Effort and achievement in national family planning programmes

John A. Ross & W. Parker Mauldin

New data show that national family planning programmes have made impressive progress in the last 25 years. Fertility rates have been reduced dramatically, but during the current decade even greater achievements will be called for.

In the early 1950s India established the first national family planning programme, and the International Planned Parenthood Federation was set up. By then the historic fall in mortality rates since 1945, and its implications for population growth, had been widely recognized. National leaders responded chiefly by promoting contraception, but they did not do so in appreciable numbers until the mid-1960s. By that time new contraceptive technology had made large action programmes feasible, first with the intrauterine device (IUD), then with oral contraceptives at prices permitting general distribution. Subsequently, there were breakthroughs in female sterilization, condom manufacture, and abortion techniques. Over the last quarter century large-scale family planning programmes have spread to cover most of the developing world, but they vary widely in their intensity and outcome. In view of these variations, together with the large economic and social implica-

tions of rapid population growth, careful analysis of the programmes and their effects is needed.

Measuring programme effort

We have used 30 indices to measure the efforts made in these programmes (see table). Questionnaires were sent to experts on 100 developing countries with populations of over one million. Some respondents were working in the programmes themselves, some in donor agencies close to the programme, and some in universities or other organizations not associated with policy formulation or field implementation. We sought respondents of each of these types for all countries. They were asked to answer detailed questions on the programmes as the basis for a score of 0 to 4 on each of the 30 indices. The total number of points awarded, expressed as a percentage of 120, is termed the Programme Effort (PE) score.

The indices fall into four groups. The first three cover activities taking place in the areas of policy support, service provision and record-keeping. The fourth refers to the resultant overall availability of fertility control.

Mr Mauldin is a Senior Associate at The Population Council, New York, USA. Mr Ross was also a Senior Associate there when this article was prepared. He is now Senior Fellow at the Futures Group, 80 Glastonbury Boulevard, Glastonbury, CT 06033, USA.
### Indices of Programme Effort (PE)

**Policy and stage-setting activities**

* 1. Official government policy on fertility/family planning and population growth
* 2. Favourable statements by government leaders
3. Level of family planning programme leadership within government
4. Minimum legal age at marriage at least 18 years for females; extent of enforcement
* 5. Laws permitting contraceptive imports; in-country manufacture
6. Legalization of mass-media advertising of contraceptives
7. Involvement of numerous ministries and government agencies
* 8. Percentage of total programme budget from in-country sources

**Service and service-related activities**

9. Involvement of private-sector agencies
10. Use of government personnel to carry out programme accountability at all levels
11. Community-based distribution (CBD)
12. Social marketing programmes
* 13. Postpartum family planning programmes
* 14. Home visiting by family planning workers
15. Adequate administrative structure and staff
* 16. Adequate training programmes
17. Extent that staff carry out assigned tasks
* 18. Adequate logistics and transport
19. Adequate supervision
* 20. Use of mass media
21. Incentives and/or disincentives

**Record-keeping and evaluation**

* 22. Collection, reporting and feedback on clinic records
* 23. Evaluation
24. Management and use of evaluation findings to improve programme

**Availability and accessibility of fertility control methods**

** 25. Male sterilization
** 26. Female sterilization
*** 27. Oral contraceptives (or injectables, if more popular)
*** 28. Condoms (or other barrier method, if more popular)
*** 29. IUDs
* 30. Safe induced abortion

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methods. It is important to consider availability separately from actual use, as a method can easily be both widely available and little used. To be effective, programmes must score well on many of these 30 items, but it is not necessary to achieve a high score on all of them. To some extent, each programme finds its own blend of features, according to the local administrative and cultural context.

We now have the results of three investigations of programme effort, made in 1972, 1982 and 1989. In 1972 only 15 indices were used, and these were expanded in 1982 and 1989 to the current list of 30. The original 15 correspond closely to the 30 now used, as explained in the list, and provide total scores which are comparable with those recorded in 1982 and 1989 (1).

