Heterogeneous Fertility Rates within Countries – the Examples of Ethiopia and Ghana

Since 1970 Ethiopia and Ghana have both managed to reduce their high fertility rates of seven births per woman to below the current average rate for Sub-Saharan Africa, which stands at 4.9. They are therefore often regarded as promising demographic role models. However, what at first glance appear to be two population policy success stories reveal, on closer examination, the typical heterogeneity of fertility reduction across different population groups within a country. The data for these two countries illustrate that residence and educational attainment are the main factors influencing national variations in fertility.

Ethiopia: Urban Environment Drives Fertility Reduction

While the average total fertility rate for the whole of Sub-Saharan Africa already started to decrease in the late 1970s, in Ethiopia it continued to increase up to the 1990s when a sharp decline finally began. The change was accompanied by a new strong political commitment to population issues. In 1993 the country adopted its first explicit and holistic population strategy, which aimed to harmonize the population growth rate with the country’s capacity for economic development and the rational utilization of natural resources. Although fertility reduction became a priority relatively late in Ethiopia, by 2011 it had already managed to reduce the number of births per woman to 4.8.

Total Fertility Rates Vary Strongly across Residence Area

Number of children per woman and wanted number of children per woman according to their place of residence in 2011 in Ethiopia. (Data source: Demographic and Health Surveys)
Nevertheless, the fertility rate differs strongly according to place of residence. According to DHS data from 2011, in rural areas women on average have 5.5 children during their lifetime; in urban areas, by contrast, the figure is only 2.6 and in the Addis Ababa region, only 1.5. Thus, the fertility rate of women living in the capital has already fallen below replacement level – quite a novelty for the continent. A similar divergence can be observed across different educational levels. Women without any education at all have on average 5.8 children, while women with secondary or higher education on average only give birth to 1.6 children. These two variables are, moreover, closely related. In rural areas more than half of the women (58 percent) have never attended school and only 3 percent have been able to complete primary school or have even received some secondary education. In contrast, in urban areas 30 percent of all women have at least completed primary school and in the Addis Ababa region, 37 percent.

Family Planning Less Common in Rural Areas

Percentage share of currently married women aged 25 to 49 years currently using a modern method of family planning and their median age at first marriage according to their place of residence in Ethiopia in 2011. (Data source: Demographic and Health Surveys)
A closer look at the proximate determinants affirms the divergence. As in most East African countries contraceptive prevalence in Ethiopia is relatively high, with 27 percent of all married women using a modern method of contraception. But while in rural areas the rate is only 22 percent, in urban areas half of all married women use modern methods of contraception and in the capital city of Addis Ababa the rate is as high as 56 percent. Rural women also tend to get married quite early, with an average age of 16.3 for their first marriage. The average age of first marriage in urban areas is 18.1 and in the capital 21.4.

Even though rural-urban gaps are common in developing countries, in Ethiopia the discrepancy seems to be particularly large. This may be because many of Ethiopia’s rural areas are, even by regional standards, quite isolated and undeveloped with poor access to infrastructure and services. DHS figures for 2011 show that only 41.7 percent of the households in rural Ethiopia have access to clean drinking water (cities: 94.6 percent) and only 4.8 percent have electricity (cities: 85.2 percent). Furthermore, health care and family planning programs are not as widespread in rural areas as in cities. In 2005 only 40 percent of the total population lived within ten kilometers of a clinic or other health service delivery point, and only 6 percent of all births took place in a clinic or hospital. To address these challenges, in 2003 Ethiopia launched a very comprehensive health extension program (HEP) based on training local female health extension workers. Preliminary assessments of the outcomes of these programs indicate that they have already achieved quite a lot.

Nevertheless, the uneven distribution of infrastructure and health services does not sufficiently explain the sharp decline of fertility in the capital. Nor do the rising educational attainments of women and increasing empowerment aspirations that delay marriage and childbearing, since these also apply to other urban areas in the region. One particularity of Addis Ababa is its relatively low economic opportunities combined with very high living costs, housing problems, and limited kin support. As access to family planning is quite simple and cheap and the economic and opportunity cost of having children is high, many women decide against reproduction. In comparison with urban areas of other Sub-Saharan African countries the fertility decline in Addis Ababa is not only considerable among married women but is also clearly linked to a decline in extra-marital births. One reason for this might be that in the capital the social role attributed to women is still strongly based on traditional values and therefore associates motherhood with being married. Thus, generally speaking, a rise in women’s status aspirations combined with the challenges posed by economic constraints and secure access to family planning has made investment in children too costly in comparison with the effort involved to postpone or avoid childbearing.

**Ghana: High Educational Attainment Drives Fertility Reduction**

In Ghana population issues have already been included in national policy strategies since the late 1960s. Since then the total fertility rate has continuously declined and according to the most recent DHS data from 2008 has reached four births per woman. However, in Ghana, too, fertility varies considerably among different population groups and seems to be especially influenced by female educational attainment: women with secondary or higher education have on average half as many children as women without any education (three and six births per woman, respectively). As in Ethiopia, educational attainment and residence are closely linked. Thus, the lowest average fertility rate of 2.5 births per woman
can be found in the region of Greater Accra, where more than two-thirds of all women have been able to achieve at least secondary education.

