# Population Growth, Fertility Transition and Family Planning in West and Central Africa

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**Abstract**

This paper provides an overview of the demographic transition in West and Central Africa in relation to the rest of the world. West and Central Africa is the last region of the world to embark on the second phase of the demographic transition. Specific features of population growth, fertility trends and family planning pertaining to the region are highlighted, including persistent preferences for large desired family sizes among men and women (above 5 children in most countries and up to 9 children in Niger and Chad); persistently low contraceptive use (less than 10-15%) and greater unmet need for spacing rather than limiting births; high prevalence of early marriage and teenage pregnancy with the median age at first birth below 20 in most countries; widespread reluctance to use modern contraceptive methods from women themselves (not necessarily because of spousal opposition). As a result, even if expressed unmet needs for family planning were to be fulfilled, the impact on fertility would remain minimal with total fertility rates above the population replacement levels of 2.7 children per woman. Policy views in the region have shifted from low concern for high fertility rates and population growth in the 1970s to high concerns in 2009 (except in CAR, DRC, Equatorial Guinea and Gabon). Within this favourable context, the paper makes the case for tackling the issue of high adolescent fertility, which is one of the main factors for the persistence of high fertility rates in West and Central Africa. Renewed emphasis on policies that raise the age at first birth, encourage access to contraception for teenage girls, provide adequate information on birth spacing for young girls, and reduce the high proportion of unsafe abortions, may be particularly promising avenues.

Date: this version dated May 24, 2011

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## 1. Family planning in global health policy

Since the 1994 Cairo International Conference on Population and Development, family planning shifted away from the paradigm of population control and became integrated in the wider framework of child survival, safe motherhood and reproductive health (Cleland & Bernstein, Family Planning: the unfinished agenda, 2006) (CountDown to 2015, 2010) (Sen, 2010). This paradigm shift has had important programmatic implications: in the past 15 years, programmes have focused on identifying, measuring and addressing 'unmet need' for family planning with the objective of helping "couples have the number of children they want, when they want them" (Gwatkin, 2009). Hence, "the main job of family planning programmes is therefore not to promote smaller families *per se* but to meet existing demand with services that are respectful and competent." (Bruce & Jain, 1995) At the global level, family planning has been endorsed as a key measure for improving maternal health with MDG 5.3 monitoring progress in contraceptive prevalence rate.

## 2. A Delayed Demographic Transition in sub-Saharan Africa

Countries in West and Central Africa have the highest population growth rates in the world, ranging from 1.4% p.a. in Cape Verde to 4% p.a. in Niger and Liberia. To appreciate the significance of such high population growth rates, we calculate the implied "doubling time", which tells us how long it will take for the population to double from its current size assuming population growth rates remain at their current levels (Table 1, third column). All but 5 countries (Cape Verde, Sao Tome, Gabon, Congo and CAR) have annual population growth rates above 2% p.a, implying a population doubling time of 20 to 30 years. Niger and Liberia, which have the highest population growth rates (circa 4% p.a.) have a population doubling time of 18 years or less.

| Table 1 | Population Growth Rate (% p.a.) | | | Doubling Time | | Population Growth Rate (% p.a.) | | | Doubling time |
|---|---|---|---|---|---|---|---|---|---|
| **Country** | **1985** | **1995** | **2009** | **(years)** | **Country** | **1985** | **1995** | **2009** | **(years)** |
| Liberia | 3 | -2.2 | **4.1** | 17 | Mauritania | 2.7 | 2.7 | **2.4** | 29 |
| Niger | 2.8 | 3.3 | **3.9** | 18 | Cameroon | 2.9 | 2.8 | **2.3** | 30 |
| Burkina Faso | 2.3 | 2.8 | **3.4** | 21 | Cote d'Ivoire | 4.4 | 3.4 | **2.3** | 30 |
| Benin | 2.9 | 3.5 | **3.2** | 22 | Guinea | 2.6 | 3.9 | **2.3** | 30 |
| Chad | 2.5 | 3.1 | **2.8** | 25 | Nigeria | 2.7 | 2.5 | **2.3** | 30 |
| Democratic Republic of the Congo | 2.9 | 3.9 | **2.8** | 25 | Guinea Bissau | 1.9 | 2.6 | **2.2** | 32 |
| Gambia | 3.5 | 3.8 | **2.7** | 26 | Ghana | 3.3 | 2.8 | **2.1** | 33 |
| Sierra Leone | 2.2 | -0.5 | **2.7** | 26 | Central African Republic | 2.9 | 2.6 | **1.9** | 37 |
| Eq. Guinea | 7.1 | 3.5 | **2.6** | 27 | Congo | 3.1 | 2.6 | **1.9** | 37 |
| Senegal | 2.9 | 2.8 | **2.6** | 27 | Gabon | 3 | 3.2 | **1.8** | 39 |
| Togo | 3.7 | 2.4 | **2.5** | 28 | Sao Tome | 1.8 | 1.9 | **1.6** | 44 |
| Mali | 1.8 | 2.0 | **2.4** | 29 | Cape Verde | 1.9 | 2.3 | **1.4** | 50 |
| South East Asia | 2.0 | 1.5 | **1.1** | 63 | China | 1.6 | 0.9 | **0.5** | 140 |
| Latin America and Caribbean | 1.9 | 1.5 | **1.1** | 63 | India | 2.1 | 1.7 | **1.4** | 50 |
| Europe | 0.4 | -0.02 | **0.2** | 350 | | | | | |

Historically, sub-Saharan Africa is the last region of the world to embark on the second phase of the so-called demographic transition, characterized by falling fertility rates and falling mortality rates which combine to generate low population growth rates (Table 2).

**Table 2: The Three Phases of Demographic Transition**

| Demographic Transition | Definition | Phase 1 | Phase 2 | Phase 3 |
|---|---|---|---|---|
| Crude Death Rate | CDR | Fall | Fall | Slow fall |
| Young-age mortality | IMR and U5MR | Fall, becoming rapid | Fall | Slow fall |
| Total fertility | Children per women | No trend or slow rise, then fall | Fall | Fall |
| Crude birth rate | CBR | No trend or slow rise | Fall | Slow fall |
| Natural increase | CBR – CDR | Rapid rise | Fall | Fall, then no trend |
| Dependency ratio | (ratio of population 0-14 per 100 population 15-64) | Rapid rise | Rapid fall | Rise |

Source: Lipton and Longhurst (2011)

There are marked disparities in demographic trends within sub-Saharan Africa. As shown in Figure 1 below, natural increase in population remained high until the mid-1980s in Southern and Eastern Africa and until the mid-1990s for Western and Central Africa. By comparison, Asia and Latin America embarked on their demographic transition in the 1960s. High population growth rates in sub-Saharan Africa are due to persistently high fertility rates relative to (moderately) declining mortality rates. This latter pattern is most apparent in West and Central Africa (see Figure 2) although there are also marked variations between countries within each region as we will see later.

One consequence of the delayed demographic transition is that the proportion of the young dependent population (0-14 years of age) has grown disproportionately large relative to the working age population (see Figure 3), preventing sub-Saharan African countries to capture the so-called 'demographic dividend' (Bloom, Canning, Fink, & Finlay, 2007) (Eastwood & Lipton, 2011) and straining countries' capacities to provide essential social services.

Economists have argued that the changing age structure driven by the demographic transition can have positive impacts on economic growth and poverty reduction. In theory however, demographic (birth rates, mortality rates) and economic variables (growth and poverty) are linked through joint and reverse causation and it has been difficult to empirically identify in which directions causalities effectively run. Nevertheless, it has been shown that "high birth rates reduce current growth of real GDP per person, but accelerate it after 10-15 years, as the extra new-borns grow up and become workers and net savers" (Eastwood & Lipton, 1999, p. 2). On the other hand, there is what has been called the fertility amplifier: "an initial fall in fertility leading, via faster growth and more equal distribution, to fertility declines later on" (Eastwood & Lipton, 1999, p. 21) such that declines in fertility have positive effects on both economic growth and poverty reduction.

What policies can trigger the initial fall in fertility that could advance the demographic transition in sub-Saharan Africa? Proximate determinants of fertility decline include child mortality and factors affecting the opportunity cost of motherhood such as female education and wages. Theoretically however, the relationship between child mortality and fertility remains ambiguous with a decline in child mortality resulting in both an increase and a decrease in total fertility (Angeles, Guilkey, & Mroz). Nevertheless, recent empirical work has shown that improved child survival may be the main driver for fertility decline relative to other proximate factors such as GDP per capita, urbanization and female literacy (Conley, McCord, & Sachs, 2007).

However, as Lipton and Longhurst warn, "even maintaining past rates of fertility decline in most African countries (let alone accelerating them on the Asian pattern) will require falls in fertility among areas and groups where it is particularly high. *To facilitate this, measures to reduce young-end mortality – principally, affordable access to preventive and primary health care – must increasingly be spread to poorer rural and slum areas and groups.*" (Lipton and Longhurst 2011)

Since a (faster) decline in child mortality where it is currently high is likely to *first* result in higher natural increase and dependency due to time lags between perceived child mortality and fertility-related behavior (Eastwood & Lipton, 2011), policies tackling *both* child mortality and total fertility are needed. Hence, the approach we take in this paper is to seek the mutual causes of both child mortality and high fertility and see what joint solutions may exist.

Only Southern Africa was able to achieve a fall in fertility, mortality and natural increase similar to that achieved in Asia (see Figures 1-3).

Figure 1: Late demographic transition: natural increase in population in sub-Saharan Africa

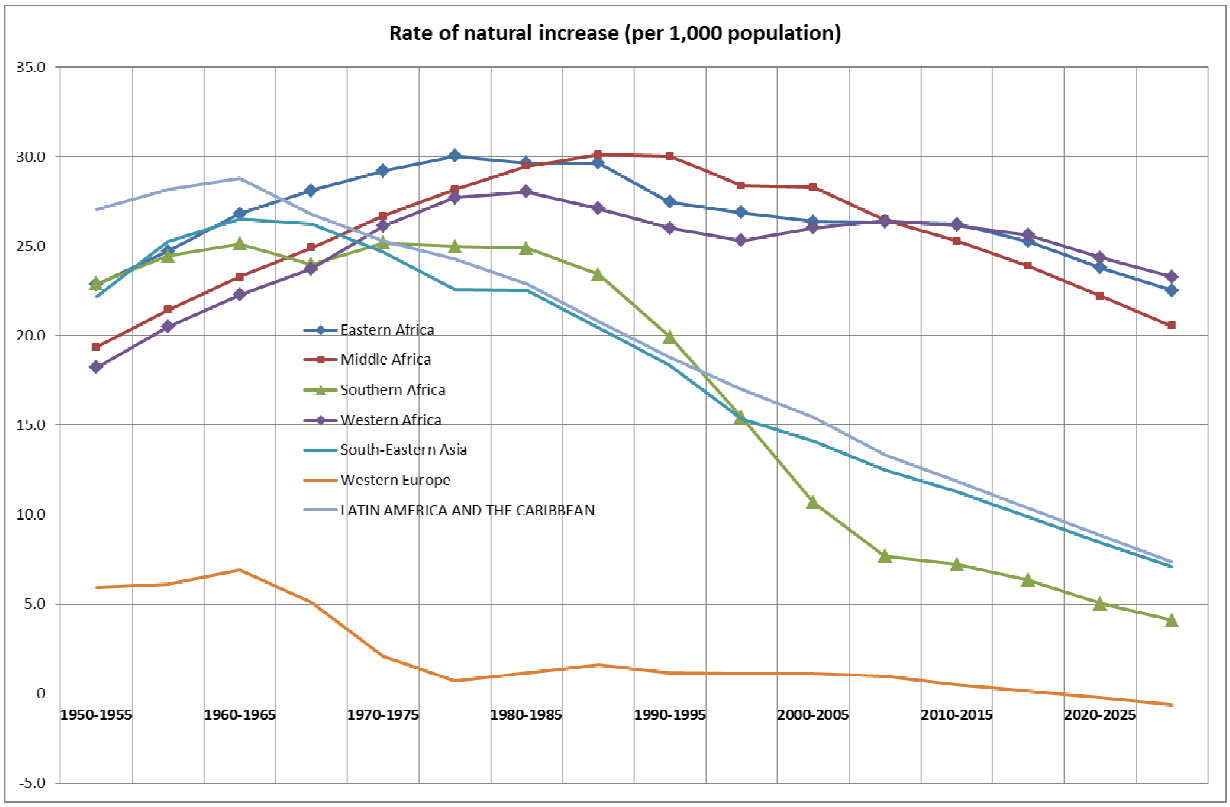


Figure 2: Crude Birth Rate, Crude Death Rate and natural population increase in sub-Saharan Africa (1950-2010)

