

# **Fertility transitions in Kenya and Ghana: Trends, Determinants and Implications for Policy and Programs**

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## Introduction and methodology

The literature on fertility transitions in the sub-Saharan Africa region suggests that an early transition was observed across nearly all age groups, socio-economic groups and countries. This was somewhat different than the experiences of South Asia and other regions, where specific sub-populations (generally urban and educated women) led the transition, before the new behavioral and social norms they had adopted diffused to other sub-populations. In reviewing the fertility transitions of Kenya and Ghana, therefore, it is important to determine not only the trends at national level, but how different sub-populations have behaved and whether there are specific sub-population characteristics that could explain why the transitions have these characteristics. The role of family planning programs will then be assessed to determine the role they have played to date and potential for future contributions to enable women and their partners to achieve the number of children desired when they want to have them.

The analyses presented here draw from three sources of information. First, DHS datasets for both countries were analyzed over the period 1993 to 2014. At this point in time (June 2014), however, the full datasets are not yet available and so not all analyses could be completed to this date, in which case data are presented through to the previous DHS round in 2008-9 and supplemented with data from the surveys undertaken by the PMA2020 program for 2014<sup>1</sup>. While these surveys are not directly comparable with the DHS we are confident that the sampling is sufficiently similar to use the data to describe the trends over time. These analyses will be revised when the full datasets are available. Secondly, selected documents describing the population and family planning policies and programs over the past three decades in both countries were reviewed to provide awareness of the political and social environment in which these behaviors have occurred. Thirdly, all three authors have extensive personal experience of living in Kenya and engaging directly with the national family planning programs and various stakeholders since the early 1990s; over the same time period, IA and NM have engaged with the Ghana family planning program continuously. These personal experiences provide valuable insights that complement the evidence provided through the statistical analyses and documentation reviews.

## Fertility trends in Kenya and Ghana

Kenya (1968) and Ghana (1969) were the first two countries of sub-Saharan Africa to develop a national population policy. In Kenya, however, the policy remained largely dormant until the findings from the World Fertility Survey (WFS) in 1977 showed that Kenya had one of the highest fertility rates in the world, with a total fertility rate (TFR) of 8 children per woman. This statistic served to focus both policy and public attention on fertility issues and to reinvigorate the population

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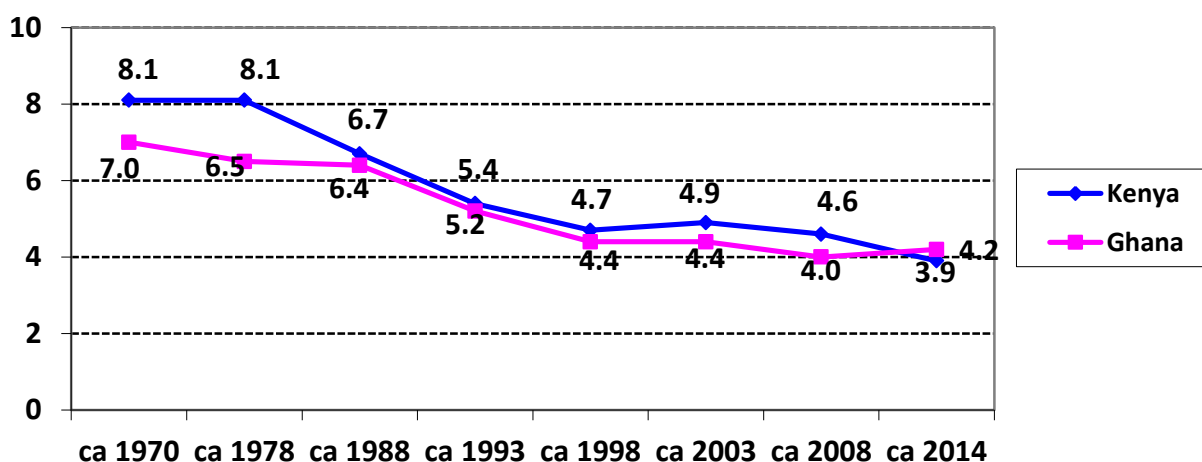
<sup>1</sup> Performance Monitoring and Accountability 2020 (PMA2020) Project, International Centre for Reproductive Health Kenya (ICRHK). 2014. *Detailed Indicator Report: Kenya 2014*. Baltimore, MD: PMA2020. Bill & Melinda Gates Institute for Population and Reproductive Health, Johns Hopkins Bloomberg School of Public Health; Performance Monitoring and Accountability 2020 (PMA2020) Project, Kwame Nkrumah University of Science and Technology (KNUST). 2013. *Detailed Indicator Report: Ghana 2013*, Baltimore, MD: PMA2020.

policy, with the result that substantial national and international support was dedicated to developing and strengthening a vigorous national family planning program.

Similarly, little to no progress was made in Ghana during the first two decades towards the goals stated in its policy. The TFR remained virtually unchanged for thirty years between 1960 and 1988, at 6.9 and 6.7 respectively. The main reasons identified at the time were the lack of involvement of key stakeholders, in its development, including communities, and the absence of a clear strategic plan for implementation. The policy was revised in 1994 to address these issues, which was followed by a renewed interest and investment in the family planning program. The revised plan had clear goals of reducing the TFR to 3.0 and increasing the CPR to 50% by the year 2020. Although progress has been made towards achieving these goals, the road has not been smooth and more will have to be done given the short period left within which to achieve them.

Figure 1 compares the trends in TFR for both countries over the past 45 years. Between 1970 and 1998, Kenya's TFR decreased drastically from 8.1 to 4.7 births per woman, which was one of the most rapid fertility declines ever documented and led to projections by the UN Population Division that the TFR would continue to decline to about 3.5 by 2008. In Ghana, the TFR had been 1.6 births lower than Kenya in 1977 and there was a slight decline over the following decade to 6.4. Over the decade from 1988 to 1998, both countries experienced a rapid decline of two births per woman. Since then, the TFR in Ghana decreased by almost half a birth in the next ten years whereas there was no change in Kenya, so that in 2008 the TFR was over half a birth lower than Kenya. The past five years has seen two surprising changes resulting in Kenya now having a slightly lower TFR than Ghana for the first time: the TFR declined by 0.7 births in Kenya and increased by 0.2 births in Ghana. This paper will examine the factors associated with these fertility trends, and particularly the role of family planning, and posit reasons for their initial similarities and recent differences.

**Figure 1: Fertility trends in Kenya and Ghana**



## Fertility trends among sub-populations

### Age

The age-specific fertility rates (ASFR) over the same period show that the overall trend in the TFR for Kenya is reflected evenly across all age groups. Over the past five years however, while there have been no increases among any rural age groups, three age-groups of urban women (20-24, 30-34, 35-39) have shown slight increases. In Ghana, the recent increase in the national TFR has also occurred in four of seven age groups, with the largest increases in women aged 30-39 and 15-19 years; it is also more marked in rural than urban areas.

For 15-19 year olds, the gap in ASFR between rural and urban girls in both countries has increased since 2008, and is now 25 births per 1,000 girls higher in Kenya and 47/1,000 higher in Ghana. In Kenya, this is due primarily to a reduction in the ASFR among urban girls; in Ghana, the ASFR has increased among both urban and rural girls but the increase is much greater among rural girls. In both countries, huge differences in fertility exist among adolescent girls by education; in Kenya the ASFR is 52 for highly educated girls and 208 for uneducated girls and in Ghana the rates are 39 for educated girls and 150 for uneducated girls.

### Wealth

As would be expected, in both Kenya and Ghana fertility levels vary consistently by wealth quintile. Each country shows some important differences over the period 1993 to 2014, however. In 1993, it was the richest quintile in Kenya that was significantly different, i.e. lower, than the rest of the population (3.3 vs. 5.3-7.2); in 2014, it is now the poorest quintile which is significantly different, i.e. higher, than the rest of the population at 6.4 (compared with 2.8-4.7 for the other four quintiles), which is over 3.5 children more than the richest quintile. Moreover, the TFR of the poorest in 2014 is pretty much the same as it was in 1998 (6.5). These two extreme quintiles have both shown the lowest decreases over this time (0.5 births for the richest and 0.8 births for the poorest) with the middle three quintiles experiencing declines of between 1.5 and 2.2 births per woman since 1993.

