some timid urban patterns in childbearing do seem to emerge as of late. Total fertility rate stands at 6.3 births in urban as against 7.4 in rural population.

Family planning/contraceptive practices

The 2001 national survey on children and women's conditions (Lututala *et al*, 2002) offers as per Table 9 some interesting data on contraceptive practices for women 15 to 49 years of age who are in a marital union. The survey differentiates between modern methods (pills, condom) and traditional (breast feeding, periodic abstinence, withdrawal, vaginal infusion), or what I would call *hard* and *soft* contraceptive techniques. The difference is not only in their respective efficacy, but also in the users' determination to control births.

The most striking, but not really surprising, feature of the reported contraceptive practices is the very low level of the modern contraceptive practice, just 4.4 per cent nationally. Even in Kinshasa, claiming more urban born and educated peoples than any other city, the percentage is only 11. Half of them report to use condom, possibly no less for prophylactic than contraceptive motifs. All the other modern methods, with the exception of pills, 1 per cent nationally and 2.5 per cent in Kinshasa, are hardly worthy mentioning, so uncommon are they. By contrast, the traditional methods claim 27 per cent of women. Judged at its face value, this high percentage would suggest there is a significant demand for hard contraceptives, and that there might be a supply and an affordability problem. However, one cannot be sure that this is the case, when one takes a closer look at the data.

This becomes apparent when provinces with prolonged post-natal abstinence are contrasted with eastern pastoral regions (Kivu, eastern Katanga) where such customs are absent. In these latter regions the *periodic abstinence* (in French '*abstinence périodique*') and lactation methods (*méthode d'alaitement*, LAM), as methods of contraception, are reported to be well below (about 10 and 1 per cent respectively) the level in the former (30 per cent, and as high as 45 per cent in Bas-Congo for periodic abstinence and 6 to 10 per cent for contraceptive lactation). Wouldn't one expect just the contrary to happen? Does the periodic abstinence stand out for what it claims to be, the abstinence during the *susceptible* period, or is it confused, at least to some extent, with the prolonged post-natal abstinence practised for immunological and nutritional reasons?

There is something more to be said when assessing the scope of family planning in sub-Saharan Africa. It is generally claimed that the goal thereof is child spacing rather than family size (Westoff, 2001). Hence, if practice of contraception is essentially a substitute for traditional forms of birth spacing, then increasing contraceptive prevalence will have only a limited impact (van de Walle & Foster, 1992:39), if any, I should add, given how imperfect are these traditional contraceptive substitutes. No less questionable is the assumption that since spacing through prolonged breastfeeding and related post-natal abstinence being very much embedded in the procreative culture and mentality of Africans, the spacing for other motifs - life style, standards of living or career considerations - will come quite naturally into their family planning calculus. Taking such a view is to confuse the abstinence taboo for the infant's wellbeing with the abstinence (periodic, withdrawal) as a consciously practiced contraception. Following the same logic, one is also tempted to assume that the transfer of spacing-related birth control to family size is only a matter of time. This too is questionable. The moral of this digression into the reported *traditional* methods of contraception in tropical Africa and the underlying assumptions is that we ought to take a cautious reading of them. It is not out of place to recall here the Ansley Coale's (1973) three requisites for a successful family planning and hence for demographic transition: (1) fertility must be within the calculus of conscious choice; (2) reduced fertility must be (perceived) advantageous, and (3) effective technique must be known and available. The present day Congolese society, generally speaking, falls far short of meeting these requisites.

Table 9: Percentage distribution of women aged 15-49 living with a partner, using a method of contraception, by type of residence, province, social class, education and age

