

## The Fertility Transition in **Sub-Saharan Africa**



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The belated fertility transition in sub-Saharan Africa is now definitely underway not only in Southern Africa but also more widely. By the standards of the rest of the world, fertility is still high. The current Population Reference Bureau *Data Sheet* shows only two countries with total fertility rates under four, South Africa and Botswana. If the ceiling is lifted to include rates under five then we can add Ghana, Kenya, Zimbabwe, Lesotho, Cape Verde and southern Nigeria, as well as Gabon where the explanation is high levels of sterility. Lifting the ceiling to 5.5, a very high level by international standards, we then add Côte d'Ivoire, Cameroon, Namibia and also the Central African Republic, where the explanation again is sterility.

South Africa led the transition, with all sections of the population evidencing fertility decline from about 1965, followed by other parts of Southern Africa as well as Kenya from the 1980s. This beginning of fertility transition was not recognized in the demographic literature until the 1990s. It is still only partial. It can be shown to be occurring in only one third of the districts of the whole region (Tabutin and Schoumaker 2001). Outside Southern Africa, Kenya and parts of the West African coast, it is almost entirely an urban phenomenon, mostly concentrated in cities. Three belts of pronounced decline stand out: (1) the whole of Southern Africa; (2) Kenya, particularly its Central Region; and (3) a strip of the West African coast including Abidjan, southern Ghana, Lomé, southern Nigeria and Yaoundé and Douala in Cameroon. Two points might be noted. The first is that, for most of Africa, it may not be merely a case of change diffusing from urban to rural areas. Life is different in urban areas and the conditions which prevented fertility decline until recently in the whole region still operate in most rural areas. The second point is that the belief that the West African family structure was relatively resistant to fertility change has been disproved.

It is true that sub-Saharan Africa was earlier resistant to fertility change for a range of reasons. These did not include poverty for in the 1970s a range of African countries enjoyed per-capita incomes at least as high as those of South Asia and some Southeast Asian countries where fertility was already falling (Caldwell and Caldwell 1988). The reasons included communal ownership of land in much of the region, the value of child labour enhanced by deference to the elders, strong traditional beliefs in fertility formed in eras of very high child mortality, and poor family planning programs undermined by scepticism among politicians and bureaucrats about their fitting in with African ways (Caldwell and Caldwell 1987). Much has since changed, notably in terms of the cost of children. Sustained economic growth over 40 years after the Second World War had led to children being increasingly sent to school for education and to health services when sick. From the mid-1980s economic growth slowed down and many countries had little alternative but to accept IMF recommendations that user pays principles be applied both in education and curative services. In the more economically advanced countries which had moved towards such services for children during the prosperous years, these administrative changes meant that children became a greater economic burden to their parents. This was aggravated by an increasing tendency for children's expenses to be borne by their parents rather than being shared more widely across a greater range of As the demand grew for contraception, politicians and bureaucrats became more

confident about being seen to be identified with their provision and family planning programs became more common and more efficient. Increasingly the politicians became convinced that curbing population growth might be a way out of their economic difficulties. This simple picture was rendered more complex in the last years of the twentieth century, especially in East and Southern Africa, by the AIDS epidemic.

The most recent United Nations Medium Population Projections provide the following picture. Southern Africa has a total fertility rate of 3.0 and will reach replacement level fertility by 2040. Because of the AIDS epidemic population decline is forecast for the second decade of this century, with annual growth rates thereafter increasing and amounting to 0.6 per cent by mid-century. Eastern Africa is shown with a total fertility rate of 5.8, probably reaching replacement level around 2075 without any great diminution in population growth ascribable to AIDS. The explanation is its high fertility and growth rates when the epidemic struck. Middle Africa still has a total fertility rate of 6.3 with a slow decline over the next couple of decades and replacement fertility around 2075. Western Africa has a total fertility rate of 5.6 with a somewhat greater pace of decline reaching replacement level fertility perhaps by 2060. With the possible exception of Southern Africa stationary population will not be reached in the present century, and the continent as a whole will probably attain a population by the end of the 22<sup>nd</sup> century close to 2.5 billion or one quarter of the human race (United Nations 2000, 2001).

One persistent issue with regard to the region is the nature of the demand for fertility control and the kind of services that would most satisfactorily meet that demand. The Asian demand has been similar to the late nineteenth century European one with the aim of stopping family growth within marriage once it has reached a certain size. Thus, fertility was first restricted by older married women. The sub-Saharan African fertility decline has been completely different. Contraception is required by the unmarried as well as the married, and strikingly by single young women wishing to complete their education or to secure and hold a job in the modern sector of the economy. The greatest demand has been for maintaining or extending birth intervals, with contraception often replacing traditional postpartum sexual abstinence. The Asian family planning programs were centred on clinics providing services almost entirely for mature married women. In Africa there is a demand for contraception by adolescents of both sexes and women who are expected by many in their community to be abstaining from sexual relations. Men and adolescents cause surprise if they go to family planning clinics, and the latter are usually turned away. In these circumstances there is probably much to be said for assisting the market to provide services in its unobtrusive and anonymous way. On the other hand, it appears that South Africa has had a successful program with the same intensity and perhaps greater expenditure than those found in Asia.

The situation is made more complicated by the need for condoms to reduce HIV infection. There is a strong international push to amalgamate family planning and AIDS services, which we believe could be counterproductive (Caldwell and Caldwell 2002b).

Apart from South Africa and Zambia, abortion is illegal throughout the region. There has always been a demand for it from pregnant schoolgirls, and that demand seems to be spreading to other

sections of the community. The level of abortion is difficult to research but its practice on a significant scale seems to explain some of the fertility decline in countries where the level of contraception offers an insufficient explanation. Over the 40 years that we have worked in Ghana and Nigeria there has been a transition from unsafe abortion to that carried out by qualified doctors. It is still illegal but the law is rarely implemented and abortion provides a substantial part of many doctors' incomes.