For Ghana (where data are currently only available until 2008) the TFR has decreased fairly evenly over time for all of the quintiles except the poorest, for which it has decreased by just 2% (6.7 to 6.5) between 1993 and 2008 compared with a decrease of 32% among women in the highest quintile (3.4 to 2.3), and even larger decreases among women in the intermediate quintiles. This has resulted in a situation similar to Kenya – in 2008, the wealthiest quintile in Ghana had a TFR of 2.3, over four children less than the poorest Ghanaian women. Interestingly, the richest quintile in Ghana has, on average, half a child fewer than the richest in Kenya and in 2008 was almost at replacement level. Given the national increase in TFR over the past five years, it will be interesting to see which quintiles have and have not experienced this.

## Education

For both countries, level of education is clearly associated with fertility. Since the late 1980s there have been fairly steady and similar declines in fertility among women with formal education, at both primary and secondary levels. Moreover, in both countries women with secondary or higher education have much lower fertility rates than those with primary or middle level education, particularly in Ghana where highly educated women were, in 2008, at replacement level fertility (2.1) while those with primary education are still at almost 5 births. For both countries, however, the fertility decline among women with no education has stalled for the past fifteen years or more; indeed, in both countries the TFR for uneducated women had reduced to 5.8 by 1998 but has subsequently increased to 6.0 in 2008 in Ghana and to 6.5 in 2014 in Kenya.

## Place of residence

As would be expected, the TFR is substantially higher among rural than urban dwellers in both countries and has stayed higher over time. There are some important differences between the two countries, however, especially over the past decade.

In Kenya, the urban TFR has stalled at 3.1 in 2014 (indeed, this is an increase of 0.2 births in the last five years), whereas the rural TFR has continued to decline rapidly to 4.5 from 5.4 in 2003; the urban-rural gap is now 1.4 children whereas in 1989 it was 2.3. In Ghana, the urban TFR not only stalled but has increased from 3.0 in 1998 to 3.4 in 2014. The rural TFR has also increased, to 5.2 in 2014; thus the national stall and recent increase in fertility in Ghana appears to be evenly distributed among urban and rural dwellers. Conversely, the recent decline of 0.7 in the TFR in Kenya has been entirely within the rural population.

Why urban dwellers in both countries would experience increases in TFR of 0.3 over recent years is challenging and requires further analysis when the final DHS 2014 datasets for both countries become available. For example, a comparison should be made between the fertility behaviors of the urban poorest with other wealth quintiles, given the rapid in-migration of rural poor in both countries, which has increased their population size.

Sub-national differences are critically important in understanding fertility transitions. In Kenya, the stall and recent decline has been experienced fairly evenly over all of the former provinces<sup>2</sup>, with the exception of North Eastern which recorded an increase over the past five years of half a child to 6.4, by far the highest TFR in the country. Rapid declines of approximately 1 child per woman over the past five years have occurred in Eastern, Western and Nyanza provinces.

In Ghana, as of 2008, most of the regions experienced the national reduction in the TFR by 1+ child from 1993 to 2008, with two important exceptions. The TFR in Northern region has barely declined and is still by far the highest at 6.8; and in Central region, the TFR has steadily increased

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<sup>2</sup> Kenya dissolved the eight provincial administration structures in 2013 to create 47 counties.

since 1998 to 5.8 in 2008. Given the national increase in TFR since 2008, the data for 2014 should be examined to determine whether or not these two regions have disproportionately accounted for this increase.

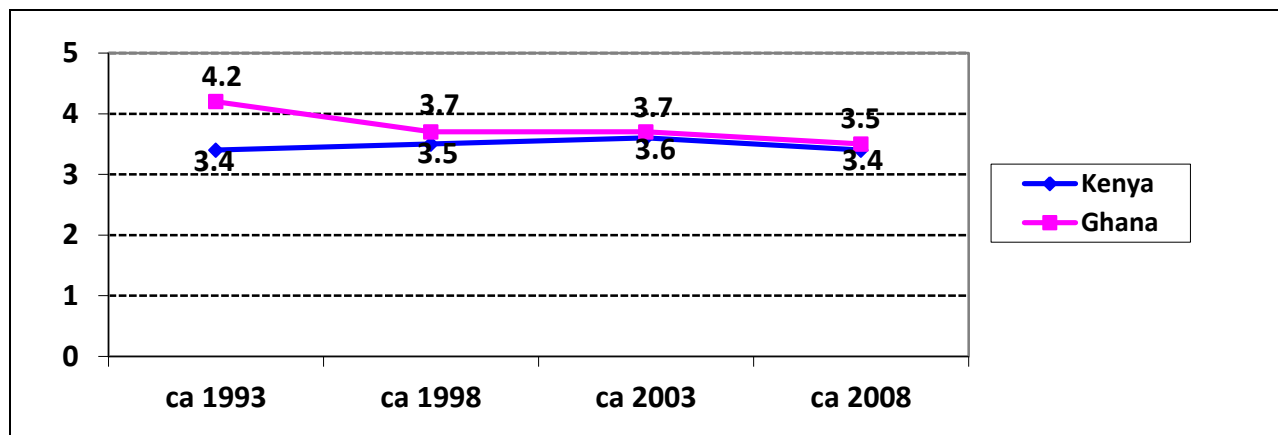
### Trends in wanted and unwanted fertility

Disaggregating trends in fertility rates into wanted and unwanted<sup>3</sup> is critically important, because trends in each indicator reflect different dynamics within national and sub-national fertility trends and have different implications for policy and programmatic interventions. The analysis that follows does not include information on 2014 because the full datasets for the latest DHS surveys in both countries are not yet available; the analysis will be updated once these are available.

### Trends in wanted fertility

Understanding trends in fertility preferences, as measured by wanted fertility rates and statements of desired family size, is critically important as it provides insights into both individual desires and social norms. As Figure 2 indicates, probably the most important element of the stalled fertility transition in Kenya was that the wanted fertility rate did not decline over the 15 year period; indeed, it increased slightly to 3.6 before decreasing in 2008 to the same level it had been in 1993. In Ghana on the other hand, the wanted fertility rate has dropped steadily over this same period from 4.2 to 3.5; however, it too has now plateaued at the same level as Kenya.

**Figure 2: Trends in wanted fertility in Kenya and Ghana**



Wanted fertility rates are higher in rural than urban areas in both countries. Whereas the rate has decreased over time in rural Ghana and increased slightly in urban areas, the rate has remained constant over time in both urban and rural Kenya. Both countries show wide ranges sub-nationally, of between 2 to 6 children, indicating the importance of regional differences in fertility preferences that are likely to persist and sustain high fertility in some areas (e.g. North Eastern province in Kenya (5.9) and Northern region in Ghana (6.2)), even if fertility rates decline in most of the

<sup>3</sup> Unwanted fertility, as measured by the DHS, is the proportion of women who have more children than they say they desire or consider ideal.

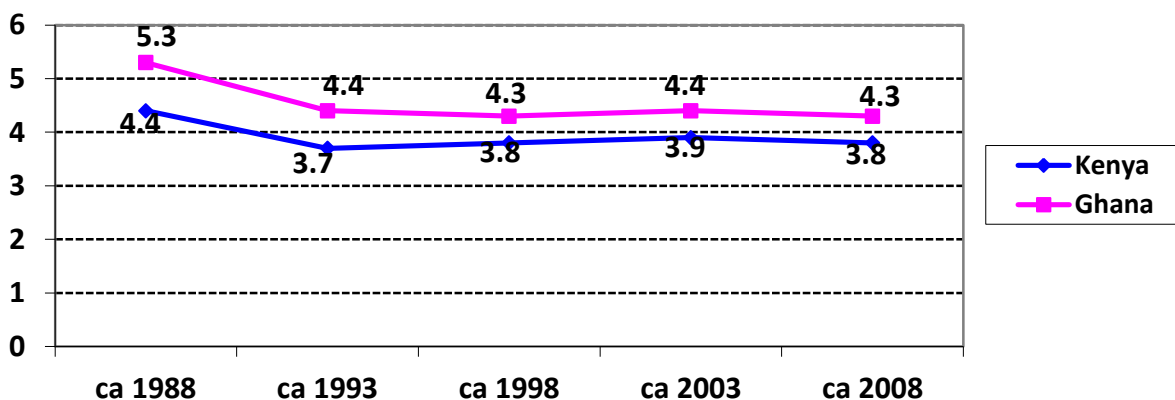
country. Greater Accra (2.2) and Nairobi (2.4), the two major urban areas, have always had the lowest wanted fertility rates; indeed, in Greater Accra the rate is almost one birth less than the next lowest regions (Eastern and Ashanti).

