

**REPORT OF THE COMMITTEE FOR THE
STUDY OF CONTRACEPTIVE REQUIREMENTS
OF SRI LANKA FOR THE
PERIOD 1981 — 1984**

**Ministry of Plan Implementation
Population Division
8th Floor, Central Bank Building
Colombo - 1, Sri Lanka.**

November 1981

FOREWORD

The UNFPA Needs Assessment Mission that visited Sri Lanka in 1980 recommended in its Report that the Government should prepare a Four-Year Rolling Plan for all contraceptive requirements, particularly in view of the fact that SIDA, the major donor of contraceptives for many years, is scheduled to stop supplies at the end of 1981.

In pursuance of this recommendation, the Ministry of Plan Implementation appointed a Committee comprising representatives of Government Ministries, International Agencies and Non-Governmental Organizations involved in family planning Activities to prepare a Four Year Rolling Plan for all contraceptive requirements for Sri Lanka for the period 1981-84.

Mr. Jim Collins, formerly of IPPF, and Mr. A. T. P. L. Abeykoon, Deputy Director, Population Division of this Ministry were responsible for co-ordinating the work of the Committee and for preparing an interim report which was submitted for consideration of the Committee. Due to time constraints the Committee was unable to examine the procedures used for the procurement of contraceptives, their distribution and storage. These aspects would however be examined in due course as it has been decided that the Committee should continue to function till these issues are examined in depth. This interim report could then be developed into a final report covering all the relevant issues and recommendations.

I am grateful to all the members of the Committee and in particular to Messers Jim Collins and A. T. P. L. Abeykoon for completing this report after considerable deliberations and for submitting it on the due date. I have no doubt that the Report will be of much use to all those who are involved in the planning and management of family planning activities in the country.

Dr. Wickrema Weerasooria
Secretary,
Ministry of Plan Implementation.

SYNOPSIS

In order that it might attempt to produce the four year rolling plan for contraceptive requirements within the guidelines suggested by UNFPA, the Committee decided that the significant factors which must be taken into account were:-

- (1) The public opinion within the country affecting the degree of acceptance of family planning.
- (2) The history of progress of acceptance.
- (3) The number of women at risk.
- (4) The extent to which knowledge is translated into practice.
- (5) The degree of preferences for method, and any significant changes in degree of preference.
- (6) Any stated target for achievement or, if no official policy target, then a desirable target assessed from known circumstances.

Having examined each of these in some depth, their conclusions were that the concepts of Family Planning had been widely disseminated and that the people of Sri Lanka have been completely receptive to the idea of smaller families, but not fully to the norm of less than three children. The level of traditional methods has noticeably increased, and under certain specific circumstances, the reception of sterilisation has been favourable. However, during the last five years, it would appear that, in spite of aggressive promotion throughout the country, the uses of modern spacing methods have shown no commensurate increase. The total acceptance has been almost stationary, but there has been distinct reduction in demand for orals and IUDs, this reduction being largely offset by increased demand for condoms and injections.

This may be due to the growing antipathy towards orals and IUDs, which has been encouraged by considerable publicity in the media to the side-effects which can be experienced by users of these methods. There are no known side-effects from use of condoms.

It is thought that the recent publicity given to the Swedish government's decision to withdraw from provision of Depo Provera may have similar effect on acceptors' choice.

The current birth rate is of the order of 28.5 per thousand, which could indicate an overall population increase factor of 2. This would be a population growth which could negate all the government's efforts in its development programmes, since they are not geared to support a population of 20,000,000 in the last decade of this century.

The period for which the rolling plan is to be prepared, 1981 - 1984, is too short for the satisfactory implementation of any ambitious "recovery" plan, and it was decided that the plan should be prepared with the objective of achieving a reduction in birth rate to 26

per thousand by end 1984. It was felt that subject to the establishment of defined strategies, this could be achieved, and provide the "breathing space" for the preparation of plans for further reductions within the medium term.

It must be stated that this is not the opportune time for the preparation of such a plan, since there are a number of variables which will effect the contraceptive requirement "mix" in the next two or three years.

- (a) The tremendous response to the offered sterilisation incentive in the last three months of 1980 and the first months of 1981.

There is no available data yet to provide knowledge of which spacing method, if any, had been used by these 120,000 acceptors.

- (b) The continuing downward trend in acceptance of orals and IUD methods.
 (c) The uncertainty regarding the extent to which the new interest in sterilisation can be maintained with a lesser incentive offered.

Nevertheless, the Committee felt that the probable requirements should be computed on the basis of the trend experience of the 1975 - 1980 experience in order that:-

- (a) There should be some available knowledge as to the magnitude of the costs.
 (b) There could be some indication of the nature of the target groups.

The plan was therefore prepared and submitted with the report, showing that the total cost requirement for contraceptives and incentive payments for sterilisation would be:-

Year	Contraceptives US\$	Sterilisation Incentive US\$	Total US\$	Total SL Rs.
1981	1,197,636	736,111	1,933,747	35 million
1982	1,317,400	736,111	2,053,511	37 million
1983	1,449,139	736,111	2,185,250	39 million
1984	1,594,052	736,111	2,330,163	42 million

Major Recommendations

1. That the present high level of availability of sterilisation service delivery be not increased, but that existing facilities be improved, and constant training be continued to ensure continual availability of surgical skills.
2. Consideration be given to an increased incentive to acceptors who elect for sterilisation prior to conception of third child.
3. Intense motivational efforts to allay the fears, real and imaginary, of the people, which are obstructing greater use of IUD.
4. More intense concentration of motivational and service effort in eleven districts where the birth rate is 30 or more per thousand.

5. Priority in Population Education to higher school age groups (12 - 15) on environmental effects of over-population.
6. Special efforts to concentrate higher motivational effort in the 15-25 age group through the subject of Human Sexuality.
7. The re-design of the data collection and data retrieval system, in order that a viable monitoring system can be established.
8. The establishment of a committee, comprising representatives from the major executing agencies within the country, to enable maximum concentration of effort by mutual agreement between those agencies.

REPORT

Introduction

A UNFPA Needs Mission visited Sri Lanka in 1980, and the report of the Mission included the following recommendation:-

"The question of contraceptive supplies is critical, particularly since SIDA, the major donor for many years, is scheduled to cease supplies at the end of 1981. IPPF, another major donor through FPA Sri Lanka, cannot provide more contraceptive supplies at present day prices; this is the major bottle-neck in expanding the contraceptive supply. The government has not yet provided any funds for contraceptives.

The Mission recommends that the government prepare a four year rolling plan for all contraceptive requirements. After making its own budget contribution, the government could then discuss possibilities of aid with SIDA, UNFPA, IPPF and the other past and potential donors. Injectables are in particularly short supply and should get priority attention along with supplies needed for sterilisation. For some time to come, injectables for the poorer sections of the population will have to be subsidised, and expenses for those choosing sterilisation will have to be re-imbursed.

Donors providing supplies may also be interested in making assistance available for training government personnel in bulk purchasing and in better stores management."

The UNFPA, in an aide memoire of July 28, 1980 indicates that it is desirous of conducting, or having conducted, a series of country studies in collaboration with the governments of a number of Asian countries, to assess the future contraceptive demand and supply situations in those countries.

They express preference for the inquiries to rely on three quantitative approaches to estimate the current and future demands:-

- (1) The contraceptive use approach which should estimate the future demands utilising the data available on programme targets, contraceptive mix of family planning acceptors and their continuation rates.
- (2) The trend line approach to estimate the future demands of the basis that they will depend to a large extent upon the past consumption pattern.
- (3) The percentage growth approach which is a process of estimating the future contraceptive demands, taking into consideration a set of programmatic variables such as the probable changes in population policies, delivery systems, contraceptive technology as well as fertility behaviour of the target population.