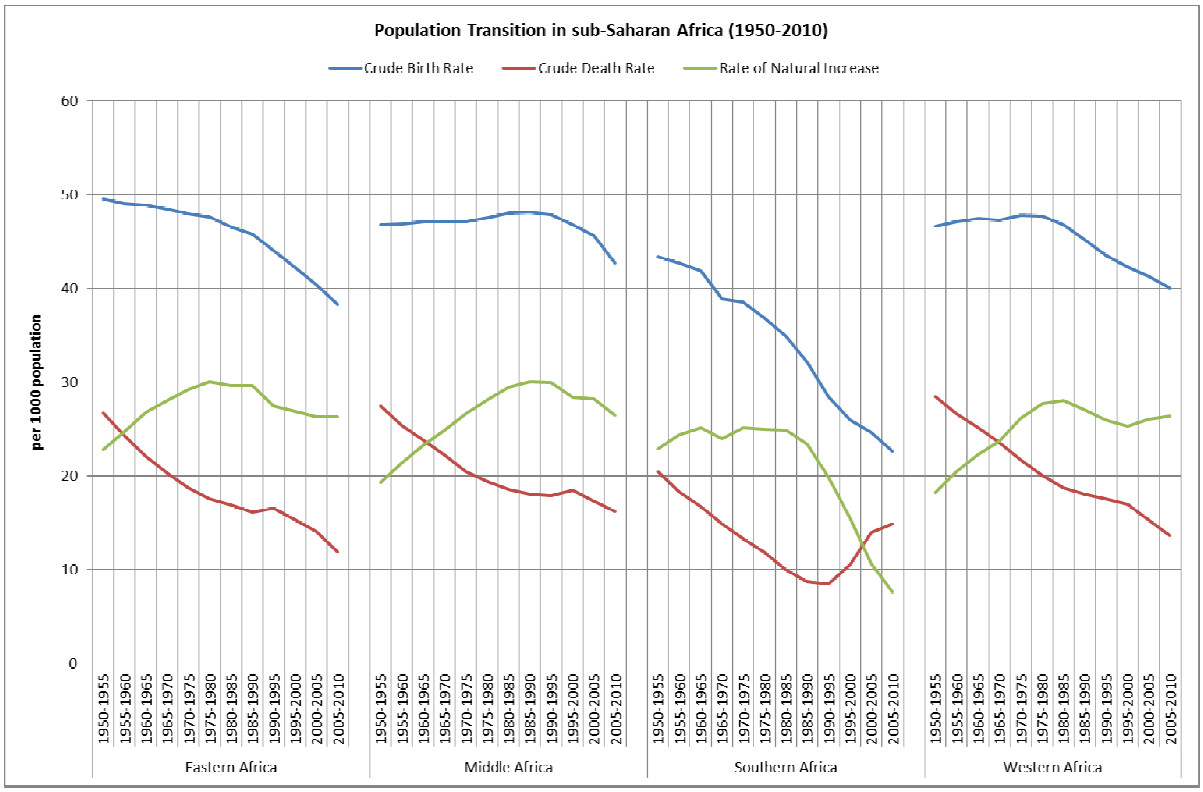



Figure 3: Delayed demographic dividend in sub-Saharan Africa

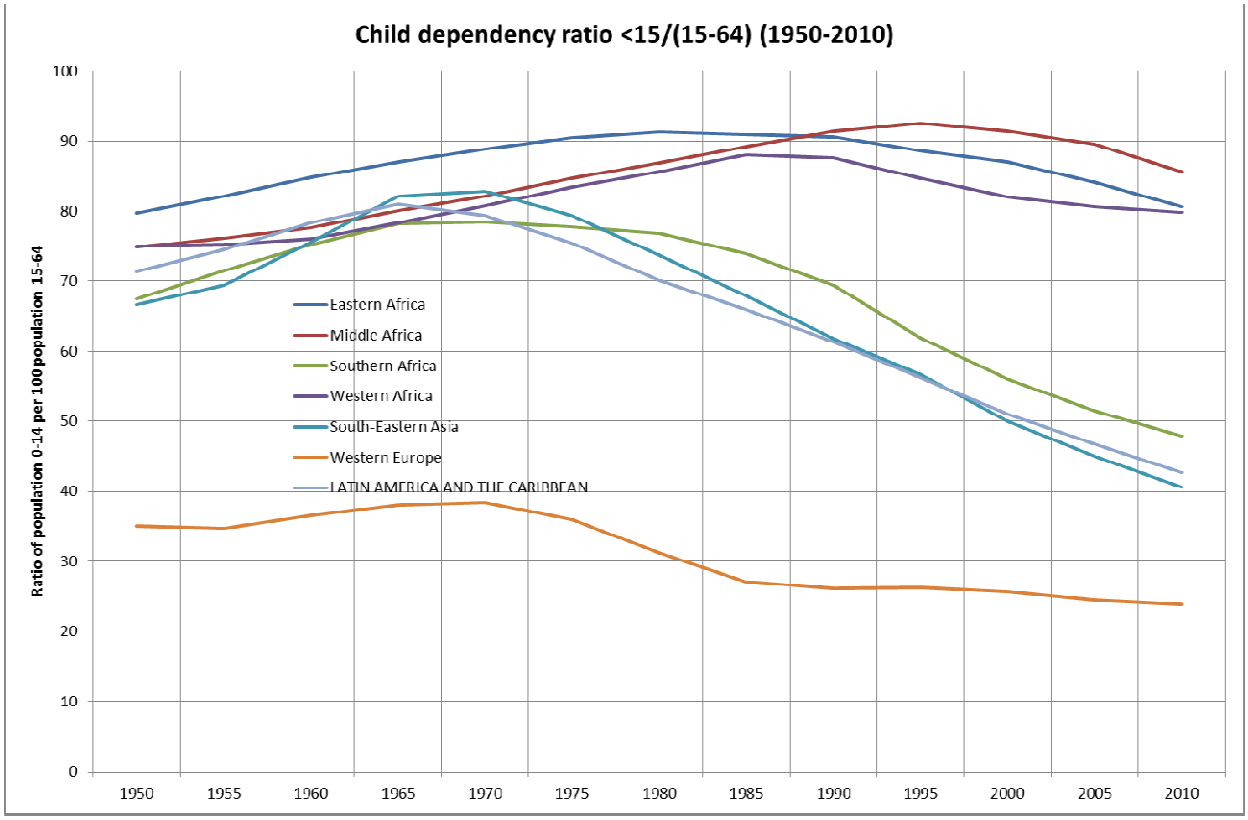
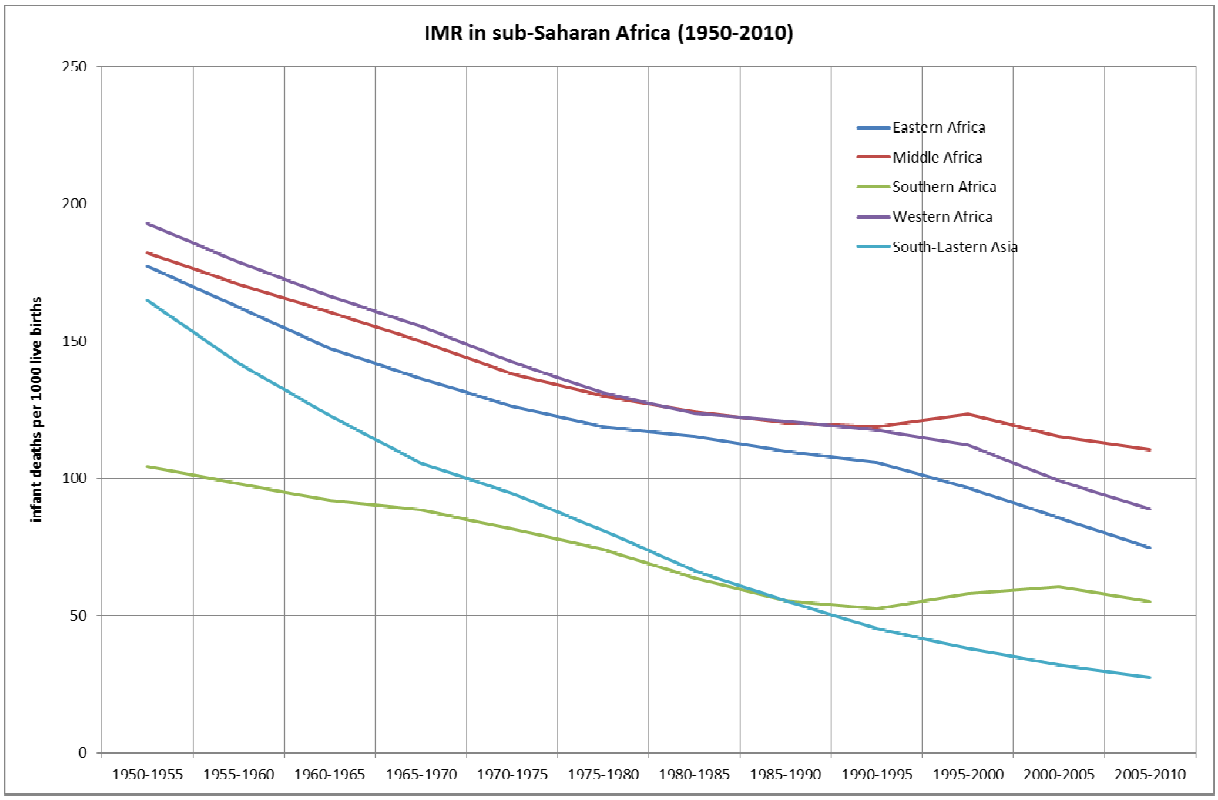


Figure 4: Higher child mortality in West and Central Africa (1950-2010)




## 3. Demographic trends: basic facts and trends

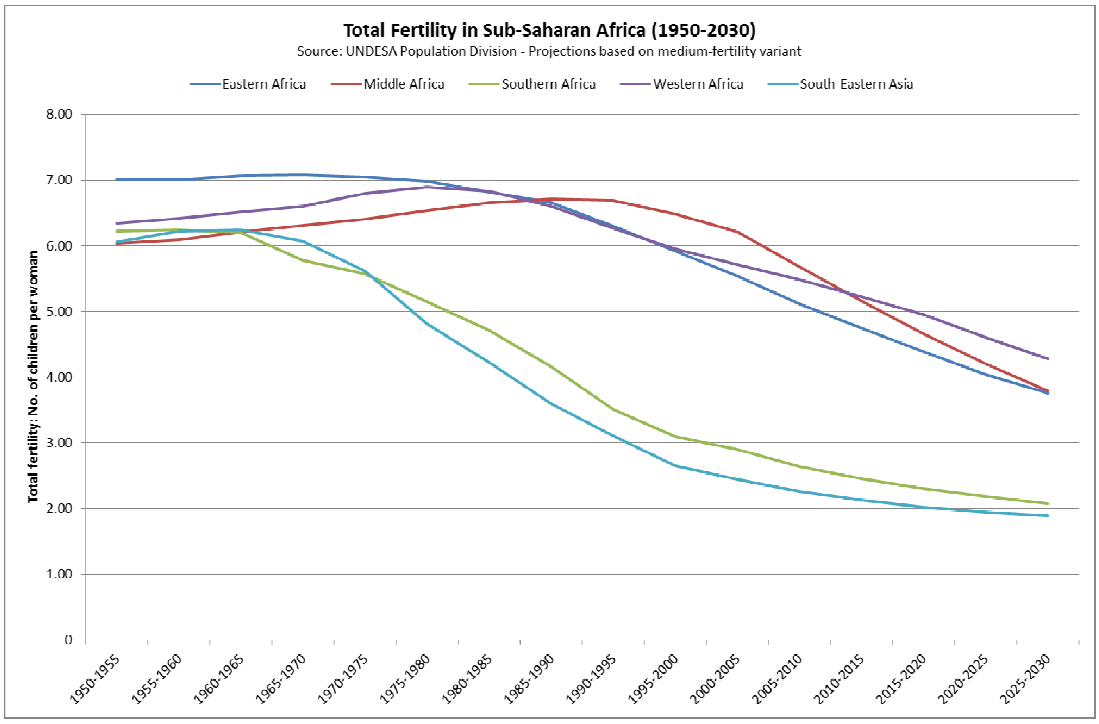
### 3.1 Fertility

The natural increase in population in sub-Saharan Africa is sustained by fertility rates that have remained stubbornly high despite the decline in mortality that has been underway over the past 50 years (Figure 4). The decline in fertility started in the mid-1980s, with sustained falls across Eastern and Southern Africa (notably Kenya, Zimbabwe, Botswana and South Africa) (Cohen 1998) but slower declines in West and Central Africa.

