Towards an understanding of sub-Saharan African fertility transition with particular reference to Kenya

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Continuing growth but falling fertility

- sub-Saharan Africa characterised by high fertility and mortality and high levels of population growth
- countries moving in the direction of lower fertility levels, albeit with continuing high levels of growth
- continued preoccupation with high rates of population growth in the poorest regions of the world is somewhat ironic in a world which is increasingly characterised by rapidly diffusing below replacement fertility

Ideological influences

- negative interpretation of family size in poor countries related to poor quality policy formulation based on questionable demographic analysis
- an unquestioning environment among many population scholars
- examine some of the more reductionist forms of thinking in population studies by deconstructing some of the ideological influences

Warwick, 1982, 34

In the developing countries individuals are already motivated to limit births, but lack the means to do so. When these means are supplied, the eligible population will use them and thereby control their fertility. The best way to provide such means is through a large-scale voluntary family planning programme

Paul Demeny

In the March (1994) issue of Population and Development Review, the editor Paul Demeny wonders how anybody could claim that 'two billion people in the past 30 years were added to the world's population because their parents were too stupid to figure out what to do'.

Population programmes

- ‘dreams that brought forth monsters’ (Duden, 1992)

‘unmet need’/demand?

- limitations of this concept
- incorrectly interpreted as evidence of lack of access to a source of contraceptive supplies
- that such indicators are overly simplistic representations of complex issues
- design of DHS questionnaire unsuited to the situation, with women struggling to explain circumstances that the questionnaire never envisaged

Articulating local voices

- Rural Gambia: typical western assumptions about contraception did not apply in these circumstances (Bledsoe et al., 1994)
- Women were primarily concerned about the potential of fine-tuning birth intervals
- factors that may underlie stalling of fertility transition in Kenya - inconsistency of answers, with many stating they did not want their last child but that they did want more children (Westoff and Cross, 2006)

Eberstadt (1997)

- greater humility on the part of those pushing for fertility reduction in seeking to explain the current trend towards widespread below replacement fertility
- absence of broad, obvious, and identifiable socioeconomic thresholds or common preconditions for such decline

July 12th London summit

- $4.6 billion from donors and developing countries to provide modern contraception (coils, pills, injectables, implants and condoms) to an extra 120 million women by 2020
- population programmes comprised 35.3% of total aid from the US (biggest donor) in 2010 compared to only 7.3% on health

High fertility Africa?

- some unique aspects of Africa
- primarily rural with high fertility supported by pronatalist institutions such as patrilineal descent, patrilocal residence, inheritance and succession practices and hierarchical relations
- have remained unchanged for generations

Makinwa-Adebusoye (2001)

- a marked decline in fertility in the past three decades
- need for a paradigm shift in our thinking
- recent stalling of fertility decline - a rational response to pervasive poverty and insecurity, particularly about the survival of children
- obliviousness of policymakers to cultural norms and practices and the lack of recognition of significant differences within the population are reasons for the failure of Nigeria's population policy (Obono, 2003).

LDCs versus historical Europe

were much higher levels of population growth in poorer countries today than historically in Europe, and compared with Europe where the population growth was ‘controlled’ by variations in the marriage age and the proportion of people unmarried, the marriage age in Africa has been under 18 with fewer than 1% of women remaining unmarried

the apparent lack of connection between fertility patterns and economics

- high level of insecurity regarding property rights, inequality of opportunity, and institutional structures protected by the state which deprives large sections of the population from participating in a process of sustained economic development
- in high-risk or chaotic societies particularly in Africa, that the security problem has been solved mainly on the social side by large families

Demographic factor in context

- rejects the argument that the demographic factor is dominant in explaining economic stagnation in many African countries (Gould, 2005)
- emphasizes a wide range of factors including capital, governance, and lower levels of technological knowledge and practice

Gould (1995)

- fertility transition in Kenya triggered by improvements in childhood survival
- rather than a family planning policy allocate resources childhood and maternal health
- sensitive to both the political and ideological contexts of African population analysis
- South Africa - fertility transition began about 1965, followed by Kenya from the 1980s - not recognized until the 1990s