In pursuance of this declaration of intent, UNFPA has asked the Sri Lankan government to agree to a visit from Mr. Peter Garrucho and Mr. Mitsee Shimaguchi at end April 1981, who will collaborate with counterparts selected by government in preparing the data necessary for the successful conclusion of the contraceptive demand and supply study for Asian countries.

The government of Sri Lanka recognises the validity of the recommendation made by the Needs Mission of UNFPA, and also declares willingness to participate in the study of requirement for future contraceptive supply in Asian countries, and has required the Ministry of Plan Implementation to take the necessary action.

The Ministry of Plan Implementation set up a Committee, representative of:-

- (a) The government Ministries involved in Family Planning and Family Health.
- (b) International aid agencies.
- (c) Non-governmental organisations.

Representation on the Committee was as follows:-

Ministry of Plan Implementation	- Dr. W. Weerasooria - Chairman
Ministry of Colombo Hospitals & Family Health	- Mr. Tissa Devendra
Ministry of Health	- Dr. V. D. T. de Silva
Family Health Bureau	- Dr. (Mrs) K. Alahakoon
SIDA	- Mr. Rolf Beijer
UNFPA	- Dr. (Mrs) Elina Visuri
	- Mr. G. N. Valentine
WHO	- Mrs. Chandranie Kadirgamar
IPPF	- Mrs. Sarddha Coorey
FPA Sri Lanka	- Mr. Daya Abeywickreme
CDS	- Brig. Dannis Hapugalle
PSI	- Mr. Terry Louis
Consultant	- Mr. J. W. G. Collins
	- Mr. A. T. P. L. Abeykoon

TERMS OF REFERENCE

The first meeting of the Committee was held at the Ministry of Plan Implementation, Monday, March 9, 1981, at 10.30 a.m, when the following terms of reference were agreed upon:-

1. The Committee should prepare a four year rolling plan for all contraceptive requirements necessary to achieve the maximum implementation of the targets set out in the National Family Planning Programme, taking into consideration the following:-
 - (a) The availabilities from stocks presently held within the country, in transit or already ordered for delivery.
 - (b) Commitments already made by donors or aid agencies for supply within that four year period.

- (c) The estimation of total needs, based on projections of the number of fertile couples in the population during those years.

In this context, contraceptives shall mean mechanical devices, chemical formulations to be taken orally, or administered by injection, or barrier applications such as condoms or foams. Sterilisation shall not be considered as a contraceptive, but the effect which the sterilisation programmes will have in lessening the demand for these other contraceptive methods must be taken into account when the estimates (c) are calculated.

These requirements must be estimated in terms of quantity and type required in each year, and best possible estimate of financial implication taking into consideration the possible effects of inflation.

It will be necessary to take account of any known or foreseeable trend in change of preference by acceptors for method, and particularly to consider the changes which may occur if Depo Provera becomes less available. Due regard should also be given to the possible effects of the removal of restraints or constraints on the supply or application of commodities or services, eg. prescription requirements, use of paramedics, etc.

2. The Committee should examine the present systems and procedures for procurement of contraceptives, methods of storage and quality of storage. In particular it should examine the facilities and resources available, including manpower, for bulk purchasing of contraceptives, and if necessary examine possible use of other agencies such as UNFPA, IPPF, etc. to ensure "best market" availabilities.
3. The Committee should examine the present distribution system, identify existing bottle-necks if any, and make any recommendations it feels necessary to facilitate expeditious delivery to the units where they are delivered to the acceptor.
4. The Committee should examine the record and inventory systems, to ensure that stocks are issued in correct rotation on FIFO basis, to avoid wastage due to deterioration through excessive storage time.
5. The possibilities of advantage through encouragement of local manufacture should be investigated.

The Committee should make any recommendations it may consider advisable in respect of items 2-5 above.

Mr. Jim Collins and Mr. A. T. P. L. Abeykoon were asked to undertake the responsibility of co-ordinating the work of the Committee, and preparing the final draft report to be submitted for consideration of the whole Committee not later than April 10, 1981.

To facilitate action, it was decided to form two sub-committees:-

(a) A technical sub-committee comprising:-

Mr. Tissa Devendra (Chairman)
Mr. Jim Collins
Mr. A. T. P. L. Abeykoon
Dr. (Mrs) K. Alahakoon
Mr. G. N. Valentine
Mrs. Chandranie Kadirgamar
Mrs. Sarddha Coorey
Mr. Daya Abeywickreme
Brig. Dennis Hapugalle
Mr. Terry Louis

A SIDA representative to be nominated.

This sub-committee would prepare the draft report, formulate the four year rolling plan, which would be based on their recommendations for the contraceptive requirements by type, quantity and estimated costs, for each of the relevant years, taking into account the findings of a second sub-committee, consisting of:-

Mr. D. P. Wijegunasekera (Chairmen)
Dr. Kusum Wickramasuriya
Mr. Terry Louis
Mr. Victor de Silva

which was charged with an examination of the probable sterilisation achievement during those years.

Irrespective of which of the required UNFPA approaches be adopted, the significant factors which must be taken into account in preparing recommendations must be:-

- (1) The public opinion within the country affecting the degree of acceptance.
 - (2) The history of progress of acceptance.
 - (3) The number of women at risk.
 - (4) The extent to which knowledge is translated into practice.
 - (5) The degree of preference for methods, and any significant changes in degree of preference.
 - (6) Any stated target for achievement or, if no official policy target, then a desirable target assessed from known circumstances.
- (1) The public opinion within the country affecting the degrees of acceptance of family planning

Nearly thirty years ago, the concept of family planning as a benefit to the society and the individual was introduced to Sri Lanka by the creation of the Family Planning Association of Sri Lanka, and in 1965, the government declared full acceptance, and the concepts became national policy.

The characteristics of the country are in every way conducive to the successful communication of the knowledge and provision of services necessary for the fullest practice of that knowledge.

For successful communication, literacy and ease of contact are necessary. Sri Lanka has one of the highest literacy rates of the world, it has no inaccessible population, and possesses a road network, fully served by transport facilities for people and goods.

Population awareness has been created and there is ample evidence that the message has been received and understood, since usage of traditional methods have even increased, whilst there has been growing acceptance of sterilisation.

The basic target of family planning, less children per family, is totally accepted by the People, and this has been shown by the astonishing fall in fertility between 1963 and 1974. During this period, the average number of children per family dropped from more than 5 to 3.3. The world Fertility Survey of 1975 attributed this to two major factors:-

- (i) A substantial increase in age at marriage of women.
- (ii) A decline in marital fertility achieved in some part through the use of sterilisation and traditional contraceptive methods.

In a number of surveys, it has been recorded that there is distinct preference for a family norm of two children per family, but it would appear that whilst this is an expressed ideal, the true fact is that the normal family 3+ children. It is a national trait that the average Ceylonese parents love children and although they realise the economic and other advantages of the two-child family, in spite of their declarations, they still regard three as the minimum desirability.

The attached table I provides a graphic picture of the potential dangers which threaten the balance of resources and population in Sri Lanka.

During the period 1971 - 1986, the proportion of the population within risk age will have risen from 48.2% to 52.7%.

In the fifteen years from 1971 - 1986, it is certain that there will be an increase of three million within this fertile age group, since they are all already born.

It shows that every year of the present decade, 200,000 people are added to the fertile age groups.

A further interesting factor is that whilst in 1971, only 28% of the people of risk age were married women, in 1986, it is expected that the percentage of married women of risk age will have risen to at least 31.3%. In absolute terms, this means an addition of almost one million married women of whom 400,000 will be added during the next five years.

