The family planning programme and contraceptive use in India: A marketing perspective

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Introduction

India's current demographic phase is characterised by rather high fertility and moderate mortality rates. As a result, the country's population is growing rapidly with about 18 million people being added to it annually, to give a 2.1 per cent increase per annum.

Data from 104 countries[1] indicate that the rising use of contraception is indisputably the main proximate determinant of the fertility decline experienced by developing countries. They have also revealed that no country has approached replacement level fertility without reaching a contraceptive prevalence rate of at least 50 per cent.

This paper looks at fertility related indicators and changes in the use of contraception in India together with a marketing perspective of the national family planning programme. It seeks to show that a suitable marketing approach can bring about significant improvements in the effectiveness and efficiency of the programme.

Trends in contraceptive use and fertility

A look at the fertility data of India shows that the general fertility rate declined by 25.7 and 15.8 per cent in urban and rural areas respectively while the total fertility rate (TFR) declined by 27.9 and 20.4 per cent respectively (Table 1).[1] During the same period, the urban and rural crude birth rates fell by 12.3 and 12.5 points respectively.[2]

During the late '60s, vasectomy was the mainstay of the family planning programme, and in 1967-68, it constituted 90 per cent of the 1.84 million sterilisations performed that year.[2] Vasectomy acceptance peaked at 6.2 million in 1976-77, and though the total number of sterilisations continued to rise, vasectomies fell consistently and constituted only 20.5 per cent of all sterilisations in 1981-82, 6.2 per cent in 1990-91, and just 3.4 per cent of all sterilisations in 1993-94 (table not given). As a result, the couple protection rate (CPR) rose from 23.8 per cent in 1981-82 to 44.1 per cent in 1990-91, and the contribution of terminal methods to the CPR decreased by 16.7 per cent. In 1990-91, about

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TABLE 1
Urban-rural fertility indicators, 1972-1988

Indicator	Area	1972	1978	1984	1985	1986	1987	1988
Birth rate	Urban	30.0	27.9	28.6	28.2	27.5	26.9	26.3
	Rural	37.7	34.5	35.0	34.6	34.1	33.6	33.0
GFR	Urban	139.8	111.6	120.2	112.9	108.1	108.5	103.9
	Rural	165.6	146.8	153.1	146.9	145.6	141.8	139.5
GMFR	Urban	172.9	143.6	166.1	157.3	150.6	152.5	146.2
	Rural	190.8	170.2	191.0	184.4	182.8	179.6	177.7
TFR	Urban	4.3	3.4	3.5	3.3	3.1	3.2	3.1
	Rural	5.4	4.8	4.8	4.6	4.5	4.4	4.3
GRR	Urban	2.1	1.6	1.7	1.5	1.5	1.5	1.5
	Rural	2.7	2.3	2.3	2.2	2.2	2.1	2.0

GFR = General fertility rate; GMFR = General marital fertility rate; TFR = Total fertility rate; GRR = Gross reproductive rate

Source: F.W. Programme in India, Year Book 1990-91, Government of India, pp. 996, 109, New Delhi (1992).

68.7 per cent of all acceptors were protected by sterilisation, 15.2 per cent by the IUD, and 16.1 per cent by other methods. (The corresponding figures for 1981-82 were 87.3, 4.5 and 8.1 per cent respectively.)

The Third All India Survey on Family Planning Practices conducted by the Operations Research Group[3] in 1988-89 estimated that among current users, 69.7 per cent had adopted a terminal method; 4.2 per cent, the IUD and 26.1 per cent other methods. It also reported that 75 per cent of the estimated 134.3 million acceptor couples were from rural areas. In both urban and rural areas, the increase (nine per cent) in terminal method acceptance during 1980-88 was lower as compared to that (16 per cent) during 1970-80. Overall, for all modern methods except the IUD, the increase in acceptance during the 1980-88 period was lower than that observed during the 1970-80 period.

Many reasons have been advanced for non-adoption or discontinuation of family planning methods.[3] In general, among the perceived effects of contraceptive use, "can't work hard" is the most frequently mentioned for sterilisation, followed by menstrual problems (with IUD use) and pain (tubectomy), and or desire for another child. Among those who practiced traditional methods, 17 per cent found them unreliable and had shifted to other methods while another 15 per cent had discontinued following method failure.

