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Evaluation of A Target Oriented Programme : A Case Study of Sterilization in U.P.

1. Introduction

TWO aspects are now given emphasis in the implementation of plan programmes. The first is a wider spread in programme implementation. The concern here is to bring more regions and more people into the mainstream of development activities. Realisation of the targets set at district, block and village levels is, therefore, given weightage in assessing overall performance of a programme. The second is the importance attached to result-oriented rather than expenditure-related performance in programme evaluation. Clearly identifiable and directly measurable physical targets are set, and the officials involved in programme implementation at all levels are made responsible and accountable for the realization of the targets. Thus, numerical achievements like number of people pulled up above the poverty line, couples covered by birth control measures, number of landless people given land, etc. have all become important in the career assessment of the officials involved in programme implementation.

Officials from the revenue, planning and health departments posted at district, block and village levels have more intimate knowledge of the socio-economic and political realities at the grass root level. To obtain better results, the government has, therefore, found it convenient to make the best use of these officials by making them more accountable for programme implementation.

The over-emphasis placed on achieving the numerical targets has qualitatively changed the implementation of plan programmes at the grass root level.

Apparently, the programme are getting implemented. Success stories, as measured by the realization of set target, are now more frequently reported.

However, not enough follow up studies are available to make an objective assessment of these success stories. Moreover, realization of the numerical target alone cannot be considered an yardstick for measuring success unless all the ramifications of an implemented programme are thoroughly examined.

Even if the attainment of a numerical target is used as an indicator for measuring success in programme implementation, it is essential to know how it was obtained, what organizational and administrative innovations were used and what difficulties were experienced at the implementation stage. We propose to investigate some of these issues in this paper from a 'successfully' implemented family planning programme for sterilization in the Meerut tehsil of U.P. in 1985-86. Our investigation is based on a follow up survey carried out in that area in June, 1986.

We first present in Section II, a brief account of the governmental efforts for attaining the sterilization targets. The procedure adopted for fixing the targets and the consequent responses of the state administration for attaining these targets at district and lower levels in U. P. are also described in this section. We then provide in Section III, the socio-economic background of the study area, and the details of the sample design used for the purpose of testing several hypotheses. The main findings of our investigation including some general field observations are presented in Section IV. Finally, draw some policy implications from our field investigation and also suggested some new measures for improving the implementation of family planning programme at the grass root level.

II. Action Programmes for Achieving Sterilization Targets

A large number of medical options are now available for reducing the birth rate. Though many of these methods are being popularised through the family planning programme for limiting the family size to two or three children, governmental agencies are giving maximum emphasis on sterilization operations. Realization of the target set for sterilization has now become the sole concern of the government in its efforts towards controlling the population growth rate.

To achieve the sterilization targets at regional and sub-regional levels, many novel schemes were tried from the early 1970s for inducing people to undergo sterilisation. Camps were organized, and cash and kind incentives were offered to those who came forward for sterilization operations. However, these incentive schemes did not click. Responses remained low. Direct coercive methods were then used during the Emergency with disasterous consequences. Besides political upheaval and serious law and order problems, the coercive methods generated an antagonistic attitude of the people towards sterilization.

The drive for sterilization was almost given up.

Beginning from the 1980s, the government has again activated its campaign for sterilization operations. Although direct coercive methods are now forbidden, efforts are made to induce the beneficiaries of various minimum needs programmes to undergo sterilization. In 1985-86, the Government of India went a step further, and for the first time since the Emergency, induced the state governments to design action programmes for attaining the sterilization targets assigned at the state levels. The U.P. Government responded to this task by designing a weighted evaluation system for assessing district performance. Until then the U. P. Government was assigning equal weightage for assessing the performances of a district on various programmes. The importance given to the family planning programme by the Centre prompted the State Government to abandon the equal weightage scheme. From 1985-86, family planning was given three times the weightage over other programmes. In other words achievement of the target in family planning programme would get the district a grading of 3 points whereas in all other programmes similar performance would yield only one point. The weighted grading system reflected the seriousness with which Government viewed the family planning programme and their concern to ensure that the district administration accorded special importance to it.

However, no feasibility surveys were made before setting the district level targets. The targets were fixed exogenously by the State Government and the district administration had no say in these exercises. Broadly, the U. P. Government followed the same population based normative approach adopted by the Central Government for fixing the state level sterilization targets, and distributed the State target assigned by the Centre over the districts accordingly. The district administrations in U. P. also followed the same procedure. Each district's target was apportioned between the blocks roughly on the basis of population size. In the Meerut tehsil the target for the year 1985-86 was fixed at 600 cases per block.

Prior to 1985-86, the district administrations in U. P. were utilizing the services of the health department in the implementation of family planning programmes. It was hoped that sterilization targets would be relatively easier to attain if the entire family planning programmes were pushed through the health department as an integral part of its health care services. The performance of the health department, however, consistently fell short of the set target. As the weighted grading system introduced in 1985-86 imposed added responsibilities and concern for the realization of sterilization targets, the district administration in U. P. felt it necessary to utilize the services of other agencies having stronger grass root contacts. The district magistrates mobilized the revenue and planning departments for motivating sterilization cases. Both the agencies had a brief exposure to the implementation of family planning programme in the previous year.

