
UN/POP/PFD/2001/1
7 June 2001
ENGLISH: ONLY

**WORKSHOP ON PROSPECTS FOR FERTILITY
DECLINE IN HIGH FERTILITY COUNTRIES**

Population Division

Department of Economic and Social Affairs

United Nations Secretariat

New York, 9-11 July 2001

DEMOGRAPHIC SITUATION IN HIGH FERTILITY COUNTRIES*

Population Division**

*This document was reproduced without formal editing.

**Population Division, United Nations

Demographic situation in high fertility countries

The fertility transition may be characterized by five stages that include the pre-transitional stage when total fertility rate (TFR) is above 5 children per woman and shows very weak or no signs of decline; the incipient (or early) stage when fertility declines from a maximum level recorded to 5 children per woman; the core stage that encompasses fertility levels of 5 to 3 children per woman; the advanced stage corresponding to fertility lower than 3 children per woman but higher than the replacement level of 2.1 children per woman; and below-replacement fertility that is typical for post-transitional stage. For the purposes of examining the fertility transition countries may be grouped according to whether fertility has started to decline, the level of fertility reached in a specified period, the stage of the fertility transition the country recently went through. Countries with high fertility (46 in all, see table 1) that are of interest in this paper are at two of the five stages of fertility transition: the pre-transitional stage and the incipient stage. In the two following sections of this paper, some background information such as marriage and sexual activity and other proximate determinants of fertility, and population policies are explored for those countries.

During the second half of the 20th century, particularly since the late 1960s and the early 1970s, fertility declined rapidly in many developing countries. In 1950-1955 TFR was higher than 5 children per woman in 128 countries, including 100 countries where it was 6 children per woman or higher and 34 countries where it was 7 children per woman or higher. By 1995-2000 TFR decreased to below 5 children per woman in 80 of the 128 countries where fertility was high in 1950-1955; in 14 of those countries fertility levels had reached or passed the replacement level. Eastern Asia – the most populous region of the world – joined the developed regions in that its fertility is currently below replacement. Among those 34 countries where TFR was 7 children per woman or more in 1950-1955, fertility decreased to levels below 5 children per woman in 18 countries.

Most of the currently high fertility countries are in sub-Saharan Africa. In 1995-2000, the average TFR was at 5.9 children per woman in Western Africa, 6.1 children per woman in Eastern Africa and 6.4 children per woman in Middle Africa. Scattered pockets of high fertility remain in South Asia and Western Asia.

By the late 1990s, the fertility transition had not yet begun in 14 countries (13 sub-Saharan and the Occupied Palestinian Territory) with a combined population of 200 million. Estimates of trends in TFR¹ in those pre-transition countries indicate that fertility rates had been either stable or even increasing (as in Niger)². All of the African pre-transitional countries but Congo belong to the group of the least developed countries as defined by the United Nations. Pre-

¹ The paper is based primarily on data compiled by the United Nations Population Division from a variety of sources (surveys, censuses and, in a limited number of low fertility countries, civil registration) (Fertility Trends and Patterns Database) and the World Population Prospects: The 2000 Revision Database.

² The absence of fertility decline was documented for Burkina Faso, Chad, Guinea and Niger by two demographic surveys implemented in each country during the 1990s. For Mali and Uganda the stability of TFR at a high level of seven children for women is inferred from a single survey carried out in the first half of the decade. TFR of 8.4 children per woman recorded by civil registration in the Occupied Palestinian Territory implies a pre-transitional stage. For Angola, Burundi, Congo, the Democratic Republic of the Congo, Equatorial Guinea, Liberia, Sierra Leone and Somalia data do not exist for the 1990s; population estimates by the United Nations are based on the assumption that fertility there is stable.

transitional fertility levels are not uniform: they vary from 5.6 in Chad to more than 7 in a number of countries (Table 1).

Another 32 countries (22 from sub-Saharan Africa, 9 from Asia and 1 from Oceania) with a combined population of 550 million are progressing through the incipient stage of fertility transition (Table 1). In this group, the total fertility rate ranges from 5.0—5.1 children per woman in the Central African Republic, Comoros and Mauritania to 6.7—6.9 children per woman in Malawi and Uganda.

The tempo of fertility decline varies among the high fertility countries where the transition has already started. The lack of data precludes analysis of long-term trends for most of these countries; however, the onset of fertility transition occurred in most of them not earlier than the mid-1980s. The speed of decline varies from 0.1 children per woman per quinquennium in Guinea to 1.6 children per woman per quinquennium in Comoros (figure 1). It remains an open question whether the timing of the onset of fertility decline is linked to the speed of decline. In the case of countries where fertility has started to decline, about half of them were progressing through the incipient stage of transition slower than did the countries that completed the incipient stage before 1990³, while in the other half the decline was as fast or faster. The data also suggest that in most countries that have data for both the 1980s and 1990s that have embarked on the transition, fertility decline accelerated in the 1990s.

The United Nations assumes that fertility will decline in all high fertility countries irrespective of whether or not the TFR has shown signs of decline (tables 1 and 2). However, the speed of decline and the projected level of TFR are function of the past trends and are modelled so as to take into account the past experience of countries that have progressed through the demographic transition. The 2000 Revision of the *World Population Prospects* assumes an acceleration of fertility decline in currently high fertility countries in the second decade of the 21st century, implying the average decline from 6.2 children per woman in 1995-2000 to 4.2 children per woman in 2020-2025. The group of currently high fertility countries is expected to become more diverse with respect to the fertility levels: the range of TFR will increase from 8.0 to 5.1 births per woman in 1995-2000 to 5.9 to 2.8 in 2020-2025. The current maximum difference in TFR within this group of countries of 2.9 children per woman between Niger and Côte d'Ivoire is expected to widen to 3.5 children per woman.

During the demographic transition fertility often decreases more at older ages than at younger ages. At the start of the transition declines in fertility at the younger ages due to increases in age at marriage are more than offset by declines among older women who wish to stop childbearing. As a result, the age profile of period fertility rejuvenates. This happened in most developed countries at least until the 1970s. A similar pattern of change in the age structure of fertility was typical for many developing countries, particularly those in Asia. This, however, is by no means a general rule. In Africa, for example, all types of decline can be found. For instance, in several African countries fertility decline is evenly distributed across prime childbearing ages. As a result, the age profile of period fertility does not change, as in Côte d'Ivoire (figure 2). On the other hand, in Madagascar fertility declined at all ages older than 24, but effectively increased at younger ages; as a result, the structure of period fertility became younger. In contrast, the 1.4 (children per woman) TFR decrease in Senegal was achieved almost exclusively by fertility decline among women younger than 30. Furthermore, in Niger increased fertility of women older than 24 and stable high fertility of younger women resulted in a TFR

³ 0.6 children per woman per quinquennium on average for 56 countries (United Nations, forthcoming).

increase of 0.5 children from the late 1980s to the mid 1990s. While it is difficult to generalize about the cultural, social or economic factors underlying the differences in age patterns of fertility transition, these differences have important implications for population policies.

Assumptions about the future course of fertility transition combined with current population age composition (and mortality assumptions) produce projections of population size (Table 1). All high fertility countries are expected to experience several decades of rapid population growth. The total population of high fertility countries is projected to reach in 2025 1.4 billion – a 93 per cent increase over the 2000 level (Table 2). However, the differential projected fertility trends underlie profound differences in future population growth in the currently high fertility countries (Figure 3). For instance, population is expected to increase, from 2000 to 2025, by 60 per cent in the Central African Republic, Côte d’Ivoire and Namibia, whereas it will increase by 160 per cent in Liberia and Yemen. Figure 3 shows that in countries where the transition has not yet begun, population is expected to more than double in all but two countries.

B. Socio-economic correlates

It is widely acknowledged that socio-economic development is one of the major driving forces of fertility transition, but the tempo and speed of the transition is poorly predicted by such measures of development as income per capita (e.g. Bongaarts and Watkins, 1996). In fact, while poor societies tend to have higher fertility and the rich countries are characterized by low fertility, cross-country correlations between TFR and an indicator of economic output per capita, such as the GNP per capita, or a measure of incidence of absolute poverty, such as the percentage of the population living on less than one dollar a day, are weak although statistically significant (Table 3). This is probably because reproductive behaviour responds more to socio-cultural changes and transformations of lifestyles implicit to modernization, of which economic growth is but one of its components.

It would be logical to expect a close association of fertility levels and trends with levels and trends in urbanization, which encompasses the multi-faceted transformation of a “traditional” into a “modern” society. Survey data invariably confirm that, at the individual level of analysis, fertility is lower in urban areas, and most often is lowest in the largest cities. At the macro level, however, the relationship between urbanization and fertility is not as strong as that between education and child mortality (table 3). This is probably because of widespread differences in national definitions of what settlements are regarded as urban⁴.

On the other hand, the association between the “human capital” indicators and fertility is strong. Child survival (figure 4) and female enrolment in education (figure 5) are highly negatively correlated with the total fertility rate (table 3). Together, they explain almost four-fifth of the cross-national variation of total fertility among 57 developing countries for which these statistics are available. These correlations are important because they reflect social improvements

⁴ The population size criterion for a settlement to be classified as urban varies, among the developing countries, from 100 dwellings in Peru to 20000 inhabitants in the Syrian Arab Republic. Many countries apply other non-related criteria (such as percentage of population engaged in non-agricultural activities, or a locality being the centre of an administrative region or only the capital city) and several sub-Saharan countries (e.g. Benin, Burkina Faso, Cape Verde, Côte d’Ivoire, Gabon, Namibia, Niger, Nigeria, Rwanda, Uganda) do not report them at all.

that are (unlike urbanization and economic growth) amenable to effective and efficient policy interventions. Worth noting is also the absence of any particular “sub-Saharan pattern” in the relationships of these indicators with fertility.