Today, West and Central African countries have the highest fertility rates in the world ranging from 7.1 births per woman in Niger to 2.8 in Cape Verde (Table 3). Two groups of countries can be distinguished. Niger, Chad, Burkina Faso, Mali, Chad, CAR experienced almost no fertility decline until 2000 with fertility rates remaining around 7-8 births per woman, and very moderate declines since 2000 (less than one birth per woman). Countries that experienced more rapid fertility decline include Cote d'Ivoire, Togo, Ghana and Senegal (Figure 5). In Cote d'Ivoire, fertility dropped from 7.2 to 4.0 births per woman between 1980 and 2010. In Senegal, fertility dropped from 7.3 to 4.9 births per woman between 1980 and 2010. Cape Verde experienced the largest decline in fertility and today enjoys the lowest fertility rate in the region (2.8 births per woman).

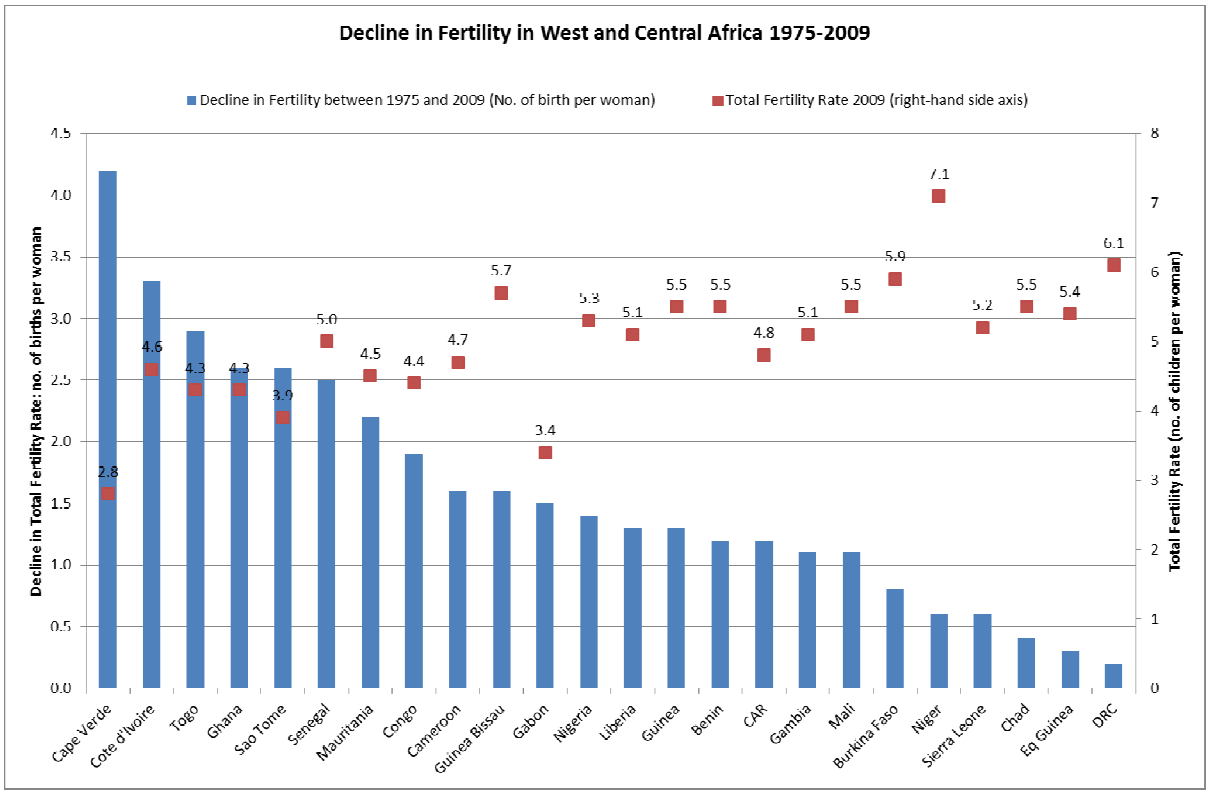
These fertility trends are underpinned by complex socio-economic dynamics. For instance, it appears that the decline in fertility in Senegal is somewhat atypical to the extent that has been concentrated among women under the age of 30. This trend is attributable to later marriage and later firth birth rather than to an increase in the use of modern contraception or a decrease in ideal family size (on the latter, see section 3.2) (Montgomery & Cohen, 1998, p. 18). Such complex patterns require that changes fertility behaviour be analysed with micro data country by country. They also indicate that fertility decline has taken place historically under a wide variety of social, economic and demographic conditions.

Figure 5: Total fertility decline across regions in Sub-Saharan Africa (1950-2030)

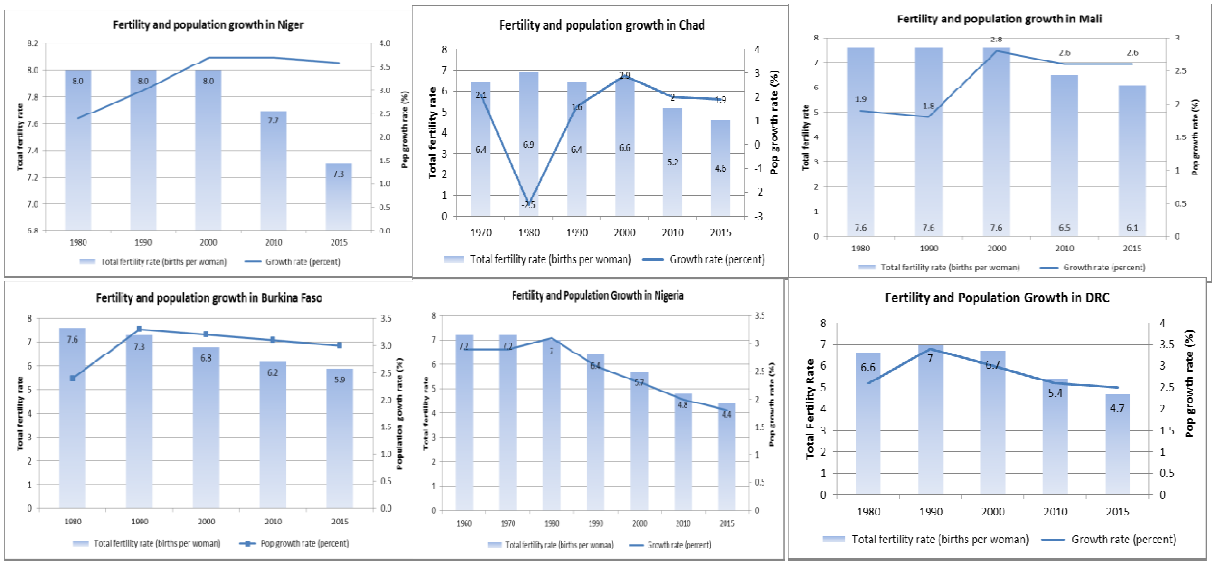


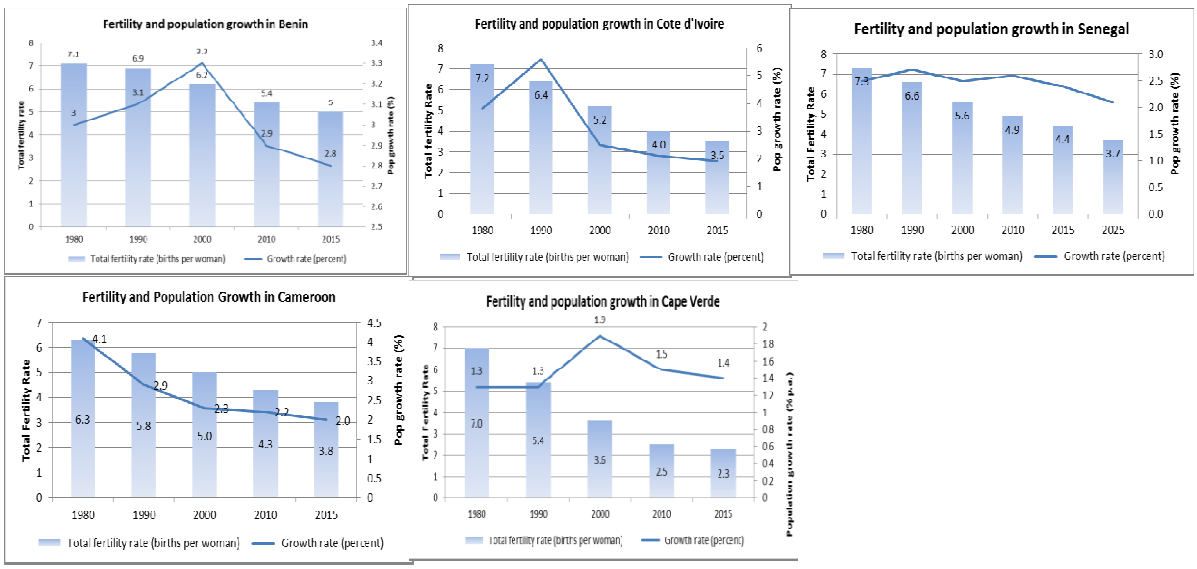

| Table 3: Trends in Fertility Rates in West and Central Africa | Total Fertility Rate | | | Change in Fertility Rate | |
|---|---|---|---|---|---|
| | 1975 | 1995 | 2009 | 1975-1995 | 1995-2009 |
| Niger | 7.7 | 7.8 | 7.1 | 0.1 | -0.7 |
| Chad | 6.6 | 6.6 | 6.2 | 0.0 | -0.4 |
| Democratic Republic of the Congo | 6.3 | 7.1 | 6.1 | 0.8 | -1.0 |
| Burkina Faso | 6.7 | 6.7 | 5.9 | 0.0 | -0.8 |
| Guinea Bissau | 7.3 | 5.9 | 5.7 | -1.4 | -0.2 |
| Benin | 6.7 | 6.6 | 5.5 | -0.1 | -1.1 |
| Guinea | 6.8 | 6.6 | 5.5 | -0.2 | -1.1 |
| Mali | 6.6 | 6.3 | 5.5 | -0.3 | -0.8 |
| Equatorial Guinea | 5.7 | 5.9 | 5.4 | 0.2 | -0.5 |
| Nigeria | 6.7 | 6.4 | 5.3 | -0.3 | -1.1 |
| Sierra Leone | 5.8 | 5.5 | 5.2 | -0.3 | -0.3 |
| Gambia | 6.2 | 6.0 | 5.1 | -0.2 | -0.9 |
| Liberia | 6.4 | 6.4 | 5.1 | 0.0 | -1.3 |
| Senegal | 7.5 | 6.5 | 5.0 | -1.0 | -1.5 |
| Central African Republic | 6.0 | 5.7 | 4.8 | -0.3 | -0.9 |
| Cameroon | 6.3 | 5.7 | 4.7 | -0.6 | -1.0 |
| Cote d'Ivoire | 7.9 | 5.9 | 4.6 | -2.0 | -1.3 |
| Mauritania | 6.7 | 5.7 | 4.5 | -1.0 | -1.2 |
| Congo | 6.3 | 5.2 | 4.4 | -1.1 | -0.8 |
| Ghana | 6.9 | 5.3 | 4.3 | -1.6 | -1.0 |
| Togo | 7.2 | 6.0 | 4.3 | -1.2 | -1.7 |
| Sao Tome | 6.5 | 5.2 | 3.9 | -1.3 | -1.3 |
| Gabon | 4.9 | 5.1 | 3.4 | 0.2 | -1.7 |
| Cape Verde | 7.0 | 4.9 | 2.8 | -2.1 | -2.1 |