Revenue and planning agencies were brought in to participate in the programme implementation also because of their direct involvement in the implementation of various social welfare programmes such as distribution of loans and house sites, IRDP, TRYSEM, etc. The revenue department's 'patwaris' who keep the land records for revenue department, are probably the most important and influential officials at the village level. The planning department's the 'Gram Vikas Adhikaris' and the 'Gram Panchayat Adhikaris' are directly involved in the implementation of various agricultural and rural development programmes and so they too enjoy access to and influence over the villagers.

In the Meerut tehsil, the district administration entrusted the task of realizing 50 per cent of the sterilization target set at the block level to the revenue and planning agencies, and the remaining 50 per cent to the health department. This work of the patwaris was supervised by the Kanungos, Naib-Tehsildars and the Tehsildars. Similarly, the Assistant Development Officers and the Block Development Officers supervised the efforts of the gram vikash adhikaris and gram panchayat adhikaris. The sub-divisional officer supervised the activities of both the agencies. To ensure smooth functioning of the family planning camps, the district magistrate made the sub-divisional officer fully responsible for monitoring and overseeing the performances of the organized camps.

The number and location of the camps were decided by the district magistrate in consultation with the sub-divisional and health department officials. The general strategy adopted was to organize as many camps in a month as possible. The emphasis was more on organizing small camps at shorter intervals than few big camps at longer intervals. The advantage of the former was apparent not only in providing comfort and care to the patients but also in motivating and bringing cases for sterilization at frequent intervals from a larger area. It was found from the past record that the drop out rate among all those who promised to turn up at a camp for sterilization was high, around 50 per cent. This was due to various personal reasons such as illness, preoccupation with certain domestic matters, marriage or festival celebrations or plain reluctance to undergo the sterilization operation. Frequent organization of the camps thus helped also to cover increasing number of such persons who promised but failed to turn up on earlier occasions.

The camp schedules for each month were worked out after taking into account availability of doctors' teams and locations suitable for sterilization operations. In the Meerut tehsil, camps were organized at the Medical College, Primary Health Centres, local hospitals or at the premises of public sector undertakings, found suitable by the doctors. Operations were performed by the teams of doctors deputed by the medical college located in the district and those sent by the local hospitals. Teams of doctors who came from the medical college were distributed among the tehsils by the district magistrate.

At the tehsil level, the sub-divisional officer arranged the work schedules of the teams in different blocks so as to provide each team a turn to operate in every block. Local hospital teams worked in camps organized on dates fixed in joint consultation with the health officers. The broad directive was that a gap of one week to ten days be given between camps in the same block. The functioning of these camps were reviewed every week by the district magistrate and the health department officials. Appropriate remedial measures were taken whenever problems crept up.

III. Methodological Framework of the Follow-up Survey

With per capita income significantly above the state average, Meerut is one of the highly developed districts of U.P. It accounts for around 2.5 per cent of the state's population, nearly 40 per cent of which resides in the Meerut tehsil alone. The district falls within the national capital region and has a population density above 700 per square kilometre. The density in the Meerut tehsil is around 1200 per square kilometre. The district has recorded a decenial population growth rate of 25.30 per cent during 1971-81. Sex ratio in the district according to the 1981 census was around 830 and the literacy rate was nearly 35 per cent. The corresponding estimates for the Meerut tehsil were around 845 and 40 respectively. Nearly 68 per cent of the tehsil's total population were Hindus and 31 per cent, Muslims; and the remainder 1 per cent were of other religions.

The Meerut district has a total number of 1042 revenue villages. 940 of which are inhabitated. The Meerut tehsil has 273 of these inhabited villages. Over 30 per cent of the district's population resides in urban areas, more than 65 per cent of which is in the Meerut tehsil; the urban proportion of the Tehsil's population is around 50 per cent of the total. Though the district and the Meerut tehsil in particular is agriculturally advanced, more than three-fourth of its farmers are small and marginal; together they operate on less than 40 per cent of the district's total area under agriculture. For the year 1978, percentage of unemployed and underemployed in total labour force of the district was estimated at around 6.25.

Infrastructure facilities are fairly well developed in the district, particularly in the surveyed tehsil. Meerut is one of the few districts of U.P. where all the villages are connected with roads. Nearly all the villages are now electrified. Educational facilities at junior, senior and higher secondary levels are fairly well spread over the villages. The district has relatively better hospital and medicare facilities. However, less than 20 per cent of its villages have access to allopathic hospitals within 3 km. distance.

The Meerut tehsil has five contiguous blocks, viz. Meerut, Rajpura, Rota, Kharkhoda and Jani. With 600 per block, the sterilization target for the tehsil for the year 1985-86 was set at 3000. Actual achievement in 1985-86, however,

overshoot the set target by over 20 per cent. The three main official agencies, viz. health, revenue and planning, and a few others like the District Industries Centre (DIC) were able to motivate a total of 3646 persons to undergo sterilization operations. A follow up survey of the persons who underwent sterilization operations was carried out in June, 1986 in order to evaluate quality of inter-agency performance and also to identify the factors motivating them to undergo sterilization.