Much higher levels of wanted fertility are found among the poorest and those with no education than the general population in both countries. Moreover, these differences by education have increased between 1993 and 2008, most dramatically in Kenya where in 2008 uneducated women had a wanted fertility rate of 5.8 compared with 4.2 fifteen years earlier. Similarly, wanted fertility did not change among the poorest quintile in both countries between 2003 and 2008, remaining at 5.7 in Ghana and 5.3 in Kenya, more than one child higher than all other wealth quintiles.

### Trends in desired family size

The average desired family size<sup>4</sup> (DFS) has plateaued in both countries at around 4.3 in Ghana and 3.8 in Kenya, i.e. half a child higher in Ghana than in Kenya (see Figure 3). Although this ideal remains almost one child below the actual number of children per woman in Kenya in 2008, with the TFR reducing to 3.9 in 2014 it is likely that many Kenyans are now achieving their desired family size of just under four children (data on DFS are not yet available for 2014). In Ghana the desire for 4.3 children in 2008 exceeded the actual TFR (4.0), which may help explain why the TFR increased to 4.2 in 2014, as women and couples seek to achieve their desired family size; it will be interesting to see what the DFS is in 2014..

**Figure 3: Trends in desired family size**



In both countries, there is an expected difference in DFS between oldest and youngest age groups; in 2008 the difference in both countries was about 1.5 children fewer among 15-19 year olds. Urban women in both countries would like roughly one child less than rural women. In Kenya, there is a difference of almost two children between North Eastern (8.8) and the other seven provinces, which

<sup>4</sup> The wanted fertility rate is a hypothetical measure of what the total fertility rate (TFR) would be given age-specific fertility rates for a recent past period under the condition that all women's fertility preferences were perfectly realized, that is, if only "wanted" births occurred. This rate is based on the stated desired number of children, or "ideal family size" that a woman indicates in a DHS survey; thus the DFS represents a preference statement, at a specific point in time, rather than an estimate based on aggregating ASFRs.

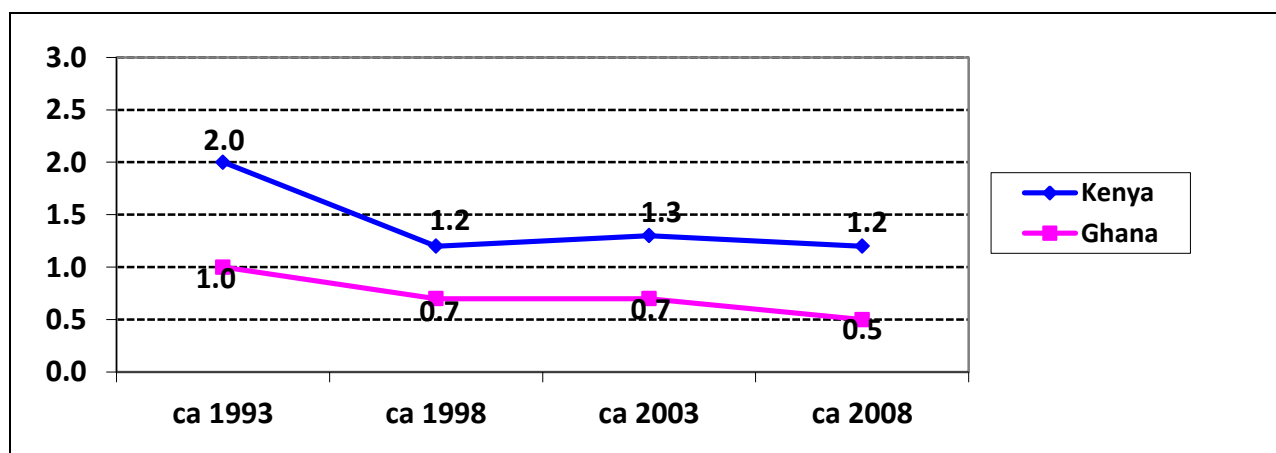
is six children per woman higher than Nairobi province (indeed, the DFS was 11.1 children just five years earlier). In Ghana, the DFS in most regions cluster between 3.4 and 4.2 children, although Northern (6.6) and Upper West (5.7) regions are much higher. Upper East region has shown a notable decline of one child in just five years to 4.9 in 2008.

Sub-population differences in DFS, as in wanted TFR, are most marked by wealth and education. In Kenya, while those with any level of education desired 3-4 children in 2008, uneducated women wanted 6.4 children, which is more than double that of highly educated women, and represents an increase in DFS among uneducated women of 1.5 children since 1993. Likewise, in Ghana uneducated women want, on average, a family of almost six children, compared with 3.5 – 4.6 children for educated women. In terms of wealth quintiles, the DFS of the poorest is not only substantially higher than the rest of the population in both countries, it is more than two children per woman higher than the richest quintiles and this difference is increasing over time in both countries.

### Trends in unwanted fertility

High levels of unwanted fertility indicate a potential unmet need and demand for family planning services, because women or couples are having more children than they desire. Figure 4 describes the different levels – yet similar trends – in unwanted fertility in the two countries. Kenya has consistently had double the level of unwanted fertility of Ghana over this 15 year period, yet both countries display similar trends: a virtual halving of unwanted fertility in the late 1990s and little or no change over the next decade. Examining these levels and trends by selected sub-populations in each country provides some further insights.

**Figure 4: Trends in unwanted fertility in Kenya and Ghana**



The most educated in both countries have the lowest levels of unwanted fertility, and those with primary education have the highest levels. In Kenya, however, uneducated women have the second lowest level of unwanted fertility and the steepest decrease over time but they also have the highest level of wanted fertility; this combination suggests that a high fertility norm has been sustained among uneducated women.



In both countries, unwanted fertility is around twice as high in rural than urban areas, and is much higher in rural Kenya (1.5) than rural Ghana (0.7); conversely the levels are similar in both urban Kenya and Ghana at 0.4 children per woman. In Kenya, unwanted fertility is highest in Western province (2.0), where it has increased by 0.7 since 1998. Unwanted fertility in North Eastern is actually at 0.0, although this province also has a wanted TFR of 5.9, reflecting sustained high fertility preferences. In Ghana, the highest levels of unwanted fertility remain in Central (1.1) and Western (0.8) regions, whereas the Upper West and Greater Accra regions were down to about 0.2.

## **Policy and programmatic responses to fertility trends**

### **Kenya**

As highlighted in Box 1 below, Kenya has developed a host of policy statements and action strategies over the past five decades that have contributed to a supportive environment for addressing population issues generally, and fertility specifically. As one of the first countries in Africa to develop a population policy and establish a family planning program as the main policy lever to reduce the population growth rate, Kenya was well-placed to initiate a fertility transition through government-led actions.

Family planning services were first made available in Kenya in the 1950s by private doctors and from 1962 by the Family Planning Association of Kenya (FPAK) (now called Family Health Options of Kenya (FHOK)). The Ministry of Health started providing a range of family planning services in 1967 through the network of MCH / Family Welfare Centres. Several community-based distribution programs were introduced in the early to mid-1980s, largely implemented by NGOs, but by the late 1990s most had ended as donor support for this approach waned. Marie Stopes International (MSI) started offering services in 1985 through static clinics and diverse outreach strategies. Long-acting and permanent methods (LAPMs) were strengthened in the late-1980s – mid-1990s, including sterilization, vasectomy, IUDs and the introduction of implants and the major sources for these methods are MSI and FHOK. Social marketing of condoms and pills began in the 1990s, primarily by Population Services International (PSI) and GTZ.

Many attribute Kenya's early and rapid fertility decline to the strong political commitment of the government and substantial funding and technical support from a range of bilateral and multilateral development partners in the 1980s and 1990s. Indeed, when the results from the 1993 DHS survey were released, Kenya's success in achieving a phenomenal decline in fertility was lauded globally and many national and international observers felt that social norms in favor of small families and increased use of contraception were now well established and irreversible. Kenya had established a strong and diverse family planning program, immersed in both public and private sectors, which benefited from high levels of support from external sources. Long-standing donor investment in family planning in Kenya had been seen to produce a major fertility decline and so in the 1990s many donors began re-directing their investments into a broader range of MCH-related services,

### **Box 1: A brief history of relevant policies in Kenya**

- **1965:** Population issues first highlighted in Sessional Paper No. 10 on *African Socialism and Its Application to Planning in Kenya*
- **1967:** Government adopted official population policy and established a national family planning action programme under the Ministry of Health, with an emphasis on reduction of family size and spacing of children to reduce population growth rate
- **1982:** Government established National Council for Population and Development (NCPD) in the Office of the Vice President and Ministry of Home Affairs. Role and mandate contained in **1984** Sessional Paper No. 4 on *Population Policy Guidelines*
- **1994:** ‘Manage population growth’ a strategic imperative Kenya Health Policy Framework and reiterated in NHSSP I and II
- **1996:** NCPD publishes National Population Advocacy and IEC Strategy for Sustainable Development (until 2010)
- **1997:** National Reproductive Health Strategy (1997-2010) launched
- **2000:** Sessional Paper No. 1 on second *National Population Policy for Sustainable Development (NPPSD)*
- **2003:** Adolescent Reproductive Health and Development policy
- **2004:** National Coordinating Agency for Population and Development replaces NCPD
- **2005/6:** Parliamentary budget allocates Government funds to family planning for the first time
- **2007:** National Reproductive Health Policy published
- **2007:** Population growth, and especially urban and young, mentioned in *Vision 2030* document

into addressing the emerging HIV epidemic, or into basket funding to the government to support a range of social investments.