Table 1 Demographic indicators in selected African countries

Source: CIA Factbook 2012

Country	Maternal Mortality Rate 2010	Infant Mortality Rate 2012	Life expectancy at birth 2012	Total Fertility Rate 2012
Senegal	370	56.4	60.1	4.69
Rwanda	340	64.0	58.4	4.81
Kenya	360	52.3	63.0	3.98
Uganda	310	62.4	53.4	6.65
Ghana	350	47.2	61.4	3.39
Zambia	440	66.6	52.5	5.90
Mozambique	490	78.9	52.0	5.40
Ethiopia	350	77.1	56.5	5.97
Tanzania	460	66.9	53.1	4.02
Madagascar	240	51.4	64.0	4.96
Nigeria	630	91.5	52.0	5.38
Benin	350	61.5	60.2	5.22
Niger	590	112.2	53.8	7.52
Mali	540	111.3	53.0	6.35
Malawi	460	81.0	52.3	5.35
Guinea	790	61.0	58.6	5.04
Zimbabwe	570	28.2	51.8	3.61
Lesotho	620	55.0	51.8	2.89
Namibia	200	45.6	52.1	2.41
Liberia	770	72.7	57.4	5.02
Average	461.5	67.16	55.8	4.92

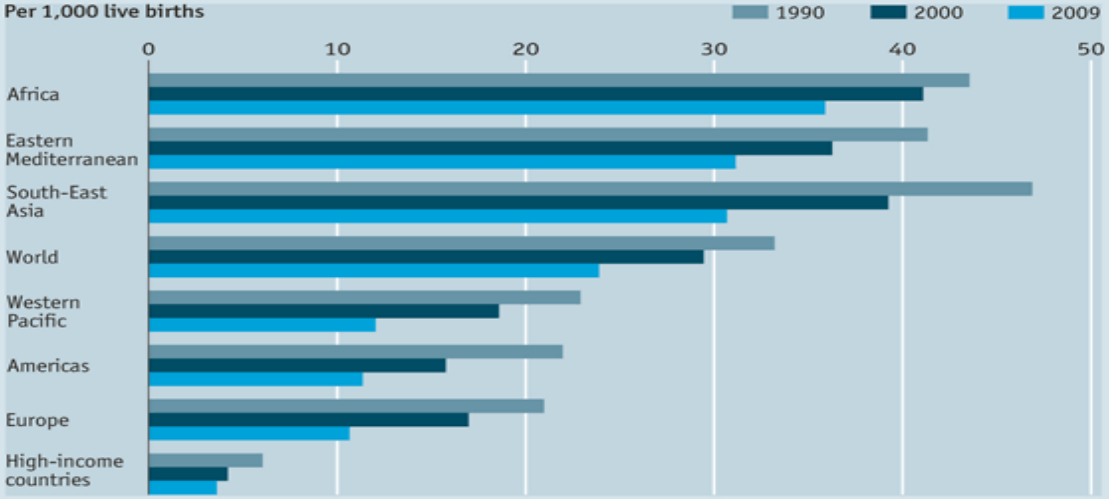
Falling maternal mortality 1980-2008

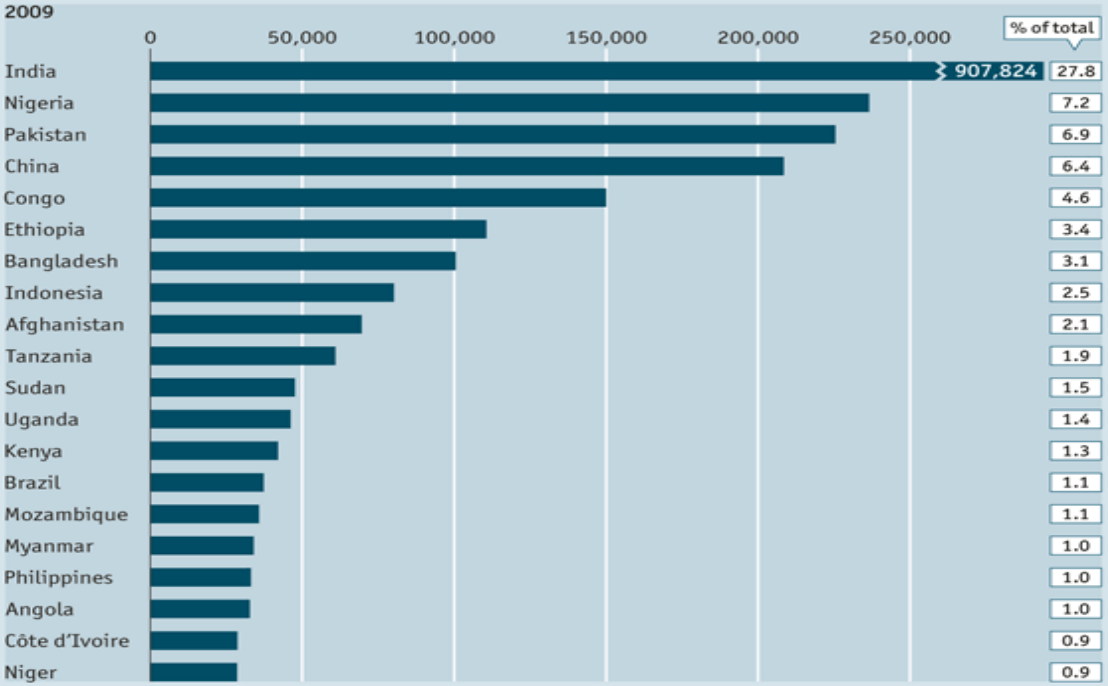
- 586 for sub-Saharan Africa central (down from 770 in 2000), 508 for sub-Saharan east (down from 776 in 2000), 381 for sub-Saharan southern (down from 373 in 2000) and 629 for sub-Saharan west (down from 742 in 2000)
- sub-Saharan east and southern, the rates in 1980 (707 and 242) were considerably lower in 1980 than in 2000, because of the impact of HIV
- both Europe and North America had an MMR of 7.0 in 2008

Infant mortality

- infant mortality: 67.16 deaths per 1000 live births, from low 28.2 in Zimbabwe to almost four times that in Niger and Mali
- most diseases including malaria in Africa affect people living in the poorest areas with little access to healthcare

Deaths of babies under 28-days old





Source: "Neonatal Mortality Levels for 193 Countries in 2009 with Trends since 1990", by Oestergaard *et al*, *PLoS Med*, 2011

Gains in infant mortality

- since 2005: Senegal, Rwanda and Kenya had falls of more than 8% a year
- What took 25 years to bring about in India has taken place in Rwanda and Senegal within a five-year period, providing some hope that infant mortality could be significantly reduced throughout Africa within a relatively short period

Gains in infant mortality in 17 African countries – various factors..

more democratic and accountable government, the end of the debt crisis, new technologies creating opportunities for business and political accountability and a new generation of policymakers, activists and business leaders