Figure 6: Fertility decline across West and Central Africa (1975-2009)




**Panel 1: Fertility transition in selected West and Central African countries (1980-2025)**



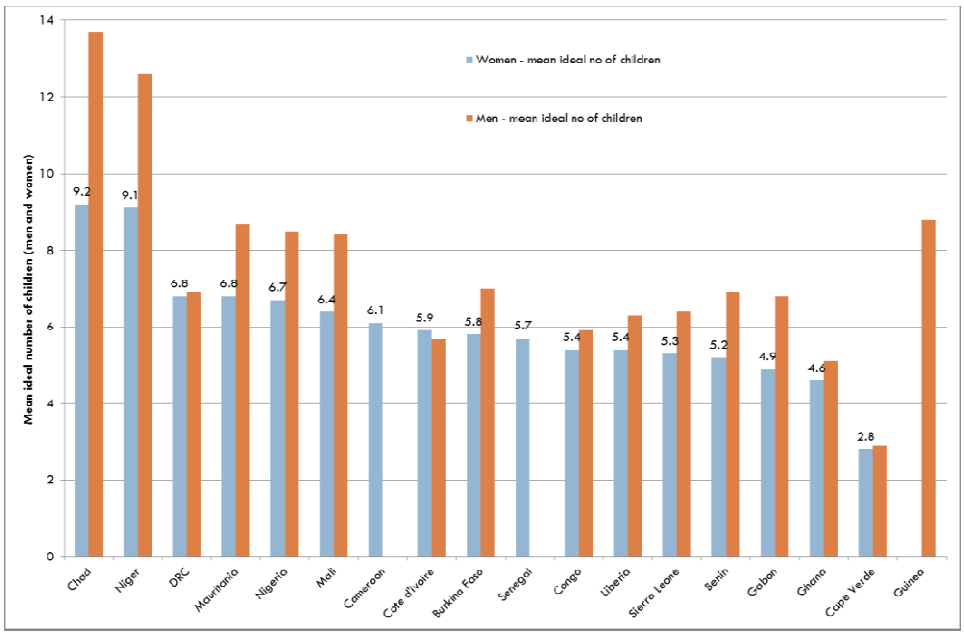



Several factors explain the persistence of high fertility rates in West and Central Africa: (1) large desired family size; (2) early pregnancies, (3) closely spaced births, and (4) low levels of contraceptive use.

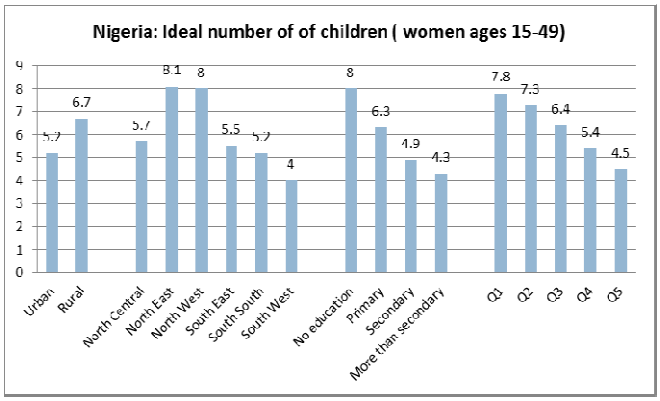
## 3.2 Preferences for Large Family Sizes in West Central Africa

One important proximate determinant of high fertility rates in West and Central Africa is men and women's preferences for very large family sizes. To see this, we look at two indicators of reproductive preferences: the ideal number of children for men and women and the proportion of women who want no more children (Figure 7 below). The ideal numbers of children for women is highest in West and Central Africa with an average of 6 children desired, from 4.1 children in Ghana to 9.2 children in Chad. For men, the ideal numbers of children are consistently higher than for women: they are highest in Chad and Niger (12-13 children) and in Mauritania, Nigeria and Mali (above 8), where the difference between the desired number of children between men and women are also the largest (Westhoff C. , 2010).

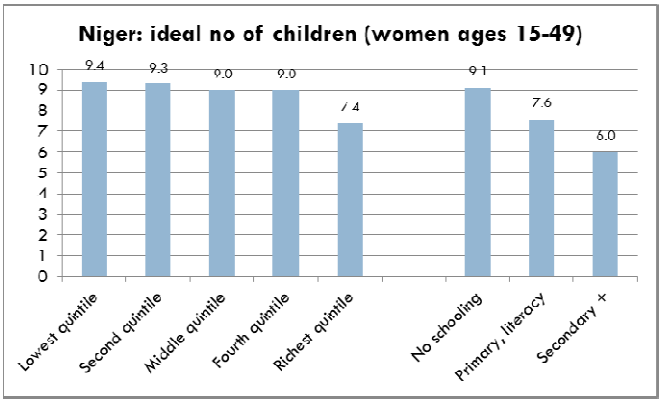
Figure 7: Preferences for large family sizes



Desired and actual family sizes can vary widely within country as shown by data for Nigeria and Niger disaggregated by sub-regions, education of the mother and wealth quintiles. In Nigeria, desired family size varies between 4 and 8 births per woman between the South West and the North East regions, mothers with secondary education and no education and for women belonging to the poorest and richest quintiles respectively. Even in urban areas, the ideal number of children remains above 5 births per woman.

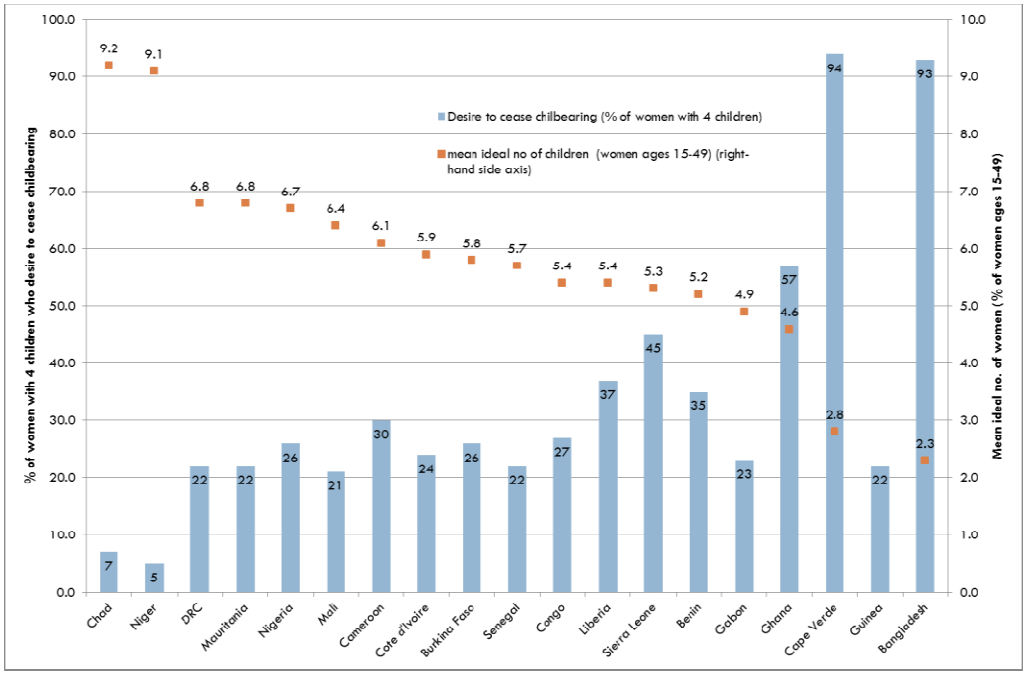



In Niger, socio-economic differences in desired family size are more muted with desired family sizes remaining high (above 6 children) for women with secondary level education. There are no marked differences between wealth quintiles until the richest quintile.




Despite high levels of desired family sizes on average, a substantial proportion of women express the desire to cease childbearing (Figure 9). In countries where the expressed desired family size ranges between 5 and 7, 22-30% of women with more than 4 children declare wanting to cease childbearing. Sierra Leone, Ghana and Cape Verde have the highest proportion of women with 4 children who want no more children (45%, 57% and 94% respectively). In Niger and Chad, which have the highest levels of desired family sizes in the region (above 9 children), the vast majority of women with 4 children (93% or more) want to continue childbearing.

Figure 9



### 3.3 Early Marriage and Adolescent Pregnancy

The issue of teenage pregnancy is of particular concern in West and Central Africa, which has one of the largest teenage population combined with the highest rates of teenage fertility in the world.

*Early sexuality*

Adolescent girls aged 15 to 19 represent 11% of the total female population in West and Central Africa (Figure 10). The majority of these teenagers begin sexual activity between the age of 15 and 20 (Figure 11): 21% of teenage girls have had sex at 15 years of age; by age 18, this proportion rises to nearly 60%; by age 20, nearly 80% of young women have had sex.

Figure 10: Adolescent girls

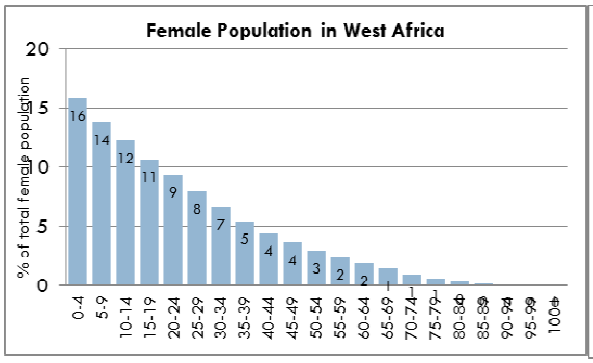
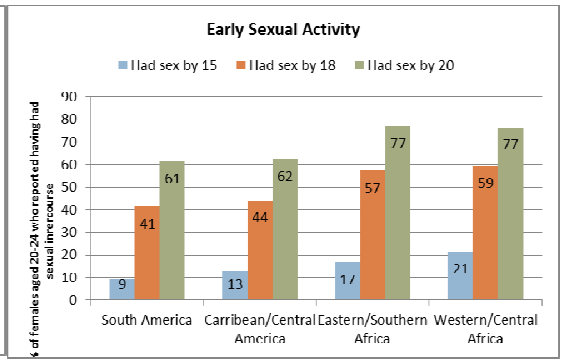



Figure 11: Early sexual activity




*Early marriage and early pregnancy*

Women in West and Central Africa give birth for the first time or get married at an early age. On average, 27% of girls aged 15-19 are married and 29% of women aged 20-24 gave birth before the age of 18 (Table 5). Early sexual activity and early marriage among teenage girls translate into high adolescent birth rates defined as the number of births per 1,000 women aged 15-19 (Table 5). In all countries except Mauritania, Ghana, Senegal, Sao Tome and Cape Verde, adolescent birth rates are above 100, compared with an average of 50 worldwide.

There are considerable variations in early marriage and teenage pregnancy across the region (columns 3-5 in Table 5 further below). Early marriage and teenage pregnancy are widespread in Niger, Chad and Mali: 40-60% of girls aged 15-19 are currently married and 45-50% of women aged 20-24 give birth before the age of 18. Correspondingly, these countries have the highest adolescent birth rates in the region, close to 200 births per 1000 adolescent girls. Ghana lies at the other end of the spectrum, with 8% of teenage girls aged 15-19 currently married, and the lowest adolescent birth rate in the region at 70 births per 1,000 adolescent girls.