| Specifications | Non e | Traditional methods | | | | | Modern methods | | | | All metho ds | Numb er of respo ndent s |
|----------------|----------|----------------------------|--------------------------------|----------------|-----------|------|----------------|----------------|-----------|------|--------------------|--------------------------------------|
| | | Lact ation (LA M) | Perio dic abstin ence | Withd rawal | Othe r | All | Pills | Co nd om | Othe r | All | | |
| Urban | 61.4 | 3.6 | 22.3 | 2.5 | 1.2 | 29.6 | 2.5 | 3.9 | 2.6 | 9.0 | 38.6 | 2253 |
| Rural | 71.5 | 6.7 | 15.1 | 3.3 | 0.9 | 26.0 | 0.4 | 1.7 | 0.4 | 2.5 | 28.5 | 5618 |
| Kinshasa | 50.7 | 0.7 | 30.8 | 4.2 | 2.3 | 38.0 | 2.9 | 6.0 | 2.4 | 11.3 | 49.3 | 704 |
| Bas.Congo | 44.4 | 7.8 | 24.9 | 10.6 | 2.1 | 45.4 | 2.1 | 4.8 | 3.2 | 10.1 | 55.5 | 440 |
| Bandundu | 53.9 | 6.9 | 29.4 | 1.6 | 1.5 | 39.5 | 1.0 | 4.8 | 0.8 | 6.6 | 46.1 | 919 |
| Equateur | 70.1 | 6.5 | 14.2 | 4.2 | 0.9 | 27.7 | 0.1 | 1.2 | 0.9 | 2.2 | 29.9 | 835 |
| Orientale | 73.0 | 10.3 | 10.0 | 3.1 | 0.6 | 24.6 | 0.5 | 0.8 | 1.1 | 2.4 | 27.0 | 1074 |
| Nord Kivu | 87.1 | 1.2 | 9.0 | 0.0 | 0.6 | 10.9 | 0.2 | 0.4 | 1.6 | 2.0 | 12.9 | 481 |
| Sud Kivu | 88.1 | 1.0 | 7.6 | 1.0 | 0.8 | 10.4 | 0.8 | 0.2 | 0.5 | 1.5 | 11.9 | 570 |
| Maniema | 75.4 | 0.0 | 19.2 | 5.4 | 0.0 | 24.6 | 0.0 | 0.0 | 0.0 | 0.0 | 24.6 | 257 |
| Katanga | 74.2 | 8.6 | 11.2 | 3.2 | 0.4 | 21.4 | 1.1 | 2.4 | 0.9 | 4.4 | 25.0 | 1054 |
| Kasai Orient. | 79.2 | 4.0 | 12.1 | 1.5 | 0.6 | 18.1 | 0.9 | 1.3 | 0.4 | 2.6 | 20.8 | 778 |
| Kasai Occid. | 81.9 | 7.6 | 23.0 | 2.6 | 0.8 | 34.0 | 1.3 | 2.4 | 0.4 | 4.1 | 38.1 | 750 |
| Poorer | 72.5 | 7.3 | 13.9 | 3.8 | 0.5 | 25.5 | 0.3 | 1.1 | 0.5 | 1.9 | 27.4 | 1706 |
| Poor | 71.5 | 7.3 | 15.5 | 2.8 | 0.9 | 26.5 | 0.2 | 1.1 | 0.6 | 1.9 | 28.4 | 1651 |
| Middle | 70.4 | 6.4 | 16.9 | 2.8 | 0.8 | 26.7 | 0.5 | 1.6 | 0.8 | 2.9 | 29.6 | 1841 |
| Rich | 70.5 | 4.4 | 15.4 | 3.5 | 1.2 | 24.4 | 1.1 | 3.2 | 0.7 | 5.0 | 29.5 | 1539 |
| Richest | 55.4 | 2.8 | 25.8 | 2.8 | 1.5 | 32.9 | 3.4 | 5.2 | 3.1 | 11.7 | 44.6 | 1335 |

| | | | | | | | | | | | | |
|---------------|------|-----|------|-----|-----|------|-----|-----|-----|------|------|------|
| No school | 77.2 | 6.3 | 10.9 | 3.4 | 1.0 | 21.5 | 0.1 | 0.8 | 0.4 | 1.3 | 22.8 | 2479 |
| Primary | 69.7 | 6.6 | 16.8 | 3.0 | 0.8 | 27.2 | 0.8 | 1.9 | 0.4 | 3.1 | 30.3 | 3285 |
| Secondary + | 57.0 | 4.0 | 25.0 | 2.8 | 1.0 | 32.9 | 2.6 | 4.9 | 2.7 | 10.2 | 43.0 | 2033 |
| Infor. progr. | 51.9 | 2.9 | 31.4 | 2.7 | 1.5 | 38.5 | 3.4 | 1.9 | 4.3 | 9.6 | 48.1 | 68 |
| 15-19 old | 75.7 | 6.5 | 11.1 | 2.4 | 0.7 | 20.7 | 0.5 | 3.0 | 0.1 | 3.6 | 24.3 | 654 |
| 20-24 | 70.7 | 4.9 | 16.6 | 3.1 | 0.6 | 25.3 | 0.8 | 2.7 | 0.5 | 4.0 | 29.3 | 1358 |
| 25-49 | 67.3 | 5.9 | 18.0 | 3.2 | 1.1 | 28.1 | 1.1 | 2.2 | 1.3 | 4.6 | 32.7 | 5860 |
| Congo | 68.6 | 5.8 | 17.2 | 3.1 | 1.0 | 27.0 | 1.0 | 2.3 | 1.1 | 4.4 | 31.4 | 7871 |