Recently we have been drawing together the findings from demographic micro-studies in eight tropical African countries (Agyei-Mensah and Casterline 2002; see also Caldwell and Caldwell 2002a). The following are the main findings to emerge from this summary.

Throughout the region there is a high level of sexual activity among unmarried adolescents. In this regard there is a great deal of denial among the older population. The result is a low level of protection against both pregnancy and HIV. The main method of dealing with the problem is to discourage sexual activity, an approach which is unrealistic and far from succeeding.

Some of the studies showed the horrendous problems of the urban slums, where poverty and the need for protection drives many women into selling sex. Adolescent pregnancy often keeps girls in the slums and the threat of HIV infection is everywhere.

A study of Accra showed that increasing economic pressures in large families was forcing down family size, especially among the elites. This is a process that has extended back at least 40 years (cf. Caldwell 1967), a finding which has been confirmed by more recent data. Middle-class children are of little productive value in the cities and need extended education. In recent decades these costs have been increasingly borne by the nuclear family. In contrast, a study of a nearby fishing village, where children work in jobs related to fishing and attend school much more briefly, fertility has remained high. Indeed, it is the attitude of community leaders towards both education and family planning that plays a significant role in determining whether children go to school and whether their parents limit the size of their families.

Research in Malawi showed that men regarded traditional controls on fertility, such as sexual abstinence, to be women's business, but, in contrast, regarded the use of modern contraception as something which required their approval or opposition. Certainly, it was true that abortions and the use of hormonal contraception, especially injectables, were often hidden from the men.

All the studies appeared to show that male sterilization will never play a significant role in sub-Saharan Africa and female sterilization only a limited one. Similarly, the IUD probably will be of some, but not great, significance. Fertility decline in the region will probably be determined by the availability of hormonal methods. This is a significant conclusion because most of Asia's successful family planning programs have been built around sterilization and IUDs, which are cheaper and do not require much continuing contact between providers and acceptors. There are exceptions, a notable one being the early Indonesian program.

An interesting study of a Zambian copper town showed just how fragile was the demand for family planning. Little separated contraceptors from non-contraceptors. Often a chance encounter made the difference. This is where community leadership and energetic but sensitive government programs make a difference.

The research also showed how considerable is the lead of anglophone African family planning and fertility decline. This is the result of a much longer history of involvement of both non-governmental and governmental programs.

It is important to analyze the South African experience to determine what can be learnt if the rest of the region is to experience the same kind of fertility transition. One of the seemingly obvious lessons is that a high-cost program can be successful, but there is a question about how many other countries could afford it. Another seemingly obvious lesson is the role of hormonal methods, especially injectables. Our suspicion is that these methods do not only meet the specific conditions of South Africa but are probably the key to reasonably rapid fertility transition in much of sub-Saharan Africa. Clearly, this would be expensive, especially in terms of provider costs, and in most countries will probably be dependent on external aid. It is at present uncertain whether large-scale international aid in the population field will continue.

Going beyond the mechanisms for fertility control to the reasons for it, a great deal depends on continued socio-economic development. Fundamental is the continued decline of infant and child mortality, a process that has slowed everywhere, and has reversed in parts of East and Southern Africa. Means will have to be found for ensuring that the market is not the only determinant of health services. Education is also important and much the same can be said about it as about health services. Certainly, continued urbanization will help to drive the African fertility transition, and, indeed, is probably a more significant determinant in the region than anywhere else in the world. Ultimately, of course, these changes will be driven by economic growth. The recent economic downturn has almost certainly played a short-term role in kick-starting fertility decline in parts of sub-Saharan Africa, but that decline will probably continue only with sustained economic growth.

## References

- Agyei-Mensah, Samuel and John B Casterline. 2002. *Reproduction and Social Context in Sub-Saharan Africa*. Greenwood Publishing Group Inc.
- Caldwell, John C. 1967. "Fertility differentials as evidence of incipient fertility decline in a developing country: The case of Ghana", *Population Studies* 21 (1): 5-21.
- Caldwell, John C. and Pat Caldwell. 1987. "The cultural context of high fertility in sub-Saharan Africa", *Population and Development Review* 13 (3): 409-437.
- Caldwell, John C. and Pat Caldwell. 1988. "Is the Asian family planning program model suited to Africa? A comparison of India and sub-Saharan Africa", *Studies in Family Planning* 19 (1): 19-28.
- Caldwell, John C. and Pat Caldwell. 2002a. "Africa: The new family planning frontiers", in John C. Caldwell, James F. Phillips and Barkat-e-Khuda (eds.), *Family Planning Programs in the Twenty-First Century*, special issue, *Studies in Family Planning* 33 (1): 76-86.
- Caldwell, John C. and Pat Caldwell. 2002b. "Is integration the answer for Africa", in Issues in Perspective: Integrating HIV/STI and Family Planning Services, *International Family Planning Perspectives* 28 (2): 108-110.
- Tabutin, Dominique and Bruno Schoumaker. 2001. "Une analyse régionale des transitions de fécondité en Afrique sub-saharrienne". Paper presented at the International Union for the Scientific Study of Population, 24<sup>th</sup> IUSSP General Population Conference, Salvador, Brazil, 18-24 August 2001.
- United Nations. 2000. World Population prospects: The 1998 Revision, Long-Range Forecasts, New York.
- United Nations. 2001. World Population prospects: The 2000 Revision, vol. 1, Comprehensive Tables, New York.