



Bringing down the birth rate – family planning in the developing world

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Motivation for family planning programmes at government level

Land, population density, food supply, soil exhaustion and water resources (e.g. China).

Rate of population growth versus rate of economic growth.

Mismatch of labour force growth and job growth (e.g. Mexico).

Controversies on economic effects of rapid growth in 1980s, mostly resolved. And most couples now 'neomalthusian'.

Dependency ratio, age structures - diversion of resources to 'maintenance' not investment.

Population momentum puts premium on prompt action.

Family planning programmes – huge experiments with uncertain outcomes.

Major scientific interest- successes and failures should throw light on human motivations to reproduce, and its rationality – especially ‘economic rationality of high fertility’ .

Major practical / academic controversy – can family planning programmes have an autonomous effect? Or are they just an adjunct to development?

Major problems of isolating programme effect and measuring it in a highly multifactorial situation.

Ideological divide – Marx versus Malthus, complicated by influence of ‘religious right’ and RC Church. Importance of US Presidential elections.

Components of programmes

- Provision of family planning services and ‘social marketing’ .
- Propaganda and publicity – direct and indirect media.
- Integration of family planning / safe motherhood into health care systems - ‘reproductive health’ .
- Educating men into responsibilities.
- Payments and other material inducements.
- Raising legal age at marriage.
- Legalising abortion and removing other legal impediments.
- Nagging and coercion
- Indirect effects through promotion of education, health and economic development.

Development the best contraceptive? Or contraception the best contraceptive?

Politically / ideologically divisive issue (e.g
Bucharest 1974).

No doubt about huge increase in FP -10% to 60% in
40 years.

But just an adjunct to development?

Crucial role of female education?

Ultimate role of lower mortality?; inevitability of
return to zero population growth?

Alternatives to fertility regulation – migration?

Some societies highly receptive to family limitation,
others highly resistant.

Factors that *can* affect rapid fertility decline

Cultural, religious predisposition affecting female equality, late marriage. Buddhism, Islam, N. versus S. India.

Autocratic government, confusing effects of Marxism / Communism. Openness to contacts with outside world.

Rapid reduction of mortality.

Rapid economic development.

Rapid urbanisation.

Effective government.

Emphasis on education, media penetration, economic reform.

Well-funded and organised family planning policy.

Contributions to future world population growth 2005 - 2050 (millions)

	Population		Increase
	2005	2050	2005 - 2050
India	1103	1593	489
Pakistan	158	305	147
Nigeria	132	258	127
Congo	58	177	120
Bangladesh	142	243	101
Uganda	29	127	98
USA	298	395	97
Ethiopia	77	170	93
China	1316	1392	77
Total	3312	4660	1348
World	6465	9076	2611

Source: United Nations 2004-based projections

Going against the grain – is high fertility rational?

Material: Cash Returns / Wealth Flows /
Private workforce (Caldwell)

Old age support.

Social prestige / affirmation of adult status.

Special needs of non-remarried women

Risk Insurance and ‘political’ support
through extended family, lineage or clan

Important where ‘civil society’ or local
institutional support weak or absent (Cain).

Usually no ‘welfare state’ .

Values underpinning high fertility

Importance of ancestry / lineage.

Family honour / seclusion of women.

(absence of gender equity; old men's control of women and children)

Son preference.

High fertility as evidence of role fulfilment.

Other predisposing factors

Complex households with weak conjugal bonds and shared child-care

Familial, non-monetised mode of production.

Communal, not individual land holding .

Patriarchal inheritance.

Division of rural labour in Kivu province, Zaire, c. 1970.

Adult woman 15+	100	ploughing, sowing, water, wood, market, beer.
Adult man 15+	30	care of banana trees, clearing land
Girls 5 - 9	5	carrying, weeding, water
Boys 5- 9	0	
Girls 10-14	55	helping mothers with all tasks
Boys 10-14	15	cattle tending, weeding
Old woman 55+	20	light work in fields
Old man 55+	5	work in banana groves

Oeuvre pour la lutte contre le bwaki et la protection de l'enfance
Analyse de la Malnutrition au Bushi 1971.

Familial Systems of support

Familial systems of support, Thailand 1986

Percent co-resident with child

all	77
all with living children	80

Percent co-resident or daily contact

all	88
all with living children	91

Percent receiving material support from non co-resident child

Food / clothes

all	56
all with living children	63

Money

all	58
all with living children	65

Population policy: the remaining governmental unbelievers as of 2009

Those with a policy not to intervene, to maintain, or to increase fertility (pronatalist)

Some Tropical Africa (mostly West, Francophone)

Benin (changed mind from 2005-2009)
Brunei (fertility too low, but no policy)
Cote d' Ivoire (up to 1996)
Sierra Leone (TFR too high but no policy)
Gabon (pronatalist)
Libya (up to 2009)
(Somalia)