These calculations are on the assumption that the marriage rate will *not* increase during the years after 1975, since they are based on marriage rates then current. *There are indications that there have been increases in this rate but no figures are available since 1978.*

2. History of progress of acceptance

For the past fifteen years there has been a large scale Family Planning information and service delivery programme existing in the country, fully supported by government with

tremendous financial aid and technical assistance from outside sources. Especially during the five years from 1975 to 1980, the modern methods of family planning have been aggressively promoted on an island-wide scale. Full use has been made of all media, commercially as well as editorially, supported by intensive training schemes in motivational as well as technical fields.

In view of this, the conclusions which may be drawn from the comparison of the conclusions reached by the World Fertility Survey of 1975, and those reached by the Australian National University Survey in 1979 are surprising:-

	<i>World Fertility</i>	<i>Australian University</i>
	<u>1975</u>	<u>1979</u>
Never users	59%	52%
Traditional methods	17%	21.5%
Sterilisation	13%	15%
Modern methods	11%	11.5%

The comparison seems to indicate that the increased awareness has probably resulted in a greater desire to practise, but that there may have been insufficient availability of modern methods, which resulted in an increase of usage of traditional methods. Certain known facts could support this view:-

- (a) In the years 1977 and 1978, the inability to achieve full co-operation between the medical profession and government caused significant reductions in the availability of services for sterilisation and insertion of IUDs.
- (b) For almost the whole of the year 1977, the political aspects in election year forced all Family Planning work into low profile.

The considerable reduction in the percentage of "never users" in the result of increasing acceptance of sterilisation, since a high proportion of acceptors were from this group. Various analytical studies indicate that some 50% of the male acceptors were previous "never users". More than 80% of tubectomies are performed post partum, on women bearing children in institutional establishments. These patients would represent a normal cross-section of the married women of reproductive age, and on this basis, more than 50% of the tubectomies would also be from the "never users" group.

The computation of complete coverage which could have been obtained from the actual quantities of spacing contraceptives distributed during the years 1975 - 1980, shows that (with the exception of 1977) there were more supplies available than required to meet the demands of people already motivated.

(ALL FIGURES IN '000s)

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Modern users at risk	220	227	234	242	250	260
Protection issued for modern users	228	280	149	266	267	310

This is particularly noticeable in the years 1978-1980.

It would appear that the inability to increase the number of users of modern methods was not due to non-availability of services or supplies.

3. Women at risk

The total number of women at risk has been calculated from the projections of the Department of Census and Statistics based on the 1971 Census (Tables II and III). The tables show that all women between the ages 15-49 have been considered as of reproductive age, and an estimate made of the number of women married within that age group.

Account has been taken of the probable infertility rate on the internationally accepted basis of 20%, to cover the probabilities of natural infertility and widowhood and lower fertility due to increasing age. Additionally, it has been considered that each pregnancy will result in natural protection for a period of one year (gestation and lactation). The effect of sterilisation, which is now significant, has also been allowed for. As a result of these adjustments, on present pattern, the number of women at risk, motivated to accept spacing control techniques by modern methods, would appear to be:-

1981	272,000
1982	281,000
1983	284,000
1984	292,000

4. The degree of preference for method

This history of distribution during the year 1975 - 1980 shows very little alteration in the degree of preference of the user. (Table V).

Throughout the six years, the condom has remained the highest demand of the spacing techniques. In 1975, it represented 39% of the acceptors. By 1980, it had grown to 44%.

In the earlier years, the IUD was the next most preferred. In 1975, it represented 35% of acceptors' choice and remained at this high rate until 1978. However, since then, it has shown some decline and now represents about 24%.

In 1975, there were only three main methods distributed, the third being the oral contraceptive. This represented 26% of acceptors' choice but has been losing popularity over the years and by 1980, it represented only 22%.

In 1976, subsequent to a number of short term tests, Depo Provera was adopted as a distributed method, subject to certain safe-guards; and by 1980, this had become a method chosen by 10% of users.

It seems likely that Depo Provera has been the choice of women who were inclined to change from the short term spacing contraceptive, rather than changing to IUD, probably for reasons of comfort and convenience.

The overall pattern of acceptance can be expressed as follows:-

	<u>1975</u>	<u>1980</u>
Short term method (oral and condom)	65%	66%
Long term method (injection and IUD)	35%	34%

During the period examined, there has been one significant change in method of distribution.

Until 1975, almost the entire distribution of pills and condoms had been effected by the Family Health Bureau. In 1975, the IPPF instituted the social marketing scheme for condoms, and in the latter half of 1976, a similar scheme for orals.

An interesting factor emerges from the table — Distribution of Contraceptive Methods (Table V). The quantity of orals supplied to acceptors has increased during the years 1975-80, but every increase in issue through the social marketing scheme has been offset by a reduction in distribution through government sources. The method has not increased its share of the total market, in fact, the oral method has attracted a lower percentage of acceptors.

In the course of the years since 1971, there has been ample evidence that sterilisation is growing in popularity. (Table IV)

Since 1974, with the exception of 1977 and 1978, each year, there have been more than 33,000 recorded female cases, and in 1980 when the cash incentive was added, the total reached 55,000. With this steady record, even with the reduction of the incentive payment, it seems that female sterilisation is likely to continue at a high level.

As referred to earlier, the bulk of female sterilisations is carried out at the institutions in which the births are achieved. It is difficult at this point of time to make any valid conclusions as to the probable future rate of sterilisations because the Rs. 500 incentive caused a very large increase in the number of female sterilisations, which during the months October 1980 - January 1981, achieved a level of more than 8,000 per month. As yet, there is no information available from which a judgement can be made as to whether this high rate will continue in the light of the reduced incentive.

From the performances achieved in both male and female sterilisations during the period October 1980-January 1981, it would seem that there is an available capacity for at least 100,000 female sterilisations per annum and 140,000 male sterilisations. Such capacity would be capable of satisfying any possible demand in the foreseeable future.

The unknown factor for the future is the effect that non-availability of Depo Provera could have on the acceptor demands for other methods. It would seem logical that a large part of previous Depo Provera users would elect to change to a terminal method, and if this proves true, the number of acceptors who would change to other methods is not likely to exceed about 15,000. The bulk of these are likely to change to IUD or condom and in either event, would make no significant difference to the total requirement.

6. Any stated target for achievement or a desirable target to be assessed from known circumstances

From the statistics available, it is believed that the current birth rate of Sri Lanka is approximately 28.5 per 1,000. This is based on vital statistics published for the years up to and including 1979. From figures now available for the years 1977 to 1979, there is indication of a trend to higher fertility in the age group 15-24, tendency to stability of fertility in the 25-29 group and reduction in fertility in the 30-39 age group. There is some indication of increase in marriage numbers which may account for the increased fertility in the lower age groups. The downward trend in the older age groups would seem to indicate the success of increasing sterilisation acceptance. Projections on the basis of the 1976 Age Specific Fertility Rates would indicate a total number of births at around 464,000 in 1986. This takes no account of the indication of higher fertility in the low age groups, nor of any possible reduction in infant mortality rates. This projection indicates that the birth rate is unlikely to have lessened below 28 by 1986. This is too high a rate since it would indicate a growth rate of population close to a factor of 2.

It becomes obvious that the prospects for the future warrant the most serious consideration by the government, in spite of considerable effort and expenditure on education, training, supply of material and resources, the overall situation has not noticeably improved since 1975.

As the name denotes, family planning is essentially the implementation of a formulated plan to achieve a stated objective. For successful implementation, the plan will require establishment of definite targets, the creation of strategies to achieve those targets, and a system of periodical monitoring to ensure adequate progress towards achievement within the agreed time span.

In the particular situation of Sri Lanka, there must be the fullest collaboration between the executing agencies, i.e. Family Health Bureau, Family Planning Association, Community Development Services, and Population Services International, to ensure minimum overlapping of effort and maximum cost benefit from expenditure.

Unless definite plans, capable of achievement, can be formulated and monitored to maximum implementation, then by the beginning of the 1990 decade, Sri Lanka will have a population in excess of 20 million. The prospects of the increased demand which must then arise to fulfil requirements for health care, schools, job possibilities, housing and food, may be beyond the economic possibilities of the time.

