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# SOCIOCULTURAL FACTORS AFFECTING FERTILITY IN SUB-SAHARAN AFRICA*

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### A. INTRODUCTION

Today, following the path of More Developed Countries (MDCs), a "demographic transition" from high fertility and mortality to low fertility and mortality can be said to be underway in much of Less Developed Countries (LDCs). In the last 50 years, the average fertility in MDCs has declined from 2.8 to 1.6 children per woman. Although there are considerable regional variations, average fertility in LDCS has declined from 6.2 to slightly less than 3 children per woman; a decline of 3. Fertility has declined most quickly in Latin America and Asia from 5.9 to 2.6; and less rapidly in North Africa and Western Asia, from 6.6 to 3.5 children per woman. The transition is slowest in sub-Saharan Africa in which fertility declined by 1 only from 6.5 to 5.5 children per woman (UNFPA, 1999).

Although some countries in the sub-region have recorded declines in fertility levels in the last three decades, certain household, kinship and community institutions that favour childbearing remain highly influential in many countries especially in western and central Africa. In these countries, as table 1 shows, contraceptive prevalence rates are low. (See table 1). Because the success of contraception, the primary focus of interventions to reduce fertility, depends on understanding of motivations to limit family size and space births, this paper is an analysis of the demand for children.

The experience of developing countries suggests three pre-requisites for fertility decline; (a) Fertility must be within the calculus of conscious choice; (b) effective techniques of fertility reduction must be known and available and, (c) reduced fertility must be perceived to be advantageous" (Cleland and Wilson, 1987). This paper examines the extent to which these factors exist in sub-Saharan Africa by examining family decision-making with respect to fertility.

Following this introduction, the first section of this analysis of the demand for children examines evidence from various census, and demographic and health survey data for the period from 1960 to 1999. Based on these data, an attempt is made to classify African countries according to their perceived progress towards demographic transition. The second section discusses models of fertility decision-making vis-à-vis certain characteristics of the African household that favour high fertility. In the third section, the low status of women in African societies and related factors that are associated with sustained high demand for children, are discussed. The paper ends with a concluding section.

### B. FERTILITY TRENDS: EVIDENCE FROM DATA, 1960-1999

Increased availability of demographic survey data in Africa has made assessment of fertility and mortality trends feasible. Table 1 depicts Total Fertility Rate (TFR), Desired Fertility, Under-five mortality, Contraceptive Use and Proportion of women married by exact age 20 for African countries that have data at some point during the period 1960-1999. The data are from various sources including censuses, World Fertility Surveys (WFS) and Demographic and Health Surveys (DHS)_. Because of variations in data source, procedures to estimate TFR include the Stable Population Model, the P/F Ratios and the Relational Gompertz model_. However, it is necessary to sound a note of caution about data quality. Given variations that are bound to exist in the quality of data from different sources, fertility trends in some countries appear more erratic than they truly are (Cohen, 1993).

Although the evidence from data presented in table 1 is fragmentary and of varying quality, there is still enough to provide a rough picture. Data on achieved fertility (TFR) and Desired Fertility provide

evidence of an incipient demographic transition in some sub-Saharan African countries. The situation in these countries contrasts sharply with what obtains in numerous other countries in which fertility appears to have either stagnated at high levels, or is on the increase.

**1. Country categorization: Category I, II and III**

Using data depicted in table 1, all African countries can be grouped into three categories according to their position on a demographic transition continuum_. Countries whose data demonstrate apparent support for a demographic transition from high to much lower fertility levels.are placed in category I. Their selection is based on three criteria; whether or not the countries record a) marked and continous fertility decline from an initial peak over time (or stagnation at much lower levels), b) rates of Desired Fertility that are generally lower than achieved TFR, and c) substantial increase, over the observation period, in contraceptive prevalence rate (modern methods). The following countries meet all three critieria and are placed in category I; Cote D'Ivoire, Ghana, Nigeria, Kenya, Rwanda, Botswana, Zambia, Zimbabwe, Egypt, Morocco and Tunisia.

The countries that are grouped in category II are those that have recorded small declines in TFR (between 0.5 and 0.9 every ten years of observation). The category II countries are; Benin, Mauritania, Senegal, Cameroon, Central African Republic, Malawi, Tanzania and Swaziland.