Some Middle East

Israel (pronatalist)
Kuwait (TFR too low; maintain)
Oman (until 2005)
Saudi Arabia (but was pronatalist)
United Arab Emirates

A few Latin America (varies with regime change)

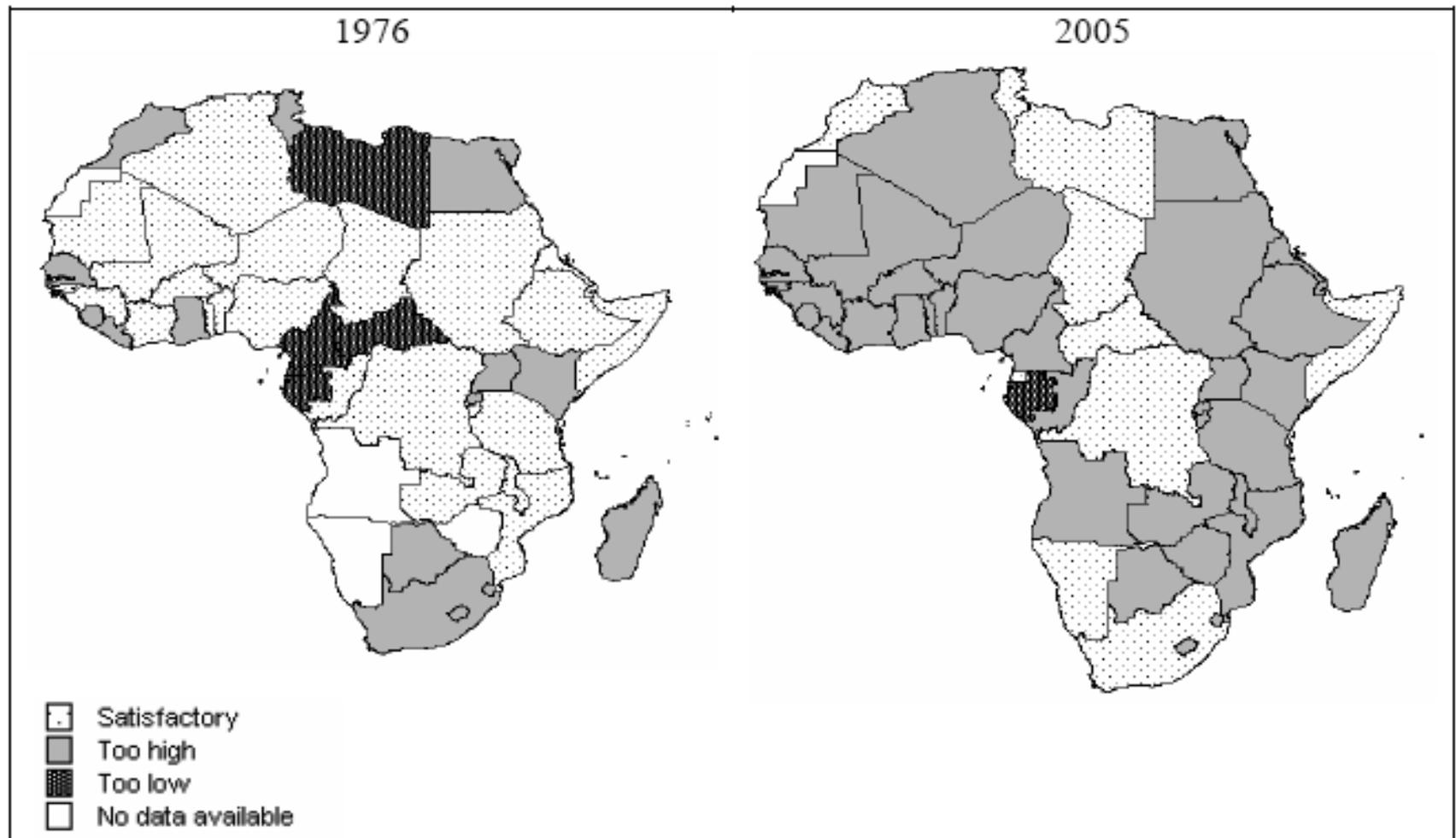
(Brazil; 1979 compromise)
Bolivia
Paraguay (2009: TFR too high. no intervention)
Uruguay

A few Asia and Pacific

(Afghanistan)
Burma (Myanmar)
Malaysia
Mongolia (pronatalist)

African government views on fertility level 1976 and 2005. Source: UN 2006

Figure III. Government views on the level of fertility, Africa, 1976 and 2005



Population policy ; some governmental revisionists

China 1960s

Indonesia 1964

Mexico 1973

Vietnam 1972

(Brazil 1979)

Malaysia 1984

Iran 1979

Chile 1979

Bolivia 1976

Iran 1988-9

Fertility, family planning and ideal family size,
selected countries, latest Demographic and Health Survey

	TFR	% want no more	% with unmet need	Ideal family size
Cambodia 2005	3.4	57	25	3.3
Cameroon 2004	5.0	21	20	5.7
Chad 2004	6.3	8	21	8.9
Congo (Brazzaville) 2005	4.8	19	16	5.1
Congo Dem. Rep. 2007	6.3	20	24	6.3
Ghana 2008	4.0	37	35	4.3
Guinea 2005	5.7	22	21	5.6
Niger 2006	7.0	9	16	8.8
Nigeria 2008	5.7	20	20	6.1
Mali 2006	6.6	20	31	6.3

India's family planning programme.