It is the opinion of the committee that until a number of basic essential factors are agreed as to the direction and thrusts of effort during these coming years, it would not be possible to produce any meaningful assessment of total contraceptive requirement. Although it is obvious that there is need for greater contraceptive usage, without some assurance that the demand can be created, it would seem pointless to obtain these supplies. There would need to be assurance that the available national force has sufficient manpower, technologists, teachers, audio-visual equipment, etc. to provide effective motivation.

In order to provide some illustrations of the probable cost of a feasible programme, Mr. A. T. P. L. Abeykoon, Deputy Director, Population Division of the Ministry of Plan

Implementation, was asked to provide suggestions for a plan to reduce the birth rate to 26 per 1,000 by 1984. Essentially, the proposals envisaged:-

- (a) The achievement of 50,000 sterilisations each year.
- (b) Completely maintained contraception for 220,000 fertile couples throughout the period.

The proposals together with comments on the strategies involved, the assumptions as to contraceptive trend and other factors affecting the total cost together with a table of estimated costs for implementation of the plan are attached hereto as Annexure A.

Conclusions

It would seem that although awareness of the benefit of family planning has been almost totally communicated, the endeavours to persuade the women of Sri Lanka to accept family planning practice have as yet succeeded in convincing only 48% of the married women of reproductive age. Of this proportion, 26% have accepted modern methods, terminal and spacing, whilst 22% continue to rely on traditional methods. During the five years 1976-1981, there has been negligible increase in acceptors of modern methods for spacing, but considerable increase in acceptance of sterilisation. There has however also been an increase in the use of traditional methods for spacing.

In 1979, (Australian University Survey), there still remained 52% of the unprotected women of reproductive age who apparently still used no contraceptive or sterilisation method. By today, the increase of utilisation of sterilisation services will have further reduced this proportion. The other important factor is that although a number of surveys reveal an expressed opinion that a family size of two children is ideal, the facts show that 3+ still is the preferred norm by the greater part of the population.

Sterilisation acceptance illustrates this fact, in that males accept at a parity of 3+, while women tend more towards the 4+ level.

This could be critical factor, since the age groups which will come into fertility during the next twenty years, are larger in number content than those moving to the less fertile ages.

The need for greater sterilisation acceptance is vital to any realistic attempt to prevent an insupportable situation twenty years from now.

Much has been said to give the impression that sterilisation services are insufficient. It is difficult to reconcile these statements with the facts as seen in 1980, and the performances achieved in that year.

The performance details would seem to negate the sincerity of the comments. During the last decade, vasectomies only once exceeded 7,000 cases per annum - 600 per month. This was so until mid 1980, yet in the three months October-December 1980, almost 40,000 cases were handled. The conclusion is that the possibilities of service existed, but insufficient demand had not required the service. Since the throughput built up so quickly, it must be obvious that the facilities and trained personnel were already available, but had not previously been required.

Similarly, for a period of several years to 1980, there had been a steady throughput of 30,000+ cases per year, about 2,500 per month of female sterilisation, yet when the Rs. 500 incentive impact raised this to a level of 7,000 cases per month, the demand was met, and the throughput for 1980 totalled an astonishing 55,000 of which more than 30,000 were in the last three months. It is obvious that the trained medical teams and establishments were also available to meet this sudden upsurge of demand.

A similar conclusion emerges from the supply and demand picture of spacing methods. The availability of supply would seem to exceed the demand, and the broad picture, yet to be checked in detail through examination of district store records, shows the possibility that except for Depo Provera, there has been availability in excess of demand. Even with Depo Provera, it is difficult to understand that there was short supply, since there were 138,000+ doses in FHB stores at December 31, 1980, equal to the total distribution for that year by the Family Health Bureau and the FPA.

Other methods, oral, condom and IUD, have shown a history of distribution increase which is less than the population increase, yet requirement quantity would seem to be less than declared distribution quantity.

Taking these factors into account, it would seem improbable that the inability to increase the proportion of acceptance could be blamed on any lack of availability of method or distribution of method.

There are definite indications that any method which can produce side effects is difficult to motivate into maintenance. This could account for the constantly increasing acceptance of condom, the early popularity of Depo Provera, and for reduction of interest in oral and loop methods.

A survey conducted by FPA (1980) into the cause of decline in acceptance of IUD protection concluded:-

"The inescapable finding from this study is that most women do not accept the IUD, not because they cannot get it nor because they do not want contraceptive protection, *but because they are afraid of the IUD*. They are afraid of the real side-effects caused by the IUD and they are afraid of side-effects which are imaginary and are not caused by the IUD."

The comparison between the World Fertility Survey findings of 1975 and the Australian University Survey findings of 1979 point to a disappointing result for motivation for use of modern spacing methods during those years, in spite of the aggressiveness with which the policy was promoted, particularly in those years. The inquirer is led to suggest that the high literacy rates, which helped so much in communicating awareness in the earlier years, is now a minus factor, operating against the motivation to practise modern spacing methods. There is a suggestion of this possibility in the World Fertility Survey which notes the very large number of recorded complaints on side-effects, particularly related to the use of orals. Since 1975, there have been a constant publication of articles in the press, giving considerable publicity to side-effects, medical dangers and physical discomforts which may be attendant on the use of various types of pills and IUDs. Currently, the publicity given to the international disagreements on the security of the use

of Depo Provera and the possible effects of its use on the future of the user and offspring, have also produced some consumer reaction, which will undoubtedly become more marked when the decision of Sweden to withdraw issue of Depo Provera become known.

These induced fears at acceptor level may in part account for the increased preference for condoms as a spacing method, and the increased use of traditional methods.

The inescapable fact remains that the present birth rate of 28.5 is too high, and maintenance at this level will undoubtedly negate to a real extent, the benefit which the government is hoping to gain from its very considerable economic development programmes. The time-scale within which results must be achieved is very small indeed, since unless a definite check is achieved within the next five or six years, the effect of the large numbers coming into fertility during those years could produce an irreversible situation.

The priority must be sterilisation. Even if no increase in present availabilities were made, it has a proven capacity to handle to handle at least:-

Male sterilisations	-	140,000 per annum
Female sterilisations	-	100,000 per annum

RECOMMENDATIONS

The committee would wish to make the following recommendations:-

4. Sterilisation

- (a) The success which was achieved in providing service for the unprecedented demands which arose during the last quarter of 1980 in the introduction of the Rs. 500 incentive shows that there are adequate facilities and trained staff to meet any possible future demands. No additional facilities are required, or should be established. However, funds should be made available during the next few years to make some improvement to the existing premises and equipment, It must also be remembered that the loss of doctors is continual, and funds must always be available for on-going training schemes in the various techniques of sterilisation to maintain the surgical strength.
- (b) The agreed incentives due to medical teams for performance of sterilisations has not been paid since June 1980. These should be paid, and assurance given that they will be promptly paid in the future.
- (c) An increased incentive to acceptors for sterilisation who accept *prior to conception of the third child*, with special concentration on the motivational aspect of the post partum programme.
- (d) A more definite co-ordination between the motivational and medical forces to ensure that surgical service can be available when motivation has been established.

2. Long Term Spacing Methods - IUD and Depo Provera

- (a) Every effort should be made to allay the fears, real and imaginary, which are obstructing the greater use of the IUD. This will be a major motivational task involving the co-operation of satisfied acceptors, editorial exposures of respected medical opinion and public pronouncements by trusted community leaders. In the context of Sri Lanka, the fullest co-operation of the media should be sought.

- (b) Depo Provera is the most expensive method of contraception. It is recommended that it be used only after earnest persuasion to accept an alternative has failed.