Kenya's infant mortality

- for half the drop in Kenya's infant mortality rate is the increased use of treated bednets in the malaria zone where 40% of the population lives, from 8% of households in 2003 to 60% in 2008
- huge drop in child mortality in Africa should be seen as a major step forward in the development process

Under-fives

- very significant and relatively rapid decline in under-five deaths
- most significant causes of death to sub-Saharan African children is not from AIDS but rather include malaria, diarrhea, pneumonia, other infectious diseases and preterm birth complications
- stunting, severe wasting and vitamin deficiencies are related to infectious diseases and are a significant risk factor of under-five mortality

HIV/AIDS

- HIV prevalence rates for pregnant women in sub-Saharan Africa are 10-15% compared with 0.15% in the US
- Rates in Africa vary from under 1.0% in Madagascar, Senegal and The Gambia to above 20% in Botswana, Zimbabwe, South Africa, Swaziland and Lesotho
- revisions downwards in a number of countries, particularly Kenya from the previous UNAIDS figure of 15% to 6.7%.

Urgent and effective response needed

- two million people have died, leaving behind 1.2 million orphans, with about 20% of children not getting any form of support
- Only about 40,000 of the 200,000 needing medication to prolong life have the necessary access
- In those African countries reporting a reduction, there has also been a reduction in the number of men and women reporting more than one sex partner over the course of a year

Life expectancy

- a low of 51.8 for both Lesotho and Zimbabwe (with HIV prevalence of 24.03 and 18.36) to the slightly higher values of 60 years or more for Senegal, Kenya, Ghana, Madagascar and Benin
- still low by developed world standards, Kenya's current life expectancy from birth is a major improvement from 45.2 years as recently as 2003

Total Fertility Rate (TFR)

- 2.41 for Namibia, a country with very low maternal mortality, and Lesotho with 2.89, which has high maternal mortality, to Niger with 7.52, Uganda with 6.65 and Mali with 6.35
- TFRs in Kenya, Ghana and Zimbabwe: <4
- Kenya's TFR oscillated from 6 to 6.8 from 1948 to the early 1960s, before increasing to 7.8 in the late 1960s and to the late 1970s and then reducing gradually to the current estimate of 3.98 children per woman

Demographic dividend?