Srinivasan 2006

Very early - began 1952. clinic approach assumed unmet need.

But inconstant government support, change of favoured method, top-down target-oriented approaches.

Huge regional variations in motivation and acceptance.

1961 – demographic goal of CBR 25 by 1972.

1965 IUD campaign. 900,000 acceptors 1966-7, halved by 1970s. HITTS approach

Vasectomy camps 1971. 3.1 million 1972-3, 900,000 1973 – 4.

National Emergency 1975. negative inducements, quotas 1976-7, 8.25 million sterilisations.

1977 election. 'recoil' phase only 900,000 sterilisations 1977-8

Election 1980 return of 'family planning'. sterilisation now aimed at women; 2 million 1980 – 81

1995 Reproductive Health and Child Health approach.

2000 National Population Policy with TFR targets (2.1 by 2010, irrespective of method, actually about 2.5 in 2012).

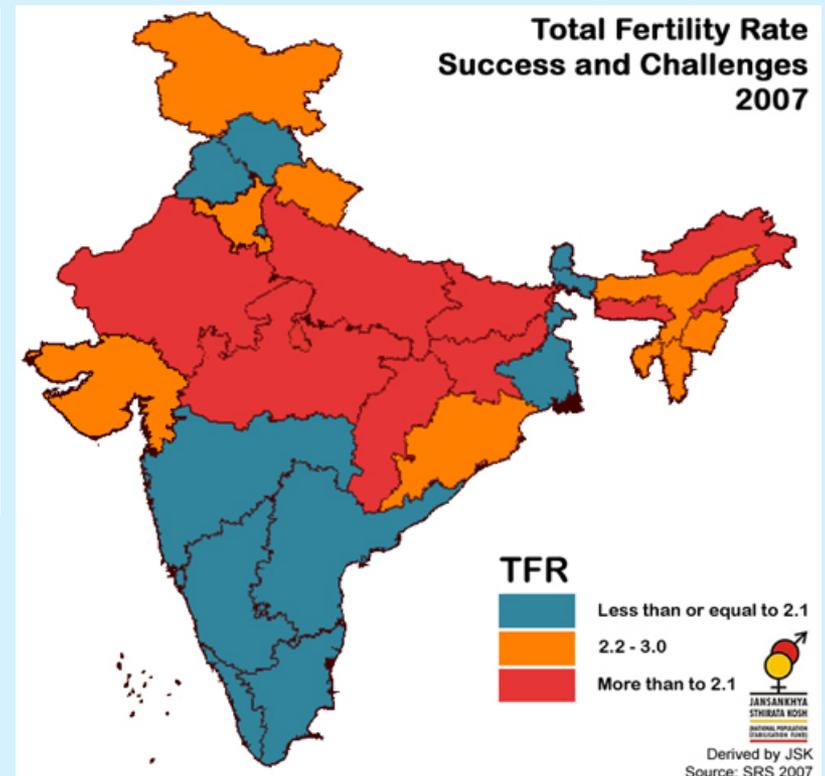
48% overall use of FP of which 85% sterilisation, 7% condom, IUD, pill.

The importance of sub-national diversity: Heterogeneity of fertility rates in India 2007-8

India 2008: Classification of Bigger States based on Total Fertility Rate

TFR<2.1		TFR 2.1 to 3.0		TFR>3	
Kerala	1.7	Jammu & Kashmir	2.2	Chhattisgarh	3.0
Tamil Nadu	1.7	Orissa	2.4	Jharkhand	3.2
Andhra Pradesh	1.8	Gujarat	2.5	Pradesh	3.3
Himachal Pradesh	1.9	Haryana	2.5	Rajasthan	3.3
Punjab	1.9	Assam	2.6	Uttar Pradesh	3.8
West Bengal	1.9			Bihar	3.9
Delhi	2.0				
Karnataka	2.0				
Maharashtra	2.0				

Source: Sample Registration System (2008)



China's Population Policy

The rise of 'market Leninism'

Long-standing migration control through household registration.

Most fertility reduction occurred before 1 – child policy of 1979 ('later, longer, fewer ' policy of 1971). 1964 policy wrecked by Cultural Revolution.

Planned parity was 1.62 (e.g. 1.28 Shanghai (now 0.85), 2.40 Sinkiang).

One-child norm not systematic in rural areas since 1984.

More severe since 1991, long delays in permission for rural couples.