A stratified sampling design was adopted. The villages for each block were arranged according to the Hindi alphabet and the persons sterilized were classified according to their respective villages. Within each village, they were further classified by agencies motivating them. From each village, a 10 per cent random sample was then drawn from the agency-wise classification of sterilized persons. Where the number of sterilized cases through any agency in a village was less than 10, it was not possible to draw a 10 per cent sample from the village per se. In such situations, the cases motivated by the agency were added over two or more villages arranged alphebetically, and a 10 per cent sample was then selected for that particular agency from the grouped villages. The possibility of spatial bias was thus minimized since the villages were pre-arranged according to the manner described above. This selection procedure was followed in order to ensure that the agency-wise 10 per cent sample was spread over the maximum number of villages. By this it was hoped, the techniques of motivation employed by each agency could be adequately explored.

A special emphasis was given to study the responses of the Muslims to sterilization programme. For this purpose a different weighting scheme was adopted for the selection of muslim cases sterilized in the tehsil. The Muslim cases in each village, irrespective of the motivating agency, were identified with the objective of selecting at least 50 per cent of such cases. Wherever necessary, the number of Muslims selected in the general sample was thus raised through an additional selection in order to include in the sample at least 50 per cent of the Muslims sterilized in any village.

Besides this, we also included in the sample the sterilization cases motivated by the district administration through the D.I.C. Since the sphere of operation of the D.I.C. is primarily the urban areas, the cases motivated by the D.I.C. mostly came from the urban poor and industrial workers in urban/semi-urban areas. To cover cases sterilized through this agency, camp-wise sterilization cases were grouped and a 10 per cent sample was taken from all such cases sterilized through the D.I.C. Here too, the same weightage was given for the selection of muslim cases.

Due to the above departures, the sample size exceeded the 10 per cent limit. The questionnaire was canvassed for a total of 425 cases of which 376 were found to be complete in all respects for detailed investigation.

The investigators were selected from all the three motivating agencies. To

eliminate the agency bias of the investigators, the cases motivated by the revenue and planning department were surveyed by the health department and those motivated by the health department were surveyed by the revenue department. About sixty cases could not be traced in the first round of investigation because of incomplete addresses reported in the records. A large number of them pertained to the city. For all such cases, the motivators were entrusted with the task of compiling the information through direct contact with the persons sterilized

Besides sex, caste and religion, the survey collected information on several socio-economic and demographic characteristics. Age at marriage of the husband and wife and their ages at the time of operation of either of the spouse were collected along with the information on number of surviving children. Similarly, information on the sex distribution of the children were collected along with the details regarding the sequencing in children's sex distribution. Further, information collected for investigating the factors influencing the age at operation related to economic and educational status, and the type of incentive provided or promised by the motivators. Information of economic status was obtained by classifying the cases according to the following five categories : landless, self-employed and artisans, small farmers with less than 5 acres of land, big farmers, and services. Similarly, information on educational status was obtained according to the following four levels attained : illiterate, primary, secondary, and higher education.

The government is presently giving the persons sterilized a cash incentive of Rs. 165 for those with two children and Rs. 140 for those with more than two children. This includes incentive money, transport costs to and fro from the camp as well as expenses for diet during the period of convalescence. During our preliminary field enquiries we found that a system of informal incentives was also used by the motivating agencies. The motivating agencies had extended, on priority basis, benefits of the various development programmes to qualified persons who volunteered for sterilization. In this process of informal understanding and cooperation, incentives such as loans under various development programmes, land pattas for house-sites, services or other incentives such as opening of roads, water channels or removal of organizational bottlenecks were offered. In order to examine the extent to which this system of informal incentives has contributed in realizing the sterilization target in the surveyed tehsil, we have collected information on such incentives. We also found during our preliminary field enquiries that in several instances persons were induced with promises of some incentives which were not honoured afterwards. Since allurement with unkept promises can adversely affect future implementation of the programme, we have tried to collect information of cases where the incentives promised were not honoured.

IV. Major Findings

During our field investigation we were told that although the target set for sterilization was on financial year basis i.e. from April to March, actual implementation of the programme for the year 1985-86 started only after the monsoon. The period from April to June are generally very warm and the people also remain busy with harvesting and sowing operations. The monsoon months are invariably avoided by the people because of the difficulties in reaching the PHCs, the possibility of sepsis, and a general belief that recovery is slow during this period. Usually, the programme gets underway from September, and attains a peak immediately after the rabi sowing in December-January. Even during this period the responses affected by the weather. We were told that expected turnout can get reduced by as much as 90 per cent on a cloudy day.

The efforts made by the district officials for obtaining maximum help and cooperation from the available institutions at the grass root level appeared to be the major contributing factor in the successful realization of the sterilization target in Meerut tehsil. The district officials exploited the cross-currents of inter-group and inter-personal rivalries among the local leadership and were able to mobilize all the influential people in a competitive spirit for achieving the target set for sterilization. Thus, the block pramukhs were incited into competing and ensuring that their respective blocks attained a position both at the district and tehsil level. A competitive spirit created among the blocks along this line soon made the attainment of sterilization target a matter of personal pride for the block pramukhs This positive attitude of the block pramukhs helped considerably to mobilize public support right upto the grass root level. The prestige attached to the block for attaining the sterilization target necessitated the pramukhs to mobilize full support and cooperation of the village pradhans.