The 1990s were also characterized by declining growth in the GDP and increases in the proportion of the population (nearly half) living below the poverty line. At the same time, political tensions increased significantly following the introduction of a multiparty system at the 1992 elections. Both factors absorbed the attention of politicians, other influential leaders and indeed the general population, and so the family planning “success story” soon become yesterday’s news and attention to population issues generally, and fertility decline specifically, gradually waned. This political turbulence also facilitated a rise in public advocacy against family planning from conservative religious leaders and “pro-life” groups, leading many senior politicians to be more cautious in making any public statements around reproductive health generally, and family planning in particular.

This decline in international and national support for the family planning program mirrored a decrease in official development assistance to Kenya over the same period (from a high of above \$1 billion in the late 1980s to under \$400 million by 2000), although whether this decrease in development assistance affected the stall in fertility decline has not been fully evaluated<sup>5</sup>.

The 1998 DHS findings reinforced the impression that the fertility transition in Kenya

was well and truly established and that the strategies being implemented and levels of funding available for both creating and supplying demand were appropriate for a country at this stage of the fertility transition. Consequently, the results of the 2003 DHS came as a shock to most observers, national and international, and a flurry of activities ensued to try to “reposition” both family

<sup>5</sup> Crichton, J. 2008. “Changing fortunes: analysis of fluctuating policy space for family planning in Kenya”, *Health Policy and Planning*, 23(5): 339-350.

planning and population as key issues worthy of attention and investment. For example, the Government replaced the NCPD with a National Coordinating Agency for Population and Development (NCAPD) and the Millennium Development Goals provided a platform for the role of population growth in sustainable development to be revisited and addressed.

Following the development and adoption of a *National Reproductive Health Policy* in 2007, the Division of Reproductive Health (DRH) focused on developing multiple strategies, standards and guidelines to operationalize it as a means to revitalize the family planning program. The *National Reproductive Health Strategy* covering the period 1997-2010 and was updated in 2009 to address several issues and challenges and to provide clear guidance and alignment with the 2007 policy, which stated Kenya's commitment to the achievement of the ICPD and MDG goals, as well as other international development goals and targets.

The *Family Planning Guidelines for Service Providers* developed and launched in 2005 were updated and a revised edition issued in 2009. To ensure un-interrupted supply of contraceptive commodities, the MOH developed a *Contraceptive Policy and Strategy 2002-2006*, a *Commodities Procurement Plan 2003-2006* and a *Contraceptive Commodities Security Strategy 2007-2012*. To address SRH among youth, the DRH developed the *Adolescent Reproductive Health and Development Policy* in 2003 the *Adolescent Reproductive Health and Development Policy Plan of Action 2005-2015*, and the *Guidelines for the provision of Youth Friendly Services*. The National Reproductive Health Policy identified as a priority action the integration of HIV and AIDS and RTIs information and services in RH programs. In this respect several guidelines have been developed to guide integration including the *National Guidelines for Voluntary Counselling and Testing* and the *National Guidelines on Prevention of Mother-to-Child Transmission of HIV*. A specific strategy, The *National Reproductive Health and HIV & AIDS Integration Strategy* (May 2009), has been developed. Another important policy and programming initiative was the development of the *Kenya Essential Package for Health* and the *Community Health Strategy* in 2006, which focused attention on the benefits of community-based services and paved the way for revitalization of the CBD programs that had been so successful in the 1990s at raising demand for and increasing access to family planning information and services.

Contraceptive commodity security continued to be a problem for the family planning program, as Kenya relied entirely on contributions from development partners whose funding has reduced over time. To address this problem, the Government established a dedicated line item in the ministry of health (MOH) budget for the procurement of commodities in 2008. This enabled the MOH to reduce the funding gap and to have better control of the process. At the same time the Kenya Medical Supplies Authority (KEMSA), the central government mechanism for procuring and distributing contraceptive commodities was reformed and became more efficient reducing the occurrence of stock outs. Since devolution in 2013, however, responsibility for commodity procurement has devolved to the 47 counties, each of which is expected to procure and distribute its commodities from KEMSA. Serious challenges are emerging as most counties have not created the

necessary budget line items and mechanisms, and so are not able, or willing in many cases, to fund commodity procurement.

Prior to 2010, the major donor for family planning in Kenya, USAID, had separate funding mechanisms for its HIV/AIDS and family planning programs that were implemented largely through programs with national scope or that were highly focused geographically. This had created competition for resources and challenges in managing the programs throughout the country. In the period 2002-2008, the MOH embraced the concept of integrating FP services into the HIV/AIDS programs, which opened the door for development partners to support an integrated approach to funding and programming. USAID's AIDS, Population and Health Integrated Assistance (APHIA) was established through a series of geographically-focused programs (originally by province, now by groups of counties) that have enabled family planning services to benefit from the broad health system strengthening and community programming approaches supported by APHIA. This combination of investments in health systems and community infrastructures, rather than the historical approach of focusing solely on improving service delivery, has not been rigorously evaluated but the rapid increases in the CPR for modern methods (mCPR) witnessed over the past decade may well be attributable to this change in strategy.

Performance-based programming was introduced in 2008 by the MOH, through which program managers are now required to develop work plans with very clear and measurable outcomes against which their performance would be determined. It was no longer business as usual and this may well have contributed to the better outcomes, not only for family planning but other health indicators, seen in the 2014 DHS. With funding from the German Government, the MOH also introduced a voucher system that could be used by clients in lower wealth quintiles to access maternal and child health services, including Long Acting and Reversible Contraception (LARCs). Although not introduced at a national level, this approach is thought to have had some impact in those districts where it was implemented. During this period, again with funding from the German Government, the MOH has outsourced some of its services, including family planning, to NGOs and social marketing organizations (SMOs) to allow them to be more innovative in their approaches to reach marginalized clients.

The creation of the county governance system and devolution of financial and implementation responsibility has created uncertainty about the capacity of these new political and administrative bodies to sustain the progress made over the recent years. The threat to commodity security noted above is one example of the challenges faced when a health system is radically altered, as has been the case with primary health care generally and family planning specifically in Kenya. Careful attention will be needed to ensure that these impressive gains are not lost as a result.

## **Ghana**

Over the past five decades, several policies and initiatives have supported the evolution and early success of the Ghana program. These can be traced back to 1961 when the Christian Council of

**Box 2: Relevant policies and plans in Ghana**

- Ghana Population Policy (1969)
- National Population Policy (Revised 1994)
- Ghana Vision 2020 (1995)
- National Reproductive Health Service Policy and Standards (1996)
- Adolescent Reproductive Health Policy (1996)
- Roadmap for Repositioning Family Planning in Ghana (2006–2010)
- National Health Policy (2007)
- National Reproductive Health Policy and Service Standards (Revised 2003)
- National Reproductive Health and Commodity Security Strategy (2011–2016)
- MDG Acceleration Framework for MDG 5 (2012)—  
Prioritized Acceleration Solution: Develop proposal and mobilize the international community to ensure adequate funding for the procurement of commodities
- Ghana Shared Growth and Development Agenda (2010–2013)

Churches began providing information to its congregations about family planning. This was quickly followed by the introduction of services in few of their clinics and the establishment of the Planned Parenthood Association of Ghana (PPAG) in 1967 and by the Family Planning and Data Development project funded by USAID in 1968, the findings from which informed the development and launch of the first Ghana Population Policy in 1969. The policy established the Ghana National Family Planning Program with a secretariat to coordinate activities with other ministries. The period 1970-1979 saw the registration of a small number of family planning clinics by the Ministry of Health. USAID expanded its funding to include training of providers, procurement of commodities and demand generation. A World Fertility Survey in 1979 found a CPR of 5.5 percent, providing a baseline for future surveys.