The importance of improvements in child survival in triggering and fostering fertility transition is well researched (United Nations, 1987; 1996). These improvements generate various distinct but closely interrelated changes in reproductive behaviour resulting in lower fertility levels. Several of these, in particular the “physiological effect” which links a child’s death with a shortening of birth intervals through its impact on breastfeeding, and the “replacement effect” which links a child’s death to birth spacing and completed fertility through the intervention of family planning, operate at the level of individual family. Other effects of child survival operate on reproductive behaviour by altering parents’ perceptions about their environment, in particular about their children’s survival chances.

The decisive role of education in fostering changes in reproductive behaviour has been documented extensively. Education, especially of women, provides knowledge, increases exposure to information and media, moderates beliefs, builds the skills for gainful employment, increases female participation in family decision-making, and raises the opportunity costs of women’s time. The empowerment and autonomy of women transforms the fabric of reproductive behaviour, mainly through women’s ability to control their own fertility. Even a few years of formal education make a difference: in most countries, women with primary education have fewer children than uneducated women in spite of the negative relationship between education and infecundity⁵ (United Nations, 1995). Higher levels of education are strong predictors of lower fertility. The difference between the number of children ever born to women with no education and the number to women with at least secondary education averages 2.6 among 48 developing countries. Similarly, the average total fertility rate for 50 developing countries is 2.7 children less for women with secondary or tertiary education than for uneducated women (United Nations, forthcoming).

The Human development index (HDI)⁶ intended to serve as an overall measure of socio-economic development, is also negatively and strongly correlated with total fertility rate (figure 6 and table 3). However, one may argue that under-five mortality rate and female combined enrolment ratio in primary and secondary education are better variables for the purposes of fertility analysis because partial indicators are, in general, better suited for policy intervention than a composite index.

⁵ In Cameroon, Chad, Guinea, Indonesia, Madagascar, Niger, Nigeria and Uganda women with primary education had more children than uneducated women – probably because health improvements associated with education have outweighed behavioural changes. These exceptions are few and they happened in the past: in all but two (Indonesia and Uganda) of these countries the positive impact of primary education on completed family size seems to have reversed with respect to recent period fertility rates.

⁶ The HDI is a simple average of the normalized (by extreme values) life expectancy; educational attainment, as measured by a combination of the adult literacy rate (two-third weight) and the combined gross primary, secondary and tertiary enrolment ratio (one-third weight); and GDP per capita in constant dollars adjusted for purchasing power parity.

C. Proximate determinants of fertility

1. Marriage and sexual activity

In most countries of the world, especially in the less developed ones, the family is the unit in which reproduction takes place. Therefore, marriage⁷ usually marks the beginning of family formation and as such affects fertility directly through its impact on the duration of a woman's exposure to the risk of pregnancy. It can also influence fertility indirectly because of some underlying factors that are associated with both age at marriage, such as women's education, and contraceptive use or fertility preferences. Tables 4 and 5 present the prevalence and timing of marriage in the high fertility countries. The prevalence of marriage is measured by the proportion of ever married women aged 15-49 and 45-49, and its timing by the median age at first marriage as well as the singulate mean age at marriage (SMAM).

Marriage is almost universal in all high fertility countries for by age 50 (age group 45-49), the percentage remaining single is about 2 per cent on average. Moreover, very early marriage is the norm in the great majority of these countries. In 21 of the 34 countries with data, the percentage of women aged 15-19 who are married is 30 per cent or more; in only five countries (Burundi, Comoros, Rwanda, Namibia and Saudi Arabia) is this percentage lower than 15 per cent. This early entry into union is also evidenced by the age at marriage. The singulate mean age at marriage (SMAM) shows that in the 1990s, among the high fertility countries women who married for the first time by age 50 did so on average at age 21. The median age at first union indicates that by the mid-1990s, still half of women aged 20 to 49 married in their teenage years in all these countries. For women in this age group, the median age at first marriage varies from 15.2 years in Niger to 19.2 in Comoros. Namibia and Rwanda are the only countries where the median age at first marriage among women aged 25 to 49 is 20 or over.

A look at the differentials in the median age at first marriage from data collected by the Demographic and Health Surveys reveals that urban women (particularly those who live in the capital) marry later than rural women. There is also a strong relationship between female education and median age at first marriage for women: the higher the women's educational level, the later she marries. For example, in Niger in 1998, the median age at first marriage was 15 years among women who lived in the rural areas compared to 16.9 years among women who lived in Niamey (the capital). Women who had a secondary or higher level education (median age at first union of 20.5 years) married almost five years later than women who had a primary level education (15.9 years) or no education (15.0 years) (Attama and others, 1998). As far as trends are concerned, table 2 shows that the mean age at first marriage in the high fertility countries has slightly increased in the majority of the countries—by one year on average; this increase has been shown to be mainly, if not solely, due to the increase in the proportion of women who attend higher levels of education.

Although, traditionally, age at first marriage is considered to mark the onset of a woman's sexual activity and hence exposure to the risk of pregnancy, more and more women are becoming sexually active before marriage even as age at marriage is rising (United Nations, forthcoming). Table 1 shows that in the high fertility countries with available data, the median age at first sexual intercourse is on average one year lower than the median age at first union. But in Namibia and Côte d'Ivoire, where the differences between the median age at first marriage and the median age at first intercourse are 5.7 years and 2.3 years, respectively, among women aged 25 to 49. Among women aged 20 to 49, the median age at first intercourse varies from 15.1 years

⁷ Marriage here refers to recognized marital unions and consensual unions.

in Niger to 19.9 years in Rwanda. Similarly to the median age at first marriage, the median age at first intercourse is in general lower among women who live in rural areas and with a lower educational level, according to data collected by the Demographic and Health Surveys. In Niger, for example, the median age at first intercourse is 15.0 years among women living in rural areas compared to 16.5 years among women living in Niamey. Among women with no education, with a primary level education, and with a secondary or higher level of education, this median age is 15.0 years, 15.9 years and 19.5 years, respectively.

2. Postpartum insusceptibility and breastfeeding

Following a birth and before the return of menstruation—a period referred to as postpartum amenorrhoea—women are considered to be ‘insusceptible’ to another conception if they are still amenorrhoeic or are abstaining from sexual intercourse. During this period, the risk of pregnancy is almost non-existent. The protection from contraception depends on the length and intensity of breastfeeding. For instance, it has been shown that exclusive breastfeeding provides a protection from pregnancy up to six months.

Median durations of postpartum amenorrhoea, abstinence and insusceptibility are presented in table 6. The period of postpartum insusceptibility varies considerably. In Eastern Africa, it varies from 8.2 months in Comoros to 19.6 months in Ethiopia. In Middle Africa, it is around 16-17 months in Cameroon and Chad, the two countries with data. In Western Africa where it is the longest, it varies from 15.1 months in Senegal to 22.6 months in Burkina Faso. In Southern Africa, it is equal to 12.8 months in Namibia, the only country with data. The period of postpartum amenorrhoea is in general much longer than the period of postpartum sexual abstinence and is, therefore, the principal determinant of the length of postpartum insusceptibility. In 16 of the 23 countries with data, the median durations of amenorrhoea, abstinence and insusceptibility are, on average, 12.5 months, 3.0 months and 13.3 months, respectively.

A look at the differentials in the median durations of postpartum amenorrhoea and abstinence from data collected by the Demographic and Health Surveys shows that postpartum amenorrhoea is much shorter among urban and more educated women than among rural and less educated women. This is attributable to shorter breastfeeding periods among the first group of women. Similarly, postpartum abstinence is much longer in rural areas than in urban areas, but there is not a clear relationship between the duration of abstinence and female education. For example, in Burkina Faso in 1998-1999, the less educated a woman was, the longer she abstained from sexual intercourse: the median durations among women with a secondary or higher level of education, with a primary level education, and with no education were 6.4 months, 8.1 months and 19.8 months, respectively (Institut National de la Statistique et de la Démographie and Macro International Inc., 2000). On the other hand, in Chad in 1996-1997, the duration of abstinence was shorter among uneducated women (3.5 months) than among women with at least a primary level of education (4.3 months) (Ouagadji and others, 1998).

As already mentioned, breastfeeding, especially exclusive breastfeeding⁸, affects fertility through the biological suppression of return of menses in mothers, thus to fertile status. Table 3 shows that breastfeeding lasts very long in the high fertility countries (18 months or more).

⁸ Exclusive breastfeeding is the practice of feeding only with breast milk. The World Health Organization and UNICEF recommend it for the first six months of life. Full breastfeeding refers to feeding the child with breast milk and water only in some countries and breast milk with water or juice only in other countries.

Unfortunately, breast milk is supplemented too early because on average, the median duration of exclusive breastfeeding is 1.1 month; by the end of the first month, half of the women give at least water or juice to their child in addition to breast milk in 17 countries (out of the 23 countries with data). The median duration of full breastfeeding is only 1.8 months longer, on average. Data collected by the Demographic and Health Surveys show that the median length of breastfeeding tends to be longer in rural areas than in urban areas, and among uneducated women than among women who have a primary education or secondary or higher education.

3. Contraception, fertility preferences and abortion

The literature on fertility decline in the developing countries shows that past declines have occurred predominantly from increased contraceptive use. Table 7 shows that the level of contraceptive use in the high fertility countries is very low. The percentage of women in union and of reproductive age using any method of contraception ranges from 3.3 per cent in Mauritania in 1991 to 32.7 per cent in Gabon in 2000. The percentage using any modern method of contraception varies from 1.2 per cent in Burundi in 1987 to 28.5 per cent in Saudi Arabia in 1996. In fact, the great majority of these high fertility countries belong to Eastern Africa, Middle Africa, and Western Africa, regions where the prevalence of contraception among women in union and of reproductive age is the lowest in the world—20.6 per cent, 10.0 and 14.4 per cent, respectively. In addition, the majority of these countries display the lowest increase in contraceptive prevalence in the world—less than 1 percentage point per annum in the 1990s (United Nations, forthcoming). Not surprisingly, the level of unmet need for contraception is very high in these high fertility countries. On average, a quarter of women (in union and of reproductive age) have unmet need for contraception (see % unmet need column) and only a third of women who need family planning are using contraception (see % need satisfied column). Not surprisingly too, the desired family size is still very high in these high fertility countries, 5.8 children and 6.0 children, on average, among all women and women in union, respectively.