Source: The 2001 Survey on children and women conditions (Lututala *et al*)

Modernisation-related socio-demographic differentials

It is a matter of historical evidence that the process of fertility decline does not unfold simultaneously through the population but sequentially starting with groups in the vanguard of social changes, then gradually permeating the society's lower strata. The appearance of socio-demographic differentials may be therefore regarded as harbingers of the onset of fertility transition.

To get some sense of where the Congo stands in this regard, I endeavoured to construct Table 10 based on the most recent information. The data on hand attest to the existence of the differentials according to the type of residence, level of education and social status, and they are in the expected direction. Only in regard to food sufficiency do rural inhabitants fare better than urban.

Given the space limitation, it is left to readers to pursue more fully the scrutiny of Table 10, and draw their own conclusions. I shall however comment on the rural-urban differentials in childbearing and related parameters. The total fertility rate rural-urban is 7.4 and 6.3 according to the 2001 survey. Note however that for the same year the urban-rural difference in the proportion of children under age 5, a rough indication of fertility, is only 5 per cent, as against 15 per cent for the total fertility, a significant inconsistency even when allowance is made for the urban born children higher survival rate. Any how, this is a reversal from the colonial and early post-colonial years, when urban fertility was higher than rural. As well other related indicators point to the emergence of the typical urban patterns in childbearing and marital behaviours. But make no mistake the urban fertility still remains high by any standards.

The big question is to which extent the observed lower urban fertility is the outcome of the deliberate decision of urbanites to limit progeny as a rational discourse to face challenges of urban life for themselves and their families? And to which extent is it due to the *contingencies* of urban life? One could think of such contingencies as difficulties of finding a suitable mate, marital instability, prolonged separation of spouses due to migration (including overseas), greater awareness of sexually transmitted infections, AIDS in particular, and use of condom among single women in the cities. My impression is that the *contingency-related* components in the lower urban birth rate may not be negligible, and hence our perception of urbanites as being already into transition process, while not unfounded, needs to be tempered. Only the well

educated couples, still small relative to the population size, seem to exhibit some tendency towards more prudential attitudes in the matters of childbearing.

Table 10: Socio-demographic differentials, D. R. of Congo, 2001

| Specification | Residence | | | Education | | | Social status | | | | |
|---|-----------|-------|-------|--------------|---------|-------------|---------------|------|--------|------|---------|
| | Total | Rural | Urban | No education | Primary | Secondary + | Poorest | Poor | Middle | Rich | Richest |
| Birth Rate ‰ | 48.5 | | | | | | | | | | |
| Children 0-4 % | 18.9 | 19.2 | 18.2 | | | | | | | | |
| TFR per woman | 7.1 | 7.4 | 6.3 | | | | | | | | |
| Infant mortality 1Qo per ‰ | 126 | 144 | 91 | 156 | 133 | 84 | 147 | 138 | 129 | 124 | 75 |
| Age at first marriage | 21.0 | 20.1 | 23.0 | | | | | | | | |
| Single females 20-24 % | 32.3 | 23.6 | 47.2 | | | | | | | | |
| Mothers 15-19 % | 20.1 | 21.5 | 17.2 | 24.0 | 20.8 | 15.1 | 26.1 | 20.7 | 22.5 | 19.6 | 13.1 |
| Delivery under professional supervision % | 60.7 | 51.1 | 83.2 | 41.4 | 59.6 | 81.6 | 45.2 | 43.4 | 59.7 | 71.1 | 90.9 |
| Breastfeeding 12-15 months % | 92.4 | 94.6 | 88.4 | 94.7 | 94.6 | 87.9 | 95.4 | 96.0 | 95.1 | 90.8 | 85.7 |
| Modern contraceptives % | 4.4 | 2.5 | 8.8 | 1.3 | 3.1 | 10.2 | 1.9 | 1.9 | 2.9 | 15.0 | 28.3 |
| Traditional contraceptives % | 27.0 | 26.0 | 29.8 | 21.5 | 27.0 | 43.0 | 25.5 | 26.5 | 26.7 | 24.4 | 32.9 |
| Women used condom in occasional sex % | 12.7 | 8.0 | 26.2 | 6.5 | 8.6 | 25.6 | 6.0 | 9.3 | 9.2 | 15.0 | 28.3 |
| Boys 6-11 in school % | 54.8 | 47.1 | 73.2 | - | - | - | 43.2 | 42.2 | 49.8 | 58.7 | 81.7 |
| Girls 6-11 in school % | 48.6 | 39.6 | 70.0 | - | - | - | 35.2 | 35.5 | 39.3 | 55.1 | 80.5 |
| Food reserve % | 66.0 | 75.6 | 43.6 | | | | | | | | |
| No of meals day | 1.6 | 1.9 | 1.7 | | | | | | | | |
| Wage earners M+F (15-64) % | 7.2 | 3.9 | 14.2 | n.a | n.a | n.a | 2.7 | 3.2 | 4.6 | 8.5 | 16.4 |