If we compare the fertility rate for different educational levels over time it becomes evident that the national fertility decline has mainly been linked to the increasing level of education among Ghanaian women. Since 1993 the number of wanted or actual children has not changed much within the individual educational groups, and in some cases has even increased. Hence, the overall decrease can only be explained by enhanced female educational attainment. In fact, female enrollment rates have improved significantly in the last decade or so: the primary net enrollment rate increased from 60 percent in 1999 to 81 percent in 2012. The secondary net enrollment rate increased from 31 percent in 1999 to 44 percent in 2009. Without this development it seems questionable whether total fertility would have reached its current low rate.

The Alarming Role of Abortion within Family Planning Strategies in Ghana

Besides the minor decrease in overall fertility rates within individual educational attainment groups, opposition from contraception might jeopardize Ghana’s demographic transition. While the overall contraceptive prevalence rate rose notably from 10.1 percent in 1993 to 18.7 percent in 2003, it fell again to 16.6 percent in 2008. The recent decline in the use of modern contraceptive methods is accounted for by women living in urban areas (including Greater Accra), women with secondary and higher educational attainment, and younger women – in other words, precisely those groups who are usually believed to be more likely to use contraception than others.

Total Fertility Decrease Bases Mainly on Educational Attainments

Number of children per woman and wanted number of children per woman according to educational attainment in various years in Ghana. (Data source: Demographic and Health Surveys)
An analysis of the reasons for this trend reveals that neither a lack of knowledge nor an insufficient supply has caused the decline. The DHS figures for 2008 indicate that 98 percent of all women and 99 percent of all men knew of at least one modern method of contraception, and only 2.7 percent of all married women who did not use and did not intend to use contraception explained their motivation in terms of a lack of knowledge, a lack of access, or high costs. Nor did they say they wished to have more children. Rather this behavior seems to be linked to a general opposition to contraception. Especially women under the age of thirty refuse contraception because of health concerns and the fear of side-effects. DHS data clearly show that the share of young women who refrained from using contraception because they wanted to have more children strongly declined from 45.9 percent in 1993 to 6.8 percent in 2008. Over the same period the share of those who indicated health concerns rose from 9.5 to 42.2 percent. These facts raise the question of how women practice family planning if not through modern contraception.

Rising Opposition against Contraception

Percentage share of different reasons given by women of different age groups for not using a method of contraception in Ghana. (Data source: Demographic and Health Surveys)
Evidence from several studies indicates that abortion plays a crucial role for family planning in Ghana. According to the 2007 Ghana Maternal Health Survey (GMHS), 7 percent of all pregnancies end in abortion while at least 15 percent of women aged 15-49 have had an abortion at some time in their lives. Young, unmarried, better educated women as well as women in urban areas are more likely to undergo an abortion. Among young, sexually experienced girls, 70 percent had obtained or attempted to obtain an abortion. The correlation between maternal death and abortion is quite strong as most abortions are carried out by unskilled providers using unsafe methods or in inappropriate places. The Ghana Maternal Health Survey found that about 11 percent of maternal deaths in Ghana are the result of unsafe abortions, while a study by the Ghanaian government estimates the figure to be even higher, at 22 to 30 percent.

It remains unclear why women in Ghana tend to prefer abortion to the use of contraception. The relatively liberal abortion law is unlikely to influence this attitude much, as only 4 percent of women and about half of medical professionals know that abortion is legal. Low costs are also unlikely to be the main factor, as abortion and post-abortion care are quite expensive in Ghana, especially if this leads to health problems after the intervention. In addition there is a socio-cultural stigma associated with abortion in Ghana whereby women seeking abortion might bring disrepute to their families. However, the trend towards abortion as well as the general concerns about and resistance to contraception sober optimism about Ghana’s future demographic development and should be addressed by a strong political commitment promoting family planning as an opportunity for women.

Further Perspectives

Ghana is a telling example of how changes in background characteristics can influence the overall fertility of a country. In terms of improvements in female education Ghana is already quite advanced, however, so in order to achieve a further and sustainable reduction in fertility the country now needs to focus on a real shift in family planning behavior within individual educational groups driven by nonhazardous methods of family planning. Otherwise it might become difficult to secure its path towards a demographic transition. In contrast, in Ethiopia the highly promising findings for urban and highly educated women actually only apply to a relatively small share of the population. A mere 17 percent of the population lives in urban areas, and only 12 percent of all women over the age of 14 have achieved secondary or higher education. Nevertheless, urbanization is ongoing, and secondary school enrolment rates for females have almost tripled from 11.6 percent in 2000 to 34.9 percent in 2011 – both processes which in themselves will have positive effects on the country’s fertility decline.
Endnotes


x World Bank, World Development Indicators


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