1995 Eugenic Law and 2001 Family Planning Law further regulated marriage and reproductive rights.

Breakdown in birth registration and problems with 2000 census; TFR uncertain 1.5 – 1.8.

Actual fertility now often lower than 'policy' fertility.

Serious sex-ratio problems through infanticide and sex-selective abortion.

Socio-economic polarisation: large poor rural population.

100 million plus 'floating population' cannot be controlled.

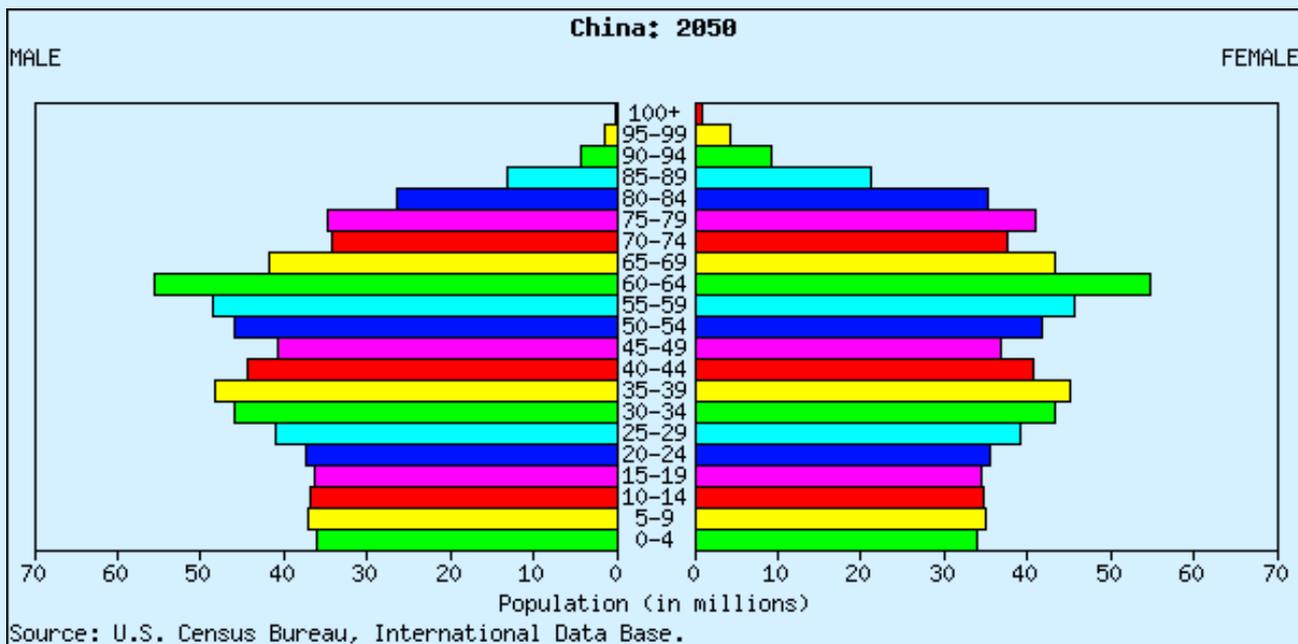
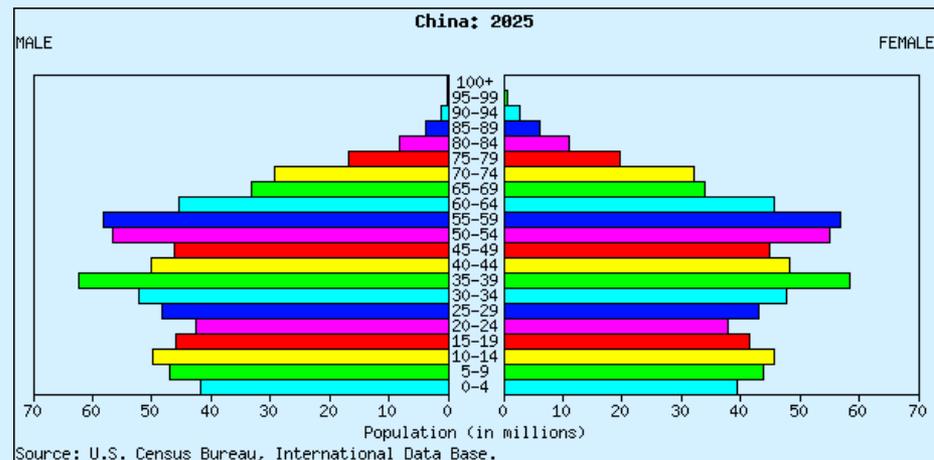
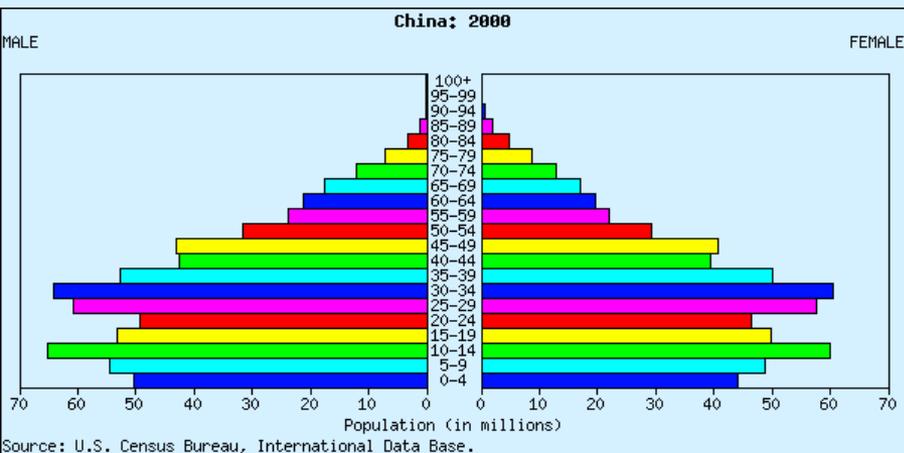
Population may peak at 1.5 billion, then decline.