Source: The 2001 Survey on children and women conditions

Discussion

I shall confine the discussion to three points: the current fertility situation, its broader African context, and the odds for a sustained fertility decline in the D. R. of Congo.

The increase in natural fertility associated with early modernisation

The birth rate in the Congo has not declined, as it would have been expected in conformity with the orthodoxy of the theory of demographic transition, when the country enters the process of modernisation. On the contrary, it has increased from about 40 per 1000 population in the forties to 50 by the turn of the century. The Congo is thus one of the clearest cases of the increase in natural fertility associated with early modernisation. The breakdown of fertility-inhibiting customs, and the emergence of modern infant feeding practices, as well as the improvement of reproductive conditions through advances in medical care and nutrition, are some of the important aspects of modernisation, which are expected to bring about a rise in fertility before family planning takes hold (Potter, 1975; Bongaarts, 1980).

In the case of the Congo two factors weighed heavily to bring about a rise in fertility. One was the erosion of the prolonged post natal abstinence from the intercourse, concomitant with some shortening of breast feeding, particularly among urban populations. The other factor, even weightier, was the reduction in sterility, generally, and more notably in the regions that suffered in the past from venereal infections responsible for excessive infertility (Romaniuk, 1980). Sterility has practically vanished as a *demographic* problem in the Congo. Potentials for further increase in fertility are by no means exhausted in the Congo as in sub-Saharan Africa generally. Childlessness remains still significant in some regions (Leonard, 2002), and the postnatal sexual taboos stand to subside even further. A largely untapped source of potential fertility increase is the lactational amenorrhea, should affordable modern nursing become more readily available to the masses of African mothers.

African context

Reflecting on the Congolese situation and what the future has in store, we are inevitably led to consider what is happening in various parts of Africa. Although sub-Saharan Africa historically was far from being demographically homogenous, it was nonetheless seen as being rather static. Tabutin and Schoumaker, in an up-to-date comprehensive study (2004), offer an excellent panoramic view of the sub-Saharan Africa in terms of its various demographic and socio-economic indicators. They distinguish basically four models of demographic configuration emerging in sub-Saharan Africa:

1. Persistency of traditional demography with a birth rate 45-50 per 1000, some of the poorest countries in western Africa (Mali, Niger) and practically all of central Africa.
2. Classical model of changes towards a lower birth and growth rates (Ghana, Senegal).
3. AIDS-torn countries of East and particularly South Africa where tendency towards steady decrease in the growth and birth rates is most evident.
4. War-torn countries (Liberia, Rwanda, parts of the D. R. of Congo), by implications economically and demographically stagnant at best.

Box: Synopsis of the significant socio-demographic characteristics for Sub-Saharan Africa based on the aforementioned Tabutin and Shoemaker study

- Marriage remains universal and precocious all over tropical Africa.
- Female age at first marriage: very precocious in the range of 16, 17; tendency towards later marriage around 20, in some countries, with South Africa as an extreme case of 28 as median

age at first marriage.