Countries in which fertility levels appear to have stabilized around a peak (TFR is approximately 6 or more), namely; Burkina Faso, Liberia, Mali, Togo, Burundi, Ethiopia, Madagascar, Mozambique and Uganda are placed in category III. Other countries in this category are Niger, Angola, Congo and Zaire (Democratic Republic of the Congo) in which there is apparent increase in TFR during the period for which data are available. Countries in category III can be said not to have begun a demographic transition.

Given these apparent differentials in fertility levels, in age at first marriage (shown in table 1 as proportions of women marrying by exact age 20), and in contraceptive prevalence, two tentative conclusions can be drawn. First, the observed decline in achieved fertility in the eleven category I countries has resulted primarily from deliberate fertility control to achieve smaller family size; evidence that the concept of 'family size ideation' is beginning to take hold. Second, in many other African countries especially those in category III, fertility decisions are apparently still considered as outside the realm of individual choice.

**2. Factors Associated with Fertility Decline**

Several factors account for declining fertility in the countries in category I; countries in which 'family size ideation' has taken root. These include reduction in under-five mortality rates, increased contraception especially the use of modern methods, and decrease in age at first marriage.

The theoretical link between child mortality and fertility is that increases in child survival chances facilitate a corresponding decline in the propensity to "hoard" or "replace"; known mechanisms used by couples to ensure that they obtain desired family size. Estimates of under-five mortality in table 1 show that countries in category I have witnessed significant decline in under-five mortality during the period under review. In consequence, under-five mortality rates are relatively lower in these than in countries in category II and III.

It is important to note that countries in category I have experienced substantial increases in contraceptive prevalence rates as shown in the seventh column of table 1. Findings from several studies confirm that contraceptive use, particularly of modern methods, plays a significant role in the transition from high to low fertility levels (Bongaarts, Frank and Lesthaege, 1984; Westoff, 1990; Ross and Frakenberg, 1993).

Using Bongaart's framework (Bongaarts, 1982), the fertility inhibiting effect of age at marriage is significant in African countries (Jolly and Gribble, 1993; Adlakha et al., 1991). Evidence of a trend towards later age at marriage is presented in Table 1 by percentages of women who were married by exact age 20 between two cohorts of women aged 20-24 and 35-39 at the time of the surveys. It is no coincidence that countries in the first group that shows evidence of declining fertility have also recorded declines in age at marriage.

## C. THE AFRICAN HOUSEHOLD VIS-À-VIS MODELS OF FERTILITY DECISION-MAKING

### 1. Characteristics of African Household

Despite some regional variations, several generalizations can be made about the African household: (i) they are mostly rural, (ii) they are mostly patriarchal and hierarchical, (iii) they give great emphasis to perpetuation of the lineage, (iv) they are frequently polygynous, (v) they are not nuclear embracing kinship networks. These characteristics of the African household affect individual's perception of the possibility and desirability (if advantageous) of making conscious choice regarding the number and timing of births. The social organization of households especially the place of women within them tend to inhibit the taking of conscious, deliberate choices regarding the number and timing of births.

It is especially important to appreciate that this African household is very much at odds with the demographer's household in models of fertility decision-making. The economic theory of fertility used in demography, assumes that husbands and wives, acting as a unit, weigh the costs and benefits of children against the cost of other competing goods and subsequently arrive at desired family size that reflect their interest (Becker, 1960). This conjugal household, with its pooled resources and shared responsibilities is the one that is viewed as the primary locus of reproductive decision-making. If this were so, then it should be easy to offer couples sufficient incentives to make them prefer smaller family size. In most African households, however, couples are more likely to have different interests as regards fertility and other issues. Decision-making about children is more likely to be predicated on family status and considerations for the preservation of lineage and, respect for ancestors. According to traditional beliefs, ancestors are re-incarnated through additional births (Makinwa-Adebusoye and Ebigbola, 1992; National Research Council, 1993).