'Demographic bonus' now; ageing and pensions problems later.

Policy change urgent – 'China may become old before it becomes rich'

Population pyramids, China 2000, 2025, 2050.

Source: US Census Bureau IDB.



Vietnam

Scornet 2001

North Vietnam policy since 1963. 2-3 child norm, 4-5 years spacing. Provincial variation.

Red River valley over-population: 1124 /km² 1994.

Government 'blames population for all problems' .

1993 land apportionment – families of 3 get same land as families of 2.

Fines and punishment for 3rd child (dismissal, expulsion from Party, 1 year harvest fine).

Bangladesh: an unsuitable case for demographic transition?

Attane 2000, Population et Societe 357.

Infant mortality rate 91/1000

Expectation of life male 56.5, female 55.6

Illiteracy male 55%, female 76%

Percent Muslim 87%

GDP growth per head 1960-1995 0.9%

Population density 890 / km²

Human Development Index rank 1991-7 136 / 150

GDP PPP 1997 \$1050 (India \$1670, Pakistan \$1560)

Nigeria – a failed policy

Instituted 1988.

Biggest African country.

Oil revenues delayed population concerns.

400 ethnic groups, North / South, Muslim / Christian rivalries. ‘demographic competition’ at census

Strong patriarchal pronatalist ethos.

Corrupt, weak unstable governments.

Male-oriented top-down policy.

Culturally insensitive.

Only one child decline so far, probably due to development.

Brazil – a family planning programme without government

1964 – 1985, Military regimes, no population concern.

High fertility, high level of illegal abortion

1985 – permissive fp policy but no motivation; a compromise with RC hierarchy.

Non- (central) government activism: BEMFAM (IPPF) set up to reduce illegal abortion, marketing by pharmaceutical industry to meet private fp demand, circumvention of law against tubal ligation (female sterilisation).

But- increased caesarian operations, big rich / poor, urban / rural inequalities in access.

TFR now below replacement.

Iran – the pragmatism of Islam in an ancient society.

Up to 1979 - autocratic government of Shah Reza Pahlavi (emulating Ataturk) promotes education for women, family planning programme (mostly effective in urban areas).