- Polygyny still widespread with regional variations: high of 50 per cent in western Africa, medium with 39 in central Africa, low of 23 in Eastern and very low of 14 per cent in Southern Africa.
- Age (median) at first child birth remains early, 19.7 as an average for the whole sub-Saharan Africa with some narrow variations, 18.9 in central Africa to 20.9 in Southern Africa
- The proportion of adolescent mothers (15 to 19) remains is around 20 per cent throughout most sub-Saharan Africa, including Southern Africa.
- The demand for children in sub-Saharan Africa remains high, but trends toward a lower fertility in the last one or two decades take holds, more so in Eastern and quite decisively in Southern Africa.
- The period total fertility rate stands at 5.4 births per woman as an average for the whole sub-Saharan Africa for the years 200-2004 For the most recent years it is still in the range of 5 to 7 births per woman, the South Africa with 2.6 being a far outlay.
- The urban fertility, although still high, is consistently below the rural, the capital cities raking lowest.
- The younger as compared to older generations seem to adhere to somewhat lower childbearing in terms of the ideal or desired family size as well in terms of actual fertility rate.
- The median birth intervals are consistently in the range of 30-35 through the region, except again Zimbabwe and South Africa with 40 and 47 months, respectively.
- The childbearing norms, desired and actual family size, do seem, as it would be expected, to correlate with the education and, to some extent, with infant mortality.
- The breastfeeding remains universal and traditionally long, consistently in the range of 20 to 25 months, although somewhat shorter in urban areas and particularly among mothers with secondary education.
- Post natal abstinence is in retreat throughout Africa where it was practised traditionally over long duration, (almost at par with the duration of breastfeeding). Only in a few countries with relevant data it still remains a significant factor in fertility (Guinea, 22 months; Togo, Cameroon, Ivory Cost, Centre-African Republic with slightly over 10 months).
- Modern contraceptives practices are low across sub-Saharan Africa, in the range of 4 to 8 per cent, with some notable exceptions in Eastern Africa (Kenya with 32, Malawi wit 26, and Tanzania with 22 per cent), with the highest in Zimbabwe and South Africa, 50 at 55 per cent, respectively.

What this bird's eye view of tropical Africa reveals is a certain regional diversity in regards to the fertility transition. Many are still locked in a pre-transitional phase. Some are about to enter it, but only a few have already crossed the threshold well into transition, with South Africa clearly in the lead. That said, one may gain the impression that with all its tardiness, the transition map road is pre-ordained, and that a major brake with the past is well in the offing for sub-Saharan Africa.

As early as in 1992 John Caldwell and his colleagues wrote that "we are witnessing a new type of fertility transition" (p.212) emerging in Africa, as reflected in the high demand for contraceptives among sexually active schoolgirls, and in the strong demand for birth spacing among married women - substitution of contraceptives for abstinence. They conjectured that ultimately fertility

control would spread to all ages, "both inside and outside marriage" (p.220). They concluded that fertility decline had started in Africa (p.237), and shall amplify. Evidence produced by Tabutin and Schoumaker seems to give substance to their predictions.

The fact remains, however, that a sizeable number of African countries do still shun transition. A *full* transition cycle is still remote, even where its threshold has been crossed. Evidence from various places in Africa and beyond suggest that after initial decline, sometimes abrupt, fertility stalls. To which extent South Africa or even Zimbabwe, with their centuries long association with a relatively large population of European stock, can serve as a role model for the rest of tropical Africa, remains to be seen. For many, the road to *full* transition is likely to be rocky; ahead are enormous obstacles and challenges. And it is about this that I shall speak briefly next.

Tensions, contradictions, vicious circle of causality

As other countries of tropical Africa, the Congo of today is in a situation where the past lingers heavily in an emerging modern future, giving rise to tensions and contradictions. How to reconcile the hold of traditional kinship over individual life and the exigencies of modernity is the dilemma many Africans are facing, particularly urban dwellers and more educated people. Smith (2004) in his study on fertility transition in Nigeria gives a vivid account of the contradictory pressures the Igbo peoples face as they "decide how many children to have". While they continue to value large numbers of children, they "find high fertility difficult to manage" (p. 224). He finds that "kinship-based patronage systems remain important, even as African society modernises by many different measures...." (p.234). In this regard the poverty stricken, insecure masses of urban dwellers in the D. R. of Congo may not fare better. On the one hand, in situations of economic hardship the focus may shift by necessity from the extended to the nuclear family in the allocation of meagre household resources and care. But, on the other hand, there is a strong-felt need for what Smith calls "having peopled", to be able to access 'modern social resources', not the least to secure the one's children education. The numerous associations - neighbourhood, ethnic, church and civic - to meet the challenges of urban life are complementary rather than substitutes to kinship solidarity. In the jungle of the city, where social cannibalism, to use Trefon's term (2004), is the way of life, where the postcolonial state has largely abdicated its responsibilities vis-à-vis its citizens in the matters of welfare and protection, the mere survival of the individual and that of his immediate kin, not to speak of entrepreneurial ventures, modest as they may be, require co-operation, support and trust, and these are more readily available among one's kin folk. The extended family remains a highly valued asset in times of adversity for young and old, male and female, educated and illiterate alike. One can speak of a vicious circle of causalities in which the African is all too often caught. Too poor, too vulnerable and too insecure to brake free from the wider kinship dependency; yet the heavy burden of large family and kinship subservience with all its obligations makes it difficult to improve one's lot.