Given that in these countries, contraceptive use is very low and has barely increased in the recent past, and yet women's need for contraception is relatively high, one may wonder whether women resort to abortion to prevent unwanted births. Unfortunately, in all the high fertility countries, data on abortion are scarce due to very restrictive laws on abortion⁹ largely inspired from that of former colonial rulers. In sub-Saharan Africa, data on abortion are obtained mainly from women who were admitted in hospitals for post-abortion complications, or else from specific populations such as adolescents, students and patients in health centers. Such data show that the practice of abortion has become more common in several African countries in the last few decades (Konate and others, 1999). Abortion is much more frequent among single young women, particularly adolescent girls who are still in school (Guillaume, 2000). In Mozambique, at the Maputo Central Hospital, for example, patients admitted for an abortion were mainly under the age of 30 (74 per cent), unmarried (58 per cent) and still in school (36 per cent) (Agadjanian, 1999). A survey conducted among schoolgirls in Togo found that 23 per cent of them had had an abortion at least once (Amagee, 1999). Abortion ratios¹⁰ are also consistently higher in urban than rural areas. For example, surveys conducted in health centers among patients bring out an abortion ratio of 20.5 per cent in Bamako, Mali, and over 30 per cent in Abidjan, Côte d'Ivoire

⁹ In 25 of the 46 high fertility countries, abortion is prohibited except to save the life of the pregnant woman; in the rest of the countries, abortion is also allowed if it is to preserve the physical or mental health of the mother.

¹⁰ The abortion ratio is the number of pregnancies terminated through abortion over the total number of pregnancies.

(Desgrées Du Lou and others, 1999). These and other studies reveal that the main reasons for having an abortion are the fear of not being to complete school, the fear of parents' reaction, the fear of having an illegitimate child, the lack of economic resources for bringing up the child and finally to control fertility. The mother's health problems are rarely mentioned. These data point to the fact that young African women are turning more and more to abortion when they have an unwanted pregnancy.

D. Population Policies

Most of the countries considered in this paper consider their current levels of fertility to be high and have adopted population policies for fertility regulation or family planning services (United Nations, 2001). Both explicit and implicit population policies regarding fertility regulation or family planning services have been issued in various forms such as legislation, sections of development plans, and documents by governmental ministries and commissions. The persistence of high fertility levels and variations therein reflect the timing of policy or program initiation, program dimensions, extent of implementation and effectiveness, political will and a whole range of socio-economic factors such as literacy levels, poverty and infrastructure.

In 1976, according to the population inquiry conducted regularly by the United Nations Population Division, a majority of countries did not have policies to modify fertility levels (table 8). By 1999, however, most countries had adopted policies to lower fertility. Out of the 33 countries, which did not have intervention policies in 1976, only nine remained without any intervention policy to lower fertility by 1999. Two countries, Equatorial Guinea and Togo had adopted policies to maintain the prevailing fertility levels, while Saudi Arabia shifted from the position in 1976 of maintaining fertility levels to join Gabon by adopting a policy to raise fertility.

Among the current high fertility countries in Africa, only six countries (Cameroon, Gambia, Nigeria, Rwanda, Senegal and Uganda) had population policies integrated in national development plans by 1987; only Burundi had a separate population policy document (Cochrane and others, 1990). The other countries that had an explicit population policy at that time, and whose fertility levels have since declined to below 5 children per woman on average were Botswana, Ghana, Kenya, Lesotho, Mauritius and Swaziland. Nigeria, the region's populous country did not adopt a formal population policy until February 1988. In the United Republic of Tanzania, despite a long history of family planning service provision—since 1970—through its child spacing programs, a national population policy was not adopted until 1992 (Richey, 1999).

The late adoption of population policies and implementation of programs appears to have been impeded by governments' views concerning fertility levels, poverty, conflicts and legal issues. In 1976, most governments considered their fertility levels to be satisfactory, while other governments such as Cameroon, Central African Republic, Equatorial Guinea and Gabon, considered fertility levels in their countries to be too low (table 9). As table 10 shows, nearly all the high fertility countries were either in conflict or emerging from it during the period 1988-1998; and, in 2001, a few of them such as Uganda, Burundi, the Democratic Republic of Congo, were still experiencing civil strife. In addition, nearly all countries shown are, in the coinage of the International Monetary Fund, heavily indebted poor countries, which at one time or the other during the past two decades have adopted and implemented the Structural Adjustment Programs. In many African countries, government does not fund family planning programmes even though they are permitted. While in some, the commercial sector is an important provider of contraceptive services, available data shows that less than 11 percent of contraceptive users were

served by the commercial private sector in Mali, Niger, the United Republic of Tanzania and Uganda, while in Cameroon, Nigeria, Togo and Zambia, the range of contraceptive users served by the private sector was 11-50 per cent (Zeitlin and others, 1994).

Among the legal issues, the anti-contraceptive and abortion law is perhaps the most important. Passed in France in 1920 and has since been repealed, the law remains on the statute books in several former French colonies (Cochrane and others, 1990). Even though it is widely disregarded in countries where it still exists, and was repealed as early as 1972 in Mali and in 1980 in Senegal and Cameroon, its existence may have impeded advocates for family planning and restricted the sale and distribution of contraceptives. Unlike in Anglophone countries where voluntary organizations were the vanguard of family planning associations, the anti-contraceptive law appears to have discouraged the establishment of family planning programmes. For example, in the Democratic Republic of Congo, instead of a voluntary association, a parastatal organization was formed perhaps to ensure that there would be no prosecutions under the 1920 law. In Senegal, government had to permit the formation of family planning association under its wings after efforts to form a voluntary one failed (Cochrane and others, 1990). Other legal issues include the legal requirements for induced abortion, the exclusion of unmarried adolescents in participating in family planning programmes, and the requirement of spousal consent for supply of contraceptives.

Colonial era laws on abortion, which remain on the statute books in most African countries—even though they have since been repealed in France and the United Kingdom—impede the institution of safe abortion services. Table 11 shows that by 1992, abortion was prohibited without exception in Burundi, Comoros, Djibouti, Madagascar, Niger, Pakistan, Senegal and Sierra Leone. Even where abortion is not illegal, not only do governments seldom subsidize it but also it is usually allowed on narrow medical grounds and requires professional consultation for authorization. In some countries such as Cameroon, Congo, Guinea, Guinea-Bissau, Maldives, Mali, Namibia, Togo and Uganda, authorization to induce an abortion must also be approved by a family member or spouse.

Population policies and programmes, although their implementation is usually not ideal, they do matter. The adoption of a population policy implies budget allocations, training of personnel and arrangement of institutional mechanism to implement the policy. Adoption of a population policy has been associated with the likelihood that a country receives international assistance; countries with population policies appear to have much more demographic data, more expert services, surveys and the provision of various contraceptive services from international organizations (Barret and Ong Tsui, 1999).

REFERENCES

- Agadjanian, Victor (1999). Men's talk: social interaction among men and reproductive changes in Maputo, Mozambique. Paper presented at the Third African Population Conference in Durban, South Africa.
- Amagee, L. K. (1999). Recours à l'avortement provoqué en milieu scolaire au Togo : mesure et facteurs du phénomène. Paper presented at the International Seminar on "Reproductive health in Africa. Contraceptive practice and family planning programmes" in Abidjan, Côte d'Ivoire.
- Attama, Sabine, Michka Seroussi, Alichina Idrissa Kourguéni, Harouna Koché and Bernard Barrère (1998). *Enquête Démographique et de Santé, Niger 1998*. Calverton, Maryland.

- Barret, D. and A. Ong Tsui (1999). Policy as symbolic statement: International response to national population policies. *Social Forces* (Chapel Hill), vol. 78, no. 1 (Sept.), pp. 213-233.
- Bongaarts, John (1982). The fertility-inhibiting effects of the intermediate fertility variables. *Studies in Family Planning* (New York), vol. 13, No. 6/7 (June/July), pp. 179-189.
- Bongaarts, J. and S.C.Watkins (1996). Social Interactions and Contemporary Fertility Transitions. *Population and Development Review*, 22(4): 639-682.
- Cochrane, S.H., F.T. Sai, and J. Nassim (1990). The development of population and family planning policies. In George T.F. Ascadi and others (eds.), *Population Growth and Reproduction in Sub-Saharan Africa*. Washington, D.C.: World Bank. Pp. 217-233.
- Desgrées du Lou, A., P. Msellati, I. Viho and C. Wellfens-Ekra (1999). L'évolution du recours à l'avortement provoqué à Abidjan depuis 10 ans : une cause de la récente baisse de la fécondité ? *Population* (Paris), vol. 54, No. 3, pp. 427-446.
- Guillaume, Agnès (2000). Abortion in Africa: a birth control method and a public health issue. *The CEPED News* (Paris), No. 8 (July/December), pp. 1-4.
- Institut National de Statistique et de la Démographie and Macro International Inc. (2000). *Enquête Démographique et de Santé, Burkina Faso 1998-1999*. Calverton, Maryland.
- Isaacs, S.L. and A. Irvin (1991). *Population Policy: A Manual for Policymakers and Planners* (2nd Edition). New York: The Development Law and Policy Program, Center for Population and Family Health, Columbia University; and The Futures Group.
- Ouagadji, Bandoumal, Kostelngar Nodjimadji, Joël Nodjimbatem Ngoniri, Ningam Ngakoutou, Keumaye Ignégongba, Joël S. Tokindang, Oumdagou Kouo, Bernard Barrère and Monique Barrère. 1998. *Enquête Démographique et de Santé, Tchad 1996-1997*. Calverton, Maryland.
- Patrick, S. (1998). The Check Is in the Mail: Improving the Delivery and Coordination of Post-Conflict Assistance. Working Paper. New York: Center on International Cooperation—New York University.
- Richey, L. (1999). Family planning and the politics of population in Tanzania: International to local discourse. *The Journal of Modern African Studies* (Cambridge), vol. 37, no. 3 (Sept.), pp. 457-487.
- United Nations (1987). *Family Building by Fate or Design*. ST/ESA/SER.R/74
- _____ (1995). Women's Education and Fertility Behaviour. Sales No. E.95.XIII.23.
- _____ (1996). Child Survival, Health and Family Planning Programmes and Fertility. Sales No. E.96.XIII.9.
- _____ (1997). Family-building and Family Planning Evaluation. Sales No. E.98.XIII.3.
- _____ (2001). Results of the Eighth United Nations Inquiry Among Governments on Population and Development. Sales No. E.01.XIII.2.
- _____ (forthcoming). *World Population Monitoring 2002*.
- Zeitlin, J., R. Govidaraj, and L.C. Chen (1994). Financing reproductive and sexual health services. In Gita Sen, Andrienne Germain, and L.C. Chen (eds.), *Population Policies Reconsidered: Health, Empowerment, and Rights*. Boston, Massachusetts: Harvard School of Public Health. Pp. 235-248.

