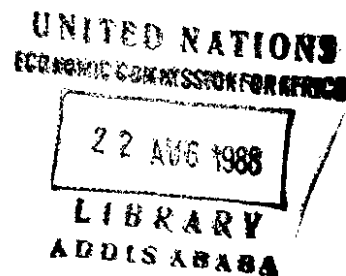


**SOME ASPECTS OF FAMILY PLANNING
PROGRAMMES AND FERTILITY IN
SELECTED ECA MEMBER STATES a/**

**Planning and Policies Section
Population Division
Economic Commission for Africa**



a/ This study is a revised version of a report prepared for ECA by Professor P.O. Olusanya (consultant) on "The demographic, health, economic and social impact of family planning in selected African countries", ECA/PD/1285/9, March 1985. Due to technical reasons this revised version has not been officially edited.

FOREWORD

Against the background of the current economic crisis in the ECA member States, the main population problem identified as worsening the situation is the rapid growth rate of the regional population - from less than 2.5 percent before the mid-1970s to about 3.1 percent as at mid-1985, implying a doubling potential of the regional population in about 23 years.

Due to this rapid growth rate, there has been a significant increase in the proportion of the regional total income that is consumed; this constraints the growth of domestic savings needed to finance fixed capital formation. It also forces the population at the grass root to operate the land more intensively. In the absence of a technological breakthrough that can raise output per unit of land and man hour, this further aggravates the deteriorating food situation in the region. The large number of people that cannot be absorbed in the modern sector are either forced into unproductive service occupations or back into the traditional sector with its already low productivity and wage levels.

However, upto the mid-1970s, few African governments viewed this rapid population growth rate as a problem to be solved by government action. This situation has changed today. Both during the Second African Population Conference at Arusha and the International Conference on Population at Mexico city, African governments contended that population growth rates and desired economic growth and social development goals should be compatible. They reviewed the progress achieved in implementing the World Population Plan of Action and identified future actions to be taken in terms of managing the regional population. These actions grouped under 9 activity areas constitute the 93 recommendations of the Kilimanjaro Programme of Action (KPA) on population.

The message that runs through these recommendations for containing the economic crisis and the identified population problems in the region is that the challenge for the future of the region is the recognition by the Lagos Plan of Action and the Final Act of Lagos that the future growth and stability of African countries hinge on making a renewed and carefully guided structural thrust to maintain internal and external equilibrium, which can be effected by taking appropriate steps to effect a drastic decline in the growth rate of the regional population and to boost the agricultural/manufacturing sectors of African economies.

One of the 9 activity areas of the KPA relates to fertility and family planning. The KPA suggests that African Governments should motivate and educate their populations to recognize that (i) a substantial decline in infant and childhood mortality is a prerequisite for fertility decline; and, (ii) family planning and child spacing have stabilizing effects on the family's well-being.

This ninth issue of the African Population Studies Series prepared by the Planning and Policies Section of the Population Division in ECA Secretariat is focussed on the potential rôle of family planning programmes in terms of reducing the high fertility levels (the main cause of the rapid population

growth rate) in the member States. The aim of the study is to provide some guidelines to the member States seeking to adopt family planning programmes in the future in a bid to reduce their population growth rates.

It is my pleasure to recommend this edition of the African Population Studies Series to researchers, planners and policy-makers in the ECA member States.

Adebayo Adedeji
United Nations Under Secretary General
and
Executive Secretary
United Nations Economic Commission for Africa

Explanatory notes

The following symbols have been used in the tables throughout the report:

Three dots (...) indicate that data are not available or are not separately reported.

A dash (-) indicates that the amount is nil or negligible.

A blank in a table indicates that the item is not applicable.

A full stop (.) is used to indicate decimals.

Use of a hyphen (-) between dates representing years, e.g. 1971-1973, signifies the full period involved, including the beginning and end years.

Details and percentages in tables do not necessarily add to totals, because of rounding.

ABBREVIATIONS

ASFR	Age-specific fertility rate
CBD	Community-based distribution
CBP	Clinic-based programme
CEB	Children ever born
CPS	Contraceptive prevalence survey
CSM	Contraceptive social marketing
EFS	Egyptian fertility survey
ECA	Economic Commission for Africa
FPAK	Family planning Association of Kenya
IPPF	International Planned Parenthood Federation
IUD	Intra-uterine device
KAP	Knowledge, attitude and practice of family planning
KFS	Kenya Fertility Survey
LFS	Lesotho Fertility Survey
LFPA	Lesotho Family Planning Association
MCH/FP	Maternal Child Health and Family Planning
PDP	Population and development programme
SMAM	Singulate mean age of marriage
TFR	Total fertility rate
UNECA	United Nations Economic Commission for Africa
WFS	World fertility survey

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INTRODUCTION

1. Rapid population growth has become an increasingly important concern to governments in the ECA member States. The estimated regional population growth rate was 3.1 per cent per annum for the 1980-85 quinquennium. Among the major factors identified as accounting for this rapid population growth are high fertility and moderate declines in mortality, particularly infant mortality. The high fertility is the result of a broad mix of economic, social and cultural factors including early age at marriage; diminishing practice of prolonged breastfeeding; limited use of modern contraception; the relative low status of women; and, the relative lack of clear population policies in many of the states.

2. The challenge posed by this rapid population growth to the ECA member States is compounded by the low rates of economic growth which the region has been experiencing since the 1970s. Beyond the economic concerns, there is mounting evidence that the health of both mothers and children is adversely affected by the short birth intervals associated with the high fertility levels 1/.

3. Data on population size and growth rates for the 10 most populated and the 10 least populated ECA member States are presented in Table 1. The 10 most populated states together accounted for over 60 per cent of the total population in the 50 ECA member States and about 7 per cent of the total world population estimate as at 1985; and, will remain so by the year 2000. The increases in the populations of four of these states during the 15 year period (1985-2000) are particularly noteworthy with Kenya leading (87.1 per cent) followed by United Republic of Tanzania, (73.9 per cent); Nigeria (70.1 per cent); and, Uganda (69.7 per cent). In contrast, excepting Swaziland, the corresponding increases in the other 9 least populated countries will range from 23.6 percent in Mauritius to 56.5 per cent in Comoros. There is thus a need for policies and strategies to contain the situation. With the increased recognition of the economic and health advantages of slower population growth in these states, the number amongst them adopting population policies aimed at reducing population growth rates has increased.

4. Population policies comprise any legislative measures, administrative programmes or other governmental actions intended to alter or modify existing population trends in the interest of national survival or welfare 2/. Usually a distinction is made between explicit and implicit policies. An explicit policy is a statement or document by a national government announcing its intention or plan to affect the country's population growth, its distribution and/or composition. In contrast, an implicit policy is a law, regulation or other directive which, although not necessarily issued for the purpose of affecting population growth, distribution or composition, has the effect of doing so 3/.

1/ Rhinehart, W.K. and Moore, S.H., "Healthier mothers and children through family planning", Population Reports Series J, No.27 (Baltimore: John Hopkins University Press, 1984). See also Mauldin, W.P. and Berelson, B., "Cross-cultural review of the effectiveness of family planning programmes", IUSSP Conference Proceedings (Mexico, 1977), Vol.3, pp. 163-185.

2/ Eldridge, H.T., "Population policies", in International Encyclopaedia of the Social Sciences (Free Press, 1968) pp. 331-338. For other definitions, see Organzki, K. and Organzki, A., Population and World Power (Knoff, 1961); Driver E., World Population Policy: An annotated Bibliography (Lexington, 1972); Bourgeons-Pichat, J., "France", in Population Policy in developed countries (Ed. B. Berelson), (McGrawhill, 1974).

3/ Isaacs, S.L. et al, Population policy: a manual for policy-makers and planners (Columbia University, 1985).

Table 1 : Population estimates for selected ECA member States, 1985 and 2000

10 most Populated States	1985 Population (000s)	2000 Population (000s)	Population Increase 1985-2000	
			Number (000s)	Per cent
Nigeria	95,198 (1)	161,930 (1)	66,732 (1)	70.1 (3)
Egypt	46,909 (2)	63,941 (3)	17,032 (5)	36.3 (9)
Ethiopia	43,557 (3)	66,507 (2)	22,950 (2)	52.7 (8)
Zaire	29,938 (4)	47,581 (4)	17,643 (4)	58.9 (5)
U.R. Tanzania	22,499 (5)	39,129 (5)	16,630 (6)	73.9 (2)
Morocco	21,941 (6)	29,512 (9)	7,571 (10)	34.5 (10)
Algeria	21,718 (7)	33,444 (7)	11,726 (7)	54.0 (6)
Sudan	21,550 (8)	32,926 (8)	11,376 (8)	52.8 (7)
Kenya	20,600 (9)	38,534 (6)	17,934 (3)	87.1 (1)
Uganda	15,477 (10)	26,262 (10)	10,785 (9)	69.7 (4)
Sub-total	339,387	539,766	200,379	59.0
ECA total	520,485	821,479	300,994	57.8
World total	4,836,645	6,121,813	1,285,168	26.6
% Sub-total of ECA total	65.2	65.7	-	-
% ECA total of World total	10.8	13.4	-	-
10 Least populated States				
Mauritius	1,050 (41)	1,298 (41)	248 (5)	23.6 (1)
Guinea Bissau	889 (42)	1,229 (42)	340 (2)	38.2 (8)
Swaziland	650 (43)	1,048 (43)	398 (1)	61.2 (2)
Gambia	643 (44)	898 (44)	255 (3)	39.7 (6)
Comoros	444 (45)	695 (45)	251 (4)	56.5 (3)
Eq. Guinea	392 (46)	559 (46)	167 (7)	42.6 (9)
Djibouti	361 (47)	549 (47)	188 (6)	52.1 (4)

Table 1 (Contd.) Population estimates for selected ECA member States, 1985 and 2000

10 least Populated States	1985 Population (000s)	2000 Population (000s)	Population Increase, 1985-2000	
			Number (000s)	Per cent
Cape Verde	326 (48)	470 (48)	144 (8)	44.2 (5)
Sao Tome and Principe	102 (49)	142 (49)	40 (9)	39.2 (7)
Seychelles	65 (50)	84 (50)	19 (10)	29.2 (10)
Sub-total	4,979	6,972	2,050	52.5
% Sub-total of ECA total	1.0	0.9	-	-

N.B. The numbers in brackets represent ranks.

Source: United Nations : World Population Prospects: Estimates and projections as assessed in 1984 (United Nations: New York, 1986). For Djibouti, Sao Tome and Principe and Seychelles, See UNECA: Demographic and related socio-economic data sheets for ECA member States (UNECA: Addis Ababa, 1986).

5. Regardless of whether a population policy is explicit or implicit, the government document on it usually includes reasons behind its issuance; objectives and goals based on its rationale; targets set relative to the objectives and goals; programme measures in pursuance of the target; implementation, monitoring and evaluation of the programmes; and, institutional arrangements for its implementation. In effect, the process through which a population policy is accepted at the political level and exerts an impact on the development process in a country can be viewed as comprising the three elements of formulation (i.e. the articulation of overall national population and development goals); planning (i.e. the elaboration of strategies and measures for incorporation of population into programme formulation and resource allocation activities); and, policy implementation (i.e. the translation of policy into action through programmes and projects).

6. Among the common programmes adopted in pursuance of population policy objectives are the provision of fertility regulation services and information; the furnishing of population, family life, and/or sex education and information; improving the status of women; improving health and nutritional status; providing incentives and disincentives; improving research and evaluation; carrying out specific legal reforms; and, implementing policies to affect internal and/or international migration. Because fertility and family planning are often given great attention, population policy is sometimes confused with fertility policy or family planning policy. It is pertinent to note that population policy is generally considered as broader than this and includes considerations of migration, population redistribution and urbanization, mortality as well as fertility.

7. Among the policy instruments advocated by governments seeking to reduce high fertility rates (the main cause of rapid population growth rates) are: delayed marriage, prolonged breastfeeding, abortion, lengthy periods of abstinence following the birth of a child and contraception. By far, the use of contraception within a family planning programme is the most popular method adopted by couples seeking to limit and to determine the spacing of their children ^{4/}. By family planning programme is meant organised efforts to provide birth control information and services on a voluntary basis to a target population, with a view to lowering fertility and/or improving health ^{5/}. Family planning is not a new phenomenon; it has been practiced privately by individuals and couples in one form or another through the ages. It is only in recent times and especially in developing societies that government intervention in the form of family planning programmes has increased.

8. The components of a family planning programme vary greatly over time and space. Typically they include an informational component; service points at hospitals, health centers, special clinics, mobile clinics, offices of private physicians, and occasionally delivery of supplies by para-professional and lay personnel; a variety of contraceptive methods usually distributed free or at subsidized prices; facilities for male and female sterilization; and, sometimes provision of induced abortion ^{6/}. In theory at least, family planning activities

^{4/} Mauldin, W.P. and Segal, S.J., Prevalence of contraceptive use in developing countries (The Rockefeller Foundation: New York, 1986).

^{5/} Mauldin, W.P. and Johnson-Acsadi G., "Development and growth of family planning programmes" in C. Chandrasekaran and A.I. Hermalin (eds), Measuring the Effect of Family Planning Programmes on Fertility, (OECD: Paris, 1972), IUSSP, p. 1.

^{6/} Ibid.,

in the private sector can also form part of the overall programme. The structure and management of a family planning program have a marked effect on the quality of service as well as on the range of birth control methods available.