The decade of 1980-1990 saw a ramp up in funding, by USAID and other donors, and growth in number of clinics and providers able to deliver family planning services. During this period the Ghana Social Marketing Program was launched, expanding the options for delivering and funding family planning services to non-public sector and community outlets. Despite this rapid expansion in service availability, the 1988 DHS found little improvement in the mCPR (5.2%) and a TFR of 6.4.

Between 1991 and 1993 the government and development partners continued to increase their investment in and diversification of the FP delivery channels to include NGOs such as the Ghana Registered Midwives Association (GRMA) and PPAG. It was during this period that the injectable contraceptive, Depo-Provera, was added to the program, thereby expanding the options for women with unmet need. These efforts began to pay off as the 1993 DHS showed a mCPR of 10.1 and a TFR of 5.2. Encouraged but not satisfied by these achievements, the government revised its policy and set new ambitious goals for the next two decades aligned with the 1994 ICPD recommendations. It also involved more stakeholders at the national level, making the policy more acceptable and easier to implement.

The period 1994-1998 also saw several new initiatives being introduced to support and expand the family planning program. The Ghana Social Marketing Foundation was incorporated; an implant contraceptive, Norplant, was introduced and policies were changed to allow nurses to provide it;

*National Reproductive Health Service Policy and Standards* were established and the *Population and AIDS Programme* was launched. This period saw a further reduction in TFR to 4.4 and an increase in mCPR to 13.3.

The Ghana family planning program continued to evolve over the next five years. The highly-influential Community Health and Family Planning (CHFP) project was completed and demonstrated an effective rural, community-based approach for increasing CPR and reducing TFR using community health nurses. The government transformed the CHFP model into the nationwide *Ghana Community-Based Health Planning and Services* (CHPS) program. An *Adolescent Reproductive Health policy* was developed and launched; the *National Reproductive Health Service Policy and Guidelines* were revised; two demand generation programs were launched (the “Life Choices” behavior change campaign and “get a permanent smile” vasectomy campaign). Although mCPR rose to 18.7% in 2003, the TFR stagnated at 4.4.

Family planning services were part of the *Medium Term Health Strategy* and the two five-year programs of work covering the period 1997 to 2006 which defined a package of priority health interventions, including health promotion, nutrition, preventive and clinical services, for which improved access and quality of provision of family planning was recommended for all Ghanaians. However, findings from the 2003 DHS showed that although progress was being made, towards the mCPR and TFR targets set out in the 1996 Population Policy, it was slow and off target, the gap in funding was growing and much effort would be needed to get the program back on track.

A key problem identified at the time was the lack of a clear strategy for the procurement and distribution of contraceptive commodities leading to frequent stock out and impacting the ability of the program to meet women needs. In 2004 the MOH developed and launched the *Contraceptive Security Strategy* (2004 – 2010). The vision for the strategy was to ensure that every woman, man and youth can choose obtain and use the quality contraceptives and condoms they need for family planning and prevention of sexually transmitted infections. This vision was to be achieved through improving the availability of quality and affordable contraceptive products and services, strengthening public-private partnership in the supply and delivery of contraceptive products and services, implementing a reliable and efficient systems for the supply of contraceptive products and services and to achieving sustainable financing of contraceptive products and services.

It was realized that there was a growing gap between resources that were being made available to support not just for family planning services but the entire health sector. To address the growing financing gaps for the health sector, the Government introduced the National Health Insurance Scheme (NHIS) in 2005 as a social protection policy with the objective of improving financial access to quality health services. The NHIS is administered peripherally through District-Wide Health Mutual Insurance Schemes (DWHIS). The scheme is tax-based and cover most services offered at the district hospital level. Despite a number of constraints, it has registered over 50% of Ghana’s population. In 2008, free maternal care was included in the range of services covered by the NHIS.

Some of the clinic based methods for family planning are covered as part of maternal health care services.

Despite having the *Population and Vision 2020 policies*, there was no formal health policy to guide the MOH's contribution to them. In 2007, the *National Health Policy* was developed and launched. The policy was designed within the context of Ghana's vision of achieving middle income status by 2015. The 2007 National Health Policy proposed the following seven priority areas to address sector objectives, concerns and challenges. The *National Health Policy* was followed by the development and launch of the *Reproductive Health Strategy Policy* (RHSP) which outlined the national health strategy for reproductive health in Ghana over the next five years (2007-2011). A key strategy adopted by the MOH in the RHSP was the introduction of the *High Impact Rapid Delivery* (HIRD) approach, aimed at using an integrated approach to reduce the morbidity and mortality of mothers and children. The RHSP was operationalized through the 2007-2011 *Five-Year Program of Work* (5YPOWIII). The 5YPOWIII addressed the four strategic objectives: Healthy lifestyles and the environment; healthy reproduction and nutrition services; general health systems development; and governance and financing.

Bilateral and multilateral partners including UNFPA, WHO and USAID continued to support the Ghana government's family planning program through their own country initiatives. For example, in recognition of the need to reposition and re-invigorate access to and use of family planning services in Ghana, the National Population Council, with support from UNFPA, developed and launched a *Roadmap for Repositioning Family Planning* for the period 2006-2010. USAID continued its support to the Ministry of Health /Ghana Health Service to procure and distribute contraceptive commodities, upgraded service delivery facilities, the skills and knowledge of service providers on new contraceptive technology and service delivery through trainings. Despite these efforts, the MOH was not on track to achieve the ambitious mCPR and TFR goals set out in the Population Policy. Family planning services continued to face challenges in meeting clients' expectations and needs. Factors contributing to low contraceptive prevalence include stock outs of commodities, low acceptance of modern family planning methods, limited knowledge/skills of providers and providers' bias affecting informed choice.

In 2010, the Ministry of Health developed a second *Health Sector Medium Term Development Plan* (HSMTDP) for 2010 – 2013, which replaced the sector's 5YPOWIII when it expired. The strategic plan focused on program and interventions designed to improve the health system's efficiency and bridge access to quality health care. In its broad perspective, the plan's strategies reflected a policy framework directed primarily towards the attainment of the UN's Millennium Development Goals (MDGs), particularly those related to health. The HSMTDP has five strategic objectives: bridging equity gaps in access to health care and ensuring sustainable protective financing arrangements; improving governance and strengthening efficiency and effectiveness; improving access to quality services; intensifying prevention and control of non-communicable and communicable diseases; and strengthening institutional care. The HSMTDP set a target for increasing mCPR to at least 35%.



Going by the 2014 DHS results, the program is not on track and more will have to be done to bend the curve towards the targets set in the Population Policy.

## **Trends in provision of family planning services**

### **Source of method**

In Kenya, the public sector has historically, and continues, to be the predominant source of family planning services – in 2008, 57% obtained their method from the public sector, which has increased to 62% according to the PMA2020 survey. In Ghana, the private sector has historically been the major source – in 2008 39% got their method from a public source, although the 2014 PMA2020 reported that this has increased to 53%. Interestingly, during the period of stalled fertility decline in both countries, the proportions of women using the private sector increased and public sector use decreased, possibly reflecting the reduced investments.

An important trend in the provision and use of family planning services in both countries over the past 25 years has been the rapidly increasing dominance of injectables as the most widely used method and the concomitant reductions in all other methods, especially IUCDs, pills and sterilization. In Kenya, as the CPR did not increase between 1998 and 2003, most of the increase in injectable use during this period represented either switching from methods such as pills, IUDs and condoms, or new users starting with injectables.