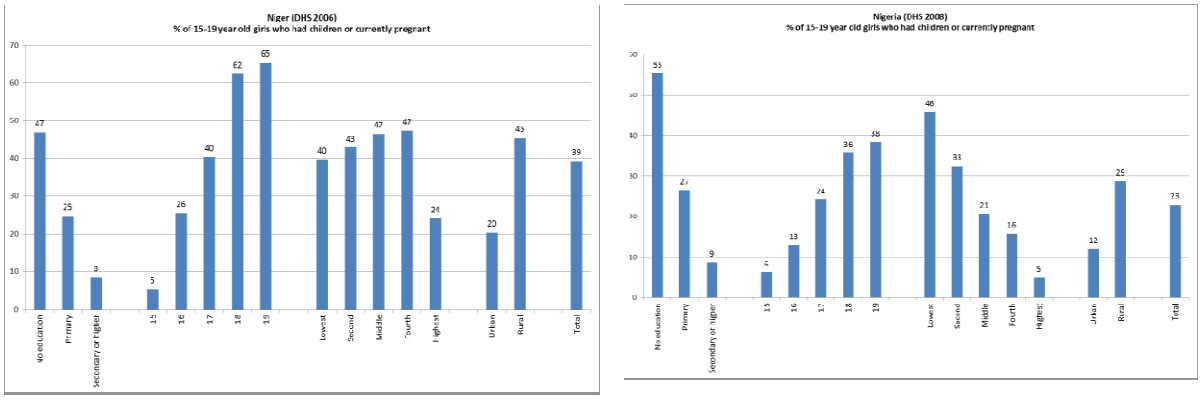
Early childbearing is also evident by looking at the median age at firth birth, which is 2 years younger than in the rest of the world (Cohen 1998 p.1439) and ranges from 18.2 years of age in Niger to 20.7 in Ghana (Table 4).

| Table 4 | Median age at first birth | % of women giving birth by age 18 | Country | Median age at first birth | % of women giving birth by age 18 |
|---|---|---|---|---|---|
| Niger | 18.2 | 51 | Benin | 19.9 | 23 |
| Liberia | 18.3 | Na | DRC | 20.0 | Na |
| Mali | 18.9 | 45 | Nigeria | 20.4 | 28 |
| Guinea | 19.1 | 44 | Ghana | 20.7 | 15 |
| Sierra Leone | 19.3 | Na | Senegal | 20.8 | 22 |

| Table 5 | Adolescents Population (aged 10–19) | | Marital status | Age at first birth | Adolescent birth rate |
|---|---|---|---|---|---|
| **Adolescents in West and Central Africa: Marital status and pregnancy** | Total | % of total population | Girls aged 15–19 currently married (%) | Women aged 20–24 who gave birth before age 18 (%) | Number of births per 1,000 girls aged 15–19 |
| (Source: SOWC 2010) | (1) | (2) | (3) | (4) | (5) |
| | 2009 | 2009 | 2000–2009* | 2000–2009* | 2000–2008* |
| **Niger** | 3512 | 23 | 59 | 51 | 199 |
| **Chad** | 2621 | 23 | 42 | 48 | 193 |
| **Mali** | 3101 | 24 | 50 | 46 | 190 |
| **Guinea** | 2305 | 23 | 36 | 44 | 153 |
| **Sierra Leone** | 1258 | 22 | 30 | 40 | 143 |
| **Central African Republic** | 1014 | 23 | 57 | 38 | 133 |
| **Liberia** | 912 | 23 | 19 | 38 | 177 |
| **Gabon** | 342 | 23 | 18 | 35 | – |
| **Cameroon** | 4459 | 23 | 22 | 33 | 141 |
| **Congo** | 846 | 23 | 16 | 29 | 132 |
| **Côte d'Ivoire** | 4784 | 23 | 20 | 29 | 111 |
| **Nigeria** | 35386 | 23 | 29 | 28 | 123 |
| **Burkina Faso** | 3634 | 23 | 24 | 27 | 131 |
| **Mauritania** | 738 | 22 | 25 | 25 | 88 |
| **Benin** | 2041 | 23 | 22 | 23 | 114 |
| **Democratic Republic of the Congo** | 15938 | 24 | 23 | 23 | 127 |
| **Cape Verde** | 123 | 24 | 8 | 22 | 92 |
| **Senegal** | 3008 | 24 | 29 | 22 | 96 |
| **Togo** | 1521 | 23 | 16 | 19 | – |
| **Ghana** | 5347 | 22 | 8 | 16 | 70 |
| **Equatorial Guinea** | 156 | 23 | – | – | 128 |
| **Guinea-Bissau** | 354 | 22 | 22 | – | 170 |
| **Sao Tome and Principe** | 39 | 24 | 19 | – | 91 |
| | | | | | |
| **Africa**[#] | **227318** | 23 | 22 | 25 | 108 |
| **Sub-Saharan Africa**[#] | **194803** | 23 | 23 | 28 | 123 |
| **Eastern and Southern Africa** | 91042 | 23 | 19 | 27 | 118 |
| **West and Central Africa** | **93824** | **23** | **27** | 29 | **129** |
| **Middle East and North Africa** | 83589 | 20 | 15 | – | 38 |
| **Asia**[#] | **663166** | 18 | 24 | 19 | 36 |
| **South Asia** | 334645 | 21 | 28 | 22 | 54 |
| **East Asia and Pacific** | 328521 | 16 | 11 | 8 | 18 |
| **Least developed countries**[§] | 190214 | 23 | 30 | 31 | 123 |

Figure 12 shows how teenage pregnancy also varies within country in Niger and Nigeria. Teenage pregnancy is twice as prevalent in rural areas (30-40%) but still high in urban areas (around 10-20% of 15-19 year-old girls). It is high across all wealth quintiles except for the richest in Niger and declines linearly across wealth quintiles in Nigeria

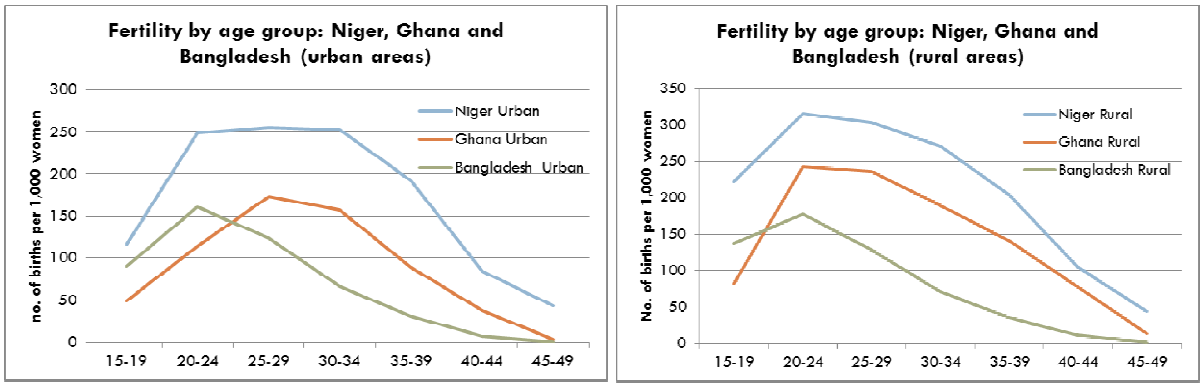
**Figure 12**: % of 15-19 year old girls who had children or currently pregnant




*Reproductive behaviour by age group*

Women in West and Central Africa also bear children during a long period of their reproductive lives (15 to 49 years of age). In Figure 13, we graph how the birth rate pattern across age groups changes in three countries, Niger, Ghana and Bangladesh which exhibit high, medium and low levels of fertility. In Niger, birth rates are very high among teenagers (above 100 births per 1,000 women) and remain at high levels almost until the end of the reproductive timespan of a woman. In Ghana, the birth rate is considerably lower across all age groups, starts declining at an earlier age (25-29) and declines more rapidly. Bangladesh, which accomplished its demographic transition earlier and was able to halve its fertility rate from 5 in 1993 to 2.7 in 2007, exhibits a drastically different pattern of child bearing with birth rates sharply declining among women above 25 years of age in both urban and rural areas. In Niger, women have high birth rates until the age of 35-40,

**Figure 13: Fertility by age group in Niger, Ghana and Bangladesh (urban and rural areas)**




*Quantifying early pregnancy and its effects on child and maternal mortality*

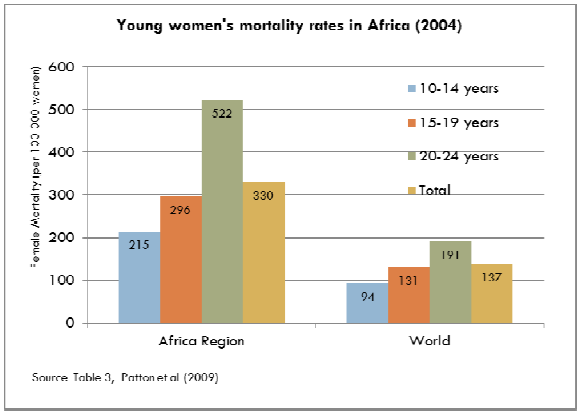
Early pregnancies make a substantial contribution to the total number of births as indicated by the percentage of births to women under the age of 20, which ranges from a high 17% in DRC to 7% in Ghana (Table 6). They are also associated with higher risks of mortality for young mothers (Figure 14). Pregnancy-related causes of deaths are responsible for 26% of female deaths among women aged

10-24 in sub-Saharan Africa (Patton, Coffey, & Sawyer, 2009), with leading causes of mortality including complications occurring during child births and unsafe abortions (UNFPA, 2004).

| Table 6 | Percentage of births to women under age 20 | | | Percentage of births to women under age 20 | |
|---|---|---|---|---|---|
| **Country** | **1995** | **2009** | **Country** | **1995** | **2009** |
| Democratic Republic of the Congo | 17 | 17 | Central African Republic | 13 | 11 |
| Cape Verde | 11 | 17 | Equatorial Guinea | 11 | 11 |
| Mali | 14 | 15 | Burkina Faso | 11 | 11 |
| Cameroon | 14 | 14 | Guinea-Bissau | 11 | 11 |
| Côte d'Ivoire | 13 | 14 | Niger | 15 | 11 |
| Guinea | 14 | 14 | Benin | 10 | 10 |
| Liberia | 13 | 14 | Mauritania | 9 | 10 |
| Chad | 15 | 13 | Senegal | 10 | 10 |
| Congo | 13 | 13 | Sao Tome and Principe | 11 | 9 |
| Gabon | 15 | 13 | Gambia | 12 | 9 |
| Nigeria | 12 | 12 | Togo | 9 | 8 |
| Sierra Leone | 14 | 12 | Ghana | 10 | 7 |

Source: UNDESA World Population Division

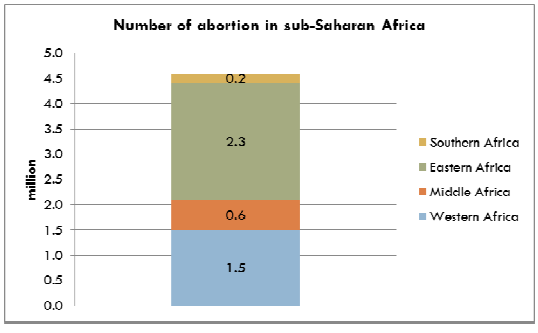
**Figure 14: High risks of mortality among young women in Africa**

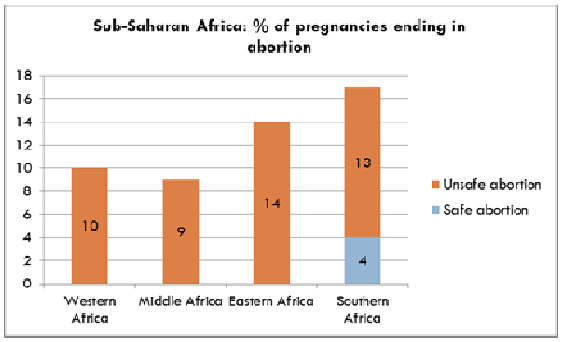



*Unsafe abortion and teenage deaths*

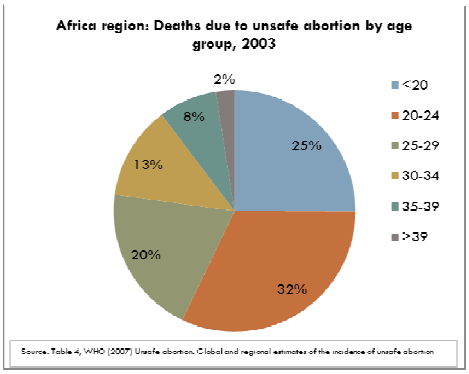
There are 4.6 million abortions annually in sub-Saharan Africa, including 1.5 million in Western Africa and 0.6 million in central African countries. Overall, abortions account for 10-17% of pregnancies in a given year (Figure 15). Abortion being illegal in the majority of African countries (except under exceptional circumstances to save a woman's life) (Centre for Reproductive Rights, 2008), most of these abortions are performed under unsafe conditions, causing 35,900 deaths annually. Adolescent girls account for 25% of all deaths from unsafe abortions in Africa (Figure 16).