9. To date available evidence is inconclusive regarding the potential of family planning programmes either alone or in combination with socio-economic development in terms of effecting fertility declines ^{7/}. Accordingly the objectives of this study are to (i) assess the effect(s) of family planning programme on fertility levels, patterns and trends in some selected ECA member States; (ii) identify the socio-economic and attitudinal factors which act as antecedent conditions impinging on the clientele of national family planning programmes in these states and, to the extent that this is possible, the manner in which these conditions have affected the levels of fertility and/or maternal and child health; and, (iii) identify factors (demographic, socio-cultural and economic) which have facilitated, delayed or hindered the attainment of national family planning programme objectives and targets in these states. Based on these, an attempt will be made at a theoretical construction of the pattern of demographic change implied by the data for the study cases with the aim of providing some guidelines to other ECA member States seeking to adopt family planning programmes in the future in a bid to reduce their population growth rates.

10. For the purpose of the study, four ECA member States (Kenya, Egypt, Mauritius and Lesotho) have been selected. These four have national family planning programmes aimed at reducing the levels of fertility as well as improving maternal and child health. They also have a wealth of demographic data available from past population censuses and surveys; in the cases of Egypt and Mauritius, a fairly reliable vital registration system has existed for many decades. Kenya and Lesotho participated in the World Fertility Survey (WFS). The Kenyan Fertility Survey (KFS) was undertaken in 1977-78 while the Lesotho Fertility Survey (LFS) was in 1977. A Rural Fertility Survey was conducted in Egypt (EFS) in 1980.

11. Following these introductory remarks, Chapter I outlines the family planning programmes in the four selected ECA member States and in Chapter II, attempt is made to indicate the impact of such policies and programmes on fertility. Chapter III then reviews the fertility levels, patterns and trends in the states in relation to these policies and programmes. Chapter IV summarizes the main findings and recommendations of the study.

^{7/} Omran, A.R., and El-Khorazaty, M.N., "The development level needed to enhance family planning programmes", Paper presented at the annual meeting of the Population Association of America, St. Louis, April, 21-23, 1977.

CHAPTER ONE
FAMILY PLANNING PROGRAMMES

12. Typically, family planning services are provided to clients who come voluntarily to clinics for counselling, medical examinations and contraceptives. Alternatively, family planning services may be integrated into a health clinic—usually a maternal and child health clinic ^{8/}. These clinic-based services are a necessary part of any overall family planning strategy. They provide the medical personnel needed to deliver certain kinds of contraceptives; deal with any medical complications; and, encourage clients who come in for other services to adopt family planning. However, clinic-based programmes (CBP) may not lead to a rapid increase in the number of contraceptive users because the strategy is relatively expensive given the required infrastructure. It also expects clients to come voluntarily to the clinics.

13. The real problem arises in areas where family planning may be a new idea in which case special outreach efforts may be required for potential clients. In this regard, family planning services offered through community-based distribution (CBD) programmes expand the reach of clinic-based services by taking services directly to the people where they live. These CBD programmes distribute contraceptives at convenient locations in the community through local agents (e.g. health workers, traditional midwives). Research worldwide has shown that CBD constitutes one of the successful ways of increasing contraceptive prevalence. However, it requires an effective logistic system so that clients who adopt family planning can get supplies whenever they need them.

14. Besides CBP and CBD, the contraceptive social marketing (CSM) programme is designated to promote, distribute and sell contraceptive products through existing sales outlets at relatively low subsidized prices. Its success depends on sound marketing principles of advertising, packaging, market identification and logistics. Where they are appropriate, CSM programmes may constitute effective and inexpensive supplements to CBP and CBD components of existing family planning strategies.

15. Other family planning strategies **comprise** training of traditional midwives to include family planning among their services; family planning services offered by workers' unions and employers; and, post partum programmes based in hospitals or maternity clinics which provide family planning counselling and contraceptives to women who have just delivered a child.

(i) Some findings from selected national family planning surveys

16. Results from national surveys conducted in 10 ECA member States (Benin, Cameroon, Ghana, Côte d'Ivoire, Kenya, Lesotho, Mauritania, Nigeria, Senegal and Sudan) between 1977 and 1982 as part of the World Fertility Survey programme

^{8/} "Family planning services: options for Africa", A background document for the All-Africa Parliamentary Conference on Population and Development, 12-16 May, 1986 (Harare, Zimbabwe).

showed that, on average, only 5 per cent of the currently married women aged 15-49 in these countries were using contraceptive methods ^{9/}. These findings, which demonstrate some of the limitations of family planning programmes in many ECA member States in terms of educating and motivating women to use contraception, are sobering.

17. More encouraging are the results of surveys carried out in Botswana, Egypt, Kenya, Mauritius, Morocco and Zimbabwe in 1984 as part of the international Contraceptive Prevalence Survey (CPS) programme which demonstrated that family planning programmes in Africa can be very successful in these tasks. The CPS data show that substantial proportions of currently married women aged 15-49 in all six countries are currently practising family planning. The highest contraceptive prevalence rate was observed for Mauritius, where 56 per cent of married women reported that they were using some family planning method. This was followed by Zimbabwe, 40%; Egypt, 30%; Botswana, 29%; Morocco, 27%; and Kenya, 17%. Kenya's prevalence rate, while lower than that of the other five member States, represents a marked increase over the 7 per cent recorded in the 1977-1978 Kenya Fertility Survey ^{10/}.

18. The results of the CPSs fielded in these six member States particularly Kenya, Botswana and Zimbabwe show that active family planning programmes can be very successful in encouraging women in sub-Saharan Africa to use contraceptive methods. The findings also suggest that women in these member States are beginning to show an interest in limiting their family size and that there is in all the populations surveyed, a strong concern for spacing wanted births.

19. However, the socio-cultural milieu in which a family planning programme is established exerts subtle influences on the effectiveness of the programme which are ultimately manifested in reduced fertility. The components of this milieu are complex and interwoven. While socio-economic factors existing within a society influence attitude to, and acceptance of family planning methods, a change in attitude can be considerably accelerated if conscious and concerted efforts are made by policy-makers, and there is a seriousness of purpose and a feeling of urgency, in the implementation of programmes. The rate of change, of course, depends also on policy options and strategies adopted.

20. Three of the four ECA member States selected for the present study (i.e. Kenya, Egypt and Mauritius) were the earliest countries in the region to adopt explicit policies on population and family planning. The concern with population issues of these three countries, much earlier than others in the region, was probably due to socio-economic forces within them perceived as directly or indirectly related to population growth. The factors that motivated the policies and the strategies adopted in implementing these policies constitute the subject matter of this chapter.

^{9/} Hobcraft, J., "Survey throws new light on key policy issues", PEOPLE (1985), Vol. 12, No. 3, p.4; See also IPPF Medical Bulletin, Vol. 20, No. 6, (December 1986).

^{10/} Mauldin, W.P. and Segal, S.J., Prevalence of contraceptive use in developing countries: A chart Book (The Rockefeller Foundation: New York, 1986), Table IA.

(ii) The case of Kenya

21. Family planning advice and services had been available in Kenya through private sources since the 1950s. By 1955, voluntary family planning associations had come into existence. These were fused in 1961 into a larger body known as the Family Planning Association of Kenya (FPAK). In 1965, the Government of Kenya invited a Population Council (New York) mission to study the population situation, recommend an ideal rate of growth and advise on how to attain this target. On the basis of the mission's report, the government in 1966 announced its policy "to pursue vigorously policies designed to reduce the rate of population growth through voluntary means"^{11/}. It also announced its intention to include family planning in its development policy; the Ministry of Health was charged with the responsibility for programme implementation. A national family planning programme was launched in 1967. At the time FPAK already had 40 clinics and had provided services for about 14,000 women resident in urban areas of the country.

22. The family planning services of the government of Kenya are provided through the Ministry of Health/FP programme in out-patient clinics which by end of 1978 numbered 505 with a total of 603 field educators assigned to specific areas in the country to motivate the population to use MCH/FP facilities^{12/}. About 30 service delivery points were also established and 181 new field educators were recruited and trained. Of the 505 clinics 329 were service delivery points; 54 were operated on a weekly basis and 122 were on a monthly basis. The number of clinics operated by private organizations were 46. Local governments (e.g. The Nairobi City Council, the Municipality of Mombasa), and voluntary organizations (e.g. the FPAK and IPPF) have also been actively involved in the programme. The FPAK has been mainly concerned with motivation and education through home visits and public meetings, radio and television, seminars and press releases and lectures on sex education as well as responsible parenthood in schools and colleges.

23. Although no specific demographic targets were set by the government at the inception of the programme, the objective of the programme was "to lower infant mortality rate as much as possible as well as achieve a realistic and acceptable reduction in fertility"^{13/}. The Population Council mission recommended the introduction of 25,000 IUD in the first year to be increased to 150,000 by the end of the fourth year and additional 50,000 acceptors yearly. It was hoped that this would ensure a reduction in fertility by about 50 per cent within 10 to 15 years.

(iii) The case of Egypt

24. Egypt has been concerned with the problem of rapid population growth since 1952. By 1965, its population growth rate was 2.8 per cent. For a country with very little arable land and a low level of industrialization, this was seen by

^{11/} Abigail Krystall, J.A. Mwaniki and J.W. Owuor, "Kenya" Studies in Family Planning 6(8), 1975, pp. 286-292.

^{12/} Kenya Fertility Survey 1977-78, First Report (Central Bureau of Statistics: Nairobi, 1980), p. 127.

^{13/} Abigail Krystall et al, Op.Cit., p. 288.

the government as a source of concern. Accordingly a national family planning programme was established in 1965 by the government with the aim of reducing fertility.

25. Since the 1973 Middle East War, however, the government has had to re-examine the question of the appropriateness of the traditional family planning approach in the face of the multi-dimensional nature of the population problems facing the country including high growth rate, mal-population distribution, inadequate health and educational facilities, the low status of women, etc. 14/. This appraisal led to the adoption of an integrated approach to the population-development interrelationship. The new approach involves a reduction of the country's natural increase from 2.3 to 1.6 per cent by 1985; and population re-distribution using a new population distribution map. The later discourages rural migration to large urban centres; involves the design of physical development plans at governorate levels; and, the re-construction of Egyptian villages and rural development 15/.

26. The programme was also to promote community participation and involvement in planning, implementation and supervision of activities that have population objectives for the country. Furthermore, it was to see to the upgrading of the skills of local government councils as well as local leaders so they might be able to set population targets, design and implement projects and mobilise community participation through voluntary organizations such as youth clubs. Every government agency is involved with the implementation of the population policy. A population and development programme (PDP) was established in twelve regions or governorates to co-ordinate and support the activities of the local family planning agencies as well as the population responsibilities specified by the local government laws. The PDP has a built-in-period evaluation scheme in which a KAP-type questionnaire is administered. As a result of this strategy, community leaders of 70.0 per cent of all Egyptian villages are currently aware of national and local population problems which they discuss monthly in committees 16/.

27. About 80.0 per cent of the 3,500 or more family planning services in the country are delivered through government hospitals and clinics. The remaining 20.0 per cent is provided by the clinics of the Family Planning Association and other private bodies. A large proportion of family planning outlets are located in rural areas. The Family of the Future Project in Egypt sells condoms, oral contraceptives, foaming tablets and IUDs through pharmacies, at subsidized prices, in rural and urban areas. A major feature of the project is the extensive use of the media including television advertising, bill-boards, signs on buses and colourful displays in shops. Family of the Future, which was initiated in 1979, generated 1.8 million couple-years of protection in its first five years of operation thus demonstrating that commercial distribution of contraceptives offer effective avenue for reaching Egyptian couples 17/.

14/ Sarah, F.L., "Strategies and schemes in family health, welfare and family planning", Second African population Conference Papers, Vol.2 (UNECA: Addis Ababa, 1984), pp. 90-99.

15/ Ibid., p. 95.

16/ Ibid., p. 96.

17/ "Family planning services: options for Africa", Op.Cit.,

(iv) The case of Mauritius

28. At the end of World War II, the standard of living of Mauritians was seen to be declining as a result of rapid growth rate of the country's population. Life became increasingly insecure; the problem of destitution and the money spent in rehabilitation activities increased sharply. Accordingly, in 1953-54 the committee on population (i) voted overwhelmingly in favour of the adoption of a policy of planned parenthood; and, (ii) urged that information on family planning be made available in government hospitals and health centres to those who wanted such advice and that family planning clinics be established under the sponsorship of government 18/.

29. No action was, however, taken until October 1957 when a family planning association, a voluntary organization advocating the use of foaming tablets as a method of contraception, was inaugurated in a village north of the island 19/. Branches of this association were later formed and film shows and lectures were used as a means of educating people and arousing their interest in family planning. In 1959, the association became an associate member of the IPPF. In 1960, government waived import duty on all contraceptives and gave the Association land for its headquarters and central clinic. In the same year, a bill was introduced in the Legislative Assembly proposing a national family planning scheme. Catholic members were asked by the church to oppose the bill and so it was withdrawn. After the Titmuss and Meade Reports, it was agreed in principle that government should consider the possibility of popularizing the rhythm method.

30. Accordingly, in 1962, the government invited an expatriate catholic doctor to initiate the method 20/. The Catholic church was prompt in acting and formed an organization known as the Actional Familiale. It invited two doctors from France to organise its campaign against any other but the rhythm method. The sugar magnates provided transport and other facilities for their employees to enable them attend lectures on the subject. According to the report, however, many who adopted the rhythm method did so to please their employers and many combined it with more effective methods.

31. On 10 November 1964, the Legislative Assembly finally agreed to approve all methods of contraception; to make government hospitals and child welfare centres available for family planning advice; and, to seek external financial assistance. It was hoped that by 1972, the average family size would be about three children. This target seemed ambitious but there were a number of factors in the country's favour. Its size is small. It was and is still covered by a network of roads which made communication very easy and rapid. In every town and important village, there is a cinema theatre 21/. The country is highly monetised in spite of the importance of agriculture in the economy.