A marketing perspective

The National Family Planning Programme in India, started in 1951, was based on a clinical approach. Even after four decades, the rapidly growing population remains a major hurdle in the country's path to development. The proportion of couples effectively protected by family planning is far below that required for checking the country's rapid population growth. Secondly, some states do not show a decline in the birth rate corresponding to the increase in contraceptive practice (Table 2).

FIGURE 1
Stratification of major states by increase in CEP and decrease in CBR

Decrease in CBR between 1980 & 1988	Low (<90%)	Average (90-110%)	High (>110%)	
	ANDHRA PRADESH GUJARAT WEST BENGAL	KERALA TAMIL NADU (>8%)		High (> 8%)
		BIHAR HARYANA	RAJASTHAN UTTAR PRADESH	Average (4-8%)
	ASSAM PUNJAB MADHYA PRADESH			Low (0-4%)
	ORISSA			
	MAHARASHTRA		KARNATAKA (<0%)	Negative (<0%)

Increase in % CEP between 1980 & 1991

Note: CEP = Couples effectively protected; CBR = Crude birth rate
Source: Family Welfare Programme in India, Year Book 1990-91, p. 213, Government of India, New Delhi (1992).

Figure 1 presents the relationship between the percentage of couples effectively protected (CEP) during 1980-91 and the crude birth rate (CBR) during 1980-88 for the major states which have classified as 'high', 'average' and 'low' with respect to the corresponding all India values.

Between 1980 and 1991, the CEP value for the country as a whole showed an increase of 97.8 per cent while the CBR decreased by 6.8 per cent. Further, while the increase in CEP was 'high' in Rajasthan, Uttar Pradesh and Punjab the decrease in CBR was only 'average' in the first two states and 'low' in Punjab (Figure 1).

In Karnataka, inspite of a high increase in CEP, there was, in fact, an increase in CBR. Possible reasons for such a relationship between the CEP and CBR include :

1. the degree of reliability of the statistics on contraceptive use provided by the respective state governments
2. differences in the method-mix in different states for achieving a given level of CEP. For example, the share of terminal methods in Assam is 91.5 per cent, while it is only 54.2 per cent in Punjab as can be seen from Table 3
3. the method used for calculating CEP which misses out on the drop out rate of the IUD, or the period during which users of conventional contraceptives are not protected due to various reasons including improper use or non-use
4. low effectiveness of the method due to the poor quality of the contraceptive device or service provided, and
5. the mis-match between the actual contraceptive needs of the people (for information, products and services) and what is accessible and ultimately provided to them. This is probably the most important reason.

Understanding the needs and satisfying the unmet needs of people by providing appropriate and quality products and services is the essence of the marketing ap-

TABLE 2
Couples effectively protected and crude birth rate, major states of India

State	CEP 1980 (%)	CEP 1991 (%)	Incr. in CEP (%)	CEP in 1991 due to				CBR 1980	CBR 1988	Decr. in CBR
				Sterl. (%)	IUD (%)	CC (%)	OP (%)			
Andhra Pradesh	25.6	44.3	73.0	80.4	8.1	7.4	1.6	31.6	27.8	12.0
Assam	19.3	28.2	46.1	91.5	5.7	2.1	1.1	32.9	32.1	2.4
Bihar	12.4	26.0	109.7	85.8	11.1	1.9	1.2	38.4	36.1	6.0
Gujarat	31.3	57.8	84.7	68.0	19.0	10.0	2.9	35.1	29.7	15.4
Haryana	29.1	56.6	94.5	58.0	22.4	17.1	2.5	36.8	34.5	6.3
Karnataka	22.3	46.9	110.3	82.7	11.5	3.4	2.1	28.0	28.5	-1.8
Kerala	28.9	55.6	92.4	82.4	9.4	6.5	1.8	26.0	20.7	20.4
Madhya Pradesh	21.7	40.3	85.7	67.2	13.2	13.9	5.5	37.5	36.3	3.2
Maharashtra	34.5	56.2	62.9	74.9	11.9	7.5	5.7	28.3	28.9	-2.1
Orissa	26.9	41.0	52.4	76.3	13.7	7.1	2.9	31.9	31.1	2.5
Punjab	23.5	75.8	222.6	54.2	32.1	10.9	2.8	29.6	28.5	3.7
Rajasthan	13.3	29.0	118.0	75.5	15.2	6.6	2.8	37.1	34.2	7.8
Tamil Nadu	28.2	57.3	103.2	78.5	15.4	2.8	3.3	28.3	23.3	17.7
Uttar Pradesh	11.5	35.5	208.9	56.1	32.1	9.3	2.5	39.5	37.3	5.6
West Bengal	21.4	33.7	57.5	86.4	6.5	4.2	3.0	32.5	28.8	11.4
All India	22.3	44.1	97.8	68.7	15.2	11.6	4.8	33.8	31.5	6.8

