DEMOGRAPHIC EVALUATION OF PROGRESS AND TARGET OF NATIONAL FAMILY PLANNING PROGRAMME OF INDIA

by

S. K. CHAUDHURI,* M.B., B.S., D.G.O., Ph.D. (Med.), F.A.C.S., F.R.C.O.G. (Lond.)

India is the first country in the world in 1961 to 14.8 (estimated) in 1981 as seen which launched a national family plan- from Table I. ning programme. But unfortunately control of population explosion is not yet evry effective and this is eroding our national development. Gynaecologists and other doctors have got their great roles in this national programme. Scientific progress needs time to time evaluation and fixation of targets so as to intimate the persons concerned the task ahead of them.

It is very difficult to isolate the effect of family planning programme from those of other inter-related socio-economic programmes. However, the criteria of measurement which reflect mostly the effects of family planning programme in India will be discussed here.

Crude Birth Rate

It means number of births per 1000 population in a year. This is an excellent measuring factor of family planning. The birth rate of India has declined from 41.7 in 1961 to 33 (estimated) in 1981, but the effect on population growth has been nullified by decline in death rate from 22.8

*Professor of Obstetrics and Gynaecology, Medical College and Hospitals, Calcutta. Accepted for publication on 24-6-81.

TABLE I Crude Birth Rate and Death Rate of India

-15		
Year	Birth Rate	Death Rate
1961	41.7	22.8
1971	37.2	15.9
*1981	33.0	14.8
	(estimated)	(estimated)

Estimated by Government of India from

Population Growth

Table II shows that the total population in India has grown in a terrific rate from 278 million in 1931 to 684 million in 1981 (Census Report, 1981) and it is estimated that it will increase to 1037 million in the year 2000 (Norton and Hofstatter, 1980).

The decennial change in population growth and the geometric growth rate show an upward trend from 1931 to 1971 has been halted in 1971-1981, which is a good feature.

TABLE II
Population in India

Year	Total population (in millions)	Decennial change	Geometric growth rate	Density of population/
1931	278	11.0	1 00	
1941	318	14.23	1.06	90
1951	360		1.34	103
1961		13.31	1.26	117
1971	439	21.6	1.98	142
	547	24.80	2.24	173
1981	684	24.75	2.23	214

Decennial change—Change in 10 years in percentage.

Geometric Growth Rate—Growth rate as per geometric progression over the years involved.

The density of population per square kilometer has increased from 90 to 214 in the last 50 years with all its problematic effects on habitation, housing, sanitation etc.

National Income and Per Capita Income

It is observed from Table III that though the national income has increased by 24.9% in 4 years from 1974-75 to 1978-79 per capita income increase was only 15.3% over these years which means that due to population growth people could not gain from our national income growth due to failure of effective family planning programme.

Number of Couples Effectively Protected

This is a very good index to measure the effect of family planning programme. The methodology is a complicated one and it takes into account the following factors:

- (1) Cumulative effect of sterilisation and I.U.C.D. and current number of conventional contraceptives and oral users. (Conventional contraceptives and oral pills have no carry over effect).
- (2) Annual attrition rate for sterilisation and I.U.C.D. due to ageing, mortality, removal/expulsion of I.U.C.D. etc.
 - (3) Latest age distribution of acceptors.

National Income and per Capita Income in India

Year		National Income (Rs. in '000 millions)		Per Capita Income (in Rs.)		
	At current prices	At 1970-71 prices	At current prices	At 1970-71 prices		
1974-75	593.15	365.04	1004	618		
1975-76	616.09	398.49	1020	660		
1976-77	668.85	405.34	1086	658		
1977-78	747.94	438.57	1189	697		
1978-79	800.90	456.37	1249	712		

(4) Latest joint survival ratios of husbands and wives in different age groups.

(5) Use-effectiveness of different

methods.

Table IV shows that number of couples

commercial channels and through private doctors. But it is estimated that their effects are not much in the national level and are about 3% of total per cent of couple protection. Amongst the non-programme acceptors the most popular

TABLE IV

Number of Couples Effectively Protected by Various Methods of Family Planning

Year	Estimated No. of couples in Reproducive Age Groups (1000)	Sterilisation (%)	I.U.C.D. (%)	Equivalent C.C. users	Total (%)
1970-71	93,103	8.1	1.4	1.1	10.6
1973-74	99,306	12.4	1.0	1.5	14.9
1976-77	105,677	21.1	1.1	1.8	23.9
1979-80	112,185	20.1	1.0	1.4	22.5
1980-81 (April- December)	114,000	20.2	1.0	1.6	22.8

effectively protected rose gradually from 10.6 in 1970-71 to 23.9 in 1976-77. Since then there was no further rise and actually there is decline, but fortunately it seems that the upward trend is being picked up in 1980-81. (Year Book of FW 1979-80; Monthly Bulletin on FWS, 1981).