32. Government policy on population has become more directed towards reducing fertility rates to levels comparable to those of highly industrialized countries by the mid-1980s. The specific objectives are to change the age structure of the

18/ Report of the Committee on Population, 1953-54, pp. 43-44.

19/ Benedict, B., Indians in a Plural Society: A Report on Mauritius, U.K.

20/ Titmuss, R.M., and Brian Abel-Smith, Social policies and population growth in Mauritius, (Methuen and Co.: London, 1961).

21/ Roy, J.N., Mauritius in Transition, (Allahabad: India, 1960), p. 10.

population and lower the dependency ratio; give those who are born a better chance in life; and slow down the growth rate of the labour force so that the strategy of development can be changed from one of more jobs to one of better jobs. Specific targets have been set. The gross reproduction rate of 1.92 in 1969 was expected to be reduced to 1.2 between 1980 and 1985 ^{22/}. The birth rate was expected to decline from 25.2 per 1000 population in 1972-77 to 23.8 in 1977-82 and 23.1 in 1982-87 ^{23/}. In addition, government encourages emigration and has reduced family allowances for families with three or more children.

33. Family planning was integrated with maternal and child health services of the Ministry of Health in 1972. The national Family Planning Committee co-ordinates ministries and organizations concerned with population activities. Other responsibilities include advising the Minister of Health on matters related to population; reviewing the impact of the national family planning programme; and, advising on new targets and objectives as necessary. In 1975, the services were expanded from 64 clinics and 29 supply centres to 80 clinics, 45 supply centres and one mobile unit in order to provide full coverage to the population. Advice, contraceptives and other supplies are issued free of charge in the government programme. Much money was also allocated to family planning in the recurrent budget of the Ministry of Health for 1975-76 (about 8.6 per cent of the whole country's budget).

34. The success of the family planning activities is evident from the fact that in 1973, the net increase in the number of clients was 10,000 (13,000 new acceptors and 3,000 drop-outs). During the first six months of 1974, the net increase was 3,000. In 1975, the figure of new acceptors stood at 13,530. The cumulative total number of acceptors for that year was 63,920 which was a phenomenal rise from 221 in 1963 ^{24/}. In terms of contraceptive prevalence, the proportion of currently married women aged 15-44 years using contraception in the country has increased from 25 per cent in 1971 to 46 per cent in 1975; 48 per cent in 1978; 51 per cent in 1981; and, 56 per cent in 1984 ^{25/}. Regarding the actual methods used, the proportion of users of IUD increased from 2 to 3 between 1971 and 1984; with the pill from 14 to 30 per cent; and, high failure rate methods, from 9 to 20 per cent.

(v) The case of Lesotho

35. In spite of its adverse economic situation, Lesotho, until 1974, did not favour family planning activities. Private family planning associations were banned about six times between 1968 and 1972 ^{26/}. In 1973, the Lesotho Family Planning Association (LFPA) began to train nurses and fieldworkers in family planning and by 1974; it was operating 8 clinics. Following the recommendations of a national population commission in 1974 when the government adopted a position to support family planning in the context of maternal and child health,

^{22/} Stamper, B.M., Population and Planning in Developing Nations: A review of Sixty Development Plans for the 1970s, (The Population Council: New York, 1977), p. 94.

^{23/} Bhageerutty, J., "Mauritius", in Walter B. Watson (ed) Family Planning in the Developing World, A Review of Programmes, (The Population Council: New York, 1977), p. 94.

^{24/} UNECA, Analysis of Fertility Data from the 1972 Population Census of Mauritius, (Population Division: Addis Ababa, 1979, p. 39.

^{25/} Mauldin, W.P., and Segal, S.J., (1986), Op.Cit.,

^{26/} Herve Gauthier, "Other Anglophone Countries", Studies in Family Planning, 6(8), 1975, p. 295.

this situation has changed. The maternal and child welfare centres built with the assistance of USAID funding has been designated a model centre and a site for training staff for rural health centres. Discussions have been held between government, IPPF and various other organizations with the aim of integrating family life education into a major agricultural development programme in an area with a population of 94,000 people. Extension workers have been trained and family life education has been included in the course for young farmers at the Agricultural Training Centre.

36. Although the government does not have a family planning programme, it allows the LFPA to operate 14 clinics and has encouraged the association to request hospitals for permission to use their premises and integrate family planning with maternal and child health services.. In the first half of 1975, about 1,500 new acceptors of family planning were recruited 27/. Based on the findings of the Lesotho Fertility Survey, it is reported that 5 per cent of the currently married women aged 15-44 years used contraception in 1977. Of these, 1 per cent use tubal ligation and pill methods respectively while 3 per cent use other methods 28/.

27/ Walter B. Watson, "A historical overview" in Walter B. Watson (ed), Family Planning in the developing World: A Review of Programmes (The Population Council: New York, 1975), p. 74.

28/ Mauldin, W.P. and Segal, S.J., (1986), op.cit.,

CHAPTER TWO
EFFECTS, PROBLEMS AND CONTRACEPTIVE
PREVALENCE OF FAMILY PLANNING

(i) The potential effects of family planning programmes on fertility

37. A brief description of the causal factors for setting up national family planning programmes in the selected countries was presented in Chapter 1 together with the strategies adopted. As noted in the Introduction, present knowledge on the potential of these programmes in terms of effecting declines in fertility is still inconclusive. This chapter first reviews the various arguments for and against the efficacy of these programmes in this context as a prelude to examining the specific problems in the selected countries.

38. Since the adoption of the first national family planning programme aimed at lowering the birth rate and hence the population growth rate in India in 1951, a lively debate has been going on concerning the potential role, present and future, of large-scale family planning programmes both in small populations able to demonstrate declining birth rates and the large populations for which declines in the birth rate are still only a hope rather than a demonstrable fact. While one school of thought has been pessimistic about the present and potential impact of these programmes on fertility, the opposing school of thought has been much more optimistic.

39. The proponents of family planning programmes maintain that the majority of high fertility groups are desirous of controlling family size and would do so if provided with the knowledge and means 29/. This optimism is predicated on several premises. First, these programmes have been universally approved at the grass root level; second, there is aroused political leadership in their implementation; third, there is accelerated professional and research activity; fourthly, a variety of sociological and psychological phenomena are promoting the rapid adoption of the programmes by the masses; fifthly, improved technology in contraception has promoted a massive adoption of the methods and has permitted their continued use; and, sixthly, the slackening progress in death control has made imperative the need to control fertility consistent with desirable population growth rate 30/.

40. The opponents maintain that simultaneous changes in the social structure and the economy are needed to effect declines in fertility. Among the specific development measures generally upheld in this regard at least at the time of the Bucharest Conference in 1974, was (and still is) improved universal education 31/. Other suggested measures include increased urbanization; reduced IMR and dependence on subsistence agriculture; and, a more egalitarian income distribution 32/. An intermediate position is that the lag between the early stages

29/ Bogue, J., "The demographic breakthrough: from projection to control", Population Index, Vol. 30, No.4, (October 1964).

30/ Ibid.,

31/ Davis, K., "Scientist debate: will family planning solve the population problem?", Report of the Victor-Bostrom Fund for the IPPF, No.10, 1963; Hauser, P.M. "Family planning and population problems - a book review article", Demography 4, Vol.4, No.1 (1967), pp. 397-414; Mauldin, W.P. et al, "A report on Bucharest", Studies in Family Planning, Vol.5, No.12 (December 1974).

32/ Birdsall, N., "Analytical approaches to the relationship of population growth and development", Population and development Review, Vol.3, Nos. 1 and 2 (March/June, 1977), pp. 63-102.

of modernization and a shift to smaller family size desires can be shortened significantly by the introduction of family planning programmes which in turn will aid the development process 33/.

41. The substantive argument of the opponents is that family planning programmes have for the most part been clinic-oriented, medically directed, aimed at the woman and based on the assumption that human reproductive behaviour is rational and parents will simply be provided with methods to enable them to have the number of children they desire 34/. Accordingly the opponents have proposed alternative "social change" approach to family planning namely that a person's attitude, values and behaviour are a function of the social milieu into which he is born, of which he is an integral element, and in which he functions. For them these must be taken into account both in research designed to understand reproductive behaviour and in programmes designed to influence it. Indeed they further suggest that if family size must be controlled, then the whole array of pertinent social and demographic variables should be studied so that their variations over time are noted and linked into chains of influence for individuals, groups, regions and countries 35/.

42. The proponents further argue that such programmes do not undertake to influence most of the determinants of human reproduction. "Since family planning is by definition private planning, it eschews any societal control over motivation. It merely furnishes the means, and among possible means, only the most respectable. In present-day developed nations, the wide-spread use of birth control has not given the governments control over the birth rate; in developing countries, birth rates are rising, not falling, and in those countries with population policies, there is no indication that the government is controlling the rate of reproduction" 36/.

43. The foregoing does not imply that the opponents are against family planning since contraception per se is a valuable technological instrument. The main point of the opponents is that such programmes should be supplemented with equal or greater investments in research and experimentation to determine the required socio-economic correlates of fertility declines. They contend that if family planning is only a first step, it should be so labelled and its connection with the next step should be carefully examined. But family planning is not a first step in current population policies because no country has taken the next step; support and encouragement of research on population policy other than family planning is negligible. Therefore this blocking of alternative thinking and

33/ Berent, J., "Fertility and Social Mobility", Population Studies, Vol.5, No.3 (March, 1952); Freedman, R., "Statement by the moderator", Proceedings of the World Population Conference, 1965, Vol. 1, Summary Report (United Nations: Belgrade, 1966).

34/ Hauser, P.M., "Family planning and population programmes", Demography, Vol. 4, No. 1, (1967), pp. 397-414.

35/ Freedman, R., "The transition from high to low fertility: challenge to demographers", Population Index, Vol. 31, No. 4 (1965), pp.417-435.

36/ Davis, K., "Population policy: will current programs succeed?", Science, 158 (1967) pp. 730-39.

experimentation makes the emphasis on family planning a major obstacle to population control. The obvious requirement is to impose restraints on the family - that is, population control policy should aim at de-emphasizing the family; a goal which can be attained in two ways: (i) by keeping present controls over illegitimate childbirth while making the most of the factors that lead people to postpone or avoid marriage, and, (ii) by instituting conditions that motivate those who do marry to keep their families small.

44. Besides demographers, economists have argued that a more adequate theory of population should integrate the population problem into economic theories of development ^{37/}. The essential element to be explained, therefore, is the incentive behind the desire to have larger or smaller families. The basic idea behind this cost and benefit theory is that motivations with respect to family size are rational; parents will want an extra child if the satisfactions to be derived from that child are greater than the costs involved. The conceptual scheme presented explains two central aspects of the problem: the rationale behind the high birth rate in the subsistence stage; the rationale for the change in motivations as economic development occurs.

45. Essentially, the cost benefit theory involves balancing the advantages derived from an additional birth against the cost of having an additional child. Three types of utility are considered: the utility derived from the child as a consumption good; as a productive agent; and, as a potential source of security either in old age or otherwise. The two types of costs considered are direct (the conventional child maintenance expenses until it is self-supporting) and indirect (the opportunities forgone by the parents owing to the existence of the child). It is the central thesis of this economic theory that in the course of economic development, changes in per capita income, survivorship, and occupational distribution occur affecting these advantages and costs. With respect to income (i) it is assumed that the consumption utility does not change significantly as per capita income increases; and, (ii) there is less need to use the child as a productive agent as income increases and the same is ipso-facto true with the advantage of security. On the costs side, both types of costs tend to increase as per capita income increases.

46. Despite these alternative suggestions, what is significant in these various controversies is not that scholars disagree on a real theory for explaining the determinants of family size limitation but that so many able demographers and economists agree that such a theory is needed and so many of them are already engaged in the necessary research. This then underlies the ongoing and continuous research in family planning, regarding the processes by which the practice of family planning diffuses throughout a community or nation, and of the forces that retard or facilitate such diffusion and adoption ^{38/}.

47. From these diverse views, the pertinent question is whether fertility reduction can be fostered in the developing states of the ECA through family planning in the absence of some of the modernization changes that accomplished fertility declines in contemporary developed nations. The threshold hypothesis

^{37/} Leibensten, H., Economic backwardness and economic growth (New York, 1965).

^{38/} Bogue, D.J., "Family planning research: an outline of the field", in Berelson, B. (ed), Family Planning and population programs (Chicago: University of Chicago Press, 1966), pp. 721-35.

contends that where fertility is initially high, it will be influenced very little, if at all, by early improvements in social and economic conditions as well as family planning service programmes. Once a certain threshold level of development is reached, family planning programmes could be successful in reducing fertility where it remains high 39/. Unfortunately, little is known about the hypothesized threshold.

48. Aside from the threshold hypothesis, an alternative view is that family planning would yield the desired effects in the context of modernization; well-designed and administered programmes would afford at least a start at family planning among some segments of the population. This other school of thought contends that what are identified as problems of population growth and structure are economic problems emanating from the character of the economy; family planning, therefore, cannot expedite development 40/. Overall, it has been noted that deliberate efforts to reduce fertility take time to produce desired effects particularly since all the suggested measures, excepting the provision of family planning services, imply a difference between what individuals and the society consider as desirable in terms of ideal family size 41/.