Table 1. Total fertility rate and population size in high-fertility countries^a

Country	Most recent observed period fertility				United Nations estimates and projections (medium variant)						
	Source of data		Reference period	TFR	TFR			Population (thousand)			
	Type ^b	Year			1995-2000	2005-2010	2020-2025	2000	2010	2025	
Eastern Africa											
Burundi	S	1987	1983 - 1987	7.1	6.8	6.6	5.2	6,356	8,662	12,390	
Comoros	S	1996	1992 - 1996	5.1	5.4	4.5	3.2	706	939	1,327	
Djibouti	C	1990	1990 - 1990	6.0	6.1	5.5	4.4	632	679	801	
Eritrea	S	1995	1993 - 1995	6.1	5.7	4.9	3.6	3,659	5,097	7,063	
Ethiopia	S	1990	1990 - 1990	7.7	6.8	6.5	5.1	62,908	79,853	113,418	
Madagascar	S	1997	1993 - 1997	6.0	6.1	5.3	4.0	15,970	21,096	30,759	
Malawi	S	1992	1990 - 1992	6.7	6.8	5.9	4.7	11,308	14,024	19,544	
Mozambique	S	1997	1993 - 1997	5.6	6.3	5.4	4.1	18,292	21,649	28,012	
Rwanda	S	2000	1998 - 2000	5.8	6.2	5.3	4.0	7,609	9,425	12,883	
Somalia	S	1980	1980 - 1980	7.3	7.3	7.0	5.6	8,778	13,065	21,192	
Uganda	S	1995	1991 - 1995	6.9	7.1	6.9	5.4	23,300	32,588	53,765	
United Republic of Tanzania	S	1996	1994 - 1996	5.6	5.5	4.6	3.2	35,119	44,062	60,395	
Zambia	S	1996	1992 - 1996	6.1	6.1	5.3	4.1	10,421	12,989	19,026	
Middle Africa											
Angola	7.2	7.0	5.6	13,134	17,765	28,213
Cameroon	S	1998	1994 - 1998	5.2	5.1	4.3	3.1	14,876	18,347	23,986	
Central African Republic	S	1994	1992 - 1994	5.1	5.3	4.6	3.4	3,717	4,430	5,886	
Chad	S	1993	1989 - 1993	5.6	6.7	6.4	4.9	7,885	10,689	16,383	
Congo	6.3	6.1	4.7	3,018	4,084	6,284
Dem. Rep. of the Congo	C	1984	1984 - 1984	6.7	6.7	6.4	4.9	50,948	71,272	114,876	
Equatorial Guinea	5.9	5.7	4.2	457	605	889
Southern Africa											
Namibia	S	1992	1988 - 1992	5.4	5.3	4.4	3.2	1,757	2,097	2,776	
Western Africa											
Benin	S	1996	1992 - 1996	6.3	6.1	5.3	4.0	6,272	8,278	11,992	
Burkina Faso	S	1992	1988 - 1992	6.5	6.9	6.7	5.2	11,535	15,764	25,227	
Côte d'Ivoire	S	1999	1994 - 1998	5.2	5.1	4.2	2.8	16,013	19,625	25,024	
Gambia	S	1990	1986 - 1990	5.9	5.2	4.4	3.1	1,303	1,626	2,077	
Guinea	S	1999	1995 - 1999	5.5	6.3	5.4	4.1	8,154	9,996	14,120	
Guinea-Bissau	6.0	5.8	4.3	1,199	1,531	2,170
Liberia	6.8	6.6	5.2	2,913	4,682	7,638
Mali	S	1996	1994 - 1996	7.0	7.0	6.9	5.4	11,351	15,234	23,461	
Mauritania	S	1991	1988 - 1991	5.0	6.0	5.8	4.3	2,665	3,577	5,351	
Niger	S	1998	1994 - 1998	7.5	8.0	7.8	6.3	10,832	15,550	25,725	
Nigeria	S	1999	1995 - 1999	5.1	5.9	4.9	3.4	113,862	146,935	202,957	
Senegal	S	1997	1993 - 1997	5.7	5.6	4.6	3.3	9,421	12,051	16,511	
Sierra Leone	6.5	6.3	4.8	4,405	6,283	9,052
Togo	S	1998	1994 - 1998	5.2	5.8	4.9	3.6	4,527	5,826	8,219	

Table 1. Total fertility rate and population size in high-fertility countries^a

Country	Most recent observed period fertility				United Nations estimates and projections (medium variant)					
	Source of data		Reference period	TFR	TFR			Population (thousand)		
	Type ^b	Year			1995-2000	2005-2010	2020-2025	2000	2010	2025
South-central Asia										
Afghanistan	S	1973	1972 - 1973	8.2	6.9	6.7	5.2	21,765	31,308	45,193
Bhutan	S	1994	1994 - 1994	5.6	5.5	4.7	3.5	2,085	2,707	3,843
Maldives	C	1990	1990 - 1990	6.4	5.8	4.9	3.6	291	393	580
Pakistan	S	1991	1987 - 1990	5.4	5.5	4.6	3.2	141,256	181,385	250,981
South-eastern Asia										
Lao People's Dem. Republic	S	1994	1990 - 1994	6.4	5.3	4.3	2.8	5,279	6,611	8,721
Western Asia										
Iraq	S	1989	1988 - 1989	5.2	5.3	4.3	2.8	22,946	29,917	40,298
Occupied Palestinian Terr.	V	1992	1992 - 1992	8.4	6.0	5.2	4.0	3,191	4,525	7,145
Oman	S	1989	1987 - 1989	7.9	5.9	5.1	3.9	2,538	3,515	5,411
Saudi Arabia	S	1996	1994 - 1996	5.7	6.2	5.0	3.6	20,346	27,588	40,473
Yemen	S	1997	1995 - 1997	6.5	7.6	7.4	5.9	18,349	27,359	48,206
Melanesia										
Solomon Islands	S	1986	1984 - 1986	6.1	5.6	5.0	3.8	447	619	943

Note: ^a countries with TFR greater than or equal to 5 children per woman in 1995-2000: ^b C census; S survey; V civil registration

Highlighted in **bold** characters are countries where fertility transition has not yet begun

Sources: United Nations Population Division

Table 2. Estimated and projected TFR and projected population growth, by current fertility level

<i>Group of countries by fertility level in 1995-2000</i>	<i>Total fertility rate</i>		<i>Population growth index, 2000-2025 (2000=100)</i>
	<i>1995-2000</i>	<i>2020-2025 (medium)</i>	
	<i>Average</i>	<i>Average</i>	<i>Average</i>
Countries with TFR higher than 5	6.2	4.2	193
Countries with TFR lower than 5 but higher than 2.1	3.4	2.3	169
Countries with TFR at or below 2.1	1.6	1.6	99

Source: United Nations Population Division. *World Population Prospects: The 2000 Revision*

Table 3. Correlation of TFR in the late 1990s^a with selected indicators

<i>Indicator</i>	<i>Single regressions</i>		
	<i>Number of countries</i>	<i>R²</i>	<i>Correlation coefficient</i>
Under 5 mortality rate, 1995-2000	121	0.62	0.79
Female gross enrolment ratio in primary and secondary education combined, early 1990s	117	0.67	-0.82
Percentage of population living in urban areas, 2000	121	0.27	-0.52
Percentage of population living on less of one dollar (adjusted for PPP) a day, 1990s	60	0.43	0.65
Gross national income per capita (current US dollars), 1999	98	0.25	-0.50
Human development index, 1998	112	0.69	-0.83

Note: ^a most recent data in the multiple regression and United Nations estimates for 1995-2000 in single regressions

^b R²=0.79 for 57 countries

Sources: UNDP, UNESCO, United Nations Population Division, The World Bank

Table 4. Median age at first marriage^a, percentage ever married and median age at first sexual intercourse, women aged 15-49