Support from the village pradhans was however not easily obtained except from those belonging to the pramukh group who took the task as a matter of personal pride to ensure recognition of their leader and the block. Although the anti-pramukh pradhans made all possible effort to influence the programme in order to lower the status and prestige of the block pramukh, in some cases their actual actions helped significantly to achieve the sterilization targets. For example in one block the anti-pramukh pradhans themselves organized sterilization camps with due permission from the officials in order to impress the district administration that they had better control in mobilizing people for sterilization than the pramukh. In some other cases, however, the anti-pramukh groups were successful in preventing the villagers from participating in any significant way in the programme. This sort of group rivalry was reported from three out of the five blocks surveyed. We were told that the intervention made by the block officials and local leadership could settle amicably this

group rivalry in only one block.

The pradhan is the grass-root public representative of the village. Typically, a pradhan is always in the midst of intense group rivalry with the opposing group missing no opportunity to have him dismissed, suspended or even disgraced. Under the Panchayat Act, the sub-divisional officer is the enquiring officer for any charges made against a pradhan and has also the power of suspending or dismissing him if found guilty on any charge. Therefore, a pradhan is not only under pressure from his block pramukh but also constantly endeavours to keep the sub-divisional officer satisfied on any task assigned. In our conversation with the officials of the district administration we were informed that as the sub-divisional officers were given the charge of implementing the sterilization programme, the pradhans generally showed interest to keep them well disposed. Thus, the pressures from the block pramukhs and the sub-divisional officer, and the competitive spirit kept the pradhans fully involved in the implementation of the sterilization operations.

The family planning programme by its very nature of touching upon the personal life of the individual is a difficult programme to implement. The pradhans, patwaris, VLWs or health workers are asking the person to curtail his/her reproduction capacity and the consequent economic benefits thereof for the sake of long run betterment of the society. This appeal for improving the social welfare, however, did not motivate the people in the surveyed villages till they were provided with immediate economic benefits. The involvement of thd revenue and planning agencies in the programme implementation further encouraged the people to press for a bargain deal. Since the patwaris or VLWs have the capacity to provide various economic reliefs to the villagers, they were viewed not only as the propagator of a programme but also as someone having the power to provide relief. The mechanics of motivating a case in the surveyed area thus became one of striking a bargain. The immediate necessity of the individual, the general reputation and influence of the patwari or VLW, the initiatives of the local leadership at block and village level and the dynamism of the district authorities all contributed in influencing the acceptor's choice of agency through which he should go in for sterilization. The pradhan played the most crucial role in this process. In villages where there was intense competition between the patwaris and the VLWs, the pradhans intervened and settled any dispute between the two.

Other aspects apart, the ability of the pradhan to improve the village amenities or to bring more economic benefits became a part of the bargain in implementing the family planning programme. The pradhans played a key role in this bargaining process. Pradhans of some villages sought clearance of some matters of public interest or promises of some village amenities like roads, etc. before guaranteering attainment of the village sterilization target.

Of the total of 3646 persons sterilized in the Meerut tehsil in 1985-86, nearly 40 per cent were motivated by the health department, around 35 per cent

by the planning agency and the remainder mostly by the revenue department. Table 1 presents agency-wise age distribution of the sterilized persons in the sample. Of the 376 cases selected for investigation, 296 were females. Of these, 120 were motivated by the health department, 91 by the planning department, 78 by the revenue department and the remaining 7 by D. I. C. and others.

TABLE 1-AGENCY-WISE AGE DISTRIBUTION OF PERSONS STERILIZED

Agency	*Age Croup*						
	15-25	*26-30*	*31-35*	*36-40*	*41-45*	*Above 45*	*Total*
				Females			
Health	20	52	32	13	3	0	120
Planning	12	36	31	10	2	0	91
Revenue	11	24	19	21	3	0	78
D.I.C.	0	2	2	1	0	0	5
Others	0	0	0	2	0	0	2
Total	43	114	84	47	8	0	296
				Males			
Health	0	2	3	1	0	0	6
Planning	0	4	6	10	9	10	39
Revenue	0	4	5	8	3	5	25
D.I.C.	0	2	0	2	1	4	9
Others	0	0	0	1	0	0	1
Total	0	12	14	22	13	19	80

Over 85 per cent of the female cases sterilized through the health and planning agencies were below 35 years. For the revenue agency, the percentage was lower, around 70 per cent. Most of the males who underwent sterilization were above 35 years. Our sample data, however, clearly indicates the sex-bias in programme implementation. We were told that because of the male domination in the households whenever a couple agreed to undergo sterilization, it was usually the wife who was directed by the husband to undergo it.

It is interesting to note that compared to other agencies the planning department had a relatively better performance record in motivating men for sterilization. Scrutinizing individual returns we found that the relative success of the planning agency in motivating the males was primarily due to its capacity

to offer attractive economic incentives for sterilization. Also, the agency was lax in selecting persons from the targetted age groups. There were cases where above 60 years old widows and widowers with 5 or more children were offered loans, house sites, etc. for undergoing sterilization operations.