rica



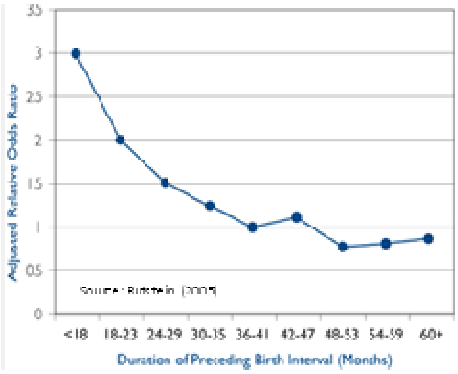
n by age




## 3.4 Short Birth Spacing

Short birth-spacing is associated with higher mortality risks for children as illustrated in Figure 17 (Rutstein, 2005).

k of U5MR by birth




Scientifically, a consensus has recently been reached on the recommended interval between 2 live pregnancies (the birth-to-pregnancy interval) for safe motherhood. According to a panel of experts convened by WHO, the interval between two births should be 'at least 24 months' (WHO, 2007). Intervals of less than 18 months are associated with high risks of "prematurity, foetal deaths, low birth weight and small size for gestational age" and neonatal mortality (WHO 2007 p.9-10). Below 6 months, there are elevated high risks of stillbirths and miscarriages, as well as "odds of having an induced abortion 10 times that of having an live birth" (WHO 2007 p.10).

Short birth-spacing intervals are prevalent, as shown in Figure 18, which presents the distribution of birth intervals by age groups in Mali, Niger and Nigeria. In all three countries, more than 1/5 of births took place within an interval of less than the recommended 24 months for safe motherhood and child development. Around 40% of births took place within a 2-3 year interval. A large proportion of teenage mothers give birth within less than 18 months (38% in Mali, 34% in Niger and 39% in Nigeria), exposing themselves and their babies to higher risks of mortality (Figure 19).

and Nigeria

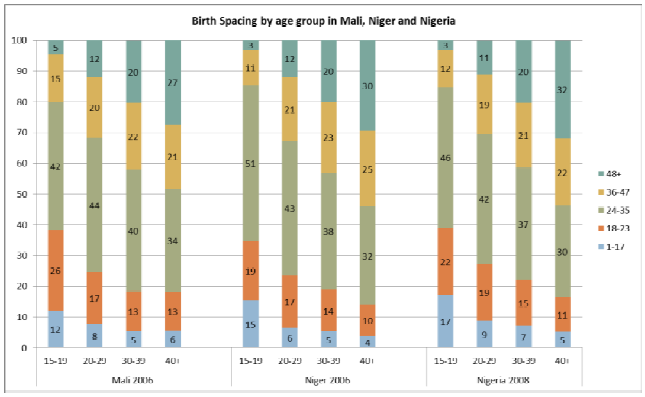
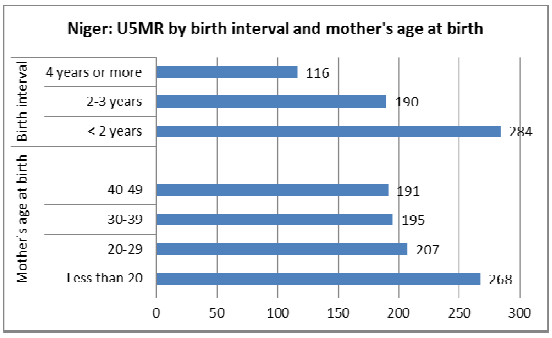
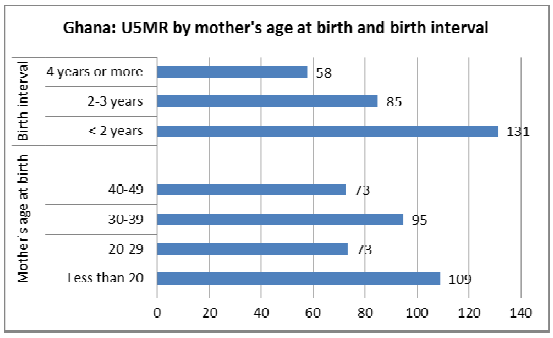
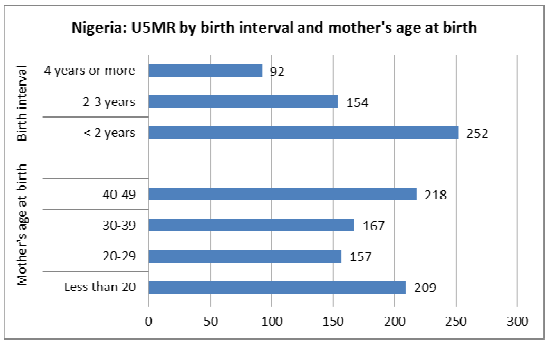


Figure 19: U5MR by mother's age at birth and birth interval



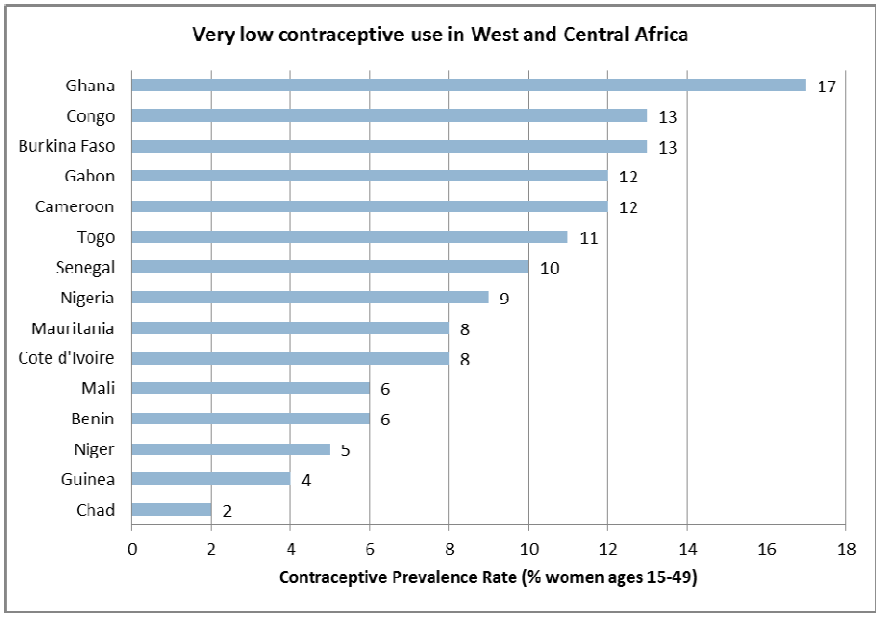




## 4. Persistently low use of modern contraceptive

West and Central Africa has the lowest rates of modern contraceptive use in the world, ranging from 5-6% in Niger, Benin and Mali to a high 17% in Ghana (Figure 20). Progress in contraceptive prevalence rates have been marginal in the past decade and have recently stalled or declined in a Senegal or Ghana (citation needed). As shown in Table 7 below, a large majority of women do not use any form of contraception, whether modern or traditional. The reasons for the persistently low use of contraceptive methods still need exploring. Below, we piece together a few facts pertaining to contraceptive use in the region.

e use (modern methods) in West and Central Africa



| Table 7: Family planning and contraceptive use in West and Central Africa | No family planning contact | Current Contraceptive Use by Women | | |
|---|---|---|---|---|
| | | Any modern method | Any traditional or folk method | Not currently using |
| Benin 2006 | 89 | 6 | 11 | 83 |
| Congo (Brazzaville) 2005 | n.a. | 14 | 31 | 56 |
| Congo Democratic Republic 2007 | 92 | 23 | 13 | 80 |
| Ghana 2008 | 80 | 17 | 7 | 77 |
| Guinea 2005 | 89 | 7 | 4 | 91 |
| Liberia 2007 | n.a. | 23 | 4 | 89 |
| Mali 2006 | 89 | 22 | 5 | 73 |
| Niger 2006 | 88 | 5 | 6 | 90 |
| Nigeria 2008 | 92 | 42 | 19 | 39 |
| Senegal 2005 | 90 | 8 | 1 | 91 |
| Sierra Leone 2008 | 82 | 25 | 9 | 66 |

There are significant disparities in contraceptive use by wealth quintile although they are less marked in Niger or Mali, where contraceptive use remains low across all wealth quintiles. Contraceptive use seems more strongly correlated with maternal education (Figure 21).

Figure 21: Disparities in contraceptive use by wealth quintile and maternal education

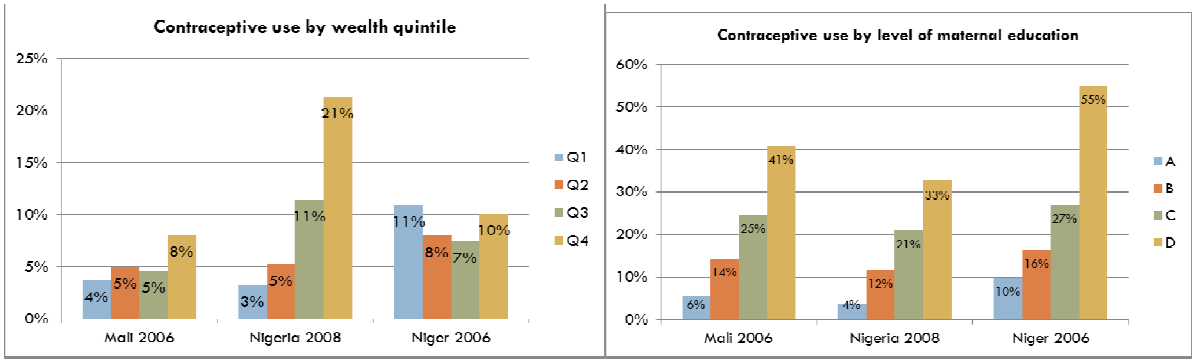


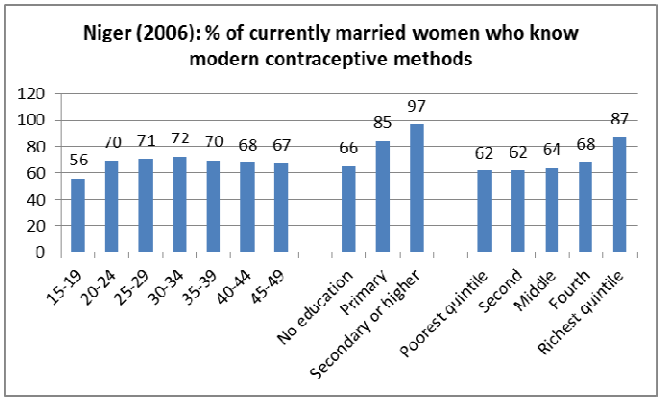

Table 8 shows the reasons cited by young women (below the age of 30) as to why they do not use contraceptive methods. Among the leading reasons cited, one finds women's desire to have more children, and women's personal opposition to using modern contraceptive methods. Opposition to contraception by the spouse or other authorities remain limited (albeit non negligible in a number of countries). The second major reasons pertain to health concerns and the fear of side effects related to the use of modern contraception. Lack of knowledge about existing methods or sources of contraceptive are also cited.