The four most remarkable findings from this series are set out below. They all point to a substantial increase in programme effort over the years.

- The mean PE score more than doubled from 1972 to 1989, rising from 20 to 44 when each country is weighted equally.
The averages are higher when each country is weighted by its number of women of reproductive age, rising from 51 to 63. This reflects the relatively high scores of large countries such as China, India, Indonesia, Mexico and Thailand.

- In 1972, half of the countries had a PE score of less than 10, but by 1989 half of them scored over 44. Thus the global rise in the average score is due to a widespread movement by countries of many types.

- The breadth of change extends to all four dimensions of effort, and, remarkably, this holds true within every geographic region. Policy and stage-setting improvements have been largest in sub-Saharan Africa, where some have claimed little change to be possible. Service and service-related activities also show a relatively large improvement in that region, though from a low base. Regarding record-keeping and evaluation, the pattern of improvement is similar: sub-Saharan Africa shifted the most, again from a low initial base. Overall, this and the North Africa/Middle East regions still rank lowest, but the fact of change itself, in regions where much pessimism has prevailed, is an encouraging sign.

- Contraceptive availability has improved more uniformly across regions than the other three dimensions of programme effort. Except in East Asia, a 13–16% rise occurs everywhere, across a low range in sub-Saharan Africa and the Middle East, and across a higher one in South Asia and Latin America. East Asia already scored high on most indicators in 1982, and had less room to improve; it began and continued with the highest score in all four dimensions of effort. Overall, sub-Saharan Africa’s score more than doubled, rising from 15 to 36; North Africa/Middle East’s rose by a third, from 40 to 54.

We can characterize national programmes which scored above 67 as strong, from 45 to 66 as medium, from 21 to 45 as weak, and below 21 as very weak or non-existent. By this criterion, 13 countries have strong programmes, principally in Asia and Latin America, 30 have moderately strong programmes, chiefly in Central and South America (with a sprinkling elsewhere), 36 have weak programmes, largely in North Africa/Middle East and sub-Saharan Africa (with a few in eastern South America), and 18 have very weak or non-existent programmes, almost all of which are in North Africa/Middle East and sub-Saharan Africa. These differences are reflected in the average regional PE scores: 66 for East Asia, 54 for both South Asia and Latin America, 36 for sub-Saharan Africa, and 33 for North Africa/Middle East.

**Outcomes**

At the same time as country programmes have grown in strength, national surveys have shown substantial increases in contraceptive use and declines in fertility. The proportion of couples using contraception has risen from about 14% in the mid-1960s to over 50% currently. The total fertility rate (the number of births per woman) for the developing world as a whole has declined in the last 30 years from 6.1 to 3.9, a decrease of one-third of the way towards zero. If the goal is taken as replacement fertility (about 2.1 births per woman), the reduction to date has gone more than halfway to it. The regional pattern for these changes is largely the same as for programme effort.
The decline in fertility has several immediate causes, including a rising age at marriage, the use of induced abortion, and, most importantly, increased contraceptive use. All immediate causes of this kind are related to broad social and economic changes which have occurred during the last 25 years, especially the following:

Life expectancy at birth has increased by almost nine years, to an average of 61 years. Adult literacy has increased from 36% to 61%, and school enrolment has increased by 59%. Female literacy still lags behind that of males, but it almost doubled from 1960 to 1985, increasing from 28% to 55%. Female school enrolment more than doubled, from 27% to 58%. Real per capita incomes have also risen in the developing world as a whole. However, large disparities within and between countries persist in all these indicators. Many countries fall well below their regional averages; much of sub-Saharan Africa in particular has made little advance, and parts of it have lost ground in the last decade.

These socioeconomic factors have their own effects on fertility rates, together with those of the family planning programmes. To explore the interrelationships involved, we used an index for the social setting of each country, selecting seven indicators that predicted fertility decline:

- adult literacy;
- primary and secondary school enrolment;
- life expectancy at birth;
- infant mortality rate;
- GNP per capita;
- proportion of males aged 15–64 years employed in non-agricultural jobs;
- proportion of total population living in cities of 100,000 or more.