1979 Islamic revolution reverses reforms, birth rate rises, TFR about 8. Population growth 3.9% by 1986.

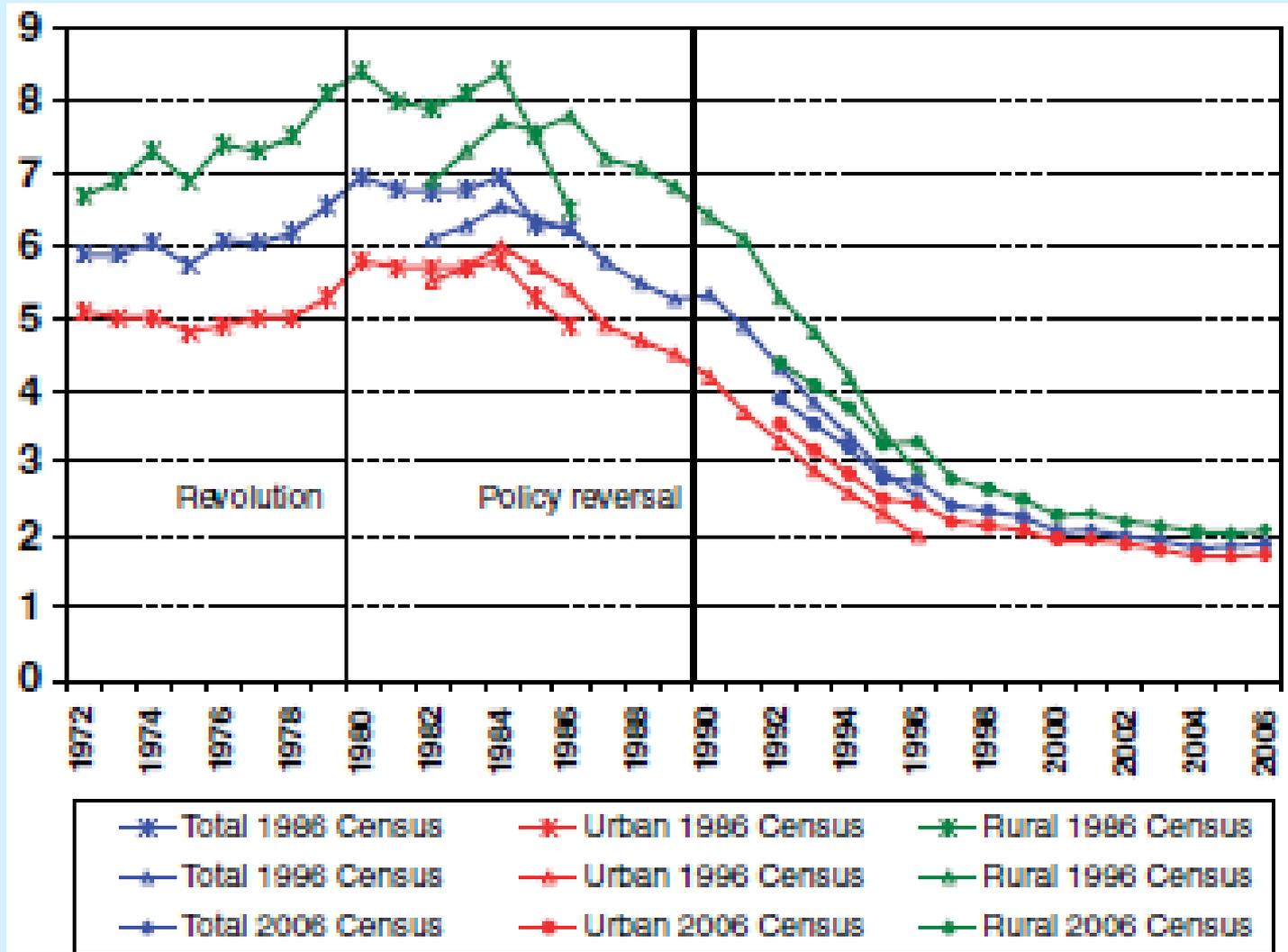
Pronatalist rhetoric accelerated by Iran / Iraq war 1980-88 (0.5 to 1.5 m dead).

New reform from 1989 – *volte face* on family planning, encouragement of women's education and health.

Policy focused on rural population; 90% covered by 2005, rural TFR down to replacement, national TFR 1.8 or less.

Iran – estimates of TFR from own-child method.

Salehi-Isfahani and Abbasi-Shavasi 2010.



Kenya – progress on hold

Policy from 1967 but no implementation

1979 – report of WFS TFR 8, 4% population growth

Major top-down campaign, desired family size fell from 7.2 to 4.8 in ten years, TFR 4.8 1998. Elite endorsement important.

FP resources diverted to AIDS, allocation for FP and provision fell, unwanted births rose from 11% to 21%. Fertility stall.

Demographic effects of delaying fertility decline (projected).

Kenya - effects of a delay in reducing fertility

(decline to TFR of 2.5 over 30 years)

Population (millions)

decline begins in

	actual	1980	1985	1990
1960	8			
1980	16			
2000	31	31	34	36
2030	63	46	55	65
2060	95	52	65	81

Futures Group Kenya The effects of population factors Washington DC 1982
in PRB 1985. Actual population from UN 2009.

Stalled fertility transition in Kenya

Source Machiama 2010

Figure 2.4.2: Kenya : Adjusted partial Total Fertility Rates (15-39) by single calendar year