<i>Region and country</i>	<i>Year</i>	<i>Median age at first marriage</i>		<i>Percentage ever married</i>		<i>Median age at first intercourse</i>	
		<i>20-49</i>	<i>25-49</i>	<i>15-49</i>	<i>45-49</i>	<i>20-49</i>	<i>25-49</i>
Eastern Africa							
Burundi	1987	..	19.5	9.0	98.8	..	..
Comoros	1996	19.2	18.5	11.5	100.0	18.8	18.3
Djibouti	..	..	..	..	..	..	..
Eritrea	1995	16.9	16.7	37.6	98.1	16.9	16.8
Ethiopia	2000	16.4	16.0	30.0	99.9	16.4	16.0
Madagascar	1997	18.6	18.5	33.7	98.7	16.9	16.9
Malawi	1992	17.7	..	41.2	100.0	..	..
Mozambique	1997	17.2	..	47.1	97.1	16.0	..
Rwanda	1992	..	20.0	9.8	99.3	19.9	19.7
Somalia	..	..	..	..	..	..	..
Uganda	1995	17.5	17.4	49.8	98.6	16.1	16.0
United Republic of Tanzania	1999	18.4	18.1	27.2	99.2	16.7	16.6
Zambia	1996	18.0	17.7	27.3	99.3	16.4	16.4
Middle Africa							
Angola	1970	..	..	35.7	95.4	..	..
Cameroon	1998	17.7	17.4	35.8	98.5	..	15.8
Central African Republic	1994/95	..	..	42.3	98.1	..	..
Chad	1996/97	..	15.8	48.6	99.9	15.6	15.5
Congo	1984	..	..	55.5	93.2	..	..
Dem. Rep. of the Congo	1984	..	..	74.2	96.0	..	..
Equatorial Guinea	1983	..	..	26.3	93.4	..	..
Gabon	1993	..	..	15.9	90.6	..	..
Southern Africa							
Namibia	1992	..	24.8	7.7	88.1	18.9	19.1
Western Africa							
Benin	1996	18.5	18.4	29.1	99.7	17.3	17.3
Burkina Faso	1998/99	..	17.6	34.8	99.8	..	17.5
Côte d'Ivoire	1994	..	18.1	27.7	99.3	15.8	15.8
Gambia	1990	..	..	43.6	100.0	..	..
Guinea	1999	16.5	16.4	46.1	100.0	16.0	16.0
Guinea-Bissau	..	..	..	..	..	..	..
Liberia	1984	..	..	35.7	96.9	..	..
Mali	1995/96	16.0	16.0	49.7	99.8	..	15.8
Mauritania	1988	..	..	36.0	96.4	..	..
Niger	1998	15.2	15.1	61.9	99.8	15.1	..
Nigeria	1999	18.3	17.9	27.5	97.8	17.9	17.8
Senegal	1997	18.0	17.4	29.0	98.3	17.5	17.1
Sierra Leone	1992	..	..	5.8	96.7	..	..
Togo	1998	19.1	18.8	19.9	99.7	17.3	17.3

Table 4. Median age at first marriage^a, percentage ever married and median age at first sexual intercourse, women aged 15-49

<i>Region and country</i>	<i>Year</i>	<i>Median age at first marriage</i>		<i>Percentage ever married</i>		<i>Median age at first intercourse</i>	
		<i>20-49</i>	<i>25-49</i>	<i>15-49</i>	<i>45-49</i>	<i>20-49</i>	<i>25-49</i>
South-central Asia							
Afghanistan	1979	..	..	53.7	99.0	..	..
Bhutan	..	..	..	..	..	..	..
Maldives	1990	..	..	36.5	99.5	..	..
Pakistan	1991	..	..	21.9	98.0	..	..
South-eastern Asia							
Lao People's Dem. Republic	1995	..	..	19.7	96.3	..	..
Western Asia							
Iraq	1987	..	..	27.9	96.1	..	..
Occupied Palestinian Terr.	1997	..	..	24.2	92.4	..	..
Oman	1995	..	..	15.5	99.5	..	..
Saudi Arabia	1996	..	..	7.4	98.5	..	..
Yemen	1997	16.5	16.0	..	99.2	..	..
Melanesia							
Solomon Islands	1986	..	..	..	..	..	..

Sources: United Nations Population Division Databases on Marriage, Demographic and Health Survey Country Reports and Gulf Family Health Survey Country Reports.

NOTES: Two dots (..) mean that the data are not available.

^a Marriage here refers to recognised marital unions and consensual unions.

Table 5. Trends in singulage mean age at marriage^a (SMAM) among women

<i>Region and country</i>	<i>Earlier</i>		Later	
	<i>period</i>	<i>SMAM</i>	<i>period</i>	<i>SMAM</i>
Eastern Africa				
Burundi	1979	20.8	1990	22.5
Comoros	1980	19.8	1996	23.6
Djibouti	..	..	..	..
Eritrea	..	..	1995	19.6
Ethiopia	1984	17.1	1994	20.5
Madagascar	1975	20.3	1997	20.6
Malawi	1982	18.3	1992	18.7
Mozambique	1980	17.8	1997	18.7
Rwanda	1978	21.0	1996	23.3
Somalia	..	..	..	..
Uganda	1969	17.7	1991	19.4
United Republic of Tanzania	1988	20.5	1996	20.5
Zambia	1980	19.4	1996	20.3
Middle Africa				
Angola	1960	17.9	1970	19.4
Cameroon	1987	20.0	1998	20.2
Central African Republic	1988	19.1	1994	19.4
Chad	1964	16.5	1996	18.0
Congo	..	..	1984	22.6
Dem. Rep. of the Congo	..	..	1984	20.0
Equatorial Guinea	..	..	1983	21.7
Gabon	1961	17.7	1993	24.3
Southern Africa				
Namibia	1960	21.8	1992	26.4
Western Africa				
Benin	1979	17.7	1996	19.9
Burkina Faso	1985	18.4	1992	18.2
Côte d'Ivoire	1978	18.7	1994	20.9
Gambia	..	..	..	..
Guinea	..	..	1992	18.8
Guinea-Bissau	..	..	..	..
Liberia	1974	19.3	1986	20.2
Mali	1976	18.1	1995	18.4
Mauritania	1977	19.5	1988	20.5
Niger	1988	16.6	1998	17.6
Nigeria	1991	20.3	1999	21.3
Senegal	1976	19.4	1997	21.5
Sierra Leone	..	..	1992	19.8
Togo	1988	20.3	1998	21.3

Table 5. Trends in singulage mean age at marriage^a (SMAM) among women

<i>Region and country</i>	<i>Earlier</i>		Later	
	<i>period</i>	<i>SMAM</i>	<i>period</i>	<i>SMAM</i>
South-central Asia				
Afghanistan	1972	18.1	1979	17.8
Bhutan	..	..	1990.0	20.5
Maldives	1977	17.5	1990	19.1
Pakistan	1981	20.3	1998	21.3
South-eastern Asia				
Lao People's Dem. Republic	..	..	1995	21.2
Western Asia				
Iraq	1977	20.8	1987	22.3
Occupied Palestinian Terr.	1967	21.9	1997	21.7
Oman	1993	20.7	1995	22.0
Saudi Arabia	1987	21.7	1996	24.2
Yemen	1992	20.8	1997	20.7
Melanesia				
Solomon Islands	1976	21.1	1986	21.2

Source: United Nations Population Division Database on Marriage.

NOTES: Two dots (..) mean that the data are not available.

^a Marriage here refers to recognised marital unions and consensual unions.

Table 6. Median durations of postpartum insusceptibility and breastfeeding

<i>Region and country</i>	<i>Year</i>	<i>Median duration of postpartum insusceptibility</i>			<i>Median duration of breastfeeding</i>		
		<i>amenorrhoea</i>	<i>abstinence</i>	<i>insusceptibility</i>	<i>any BF</i>	<i>exclusive BF</i>	<i>full BF</i>
Eastern Africa							
Burundi	1987	19.1 ^a	3.5 ^a	19.9 ^a	23.8 ^a	..	..
Comoros	1996	6.5	2.4	8.2	20.1	0.4	0.7
Eritrea	1995	14.2	2.7	16.6	22.0	3.3	5.7
Ethiopia	2000	19.0	2.4	19.6	25.5	2.5	4.2
Madagascar	1997	10.9	3.5	12.0	20.7	2.2	2.9
Malawi	1992	11.9	..	..	..	..	..
Mozambique	1997	13.7	11.6	16.5	22.0	0.9	3.6
Rwanda	1992	16.6	0.6	17.1	27.9	5.4	5.5
Uganda	1995	12.6	2.2	13.4	19.5	3.0	3.5
United Republic of Tanzania	1999	12.0	4.4	14.7	20.9	1.1	2.4
Zambia	1996	11.5	4.7	14.1	20.0	0.6	2.5
Middle Africa							
Cameroon	1998	10.7	11.9	15.5	18.1	0.5	1.5
Central African Republic	1994/95	..	..	..	..	..	..
Chad	1996/97	15.5	3.6	16.6	21.4	0.4	2.6
Southern Africa							
Namibia	1992	8.3	6.0	12.8	17.3	0.5	1.7
Western Africa							
Benin	1996	13.4	15.8	18.9	22.8	0.5	0.6
Burkina Faso	1998/99	15.9	19.2	22.6	27.7	0.4	0.6
Côte d'Ivoire	1994	12.3	11.8	16.6	20.3	0.4	3.7
Guinea	1999	11.6	22.1	22.3	22.4	0.4	5.5
Liberia	1984	..	..	..	..	..	..
Mali	1995/96	13.6	2.8	14.4	21.6	0.5	6.8
Mauritania	1988	..	..	..	..	..	..
Niger	1998	15.8	2.2	16.2	20.6	0.4	2.1
Nigeria	1999	12.8	6.2	15.5	18.5	0.5	2.4
Senegal	1997	13.2	2.9	15.1	20.9	0.5	4.5
Togo	1998	14.0	13.4	17.8	24.4	0.5	1.7
Western Asia							
Oman	1995	..	..	..	19.1 ^a	..	..
Saudi Arabia	1996	..	..	..	12.5 ^a	..	..
Yemen	1997	6.1	1.7	6.4	17.8	0.5	0.9

Sources: Demographic and Health Survey Country Reports and Gulf Family Health Survey Country Reports.

NOTES: Two dots (..) mean that the data are not available.

^a Mean duration.