Note: CEP = Couples effectively protected; CBR = Crude birth rate;
Incr. = Increase between 1980 and 1988; Sterl. = Sterilisation;
CC = Conventional contraceptives; OP = Oral pill

Source: Family Welfare Programme in India, Year Book 1990-91, Government of India, pp.100, 109, 210-213, New Delhi (1992).

proach. The present practice of target setting for individual methods by the Central Government can be viewed as a 'seller's' approach. The focus is on the product or service and it is assumed that the people have to be cajoled with incentives etc. or even pressurised into using the various family planning products or services.

The low effectiveness of a method or service is obviously an indication of the lack of an appropriate marketing strategy. Low effectiveness can be due to the poor quality of the product and/or service provided, sterilisations performed on couples who already have many children and the wife is at the end of her reproductive span, discontinuation due to unsuitability of the method on medical or health grounds and the absence of proper counselling, and the misuse or non-use of contraceptives like the condom, pill etc.

The Indian Government has been criticised for its failure to handle family planning as a marketing problem, right from its early stages.[4] Using a marketing approach, Dey,[5] Director Family Planning at the Tata Iron & Steel Company, Jamshedpur, who has already achieved the target set by the Government for 2000 A.D. in the steel township, has rightly said that family planning is "not a medical problem but a marketing problem."

An almost exclusive emphasis on sterilisation has been a serious problem with the Indian family planning programme. The poor quality of family planning information and services along with a monolithic and inflexible approach to service delivery have also been recognised as the major weaknesses of the programme.[6] In addition to this, inappropriate government policies and biases among health providers have constrained access to the full range of modern methods thereby limiting reproductive choices.

In the following sections, a marketing perspective of the family planning programme in India is presented beginning with an assessment of contraceptive needs leading to the concept of market segmentation followed by a discussion of the four basic 'Ps' of marketing namely, product, price, promotion and place.

Needs Assessment

Is lack of demand for family planning services and products the main hurdle as a section of the population programme managers argue? Probably not! The National Family Health Survey, 1992-93[7] gives an indication of the unmet need for family planning services and products. Of the one-third of all currently married women who expressed the desire for another child, 58 per cent reported that they would like to wait for at least two years before having the next child. Interestingly, the desire for spacing children was very strong among women who had less than two children. And, more than one-quarter of all currently married women indicated that they did not want any more children. This strong desire expressed by these women for spacing and limiting cannot be ignored.

Identifying the target population and assessing their needs is the starting point of a marketing approach. More attention needs to be given to regular updating of the Eligible Couple Register (ECR) which is simple to maintain and easy to analyse. This is an important tool for programme management and provides useful information about the target population.

Understanding the need for contraception is the second step. The information and method needs vary among the urban and rural populations according to the literacy level, age, stage in the reproductive cycle, parity status of the couples, and, of course, the sex of the user. It is here that the concept of market segmentation can be used gainfully to identify the specific needs of different groups of people.