### 2. Theories of Fertility

Because the Economic Theory of Fertility with assumptions based on urban, Western industrialised countries does not conform to African reality, Caldwell (1977) has put forth the "wealth-flows theory". Caldwell argues that the inter-generational transfer of wealth, which he assumes, is usually from children to parents, is a major determinant of high fertility. This theory addresses the rural nature of most African households and argues that in a predominantly subsistence agricultural (rural) economies such as prevail in most sub-Saharan African countries, large families constitute family assets. However, some studies have shown that wealth flow have little effect on childbearing. In fact, increasing costs of children to their parents are beginning to outweigh material benefits to an extent that may be influencing reduced desired fertility (Makinwa-Adebusoye, 1994).

Noting other aspects of the African household, Fapohunda and Todaro (1988) have suggested the "Transactions Framework" which places the locus of reproductive decision-making at the individual rather than at the household level. The framework explicitly incorporates the concept of spousal separateness. It is not an uncommon phenomenon in African societies with polygynous households, for husbands and wives to belong to the same household but to operate separate incomes and have distinct economic responsibilities and interests with regard to childrearing and issues of resource allocation in general.

**3. Polygamy. Lineage and Kinship Networks**

The effect of polygamy on fertility is complex. By definition, each polygynous household has at least two wives; Nigerian data (NDHS 1999) reveal that 35.7% of all currently married women are in polygynous households, of which 17.2 percent have two or more co-wives. The result is that a much larger percentage of women are in polygynous households than there are polygynous households. Another consequence of polygamy is that women marry at a very early age. Since men take several wives, they put pressure on the supply of girls (since the numbers of males and females are about the same). In addition, the pressure to have more than one wife leads older men to recruit young girls into marriage thereby increasing the likelihood of women marrying polygynously to be withdrawn from school and to marry at an early age. As indicated in table 1, low age at marriage (proportion of women married by exact age 20) is as high as 82% and 90% in Mali and Niger respectively; both countries of high fertility.

Another characteristic of the African household that has direct bearing on demand for children is its durability or perpetuity. It is generally accepted that lineage does not die; members die and are replaced through births. Consequently, there is need to ensure that fertility levels remain higher than mortality levels if the lineage is not ultimately to disappear. Considerable expansion of membership enhances the power and prestige of the lineage and reduces the likelihood of extinction through death. In addition, enormous weight is maintained to family continuity because each new birth in the lineage is regarded as providing a vehicle for the return of an ancestor. Hence, to prevent a birth is viewed as tantamount to consigning an ancestor to oblivion (Bleek, 1987; Makinwa-Adebusoye and Ebigbola, 1992; National Research Council, 1993; Caldwell and Caldwell 1987). Desire to perpetuate the lineage results in large kinship networks.

The existence of kinship networks ensures that biological parents often receive economic assistance from close kin through child fostering (Isiugo-Abanihe, 1985; Bledsoe and Isiugo-Abanihe, 1989). The resulting differentials in costs of children to a conjugal pair may lead to differences in the demand for children and high fertility levels.

**D. LOW STATUS OF WOMEN**

The extent to which women enjoy any decision-making is powerfully shaped by social institutions (Mason, 1984). The patriarchal, hierarchical and polygynous organisation of many African households tends to perpetuate the low status of women in African societies. In such households, most women cannot exert much, if any, control over their lives in the families within which they live. Early marriage, patrilocal residence after marriage and polygynous unions are institutions that perpetuate women's subordinate position and make them rather voiceless and powerless in matters affecting their reproduction. At marriage a woman assumes a low status relative to all members of her husband's extended family which is elevated usually by attainment of high fertility, and can be elevated by high educational attainment and ownership and control of substantial resources (Makinwa-Adebusoye and Ebigbola, 1992). Women are similarly disadvantaged in matters of inheritance and succession, and

women suffer considerable disadvantages with respect to education and access to resources in general. In fact, the bottom line is that women and their children are legal property of the husband (Aguda, 1992).