Cross-classifying countries by levels of programme effort and social setting, we found that the proportion of couples using a contraceptive method rises both when programme effort improves and when the social setting improves. It rises most when favourable conditions obtain for both. Fertility responds generally in the same way, falling more where either programme effort or social setting is better, and especially where both are.

A second way of examining these relationships is by multiple regression techniques, using the ratings on each individual country. If social settings are viewed as the only determinants of contraceptive use, they explain 81% of the variation between countries in contraceptive use levels. Programme effort scores are also a good predictor: viewed as the only determinant, they explain 82% of the variation in contraceptive use. If social setting and programme effort variables are combined, they explain 89% of the variation. These results are consistent with what we know, namely that the effects of social setting and programme effort run in the same direction, that countries ranking high on one tend to rank high on the other, and that countries with both an advanced social setting and a strong family planning programme register the fastest fertility declines. Thus, countries can always add to the positive effect of social setting by establishing a strong family planning programme. In short, countries experience reduced fertility as they modernize, and organized programmes can add significantly to that trend.
Options available now

In the mid-1960s family planning programmes were few in number and simple in approach. They were seen as too selective in the methods they offered and too weak on sterilization. They were criticized for offering services principally in established health clinics in cities, although some early programmes did place staff in rural areas. They made little or no use of the mass media to tell the public about family planning.

The reality now is quite different. Sterilization protects more couples in the developing world than any other method. The simplicity of outpatient female sterilization through the minilap and laparoscopic methods, and of vasectomy, has made sterilization broadly feasible and acceptable. It is adopted at rather low rates annually, but it has gradually accumulated to protect nearly one-fourth of all couples of reproductive age in the developing world.

The technology of birth control used in mass programmes has been transformed. Improved IUDs and pills have been prominent in this development, as well as injectables, the improved condom, and suction abortion. Each of these has played an important role which did not exist 25 years ago. While many programmes offer only some of the methods that exist, the net result has been a profound strengthening of the technology available and the use made of it.

At least 11 national programmes now include induced abortion or menstrual regulation, generally for contraceptive backup. These programmes are often subject to budgetary or other factors that limit true access, but they include China and India, as well as several other countries in Asia, two in the Middle East and one in Latin America. In several countries of the Middle East and Africa parts of the health sector provide abortion or menstrual regulation services on a limited scale, and some parts of the private sector are active in providing medically safe abortion. Pervasive legal barriers persist in many other countries, however, and drive thousands of women to septic abortions with consequent trauma and mortality. WHO estimates that roughly one-fourth of all maternal deaths are abortion-related (2).

Unmarried women (and men) are now included in numerous programmes. Our recent inquiry on developing countries shows few programmes imposing marital status restrictions (3), except for female sterilization. Only 8 of 41 programmes in Asia and Latin America specify marriage or spousal consent for the IUD, pill, or condom, while 24 do so for female sterilization. Marital status is loosely defined in many cultures, and being single is not necessarily an impediment to contraceptive use. In Nigeria a survey in 1986 showed the proportion using a contraceptive method was actually higher among single women. National surveys in 12 Latin American countries show an average increase of 11% in the number of contraceptive users when unmarried women are included, and in 13 African surveys the increase averages 44%; the question has not been asked in Asian surveys (except in the Philippines). Organized programmes serve many of these unmarried users.

Mass media have long been used as part of many programmes, together with an expansion of services to village populations by means of outlying depots, home distribution, local mothers’ clubs, mobile services, and other channels. These “community-based” programmes are prominent in one form or

* Population Council Databank, based largely on national surveys sponsored by the Demographic and Health Surveys Organization, plus surveys under other auspices.
another in most Asian and many Latin American countries.