3. Short Term Spacing Methods - Oral and Barrier Methods

- (a) A similar motivational campaign to that suggested for IUD for alleviating fears of side-effects from the use of orals.
- (b) More intense general motivation to recruit considerably large numbers of acceptors for all types of spacing methods.

4. General

For longer term policy, it will be necessary to reconsider the strategies presently used to motivate practise of the short term spacing methods. During the past ten years, almost every known technique has been intensively applied. Vast numbers of mid-wives, traditional physicians paramedics and community operators have been trained, sometimes by several different organisation in succession. Expensive social marketing schemes have been developed. Press and radio have been made use of, and senior government ministers have added exhortation. Yet the total usage remains remarkably stable at a very low percentage of acceptance.

Possibly by some agreement between the government, the NGOs and other organisations concerned, there could be achievement of an agreement that there be some areas of concentration by each, so that maximum benefit for cost incurred might be increased, and valuable inter-change of experience established.

For example, there are eleven districts in Sri Lanka which have an unacceptably high birth rate, which also provide more than 27% of the total births.

	<i>Births per 1,000</i>	<i>Population (1,000)</i>
Matale	29.4	347
Mannar	33.3	88
Vavuniya	34.6	108
Batticaloa	35.0	291
Amparai	32.3	307
Trincomalee	39.6	216
Puttalam	33.1	426
Anuradhapura	37.7	444
Polonnaruwa	32.1	185
Monaragala	39.9	221
Ratnapura	31.9	727

The total births (1977) in these districts was 105,676 from a total population (1977) of 3,360,000, almost a quarter of the total population estimate for that year.

The other obvious necessities for concentration are:-

- (a) The later school ages-with particular attention to instilling the effects of an over-populated environment.
- (b) The message to the 15-25 age group that spontaneous marital affection is vital to good human relationship and conjugal success, but procreation should not be spontaneous. It can be contained, considered, and carefully planned without any interferences with the spontaneous exercise of essential human sexuality.

- (c) Intense pressure on the medical profession to agree to the training of midwives, AMPs and Public Health Nurses in the procedures for insertion and withdrawal of IUDs, or injection of Depo Provera.

5. Relevant Data

The work of the committee has been severely hampered through non-availability of important information.

- (a) The total marriage numbers of Sri Lanka for the years 1979 and 1980.
- (b) The number of births registered in 1980.

Enquiries were made for this information on April 8, 1981.

A large volume of statistical data is produced by the Family Health Bureau, but much of it may be very unreliable due to the apparent laxity of divisional officers in completing the required returns.

From the fourteen Divisional Drug Stores, stock and issue returns were received from only seven in 1980. Although the condom is the most used contraceptive in the island, and the annual summaries of usage issued by Family Health Bureau purport to include the achievements of other executing agencies, no data on this contraceptive method is included in these returns.

It is recommended that the data collection system be examined to ensure:-

- (a) That an effective system for the collating of relevant data be established which will allow for information retrieval.
- (b) That all returns are completed and filed with the Evaluation Unit of the Family Health Bureau, within the due date.

6. Immediate Action

1. The Committee recommends the adoption in principle, of the Abeykoon proposals detailed in Annexure A as the short term National Plan. A Committee should be formed, membership comprising the representatives of Family Health Bureau, the Family Planning Association, Community Development Services and Population Services International to ensure the fullest collaboration in practice, so that each, by mutual agreement, accepts responsibility for implementation of such parts of the National Plan for which their resources and technical availabilities are best suited. This should be done with minimum delay.
2. The same Committee should agree
 - (i) A monitoring system to enable at least quarterly progress reports to be issued.
 - (ii) Provide government with summarised reports regularly, informing of particular difficulties found in resources available, technology, or other matters which may have become cause of constraint.
 - (iii) The Committee should specify essential data requirements to enable meaningful report preparation, and the evaluation and statistical divisions concerned should be instructed to give top priority to the design of systems to ensure timely and adequate collection of the basic data necessary for completion.

7. The Four Year Rolling Plan

It is recommended that the Abeykoon proposals be accepted, and the Committee therefore presents the plan of requirements presently believed to arise from such adoption.

As already stated, there could be some variation in the present "mix" of methods if the swing of preference continues away from oral and IUD methods to condom and sterilisation. This could affect the pattern of requirement, but will likely have little effect on total cost, provided that the use of Depo Provera can be maintained at or near the given level.

The annual cost of complete cover per acceptor is:-

Oral	-	\$ 3.25 pa
Condom	-	\$ 3.00 pa
Depo Provera	-	\$ 5.20 pa
IUD (Plastic)	-	\$ 0.12 pa
IUD (Copper)	-	\$ 1.20 pa

(This is cost of contraceptive only, and does not include the motivational costs).

On present data availability there would appear to be sufficient stocks of all methods held by Family Health Bureau and the Family Planning Association to provide ample reserve against the possibilities which might arise from change of preference, from delayed delivery of supplies or possible increase in demand in 1981.

Stocks at December 31, 1980

	<i>Orals</i> (cycle)	<i>Condoms</i> (Gross)	<i>Depo Provera</i> (Doses)	<i>IUD</i> (Plastic) piece	<i>IUD</i> (Copper) piece
FHB	154,219	6,671	136,750	465,705	26,132
FPA	207,500	57,559	10,800	2,693	2,986
TOTAL	<u>361,719</u>	<u>64,230</u>	<u>147,550</u>	<u>468,398</u>	<u>29,118</u>

The rolling plan therefore makes no provision for the acquisition of any further buffer stocks.

If the target of 50,000 sterilisations per annum is achieved, the number of married women of reproductive age at risk in 1984 would likely be about 1,180,000

	<i>'000s</i>
Total married women of reproductive age	2,700
Less: Infertility rates	540
Already sterilised	530
Pregnant	450
	<u>1,520</u>
Total unprotected women	<u>1,180</u>

Of these, it is probable that some 250,000 will already be motivated to acceptance.

To achieve a protection equivalent to a completely maintained cover for 220,000 couples, making due allowance for "drop out" rates, it is believed that some 300,000 couples must be maintained as "continuing" acceptors during each year.

The Committee did not feel that this was an impossible task, although it was apparent that there would be need to mount intensive motivational campaigns directed specifically towards counteracting the publicity which has caused undue attention to be paid to said-effect possibilities of oral and IUD usage.

The present estimate of future resources available indicates that there could be considerable shortfall after 1982.

SIDA has decided that it cannot commit to assist in contraceptive supply after 1982. IPPF, due to restriction in its own support resources, and its liabilities to encourage expansion of family planning in other developing countries presently less well served than Sri Lanka, can, at this time, make no forward commitments beyond end 1981. The input for contraceptive aid will be of the order of \$ 350,000. for the purpose of assessing the years 1982-1984, the probable input from IPPF should be assessed at less than the 1981 level.

This will result in support being requested either from government or outside donor resource towards maintenance of the condom supply in those years, since if supplies become unavailable from the CBD system, the demand will undoubtedly transfer to Family Health Bureau clinics and distribution points. It must be remembered that the condom method currently provides almost half the total spacing protection of the country, and has shown remarkable requirement increase in the last ten years. (see table 8 and graph).

If FPA is doubtful of the possibilities of replacing the IPPF supply support to the CBD system from other sources which may be available to them, it may be advisable that FHB and FPA should discuss the alternatives of:-

- (a) FPA being given government support for maintenance of the system.
- or (b) FHB taking over the system from FPA.

In any case, it would appear that except for a possible shortfall in condom supplies in 1982, there are no present additional requirements to be sought for 1981 and 1982, but immediate steps must be taken to obtain support for 1983 and 1984, in an amount of approximately US\$ 3,000,000.

This is in addition to the sums required for maintenance of the sterilisation incentive scheme at the level of Rs. 200 per acceptor, plus Rs. 65 medical team incentive - Rs. 13,250,000 each year.