On the basis of the Change in African Family Project in Nigeria (CAFN) Caldwell (1987) advanced the argument that men and their lineages rule over reproduction and decide on matters of family size in Nigeria and elsewhere in Africa. Although no study has evaluated that hypothesis with empirical data, the view continues to persist that men are the dominant decision-makers on fertility matters in Africa (Makinwa-Adebusoye, 1995). Yet, several studies show women's subordinate status underlies low contraceptive prevalence and high fertility in Africa. Kritz and the author conducted (in 1991) a survey of Women's status and Fertility which has data on married couples in five Nigerian ethnic groups- the Hausa, Ibo, Yoruba, Ijaw and Kanuri. Several Studies emanating from this survey look at several dimensions of women's decision-making and spousal communication and spousal agreement on the desire for more children, and wife say on family planning (Kritz and Makinwa-Adebusoye, 1994, 1995, 1999, 2000; Makinwa-Adebusoye and Jensen, 1995; Makinwa-Adebusoye and Kritz, 1997). The studies confirm that levels vary sharply across ethnic groups and appear to be related to women's status in their respective societies. For instance, spouse from groups in which women's status is lowest (e.g. the Kanuri and the Hausa) have higher levels of disagreement on fertility desires than those from ethnic groups in which women's status is higher (Yoruba, Ibo, and Ijaw). Moreover, higher levels of decision-making and joint decision-making are recorded among the Yoruba, Ibo and Ijaw in contrast with the Kanuri. Overall, women's disadvantage by lack of education, legal rights, and inheritance rights reinforces a culture that places very great value on high fertility in African societies

## E. CONCLUSIONS

Africa is primarily rural and its highly gender-stratified cultures are very supportive of high fertility. Indeed, pronatalist institutions notably patrilineal descent, patrilocal residence, inheritance and succession practices, and hierarchical relations have remained unchanged for generations. This situation has given rise to the widely canvassed viewpoint in literature on Africa (Caldwell and Caldwell, 1990, Caldwell and Caldwell, 1987, Frank and McNicoll, 1987) that the pronatalist institutions are so deeply entrenched that they are immutable and likely to remain unresponsive to modern innovations. Implicit in this perspective is that because of these entrenched props of high fertility, African countries might not join in the fertility decline already noticeable in other Less Developed Regions. However, data from recent fertility and health surveys do not support this viewpoint. Table 1 provides substantial evidence that there has been a revolution in reproductive behaviour in Africa over the last three decades and that decline in fertility which has begun may continue in several countries of the region.

On one hand, as argued above, there are category III countries that rank lowest on the demographic transition continuum and in which individuals appear to have limited recognition that fertility is within one's control. The fact that 'ideation of family size preference' is a concept that has been slow to take hold in these countries is evidenced by apparent increases in fertility and low contraceptive prevalence. The reasons for this may not be unconnected with the persistence of pronatalist societal structures. In addition, high fertility is also connected with very pervasive poverty, which engenders general insecurity especially the insecurity people feel over the survival of their children. In such situations, high fertility is perceived as a rationale response.

On the other hand, there are the category I countries that have commenced a seemingly irreversible transition from high to low fertility levels. Because the continent is undergoing profound socio-economic changes, fertility decline may come more rapidly than would otherwise appear. Feyisetan and the author (1994) demonstrate this in a study, based on Nigeria's 1990 DHS data. Findings from the study reveal an onset of fertility decline among all sub-groups of the Nigerian population (rural, urban,

educated and non-educated and irrespective of geo-political location). The Nigerian (1999) Demographic and Health Survey that records a TFR of 5.2 confirms findings from the earlier study.

Fertility decline in category I countries strongly suggests that the time has come to qualify the notion that sub-Saharan Africa, as a region, is different from the rest of the world. In this regard, the example of Nigeria is worth noting. The moderate fertility decline in the last decade has occurred in a period during which the country has suffered a severe economic recession resulting in considerable deterioration in the quality of life. The generalized notion that sub-Saharan Africa is unique in its support for large family size as a result of a deep-seated and seemingly immutable social organization is no longer valid. In fact, available empirical evidence supports an opposite viewpoint; socio-cultural forms, which hitherto sustained high fertility, can give way, and are being redefined to accommodate the small family size ideal in the face of new social and economic imperatives. Hence, the need for a paradigm shift into women's empowerment along with the related goals of women's reproductive health and securing their own reproductive rights.