With the induction of *the* revenue and planning agencies into the family planning programme the motivational aspect underwent a change. The health workers motivated cases mainly through personal contact by providing medicines, child care and general treatment facilities. The health staff drew their cases mostly from the fixed income groups or from the lower middle classes. During our field investigation we found that due to the frequent visits by the health staff, most of these people were well aware of the importance and personal benefits of the family planning programme.

Cases motivated by the revenue and planning agencies came mostly from landless agricultural workers, and from small and marginal farmers. The cases drawn by these agencies were largely bought with the assurance of a house site for the landless, or a land patta for the small or marginal farmers. There were very few cases of affluent farmers being motivated by the governmental agencies. A large number of cases motivated by the revenue department were drawn from the towns. They were motivated with the promise of a loan under the urban poor scheme. Other cases drawn from the rural/urban areas came from the self-employed group or those financed for self-employment.

Table 2 provides sex-wise, caste and religious composition of the respondents. Age at sterilization followed a similar pattern across castes and religion. Generally, more females underwent sterilization operations below 35 years while more males volunteered only after crossing 35. The pattern of age distribution at sterilization suggests that the motivating agencies were relatively successful in persuading young females for sterilization only from among the upper caste and Jat families. It may be noted, however, that in the surveyed tehsil most of the upper caste families have fixed sources of incomes from services. Typically, these families are better educated, well aware of the family planning programmes, and frequently visit health department staff for medicare and other facilities. Also, among the Jats there appears to be a general awareness to limit the family size, lest the family property and particularly the agricultural land might get sub-divided among the heirs and reduce thereby the social standing of the family in the village community.

Table 3 provides the economic status of the families of selected persons sterilized. As can be seen, most of the persons who underwent sterilizations were either from the low income families or those with uncertain sources of incomes. Big farmers and those in services constituted less than 20 per cent of the sterilized persons in the selected sample. Landless workers, both males and females were the most important group on which the implementation of the sterilization programme appeared to have been targeted. The motivators, however, have failed to motivate the young of this group. Only around 10 per

TABLE 2—CASTE AND RELIGIOUS COMPOSITION OF PERSONS STERILIZED

Caste	Age Group						
	15-25	26-30	31-35	36-40	41-45	Above 45	Total
				Females			
Upper Castes	5	11	3	6	1	0	**26**
Jats	6	12	6	2	1	0	**27**
Gujars	2	8	6	2	1	0	**19**
Sched. Castes	10	27	23	**16**	2	0	78
Others	8	29	**21**	7	2	0	**67**
Muslims	12	27	25	**14**	1	0	**79**
Total	43	114	84	**47**	8	0	296
				Males			
Upper Castes	0	1	2	1	0	1	5
Jats	0	1	0	1	1	0	3
Gujars	0	1	0	0	0	0	1
Sched. Castes	0	6	7	11	6	11	41
Others	0	2	2	2	1	0	7
Muslims	0	1	3	7	5	7	23
Total	0	12	14	22	13	19	80

cent of the landless females were sterilized below the age of 25 years and another 30 per cent between 26 and 35 years. As will be shown later, this lack of focus in the programme implementation is defeating the very purpose for which the family planning programme is launched, namely limiting the family size to two or three children.

Table 4 provides the average age at sterilization of the persons sterilized according to religion, caste and economic status. The average age at sterilization of the females was estimated at 30.7 years and that of the males at 39.7. The corresponding average ages of the spouses of the persons sterilized were estimated at 37.8 and 34.8 years respectively. No significant difference in average age at sterilization was found between the Hindus and Muslims, though it was slightly higher for the latter community, particularly for its

TABLE 3—ECONOMIC STATUS OF THE FAMILIES OF PERSONS STERILIZED

Economic Status	*Age Group*						
	15-25	*26-30*	*31-35*	*36-40*	*41-45*	*Above 45*	*Total*
			Females				
Landless	15	38	40	*26*	4	0	123
Self employed	9	22	10	8	1	0	50
Small farmer	7	27	20	11	3	0	68
Big farmer	2	9	5	0	0	0	16
Service	10	18	9	2	0	0	39
Total	43	114	84	47	8	0	296
			Males				
Landless	0	7	10	10	5	12	44
Self employed	0	3	0	5	3	4	15
Small farmer	0	1	2	4	4	3	14
Big farmer	0	1	0	1	0	0	2
Service	0	0	2	2	1	0	5
Total	**0**	12	14	22	13	19	80

males. Caste-wise, however, differences were observed. Average age at sterilization for Jat women was the lowest, being 29.0 years. The scheduled caste women turned out for sterilization operations at a considerably late age, above 31 years. Among the males also, both the Scheduled Castes and Muslims volunteered for sterilization at an age above 40 years. Little reliance could be placed on low average age obtained for the Gujar males as it was based on a single observation covered in the sample.

Among the various economic groups, the lowest age at sterilization for females was obtained from the service category, followed by big farmers, self-employed, small farmer and the landless. For males, the estimated average age at sterilization was more or less same across the economic groups except for the big farmers category, where it was estimated at 33.5 years. Thus, it appears that efforts of the motivating agencies have had little success in influencing the socio-economically backward classes to undergo sterilization operations at an early age.