Table 7. Contraceptive use and need levels and desired family size

<i>Region and country</i>	<i>Year</i>	<i>Contraceptive use among in-union women</i>				<i>Desired family size among women</i>	
		<i>Prevalence</i>		<i>Unmet need</i>		<i>All</i>	<i>Married</i>
		<i>any method</i>	<i>mod. method</i>	<i>% unmet need</i>	<i>% need satisfied</i>		
Eastern Africa							
Burundi	1987	8.7	1.2	..	..	5.3	5.5
Comoros	1996	21.0	11.4	34.6	37.7	5.3	5.7
Eritrea	1995	5.9	3.1	27.5	22.4	6.0	6.6
Ethiopia	2000	8.1	6.3	35.8	18.4	5.3	5.8
Madagascar	1997	19.4	9.7	25.6	43.2	5.3	5.7
Malawi	1992	13.0	7.4	36.3	26.4	5.1	5.3
Mozambique	1997	5.6	5.1	6.7	51.9	5.9	6.2
Rwanda	1992	21.2	12.9	40.4	34.4	4.2	4.4
Uganda	1995	14.8	7.8	21.9	37.9	5.3	5.6
United Republic of Tanzania	1999	25.4	16.9	17.2	56.4	5.3	5.7
Zambia	1996	25.9	14.4	5.4	61.4	5.3	5.7
Middle Africa							
Cameroon	1998	19.3	7.1	13.0	59.7	6.0	6.5
Central African Republic	1994/95	14.8	3.3	..	..	..	..
Chad	1996/97	4.1	1.2	9.4	30.6	8.3	8.5
Dem. Rep. of the Congo	1984	7.7	2.0	..	..	..	..
Gabon	2000	32.7	11.8	..	..	..	..
Southern Africa							
Namibia	1992	28.9	26.0	23.5	55.1	5.0	5.7
Western Africa							
Benin	1996	16.4	3.4	25.7	38.9	5.5	5.8
Burkina Faso	1998/99	11.9	4.8	25.8	31.5	5.7	5.9
Côte d'Ivoire	1994	11.4	4.3	43.4	20.8	5.5	6.0
Gambia	1990	11.8	6.7	..	..	..	..
Guinea	1999	6.2	4.2	24.2	20.5	5.7	5.9
Liberia	1984	6.4	5.5	..	..	..	..
Mali	1995/96	6.7	4.5	25.7	20.7	6.6	6.8
Mauritania	1991	3.3	1.2	..	..	..	..
Niger	1998	8.2	4.6	16.6	33.0	8.2	8.5
Nigeria	1999	15.3	8.6	17.5	46.7	6.2	6.7
Senegal	1997	12.9	8.1	32.6	28.4	5.3	5.7
Togo	1998	23.5	7.0	32.3	42.1	4.5	4.9
South-central Asia							
Afghanistan	1979	1.6 ^a	1.6 ^a	..	..	..	..
Bhutan	1994	18.8 ^b	18.8 ^b	..	..	..	..
Pakistan	1991	23.9	16.9	..	..	..	..
South-eastern Asia							
			

Table 7. Contraceptive use and need levels and desired family size

<i>Region and country</i>	<i>Year</i>	<i>Contraceptive use among in-union women</i>				<i>Desired family size among women</i>	
		<i>Prevalence</i>		<i>Unmet need</i>		<i>All</i>	<i>Married</i>
		<i>any method</i>	<i>mod. method</i>	<i>% unmet need</i>	<i>% need satisfied</i>		
Lao People's Dem. Republic	1995	18.6	15.0	..	..	..	..
Western Asia							
Iraq	1987	13.7	10.4	..	..	..	..
Oman	1995	23.7	18.2	..	..	6.4	..
Saudi Arabia	1996	31.8	28.5	..	..	6.7	..
Yemen	1997	20.8	9.8	38.6	35.0	..	4.5

Sources: United Nations Population Division Databases on Contraceptive Use, Demographic and Health Survey Country Reports and Gulf Family Health Survey Country Reports.

NOTES: Two dots (..) mean that the data are not available.

^a Prevalence among ever married women.

^b Prevalence among women of all marital status.

Table 8. Government's policy to modify fertility levels

	<i>1976</i>		<i>1986</i>		<i>1992</i>	<i>1999</i>
<i>No intervention</i>	Afghanistan	Madagascar	Afghanistan	Mozambique		Afghanistan
	Benin	Malawi	Benin	Sierra Leone		Benin
	Bhutan	Maldives	Bhutan	Somalia		Central Af. Rep.
	Burkina Faso	Mali	Burkina Faso	Sudan		Chad
	Burundi	Mauritania	Cameroon	Tanzania		Dem. Rep. Congo
	Cameroon	Niger	Central Af. Rep.	Zambia		Guinea-Bissau
	Central Af. Rep.	Nigeria	Chad			Mauritania
	Chad	Rwanda	Congo			Somalia
	Comoros	Senegal	Dem. Rep. Congo			Iraq
	Congo	Sierra Leone	Ethiopia			
	Dem. Rep. Congo	Somalia	Guinea			
	Eq. Guinea	Sudan	Guinea-Bissau			
	Ethiopia	Tanzania	Liberia			
	Gambia	Togo	Madagascar			
	Guinea	Yemen	Malawi			
	Guinea-Bissau	Zambia	Maldives			
	Liberia		Mauritania			
<i>Maintain</i>	Cote Divoire		Laos		Togo	Eq. Guinea
	Iraq		Mali			Togo
	Laos		Oman			
	Mozambique		Saudi Arabia			
	Oman		Togo			
	Saudi Arabia					

Table 8. Government's policy to modify fertility levels

	<i>1976</i>	<i>1986</i>	<i>1992</i>	<i>1999</i>	
<i>Lower</i>	Pakistan Uganda	Burundi Comoros Gambia Niger Nigeria Pakistan Rwanda Senegal Uganda Yemen	Bhutan Burundi Cameroon Comoros Congo Ethiopia Gambia Guinea Liberia Madagascar Malawi Maldives	Mali Mozambique Niger Pakistan Rwanda Senegal Sierra Leone Sudan Tanzania Uganda Yemen	Bhutan Maldives Burkina Faso Mali Burundi Mozambique Niger Cambodia Nigeria Cameroon Oman Comoros Pakistan Congo Rwanda Cote Divoire Senegal Ethiopia Sierra Leone Gambia Sudan Guinea Tanzania Laos Uganda Liberia Yemen Madagascar Zambia
<i>Raise</i>	Cambodia Gabon	Cambodia Cote Divoire Eq. Guinea Gabon Iraq		Gabon Saudi Arabia	

Source: United Nations Population Division Database on Population Policy

Table 9. Government's view concerning fertility levels 1976-1998

<i>Government's view concerning present fertility levels</i>	<i>1976</i>		<i>1986</i>		<i>1992</i>		<i>1998</i>	
Satisfactory	Benin	Maldives	Angola	Maldives	Eq. Guinea		Angola	
	Bhutan	Mali	Benin	Mali	Togo		Benin	
	Burkina Faso	Mauritania	Bhutan	Mauritania			C.A.R.	
	Burundi	Mozambique	Burkina Faso	Mozambique			Chad	
	Chad	Niger	Chad	Oman			Congo, DR	
	Congo	Nigeria	Côte d'Ivoire	Saudi Arabia			Eq. Guinea	
	Côte d'Ivoire	Oman	Congo, DR	Somalia			Iraq	
	Congo, DR	Saudi Arabia	Djibouti	Sudan			Mauritania	
	Ethiopia	Somalia	Guinea-Bissau	Togo			Saudi Arabia	
	Gambia	Sudan	Lao PDR				Somalia	
	Guinea	Togo					Togo	
	Guinea-Bissau	Tanzania						
	Iraq	Yemen						
	Lao PDR	Zambia						
	Malawi							
<i>Too high</i>	Afghanistan		Afghanistan	Nigeria	Bhutan	Namibia	Afghanistan	Malawi
	Comoros		Burundi	Pakistan	Burundi	Niger	Bhutan	Maldives
	Liberia		Cameroon	Rwanda	Comoros	Pakistan	Burkina Faso	Mali
	Madagascar		C.A.R.	Senegal	Congo	Rwanda	Burundi	Mozambique
	Pakistan		Comoros	Sierra Leone	Ethiopia	Senegal	Cambodia	Namibia
	Rwanda		Ethiopia	Solomon Is.	Gambia	Sierra Leone	Cameroon	Niger
	Senegal		Gambia	Uganda	Guinea	Sudan	Comoros	Nigeria
	Sierra Leone		Guinea	Tanzania	Guinea-Bissau	Uganda	Congo	Oman
	Uganda		Liberia	Yemen	Liberia	Tanzania	Côte d'Ivoire	Pakistan
			Madagascar	Zambia	Madagascar	Yemen	Djibouti	Rwanda
			Malawi	Zimbabwe	Maldives	Zimbabwe	Eritrea	Senegal
			Niger		Mali		Ethiopia	Sierra Leone
					Mozambique		Gambia	Solomon Is.
							Guinea	Sudan
							Guinea-Bissau	Uganda
							Lao PDR	Tanzania
							Liberia	Yemen
							Madagascar	Zambia
								Zimbabwe

Table 9. Government's view concerning fertility levels 1976-1998

<i>Government's view concerning present fertility levels</i>	<i>1976</i>	<i>1986</i>	<i>1992</i>	<i>1998</i>
Too low	Cambodia Cameroon C.A.R. Eq. Guinea Gabon	Cambodia Congo Iraq Eq. Guinea Gabon		Gabon

C.A.R.=Central African Republic; Congo, DR= Democratic Republic of the Congo; Eq. Guinea= Equatorial Guinea

Source: United Nations Population Division Database on Population Policy

Table 10. Countries heavily indebted and in conflict or emerging from it

<i>Country</i>	<i>TFR</i>	<i>In conflict or emerging from it, 1988-1998</i>	<i>HIPC which have implemented SAPs</i>
Angola	7.2	+	
Benin	6.1		×
Burkina Faso	6.9		×
Burundi	6.8	+	×
Cameroon	5.1		×
Central African Republic	5.3	+	×
Chad	6.7	+	×
Comoros	5.4		×
Congo	6.3	+	×
Côte d'Ivoire	5.1		×
Dem. Rep. of the Congo	6.7	*	×
Djibouti	6.1	+	×
Equatorial Guinea	5.9		×
Eritrea	5.7	+	
Ethiopia	6.8	+	×
Gabon	5.4		
Gambia	5.2		×
Guinea	6.3		×
Guinea-Bissau	6.0	*	×
Liberia	6.8	+	×
Madagascar	6.1		×
Malawi	6.8		×
Mali	7.0	+	×
Mauritania	6.0		×
Mozambique	6.3	+	×
Namibia	5.3	+	×
Niger	8.0	+	×
Nigeria	5.9		
Rwanda	6.2	+	×
Senegal	5.6		×
Sierra Leone	6.5	*	×
Somalia	7.3	*	×
Sudan		*	×
Togo	5.8		×
Uganda	7.1	+	×
United Republic of Tanzania	5.5		×
Zambia	6.1		×
Zimbabwe	5.0		×
Afghanistan	6.9	*	
Bhutan	5.5		
Cambodia	5.3	*	×
Iraq	5.3	+	
Lao People's Dem. Republic	5.3		×