"Market segmentation is the act of dividing a market into distinct group of buyers (in this case users) who might require separate products and/or marketing mixes." [8] Some examples of the segments into which potential family planning users can be divided are:

- women who have an unmet need and do not know about the methods of family planning
- couples with an unmet need for spacing
- couples with an unmet need for limiting
- women who have experienced side effects due to the use of family planning method(s) and received no help,
- couples at risk of having a child soon, and so on.

These preliminary segments can be divided further into sub-segments based on another set of criteria viz. age group of mother, parity, past history of medical problems etc.

The third step concerns market targeting or the identification of key segments, that is homogenous groups with similar needs for contraception, in order to introduce appropriate interventions which will improve contraceptive or service effectiveness.

The four basic 'Ps' of marketing namely

product, price, promotion and place can now be discussed in terms of effectively satisfying the contraceptive needs that have been assessed.

Product

Designing and providing the right product is the first step in the process of effectively meeting identified needs. The most important facet of the right product is its positioning. According to Ries and Trout,[9] "Positioning is not what you do to a product or service but what you do to the minds of people".

It is essential to understand what the people think is being offered by the family planning programme rather than what the government or the personnel associated with the health care delivery system believes they are providing. That is, is the product perceived as a concept or idea such as:

- better health for mothers and children?
- the small family norm?
- helping to solve the problem of over population faced by the country?

or is it perceived as

- a tangible product or service such as
- a contraceptive viz. the IUD, condom, Copper-T etc.?, or
- sterilisation viz. vasectomy and tubectomy or laparoscopy?

Positioning family planning products and services as something desirable and a means of better health, particularly for mothers and children and for the family in general is essential for increasing their acceptance and thereby the CEP and its effectiveness.

The second aspect of providing the right product concerns the choice of appropriate contraceptive methods to meet the needs of individuals. In India, the discontinuation rate of the IUD is rather high probably due to inadequacies in screening, poor follow-up, complications and exaggerated rumours.[10]

The actual availability of the contraceptive method for which there is an expressed need is the third consideration in providing the right product. For example, a nationwide survey[11] conducted in India in 1986-87 indicated that among non-sterilised couples seeking a temporary method of contraception, nearly 75 per cent of those who wanted an IUD reported that they could not get it; 67 per cent reported failure in getting contraceptive pills, and 40 per cent in not being able to get condoms.

The quality of the product is the fourth attribute of the right product. Leaking condoms, oral pills of non-uniform hormonal content, or non-sustainability of the material used for the IUD are not uncommon. Similarly, poor quality of services while inserting an IUD or conducting vasectomies and tubectomies is another area of concern. This not only reduces the effectiveness of the method but also discourages its continuation due to side-effects and prevents the entry of new adopters.

The introduction of newer methods of contraception developed either in India or in other countries is likely to expand the base of contraceptive users. Making more modern methods of contraception available was found to increase contraceptive use when a new method is introduced; though some couples tended to switch over from the method they were practicing, most acceptors were new.[12] Therefore, designing and providing a qualitatively superior product or service which the people feel meets their contraceptive needs is basic to the success of the marketing approach.

Price

The government of India provides various family planning services and products free of cost through an extensive health care delivery system in both urban and rural areas. Does that mean that there is no cost involved in availing of these services? What

about the cost of travelling and other non-monetary costs such as opportunity costs of loss of wages, energy costs, and last but not the least, psychic costs. Analysing the role of price in the acceptance of the product or service requires the whole gamut of costs mentioned above to be considered.

Marketing experts argue that attaching some monetary cost to the product or service may bring about a perception of the value of the product, its better acceptability and lesser wastage in the case of the condom and other methods which are distributed free of cost. It is this concept that gave birth to social marketing in India in 1968, with the condom being the first contraceptive product to be introduced in this new marketing programme. Though the entry of voluntary organisations like Population Services International (PSI) and Parivar Seva Sanstha (PSS) in the late 1980's brightened the scenario of social marketing in India, the current status of the programme is not very encouraging. In 1987, social marketing of the oral pill was also started.

Promotion

Promotion plays an extremely important role in the positioning of the product in the minds of the people. What do people think about the quality of the product or service available to them? Does it inspire their confidence in the product or service provided, in the system offering the product, and the after sales service available? And, do people feel that spacing births and limiting family size are in their own interest rather than in fulfilling their duty to the nation?