TABLE 4—AVERAGE AGE OF PERSONS STERILIZED

Religion/Castel / Economic Status	Average age of Females	Males
	Religion-wise	
Hindus	30.6	38.7
Muslims	30.6	42.0
	Caste-wise	
Upper Castes	30.3	36.8
Jats	29.0	36.8
Gujars	31.0	28.5
Sched. Castes	31.3	40.0
Others	30.5	34.9
	Economic Status-wise	
Landless	31.7	39.5
Self-employed	29.9	40.6
Small farmer	31.4	41.0
Big farmer	29.0	33.5
Service	28.8	37.5
	All Categories	
Persons sterilized	30.7	39.7
Spouses of the persons sterilized	37.8	34.8

Table 5 provides details of religion-wise and economic status-wise distribution of persons sterilized according to their number of surviving children. Only around 13 per cent of the persons sterilized underwent operation after having two or less number of children, irrespective of their religions. In contrast, nearly 35 per cent of the Hindus and over 42 per cent of the Muslims accepted sterilization only after having five or more children. Although more Hindus with 3 or 4 surviving children accepted sterilization than those from the corresponding Muslim community, the willingness to undergo sterilization after a desired number of surviving children followed similar pattern in both

TABLE 5—RELIGION-WISE AND ECONOMIC STATUS-WISE DISTRIBUTION OF PERSONS STERILIZED ACCORDING TO NUMBER OF SURVIVING CHILDREN

Economic Status	*Persons Sterilized having Children*					
	2 or less	*3*	*4*	*5 or more*	*Total*	*Average No. of children*
			Hindus			
Landless	11	24	24	48	107	4.2
Self-employed	5	12	12	9	38	*3.8*
Small farmer	8	23	15	27	73	4.0
Big farmer	2	6	5	5	18	3.8
Service	10	12	10	6	38	3.4
Total	36	77	66	95	274	4.0
			Muslims			
Landless	7	14	14	25	60	4.1
Self-employed	4	7	6	10	27	4.0
Small farmer	1	1	0	7	9	4.9
Big farmer	0	0	0	0	0	0
Service	1	3	1	1	6	3.5
Total	13	25	21	43	102	4.1
			Combined			
Landless	18	38	38	73	167	4.2
Self-employed	9	19	1819		65	3.9
Small farmer	9	24	15	34	82	4.1
Big farmer	2	6	5	5	18	3.8
Service	11	15	11	7	44	3.4
Total	49	102	87	138	376	4.0

the communities. There were too few persons who were willing to accept sterilization after 2 or 3 surviving children. The only exception was the service category where 25 per cent of the persons sterilized underwent operation with 2 or less number of children and another 34 per cent with 3 surviving children. Landless persons responded least to undergo sterilization with less number of children. This is clearly reflected by the average number of children computed for each of the five socio-economic groups. Irrespective of the religion, the average number of children increased steadily as the risk and uncertainty in household incomes progressively increased in severity over the economic groups. For persons in service category which usually have assured household incomes, the average number of children was estimated at 3.4. It became 3.8 for big farmer, 3.9 for the self-employed, 4.1 for small farmer and 4.2 for the landless—a gradual progression which uniquely correlates with the economic condition of the respective groups.

Since the focus of the family planning programme is to limit the number of children per couple at 2 or 3 it would be of interest to analyse family size of the persons sterilized according to their age groups. As can be seen from Table 6, age-group-wise, average number of children of all those sterilized steadily increased till the age-group 36-40 after which it started falling due to various reasons including death of children. Also, rarely a husband or a wife had volunteered to undergo sterilization without achieving the desired sex-composition of the children which turned out to contain at least two sons. Given these facts as obtained from our sample and given the objective of the family planning programme to limit the number of children per couple at two or three, it would be pertinent to identify particular age group on which the motivational efforts for sterilization should be focussed. Our sample data suggests that such efforts should be directed towards women below 25 years, and men below 30 years.

TABLE 6—FAMILY STRUCTURE OF PERSONS STERILIZED

	Age Croup of Persons Sterilized						
	15-25	*26-30*	*31-35*	*36-40*	*41-45*	*Above 45*	*Combined*
			Females				
1. No. of children	3.0	3.8	4.7	5.5	5.0	—	4.2
2. No. of sons	2.0	2.5	2.8	3.3	3.1	—	2.6
			Males				
1 No. of children	—	3.1	3.9	4.6	4.4	4.1	4.1
2. No. of sons	—	1.9	2.2	3.4	2.7	2.3	2.6

In this context, it would be of interest to report the criteria used in the surveyed villages for the selection of eligible persons for sterilization. We were told that all women below 45 years were considered eligible for sterilization and also entitled for the incentive benefits. For men, no such age eligibility condition was used. As can be seen from our survey, the wide open age eligibility criteria used for motivating sterilization cases had in effect helped little to restrict the birth rate at the desired level. The motivating agencies appeared to have been successful in attracting persons for sterilization mostly from an exhausted generation which had already completed the desired family size, and that too by offering attractive incentives. In fact, given that most of those who volunteered for sterilization had more than 3 surviving children, the wisdom of giving them incentives for sterilization could be questioned.