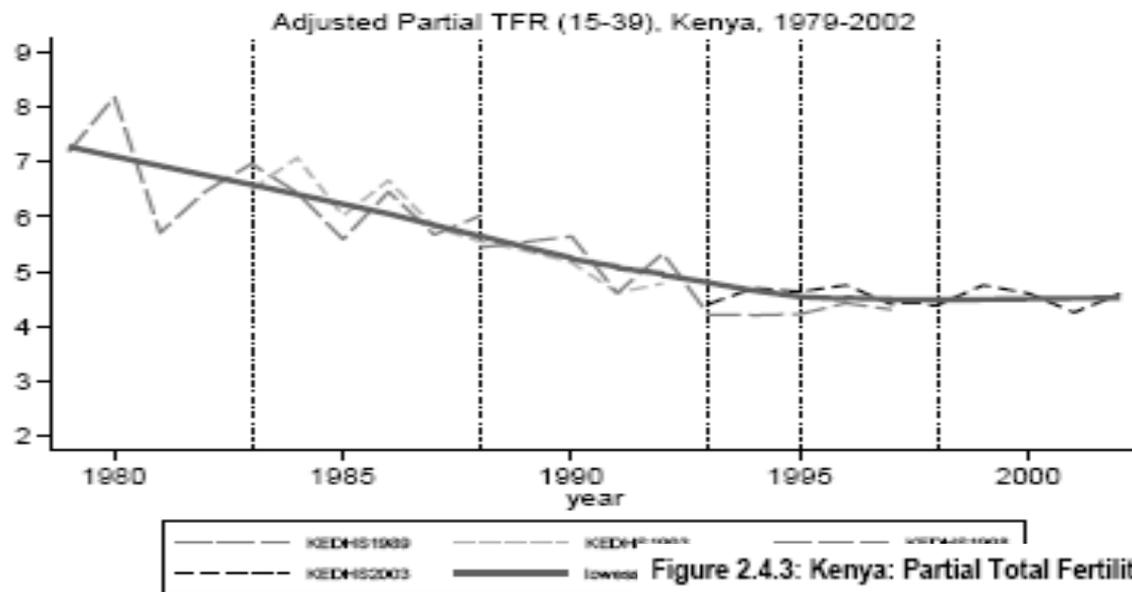
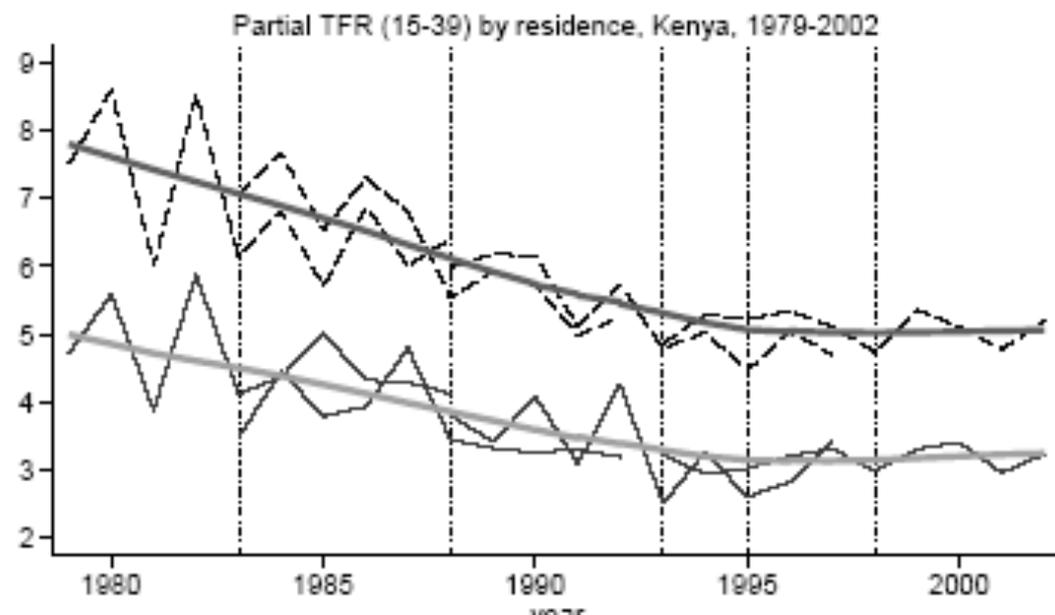
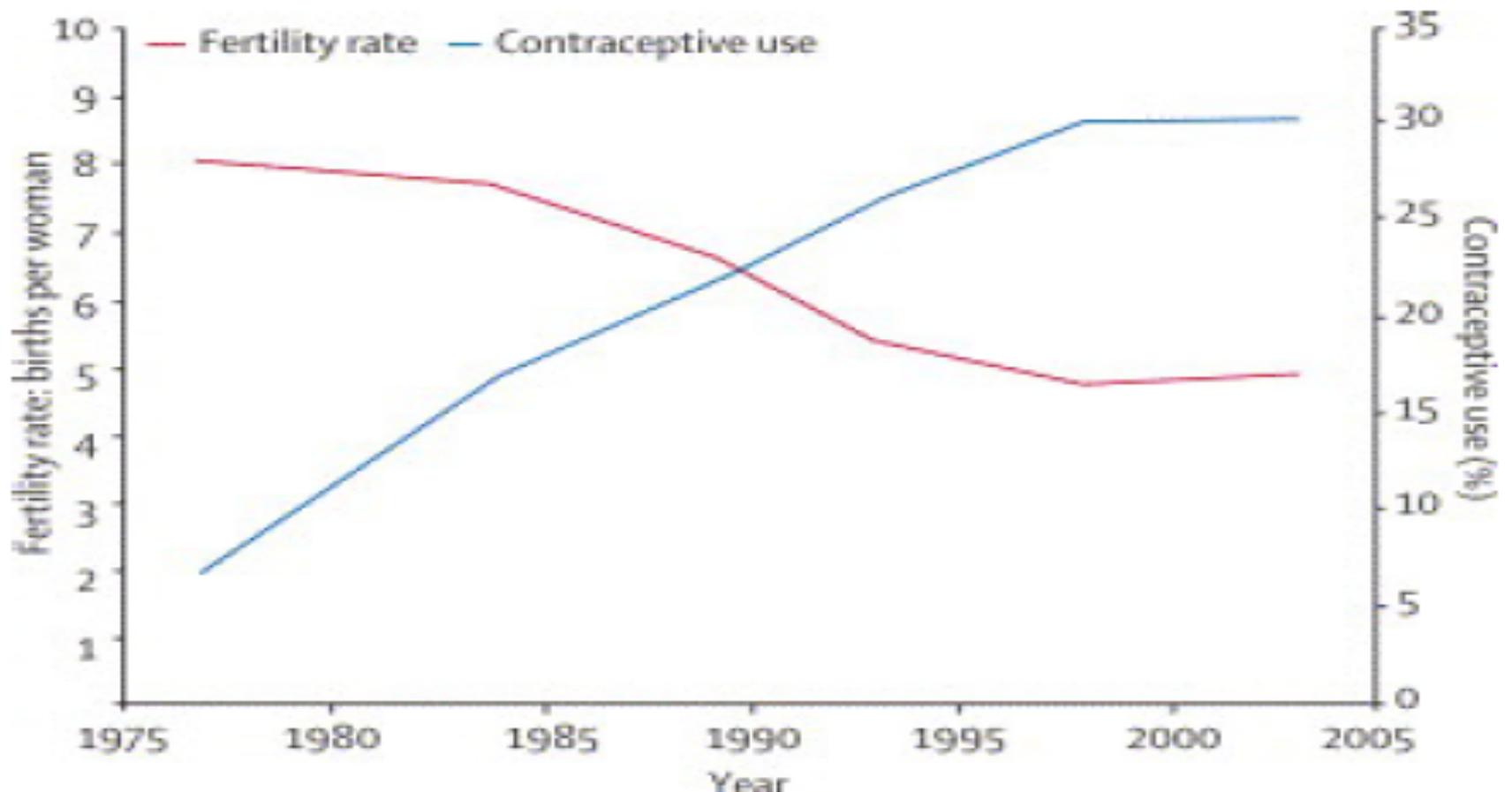