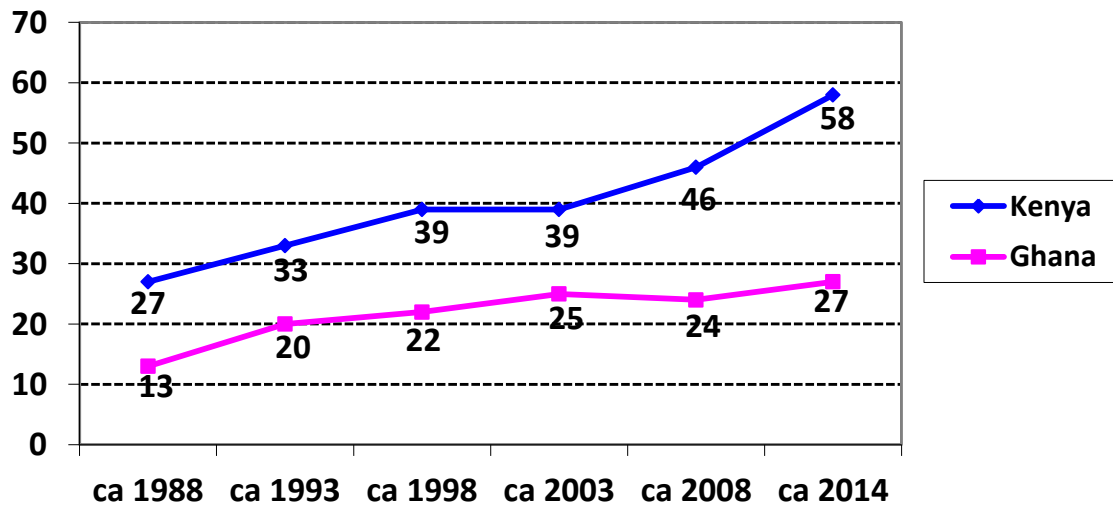
Notable in both countries has been the rapid increase in the use of implants over the past five years. The PMA2020 surveys show that the proportions of currently married women in both countries using family planning who are using implants may have increased from 5-6% in 2008 to 17-19% in 2014 (10-11% among unmarried women). However, single women in Ghana more likely to rely on condoms, and less effective methods compared to married women.

### **Trends in use of family planning**

Both countries showed similar rates of increase in the prevalence of family planning use (all methods) among currently married women until 1993, with Kenya being 13 percentage points higher than Ghana (see Figure 5); in both countries, approximately five percent of this prevalence is for traditional methods. From 1993 onwards, however, the trajectories for each country are notably different. Kenya sustained its rapid growth in CPR until 1998, but then for the next five years prevalence did not increase. However, for the following decade through till 2014, the rate of increase returned to its earlier levels of almost 2 percentage points per year, reaching an all-method CPR of 58 percent. In Ghana, the rate of increase has slowed during the 21 years since 1993, only increasing by seven percentage points in 20 years (i.e. 0.33 per year); indeed, it actually decreased between 2003 and 2008. In understanding these prevalence trends in both countries, it is important to analyze patterns among sub-populations.



**Figure 5: Trends in all-method contraceptive use among currently married women in Kenya and Ghana, 1988-2014**

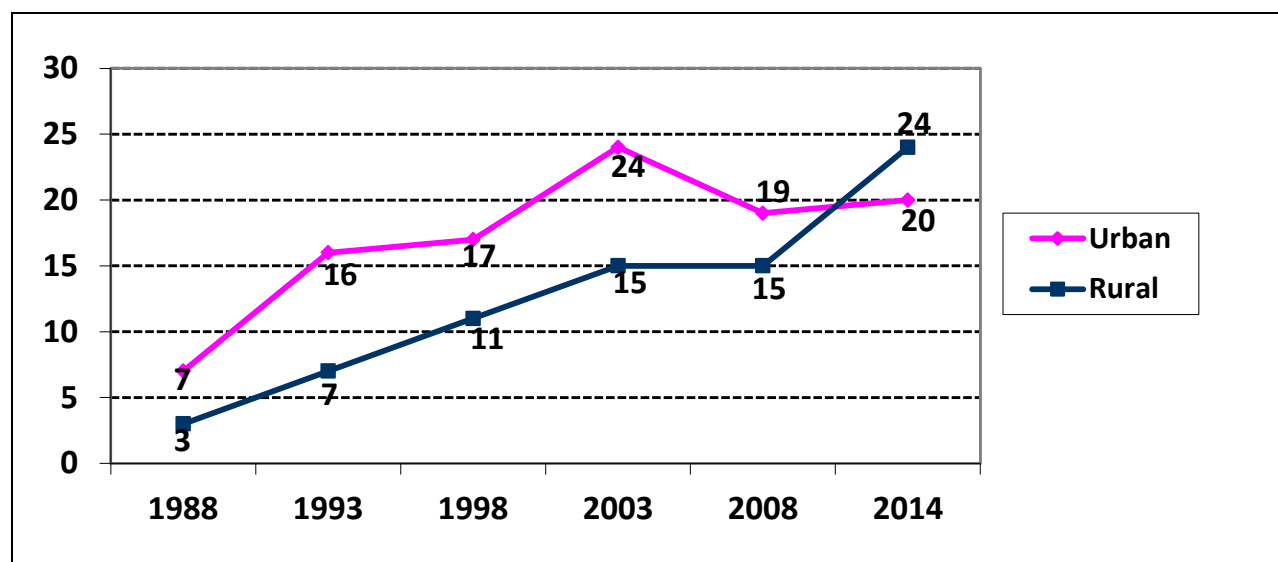


### Residence

In Kenya, CPR has always been higher among urban than rural dwellers, but over the past decade the difference has reduced tremendously, from 11 to six percentage points in 2014. Among the urban population, however, there was a tremendous disparity by education in 2008, with only 12% of urban uneducated women using a modern method compared with 35% of women with secondary education.

With the exception of North Eastern Province, the increase in CPR has been fairly even over all provinces, although particularly rapid increases – of around 20 percentage points in five years – have been seen in Eastern, Western and Nyanza provinces. Since 1989, Central province has consistently had the highest CPR in the country; interestingly, over the past five years Eastern province, which is largely rural, has overtaken Nairobi province, which is largely urban and peri-urban, to have almost the same mCPR for modern methods (64%) as Central province (67%); both provinces have 70 percent or more prevalence for any method, a remarkable achievement and certainly among the highest levels anywhere in sub-Saharan Africa.

**Figure 6: Trends in use of modern methods among currently married women by type of place of residence, Ghana 1988-2014**



In Ghana, the difference in CPR between currently married women living in urban and rural areas has been changing over time – in 2014, the proportion of rural women using modern contraception has now surpassed that of urban women (see Figure 6). Except for the Northern Province (where mCPR is 11%), there is only 11 percentage points difference between the other nine provinces (range 19-30%). Substantial increases are seen in Upper East (166%) and Upper West (108%) regions since 1993. Most notable though, is the tremendous decline in the Great Accra region, which has reduced from 26% in 2003 to 19% in 2014.

## Education

In Kenya, the past decade has seen the use of modern contraception among those with primary education (complete or incomplete) increase rapidly so that there is now virtually no difference between those who have completed secondary or primary education (around 60%). The largest increase over this period has been 28 percentage points among those with incomplete primary education, from 23 to 51 percent. A major challenge remains among women with no education; although there has been an increase from the eight percent in 2003, it is still only 15% in 2014, which is one quarter the level of use, or 45 percentage points less than, women who have completed primary or secondary education.

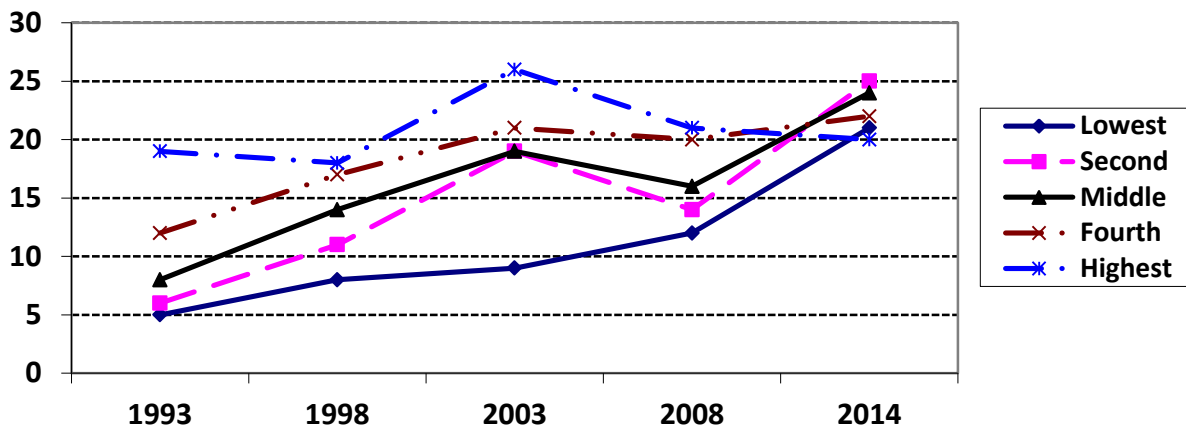
In Ghana, education seems to have had the opposite effect. Although contraceptive use increases with higher levels of education, the trend over the past decade has been for increases among those with primary and no education. Among those with secondary or above education, use of modern methods is now lower (24%) than among those with primary education (27%).