Some idea of the social costs involved in this off-the-target implementation of the programme can be had from our survey data. Table 7 provides information on various material benefits besides the standard monetary incentive that were offered informally for inducing persons for sterilization in the Meerut tehsil. About 40 per cent of those sterilized volunteered themselves to undergo the operation without asking for any additional benefit. The rest bargained for some benefit besides the standard monetary incentive provided in the programme. The maximum number of people were induced by providing a loan. Offer of a land patta figured next. Only three were motivated by providing a job while six others were induced by extending minor reliefs.

The informal incentive system did not appear to be biased in favour of any religious group. However, it was more freely used for attacting people from the relatively backward socio-economic groups. Thus less than 35 per cent of the persons sterilized from the big farmer category were given some form of an informal incentive, while for the service household category it was only around 15 per cent. In contrast, over 75 per cent of the landless volunteered for sterilization only after securing a bargain incentive. The corresponding figures for the self-employed and small farmer categories were respectively 70 and 60 per cent approximately. *Prima facie,* there appears to be no reasons to raise objection, as the informal benefit system was mostly offered to the socio-economically deprived classes. Unfortunately however, those who were induced from these classes mostly agreed because they had already attained a family size of 4 or more children. TO the exhausted generation of the socio-economically backward classes, sterilization programme has thus become a bonanza for securing more benefits.

Several facts came to notice during our field investigation. It was reported that when incentives or reliefs remained merely a verbal promise, camp attendance thinned out at the last moment. However, where the cases were assured with some form of a guarantee in the implementation of the promise such as the loan letter immediately after the operation, eighty per cent of the cases turned out on the promised date. This was best illustrated by the cases

motivated by the D. I. C. At all the camps attended by the D. I. C., the response to promise was high and above 80 percent, primarily due to the linking of distribution of urban loans immediately after the operation. A large number of cases motivated by the D. I. C. also happened to be the Muslims.

TABLE 7—INCENTIVES OFFERED FOR STERILIZATION

Economic Status	*Incentive Offered*					
	Loan	*Paita*	*Service*	*Other*	*None*	*Total*
			Hindus			
Landless	61	20	0	1	25	107
Self-employed	21	7	0	0	10	38
Small farmer	20	14	1	4	34	73
Big farmer	4	1	0	1	12	18
Service	2	3	1	0	32	38
Total	108	45	2	6	113	274
			Muslims			
Landless	33	11	1	0	15	60
Self-employed	11	4	0	0	12	27
Small farmer	6	2	0	0	1	9
Big farmer	0	0	0	0	0	0
Service	1	0	0	0	5	6
Total	51	17	1	0	33	102
			Combined			
Landless	94	31	1	1	40	167
Self-employed	32	11	0	0	22	65
Small farmer	26	16	1	4	35	82
Big farmer	4	1	0	1	12	18
Service	3	3	1	0	37	44
Total	159	62	3	6	146	376

There appears to be a controversy on the Muslim participation in the programme. One aspect that came out clearly during our field investigation was the uneasiness of the Muslims to" let it be known that they had undergone sterilization operation. This was mainly because of the social sanctions against sterilization operation imposed by the Muslim conservatives. As a result, we were told a number of Muslims in the surveyed villages preferred to have themselves operated at unknown places without taking the help of any motivator. Even in cases where they were operated at the PHC, it was generally at a pre-appointed hour with the doctor. This conservatism among the Muslims was less apparent among those residing in the city. The Muslims from the cities came in large numbers to attend the camps. At a single camp where the D.I.C. participated, about 25 per cent of the cases operated were Muslims and amongst them a majority were males. All these cases were brought from the city and were transported back and forth from their homes. On the other hand. Muslim cases belonging to the villages and operated through the motivating agencies were secretive about their departure and arrival times. In some cases the Muslim community reacted by debarring the sterilized women from reading namaz. However, there were exceptions too. In one village the loan incen tive and group rivalry contributed in motivating large number of people irrespective of their religion.

This veil of secrecy created problems in surveying some of the cases selected in the sample. In one case the interviewer was threatened for spreading canards that the lady to be interviewed had undergone sterilization. The neighbours were pacified after assuring them of the possibility of a mistake. The interview, however, was quietly completed on another day. Similarly, in another village the person refused to answer the questions and denied sterilization. In this case the lady was motivated by the patwari on whom she had confidence for preserving privacy. She declined as the interviewer was a health visitor. Timely intervention of the patwari helped to fill the questionnaire.

Our sample data indicates that within a particular economic group, the Muslims did not have large families than their Hindu counterparts. The size of the family appeared to be related to the economic status and the occupation of the male member in the family. The hypothesis that Muslims are antipathic to the programme did not get support from our field investigation as the family size in each of the economic classes turned out to be almost same. The other argument advanced is that Muslims do not participate in the programme. This cannot be refuted because a large number of them prefer to be operated in secrecy. However, their absence in large numbers from the government sponsored family planning camps cannot be taken as lack of participation in practicing family planning measures.