Figure 2.4.3: Kenya: Partial Total Fertility Rates (15-39) by single calendar year by residence



Kenya – flatlining of contraception use.

Source: Cleland et al. 2006



Causes of stalled / slowed declines

Political attitudes favouring population growth, high fertility.

Postponement / recuperation balance (Southern S America).

Halving of funds devoted to family planning by international agencies. (effects of Cairo conference 1994, AIDS epidemics, US elections).

Weak political will among governments.

Poor / negative economic growth (Africa).

Increase of unmet need, doubling of unwanted pregnancies in (e.g.) Kenya, halving of use of fp from public clinics.

Persistence of highly restrictive abortion laws.

Persistence of above-replacement desired family size, especially in less developed regions.

How far could that be 'rational' ?

Calculating programme effect

Standardisation / decomposition with proximate determinants

Thailand - 9 point CBR decline in marital fertility

Trend Analysis Chile, Tunisia CBR fell 2x faster after programme

Reproductive process analysis – births averted by programme methods (eg sterilisation, IUDs) – calculation of Couple Years of Protection

Method Prevalence based on surveys to calculate births averted by programme methods

Experimental design contrasts test area with control: Matlab, Bangladesh

Multivariate analysis to account for socio-economic change

Cross-national studies evaluating programme strength: Parker Mauldin and Lapham.

Percent of fertility decline attributed to FP programmes

Population Reports J29 1985

Taiwan 1964-74	35-50%
Singapore 1966-85	40-60%
South Korea 1963 – 75	45%
Kerala `968 – 78	40%
Thailand 1971 – 75	80%
Mexico `973 – 78	42-48%
Tunisia 1979	78%
Mauritius 1950-1971	50-60%
20 developing countries	48% of variance of CBR
Bangladesh 1970-80	15%
Iran 1986-96	4% -20% from rural health clinics alone

Reversing population policy – the problems of ageing and population decline

Japan

South Korea

Singapore

Taiwan

China to follow?

Major non-European countries projected to be in population decline
by 2050 (total 2.406 billion) with population in 2010.
in approximate order of projected onset of decline

Source: United Nations 2010

	population in millions
(Japan)	128
Taiwan	23
S Korea	49
China	1346
Mexico	115
Brazil	197
Thailand	70
Iran	78
Turkey	74
Indonesia	238
Vietnam	88

Some speculations about future fertility and growth

Possibly a future of even greater diversity

Estimates of African TFR decline too optimistic

Asian decline under-estimated

Ultra-low fertility in urban China – an Asian low fertility trap?

Effects of global urbanisation

Effects of ‘familism’