| Table 8: Reason for not using contraception Women aged 15-30 | Benin | Congo | DRC | Ghana | Guinea | Liberia | Mali | Niger | Nigeria | Senegal | Sierra Leone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Not married | 0.1 | 0.0 | 0.6 | 0.0 | 0.4 | 0.4 | 0.1 | 0.0 | 0.0 | 0.4 | 0.1 |
| Infrequent sex | 3.8 | 4.5 | 5.9 | 2.5 | 1.6 | 0.2 | 1.9 | 5.6 | 0.7 | 4.3 | 0.6 |
| Menopausal, hysterectomized | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 |
| Subfecund, infecund | 5.3 | 15.9 | 5.1 | 1.8 | 4.3 | 0.4 | 1.8 | 0.9 | 1.8 | 1.7 | 6.0 |
| **Wants more children** | **17.6** | **12.6** | **30.5** | **6.8** | **45.4** | **20.4** | **21.1** | **27.4** | **21.7** | **15.4** | **13.7** |
| **Respondent opposed** | **17.0** | **18.6** | **10.7** | **22.1** | **16.2** | **7.7** | **26.1** | **17.2** | **21.6** | **26.8** | **14.5** |
| Spouse opposed | 4.9 | 6.1 | 6.2 | 4.1 | 3.7 | 7.2 | 11.9 | 8.2 | 12.0 | 10.8 | 18.0 |

| Table 8: Reason for not using contraception Women aged 15-30 | Benin | Congo | DRC | Ghana | Guinea | Liberia | Mali | Niger | Nigeria | Senegal | Sierra Leone |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Others opposed | 0.4 | 0.6 | 0.5 | 1.2 | 0.0 | 0.5 | 0.0 | 0.4 | 1.0 | 0.4 | 0.2 |
| Religious prohibition | 5.6 | 5.3 | 6.9 | 3.4 | 13.0 | 2.9 | 4.3 | 6.5 | 8.3 | 10.9 | 9.1 |
| **Knows no method** | **6.2** | **2.8** | **11.4** | **3.7** | **2.9** | **14.0** | **9.2** | **13.3** | **9.9** | **6.7** | **15.3** |
| Knows no source | 2.8 | 4.0 | 3.2 | 2.7 | 2.5 | 5.8 | 5.5 | 5.3 | 1.1 | 2.3 | 0.8 |
| **Health concerns** | 7.2 | 10.1 | 2.6 | 8.1 | 2.0 | 2.2 | 3.3 | 1.8 | 1.6 | 4.7 | 3.0 |
| **Fear of side effects** | 19.3 | 14.6 | 6.6 | 34.1 | 5.5 | 29.2 | 5.4 | 2.6 | 7.8 | 10.9 | 9.9 |
| Lack of access | 0.1 | 0.0 | 0.6 | 0.4 | 0.0 | 1.4 | 0.1 | 0.7 | 0.1 | 0.3 | 0.0 |
| Cost too much | 1.2 | 1.5 | 0.3 | 0.0 | 0.2 | 0.0 | 0.4 | 0.5 | 0.2 | 0.2 | 0.5 |
| Inconvenient to use | 0.6 | 1.1 | 2.1 | 3.6 | 0.9 | 0.9 | 0.5 | 0.9 | 0.4 | 0.3 | 0.4 |
| Interfere with body | 2.4 | 0.7 | 1.1 | 2.6 | 0.8 | 1.9 | 3.0 | 2.0 | 3.6 | 0.4 | 1.5 |
| Other | 1.0 | 1.1 | 1.7 | 0.5 | 0.1 | 2.2 | 2.1 | 3.2 | 4.7 | 1.2 | 2.9 |
| DK | 4.1 | 0.2 | 3.6 | 2.3 | 0.5 | 2.5 | 2.7 | 2.9 | 3.0 | 2.2 | 2.8 |
| Missing | 0.3 | 0.4 | 0.2 | 0.0 | 0.0 | 0.3 | 0.5 | 0.4 | 0.4 | 0.0 | 0.4 |

It is striking to note that knowledge of contraceptive methods is widespread for both men and women across West and Central Africa. Figure 22 shows the percentage of married women who know modern contraceptive methods in Niger, where contraceptive use is lowest and fertility rates are highest. Teenage girls (aged 15-19) and women with no education are significantly less informed about contraception. There is little difference in knowledge across wealth quintiles until the richest quintile.

Figure 22: Knowledge of modern contraceptive methods

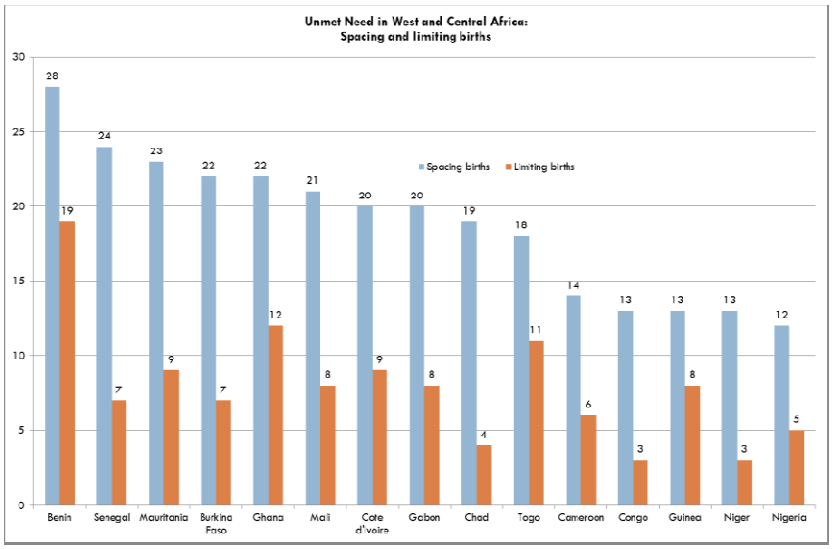



## 5. Unmet needs and fertility rates

The concept of unmet needs is commonly used as a proxy for the latent demand for family planning. By construction, unmet needs capture both women's fertility preferences and their contraceptive behaviour with the aim of preventing unwanted pregnancies. Women have an unmet need for family planning if they are not currently using a method of contraception *and* express the desire to stop or limit childbearing. Two types of unmet needs are distinguished: for spacing births (i.e. delaying the next birth by at least two years) and limiting births (stopping childbearing altogether). As argued by Casterline and Sinding (2000), unmet needs need to be interpreted with caution. Whether women with an unmet need would adopt contraception were family planning be provided to them remain unclear. As shown in Table 8 above, there are many reasons as to why women do not adopt contraception, including their own reluctance to adopt contraception or because of social, cultural, and health concerns.

Figure 23 presents the prevalence of unmet needs for spacing and limiting births across West and Central Africa (Westhoff C. , 2006). Total unmet needs are substantial, ranging from 47% in Benin to 16% in Niger. In keeping with the preferences for large family sizes documented earlier, unmet needs are dominated by the demand for spacing rather than limiting births.

**Figure 23: Unmet need for spacing and limiting birth in West and Central Africa**




Westhoff (2006) similated the impact of responding to unmet needs on total fertility rates. Predicted fertility rates for West Africa are shown in Figure 24 can be compared to meeting unmet needs in other regions. The effect on total fertility rate is minimal (from 5.5 to 4.8) and the predicted fertility rate remains substantially higher than the replacement fertility rate of 2.7. This is because most of the unmet needs correspond to spacing rather than limiting births. Predicted fertility rate by country in West and Central Africa are shown in Figure 25 below. Predicted total fertility rates remain high, notably in Niger, Mali and Chad (5-6 children per woman).

**Figure 24: Implied TFR by meeting unmet needs by region**

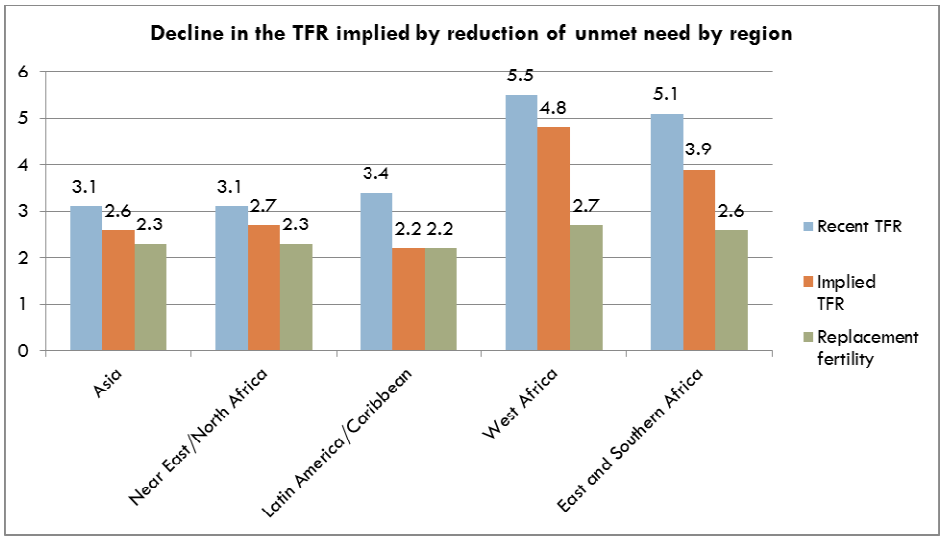


Figure 25: impact of meeting unmet needs on fertility in West and Central Africa

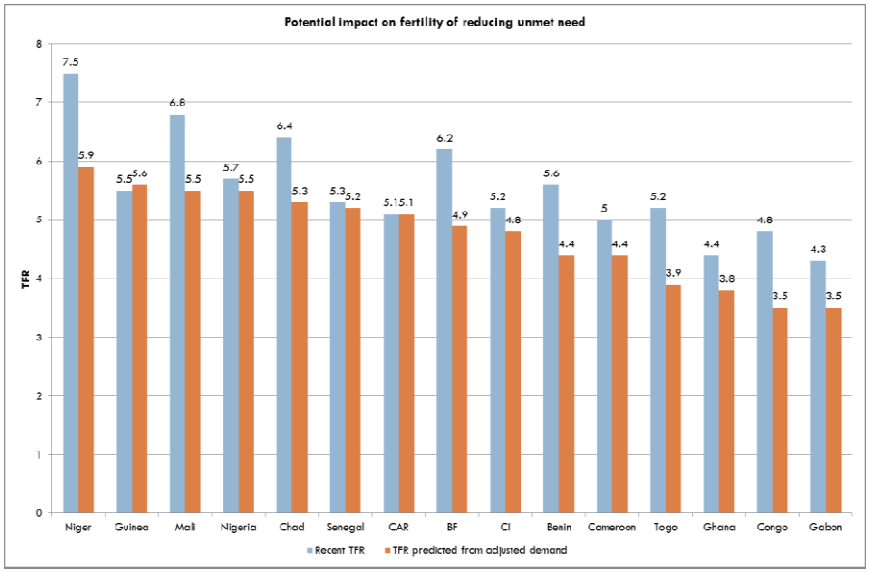
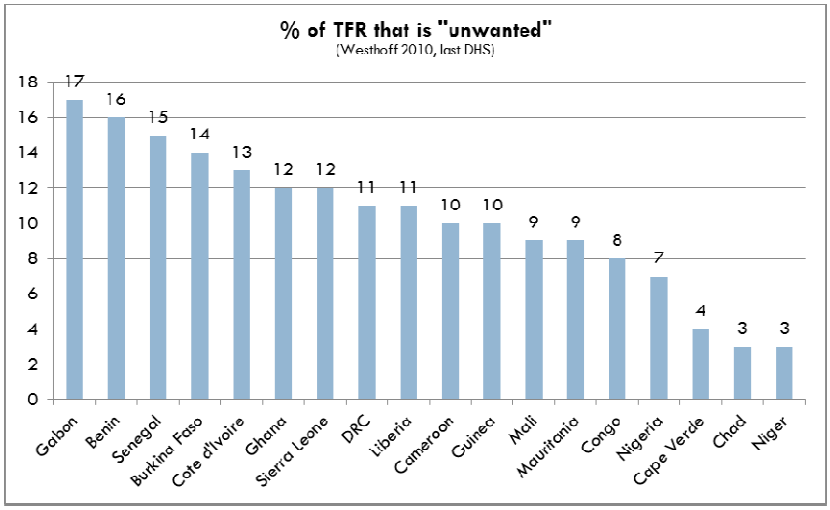



Figure 26: Unwanted births in West and Central Africa




## 6. Family planning policies in Sub-Saharan Africa

We draw on a database of family planning programmes, compiled under the aegis of the UN Population Division and available in a software called World Population Policies 2009. Information on policies are compiled by "a few knowledgeable observers in each country […who] are asked to answer questions on about 125 items dealing with a variety of program characteristics. This database tracks changes in views and policies related to population growth, fertility and family planning from the 1970s until 2009. Detailed information on existing family planning programmes, their scope, quality, and effectiveness need to be found country by country.