Can the vicious circle be broken? Much faith is placed on education as engine of fertility modernisation. But even this causes us to take pause when we consider some facts. According to the 2001 survey on the conditions of children and women, when asked for the reason of not sending children to school, 73 per cent of respondents in urban areas, and 60 in rural and, surpassingly (!) 63 per cent of well-to-do, invoked the prohibitive costs (*frais de scolarité*). Mind you, we are talking here not about university, but about primary school. In Kinshasa, according to Trefon (2004), many parents are faced with the daily dilemma of which child is to eat today, and

which tomorrow. One would expect the solution to this dilemma be simply in limiting the offspring. Yet this is not the case. The spirit of the *capillarity* - the aspiration of moving up one's children along the social ladder - to which French sociologist Arsène Dumont attributed the decline of fertility in his country, had not yet penetrated the conciseness of ordinary Congolese. Even the belief that education is the key to success has been lately shattered in the mind of many parents and youngsters, as so many Congolese with university degrees are jobless. As goes the saying in Kinshasa among students, "*Mon bic est ma pelle*" (*My pen is my shovel*).

The forces of modernity are nonetheless at work and increasingly so: education foremost but also urbanisation, transitional South-North migration, and mass media not the least. The very foundation of high fertility culture stands to be undermined in the country-side by population pressure on land tenure, and in cities by the fragmentation of lineage (ethnic intermarriage, loss of lineage memory) and erosion of ancestral customs. The economic conditions also stand to impose constraints on families. Urban couples above all feel the burden of large family and are tempted to revise their fertility projects, and do so successfully in some cases (Locoh and Vallin, 1998). But here again, the impact to be real and lasting requires a strong *economic engine* of social and cultural change. Yet, this fundamental ingredient to social processes of modernisation is still very much in short supply in tropical Africa and in the Congo specifically, as gauged by very low economic developmental indicators shown in Table 1. Higher income, which comes with economic growth, gives rise to different life styles and commitments, less family centred, more individualistic. Yet, that higher income is not there to generate these novel life styles, so again one is sunk into the vicious circle of poverty.

Conclusion

The conclusion of this paper is that the D. R. of Congo has not yet fulfilled the preconditions for sustained fertility transition. Mediating considerations, such as self-fulfilment, family versus non-family investment choices, opportunity cost of motherhood, children's quality versus quantity, have not yet entered the family formation calculus of the Congolese people at large, nor could have they arisen under the prevailing low developmental conditions. Rather, in order to conceptualise the persisting pre-modern demographic regime, one ought to resurrect such concepts as the "vicious circle of poverty" and "Malthusian checks", now somewhat dated but which have not lost their relevance in sub-Saharan Africa. Under the prevailing conditions of long-drawn precarious economic situation and social insecurity, the nuclear family is not an alternative to extended kinship with its deep-seated sense of solidarity and lineage continuity. The common African, moved by culture and atavism, and no less by economic rationality, remains undeterred in his belief regarding the benefits of numerous progeny for his own and his kin's security, although he/she may seek to moderate procreation to optimise the chances of coping with the challenges of modernity.

Yet, the eventuality of fertility transition in sub-Saharan Africa is almost an *article of faith*, so overwhelming is the world-wide historical experience. But history also teaches us that attainment of the modern fertility regime takes a variety of configurations, in timing, speed and underlying causality. Will Africa or parts thereof, and in our case specifically the D. R. of Congo, choose the paths hinted to by Caldwell (1992) as discussed earlier in the paper, or take some novel, yet unforeseen directions, and when it will happen? A tricky business in itself, any prediction is rendered even more problematic for sub-Saharan Africa because, save possibly for education,

relationships between micro determinants and fertility "are complex, involving non-linearities and contextual effects" (van de Walle and Foster, 1992:27).