V. Concluding Observations

Although the focus of our investigation in this paper has been on the steri-

lization programme, we had initiated the present study in a more general context. With the pressure of accountability now imposed upon the district administration for the attainment of set targets at the grass root level, we were interested to know how the officials involved in programme implementation were responding to the tasks, what changes they were making in implementing the programmes for attaining the set targets and what consequences such changes would have in implementing the programmes in future years. It was with these general interests in mind we initiated the present study for probing implementation of sterilization programmes, the one on which top priority has been given by the government. Deliberately we carried out our investigation in a socio-economically better developed area where the chances of attaining the set targets were relatively high. The purpose was to examine how, in a favourable environment, the people responded to a programme, the acceptance of which is generally believed to be against traditional norms and social ethos.

Several conclusions follow from our investigation. Successful implementation of a programme at the grass root level will depend crucially upon the efforts of the officials in securing for the programme involvement and support of the local people and local leadership. One of the main reasons for which the sterilization target in the surveyed area was easily attained was, the emphasis given by the district administration to involve the local leadership at every stage of programme implementation. In fact, the ingenuity of the officials in exploiting the cross-currents of leadership rivalry at the grass root level helped in many places to create an atmosphere conducive to the success of the programme. Use of such innovative designs in the operational strategy, however, is possible only if the officials have an intimate knowledge of the local situations. This is a necessary must for implementing any development programme —a requirement that is not normally met because of the frequent transfers of the officials.

To what extent targetism helps in attaining the objectives of a programme ? Our field experience from this study suggests that such a strategy in programme implementation might as well defeat the very objective for which the programme is designed. When over-emphasis is given on narrowly defined targets, short term considerations draw the immediate attention of the officials. They tend to take up implementation as a one-shot operation, not as a continuing one spread over a number of years. The district administration in the surveyed area was under tremendous pressure to meet the sterilization targets using only voluntary motivational methods. One consequence of it was the induction of several other agencies such as revenue, planning, D.T. C., etc. and a system of informal incentive scheme in programme implementation. This new implementation strategy was adopted as the administration found it almost impossible to achieve the targets through the educational and medi-care programmes of the health department. In the process, however, the informal incentive system built up an expectation among the people and further complicated the

task of the health department's continuing efforts to motivate people for birth control measures. During our field investigation health department officials reported that by introducing competition among the various agencies for fulfilling the sterilization targets, the administration had considerably demoralised its staff, as unlike other agencies, field workers of the health department had nothing to offer to attract people, except medicines and medi-care advice.

Even then, the informal incentive system would have deserved some consideration had it been able to attract people with two or three children for sterilization. As we have seen, the inducement through informal incentives had considerably helped to attain the set targets only by attracting those who had already achieved their desired family size. Not only that, the system of informal incentives failed to correct the sex bias in programme implementation. In a male dominated society it proceeded along the set lines. In a sense, the prospect of receiving some incentive benefits provided encouragement to men to send their wives for sterilization after they attained the desired family size. No wonder, therefore, that the sterilization programme is contributing little to arrest population growth.

However, this defect in implementation was primarily due to poor planning and organization of the programme. For instance, the programme was launched without collecting even preliminary information on family characteristics and family age structure. If those were known at the planning stage, the wide age eligibility criteria might not have been recommended for motivating cases for sterilization. Similarly, motivational efforts were directed on individuals, not on families. Implementation proceeded without involving the family in the family planning programme. Had it been otherwise, sex bias in the programme might have been reversed. Thus, even though the patwaris, the VLWs and others followed faithfully the procedure laid down for motivating cases, poor planning and organization defeated the very purpose for which the programme was launched.

Our field investigation clearly brings out the limitations of an incentive scheme, formal or informal, for motivating people for sterilization. Even with attractive incentives, persons from the socio-economically backward classes did not volunteer for sterilization till they attained their desired family size which was more than double the target set for the nation. Where persons came forward with two or three children they came mostly on their own. They were mainly from the upper castes with fixed sources of income and some level of education. This clearly suggests that to achieve the desired objective of family planning programme, not only education should be emphasized but also ways and means must be found out so that income levels of the poor are assured and improved.

If more attractive incentives need to be offered to induce people for sterilization, we would like to strongly urge for its formalization. For one thing, the monetary incentive that is now given formally provides hardly any moti-

Vational incentive to people for sterilization. The amount is less than ten days earnings of a farm labourer. We got the impression during our field investigation that the formal monetary incentive had rarely entered into the calculations of the persons sterilized. Those who underwent the operation did so either because they recognized the necessity of it or because they were attracted by the incentives which were offered informally. Whatever be the form of motivation incentive offered, formalization of the procedure is necessary; otherwise, favouritism and corruption are bound to surface.

We feel uneasy as we take an overview of the governmental efforts for birth control through the family planning programme. We are convinced that in the present socio-economic setting, governmental efforts for birth control must necessarily have to revolve around a well thought out incentive scheme. We are less convinced, however, regarding the appropriateness of the present practice and procedure in distributing incentive benefits for birth control. We are of the opinion that incentives should be given not so much for practising birth control measures as for undergoing training and education for building a more secured future life. We are of the view that the focus and orientation of the governmental efforts for birth control should be different. It should make efforts to catch the imagination of the people when they are young—boys and girls in their teens—and harp not so much on sterilization as on training and education.

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