## 6.1 View and policies on fertility

Policy views have shifted from low concern for high fertility rates and population growth in the 1970s to high concerns in 2009, except in CAR, DRC, Equatorial Guinea and Gabon.

| | Total fertility rate (per woman) | | | | View on Fertility Level | | | | Policy to modify fertility | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1975 | 1985 | 1995 | 2009 | 1976 | 1986 | 1996 | 2009 | 1976 | 1986 | 1996 | 2009 |
| Benin | 6.7 | 7.0 | 6.6 | 5.5 | Satisfactory | Satisfactory | Satisfactory | Too high | No intervention | No intervention | No intervention | Lower |
| Burkina Faso | 6.7 | 7.1 | 6.7 | 5.9 | Satisfactory | Satisfactory | Too high | Too high | No intervention | No intervention | Lower | Lower |
| Cameroon | 6.3 | 6.4 | 5.7 | 4.7 | Too low | Too high | Too high | Too high | No intervention | No intervention | Lower | No intervention |
| Cape Verde | 7.0 | 6.1 | 4.9 | 2.8 | Satisfactory | Satisfactory | Too high | Too high | No intervention | No intervention | Lower | Lower |
| CAR | 6.0 | 6.0 | 5.7 | 4.8 | Too low | Too high | Too high | Satisfactory | No intervention | No intervention | No intervention | No intervention |
| Chad | 6.6 | 6.8 | 6.6 | 6.2 | Satisfactory | Satisfactory | Satisfactory | Too high | No intervention | No intervention | No intervention | No intervention |
| Congo | 6.3 | 6.0 | 5.2 | 4.4 | Satisfactory | Too low | Too high | Too high | No intervention | No intervention | Lower | Lower |
| Cote d'Ivoire | 7.9 | 7.3 | 5.9 | 4.6 | Satisfactory | Satisfactory | Satisfactory | Too high | Maintain | Raise | Raise | Lower |
| DRC | 6.3 | 6.7 | 7.1 | 6.1 | Satisfactory | Satisfactory | Satisfactory | Satisfactory | No intervention | No intervention | No intervention | No intervention |
| Eq Guinea | 5.7 | 5.8 | 5.9 | 5.4 | Too low | Too low | Satisfactory | Satisfactory | No intervention | Raise | Maintain | Maintain |
| Gabon | 4.9 | 5.2 | 5.1 | 3.4 | Too low | Too low | Too low | Too low | Raise | Raise | Raise | Raise |
| Gambia | 6.2 | 6.3 | 6.0 | 5.1 | Satisfactory | Too high | Too high | Too high | No intervention | Lower | Lower | Lower |
| Ghana | 6.9 | 6.3 | 5.3 | 4.3 | Too high | Too high | Too high | Too high | Lower | Lower | Lower | Lower |
| Guinea | 6.8 | 6.9 | 6.6 | 5.5 | Satisfactory | Too high | Too high | Too high | No intervention | No intervention | Lower | Lower |
| Guinea Bissau | 7.3 | 5.7 | 5.9 | 5.7 | Satisfactory | Satisfactory | Too high | Too high | No intervention | No intervention | No intervention | No intervention |
| Liberia | 6.4 | 6.6 | 6.4 | 5.1 | Too high | Too high | Too high | Too high | No intervention | No intervention | Lower | Lower |
| Mali | 6.6 | 6.6 | 6.3 | 5.5 | Satisfactory | Satisfactory | Too high | Too high | No intervention | Maintain | Lower | Lower |
| Mauritania | 6.7 | 6.3 | 5.7 | 4.5 | Satisfactory | Satisfactory | Satisfactory | Too high | No intervention | No intervention | No intervention | Lower |
| Niger | 7.7 | 8.1 | 7.8 | 7.1 | Satisfactory | Too high | Too high | Too high | No intervention | Lower | Lower | Lower |
| Nigeria | 6.7 | 6.9 | 6.4 | 5.3 | Satisfactory | Too high | Too high | Too high | No intervention | Lower | Lower | Lower |
| Sao Tome | 6.5 | 6.2 | 5.2 | 3.9 | Satisfactory | Satisfactory | Too high | Too high | No intervention | Maintain | No intervention | No intervention |
| Senegal | 7.5 | 7.3 | 6.5 | 5.0 | Too high | Too high | Too high | Too high | No intervention | Lower | Lower | Lower |
| Sierra Leone | 5.8 | 5.7 | 5.5 | 5.2 | Too high | Too high | Too high | Too high | No intervention | No intervention | Lower | Lower |
| Togo | 7.2 | 7.1 | 6.0 | 4.3 | Satisfactory | Satisfactory | Satisfactory | Too high | No intervention | Maintain | Maintain | Lower |

## 6.2 Policies addressing adolescent fertility

The Population Policy Database also compiles information on policies addressing adolescent reproductive behavior. Five categories of policies affecting adolescent fertility are documented: (a) the provision of family life or sex education, (b) policies regarding schoolgirl pregnancy, (c) abortion laws, (d) access to contraception, and (e) minimum legal age of marriage, (f) policies encouraging female enrollment in secondary school, (g) policies regarding employment for teenagers, (h) efforts to improve the status of women.

The table points to several avenues for policy advocacy. Several countries exhibit low concern for adolescent fertility where the phenomenon is widespread (CAR, Chad, DRC, Guinea and Mauritania). Abortion is either prohibited (Mali) or highly restricted. The minimum legal age for marriage is below 18 in Gabon, Guinea, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo. Policies that encourage access to contraception remain undefined in the majority of countries or are limited in scope.

## 6.3 Family planning saves lives

Family planning can make a significant contribution to saving lives and reducing the costs associated with unwanted pregnancy and unsafe abortion highlighted earlier. According to Singh et al (Singh , Darroch , Ashford , & Vlassoff , 2009), meeting women's needs for contraception globally would result in a 66% decline in safe and legal abortions from 15 million to 5.1 million, a 73% decline in unsafe abortions from 20 million to 5.5 million, and a 73% decline in the number of women requiring treatment for abortion complications from 8.5 million to 2.3 million. However, because modern contraceptive methods are not full-proof, a substantial number of women will suffer from contraceptive failure and are likely to continue resorting to unsafe abortion (UNDP/UNFPA/WHO/World Bank , 2010).

| | 1996 | | | 2009 | | | Policies related to adolescent fertility | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Level of concern on adolescent fertility | Policies and programmes addressing adolescent fertility | | Level of concern on adolescent fertility | Policies and programmes addressing adolescent fertility | | Family life or sex education | Circumstances for which abortion is permitted | Access to contraception | Minimum legal age for a woman to marry |
| Benin | Minor concern | No | | Major concern | Yes | | prim and sec FLE in workplace | save life of woman | ? | ? |
| Burkina Faso | Major concern | Yes [9] | Family planning programme for youth and adolescents; population education in school. | Major concern | Yes [10] | Information, education and communication for youth; promoting education for girls. | prim and sec | save life of woman | by Rx | _ |
| Cameroon | Major concern | Yes [2] | Information, education and communication. | Major concern | Yes [2] | Information, education and communication. | in progress | health risk; rape or incest | _ | 16 |
| Cape Verde | .. | No | | Major concern | Yes | | prim and sec | ? | _ | _ |
| Central African Republic | Not a concern | .. | | Minor concern | Yes [3] | Assigning public health doctors to working in areas of sexual and reproductive health of adolescents; health and sex education for adolescents. | prim and sec | save life of woman | _ | _ |
| Chad | .. | .. | | Minor concern | Yes | | prim and sec | save life of woman | _ | _ |
| Congo | Major concern | Yes [1] | family-life education in school. | Major concern | Yes [1] | family-life education in school. | prim and sec | broad medical | _ | 18 |
| Côte d'Ivoire | .. | .. | | Major concern | Yes | | prim and sec | broad medical | restricted for all | 18 |
| Democratic Republic of the Congo | Minor concern | Yes [4] | Discouraging early marriage and fertility. | Minor concern | Yes [4] | Discouraging early marriage and fertility. | | | | |
| Equatorial Guinea | .. | .. | | Major concern | Yes | | | | | |
| Gabon | .. | .. | | Minor concern | Yes | | in progress | narrow medical | no Rx if under 25 | 15 |
| Gambia | Minor concern | Yes [1] | family-life education in school. | Major concern | Yes | | in progress | broad medical | married only | no min |
| Ghana | Major concern | Yes [#] | Education in print and electronic media; sex education in school. | Major concern | Yes [12] | family-life education for in-school and out-of-school youth; peer counselling programmes. | in progress | broad medical | _ | none_21 |
| Guinea | Major concern | No | | Minor concern | No | | prim and sec | broad medical | _ | 17 |
| Guinea-Bissau | Major concern | Yes [#] | family-life education in school; maternal and child health care programme; family planning programme on the advancement of women. | Major concern | Yes | | | | | |
| Liberia | Major concern | Yes [1] | family-life education in school. | Major concern | Yes | | prim and sec, TC | save life of woman | _ | 16 |
| Mali | Minor concern | Yes [#] | family-life education in school; information, education and communication. | Major concern | Yes [15] | | prim and sec | prohibited | permitted for birth spacing | 16-18a |
| Mauritania | Not a concern | No | | Minor concern | Yes [15] | | prim and sec | narrow medical | by Rx only | _ |
| Niger | Not a concern | No | | Major concern | Yes [16] | Family planning programme for adolescents. | prim and sec | narrow medical | _ | 16 |
| Nigeria | .. | .. | | Major concern | Yes [15] | | prim and sec, TC, univ | North: save life of woman South: physical or mental health | government supports access for all ages | 9-16a |
| Sao Tome and Principe | Not a concern | .. | | Minor concern | Yes | | | | | |
| Senegal | Major concern | Yes [#] | Maternal and child health care programme; family planning programmes. | Major concern | Yes | | in progress | health risk | _ | 16 |
| Sierra Leone | Major concern | Yes [#] | Information, education and communication in school. | Major concern | Yes | | prim and sec, TC | save life of woman | illegal under 18 | 15 |
| Togo | Major concern | No | | Minor concern | Yes | | prim and sec | save life of woman or health risk | _ | 17 |

**Summary**

- West and Central Africa has the highest population growth rates in the world (between 4-2% p.a.) with population doubling times averaging 18-30 years in the majority of countries.
- High population growth rates are due to persistently high fertility rates (ranging between 3 and 7 children per woman) despite moderately declining (child) mortality rates.
- As a consequence, the proportion of the young dependent population (0-14 years of age) has grown disproportionately large relative to the working age population, preventing sub-Saharan African countries to capture the so-called 'demographic dividend' and straining countries' capacities to provide essential social services.
- High fertility rates are underpinned by several factors:
    - Preferences for large desired family sizes among men and women (above 5 in the majority of countries and up to 9 in Niger and Chad) and persistently low contraceptive use (less than 10-15%) prevail across West and Central Africa.
    - High prevalence of early marriage and teenage pregnancy (median age at first birth is below 20 in most countries);
    - Widespread reluctance to use modern contraceptive methods from women themselves (not necessarily because of spousal opposition)
- Existing unmet need for family planning is for birth-*spacing* (requiring reversible contraceptive methods) rather than for limiting births (requiring non-reversible contraceptive methods).
- As a result, even if expressed unmet needs for family planning were to be fulfilled, simulations shows that the impact on fertility would remain minimal and total fertility rates way above the population replacement levels of 2.7 children per woman.
- Policy views in the region have shifted from low concern for high fertility rates and population growth in the 1970s to high concerns in 2009 (except in CAR, DRC, Equatorial Guinea and Gabon). These heightened concerns could be exploited for advocacy purposes.
- *Addressing the needs of mothers who are too young and child births that are too close and too many.*
    - Policies addressing adolescent fertility (one of the main causes for high fertility rates in West and Central Africa), including raising the minimum legal age for marriage, encouraging access to contraception for teenage girls, provide adequate information on birth spacing for young girls, reforming abortion policies to reduce the high proportion of unsafe abortions.

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