TABLE I

TOTAL POPULATION AND TARGET GROUP PROPORTIONS: 1971-1986
(ALL FIGURES IN '000s)

	1971	1976	1981	1986
Population: 0 - 14	4,989	5,264	5,497	5,733
50+	1,594	1,864	2,168	2,488
	<u>6,583</u>	<u>7,129</u>	<u>7,665</u>	<u>8,181</u>
Risk age : 15 - 49	51.8%	50.1%	48.6%	47.3%
	<u>6,131</u>	<u>7,101</u>	<u>8,100</u>	<u>9,111</u>
	48.2%	49.9%	51.4%	52.7%
TOTAL POPULATION	<u>12,714</u>	<u>14,230</u>	<u>15,765</u>	<u>17,292</u>
Married women of reproductive age	1,774	2,091	2,452	2,851
Proportion - Risk population	28%	29.4%	30.3%	31.3%

PROJECTION OF EFFECT STERILISATION EXPECTATION: 1971-1986
(ALL FIGURES IN '000s)

Married Women of Reproductive Age	1,774	2,091	2,452	2,851
Number of Sterilisations	4	142	368	568
Net Women at Risk	<u>1,770</u>	<u>1,949</u>	<u>2,084</u>	<u>2,283</u>
Births	382	389	415	450
Births per 1,000 Women at Risk	<u>216</u>	<u>200</u>	<u>199</u>	<u>197</u>

TABLE II

MARRIED WOMEN OF REPRODUCTIVE AGE
(FIGURES IN 000s)

Age Group	%	1971		1976		1981		1986	
		No. in		No. in		No. in		No. in	
		Married	Age Group MWRA	Age Group	MWRA	Age Group	MWRA	Age Group	MWRA
15 - 19	7	695	49	766	53	822	58	836	58
20 - 24	40	595	238	690	276	761	304	817	327
25 - 29	68	500	340	589	400	684	465	755	513
30 - 34	86	388	334	495	425	584	502	678	583
35 - 39	94	318	299	384	361	489	460	578	543
40 - 44	95½	288	275	333	299	378	361	483	461
45 - 49	98	244	239	283	277	308	302	373	366
		<u>3,028</u>	<u>1,774</u>	<u>3,520</u>	<u>2,091</u>	<u>4,026</u>	<u>2,452</u>	<u>4,520</u>	<u>2,851</u>

Source : Department of Census and Statistics (Page 40 - UNFPA Background papers)
World Fertility Survey 1975 (Page 81 -)

TABLE III
COMPUTATION OF WOMEN AT RISK, ACCORDING TO USE, OR NON-USE, OF
CONTRACEPTIVE METHOD
FIGURES IN '000s

<i>Year Group</i>		Total	Number Protected by			<i>At Risk</i>
		<i>MWRA</i>	<i>Infertility</i>	<i>Sterilisation</i>	<i>Pregnancy</i>	
1981	No method	1,268	254	179	234	601
	Traditional method	532	106	35	109	282
	Modern method	652	130	144	106	272
		<u>2,452</u>	<u>490</u>	<u>358</u>	<u>449</u>	<u>1,155</u>
1982	No method	1,309	261	194	242	612
	Traditional method	549	110	39	113	287
	Modern method	674	135	155	103	281
		<u>2,532</u>	<u>506</u>	<u>388</u>	<u>458</u>	<u>1,180</u>
1983	No method	1,350	270	204	243	633
	Traditional method	567	113	41	114	299
	Modern method	695	139	163	109	284
		<u>2,612</u>	<u>522</u>	<u>408</u>	<u>466</u>	<u>1,216</u>
1984	No method	1,392	278	214	248	652
	Traditional method	584	117	43	117	307
	Modern method	716	143	171	110	292
		<u>2,692</u>	<u>538</u>	<u>428</u>	<u>475</u>	<u>1,251</u>

Source : Gamini Ratne - Australian National University Survey 1979 (Page 185, UNFPA Background)

TABLE IV
STERILISATION - 1971/1980

<i>Year</i>	<i>Male</i>	<i>Female</i>
1971	245	4,090
1972	498	9,078
1973	1,850	18,398
1974	7,292	34,942
1975	6,034	33,130
1976	2,924	32,664
1977	1,302	17,752
1978	2,325	19,624
1979	5,640	30,003
1980	45,000	55,000
	<u>73,110</u>	<u>254,681</u>

Computed as :

Never users	163,000
Traditional method	32,000
Modern method	<u>133,000</u>
	<u>328,000</u>

TABLE V

DISTRIBUTION OF CONTRACEPTIVE METHODS - SRI LANKA - 1975/1980

Type	Unit	Source	1975	1976	1977	1978	1979	1980
Oral	Cycle	FHB	780,023	718,924	168,323	479,398	429,549	576,626
		IPPF	5,284	122,079	140,581	334,203	318,795	385,199
			<u>785,307</u>	<u>841,003</u>	<u>308,904</u>	<u>813,601</u>	<u>748,344</u>	<u>961,825</u>
					A (613,601)	B(821,000)	B(888,000)	
Condom	Gross	FHB	15,541	14,293	6,632	4,421	5,081	7,300
		IPPF	28,600	38,000	41,892	49,864	52,642	60,555
			<u>44,141</u>	<u>52,293</u>	<u>48,535</u>	<u>54,285</u>	<u>57,723</u>	<u>67,885</u>
Depo-Provera	1 cc Dose	FHB	—	1,551	7,405	13,455	33,725	86,081
		IPPF	—	15,144	21,913	35,689	34,958	33,958
			—	<u>16,695</u>	<u>29,318</u>	<u>49,144</u>	<u>68,683</u>	<u>120,039</u>
IUD	Piece	FHB	78,513	105,647	21,147	92,165	52,300	83,729
		IPPF	1,500	1,502	363	7,312	3,047	5,744
			<u>80,013</u>	<u>107,149</u>	<u>21,510</u>	<u>99,477</u>	<u>55,347</u>	<u>89,473</u>
					B(71,000)	B(79,000)		

SOURCES OF INFORMATION

- SOURCES :** FHB - Total issues from Central Stores to Divisional Stores each year.
 IPPF - Actual distribution each year as declared in the Annual Report to IPPF Central Office by FPA Sri Lanka and IPPF/CBD project (which was taken over by FPA in 1978)
- NOTES :** (A) - In 1978, IPPF was supplied with 200,000 cycles orals, and is shown in both distributed figures. The actual total for the country was therefore 113,601 cycles.
 (B) - In 1979, FHB moved central stores to new premises, which interfered with distribution. It is believed that district stores ran down stocks, which were replenished in 1980. These figures (B) average the 1979/80 issues to give a possible truer trend.