**NOTES**

i. Fertility decision-making suggests the taking of conscious deliberate choices regarding the number and timing of births

ii. Several scholars have examined the quality of WFS and DHS data. Studies by Makinwa-Adebusoye and Feyisetan (1994), Blanc and Rutenberg (1990), Arnold (1990), Arnold and Blanc (1990), United Nations (1987), Chidambaram and Sathar (1984) and Chidambaram, Cleland and Verma (1980) have noted the limitations of DHS and WFS data with respect to the estimation of levels and trends in fertility. Inaccuracies result from age misreporting, under-reporting of births, inaccurate dating of births and its consequent intentional or unintentional displacements of births, and age heaping. However, WFS and DHS data have been noted to be comparable in their basic features in several countries. In this paper, conclusions from available data involve considerations of data quality but the paper does not attempt data assessment.

iii. See Cohen (op. cit.) for more details on data sources and procedures of estimation

iv. Estimates of desired number of children (Desired Fertility) are available only for countries that have participated in the WFS and DHS programs and that have data for two or more points of observation.

v. Categorization is necessarily subjective in view of variations in the source and quality of data.

vi. It is argued by Cleland and Wilson (1987) that the idea that fertility as a variable over which an individual has control is the most important factor explaining fertility decline.

vii. Because the central focus of this paper is on socioeconomic factors associated with sustained high fertility, discussion on fertility decline is limited to analysis of data presented in table 1.

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Table 1. Total Feritlity Rates, Desired Fertility, Contraceptive Use and Proportion of Women married at age 20 in African countries (1960-1999)

| Country | Survey and year | Approximate reference period | TFR | Desired Fertility | Under-5 mortality (per 1000) | Contraceptive use | | Proportion married by exact age 20 | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Any | Modern | 20-24 | 35-39 |
| **West Africa** | | | | | | | | | |
| Benin | DS, 1961 | 1961 | 6.9 | - | - | - | - | - | - |
| | WFS, 1981/82 | 1967-71 | 7 | - | - | - | - | - | - |
| | WFS, 1981/82 | 1977-81 | 7.1 | 7.5 | 204 | 20 | 1 | 74.0 | 71.0 |
| | DHS, 1996 | 1993-95 | 6.3 | 5.2 | 167 | 16 | 3 | 65.4 | 66.9 |
| Burkina Faso | NDS, 1960-61 | 1960-61 | 6.2 | - | - | - | - | - | - |