## Wealth

Over the past decade the differences between wealth quintiles in Kenya has drastically reduced, with only seven percentage points (54-61%) among the top four quintiles. The gap between the lowest and second quintile, however, has increased in the last five years, with the poorest in Kenya now 25 percentage points (29%) below the second quintile (54%) – and this despite a substantial increase among the poorest of 12 percentage points from 17% in 2008/9, i.e. more than two points per year.

As portrayed in Figure 7, the past five years have seen substantial increases in modern contraceptive use among the lowest three wealth quintiles in Ghana, yet stagnation occurred among the fourth quintile and a decline by 15% within the highest quintile – indeed, the richest women in Ghana now have the lowest contraceptive prevalence rate in the country, probably a unique situation anywhere in the world.

**Figure 7: Trends in use of modern methods among currently married women by wealth quintiles, Ghana 1993-2014**



## Age and marital status

As might be expected, in both Kenya and Ghana it is the youngest (15-19) and oldest (45-49) age groups that have the lowest rates of contraceptive prevalence. In Kenya, there is only nine percentage points (50-59%) difference among all other age groups, and in Ghana only six points (25-31%). Moreover, in both countries all age groups have seen increases in prevalence. Importantly, there have been steep increases in contraceptive use among the 15-19 year age group in both countries over the past decade, and especially the past five years.

Data are not yet available for 2014, but data for 2008 indicate that use of family planning among never married women (51%) was much higher than currently married women (31%) in Ghana and historically always has been. Conversely, in Kenya use was higher among married (52%) than never married women (44%), which was a reversal from 2003 when use was ten percentage points higher among never married. In Ghana, never married women were much more likely to use traditional

than modern methods in 1988 (25% vs. 6%) and while traditional method use was still high in 2008 (18%) it was much lower than modern method use (33%).

Median age at first sex increased significantly between 1988/9 and 2008 in both countries, from 16.5 to 18.2/18.4 years among women aged 25-49. This indicates that younger unmarried adults are not only starting sex later but are also more likely to be using contraception when they are sexually active. This is a highly encouraging trend that needs to be sustained.

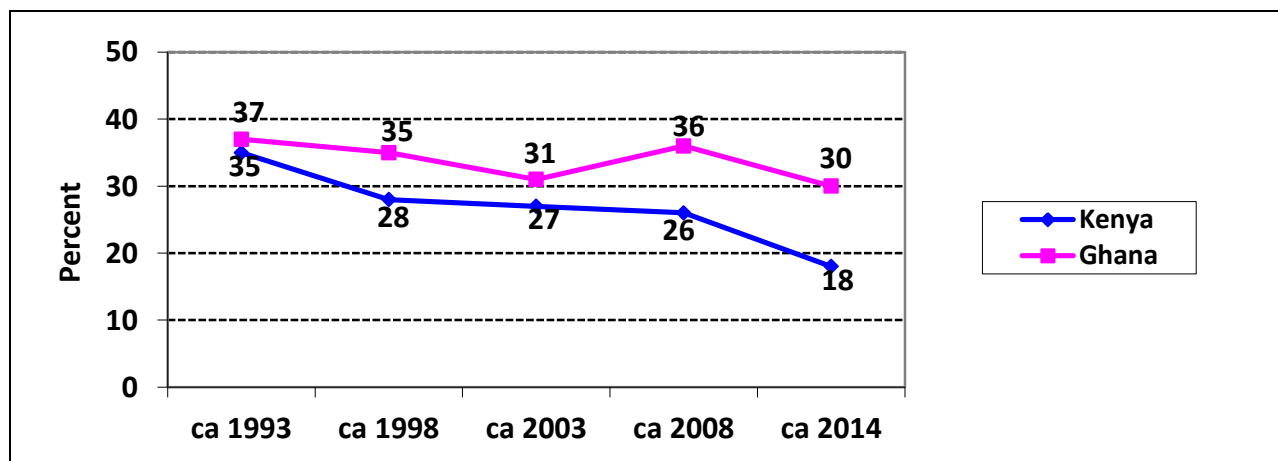
In Ghana, younger women are starting contraceptive use earlier than their older counterparts did. Women in the 30-34 year age group had initiated contraception on average when they were 26.2 years compared to those in the 45-49 year age who on average had initiated contraception when they were 36 years old. However, it is important to note that the median age at first use of contraception was 25 years, with a gap of 5.5 years and 2.8 years between age at first sex and marriage respectively. These findings are encouraging and the growth in contraceptive use among the young age groups needs to be sustained as it is the one likely to have the largest impact on future fertility rates.

Moreover, as most never married women are young, their current use of family planning may indicate a normative behavior that will continue into marriage. As young women enter into longer-standing relationships, however, the use of condoms for pregnancy protection as well as an infection prevention strategy is certainly going to decline.

### Need for family planning

Family planning programs can be measured in terms of their effect in reducing unmet need, the expectation being that this will consequently reduce unwanted fertility. Given the trends in mCPR described earlier, it is not surprising to see that unmet need in Ghana, although reducing by six percentage points over the last five years, has essentially stalled, and that it has significantly declined in Kenya (Figure 8).

**Figure 8: Trends in unmet need for contraception in Kenya and Ghana, 1993-2014**



For Kenya, there is little difference in unmet need by age, and it continues to be lower in urban (13%) than rural areas (20%). The three provinces with the highest mCPR (Central, Eastern and Nairobi) now have very low levels of unmet need (9-12%) with the other provinces clustering around 21-23%. What could be interpreted as a sign of progress is that unmet need in North Eastern province has increased over ten years from 10% to 30%, signaling that a demand for modern contraception is emerging. As may be expected, unmet need decreases with both level of education and wealth quintile, being 28-29% among uneducated and lowest quintile and 11-12% among highest educated and most wealthy.

Overall, the proportion of women with satisfied demand in Kenya has continued to increase, reaching 77% in 2014, a substantial improvement over 64% in 2008. The distribution of demand satisfied reflects the distributions of mCPR across sub-populations described above, and is over 80% among the urban, well-educated and wealthy.

These levels of unmet need and unsatisfied demand inevitably lead to a substantial proportion of unintended pregnancies – in 2014, 48% of pregnancies in Kenya and 42% in Ghana were mistimed or unwanted, apparent increases in both countries since 2008. Unintended pregnancies are by far the highest among 15-19 year olds – 74% in Ghana and 75% in Kenya.

In Ghana, the unmet need for contraception reduced from 37% in 1993 to 30% in 2014. These figures however do not tell the whole story. Although the overall unmet need shows a sustained reduction over this period, the pattern was different for the young age groups. Women in the 15-19 years age group experience a significant increase in their unmet from 48% in 1993 to a peak of 62% in 2008 and then started dropping to the current levels of 51%. This pattern was also observed in Central region where there was an initial rise from 39% to 50 % over the same period followed by a decline to 29% in 2014. On the other hand, the unmet need among women in the wealthiest quintile dropped from 29% to 19% over this period but has risen to 25% in 2014. The proportion of women whose demand for contraception has been met remains below 50% for Ghana. Young women aged 15-19 have the lowest satisfied demand. Satisfied demand also varies by education and wealth quintile with women with no education and in the lowest wealth quintile having the lowest satisfied demand.

What proportion of unplanned pregnancies are terminated through induced abortion is extremely difficult to estimate; the largest surveys to date<sup>6</sup> in Ghana (2004) and Kenya (20012) indicate an abortion rate (number of spontaneous and induced abortions) per 1,000 women aged 15–49 years of 46 in Ghana and 48 in Kenya and an abortion ratio per 100 live births of 29 in Ghana and 30 in Kenya.

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<sup>6</sup> Ipas. 2004. *A National Assessment of the Magnitude and Complications of Unsafe Abortion in Kenya*, Chapel Hill, North Carolina: Ipas; African Population and Health Research Center, Ministry of Health, Kenya, Ipas, and Guttmacher Institute. 2013. *Incidence and Complications of Unsafe Abortion in Kenya: Key Findings of a National Study*, Nairobi, Kenya.

## Discussion and conclusions

Factors likely to influence changes in fertility trends can be grouped into three categories. One is the **reproductive behavior** of individual women or couples as indicated by changes in their fertility preferences and/or contraceptive behaviors. Both Kenya and Ghana have experienced similar trends in fertility declines and stalls, except for the last five years, but very different trends in fertility preferences and in contraceptive use. The increase in age at first sex and marriage observed in both countries presents both an opportunity and a challenge for national family planning programs. Both trends are likely to reduce fertility over time but they also mean that programs have to be structured differently to meet the needs of this new profile of clients. Sexually active girls and women who are not married are often discriminated against by providers and have very variable levels and types of sexual activity, which may require more complex mixes of contraceptive methods and other means of controlling fertility than married women and couples. Despite these changes in sexual initiation and marriage, the gap between them and the time women initiate contraceptive use remains large; for example, in Ghana these are 5.5 and 2.8 years respectively. These long gaps before starting to use contraception, whether in an unmarried or married context, have the potential to increase exposure to unprotected sex with all the attendant risks and undesired outcomes as indicated by the much higher levels of unintended pregnancies reported among 15-19 year olds.