- political and economic adjustments necessary to accommodate significant global shift in the demographic centre of gravity toward less developed regions
- over a third of the growth in young manpower (15-29) of 70 million people will take place in sub-Saharan Africa

Potential, but challenges

- potential for 54 - 72 m more stable wage-paying jobs in Africa by 2020 (McKinsey, 2012)
- Africa could potentially benefit from a demographic dividend because of its young and rapidly growing workforce and declining dependency ratio, that is assuming that effective policies are implemented

Eberstadt (2011)

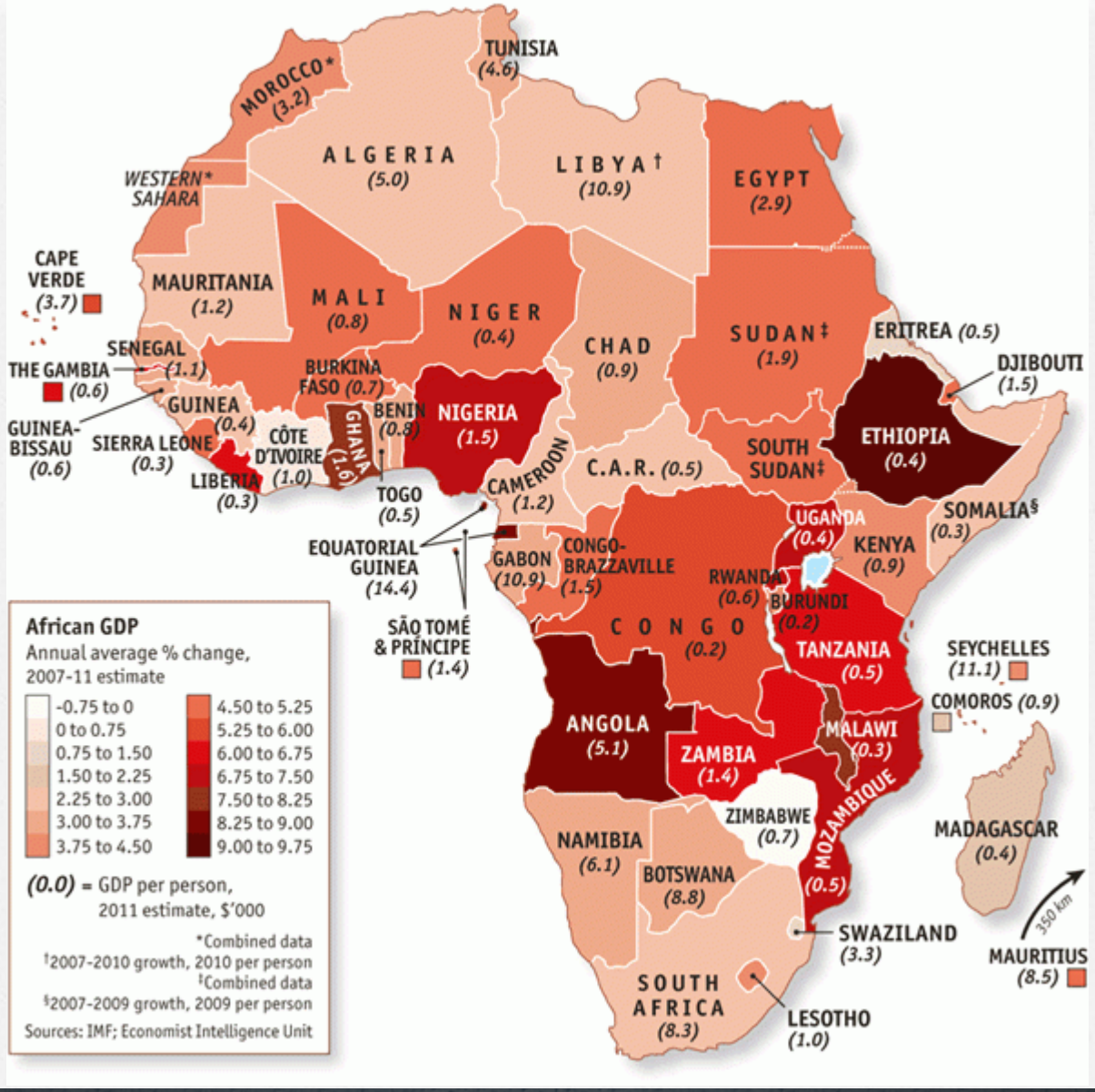
Securing a better ‘economic climate’ throughout much of sub-Saharan Africa – where economic performance has generally been so abysmal over the past three or four decades, and where so much of the world’s manpower growth is to occur over the next 20 years – looks to be a much more daunting prospect today than inculcating institutional reforms in other parts of the low-income world, but it is hardly a less pressing concern for that reason.