There is a gap between actual and preferred family sizes. A recent review of some 48 national surveys conducted from the mid-1970s through the late 1980s documents the presence of unwanted births (4): on average 26% of fertility in developing countries other than China was admitted to have been unwanted. This testifies to a strong demand for contraceptive assistance. It has led to a key principle of programme strategy, which is to help already interested couples to modify their contraceptive behaviour, in the expectation that broader attitudinal change will follow. Even in the late 1960s it was argued that meeting the existing demand for contraception would create new behavioural norms within society, and thus lead to increased demand. In fact, all programmes have supported behavioural change through contraceptive provision, and some have focused on normative changes as well.

**Prospects for the coming decades**

Notwithstanding the progress that family planning programmes have made, they will be hard pressed to satisfy the needs to come. The 26% of fertility that is unwanted can only be reduced by a very substantial increase in the use of reliable contraceptive methods. Meanwhile, not only is the number of children desired still falling in much of the developing world, but the base of married couples is continuously growing, thus greatly adding to the already unmet demand for services. During the present decade the number of married women aged 15–44 years will rise by 28%, i.e., by 212 million. Even assuming some growth in contraceptive supply through the private sector, public programmes will encounter a growing pool of couples in need.

We have prepared estimates for the numbers of contraceptive users that correspond to United Nations projections of fertility decline to the year 2000, and find that the number of users would need to increase by nearly half: by 28% just to match the growth in numbers of couples, and by another 21% to raise the proportion using a method, so as to reduce the fertility rate itself. If the United Nations projections are right, those are the implications for contraceptive use.

The costs of servicing contraceptive users will rise, not only because of these increases and inflation, but also because the easiest gains have already been made. Numerous countries, including China with one-fourth of the developing world’s population, have already reached near-ceiling levels of contraceptive use. Not even in the West does the proportion of couples using a method rise much above 75% or 80%; the remainder are pregnant, trying for a child, already sterile, not sexually active, or opposed to contraception. In addition to Brazil and China, a number of countries such as Colombia, the Republic of Korea and Thailand are in the 65–75% range and will not rise much further.

Therefore, increases in contraceptive use in the developing world must now come from countries where conditions are less favourable. Separating all developing countries into those above and below the 60% level of contraceptive use, we find that those below it must increase their numbers of users by nearly 75% during this decade if the United Nations fertility projections are likely to be met. These countries include especially difficult cases like Ethiopia, Nigeria, Pakistan.
and Zaire, as well as some of intermediate difficulty such as Bangladesh and India.

Even with substantial increases in the numbers of contraceptive users, there is a long way to go before population growth can cease. No family planning programme has stopped or reversed growth; the strongest ones have only attenuated it. The age structure of the present population means that, even with the two-child family, births will exceed deaths for two or three generations to come, and the world’s population will grow by well over half (58%), adding another 3100 million people for a minimum total of 8300 million. To this must be added the increment due to the gradual character of the fertility decline.

However, on the positive side, programmes have grown more in number, coverage, scope and strength than could have been foreseen a quarter of a century ago. Fertility has fallen half of the way to replacement level and is still falling, and both social settings and programmes can be expected to continue to improve.

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References


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**Family planning counselling**

The purpose of family planning counselling is to help the client to make an informed, voluntary, and well-considered decision regarding fertility and contraception. The counsellor ensures that the client is informed about all available methods of contraception and helps her apply this knowledge to her circumstances. Counselling is particularly important for sterilization because the method involves surgery and is intended to be permanent. It is a critical checkpoint between the client’s decision to seek sterilization and the succeeding steps that lead to surgery. …

Counselling involves two-way communication, with both the counsellor and the client spending time listening and talking. The counsellor should be objective, showing no bias for or against female sterilization or any other family planning method. Whenever it is possible, the client’s partner should also receive counselling. However, the partner’s consent should not be a prerequisite for receiving services unless it is a legal requirement.

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*Female sterilization: a guide to provision of services.*