Fertility preferences have changed in both countries as reflected in the wanted and unwanted fertility rates and statements of desired family size. While wanted fertility has stalled in Kenya over the past 15 years, in Ghana a sharp drop between 1993 and 1998 was followed by a stall for the next decade. A similar trend has been observed for desired family size for Ghana. Somewhat concerning is that this trend is mostly among the urban populations and has occurred despite a steady increase in contraceptive use and reductions in unwanted fertility.

In both countries, there has been a rapid increase in use of modern contraceptives among young women aged 15-19 years, especially among the married adolescents in Ghana and women in rural areas in both countries. This trend suggests a promising improvement of the capacity of programs to reach these often marginalized populations and if it continues is likely to impact on the TFR into the future.

A second category is changing **institutional factors** which include shifts in policy and/or service delivery environments. Specifically, changes in the level of policy and financial support for family planning, at sub-national, national and donor levels may drive changes, positively or negatively, in unmet need, awareness of family planning methods or sources, attitudes toward family planning, and availability of a range of quality services that meet the full variety of contraceptive needs. Both countries are exemplary in their development of a full range of policies and programs, particularly over the past two decades, as well as regularly reviewing and updating them, thus creating a highly supportive political environment. However, continued reliance on donor funding for commodity security, in-service training and other system strengthening and community engagement interventions has left both countries highly vulnerable to resource gaps and sudden disruptions as and when donors change commitments and priorities. These vulnerabilities have been increased with the devolution of governmental responsibility for family planning to sub-national levels, which is particularly acute in Kenya.

There is, therefore, a critical need for sustained advocacy among decision-makers for greater resource allocations from national budgets, especially at sub-national levels. Without sufficient resources, and increasingly from national sources, unmet need will not reduce further. Moreover, alternative financing mechanisms are urgently needed to reduce dependence on the current donor driven approach and unreliable public sector funding and service delivery mechanisms. Both countries have established national health insurance schemes which have the potential to address the financing challenge of protecting the poorest, but these need to be structured in ways that women and couples in the poorest quintiles can benefit, while those in the higher quintiles pay for services.

Despite the supportive policies and strategies developed by the two countries, women and couples, especially those in lower income quintiles, living in rural areas and with no education continue to demonstrate higher wanted fertility rates and experience higher unmet need. These situations may be a reflection of a failure to effectively operationalize policies and strategies that do, in principle, seek to reduce inequities. As noted earlier both countries still rely heavily on donor resources to support key aspects of their programs and both have decentralized the management of health care services including family planning shifting the responsibility of planning, budgeting and implementation to local authorities. Whether these decentralized programs are able to start proactively addressing these increasing inequities, especially by education and wealth, will determine the likelihood of achieving both rights-based goals of equal access and development goals of reducing national population growth.

Women in both countries still rely heavily on the injectable contraceptive (primarily Depo Provera), including women with a need for long-acting or permanent methods. The use of long acting reversible and permanent contraception remains low and while there has been a recent increase in the availability and use implants in both countries, there has also been a significant decline in the use of IUCDs and sterilization. While the global Implant Access Program has ensured lower prices for these products through negotiations with existing manufacturers, thereby enabling donors and governments to increase their availability, this program has a finite duration and it is unclear what will happen when it ends if a low-cost product does not become available. Moreover, the ongoing controversies concerning the use of Depo Provera by women with a high risk of HIV acquisition and the use of implants among women using anti-retroviral therapy have the potential to derail both options for women. There is, therefore, a need for both governments and their partners to prepare alternative strategies for expanding the method mix of their programs to cater for any changes that might arise, as well provide a wider range of options than are available at present.

The rapid increase in mCPR witnessed in Kenya recently suggests that strong government-led planning and implementation, together with coordination and sustained funding from donors, can lead to significant achievements over short periods of time. While the absence of a rigorous evaluation of the largest donor-supported program in Kenya, USAID's APHIA and APHIAPlus investments, means that the reasons for this success has not yet been documented, we feel that it may be attributed to a large extent to the integrated and decentralized design that focused both on health systems strengthening and community engagement approaches. This investment enabled the family planning program to optimize the community platforms and facility-level resources that were not supported in the previous service delivery focused approaches to financial and technical assistance. An expectation that innovative approaches would be tested within the APHIA programs also allowed for the introduction and scaling up of initiatives. One example is the combination of a task-shifting intervention that enabled and supported a greatly expanded cadre of Community Health Workers (CHWs) to provide injectable contraceptives to large rural populations which had

previously been restricted to accessing this service from often distant clinics. The rapid increases in mCPR (and as noted above, primarily in injectable use) were most notable in the Eastern, Western and Nyanza provinces where the government's community health strategy was strongly implemented. A similar situation was seen in Ghana, where the CHPS program also increased access to injectables at the community level (although through community-based nurses rather than CHWs) as well as expansion of an aggressive social marketing program. Current efforts to expand a recent task-shifting policy change that enable the provision of implants through the CHPS nurses has the potential to also expand access to the range of methods available at community level, which is critically important in such a highly rural population.

A third category is the **socio-economic and demographic characteristics** of a population. Fertility may vary significantly by the socio-economic and demographic characteristics of sub-populations, and shifts in these could lead to temporal changes in fertility levels and overall trends in fertility. In addition, shifts in program efforts may affect different sub-groups differentially; for example charging service fees for contraceptive services in an effort to enhance their sustainability often creates barriers for youth or the poorest women seeking services. Analysis of these factors has been shown to contribute independently or jointly to observed changes in fertility levels, in sub-groups or the total population for the two countries.

The poorest quintile and uneducated (which often overlap as they are probably the same women), in Kenya particularly, are becoming increasingly distinct from the rest of the population, with much higher fertility preferences, higher TFR and lower contraceptive prevalence. These differences within this sizeable population are distorting the national aggregates and action is needed urgently, both from an equity perspective and for enhancing national development. Moreover, both countries have geographically defined populations that are socio-culturally diverse, including some that are very different in terms of fertility and family planning from the rest of the country – for example, north eastern Kenya and northern Ghana, indicating a need for focused and intensified efforts in those areas to address both the social and structural determinants of fertility preferences.

Although TFR has remained higher among rural, poorer and less educated women in Ghana, the recent increase in TFR and wanted fertility and a stalling in mCPR among the urban, wealthy and educated populations in Ghana present an interesting question as to what may be happening among these populations. Is it possible that the rapid urbanization, largely populated by the poor and uneducated, is diluting the impact of a previously more educated and richer population? Even if this is true for urban populations, it would still not explain the increase in TFR and drop in mCPR among the wealthier and more educated women between 2008 and 2014 data. While we wait to learn the wanted fertility rate among this population in 2014, these trends may represent a combination of achievement of the desired family size in this population (which was approximately 3.5 in 2008) and disillusionment with the use of hormonal contraception as a preferred means for fertility control. A recent study by Machiyama and Cleland focused specifically on this population and concluded that *“Many urban elite couples appear to be rejecting highly effective hormonal methods, primarily for health reasons. They resort instead to various means of restricting coitus, and to abortion, to achieve small family size.”*<sup>7</sup> Whether this trend might emerge among similar urban elite populations in other countries is an intriguing possibility.

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<sup>7</sup> Machiyama K & J. Cleland. 2014. “Unmet Need for Family Planning in Ghana: The Shifting Contributions of Lack of Access and Attitudinal Resistance”, *Studies in Family Planning*, 45[2]: 203–226; page 221.



Our analyses show that fertility transitions in these two countries are influenced by a multiplicity of factors, with marked similarities and differences between each country. A more complex analysis involving modelling would be required to more accurately estimate the relative contributions of the individual and group factors. Paradoxically, these analyses and critiques of policy and programming experiences suggest that, if enabling women and couples to achieve their wanted fertility rates within a rights-based approach that reduces inequities as well as reducing TFR towards replacement level are the goals of a national FP program, then Ghana could currently be judged to more successful than Kenya, despite having achieved much lower levels of modern contraceptive use. We eagerly await the full 2014 DHS datasets to further understand these trends.