Progress, but huge needs

- there is good reason for optimism and that substantial decreases in MMR are possible over a short period (Hogan et al., 2010)
- the lack of the most basic postpartum care, childbirth and labour complications can have fatal consequences for both mother and baby
- the provision of neonatal units is very urgent

Progress, but challenges

- the very significant and relatively rapid decline in under-five births.
- most significant causes of death to sub-Saharan African children is not from AIDS but rather include malaria, diarrhea, pneumonia, other infectious diseases and preterm birth complications (Zuberi and Thomas, 2012).


TUNISIA (4.6)
MOROCCO* (3.2)
ALGERIA (5.0)
LIBYA† (10.9)
EGYPT (2.9)
WESTERN* SAHARA
CAPE VERDE (3.7)
MAURITANIA (1.2)
MALI (0.8)
NIGER (0.4)
CHAD (0.9)
SUDAN‡ (1.9)
ERITREA (0.5)
DJIBOUTI (1.5)
SENEGAL (1.1)
THE GAMBIA (0.6)
BURKINA FASO (0.7)
GUINEA (0.4)
GUINEA-BISSAU (0.6)
SIERRA LEONE (0.3)
LIBERIA (0.3)
CÔTE D'IVOIRE (1.0)
GHANA (1.6)
BENIN (0.8)
NIGERIA (1.5)
TOGO (0.5)
CAMEROON (1.2)
C.A.R. (0.5)
SOUTH SUDAN‡
ETHIOPIA (0.4)
SOMALIA§ (0.3)
UGANDA (0.4)
KENYA (0.9)
EQUATORIAL GUINEA (14.4)
GABON (10.9)
CONGO-BRAZZAVILLE (1.5)
RWANDA (0.6)
BURUNDI (0.2)
SÃO TOMÉ & PRÍNCIPE (1.4)
C O N G O (0.2)
TANZANIA (0.5)
SEYCHELLES (11.1)
COMOROS (0.9)
ANGOLA (5.1)
ZAMBIA (1.4)
MALAWI (0.3)
MOZAMBIQUE (0.5)
ZIMBABWE (0.7)
NAMIBIA (6.1)
BOTSWANA (8.8)
MADAGASCAR (0.4)
350 km
SWAZILAND (3.3)
MAURITIUS (8.5)
SOUTH AFRICA (8.3)
LESOTHO (1.0)
African GDP
Annual average % change, 2007-11 estimate
-0.75 to 0
0 to 0.75
0.75 to 1.50
1.50 to 2.25
2.25 to 3.00
3.00 to 3.75
3.75 to 4.50
4.50 to 5.25
5.25 to 6.00
6.00 to 6.75
6.75 to 7.50
7.50 to 8.25
8.25 to 9.00
9.00 to 9.75
(0.0) = GDP per person, 2011 estimate, $'000
*Combined data
†2007-2010 growth, 2010 per person
‡Combined data
§2007-2009 growth, 2009 per person
Sources: IMF; Economist Intelligence Unit

Conclusions

- Policy based on ideology with little scientific analysis
- The demographic component is secondary and needs to be placed in context
- Policies more influenced by external organisations than local knowledge
- Aid skewed towards family planning rather than basic health and other priorities
- The political error of not facing core institutional issues such as security, citizenship rights