Table 10. Countries heavily indebted and in conflict or emerging from it

<i>Country</i>	<i>TFR</i>	<i>In conflict or emerging from it, 1988-1998</i>	<i>HIPC which have implemented SAPs</i>
Maldives	5.8		
Occupied Palestinian Terr.	6.0	*	
Oman	5.9		
Pakistan	5.5		×
Saudi Arabia	6.2		
Solomon Islands	5.6		
Yemen	7.6	+	×

Sources: Patrick, S. (1998). *The Check Is in the Mail: Improving the Delivery and Coordination of Post-Conflict Assistance*. Working Paper. New York: Center on International Cooperation—New York University.
International Monetary Fund

Table 11. Legal status of induced abortion, 1987-1998

Country	Legal status of induced abortion								
	Abortion prohibited without exception			Authorization requires professional consultation			Subsidized by government		
	1987	1992	1998	1987	1992	1998	1987	1992	1998
Afghanistan	No	No		Yes	Yes		No	No	...
Benin	...	No	...	...	Yes	...		No	...
Burkina Faso	No	No	No	Yes	Yes	Yes	No	No	No
Burundi	No	Yes	...	Yes	NA	...	No	NA	...
Cameroon	Yes	No	...	No	No	...	No	No	...
Central African Republic	...	No	Yes	...	No	No	...	No	No
Comoros	No	Yes	...	Yes	NA	...	Yes	NA	...
Congo	...	No	...	...	Yes	...	...	No	...
Dem. Rep. of the Congo	...	No	...	...	Yes	...	...	No	...
Djibouti	...	Yes	Yes	...	NA	No	...	NA	No
Ethiopia	...	No	No	...	Yes	Yes	...	No	No
Gambia	No	No	...	Yes	Yes	...	Yes	No	...
Guinea	...	No	No	...	No response	Yes	...	No	No
Guinea-Bissau	No	No	...	No	Yes	...	Yes	No	...
Iraq	No	...	Yes	Yes	...	Yes	No	...	No
Liberia	No	No	...	Yes	No	...	No	No	...
Madagascar	Yes	Yes	...	...	NA	...	No	NA	...
Malawi	No	No	No	Yes	Yes	Yes	No	No	Yes
Maldives	...	No	...	...	Yes	...	...	No	...
Mali	...	No	...	...	Yes	...	...	No	...
Mauritania	No	No	...	...	No	...	No	No	...
Mozambique	...	No	...	...	Yes	...	...	No	...
Namibia	...	No	No	...	Yes	Yes	...	No	No
Niger	...	Yes	No	...	NA	Yes	...	NA	No
Pakistan	No	Yes	NA	Yes	NA	Yes	No	NA	No
Rwanda	...	No	...	...	Yes	...	...	No	...
Saudi Arabia	...	...	No	...	...	Yes	...	...	No
Senegal	No	Yes	...	Yes	NA	...	No	NA	...
Sierra Leone	No	Yes	...	Yes	NA	...	No	NA	...
Somalia	Yes	...	...	No	...	...	No	...	...
Sudan	...	No	...	...	Yes	...	...	Yes	...
Togo	...	No	...	...	No	...	...	No	...
Uganda	No	No	...	Yes	Yes	...	No	No	...
United Rep. Tanzania	No	No	No	Yes	Yes	Yes	No	No	No
Zambia	No	...	No	Yes	...	Yes	Yes	...	No
Zimbabwe	No	No	...	Yes	Yes	...	No	No	...

NA= Not applicable; NS= Not specified; S=Specified

Source: United Nations Population Division Database on Population Policy

**Figure 1. Speed of decline at the incipient stage of fertility transition:
1980s and 1990s**

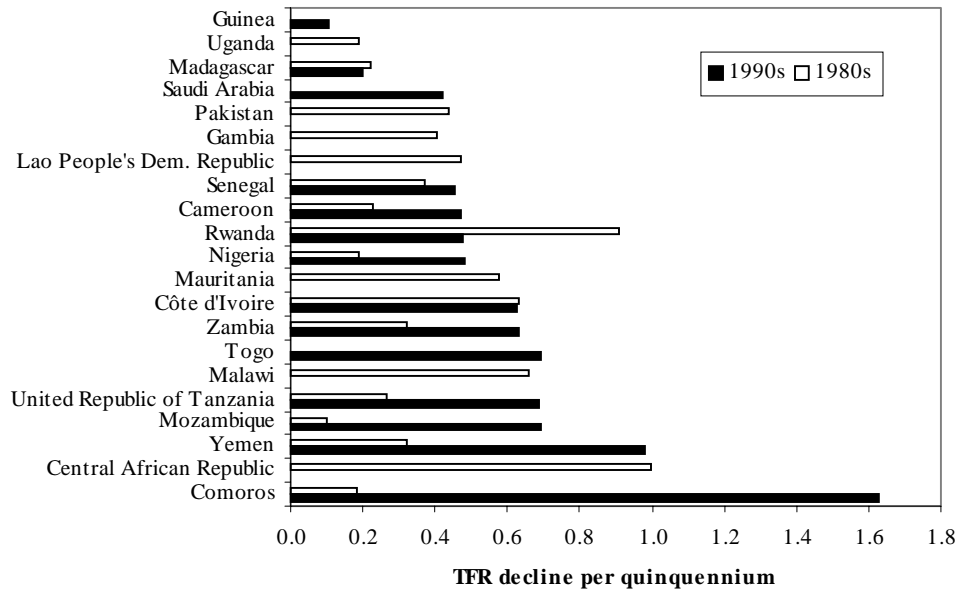
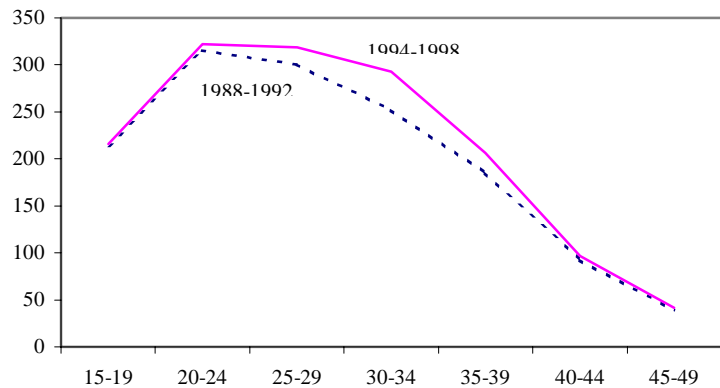
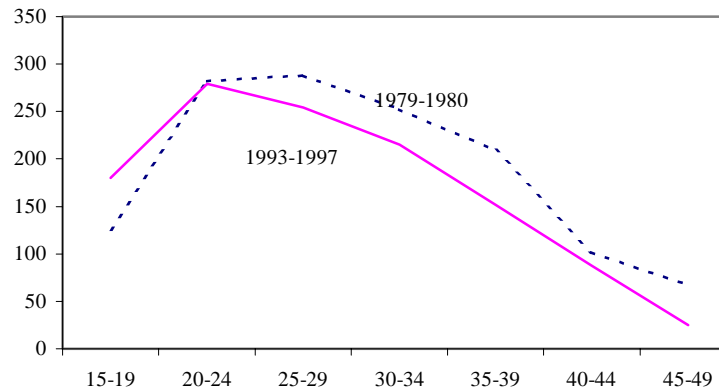


Figure 2. Trends in age-specific fertility rates in selected sub-Saharan countries