49. It is a fact that family planning programmes have been experimental from the onset with no guides for their organization and management and no assurance that they could accomplish the specified goals. However, with the development of these programmes, there have been periodic assessments of their nature as well as the means of evaluating them. Obviously there have been several problems relative to the assessment of the demographic impact of the programmes. These include the complexities of distinguishing direct and indirect programme effects; determining what the secular trend of fertility would have been, had the programme not been undertaken; accounting for substitution effects; and, interpreting evident changes in the fertility of acceptors 42/. Evaluation is also hindered by the lack of accurate data on fertility levels and on changes in fertility. There are also non-programme effects (i.e. declines in fertility not causally attributable to the family planning programme which may be due to a number of factors, including changing demographic, economic and social conditions and cultural practices after commencement of programme 43/.

50. The level of use of contraception together with the established effectiveness of the type of contraceptive method(s) being used can provide some indication as to the envisaged impact of a family planning programme(s) on fertility changes. From the available data on some 34 ECA member States on the level(s) of contraception being used (Table 2), it can be inferred that (excepting in 6 of these states or about 20 per cent), the level of contraceptive use is quite low in the region. For the 10 states with data on type(s) of contraception being used (Table 3), the pill appears to be the most popular method. The data

39/ United Nations: Population Bulletin, No.7 (United Nations, New York, 1963), Chap. 8.

40/ Berent, J., "Fertility and Social ~~Mobility~~", Population Studies, Vol.5, No.3 (March, 1952).

41/ Berelson, B., "National family planning programmes: where we stand" in Fertility and Family Planning, a world view (Ann Arbor: Michigan, 1969), p.369.

42/ Mauldin, W.P., and Johnson-Acsadi (1972), op.cit.,

43/ Ibid.,

Table 2: Reported proportion of married women aged 15-44 currently using contraception in selected ECA member States

ECA member States	Proportion using contraception					Reference period
Algeria	7					1977
Angola	1					1977
Benin	1	6				1977, 1980-81
Botswana	8	29				1976, 1984
Burundi	1					1977
Cameroun	3					1977
Chad	1					1977
Egypt	26, 25, 34, 30					1974-75, 1980, 1982, 1984
Ethiopia	2					1981
Gambia	1					1977
Ghana	2	4	11			1976, 1978, 1979-80
Guinea	1					1977
Guinea Bissau	1					1976
Côte d'Ivoire	3					1980-81
Kenya	7	17				1977-78, 1984
Lesotho	5					1977
Liberia	1					1977
Malawi	1					1977
Mali	1					1977
Mauritania	1	1				1977, 1981
Mauritius	25	46	48	51	56	1971, 1975, 1977, 1981, 1984
Morocco	7	20	25	27		1979, 1980, 1981-82, 1984
Niger	1					1977
Nigeria	5					1981-82
Senegal	4					1978
Sierra Leone	4					1982
Somalia	1	2				1977, 1982
Sudan	5					1978-79
U.R. Tanzania	1					1977
Tunisia	12	32	27	42		1971, 1978, 1980, 1984
Uganda	1					1982
Zaire	1					1977
Zimbabwe	5	14	40			1976, 1979, 1984

Source: Mauldin, W.P. and Segal, S.J. (1986) op.cit.; Table IA

Table 3 : Reported type of contraceptive method(s) being used in selected ECA member States

(Percentage)

ECA member States	Low failure rate methods				High failure rate methods	No method used
	Vasectomy	Tubal ligation	IUD	PILL		
Benin 1981/82				1	5	94
Botswana 1984		1	5	12	11	71
Ghana 1979/80		1		3	7	89
Kenya 1977/78		1	1	3	3	92
1984		3	3	4	8	82
Lesotho		1	-	1	3	95
Mauritius 1971			2	14	9	75
1984		3	3	30	20	44
Nigeria 1981/82				1	5	94
Senegal 1978				1	3	96
Zimbabwe 1979				11	3	86
1984		2	2	23	12	61

Source: Mauldin, W.P. and Segal, S.J. (1986) op.cit.; Table IA

suggest that the high failure rate methods are probably more commonly used. Admittedly, there is need for caution with inferences based on the scanty data in Table 2; the overall impression being that, given the relatively low level of contraceptive use in the region, the observed high fertility in the states is a logical expectation.

51. Family planning involves educating, informing and motivating prospective clients to enable them to make a rational choice of the number of children they want as well as the methods appropriate for their individual circumstances. It is reasonable to expect, therefore, that people's attitudes at least will be influenced after a period of exposure to a family planning programme of activities. Any reduction in the level of the birth rate, which essentially is what a family planning programme aims at, should be preceded by attitudinal changes; childbearing is a personal affair and its socio-cultural determinants form part of the complex process of socialisation of the individual. Given the arguments thus far in this chapter, the extent of knowledge and practice of as well as the change of attitude towards family planning in the four selected ECA member States will now be examined.

(ii) The case of Kenya

52. The Kenyan family planning programme does not cover the whole country and all women in the childbearing ages. There is an acute shortage of medical and other personnel. Very little conscious effort is made at bringing about institutional changes which will discourage large families ^{44/}. While the strategy adopted has been successful in reducing infant and child mortality, it has not succeeded in reducing fertility.

53. Indeed, the achievements of the programme have been rather modest in terms of its effectiveness in reducing the population growth rate. The 1974-78 Five-Year Family Planning Programme had an elaborate plan to achieve the target of 640,000 births and reducing the population growth rate from 3.5 per cent to 3.25 per cent; to 3.0 per cent in 1980 and to 2.8 per cent by the year 2000 with the average family size reduced to 4.7 per woman ^{45/}. However, because of the increasing demand for curative services and the shortage of trained medical manpower, these plans have not been realized. Family planning services in most clinics are given irregularly; weekly, sometimes monthly.

54. Available information indicates that between 1977-78 (the KFS) and 1984 (the CPS), the population of currently married women in Kenya that used tubal ligation and IUD increased respectively from 1 to 3 per cent; the pill, from 3 to 4 per cent; and, high failure rate methods, from 3 to 8 per cent ^{46/}. Among the total target of 640,000 new acceptors, only 270,966 (42 per cent) cases were served. Besides, both the number of first visitors and new acceptors declined by about 14 per cent between 1977 and 1978.

^{44/} Abigail Krystal et al, op.cit., p. 287.

^{45/} Ibid., p. 288.

^{46/} Mauldin and Segal (1986), op.cit.,

55. Consequently the Research and Evaluation Division of the MCH/FP programme within the Ministry of Health recommended a thorough analysis of the programme. The analysis, however, covered only knowledge and practice of the family planning programme; attitudes of the women towards family planning were not covered. Information drawn on the extent of knowledge and practice as well as the change of attitude towards family planning derived from the said analysis is used below to indicate the potential impact of the family planning programme on fertility attitudes in Kenya.

56. The analysis revealed that female knowledge of family planning is fairly evenly spread across age groups. Excepting the age group 15-19, the female population with some awareness of modern contraceptive methods ranged from 83 per cent for the women aged 45-49 to 90 per cent for women 25-29 with a mean of 84 per cent for all 7 age groups (15-19, 20-24,, 45-49). The corresponding proportions in the case of traditional methods were 5 per cent (45-49), 3 per cent (25-29) and 3 per cent for all 7 age groups. By combining both methods, the corresponding proportions were 89 per cent (45-49) 93 per cent (25-29) and 88 per cent (for all 7 age groups). On the other hand, the female proportions that ever-used contraception were generally low. For the modern methods, the mean for all the age groups was 11 per cent as against 18 per cent for the traditional methods and 29 per cent for both methods combined 47/.

57. These results indicated a poor relationship between knowledge and practice of family planning among Kenyan females around the 1970-80 decade. Indeed, overall knowledge of contraception then was much lower for the single women; 91 per cent of ever-married women had some contraceptive knowledge as against 76 per cent of the never married. The analysis further revealed that contraception was more likely to be employed in pre-marital liaisons than to control fertility once a union has been established. Furthermore, with the exception of the pill, knowledge of the modern efficient methods led less often to usage than knowledge of the traditional inefficient ones. Although this could reflect difficulties of access to modern facilities or fear of non familiar innovations, these findings have an obvious policy relevance for the family planning programme in terms of influencing Kenyan female fertility attitudes.

58. Overall, attitudes to family planning in Kenya are largely unfavourable. Desired number of children is still as large as 7.2 (Table 4) in spite of almost two decades of family planning activities; the educated and urban women, however, are gradually changing their attitudes in this regard. The evidence of change based on a comparison of KAP surveys in 1966-67 with the KFS of 1977-78 (Table 4) show a significant increase in knowledge as well as use of family planning methods both in the rural and the urban sectors of the country.

47/ Kenya Fertility Survey, 1977-78, First Report, Vol.1 (Central Bureau of Statistics: Nairobi, 1980), Chap. 7, Tables 7.2 and 7.3.

Table 4: Reported KAP findings for currently married women (15-49) in Nairobi and rural areas of Kenya, 1966-67 and 1977-78

KAP Variable	Nairobi		Rural Areas	
	1966 - 67	1977-78	1966-67	1977-78
	N=200	N=210	N=744	N=5519
(i) Percent of women who knew any contraceptive method (without probing)	49.0	59.9	53.0	47.5
(ii) Percent of women who had ever-used				
- any contraceptive method	2.0	45.5	10.3	30.8
- at least one modern method	0.7	33.7	NA	10.8
- only traditional methods	1.3	11.8	NA	20.0
(iii) Percent current users of any method			6.3	8.4
(iv) Average number of living children			3.8	3.9
(v) Desired family size			6.0	7.2
(vi) Percent doesn't want more children				16.6

Source: Thomas E. Dow, Jr. and Linda H. Werner, "Family size and family planning in Kenya: continuity and change in metropolitan and rural attitudes", Studies in Family Planning, 12 (6 and 7) 1981, p. 274.

(iii) The case of Egypt

59. Among some of the problems of the family planning programme in Egypt is the low level of performance prevailing in the health institutions due principally to the fact that the medical personnel operating the services often tend to give a low priority to family planning especially in the rural areas ^{48/}. Studies show that the Egyptian health services are underutilized ^{49/}. Consequently it is felt that acceptance rates are not as high as they should be. The Population and Family Planning Board estimates the acceptance rate among eligible women at 12-14 per cent. Although government feels concerned about the slow rate of acceptance of family planning, informational campaigns to promote the idea have to be low-key in order not to antagonise religious opinion.

60. In 1980, as part of the Egyptian population and development project, the Population and Family Planning Board carried out the Egyptian Contraceptive Prevalence Survey (ECPS) to investigate changes in fertility and family planning attitude and practice in rural Egypt ^{50/}. A total of 5,313 ever-married women aged 15-49 were interviewed. It is pertinent to note that the rural areas constitute about 64.0 per cent of the total population of Egypt and hence these findings are fairly representative of the family planning situation in the whole country. This assessment of the effects of family planning on fertility attitudes in Egypt is based on the ECPS findings.

61. As in the case of Kenya, knowledge of contraceptive methods and support for their use is widespread among ever-married rural Egyptian women aged 15-49. About 91 per cent of these women knew about at least one family planning method (90.3 per cent knew any modern method and 48.2 per cent, any traditional method) ^{51/}. The pill (89.9 per cent) and the IUD (68.5 per cent) were the two widely known family planning method in rural Egypt. Other known methods were prolonged breast-feeding (42.3 per cent), female sterilization (26.2 per cent) and abortion (25.7 per cent). Overall, 15 per cent of the women were reported as knowing only one method while 50 per cent knew at least three methods. In general, the proportion of the women who knew at least one method increased with the number of surviving children.

62. Regarding approval for family planning, the proportion of rural Egyptian women reported as approving the use of family planning increased from 35 per cent in 1972 to about 80 per cent in 1980 ^{52/}. The improvement together with the

^{48/} Sarah, F. Loza, op.cit., p. 11; Margaret Wolfson, op.cit., p. 95.

^{49/} Sarah, F. Loza, op.cit., pp. 10-11.

^{50/} A.M. Khalifa, H.A.A. Sayed, M.N. El-Khorazaty and A.A. Way, Family Planning in Rural Egypt 1980: A Report on the Results of the Egypt Contraceptive Prevalence Survey. Population and Family Planning Board, Cairo, Egypt, 1982.

^{51/} Ibid., Table 6.1, p. 85.

^{52/} Ibid., Table 6.6, p. 93.

knowledge of the family planning methods were reported as directly correlated with the age of the respondents, the number of their surviving children and their socio-economic characteristics (education, employment and occupational status).

63. With respect to the use of contraception, it was reported that the contraceptive prevalence rate was low in rural Egypt as at 1980. About 17 per cent of married rural women were using family planning; 15 per cent of these were using modern method. By far the pill was the most commonly used contraceptive method; the IUD and prolonged breastfeeding were the only methods used by significant proportions of rural women in Egypt. Overall, contraceptive use in rural Egypt (1980) was directly associated with age of the respondents, the number of surviving children, educational status and labour force participation particularly those in non-agricultural occupations.

(iv) The case of Mauritius

64. Mauritius is the most advanced of the 4 member States being studied in terms of the adoption of family planning methods. The data on live birth and rate of natural increase presented in Table 5 do give some indications of the relative impact of the family planning programme on the apparent fertility reduction in the country. From the data in Table 5 the number of live births increased drastically (by about 30 per cent) during the 1948-53 quinquennium, following the end of World War II and the resumption of normal social life. The increase was maintained through 1963-64 though with a lower momentum. By the early 1960s, the implied rate of natural increase was rather high relative to the then derived socio-economic development goals and objectives.