TABLE VI

COMPUTATION OF NUMBER OF WOMEN
TO WHOM COMPLETE PROTECTION COULD HAVE BEEN GIVEN
BY CONTRACEPTIVES DISTRIBUTED 1975 — 1980

(FIGURES IN '000s)

	1975		1976		1977		1978		1979		1980	
	A	B	A	B	A	B	A	B	A	B	A	B
Orals (cycles)	785	60	841	65	309	24	613	47	821	63	888	68
Condoms (gross)	44	88	52	104	48	96	54	108	58	116	68	136
Depo-Provera (lcc doses)			17	4	29	7	49	12	69	17	120	30
IUD (pieces)	80	80	107	107	22	22	99	99	71	71	79	79
(Fully protected users)	<u>228</u>		<u>280</u>		<u>149</u>		<u>266</u>		<u>267</u>		<u>313</u>	

Assumptions : Oral users - 13 cycles pa
 Condom - 72 pieces pa
 Depo Provera - 4 injections pa
 IUD - 1 piece pa

TABLE VII

PROJECTION OF ALL-ISLAND BIRTHS—BASED ON AGE SPECIFIC FERTILITY RATE, 1976

YEAR '000s	15 +		20 +		25 +		30 +		35+ TOTAL BIRTHS							
	% MWRA	'000s BIRTHS	% MWRA	'000s BIRTHS	% MWRA	'000s BIRTHS	% MWRA	'000s BIRTHS	% MWRA	'000s BIRTHS						
1976	53	52.3	27.7	276	42.7	117.9	400	29.7	118.6	425	16.0	68.5	361	10.5	37.8	370.5
1981	58	52.3	30.3	304	42.7	129.8	465	29.7	118.6	502	15.5	77.8	460	9.2	42.5	418.5
1986	58	52.3	30.3	327	42.7	139.6	413	29.7	152.4	583	15.0	87.5	543	8.5	46.1	455.9

Source: Bulletin of Vital Statistics, 1967 - Dept. of Census and Statistics

- Note: (a) The Age Specific Fertility Rates used for the age groups 15 - 29 have been shown as constant. The figures available for 1977 and 1978 indicate a slight trend to higher fertility in each of the age groups 15+, 20+, stability in 25+ group and reduction in 30+ and 35+. In these latter groups, the fertility rate should decline due to the increasing sterilisation acceptance.
- (b) The probable number of births 1986 is closely in accord with the estimates prepared by A. T. P. L. Abeykoon, Deputy Director, Population Division of the Ministry of Plan Implementation, in his paper "Recent Changes in Population Growth Rate, Sri Lanka", 1980.

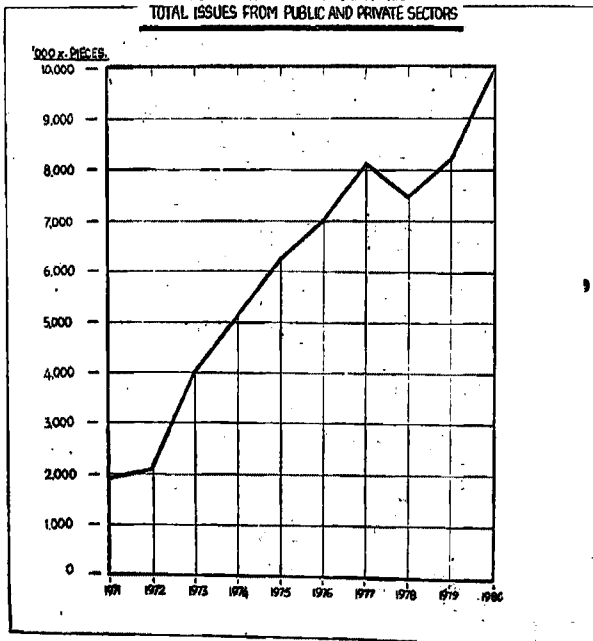
TABLE VIII

CONDOM SUPPLIES - SRI LANKA - 1971/1980

PRIVATE SECTOR

YEAR	PUBLIC SECTOR	PREETHI	OTHERS	TOTAL
1971	694,800	—	1,200,000	1,894,800
1972	874,152	—	1,200,000	2,074,152
1973	1,237,392	1,071,400	1,675,000	3,983,792
1974	1,481,040	3,730,829	—	5,211,869
1975	2,151,072	4,118,699	—	6,269,771
1976	1,816,704	5,191,000	—	7,007,704
1977	1,871,136	6,199,278	—	8,070,414
1978	636,624	6,855,564	—	7,492,188
1979	731,664	7,580,448	—	8,312,112
1980	1,051,200	8,719,920	—	9,771,120

CONDOM USAGE - SRI LANKA; 1971-1981
TOTAL ISSUES FROM PUBLIC AND PRIVATE SECTORS



ANNEXURE A

A NOTE ON FAMILY PLANNING TARGETS 1981-1984

"Theory without policy is for academics,

Policy without theory is for gamblers"

J. Mayone Stycos

In many developing countries, the national family planning programmes have been assigned demographic goals in terms of specific amounts of reduction in crude birth rates or population growth rates. These programmes have also set targets of the number of acceptors of different family planning methods to be recruited in order to achieve these demographic goals. The pre-determined targets are generally used as a criterion in monitoring the past and current progress of the family planning programmes and as a mechanism for making appropriate adjustments.

In Sri Lanka, demographic goals were for the first time formulated in 1965 when family planning became a national programme. The goal of the programmes was to reduce the crude birth rate to 25 per 1,000 in 1975. When the crude birth rate fell from a level of 33.1 per 1,000 in 1965 to 27.8 per thousand in 1973, the target rate appeared well within our reach. The birth rate since then, however, has not shown any significant change and in 1980, was 27.5 per 1,000 of the population.

The number of females who will enter the reproductive age span during 1981-1984 are already born and therefore, the number of females in the reproductive age group will increase irrespective of fertility changes that might take place during this period. As a result of this in-built potential of the population age structure to increase the birth rate, the annual number of births would be around 450,000 even if fertility rates remain constant during period.

At any given moment, the female population in the reproductive age group 15-49 years, may be divided into two categories, i. e. persons who are 'protected' from the possibility of getting pregnant, and persons who are 'unprotected'. A 'protected' female is one who is either unmarried or involuntarily sterile or pregnant or using reliable contraception, (or by spouse). An 'unprotected' female is one who has all four of the following - married, fecund (capability of conceiving and bearing children), not pregnant, and not using contraception (including spouse).

The unprotected population becomes the 'target population' for family planning action programmes. The birth rate can be reduced only by decreasing the number and proportion of women in the 'unprotected' category. There are two avenues by which this could be achieved:-

- (a) contraception may be increased or
- (b) exposure to sex selection may be decreased. The first alternative is the most plausible method by which demographic goals can be reached.

In this note, we have assumed a demographic goal of reaching a crude birth rate of 26 per 1,000 by 1984. The number of births that will have to be averted annually will be around 50,000 to reach to target birth rate. The marital fertility rate in 1979 was estimated at 186 per 1,000 married females. If this rate is taken as the constant base for estimation of the number of married couples who should practise 'perfect contraception', it is seen that the rate of 186 per 1,000 yields a relationship of 1: 5.4: that is, one married female out of 5.4 such females had a live birth that year. Alternatively, it would take 5.4 couples practising perfect contraception to avert one live birth. Thus, to avert 50,000 live births per year, about 270,000 couples will have to practise perfect contraception. Perfect contraception is difficult to achieve in practice, and the estimate could, in fact, be much higher if allowance is made for the degree of effectiveness of different methods.

It is reasonable to assume that about 50,000 couples will be protected annually by sterilisation. This will leave about 220,000 couples to be protected by other methods.

ESTIMATION OF CONTRACEPTIVE AND STERILISATION COSTS FOR REDUCTION OF BIRTH RATE TO 26 PER 1,000 BY 1984

At this precise moment of time, it is almost impossible to make any truly satisfactory forecast of contraceptive requirements for the immediate future.

In the last three months of 1980, the attraction of the Rs. 500 incentive scheme caused a tremendous upsurge in the acceptance of sterilisation, with the result that 1981 commenced with a reduction of 100,000 women at risk. In addition, a further 30,000 sterilisations were performed in January and February 1981.

There is, as yet, insufficient information available from which any meaningful analysis can be made of the former contraceptive measures used by those 120,000 sterilisation acceptors, or of the age groups from which they were drawn. Certainly there will be significant effect on the total demand, even if a considerable proportion was drawn from the "never user" group.

Without this information, the model as presented may not be fully representative of requirement, since it is based on the preferences as shown by past experience, but it will be sufficiently informative as to the cost magnitude of the problem, and as a basis for the first year of a four year rolling plan.

The assessment of the probable cost is based on the provision of sterilisation for 50,000 (male or female) and for complete and maintained protection for 220,000 couples by other modern methods.