| | Census, 1975 | 1969 | 6.4 | - | - | - | - | - | - |
| | Census, 1985 | 1985 | 7.2 | - | - | - | - | - | - |
| | DHS, 1993 | 1990-92 | 6.9 | 5.7 | 187 | 8 | 4 | 85.6 | 87.1 |
| Cote d'Ivoire | WFS, 1980-81 | 1971-75 | 7.9 | - | - | - | - | - | - |
| | WFS, 1980-81 | 1976-80 | 7.7 | 8.5 | 162 | 2 | 0 | 79.0 | 77.0 |
| | Census, 1988 | 1988 | 6.8 | - | - | - | - | - | - |
| | DHS, 1994 | 1991-93 | 5.7 | 5.5 | 150 | 11 | 4 | 58.3 | 65.4 |
| Ghana | PES, 1960 | 1960 | 7.2 | - | - | - | - | - | - |
| | WFS, 1979-80 | 1975-79 | 6.5 | 6.1 | 127 | 10 | 6 | 72.0 | 72.0 |
| | DHS, 1988 | 1985-87 | 6.4 | 5.8 | 155 | 13 | 5 | 63.3 | 72.3 |
| | DHS, 1993 | 1990-92 | 5.2 | 4.4 | 119 | 20 | 10 | 59.7 | 61.3 |
| | DHS, 1998 | 1995-97 | 4.5 | 4.2 | 110 | 18 | 11 | - | - |
| Liberia | Census, 1974 | 1967 | 6.8 | - | - | - | - | - | - |
| | Census, 1984 | 1977 | 6.6 | - | - | - | - | - | - |
| | DHS, 1986 | 1980-82 | 7 | - | - | - | - | - | - |
| | DHS, 1986 | 1983-85 | 6.7 | 6.0 | 220 | 6 | 6 | 64.2 | 69.4 |
| Mali | DS | 1960-61 | 7.4 | - | - | - | - | - | - |
| | DHS, 1987 | 1984-86 | 7.1 | 6.9 | 250 | 3 | 1 | 92.6 | 89.5 |
| | DHS, 1995 | 1992-94 | 6.7 | 6.9 | 238 | 7 | - | 82.1 | 87.6 |
| Mauritania | WFS, 1981 | 1962-66 | 6.5 | - | - | - | - | - | - |
| | WFS, 1981 | 1972-76 | 7.2 | - | - | - | - | - | - |
| | WFS, 1981 | 1977-81 | 6.3 | 8.7 | 196 | 1 | 0 | 72.0 | 83.0 |
| | Census, 1988 | 1988 | 6.3 | - | - | - | - | - | - |
| Niger | DS, 1960 | 1960 | 6.9 | - | - | - | - | - | - |
| | Census, 1977 | 1977 | 7.0 | - | - | - | - | - | - |
| | Census, 1988 | 1988 | 7.1 | - | - | - | - | - | - |
| | DHS, 1992 | 1989-91 | 7.4 | 8.2 | 123 | 4 | 2 | 90.0 | 94.7 |
| | DHS, 1998 | 1995-97 | - | 8.2 | - | - | - | - | - |
| Nigeria | NFS, 1973 | 1971-73 | 7.3 | - | - | - | - | - | - |
| | WFS, 1981-82 | 1980-82 | 5.9 | 8.3 | 165 | 5 | 1 | - | - |
| | DHS, 1990 (Ondo) | 1983-86 | 7.4 | - | - | - | - | - | - |
| | DHS, 1990 | 1987-89 | 6.0 | 5.8 | 192 | 6 | 4 | 67.6 | 70.1 |
| | DHS, 1999 | 1985-89 | 5.2 | 4.8 | 133 | 27 | 18 | 52.7 | 66.6 |
| Senegal | WFS, 1978 | 1959-63 | 7.8 | - | - | - | - | - | - |
| | WFS, 1978 | 1974-78 | 7.2 | 8.0 | 262 | 4 | 1 | 77.0 | 90.0 |
| | DHS, 1986 | 1983-85 | 6.4 | 6.8 | - | 5 | 2 | 69.6 | 85.4 |
| | DHS, 1992 | 1989-91 | 6.0 | 5.9 | 131 | 7 | 5 | 59.7 | 81.0 |
| | DHS, 1997 | 1994-96 | 5.7 | 5.3 | 139 | 13 | 8 | - | - |
| Sierra Leone | Census, 1963 | 1963 | 7.5 | - | - | - | - | - | - |
| | Census, 1974 | 1974 | 6.5 | - | - | - | - | - | - |
| | Census, 1985 | 1985 | 6.4 | - | - | - | - | - | - |
| Togo | DS, 1961 | 1961 | 7.0 | - | - | - | - | - | - |