I may, however, dare some prognostications in the way of the *first stage* of demographic transition involving educated and well-to-do segments of the population. First, I may postulate the tendency among school girls to delay childbearing for reasons of education according to the Caldwell scenario. Second, for educated married couples, I expect the strategy to be on stopping childbearing earlier, upon reaching the desired number of offspring in the range 4-5 down from the traditional range of 6-8 children. Hence, contrary to the prevailing views, the emphasis in couples' family planning will be, in my opinion, less on *spacing* and more on *family size*, i.e. earlier termination of childbearing, not unlike in some earlier European societies when the tendency was to complete the desired family size earlier, rather than later, in reproductive life. Nor would I envisage at this stage of cultural development, even for well educated African women, any significant postponement of procreation for professional considerations, i.e. "first profession, then children", so strongly is the motherhood (and the early proof of it) rooted in African culture. The fertility regime of late motherhood for sake of women's professional advancement, as a life priority goal, is far too remote a proposition for African societies - perhaps it is the ultimate stage in the fertility transition of societies in the forefront of modernity.

As to the *second stage* of transition, that is when and how the masses, the lower strata of the population, will embark on family planning so as to generate a sustained fertility decline, I dare no prognostications.

References

Adegbola, O., Hilary J. Page and R. Lesthaeghe. 1977. Breast-feeding and Post-partum Abstinence in Metropolitan Lagos, Paper presented at the *Annual Meeting of the Population Association of America*, St. Louis.

Boute, Joseph. 1973. Zaïre, in *Croissance démographique et évolution socio-économique en Afrique de l'ouest*, J.C. Caldwell (Ed.). The Population Council: New York.

Brass William, Ansley J. Coale, Paul Demeny, Don F. Heisel, Frank Lorimer, Anatole Romaniuk and Etienne van de Walle. 1968. *The Demography of Tropical Africa*, Princeton University Press.

Bongaarts, John. 1980. The Fertility-Inhibiting Effects on the Intermediate Fertility Variables, Working Paper No 57.

Bruaux, P., J. Cerf et A. Lebrun, 1957. *La lutte contre les infections vénériennes à Léopoldville*,

Caldwell John, I. O. Orubuloye and Path Caldwell. 1992. Fertility Decline in Africa: A New Type of Transition? *Population and Development Review*, 18(2): 211-391

Caldwell John, and Pat Caldwell. 1987. The Cultural Context of High Fertility in sub-Saharan Africa, *Population and Development Review*, 13(3): 409-437.

Caldwell, J. C. and Pat Caldwell. 1977. 'The Role of Marital Sexual Abstinence in Determining Fertility: A Study of the Yoruba in Nigeria, *Population Studies*, 31 (2): 193-217.

Coale Ansley, 1973. The Demographic Transition, *International Population Conference*, Liege 1973, Vol.1: 53-72.

Coale. Ansley and Paul Demeny. 1966. *Regional Model Life Tables and Stable Population*, Princeton University Press.

EDOZA. 1978. *Synthèse des études démographiques de l'Ouest du Zaïre 1974-1977*, Université Catholique de Louvain.

Gluckman, Max. 1964. Kinship and Marriage among the Lozi of Northern Rhodesia and the Zulu of Natal, in *African Systems of Kinship and Marriage*, Radcliffe Brown and Daryll Forde (Eds), Oxford University Press.

Hunt, Nancy Rose. 2004. Counting and Narrative Pleasure in a Colonial Infertility Scare, paper prepared for "The Political and Symbolic Implications of Quantification, The Working Group on Anthropology and Population, Brown University.

Institut National de la Statistique, *Recensement scientifique de la population 1984. Zaïre : un aperçu démographique*, Kinshasa.

Leonard, Lori. 2002. Problematizing Fertility: "Scientific" Accounts and Chadian Women's Narratives, in *Infertility around the Globe, New Thinking on Childlessness, Gender, and Reproductive Technologies*,. Marcia C. Inhorn and Frank Van Balen (Eds.), University of California Press.

Locoh, Thérèse and Jacques Vallin. 1998. Afrique noire: la baisse de la fécondité, *Population & Société* No 338.

Lorimer, Frank 1954. *Culture and Human Fertility*, UNESCO, Paris.

Lututala, Mumpasi *et al.* 2002. *Enquête nationale sur la situation des enfants et des femmes*, MIC2/2001, Rapport d'analyse, République Démocratique du Congo.

Meekers, Dominique. 1992. The Process of Marriage in African Societies: A Multiple Indicator Approach, *Population and Development Review*. 18(1): 61-73.