To achieve this objective, taking into account normal drop out ratios, it is probable that a total of some 300,000 continuing acceptors must be recruited, and the target for each method would be:-

Oral acceptors	100,000
Condom acceptors	100,000
Depo Provera acceptors	50,000
IUD acceptors	50,000
	<u>300,000</u>

ANNEXURE A

ESTIMATION OF CONTRACEPTIVE AND STERILISATION INCENTIVE COSTS.

TARGET: TO ACHIEVE BIRTH RATE 26 PER 1,000 BY 1984

METHOD	UNIT	%	NUMBER	ACCEPTORS		ESTIMATED COST			
				UNITS PER ACCEPTOR	ANNUAL REQUIREMENT	1981 US\$	1982 US\$	1983 US\$	1984 US\$
Oral	Cycle	22	48,400	13	629,200	786,500	865,150	951,665	1,046,831
Condom	Gross	44	96,800	0.5	48,400	290,400	319,440	351,384	386,522
Depo	Dose								
Provera	1 cc	10	22,000	4	88,000	114,400	125,840	138,424	152,266
IUD	Piece	24	52,800	1	52,800	6,336	6,970	7,666	8,433
		100	220,000			1,197,636	1,317,400	1,449,139	1,594,052
50,000 sterilisations each year incentive @ Rs. 265 — Rs. 13,250,000 p.a.						736,111	736,111	736,111	736,111
						1,933,747	2,053,511	2,185,250	2,330,163
Approximate Sri Lanka Rupee equivalent						Rs. 35 M	Rs. 37 M	Rs. 39 M	Rs. 42 M

Price calculations based on 1981 prices, with annual 10% increase.

ANNEXURE B

Report of the Sub - Committee appointed to review the Sterilisation Programme

The sub-committee appointed to review the sterilisation programme consisted of the following members:-

1. Mr. D. P. Wijegunasekara - Director Population Division, Ministry of Plan Implementation.
2. Mr. Victor Silva - Representative of the Family Planning Association.
3. Dr. K. P. Wickremasuriya - Family Health Bureau.
4. Mr. Terry Luis - Population Services International.

The above committee met on 6th of April 1981 at the Ministry of plan Implementation under the Chairmanship of Mr. Wijegunasekera and reviewed the present status of the programme and what could be achieved in the next four years.

In reviewing the performance of the Family Planning Programme during the past few years, the following two phases were identified.

- (a) Period prior to the introduction of the extra payment to Medical teams who are engaged in sterilisations and the Incentive payments to acceptors of sterilisation.
- (b) After the introduction of the above schemes.

Extra payment scheme to Medical teams.

The extra payment to Medical teams was introduced in may 1979 with a view to clear the back log on sterilisations. According to this scheme, the Medical team performing tubectomies (LRT) were entitled to an extra payment of Rs. 65/- for each LRT performed over and above a minimum, based on 10% of the deliveries that took place in that Institution for the corresponding month.

Similarly, for Vasectomies a total of Rs. 35.50 was given to the Medical team for each case performed over and above a minimum which was fixed at 5 cases per unit.

The break down is as follows:-

TUBECTOMIES		VASECTOMIES.	
Consultant/MO	Rs. 20.00	Consultant/MO	Rs. 25.00
Anaesthetist	20.00	One Nurse	7.50
Two Nurses @ Rs. 7.50	15.00	One Labourer	3.50
Two Labourers			
@ Rs. 3.00	6.00		
ward staff	4.00		

Incentive Scheme for acceptors.

The incentive scheme for acceptors was introduced at a national level, in January 1980 and a payment of Rs. 100/- was given to all acceptors of sterilisation. (both male and female) This was further increased to Rs. 500/- from 1st October 1980. Comparison of the statistics at different phases of the programme will illustrate the impact of the incentive, on the sterilisation programme.

1. Prior to any form of Incentive.

	Vasectomies	Tubectomies	Total	Average per mth.
1978 Jan - Dec.	2325	19624	21956	1829
1979 Jan - Apr.	997	6976	7973	1993
2. Introduction of Extra payment to Medical team.				
1979 May - Dec.	4643	23027	27670	3459
3. Introduction of Incentive payment to sterilisation acceptors.				
Payment of Rs. 100/-				
(a) 1980 Jan - Sept.	8961	33851	42812	4755
Payment of Rs. 500/-				
(b) 1980 Oct - Dec.	37006	21364	58370	
Octobr 1980 to Jan 1981	50604	27875	78479	19620

From the above table it is seen that, prior to any form of incentive only about 1900 sterilizations have been performed on an average per month. With the introduction of the extra payment to Medical team, it has been possible to increase the number of the incentive payment of Rs. 100/- to the acceptor, the number of sterilization has increased to an average of 4755 thus showing an increase of 37.5%. With the increase of the incentive to Rs. 500/- an average of 19620 sterilization have been performed showing a two fold increase, with the vasectomies showing an increase of more than twelve times, (average of 997 per month had increased to 12650 per month). However the tubectomies have shown an increase which is less than two fold. (average of 3771 increased to only 6969 per month).

From the 16th of February 1981 the incentive payment has been reduced to Rs. 200/- per acceptor, The month of February has shown a significant decrease in the total number of sterilization reaching a figure of 12,215 with 7540 vasectomies and 4667 tubectomies being performed. This shows that vasectomies have shown a 40% decrease while tubectomies have had a decreased of 33%. This illustrates that the reduction of the incentive from Rs. 500/- to Rs. 200/- has had a major impact on the sterilisation programme. It is too early to assess the real impact of the reduction in the incentive, since this came into effect only from the second half of the month of February.

It is too early to assess the number of sterilisations that could be performed for a year the next four year period. The incentive specially to the acceptor has had a major influence on the acceptance of this method as shown by the very significant fluctuations observed with the alterations in the incentive.

For 1981 already 32,324 sterilization have been performed for the first two months. Based on the total sterilization already performed and the downward trend already experienced for this short period, the committee felt that a total of 75,000 sterilizations would be performed for the year 1981 provided the present incentive is maintained, with the extra payment to Medical teams remaining the same. This would mean that an average of 4500 sterilizations was estimated to be performed monthly for the balance period of the year.

The Committee also felt that the number requesting sterilization inspite of the incentive scheme would reduce with time as has been the experience with other countries. Once the back-log is cleared the people would go more through temporary methods rather than sterilizations. In view of these facts it was decided that an estimate of 4000 sterilizations per month will not be too low, so that about 50,000 sterilizations would be performed annually for a further period of four years, provided the present incentive would be maintained with the extra payment to Medical teams kept unaltered.

It was difficult for the Committee to estimate seperately the Vasectomies and the Tubectomies that could be performed during this period since there was such a marked variation for each method, shown with the alterations in the Incentive Payments. Since October, 1980 a total of 58,144 Vasectomies have been recorded upto February 1981, having an average of 11,629 per month. This would have created an awareness of the method and also removed some of the hidden fears among the males. With this in mind the Committee felt that the vasectomies would be about 25% of the total sterilization.

The Committee also felt the need to review the D. H. S's General Circular No. 1136 of 22. 1. 81, specifying the conditions which would qualify the individual for a payment for sterilization. The members were of opinion that if this could be modified to include the area Public Health Inspector and the Public Health Midwife in addition to the Grama Sevaka, who could certify the age, marital status and the number of living children of the acceptors, the number consenting for Vasectomies would Increase.

The following table gives the estimated number of new acceptors of Sterilization by method for 1981 to 1984,

<i>Year</i>	<i>Estimated No. of acceptors</i>	<i>Tubectomies</i>	<i>Vasectomies</i>
1981	75,000	56,000	19,000
1982	54,000	40,000	14,000
1983	50,000	37,000	13,000
1984	50,000	37,000	13,000

Printed at:
Karunaratne & Sons Limited,
647, Maradana Road,
Colombo 10.