Table 1. Total Feritlity Rates, Desired Fertility, Contraceptive Use and Proportion of Women married at age 20 in African countries (1960-1999)

| Country | Survey and year | Approximate reference period | TFR | Desired Fertility | Under-5 mortality (per 1000) | Contraceptive use | | Proportion married by exact age 20 | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Any | Modern | 20-24 | 35-39 |
| | Census, 1971 | 1971 | 6.6 | - | - | - | - | - | - |
| | Census, 1981 | 1981 | 6.0 | - | - | - | - | - | - |
| | DHS, 1988 | 1985-87 | 6.4 | 5.3 | 158 | - | - | - | - |
| **Central Africa** | | | | | | | | | |
| Angola | Census, 1960 | 1960 | 6.4 | - | - | - | - | - | - |
| | Census, 1970 | 1970 | 6.7 | - | - | - | - | - | - |
| | Census, 1985 | 1983-85 | 8.0 | - | - | - | - | - | - |
| Cameroon | DS, 1962 | 1960-62 | 4.6 | - | - | - | - | - | - |
| | WFS, 1978 | 1974-78 | 6.4 | 8.0 | 191 | 2 | 1 | 80.0 | 72.0 |
| | DHS, 1991 | 1988-90 | 5.8 | 6.8 | 126 | 13 | 4 | 73.1 | 83.1 |
| Central | NDS, 1960 | 1959-60 | 4.9 | - | - | - | - | - | - |
| African | Census, 1975 | 1975 | 5.7 | - | - | - | - | - | - |
| Republic | Census, 1988 | 1988 | 6.1 | - | - | - | - | - | - |
| | DHS, 1994 | 1991-93 | 5.1 | 6.4 | 157 | 15 | 3 | 73.5 | 65.4 |
| Congo | DS, 1961 | 1960-61 | 4.8 | - | - | - | - | - | - |
| | Census, 1974 | 1974 | 5.5 | - | - | - | - | - | - |
| | Census, 1984 | 1984 | 6.3 | - | - | - | - | - | - |
| Zaire | NDS, 1957 | 1955-57 | 5.1 | - | - | - | - | - | - |
| | Census, 1984 | 1984 | 6.7 | - | - | - | - | - | - |
| **East Africa** | | | | | | | | | |
| Burundi | NDS, 1971 | 1964-65 | 7.1 | - | - | - | - | - | - |
| | NDS, 1971 | 1970-71 | 6.1 | - | - | - | - | - | - |
| | DHS, 1987 | 1983-86 | 6.9 | 5.3 | 152 | 7 | 1 | 44.3 | 54.3 |
| | DS, 1990 | 1990 | 6.6 | - | - | - | - | - | - |
| Ethiopia | NSS, 1967 | 1964-67 | 6.7 | - | - | - | - | - | - |
| | NSS, 1971 | 1968-71 | 5.8 | - | - | - | - | - | - |
| | DS, 1981 | 1981 | 8.8 | - | - | - | - | - | - |
| | FFS, 1990 | 1990 | 6.6 | - | - | - | - | - | - |
| Kenya | Census, 1962 | 1962 | 6.8 | - | - | - | - | - | - |
| | WFS, 1977-78 | 1975-77 | 8.0 | 7.2 | 142 | 6 | 4 | 65.0 | 76.0 |
| | DHS, 1993 | 1990-92 | 5.4 | 3.7 | 96 | 33 | 27 | 46.1 | 66.4 |
| Madagascar | RHS, 1962 | 1962 | 6.6 | - | - | - | - | - | - |
| | Census, 1975 | 1975 | 6.4 | - | - | - | - | - | - |
| | DHS, 1992 | 1989-91 | 6.1 | 5.5 | 163 | 17 | 5 | 54.1 | 65.1 |
| | DHS, 1997 | 1994-96 | 6.0 | 5.3 | - | - | - | - | - |
| Malawi | PCS, 1972 | 1971-72 | 7.9 | - | - | - | - | - | - |
| | NDS, 1982 | 1982 | 7.6 | - | - | - | - | - | - |
| | DHS, 1992 | 1989-91 | 6.7 | 5.1 | 234 | 22 | 14 | 76.6 | 65.9 |
| Mozambique | Census, 1970 | 1970 | 6.2 | - | - | - | - | - | - |
| | Census, 1980 | 1980 | 6.2 | - | - | - | - | - | - |
| | DHS, 1992 | 1994-96 | 5.8 | 5.9 | - | 6 | 5 | - | - |
| Rwanda | NDS, 1970 | 1970 | 7.8 | - | - | - | - | - | - |
| | NDS, 1983 | 1983 | 8.5 | - | - | - | - | - | - |
| | DHS, 1992 | 1989-91 | 6.2 | 4.2 | 150 | 21 | 13 | 35.1 | 49.9 |
| Tanzania | Census, 1967 | 1967 | 7.2 | - | - | - | - | - | - |
| | Census, 1988 | 1988 | 6.5 | - | - | - | - | - | - |

Table 1. Total Feritlity Rates, Desired Fertility, Contraceptive Use and Proportion of Women married at age 20 in African countries (1960-1999)