Some research studies indicate that the user's knowledge of the various methods of contraception available is confined to sterilisation. This may be one of the reasons for the high prevalence of terminal methods. For example, a study of 400 women in 50 villages of Karnataka showed that 90 per cent chose sterilisation and only a few knew about spacing methods.[13]

The perceived and actual problems associated with the use of contraceptive choices discussed earlier indicate that there is lack of appropriate information among users, the quality of the service/product provided is poor, and the support services are not adequate for dispelling myths or providing relief where needed. When the user is provided with complete information about not only the different options available but also their advantages and the possible side-effects, and the care to be taken, and he/she is given the choice and also helped to choose the method most appropriate for him/her, the chances of continuation with the method are high, resulting in a greater effectiveness.[14]

Another area, where promotion can play an important role in better acceptance of family planning services is that of providing information on the non-contraceptive health benefits such as the reduction in maternal and infant mortality due to a decrease in the incidence of high-risk pregnancies: birth timing can prevent the undermining of the health and nutritional status of the mother which can otherwise aggravate pre-existing health problems during pregnancy such as high blood pressure, heart conditions, diabetes, severe anaemia etc. For example, barrier methods help protect users against STDs including HIV infection and prevent cervical cancer. Oral contraceptive users are less likely to develop breast cysts, recurrent ovarian cysts, iron deficiency anaemia and the pill can also be used to regulate the menstrual cycle. Implants and injectables can also decrease menstrual bleeding.[15]

Place

Finally, it is a question of making sure that the product is available at the right place. This has implications on both the monetary and non-monetary costs associated with the

use of the product or service. On the one hand, the health workers are blamed for their preoccupation with family planning targets but on the other, their reach, in spite of their preoccupation, appears to be limited.

One answer to making the services more accessible and taking care of the fourth marketing 'P' - place or distribution, could be the involvement of the large network of private practitioners in the rural areas, especially those practicing the indigenous systems of medicine. Experimental evidence indicates that private practitioners in rural areas can be fruitfully involved in the delivery of health and family welfare services.[16,17]

A scheme for involving private practitioners of modern medicine in urban areas was started as early as 1962-63 for conducting sterilisations. Though it is still continuing, it lacks clear direction; changes were random and not based on appropriate evaluation.[18] In spite of recognising the importance of the involvement of private practitioners long ago it has not yet become a reality, perhaps due to the lack of a clear perspective on the part of policy makers.

Some of the issues one has to address before involving private practitioners would be: How many are interested in being involved in the national family planning programme? What will motivate them or what would they expect in return? What is the present level of knowledge and skills of those interested? What are the training needs and inputs required to make their involvement worthwhile? How can the quality of their services be monitored? And, what will be the link between the government health care delivery system and the private practitioners? Besides, there is also a need for a clear vision of the role of the private health care delivery system.

Conclusion

Controlling and stabilising the country's population continues to be a major concern of policy makers and programme managers in India. Among the various factors which influence the reduction of the population growth rate, the contraceptive prevalence rate is probably the most directly related, the other proximate determinants being the female age at marriage, breastfeeding and induced abortion. This paper highlights the substantial unmet need for spacing methods and that apart from the products, service and information accessibility and availability do not match the contraceptive needs of individuals.

Shifting from the present 'seller's approach' of fixing method-wise targets to the marketing approach is the key to better programme effectiveness. Meeting the unmet need for contraception involves identifying the target population, assessing their needs for contraception more specifically for various segments and targeting the key segments for more effective interventions. By formulating a suitable marketing mix of the right products of desirable quality and affordable prices, backed by promotional activities aimed at facilitating the process of informed choice and counselling to dispel myths or solve problems faced by users, and making the product/services available at places convenient to the people, programme managers and policy makers can increase programme effectiveness and expect a greater programme impact.

The operationalisation of the change from the seller's approach to a marketing perspective calls for a number of changes. The first prerequisite is a strong commitment from policy makers and state level officials. The most important role of this group lies in changing the way of fixing targets from a method based to a need based method.