Mitchell, J.C. 1961. Marriage Stability and Social Structure in Bantu Africa, *Proceedings of International Population Conference*, New York, Tom II: 255-262.

Mhloyi, M.M. 1988, The Determinants of Fertility in Africa under Modernisation, *African Population Conference*, Dakar, vol. 1. : 2.3.1 -2.3.22

Murdock, George. 1960. *Social Structure*, New York.

Ngondo, S. 1994. Les mutations culturelles en matière de mariage et de sexualité en Afrique subsaharienne: est-ce le début d'une transition démographique?, in AIDELF, *Les modes de régulation de la reproduction humaine: Incidence sur la fécondité et la santé*, PUF, Paris :55-64.

Ngondo a Pitshandenge S. 1982. *De la nuptialité et fécondité des polygames. Le cas de Yaka de Popokabaka*, Annales du Musée Royale de l'Afrique Centrale, Tervuren, No , 340 p.

Ngondo a Pitshandenge Séraphin, Léon de Saint Moulin, Oleko Tambashe. 1992.. *Perspectives démographiques du Zaïre 1984-1999 et Population en âge électoral en 1993-94*, Centre d'Études pour l'Action Sociale (CEPAS), Kinshasa, 72 p.

Potter, R. G. 1975. Change of Natural Fertility and Contraceptive Equivalent, *Social Forces*, Vol. 54, No.1: 36-50.

Retel-Laurentin, Anne. 1974. *Infécondité en Afrique Noire: Maladies et conséquences sociales*, Masson , Paris.

Romaniuk A. 1961. *Tableau général de la démographie congolaise : Enquête démographique par sondage 1955-1957*, République du Congo : Ministère du plan et de la coordination économique, Service des statistiques, Kinshasa, 214 p.

Romaniuk, Anatole 1988. Polygyny and Kinship: A Demographer's View, *African Population Conference*, Dakar, IUSSP, Vol. 2: 5.1.45-5.1.60.

Romaniuk, Anatole. 1968. *La fécondité des populations congolaises*, Mouton, Paris, 348 p.

Romaniuk, Anatole. 1968a. Infertility in Tropical Africa, in *The Population of Tropical Africa*, J. C. Caldwell and C. Okonjo (Eds.), Longmans, 1968:. 216-224.

Romaniuk Anatole. 1968. The Demography of the Democratic Republic of the Congo, in *The Demography of Tropical Africa*, William Brass *et al*, Princeton: University Press: 241-338

Romaniuk, Anatole. 1980. Increase in Natural Fertility during the Early Stages of Modernisation: Evidence from an African Case Study, *Zaire, Population Studies*, Vol. 34(2): 293- 310.

Ryder R.W. *et al*. 2000. Effect of HIV-1 Infection on Tuberculosis and Fertility in a Large Workforce, Democratic Republic of the Congo (an abstract).

Sala-Diakanda, Daniel. 2002. La population de la République Démocratique du Congo: entre instabilité politique et désintégration du tissu socio-économique, in *La population du monde, Géants démographiques et défis internationaux*,. Jean-Claude Chasteland et Jean-Claude Chesnais (Eds.), Les cahiers de l'INED : 147-170

Sala-Diakanda, Daniel.1980. *L'approche ethnique des phénomènes démographiques : cas du Zaïre*, Département de démographie de Louvain, UCL, Louvain-la-Neuve : Cabay.

Smith, Daniel Jordan. 2004. Contradictions in Nigeria's Fertility: The Burdens and Benefits of Having People, *Population and Development Review*, Vol. 30 (2): 221-238.

Tabutin, Dominique et Bruno Schoumaker. 2004. La démographie de l'Afrique au sud du Sahara des années 1950 aux années 2000, Synthèse des changements et bilan statistique, *Population*, Vol. 59, No.3-4 : 521-621.

Trefon, Theodore (ed.). 2004. *Ordre et désordre à Kinshasa, Réponses populaires à la faillite de l'Etat*, Cahiers Africains, Tervuren.

van de Walle, Etienne and Andrew D. Foster. 1990. *Fertility Decline in Africa, Assessment and Prospects*, World Bank Technical Report 125..

Westoff, Charles. 2003. *Trends in Marriage and Early Childbearing in Developing Countries*, DHS Comparative Reports 5,

Westoff, Charles. 2001. *Unmet Need at the End of the Century*, DHS Comparative Report N0 1,