| Country | Survey and year | Approximate reference period | TFR | Desired Fertility | Under-5 mortality (per 1000) | Contraceptive use | | Proportion married by exact age 20 | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Any | Modern | 20-24 | 35-39 |
| | DHS, 1991-92 | 1990-92 | 6.3 | 6.1 | 141 | 10 | 7 | 61.0 | 74.3 |
| | DHS, 1996 | 1993-95 | 5.8 | 5.5 | 137 | 18 | 13 | 60.3 | 70.4 |
| Uganda | Census, 1969 | 1969 | 6.8 | - | - | - | - | - | - |
| | DHS, 1988-89 | 1986-88 | 7.4 | 6.5 | 180 | 5 | 3 | 72.9 | 80.2 |
| | DHS, 1995 | 1992-94 | 6.9 | 5.3 | 147 | 15 | 8 | 74.7 | 76.0 |
| **Southern Africa** | | | | | | | | | |
| Botswana | Census, 1971 | 1971 | 6.6 | - | - | - | - | - | - |
| | Census, 1981 | 1981 | 7.1 | - | - | - | - | - | - |
| | DHS, 1988 | 1984-87 | 4.9 | 4.7 | 53 | 33 | 32 | 18.7 | 34.2 |
| South Africa | Census, 1960 | 1960 | 6.4 | - | - | - | - | - | - |
| (black | Census, 1970 | 1970 | 5.8 | - | - | - | - | - | - |
| population only) | Census, 1980 | 1980 | 5.4 | - | - | - | - | - | - |
| | DHS, 1989 | 1986-88 | 4.6 | - | - | - | - | - | - |
| | DHS, 1994 | 1991-93 | 3.3 | - | - | - | - | - | - |
| Swaziland | Census, 1966 | 1966 | 6.9 | - | - | - | - | - | - |
| | Census, 1976 | 1976 | 5.7 | - | - | - | - | - | - |
| | Census, 1986 | 1986 | 5.1 | - | - | - | - | - | - |
| | FHS, 1988 | 1988 | 5.0 | - | - | - | - | - | - |
| Zambia | Census, 1969 | 1969 | 6.9 | - | - | - | - | - | - |
| | Census, 1980 | 1980 | 7.4 | - | - | - | - | - | - |
| | DHS, 1992 | 1989-91 | 6.5 | 5.8 | 191 | 14 | 9 | 63.6 | 82.7 |
| | DHS, 1996 | 1993-95 | 6.1 | 5.3 | 197 | 26 | 14 | 64.3 | 80.4 |
| Zimbabwe | Census, 1969 | 1969 | 8.3 | - | - | - | - | - | - |
| | Census, 1982 | 1982 | 7.1 | - | - | - | - | - | - |
| | DHS, 1992 | 1985-87 | 5.5 | 4.9 | 75 | 43 | 36 | 53.1 | 62.1 |
| | DHS, 1994 | 1991-93 | 4.3 | 4.3 | 77 | 48 | 42 | 51.7 | 65.0 |
| **North Africa** | | | | | | | | | |
| Egypt | WFS, 1980 | 1976-80 | 5.3 | 4.1 | 191 | 24 | 23 | 54.0 | 76.0 |
| | DHS, 1988 | 1985-87 | 4.5 | 2.9 | 102 | 38 | 36 | 45.1 | 63.1 |
| | DHS, 1992 | 1989-91 | 3.9 | 2.9 | 85 | 47 | 45 | - | - |
| | DHS, 1995 | 1992-94 | 3.6 | 2.9 | 81 | 48 | 46 | - | - |
| Morocco | WFS, 1980 | 1976-80 | 5.9 | 5.0 | 142 | 18 | 16 | 53.0 | 85.0 |
| | DHS, 1987 | 1984-86 | 4.8 | 3.7 | 102 | 36 | 29 | - | - |
| | DHS, 1992 | 1989-91 | 4.0 | 3.4 | 76 | 42 | 36 | 31.4 | 56.2 |
| | DHS, 1995 | 1992-94 | 3.3 | - | 80 | 50 | 42 | - | - |
| Tunisia | WFS, 1978 | 1974-78 | 5.9 | 4.2 | 107 | 32 | 25 | 29.0 | 61.0 |
| | DHS, 1988 | 1985-87 | 4.2 | 3.5 | 65 | 50 | 40 | 20.8 | 43.6 |

Notes:

DHS = Demographic and Health Survey; WFS = World Fertility Survey; DS = Demographic Survey;
NDS = National Demographic Survey; PES = Post Enumeration Survey; NFS = National Fertility Survey;
NSS = National Sample Survey; FFS = Family and Fertility Survey; RHS = Rural Household Sample Survey;
PCS = Population Change Survey

Sources: Cohen (1993; 1998); UN (1987); Westoff, Blanc and Nyblade (1994); Mboup Gora (1998); ISI (1984); Feyistan (2000)