65. Accordingly, the family planning programme was then launched; the impact on reduction of births became noticeable. Indeed during the six year period (1966-72), the livebirths declined by about 24 per cent and the rate of natural increase by about 10 percentage points (Table 5). But with the sugar boom of 1973 the livebirths and rate of natural increase again increased up to 1979. Consequent from the family planning programme, both of these parameters have since then been declining steadily.

66. The proportion of ever married women (aged 15-49) reported as current users of family planning methods increased from 25 per cent in 1971 to 46 per cent in 1975; 48 per cent in 1977; 51 per cent in 1981; and, 56 per cent in 1984. The most popular contraceptive method used was the pill; 14 per cent of the women used the pill in 1971 and 30 per cent in 1984. The corresponding increase in the case of the second most frequently used method, the IUD, was from 2 to 3 per cent. About 3 per cent of the women were using tubal ligation by 1984 (See Tables 2 and 3).

(v) The case of Lesotho

67. The overall level of awareness of family planning methods is not high among Lesotho women. Based on the results of the Lesotho Fertility Survey (1977) about two thirds (65.4 per cent) of the 2,337 ever-married Lesotho women aged 15-49 interviewed at the LFS reported that they had heard of some method of contraception. The level of reported knowledge generally rose with the number of

Table 5 : Reported number of live-births in Mauritius 1962-1985

Year	Number of live-births	Percentage change	Rate of natural increase
1944-48	17 788	-	14.4
1949-53	22 913	+ 28.8	32.2
1954-58	23 936	+ 4.5	28.7
1959-63	25 913	+ 8.3	29.0
1964	27 528	+ 6.2	29.8
1965	26 279	- 4.5	27.1
1966	26 817	+ 2.0	26.7
1972	20 496	- 23.6	16.9
1973	18 974	- 7.4	14.9
1975	21 492	+ 13.2	17.0
1976	22 250	+ 3.5	17.8
1977	22 730	+ 2.2	17.9
1978	24 250	+ 6.7	19.9
1979	25 056	+ 3.3	20.2
1980	24 983	- 0.3	19.7
1981	23 670	- 5.3	18.4
1982	21 247	- 10.2	15.6
1983	19 948	- 6.1	14.1
1984	19 222	- 3.6	13.2
1985	18 520	- 3.7	12.1

Source : Annual Report of the Ministry of Health, Mauritius, 1982
(Nov. 1983), p. 1; Digest of Demographic Statistics, 1985
(Aug. 1986), Tables 3.1, 5.5 and 8.8.

living children and was peaked for women aged 25-34. Among these women, those with upper primary (68.6 per cent) and secondary (78.5 per cent) school education as well as those who had ever worked (75.6 per cent) were much more informed than the others. Of all family planning methods, the pill (45.5 per cent) and withdrawal (47.3 per cent) were the two most known methods; the other known methods were female sterilization (35.6 per cent), injection (32.1 per cent), condom (27.4 per cent) and IUD (21.3 per cent).

68. Regarding the practice of contraception, less than a quarter (22.8 per cent) of the respondents reported ever having used any method (modern or traditional). This reported usage peaked at ages 25-34 and increased with number of surviving children. Reported contraceptive use according to fertility preferences indicated that a majority of women who wanted no more children were non-users; of these non-users, a majority did not even intend to use contraception in the future. The proportion of intended users varied across background variables; education of wife, occupation of husband and employment status of wife were the major indicators of attitude to family planning. Based on these findings, the inference has been made that future fertility behaviour of Lesotho women will be largely uncontrolled with very little increase in the level of contraception 53/.

53/ Lesotho Fertility Survey 1977: First Report - Vol. 1 (Central Bureau of Statistics: Maseru, 1981, Chap. 8.

CHAPTER THREE
LEVELS, PATTERNS, TRENDS AND
DETERMINANTS OF FERTILITY

69. The discussion in the preceding two chapters considered some of the family planning programme efforts that might affect the actual fertility performance of women in the four member States under study. In this chapter the fertility levels, patterns and trends will be examined for these states.

(i) The case of Kenya

70. In Kenya, fertility level is very high and may in fact be rising (Table 6). Estimates of the mean number of children everborn alive per woman aged 45-49 increased from 5.9 in 1962 to 6.7 in 1969; 7.5 in 1977; and, 7.9 in 1977-78. The corresponding estimates of current fertility measured by total fertility rate were generally higher than the mean CEB being 6.8, 7.6, 8.1, and 8.0 respectively. Baring the probable incidence of recall lapse with the mean CEB for the women aged 45-49, and the fact that the TFR values are adjusted, the discrepancy between the retrospective and current fertility estimates are indicative of a rising fertility in the last 16 years (1962-1978) in Kenya. Indeed, this apparent trend is more so obvious with the results based on the 1979 census given the mean CEB and TFR estimates of 7.2 and 8.1 respectively (Table 6).

71. To compare estimates of current fertility in Table 6, the 5 sets of TFRS have been scaled so that they sum to 1.0 (See lower panel of Table 6). This elimination of differences in the level of current fertility allows differences in the age pattern to be more clearly discerned. Overall, the set of mean CEB and TFR estimates in Table 6 shows a major increase in the level of both retrospective and current fertility between 1962 and 1969 and a further rise, though less steep, between 1969 and 1979.

72. It has been observed that this apparent rising trend in fertility should not be accepted at face value as it could be a function of the reliability of the estimates, each of which is surrounded by an element of uncertainty. For instance, the 1969 census estimate was complicated by age misstatement (particularly by the younger women) as well as missing information on date of most recent birth 54/. The data in Table 7 indicate extremely high fertility levels in Kenya for the 20 years prior to the KFS in 1977-78. However, these retrospective estimates are sensitive to omissions of births and misdating of birth dates and therefore the impression of an increase in fertility up till the mid-1960s, followed by a decline is probably a reflection of errors rather than genuine trends.

73. Based on estimates by the UN family, the birth rate in Kenya has been very high since the 1950s while the death rate has been declining (Table 8).

54/ Kenya Fertility Survey, 1977-78, First Report, op.cit., Chap. 5.

Table 6: Estimates of mean CEB, ASFR and TFR for Kenya, by age, 1972-79

Age (Years)	Mean CEB					ASFR				
	1962 Census	1969 Census	1977 NDS	1977-78 KFS	1979 Census	1962 Census	1969 Census	1977 NDS	1977-78 KFS	1979 Census
15-19	0.4	0.4	0.3	0.4	0.3	.141	.132	.177	.168	.179
20-24	1.7	.19	1.8	1.8	1.9	.304	.331	.377	.342	.368
25-29	3.0	3.7	3.7	3.8	3.7	.301	.337	.386	.357	.372
30-34	4.2	5.1	5.6	5.6	5.4	.243	.294	.323	.293	.311
35-39	5.1	6.0	6.7	6.8	6.5	.197	.223	.233	.239	.266
40-44	5.6	6.4	7.3	7.6	7.0	.138	.135	.107	.145	.105
45-49	5.9	6.7	7.5	7.9	7.2	.036	.068	.014	.059	.014
All ages	3.7	4.3	4.7	4.8	4.6	6.8	7.6	8.1	8.0	8.1
						Relative ASFR				
15-19						.104	.087	.109	.105	.111
20-24						.224	.218	.233	.213	.228
25-29						.221	.222	.239	.223	.230
30-34						.179	.193	.200	.183	.193
35-39						.145	.147	.144	.149	.165
40-44						.101	.089	.066	.090	.065
45-49						.026	.045	.009	.037	.009
All ages						1.000	1.000	1.000	1.000	1.000

Sources: Kenya Fertility Survey, 1977-78, First Report Vol.1 (Central Bureau of Statistics: Nairobi, 1980), p. 85; Second African Population Conference, Vol.3 (UNECA: Addis Ababa, 1984), p. 162-163; Demographic Handbook for Africa, 1975 (UNECA: Addis Ababa, 1975), p. 73; Demographic and related socio-economic data sheets for ECA member States (UNECA: Addis Ababa, 1982); "Niveaux, tendances, facteurs de la fécondité au Cameroun, au Kenya et au Sénégal", ECA/PD/WP/1985/4 (UNECA: Addis Ababa, 1985), p.24.

Table 7: Age and period specific fertility rates for 5-year intervals of time calculated from birth history data for Egypt (1980), Kenya (1977-78), Lesotho (1977) and Mauritius (1985).

ECA member States	Age at maternity	Years Before Survey						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34
EGYPT (1980)								
		1975-79	1970-74	1965-69	1960-64	1955-59	1950-54	1945-49
EGYPT (1980)	15-19	.099	.122	.164	.197	.206	.199	.177
	20-24	.256	.268	.325	.350	.326	.367	
	25-29	.285	.281	.320	.327	.348		
	30-34	.217	.221	.251	.298			
	35-39	.131	.134	.165				
	40-44	.048	.066					
	45-49	.016						
KENYA (1977-78)								
		1972-1977	1967-1971	1962-1966	1957-1961	1952-1956	1947-1951	1942-1946
KENYA (1977-78)	15-19	.178	.198	.209	.210	.177	.163	.118
	20-24	.345	.356	.379	.320	.303	.200	
	25-29	.357	.362	.361	.317	.316		
	30-34	.297	.328	.352	.322			
	35-39	.244	.277	.273				
	40-44	.164	.166					
	45-49	.068						
LESOTHO (1977)								
		1972-1977	1967-1971	1962-1966	1957-1961	1952-1956	1947-1951	1952-1946
LESOTHO (1977)	15-19	.104	.085	.101	.097	.082	.093	.062
	20-24	.263	.245	.256	.246	.221	.239	
	25-29	.252	.256	.260	.236	.245		
	30-34	.233	.221	.208	.218			
	35-39	.174	.166	.193				
	40-44	.090	.100					
	45-49	.027						
MAURITIUS (1985)								
		1981-85	1976-80	1971-75	1966-70	1961-65	1956-60	1951-55
MAURITIUS (1985)	15-19	.043	.073	.053	.071	.043	.059	NA
	20-24	.137	.175	.181	.233	.305	.287	
	25-29	.130	.172	.182	.234	.297		
	30-34	.085	.113	.130	.176			
	35-39	.045	.063	.082				
	40-44	.014	.022					
	45-49	.002						

/...

N/B. The data for Mauritius derive from actual reported live births for the years indicated.

NA = Not available

Sources: The Egyptian fertility Survey, 1980 Vol.II (World Fertility Survey: ISI, 1983), p. 45; Kenya Fertility Survey, 1977-78 First Report, Vol.I (Central Bureau of Statistics: Nairobi, 1980), p. 92; Lesotho Fertility Survey, 1977, First Report, Vol.I (Central Bureau of Statistics: Maseru, 1981), p. 95; Xenos, C., Fertility change in Mauritius and the impact of the family planning programme (Ministry of Health: Port Louis, 1977), p. 77; Biannual Digest of Statistics (Central Statistical Office: Rose Hill, 1982), p. 19; Demographic Yearbook, 1965 (United Nations: New York, 1966), pp. 450-451; Demographic Yearbook 1969 (United Nations: New York, 1970), p. 372.

Table 8: Estimates of vital rates for Kenya, 1950-79

Date	Birth rate	Death rate	Natural increase	Annual growth Rate (Percent)
1950-55	55.9	26.9	2.9	2.9
1960-65	57.1	22.5	3.5	3.5
1965-70	56.7	20.3	3.7	3.7
1970-75	56.7	18.1	3.9	3.9
1975-80	56.1	15.9	4.0	4.0
1980-85	55.1	14.0	4.1	4.1
1985-90	54.2	12.4	4.2	4.2

Source: World Population Trends and Prospects by Country, 1950-2000:
Summary Report of the 1984 Assessment, ST/ESA/SER.A/98 (United Nations:
New York) 1986, p. 202.

Estimates of the proportion of Kenyan children dying by age 2 declined from .174 in 1962 to .150 in 1969 and .125 in 1977-78 (Table 9). The data in Table (9) also suggest that with an increase in educational status, both infant (190) and child mortality (392 and 590) in Kenya will decline even more so. Consequently, both the annual rate of growth and the rate of natural increase have been rising since the 1950s; both of these parameters are presently as high as 4.0 per cent per annum (Table 8).

74. It is against this background of rising fertility that one can question the impact of the family planning programme in the country over the last two decades. As indicated in the previous chapter, the programme has only succeeded in reducing infant and child mortality. Some of the possible factors for the failure of the programme to effect declines in fertility were also discussed. Knowledge of family planning methods as well as their use is widespread in the country but the actual use of these methods is limited. Rural health facilities are grossly inadequate and very unevenly distributed. Trained personnel for the various aspects of family planning (education, information and advice etc.) is also limited. Added to these problems is the increasing demand for curative services which is difficult to meet because of shortage of trained medical manpower. For this reason also, family planning services in most clinics are given irregularly. It is not surprising then that although over 90.0 per cent of Kenyan women knew at least one modern family planning method, less than half (42.0 per cent) of ever-married women knew where to obtain family planning advice or supplies and only 12.0 per cent had ever visited a clinic although a significant proportion of fecund women who had never used contraception intended to use it in future.

75. In this regard, there is a need to borrow a leaf from the decentralisation strategy of Egypt which brings family planning information and services to the local inhabitants (the "grass roots") in all corners of the country. Creating small development/MCH-FP zones throughout the country and allocating facilities on the basis of the proportional representation of the rural and urban sectors will at least distribute the available resources more evenly as in the case of Egypt. The new trend in development which is participation at the grassroots level is a potentially effective way of spreading family planning ideas to the masses.