The endorsement of a new strategy at the 1994 International Conference of Population and Development in Cairo which focusses

on meeting the reproductive health needs of individual women and men rather than on achieving demographic targets is likely to create an environment conducive to this approach. The growing recognition of reproductive health needs is another facilitating factor.

The next most important requirement is a proper and complete perspective of the marketing approach among researchers and advisors to population programme managers and policy makers. (For some, market segmentation is the end of marketing. For others, advertising is all about marketing, and yet others view marketing as a tool which creates a greater demand for products and/or services).

Improvements in the quality of personnel at different levels especially at the operational level in terms of technical skills as well as managerial skills is the third requisite. The fourth aspect is the ability of the health care delivery system to position family planning services as something desirable. This entails bringing about attitudinal, perceptional and behavioural changes among the people. Who can play a better role in the right positioning of a product or service than the satisfied user? And finally, without improvements in the choice, accessibility and quality of contraceptive methods and services including contraceptive information services, the marketing approach simply cannot succeed.

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REFERENCES

1. Weinberger, M.B.: Recent Trends in contraceptive behaviour, Demographic and Health Surveys, World Conference Proceedings, Vol. 1, Columbia, Maryland, 555-573, in *"Readings in Population Research Methodology* Vol. 7, " (1991).
2. Family Welfare Programme in India, Year Book 1990-91, Government of India, New Delhi, pp. 100 109 & 210-213 (1992).
3. Operations Research Group: *Family Planning Practices in India : Third All India Survey : Vol. II*, Operations Research Group, Baroda (1991).
4. Martin, N.A.: "The outlandish idea: How a marketing man would save India", *Marketing/Communications*, 297: 54-60 (1968) cited in Kotler, P. and Zaltman, G. (1971)
5. Sen, A.: "A better way to dispel popular misconceptions", *The Economic Times*, 2.9.1993.
6. Conly, S.R. and Camp, S.L.: *India's Family Planning Challenge: From Rhetoric to Action*, Country Study Series # 2, The Population Crisis Committee, Washington D.C (1992).
7. Kanitkar, T., Ramesh, B.M., Roy, T.K., Arnold, F. and Retherford, R.D.: *National Family Health Survey: India 1992-93*. International Institute for Population Sciences, Bombay (1994).
8. Kotler, P., and Zaltman, G.: "Social marketing : An approach to planned social change", *Journal of Marketing*, 35 (July) : 3-12 (1971).
9. Ries, A. and Trout, J.:
10. Soni, V.: "Thirty years of the Indian family planning program: Past performance, future prospects", *International Family Planning Perspectives*, 9(2) : 35-45 (1983).
11. The World Bank: *World Bank Development Report 1993: Investing in Health*, Oxford University Press, NY (1993).
12. Ross, J.A., Rich, M. and Molzan, J.P.: "Management strategies for family planning programs," Centre for Population and Family Health, School of Public Health, Columbia University, New York (1988).
13. Anonymous: "India: "Sterilisation is common: Women know little about other methods", *Progress in Human Reproduction Research*, 18 : 2-3 (1991).
14. Prabhavathi, K. and Sheshadri, A.: "Pattern of IUD use: A follow-up of acceptors in Mysore", *The Journal of Family Welfare*, 35(1):3-16 (1988).

15. World Health Organisation: *Contraceptive method mix: Guidelines for Policy and Service Delivery*, WHO, Geneva (1994).
16. Gupta, R.B., Baby, K.S., Srivastava, N.K. and Sharma, N.K.: "TNA of ISM practitioners for delivery of health and family planning services: A case study of Rajasthan," Indian Institute of Health Management Research, Jaipur (1991).
17. Kambo, I.P., Gupta, R.N., Kundu, A.S., Dhillon, B.S., Saxena, H.M. and Saxena, B.N.: "Use of traditional medical practitioners to deliver family planning services in U.P.", *Studies in Family Planning*, 25(1): 32-40 (1994)
18. Operations Research Group (ORG): *Role of Private Medical Practitioners in Family Welfare Programme*, Operations Research Group, Baroda (1988).