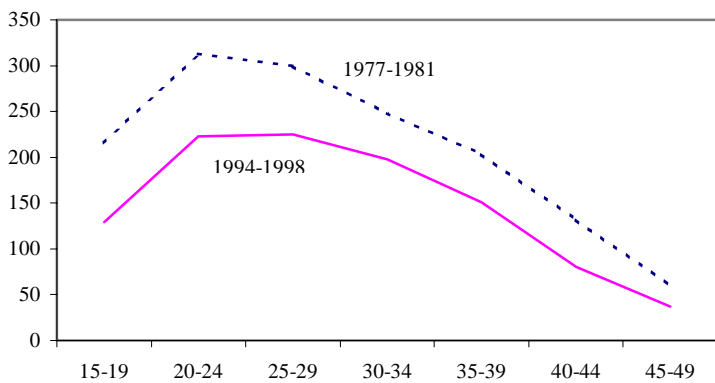
Niger



Madagascar



Côte d'Ivoire



Senegal

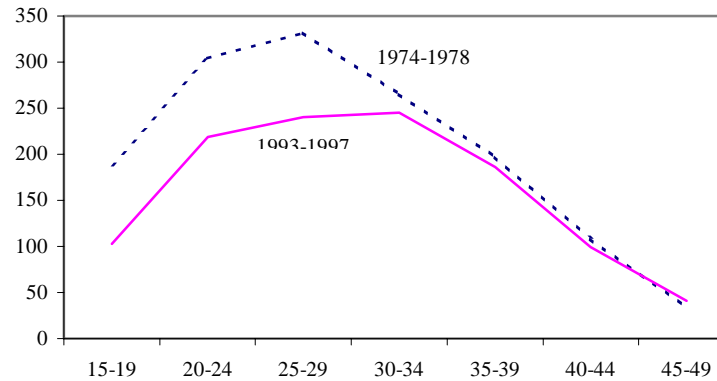
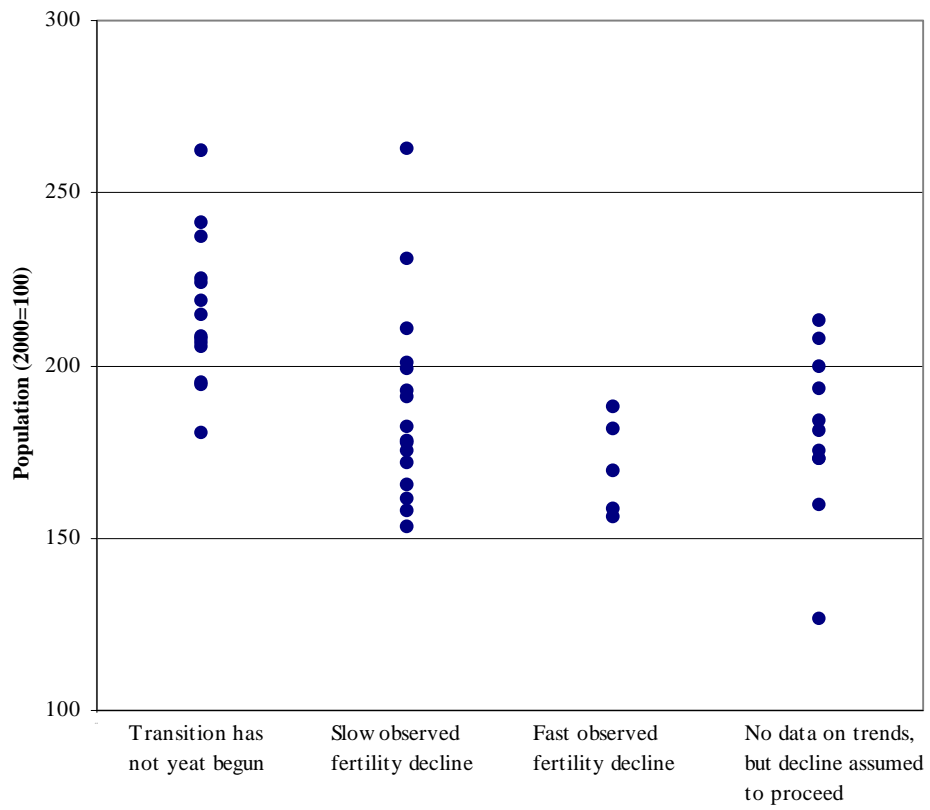
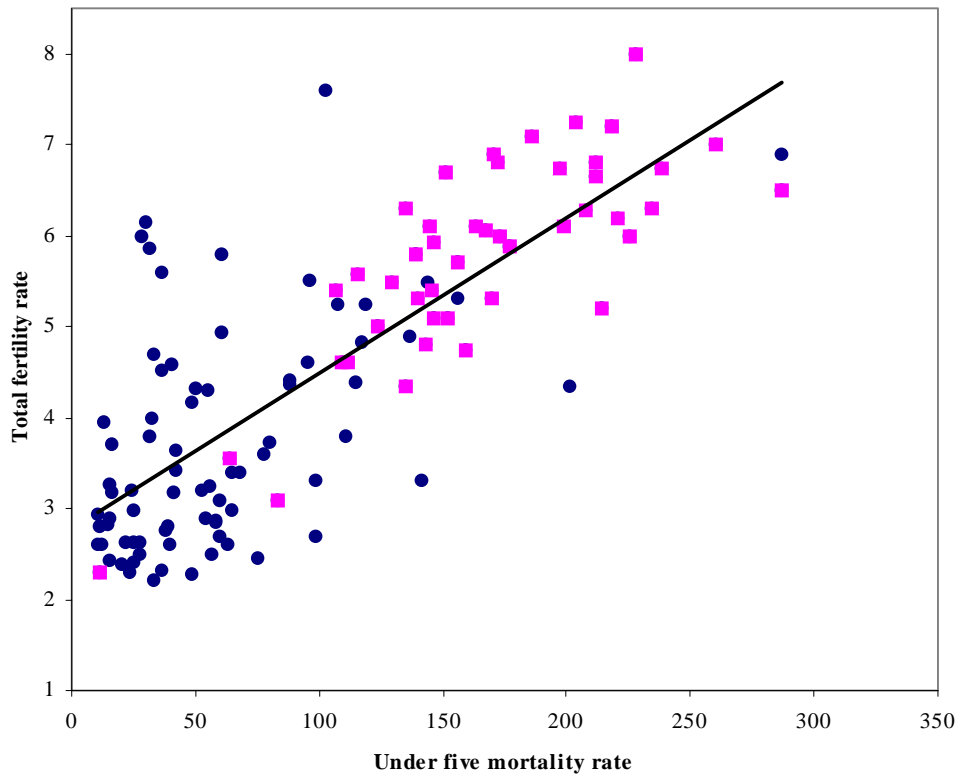


Figure 3. Projected population growth in high-fertility countries^a, 2000-2025



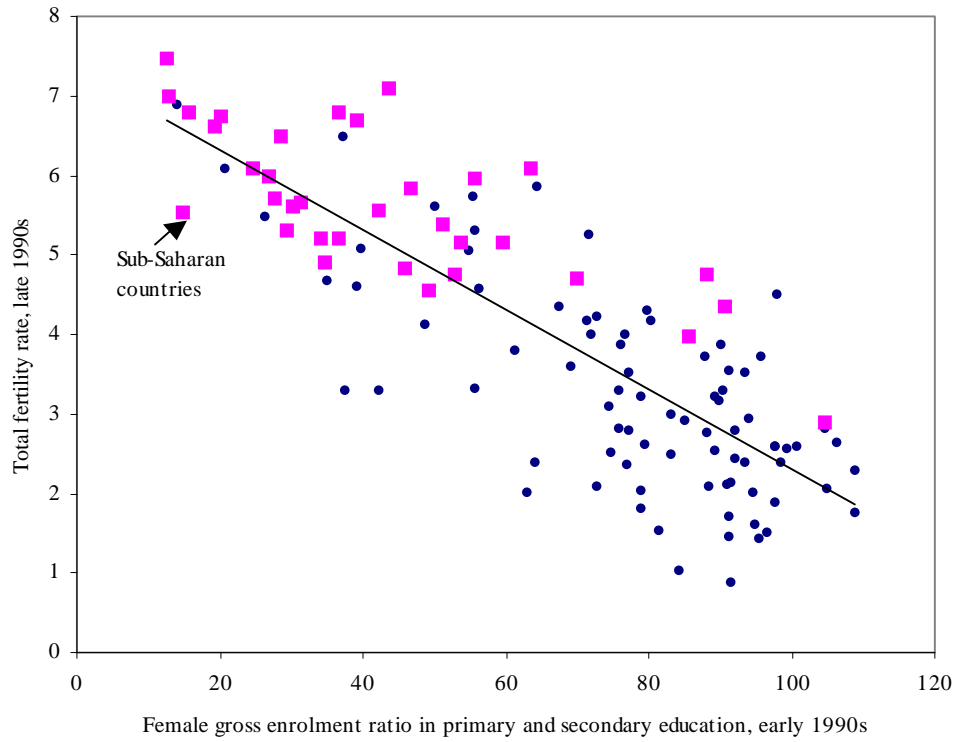
Note: A countries with TFR less than 5 children per woman in 1995-2000
 Source: United Nations Population Division

Figure 4. Relationship between under five mortality rate and total fertility rate for 121 developing countries, 1995-2000



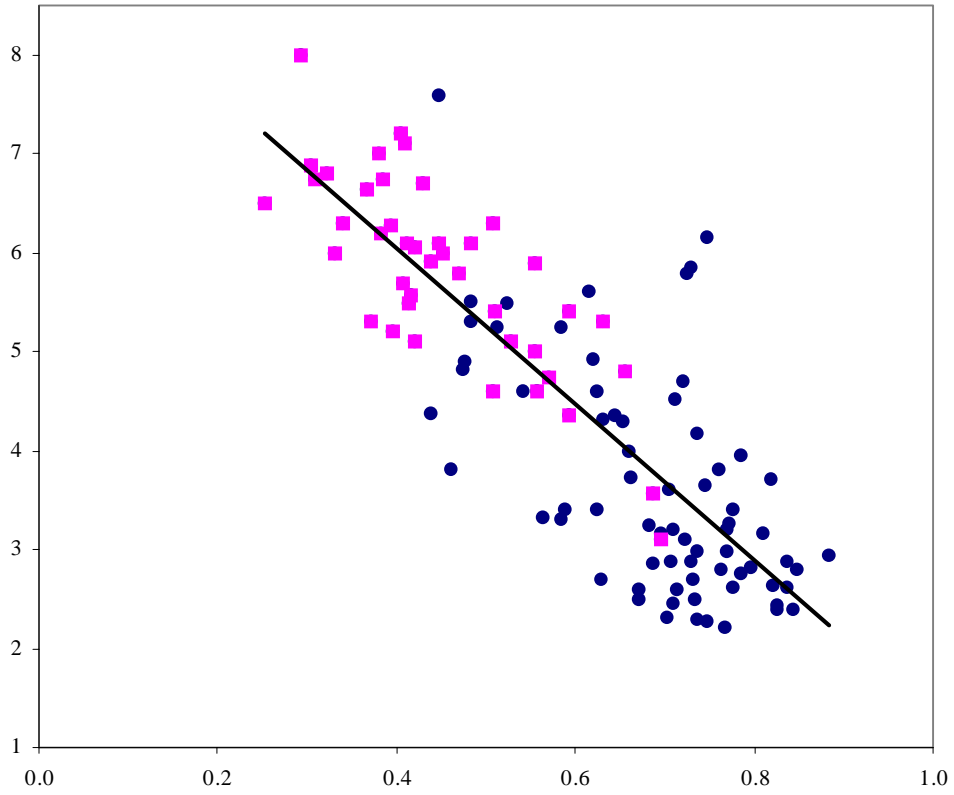
Source: United Nations (2001). World Population Prospects. The 2000 Revision

Figure 5. Relationship between educational attainment in the early 1990s and total fertility rate in 1995-2000 for 117 developing countries



Source: United Nations (forthcoming). World Population Monitoring 2002

Figure 6. Relationship between human development index (1998) and total fertility rate (1995-2000)



Source: United Nations (2001). World Population Prospects. The 2000 Revision; United Nations Development Programme. Human Development Indicators Database.