76. The low incidence of use of family planning methods in the country is possibly attributable to the low level of literacy amongst the female respondents interviewed in the KFS. In 1962, the estimated proportion of literates amongst females aged 15+ was about 10 per cent; by 1976, this increased to 30.0 per cent and in 1980, it was 34.8 per cent ^{55/}. The corresponding estimates for the males were 30.0, 65.0 and 60.0 per cent respectively. Thus considerable disparities exist between Kenyan males and females in educational status. Depending on the relative roles between husbands and wives in decisions affecting sexual behaviour in the Kenyan population, this discrepancy could possibly influence the use of family planning methods in the population. This possibility is predicated

^{55/} UNECA, Demographic and related socio-economic data sheets for ECA member States (UNECA: Addis Ababa, 1986), p. 190.

Table 9: Estimates of infant and child mortality in selected ECA member States

Mortality indices	Egypt (1980)	Kenya (1977-78)	Lesotho (1977)	Mauritius (1977)
Infant deaths	132.3	86.6	125.8	
Deaths under age 5	127.2	141.6	173.7	
Child deaths aged 2 to 5	34.3	33.3	26.5	
Educational differences				
<u>Infant deaths</u>				
0 years	147.4	103.9	149.0	a/
1-3 years	143.2	89.3	133.5	
4-6 years	125.2	82.0	129.6	
7+ years	77.9	69.9	118.2	
<u>Deaths of under 5</u>				
0 years	43.0	42.5	38.7	a/
1-3 years	46.4	35.4	27.6	
4-6 years	34.3	27.3	30.0	a/
7+ years	5.1	22.1	17.9	

a/ Less than 500 cases.

on the assumption that the more educated the female is, the more disposed she will be to taking independent decisions about her sex life.

77. A related issue to the use of contraception in relation to the observed high and rising level of fertility in Kenya is the level of development of the economy itself. Earlier, the point was made that when an economy reaches a certain threshold of development, the introduction of family planning programmes at that point is more likely to succeed in terms of effecting declines in fertility. Of course the problem is the determination of the said threshold. Nonetheless, the per capita income estimated for Kenya as at 1984 was about US\$310.00 as against US\$530.00 for Lesotho, US\$720.00 for Egypt and US\$1,090.00 for Mauritius (the other 3 member States included in the study) ^{56/}. Using the per capita income as an index of development, Kenya was by 1984, the least developed of the four countries being studied on the presumption that the estimated per capita income reflects the effect of the rapid growth rate of the population on the level of living and quality of life. It is therefore possible that the low level of development in Kenya explains the prevailing high fertility since both variables affect each other.

78. There is also the related issue of age at first marriage. It is generally expected that if the age at marriage for a given population is rising, it should have a depressing effect on fertility. In Kenya, the age at first marriage has been increasing since 1962. The singulate mean age at marriage (SMAM) for example rose from 24.1 to 25.7 for Kenyan males and from 18.4 to 19.5 years for the females between 1962 and 1969 ^{57/}. The KFS (1977-78) revealed an overall SMAM of 19.9 years for all the females (17.5 years for the illiterate women; 19.1 years for women with 1-4 years of education; 20.2 years for women with 5-8 years of education; and, 22.2 years for women with 9 or more years of education) ^{58/}. The continued increase in fertility is therefore unrelated to the trends in SMAM. The influence exerted by age at marriage on fertility is predicated on the presumption that the female that enters into marriage say at age 15 will be exposed for a longer period to pregnancy risk than one that does so at say age 25, all things being equal. However, it is known that such an effect is a function of the incidence of divorce, separation, death of spouse and prevalence of polygyny, to mention a few ^{59/}.

^{56/} World Development report, 1986 (Oxford University Press, 1986) Table 1.

^{57/} Kenya Fertility Survey 1977-78, First Report, Central Bureau of Statistics, Ministry of Economic Planning and Development, Nairobi, Kenya, Vol.1, February 1980, p. 19.

^{58/} Ibid., P. 81, Table 4.10.

^{59/} For details of the discussion on these customs and practices see United Nations, The Determinants and Consequences of population change (United Nations: New York, 1973), Chap. 4.

(ii) The Case of Egypt

79. In Egypt, registration of births and deaths began in 1839 and became compulsory in 1912. The CBR, CDR and natural increase values for the 1950-82 period (Table 10) are based on these registered events. Accordingly, the discernible trend is to be appraised with caution. Between 1950 and 1966, the birth rates appear to have been fluctuating around a level of about 42.0 births per 1000 population. Thereafter, a decline seems to have occurred with the level being consistently below 40 per 1000. From 1972, however, the downward trend appeared to have been reversed and a gradual increase occurred annually till 1980 but has since then declined again ^{60/}. Despite slight fluctuations, the CDR has been declining consistently; natural increase has thus remained high averaging 2.5 per cent annually for the 1950-66 period and also 2.5 per cent for the 1967-82 period.

80. Basically, fertility in Egypt is high. Estimated cumulative fertility of the married women in Egypt indicated a mean number of children ever born of about 6.4 live births for 1000 women aged 45-49 in 1960; 6.3 for 1976; and, 6.9 for 1980 (Table 11). When this pattern of completed fertility is compared with corresponding estimates of current fertility (See the TFRS in Table 11) a declining pattern of fertility in Egypt since the 1960s appears plausible.

81. Regarding trends, the derived period fertility rates (Table 7) for Egypt fell consistently among all age groups of women between 1960-64 and 1970-74. Prior to that, there was some evidence of a downhand shift, but it was less regular and less striking and was based on very few age groups, and should probably be discounted ^{61/}. Between 1970-74 and 1975-79 the decline in fertility was quite moderate in the age groups 25-40 years and only maintained the momentum of the previous decade in the age group 15-19 years. It is reported that total fertility in Egypt fell from 7.1 births per 1000 woman in 1960-64 to 5.3 in the period 1975-79 (i.e. 26 per cent decline); the steepest decline appears to have occurred between 1965-69 and 1970-74, from a total fertility rate of 6.5 to 5.5 births per woman ^{62/}. In effect, there has been a significant decline in Egyptian period fertility since the early 1960s; the decline in fertility since the mid-1970s has been of a very modest magnitude.

^{60/} M.S. Abdou Issa, "Modernization and the Fertility Transition, Egypt 1975", African Demography Programme Working Paper, No.3 (Population Studies Centre: University of Pennsylvania, 1980), p. 22.

^{61/} The Egyptian fertility Survey, 1980, Vol.II, op.cit., p.44.

^{62/} Ibid., p. 46, Table 4.19.

Table 10: Trends of CBR, CDR and natural increase in Egypt, 1950-82

Year	CBR	CDR	Percent natural increase	Year	CBR	CDR	Percent natural increase
1950	44.2	19.1	2.5	1967	39.2	14.2	2.5
1951	44.6	19.3	2.5	1968	38.1	16.0	2.2
1952	45.2	17.8	2.7	1969	36.8	14.4	2.2
1953	42.6	19.6	2.3	1970	34.9	15.1	2.0
1954	42.6	17.9	2.5	1971	34.8	13.1	2.2
1955	40.3	17.6	2.3	1972	34.3	14.4	2.0
1956	40.7	16.4	2.4	1973	35.7	13.0	2.3
1957	38.0	17.8	2.0	1974	35.6	12.6	2.3
1958	41.1	16.6	2.5	1975	36.0	12.1	2.4
1959	42.8	16.3	2.7	1976	36.4	11.7	2.5
1960	43.0	16.9	2.6	1977	37.3	11.8	2.6
1961	43.9	15.8	2.8	1978	37.3	10.4	2.7
1962	41.3	17.9	2.3	1979	39.8	10.8	2.9
1963	42.8	15.5	2.7	1980	40.8	10.4	3.0
1964	42.1	15.7	2.6	1981	38.0	10.2	2.8
1965	41.5	14.1	2.7	1982	36.9	10.3	2.7
1966	41.0	15.9	2.5				

Sources: Levels and trends of fertility throughout the world, 1950-70 (United Nations: New York, 1977), p. 47; The Egyptian fertility Survey, 1980 (World Fertility Survey: ISI, 1983), p. 2.

Table 11: Estimates of mean CEB, ASFR and TFR for Egypt by age 1960, 1976 and 1980

Age (Years)	Mean CEB			ASFR		
	1960 Census	1976 Census	1980 EFS	1960 Census	1976 Census	1980 EFS
15-19	0.4	0.6	0.6	.034	.019	.099
20-24	1.5	1.5	1.8	.218	.171	.256
25-29	3.0	2.8	3.1	.343	.285	.285
30-34	4.2	4.0	4.6	.366	.273	.217
35-39	5.6	5.1	5.8	.196	.189	.131
40-44	6.0	5.9	6.5	.058	.078	.048
45-49	6.4	6.3	6.9	.018	.042	.016
All ages	4.6	4.4	4.2	(TFR) 6.2	5.3	5.3
Relative ASFR						
15-19				.028	.018	.094
20-24				.177	.162	.243
25-29				.278	.270	.271
30-34				.297	.258	.206
35-39				.159	.179	.125
40-44				.047	.074	.046
45-49				.015	.040	.015
All ages				1.000	1.000	1.000

Sources:

82. When this pattern of decline in total fertility is compared with the recent rise in age at marriage and with the patterns of socio-economic differentials in cumulative fertility, it is possible to conclude that the decline in total fertility in Egypt was initially caused by rising age at marriage and that this was followed by a period in which the two dimensions of total fertility, namely the proportion married among women of childbearing ages and the rate of marital fertility, have worked in such a way as to reinforce each other.

83. The SMAM among Egyptian females has been moderately high as far back as 1960 ^{63/} with distinct differences by educational status, this indicates that with further educational development, the age at marriage would have risen or at least stabilised.

84. It appears therefore that Egyptian women start their childbearing experience at more or less the same pace regardless of their background characteristics. After an initial period of high fertility, certain groups ^{64/} of women start to regulate their fertility. In 1960 as many as 23 per cent of the women aged 20-24 years had never married. The proportion married among women in the age group 15-19 was 31.3 per cent. In addition, it has been estimated that the family planning programme in Egypt, which was established in 1965, provided in 1969 service for approximately 6 per cent of all women within the ages of 15 and 44 years and that 10 per cent were using contraceptives from the programme and private sources combined ^{65/}.

^{63/} For details, see El-Guindy, M.H. "Age at marriage in relation to fertility in Egypt", Fertility Trends and Differentials in Arab Countries, Cairo Demographic Centre Research Monograph Series No.2, 1971. According to El-Guindy, M.H., (pp. 113-114), the estimated SMAM by educational status for the females were as follows:

Educational Status	1967	1968
Illiterates	22.3	21.8
Read and write only	22.2	22.0
Intermediate stage completed	24.1	24.0
Higher levels of education	26.1	25.8
All females	22.4	22.0

^{64/} Ibid., pp. 46-47. These groups include (i) women residing in Cairo, Alexandria and the urban areas of Lower Egypt; (ii) those with at least secondary education; and, (iii) those whose husbands are in professional or clerical occupations.

^{65/} Nortman, D., Population and Family planning programmes: A Factbook, Reports on Population/Family Planning, No.2, (The Population Council: New York, 1969), p. 48.

85. Egypt has undergone considerable demographic change, though at a much slower rate than Mauritius. Its programme is a well conceived one given the circumstances in which it was established. The health infrastructure is extensive though under-utilized. This is probably not unconnected with the low level of literacy prevailing in the country particularly among females. According to the 1976 census data 29 per cent of Egyptian females (10+) were reported as literate as against 56.8 per cent of the males 66/.

86. Family planning activities are decentralized for effectiveness at the grassroots. Village leaders are active participants in the programme. Awareness of family planning methods is therefore high. To achieve this measure of success, the country's approach to the problem was modified twice. The first was in 1973 from the direct, traditional family planning approach to one based on the assumption that only a change in the socio-economic conditions of families would make family planning meaningful. The second approach is still development-oriented, but the concern with fertility reduction has been replaced by concern with "population problems". This second approach is indeed similar to the MCH/FP programmes of other African countries since the interrelationships between population and development is the focus of attention. Family planning is still being pursued but it is combined with other aspects of development in a systematic package.

87. Given the socio-cultural context of fertility in Africa, the development approach, which presents family planning not in isolation but within an overall development package, is perhaps the best in the circumstances especially in large countries such as Egypt with a population of 46 million on a land area of 1,001,000 Km². Although financial constraints are an important consideration in the implementation of Egyptian family planning programme since there are many priority projects competing for funding, caution has been exercised in campaigns in order not to antagonise religious leaders and jeopardise the whole programme. Consequently, "low-key" information and communication activities in collaboration with local religious leaders are undertaken. The strategy of decentralization of activities has probably also increased programme efficiency and may continue to do so in the near future.

(iii) The case of Mauritius

88. Mauritius has had reliable birth registration statistics since the turn of the present century. The data in Table 12 which derive from this source indicate that the course of fertility in Mauritius has been fluctuating downwards since the mid-1950s. For the first three decades of the present century, the birth rate in Mauritius fluctuated at a level around 36-37 per 1000 population 67/. By the 1930-34 quinquennium, the CBR was about 30.9. From thence it increased to 50 per 1000 by 1950 only to decline thereafter and stabilise at about 38-40 per 1000 population from 1958-63. From 1963, the CBR declined rapidly and

66/ UNECA, Demographic and related Socio-economic data sheets for ECA member States, op.cit., p. 9.

67/ Levels and trends of fertility throughout the world, 1950-70, op.cit., pp. 46-50.