It is observed that the most effeceive means of effective couple protection is provided by sterilisation (20.1%) out of total 22.5%. The trend for the last 4 years is in favour of tubectomies forming 73.7% of total sterilisations in India in 1979-80. Of the conventional contraceptives, condoms are preferred to oral pills in the family planning centres run by the Government. The popularity of I.U.C.D. is also not much as is seen from the above Table.

The figures do not reflect the effects of non-programme acceptors of family planning who practice contraception through methods are sterilisations, condom and is backed by induced abortion.

Number of Births Averted

This is another good index of measurement of effect of family planning programme. This complicated index takes into account the following facts:

- (1) Latest age distribution of acceptors.
- (2) I.U.C.D. retention rates.
- (3) Joint survivance ratios of husbands and wives in different age groups.

The Table shows that the number of births averted was actually less in 1978-79 and 1979-80 as against in 1976-77 and the most effective method is sterilisation (Year Book of FWP, 1979-80).

The official Table as above has not taken into consideration number of births averted by induced abortion because of the fact that abortion has not yet been accepted by the Government of India as a method of family planning though legal

Total fertility rate means average number of children born per female in the reproductive age group (15-44 years).

Total marital fertility rate means average number of children born per married female in the reproductive age group.

It is observed from Table VII that fertility rates have declined both in the urban and village population over the years, but the total fertility rate will have to be lowered to about 2 to make population growth stationary.

Gross Reproductive Rate

It is a more sensitive indicator of population growth and their future effect. Gross reproduction rate means average number of female children born per female in the reproductive age group assuming all the children born will reach upto the end of the reproductive period.

Gross reproduction rate in the rural people has been lowered from 2.8 in 1972 to 2.24 in 1978 and in the urban community from 2.1 in 1972 to 1.59 in 1978. The figures show a downward trend but the gross reproduction rate will have to be lowered to near one to have zero population growth which is our national aim.

Target of Family Planning Programme and the Task Ahead

It is estimated that by the year 2000, India will have 1037 million population (Nortman and Hofstatter, 1980) and the present population will be doubled in 36 years if the present rate of population growth continues (Draper Fund Report, 1980).

The original target of family welfare programme of India was to reduce the birth rate to 25 per 1000 population by 1978-79. As this was not achieved the revised target was birth rate of 30 by

1978-79 which is also far from the present actual rate of 33 in 1981.

Downward revision of target was made again in 1978 and the present target is a birth rate of 30 per 1000 population by 1982-83.

Repeated modifications of target in a downward direction show poor performance of family planning programme. Also, the present birth rate of 33 is too high in comparison to 15 to 18 in Japan, USA, USSR, other developed countries and China.

The Government of India's long term target is to achieve "Zero" population growth by 2000.

To achieve this target birth rate will have to be brought down from 33 at present (1981) to 21 per 1000 population by 1996. It is estimated that the death rate by the time will come down from the present rate of 14 per population to 9 per 1000 population. It will then be necessary to protect effectively 60% of eligible couples from the present level of 22.5% in 1980. Meanwhile the family will have to be reduced to two from the present family size of about 6 children born with 4.2 surviving.

The proposed drop in birth rate by 12 points in 20 years seems to be well within our reach, as India has a past record of a drop of 8 to 9 points over the 11 year period from 1966 to 1977 when the programme was pursued more vigorously. Since then there is a dull in our upward trend of control of fertility.

An analysis shows that 83.6% of our family planning acceptors come from the rural areas where 78% of our people live as estimated in 1979, and 36% of the husbands and 55% of the wives are illiterate, the literacy rate being 36.17% (Census Report, 1981). These are good features of our national family planning

programme as they suggest that family planning is accepted by the people living in the remote villages and by the illiterate groups too. Even then attempts must be made to improve literacy and modernisation of the society with which success of family planning is very much related.

To achieve this Zero population growth a great task is ahead of Indian people and not only our Government, but also voluntary organisations must come forward vigorously and each doctor whether he or she is a gynaecologist or not will have to perform his or her national duty in helping our family planning programme.

Acknowledgement

I am grateful to Mr. Alok Kumar Mukherjee, Demographer, Demographic and Evaluation Cell, State Family Planning Bureau, West Bengal and his associates for supplying me dates and helping me in writing this article.

References

- Census Report of India, 1981—Provisional figures issued by Govt. of India, New Delhi.
- Draper Fund Report No. 10, 1980. ed.
 L. Camp, Washington.
- Monthly Bulletin on Family Welfare Statistics, April 1981, Ministry of Health, Govt. of India, New Delhi.
- Nortman, D. L. and Hofstatter, E.: A population council fact book, The Population Council, New York, 10th ed.
- Report of the Committee to study the question of legalisation of abortion— Ministry of Health, Govt. of India, New Delhi, 1967.
- Year Book of Family Welfare Programme in India, 1979-80, Ministry of Health. Govt. of India, New Delhi.