Table 12: Trends of CBR, CDR and natural increase in Mauritius, 1950-85

Year	CBR	CDR	Natural Increase (%)	Year	CBR	CDR	Natural Increase (%)
1950	49.7	13.9	3.6	1969	27.4	8.1	1.9
1951	47.5	14.9	3.3	1970	26.8	7.8	1.9
1952	48.0	14.8	3.3	1971	25.5	7.7	1.8
1953	45.7	16.1	3.0	1972	24.8	7.9	1.7
1954	40.9	16.0	2.5	1973	22.4	7.7	1.5
1955	41.4	12.9	2.9	1974	26.8	7.3	2.0
1956	43.3	11.8	3.2	1975	24.8	8.0	1.7
1957	42.6	13.0	3.0	1976	25.3	7.8	1.8
1958	40.4	11.8	2.9	1977	25.5	7.8	1.8
1959	38.1	10.8	2.7	1978	26.7	7.0	2.0
1960	39.3	11.2	2.8	1979	27.2	7.2	2.0
1961	39.4	9.8	3.0	1980	26.6	7.1	2.0
1962	38.5	9.3	2.9	1981	24.9	6.7	1.8
1963	40.2	9.6	3.1	1982	22.1	6.6	1.6
1964	38.4	8.6	3.0	1983	20.6	6.5	1.4
1965	35.7	8.6	2.7	1984	19.7	6.6	1.3
1966	35.6	8.9	2.7	1985	18.8	6.8	1.2
1967	30.6	8.5	2.2				
1968	31.2	9.1	2.2				

Sources: Levels and trends of fertility throughout the world, 1950-70 (United Nations: New York, 1977), ST/ESA/SER.A/59, p. 47; Digest of demographic Statistics, 1985, (Central Statistical Office: Mauritius, 1986), pages 23, 27, 45; Xenos, C., Fertility change in Mauritius and the impact of the family planning programme, (Ministry of Health: Port Louis, 1977), p. 41.

achieved an all-time low of 22.4 per 1000 population in 1973 (Table 12) whence it increased again in the face of the sugar boom till 1979; it has been consistently declining since then reaching 18.8 as at 1985.

89. This trend in the birth rates is also naturally replicated by the total fertility rates as shown in Table 13 for the 1962-85 period. The TFRS were high up to 1962-64; thereafter they declined steeply from 6.0 to 3.1 in 1973 (about 50 per cent decline). Following the slight increase from 1973 through 1979, the decline in the current fertility rates have been consistently downward since then (Table 13) - a trend also substantiated by the period fertility rates for Mauritius in Table 7.

90. The temporary rise in fertility by 1973 has been attributed to the large cohorts born in the 1950s entering the reproductive ages as well as to favourable economic conditions which increased the marriage rate 68/. The rise of age-specific fertility rates among women aged 15-19 since 1973 has been attributed to pre-marital pregnancies, 69/ which, however, has not affected overall fertility significantly. It is an understatement to attribute the rise in the birth rate in 1973 to the normalisation of pre-war marriage patterns. The dramatic general decline in mortality from about 30 per 1000 around 1944 to about 11 per 1000 in 1952 which resulted from a sharp fall between 1947 and 1952 in deaths attributed to malaria was largely responsible for the steep rise in the birth rate. This affected the incidence of still births which were an important source of the relatively low birth rates of pre-1974 years.

91. The birth/death rates and the rates of natural increase for Mauritius illustrate more vividly the changes that have taken place over the past sixty years (Table 12). The average annual rate of growth was initially low as a result of high death rates. Up to 1920, there were fluctuations in the death rate due largely to epidemics and other disasters. From the last quarter of the 19th century to around 1920, the death rate fluctuated around 30 to 40 per 1000; it rose to 64.3 in 1919 owing to the virulence of the Spanish influenza epidemic which accounted for about 45.0 per cent of the total deaths for that year 70/. However, by 1920, with the epidemic over, and deaths, reduced to between 15.0 per cent and 25.0 per cent, the island had entered a period of substantial growth. From that time onwards, the paths of birth and death rates began to diverge gradually and after the temporary break between 1929 and 1931, they diverged more and more in spite of several violent cyclones and severe epidemics of poliomyelitis of 1948. The year 1948 thus marks the beginning of the phenomenal increase in the population of Mauritius.

68/ UNECA: Analysis of fertility data from the 1972 Population Census of Mauritius, (UNECA: Addis Ababa, 1979), p. 114.

69/ Annual Report of the Registrar - General on Vital Statistics, Mauritius, 1919, p. 8.

70/ Central Statistical Office (Mauritius) Yearbook of Statistics, No.14, 1959, p. 9.

Table 13: Estimates of TFR in Mauritius, 1962-85

Year	Total fertility rate	Year	Total fertility rate
1962	5.9	1975	3.2
1962-64	6.0	1976	3.1
1965	5.5	1977	3.0
1966	5.4	1978	3.1
1967	4.7	1979	3.1
1968	4.6	1980	2.9
1969	4.0	1981	2.7
1970	3.7	1982	2.4
1971	3.5	1983	2.2
1972	3.3	1984	2.1
1973	3.1	1985	2.0
1974	3.2		

Sources: W. Brass, "Impact of family planning programme on fertility in Mauritius", IPPF Medical Bulletin, 10(4), 1976; See also Digest of Demographic Statistics, 1985, op.cit., p. 37.

92. In short, the end of the Second World War saw a rapid increase in the birth rate which peaked at 50 per 1000 in 1950. This was coupled with a significant decline in the death rate and so the annual rate of increase rose to about 3.0 per cent until the mid-1960s when family planning activities began to have an impact on population growth. The infant mortality rate has also declined precipitously since 1920. Around 1921, the rate was between 160 and 230 per 1000. In 1952, the rates were about 90 per 1000 for males and 70 per 1000 for females. Since 1952, it has fallen much lower (to 62.5 in 1959 for the whole island) 71/.

93. Admittedly the national family planning programme inaugurated in 1965 might have partly contributed to the decline in the CBR for Mauritius. It is also likely that the decline in the age of females at marriage might have played some part. The SMAM for females increased from 20.1 to 22.4 years during the 1962-72 censal interval 72/. Improvements in certain other development indicators including per capita income as well as increased literacy and urbanization might also have played a part. By 1984 the per capita income for Mauritius was estimated at US\$ 1,090.00 73/. About 42 percent of the population was living in urban areas by 1983 74/. For 1980, male and female literacy rates were estimated at 86 and 72.3 per cent respectively 75/.

94. A pertinent question to raise is why have family planning programme efforts been very successful in Mauritius. Possibly it is the keen interest which both the government and the people have in family planning. Facilities are provided on an extensive scale not only by the government but also by voluntary associations. The role of women has improved significantly over the past two decades as a result of increased opportunities for education and job opportunities outside the home environment. Above all, Mauritius, a small island of less than a million people, has the advantage of size in its favour. Although it is only 40.0 per cent urban, it is compact, distances are short and informational and educational materials and family planning facilities are within easy reach.

95. The small size of the country is in a way an advantage since there is a limit beyond which population growth on a limited land area would become a very serious problem. This was actually the case in the decade following the eradication of malaria in 1947 when social problems related to population growth

71/ Central Statistical Office (Mauritius), 1972 Population Census of Mauritius, Vol.1, Preliminary Report, p.1. See also C. Xenos, Fertility Change in Mauritius and the Impact of the Family Planning Programme, Unpublished Ph.D. (London) Thesis, 1976.

72/ Analysis of fertility data Mauritius, op.cit.,

73/ World development Report, 1986, op.cit.,

74/ World Population Chart, 1985 (United Nations: Addis Ababa, 1986).

75/ UNESCO Statistical Yearbook, 1984, op.cit.,

increased; women were increasingly resorting to abortion as a way out of these problems before the family planning programme was firmly established. In a way it is tempting to suggest that extreme hardship is an important consideration in explaining mass adoption of family planning though negative in terms of policy prescription. A heavy dependence on wage employment is another. It is in this kind of situation that the roles of worker and mother come into conflict which may be resolved by either relinquishing the work role or steering a middle course between the two in the form of family limitation - usually the latter option in a situation of increasing economic difficulties.

(iv) The case of Lesotho

96. In contrast to the other three countries, the level of awareness of family planning methods in Lesotho is not high. Consequently the level of fertility is moderately high. On the average, the mean CEB of married Lesotho women aged 45-49 is between 5 and 6 children (Table 14). For an early marrying society with a very low level of contraceptive use, this level of completed fertility is rather low. The total fertility rate was estimated at 5.6 during the 1976-77 period (Table 15). The analysis of birth history data (Table 7) fails to reveal a consistent trend in fertility over time; the evidence suggests that fertility in Lesotho has remained almost stable over the last two decades 76/.

97. The observed level of fertility varies very little across various population groups classified by certain socio-economic variables. Education seems to produce an appreciable depressing effect on fertility only beyond the secondary level. The TFR estimates indicate values of 6.24 for women with no education as against 5.63 for those with 1.3 years of education; 5.97 for those with 4-6 years of education; and, 4.76 for those with 7 plus years of education 77/.

98. These insignificant differences in fertility by educational status appear consistent with the absence of any trend in fertility observed from the birth history data in Table 7. A close examination of the period specific fertility rates in Table 7 reveal the absence of any consistent trend in the TFRs during the 1960s and 1970s. The fluctuations in the annual estimates of TFR 78/ are rather marked ranging from 5.17 for the 12th year before survey (YBS) to 6.17 for the 15th YBS. These fluctuations have been explained in terms of factors such as age misstatement and misreporting of birth dates as well as sampling errors associated with a relatively small sample size.

99. The death rate is, however, gradually declining (Table 16) though still moderately high. Natural increase is therefore gradually rising. Infant mortality is also still high. Data from two previous surveys in 1967-68 and 1971-73 show that the infant mortality rate was between 110 and 130 per 1000 births 79/. The levels are still substantially above 100 and there is no clear evidence of change since the 1950s.

76/ Lesotho Fertility Survey, 1977. First report, Vol.1 (Central Bureau of Statistics: Maseru, 1981), pp. 74-107.

77/ Ibid.,

78/ Ibid., p. 94, Table 5.11

79/ See, for example, Olusanya, P.O., Nursemaids and The Pill: A Study of Household Structure, Female Employment and the Small Family Ideal in a Nigerian Metropolis, University of Ghana Population Studies No.9 (The Population Dynamics Programme: Accra, 1981); Colliver, A., "Women's work participation and fertility in metropolitan areas", Demography, Vol.V, No.1, 1968, pp. 55-60; and, Reed, F.M., and Udry, R.J., "Female work, fertility and contraceptive use in a bi-racial sample", Journal of Marriage and the Family 35(4) 1973, pp. 597-602.

Table 14: Estimates of mean CEB in Lesotho, 1977

Age (Years)	Marital Status		
	Never married	Currently married	Ever married
15-19	.04	.50	.49
20-24	.36	1.40	1.38
25-29	1.12	2.60	2.55
30-34	1.71	4.00	3.86
35-39	2.14	4.70	4.72
40-44	2.13	5.30	5.30
45-49	2.76	5.80	5.46
All ages	0.32	3.10	3.26

Source: Lesotho Fertility Survey, 1977, First Report, Vol. 1, (Central Bureau of Statistics: Maseru, 1981), pp. 74-107.

Table 15: Estimates of ASFR and TFR in Lesotho, 1976-77

Age (Years)	1976		1977	
	Absolute	relative	Absolute	relative
15-19	.065		.076	
20-24	.240		.280	
25-29	.261		.280	
30-34	.223		.220	
35-39	.166		.166	
40-44	.097		.075	
45-49	.039		.038	
TFR	5.5		5.7	

Source:

Table 16: Estimates of CBR, CDR and natural increase in Lesotho from 1950-55 to 1985-90

	CBR	CDR	(Percent)	IMR
			Natural Increase	
1950-55	42.3	26.6	1.6	160
1960-65	42.9	22.8	2.0	145
1965-70	42.4	20.9	2.2	140
1970-75	42.4	19.3	2.3	130
1975-80	41.9	17.9	2.4	123
1980-85	41.8	16.5	2.5	111
1985-90	41.2	15.2	2.6	100

Source: See, for example, P.O. Glusanya, Nursemaids and the Pill: A Study of Household Structure, Female Employment and the Small Family Ideal in a Nigerian Metropolis, University of Ghana Population Studies No. 9, The Population Dynamics Programme, 1981; Andrew Collver, "Women's work participation and fertility in metropolitan areas", Demography Volume V. No.1, 1965, pp. 55-60 and F.W. Reed and R.J. Udry, "Female work, fertility and contraceptive use in a bi-racial sample", Journal of Marriage and the Family 35 (1) 1973, pp. 597-602, among others.

100. In terms of factors influencing the observed fertility situation in Lesotho, current interest in family planning is low and knowledge of method is poor. The level of education, especially among females, is however, high. About 63.1 per cent of females were reported literate in 1976 as against 38.5 per cent for the males ^{80/}. Education alone, however, is not enough. It has to be accompanied by interest in the use and easy availability of family planning facilities. The problem of acceptability is, however, not a difficult one in a highly literate population. If and when official interest and involvement in family planning increases, it is possible for Lesotho to undergo a dramatic change, as Mauritius did, because of the advantage of small numbers.

^{80/} Demographic and related socio-economic data
Sheets for ECA member States, op.cit., p. 195.

CHAPTER FOUR

CONCLUSIONS

(i) Main findings

101. This study reviewed family planning programmes in Kenya, Egypt, Mauritius and Lesotho in terms of their effectiveness in reducing fertility levels and hence population growth rates in these states. In particular, the socio-economic and attitudinal factors which have facilitated, delayed or hindered the attainment of national family planning programme objectives and targets in these states were assessed.

102. The review indicates that Kenya, Egypt and Mauritius have population policies as well as family planning programmes specifically aimed at reducing the growth rate through fertility reduction. Lesotho, has a fairly recent population policy. The first three member States are pioneers in family planning in Africa. Their governments are actively involved in the provision of family planning services as well as giving financial assistance to voluntary family planning associations and they have set for themselves specific targets which they have pursued within the limitation of their resources. Kenya for example, in 1974-78 planned to reduce its population growth rate to 3.0 per cent by the year 1980 and further to 2.8 per cent with a family size of 4.7 by the year 2000. Egypt, on its part, planned to reduce the growth rate from 2.3 per cent around 1977 to 1.6 per cent by 1985. Its programme is comprehensive, covering towns and villages and about 80.0 per cent of its delivery service is provided through government hospitals and clinics. For Mauritius, the level of fertility was to be reduced to an average of 3 children per family and the birth rate to 23.1 by 1982-87.

103. Of the three member States, with fairly well established family planning programmes, only Mauritius appears to be relatively free from financial and organisational problems while Kenya and Egypt have had to contend with a number of problems. In Kenya, the various sectors of the economy have to compete for inadequate funds. Consequently, services are irregular at most clinics and progress in the recruitment of clients is rather slow. Egypt has had to change the operational strategy of the programme twice as a result of slow progress. Yet the problem of adequate funding of the programme remains.

104. Available information indicates that knowledge of family planning methods as well as approval of their use is widespread in Kenya, Egypt and Mauritius. In Lesotho, however, the level of awareness of family planning methods is relatively low. In all of them except Mauritius, the actual use of these methods is however more limited (much more so in Lesotho). In Kenya, for example less than 10.0 per cent of the women in virtually all age groups had paid a recent visit to family planning facilities either because they were not within easy reach, or were actually not available in many parts of the country. But then only about a fifth of fecund women who had never used a method intended to do so in future. In Lesotho, those women who had never used family planning methods and did not intend to do so in future constituted a high proportion of all women (about 50.0 per cent). This can be attributed to the non-involvement of the government directly with family planning activities as in the other three countries.

105. In Kenya, Egypt and Lesotho, desired family size is large, particularly in Kenya and Lesotho with at least a mean of 7.0. It seems to be somewhat lower in Egypt. From available evidence, Mauritius seems to have joined the group of world contracepting societies. Family planning methods have been widely adopted even among the catholic group who were initially opposed to family planning. This fact accounts for the significant reductions in the number of births averted each year in Mauritius. Nevertheless, in each of the three other member States changes are rapidly taking place at least in attitude to family planning. Such changes are associated with various socio-economic background factors which influence approval and adoption of family planning; education and pattern of work of women are clearly the most crucial of these besides family planning informational and educational activities. Fortunately, in all the four member States, the level of education has risen dramatically over the past decade and the status of women has improved to varying degrees. These changes will in time make attitudes favourable towards family limitation and increase the adoption of family methods.

106. The data examined for the four member States show that barring short-term increases in the birth rate in very recent times, Mauritius and Egypt have undergone significant demographic changes especially since the inception of their MCH/FP programmes. The change has been more substantial and clearer in the case of Mauritius. Both States have already begun the stage in which the demographic gap is reducing as fertility decline follows mortality decline. However, while Mauritius has nearly completed its transition from high to low vital rates, the rate of decline of fertility in Egypt is much slower and so population growth is much more rapid. In Lesotho, demographic change has been little in view of its socio-cultural environment and the extent of its family planning involvement. In Kenya, fertility is very high and in fact, is the highest of the four countries; the evidence is that the level has been rising substantially in recent years. Population growth in Kenya has, therefore, been increasing rapidly and is currently about 4.0 per cent per annum. Child mortality has also undergone considerable decline. Kenya has therefore entered a period of rapid population expansion. But this is not to dismiss the impact of its family planning programme.

107. A ranking of the four countries in terms of the extent of demographic change would put Mauritius in the forefront; Egypt, second; Kenya, next; and Lesotho last. The impact of the family planning programmes has been substantial in the first two countries, affecting not only the levels of fertility but also infant and child mortality. The inference can be made that programme efforts have been successful in Mauritius, Egypt and Kenya, though to varying degrees. Without a serious family planning programme in Lesotho, hardly any demographic change has taken place.

108. Based on the foregoing overview, a pertinent question to raise is: why have programme efforts been very successful in Mauritius, moderately so in Egypt, much less so in Kenya, while they have had very little effect on Lesotho? Simple as this question seems, it is very difficult to answer since the socio-economic backgrounds and the cultural setting of these countries are different. It is not sufficient to couch an explanation in terms of programme efforts since efforts, however vigorous, may be thwarted by cultural and socio-economic factors

many of which are latent and interwoven. From the review, some of the factors identified as influencing family planning programme efficiency include (i) the degree of official interest and involvement in family planning; (ii) the level of education; (iii) the extent of female employment in the wage sector of the economy; (iv) the adequacy and coverage of family planning services; and, (v) the level of infant and child mortality. Of these factors, perhaps the most important is education which is positively associated with attitudinal change and inversely with infant and child mortality and fertility ultimately.

109. Besides these considerations which derive largely from the analysis of the information from the four member States, children are still regarded as assets in the rural areas of these States given the relative absence of social security schemes. Life savings are therefore either invested in creating farm capital (e.g. purchase of animals like cows, donkeys) or are used up in raising children. These additional factors also influence family planning programme efficiency.

110. There is also the fact that African Societies have their unique preoccupations especially those regarding illhealth, poverty, drought, religious beliefs and practices associated with improving the fertility of farming land, etc. These preoccupations take the peoples attention, efforts and planning more than family planning which may not be seen as a preoccupation as such. In this context, the family planning argument that child spacing improves maternal health ignores the fact that concern with maternal illhealth is a more serious problem than long term maternal health.

(ii) Theoretical implications

111. The next pertinent issue to raise at this point is the pattern of demographic change suggested by the review of data for the four member States. It will be recalled that in three of these States, a rise in fertility seems to have been triggered off at one time or another by a decline in mortality. This happened in Mauritius between 1947 and 1952; in Egypt, it occurred for about a decade after the Second World War; and, in Kenya, fertility rose between 1962 and 1978 and no evidence of a decline has been observed while the death rate in general and infant mortality rate in particular fell steeply around this period. In explaining the levels, patterns and trends of fertility in Africa, these facts have often been somehow overlooked. One of the questions being currently asked is why fertility has remained high in many ECA member States in spite of extensive knowledge of family planning methods (in many cases), their service location and their use on a significant scale?

112. Consider the case of Kenya, for example, with a substantial increase in the percentage of women who knew and were using family planning methods in Nairobi in the decade 1966/67-1977/78. The question is why has there been no impact of this change on observed and desired levels of fertility. Available evidence indicates that

"..... In practice, these values apparently coopt and control contraceptive knowledge and use, in that they move it in the direction of spacing rather than stopping, in the realization of stable urban fertility norms (emphasis is ours). In this regard, the Nairobi experience may be typical of what appears to be a unique sub-Saharan pattern, in which family planning is used by the population to complement and maintain rather than change and reduce

(emphasis is ours) fertility aspirations". "the linear and inverse relationship observed in other developing nations between the level of fertility, on the one hand, and the percentage of women using contraceptions, on the other, may be delayed in Nigeria, Kenya and other sub-Saharan countries, as the existing or emerging pattern of contraceptive use without demographic innovation (the desire for smaller families) extends the current period of high fertility" 81/.

113. As evidenced by the data examined in this study, fertility is changing in Mauritius, Egypt and Kenya but the change in Kenya currently is in the direction of increase following improvements in health and living standards generally. On the assumption that the pattern of change observed in Mauritius, Egypt, Kenya and a number of other African countries represents the situation of the continent generally, African fertility evolution may be viewed in terms of three stages.

114. The first is the stage of blissful ignorance of family planning in the modern sense. At this stage of demographic evolution, fertility is lower than it should be because it is repressed by a complex of socio-economic and cultural factors such as a low standard of living and health, sexual taboos and norms of child-spacing, crude abortion and other involuntary fertility - restricting factors. The birth rate is conditioned by the death rate - rising when the death rate falls and falling when the death rate rises. A birth rate much less than 40 per 1000 total population, a mean number of children ever born alive or a total fertility rate much lower than 6 per woman is an indication of this stage. Pre-1947 Mauritius is a good illustration of this stage. When the death rate began its consistent and rapid decline, the birth rate began its pronounced and sustained rise far above the pre-1947 levels, and the end of the rise coincided roughly with the end of mortality decline.

115. The second stage is the beginning of a sustained rise in fertility following declines in the death rate. This is the stage of awareness (i.e., of the existence of more convenient methods of spacing births to preserve mothers' health and prevent child mortality, which constituted the main objective of sexual taboos and occasional abortion at the first stage). Here some measure of urbanization and modernization and the concomitant social pressures make abstinence as a means of birth spacing irksome. Birth interval decreases. Since improved maternal and child health brings to the awareness of the family the dissociation of early child weaning from child mortality (the reverse being traditionally believed to be responsible for lengthy periods of abstinence), the increasing adoption of modern contraception stabilises birth interval at the new level. Fertility therefore increases. Contraception is increasingly accepted at this stage as soon as families become aware of its potentiality for maintaining the status quo - the large family norm-and further reducing the

81/ Thomas E. Dow., Jr. and Linda H. Werner, "Family size and family planning in Kenya: continuity and change in metropolitan and rural attitudes", Studies in Family Planning, 12 (6 and 7), 1981, p. 272. For comparative data from other parts of Africa, see J.C. Caldwell and Pat Caldwell "The achieved small family: early fertility transition in an African city", Studies in Family Planning, 9(1), 1978 and Helen Ware, "Motivations for the use of birth control: evidence from West Africa", Demography, 13 (4) 1976.

period of abstinence occasioned by fear of premature pregnancy. But since existing gap between children born alive and living children is closing up as a result of improved health, the size of family increases beyond expectation and brings with it the realisation that they (families) need not have as many confinements as hitherto. A birth rate well above 40 per 1000 total population, an average family size or total fertility rate of 6 or more per woman is an indication of this stage.

116. At the third stage, awareness increases considerably, the link between family size and the socio-economic situation of the family becomes more clearly perceived and the adoption of family planning both for birth spacing and for ultimate limitation of size in conformity with changed fertility norm becomes widespread and fertility declines consistently, the rate of decline, of course, depending on programme efficiency which *inter alia* involves institutional changes. This is the stage of demographic sophistication.

117. In principle the change from one stage to another takes time since it involves deep-rooted attitudes and old customs. Family planning programmes can accelerate the change and sufficient evidence has been adduced in this study to show that they do. But whether there is a programme or not, such a change will probably occur ultimately. Such changes, in fact, have their origins in pre-programme periods even though the rate might be slow. Hence the futility of attempting to separate programme, pre-programme and non-programme impact on fertility or demographic change in general. Health, for example, is a priority in many ECA member States and health programmes are implemented whether or not there is a specialized MCH/FP programme as well.

118. Accelerated change and the problem of rapid population growth in the ECA member States to-day are attributable to scientific developments in the industrialized countries of the world. Importing these into backward and predominantly illiterate African societies has had the dual effect of reducing mortality and increasing fertility almost simultaneously. Oblivious of this pattern of demographic change in Africa, scholars and policy-makers often expect demographic miracles within a very short span of life of family planning programmes. The fact is that the MCH/FP or other health - or development-oriented programmes expand in scope and efficiency gradually under various organizational and financial constraints. Consequently, programme efficiency increases gradually but gathers momentum with time.

(iii) Recommendations

119. In the light of the foregoing, it is suggested that in establishing a family planning strategy, every ECA member State should decide on the contraceptive methods that are most appropriate for its population depending on a technical assessment by its medical community, the adequacy of the existing service delivery networks, and the social and cultural environment ^{82/}. Similarly,

^{82/} "Family planning services: options for Africa", A background document for the All-Africa Parliamentary Conference on Population and Development, 12-16 May, 1986 (Harare, Zimbabwe).

certain delivery systems are more appropriate for certain contraceptive methods. Decision makers in the ECA member States should be guided by these differences when designing a family planning strategy. A good strategy is to (i) first identify certain kinds of clients; (ii) choose the most appropriate methods for those clients; and (iii) develop the delivery systems most suited to those methods.

120. There is no best organizational structure for implementing family planning programmes. But in the delivery of family planning services, the involvement of multiple organizations including those from the private sector, increases their effectiveness. This study has reviewed the structure and organizational problems of national family planning programmes in four ECA member States. In particular, the factors influencing family planning programme efficiency based on the four cases have been identified. These are lessons for other member States in the region depending on their position on the continuum scale in terms of adopting family planning programmes with the goal of reducing fertility and hence rapid population growth rate.

121. For now the benefits of family planning should be seen in terms of family health as against immediate fertility reduction. Over the long term in the course of socio-economic development and improvement of standards of living, fertility reduction will gradually be realized as a byproduct of increased commitment towards family planning.

122. In conclusion, there appears to be no acceptable alternative to the development-oriented programme in the circumstances of the ECA member States. It is unrealistic to expect illiterate and under-privileged families to impose a conscious limit on their childbearing on the grounds of rapid population growth. This has little or no meaning for the population. What matters is the peoples' own day-to-day existence and the immediate factor that impinge on it - health, food, shelter and so forth. Population growth, in other words, is far from their centre of interest. Their concern is with the improvement of their quality of life. And this is the most rational stance from their own view-point. What they need to be told, therefore, is that planning their families is part of the effort to improve their and their children's health and survival as well as their general living conditions. And the results of this effort must be clearly perceived in order to bring about the desired change in family size.