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Population Growth, Status and Role of Women in India"

1. Introduction

THIS paper explores the relation between population growth and the status and role of women in India. In examining this relation it would be necessary to look at the status and role of women from the point of view of demographic, socio-economic and biological characteristics.

The term 'status' refers to the various culturally ascribed roles one has to play and the rights and duties inherent in a social position. Ascribed status is distinct from achieved status which results from efforts and personal achievements. The concept of status is here used in the sense of ordering of individuals in terms of attributes—such as level of education, occupation and income, perception of one's position within the home and in the community, decision making role with regard to domestic affairs and family planning matters, number of restrictions imposed on one's activities and freedom and so on. Role and status are almost alike and the distinction between them is only of academic nature. Role is the dynamic aspect of status.

Various studies conducted in India point to the fact that social status of women is significantly related to their aspirations, opportunities for education and employment, and adoption of new methods of living. Of these, education and employment opportunities are the most important. In recent decades

*Presented by the author at the Population Tribune held at Bucharest in August 1974.

significant changes have been observed in the occupational and educational status of women, even though the change has been very slow. The following sections are devoted to discuss the growth of India's population and the in fluence of status and role of women on the rate of growth.

2. Population Trends

Since Independence, India has added roughly 205 million to her population, a figure greater than the combined population of Pakistan, Burma, Ceylon and Nepal. India's population has increased during 1951-61 by 78 million which was roughly the population of Pakistan at the time of partition, whereas the increase during 1961-71 was 109 million. Every year there are nearly 12 million more Indians or numerically there is almost a new Ceylon or an Australia. This increase has posed many problems of national importance— the per capita national income has not risen proportionately with the rise in national income, unemployment has increased, housing shortage has become more acute, schools are overcrowded and food is in short supply.

3. Sex Ratio

Sex ratio of the population (males per 1000 females) in India has been increasing since the beginning of the century. It may be seen from the sex ratio which was 1029 in 1901 increased to 1075 in 1971, denoting thereby that there has been an increase of 46 points during the last seventy years. Further, the analysis of growth rate by sex reveals that female growth is less than the male growth rate in all the decadal periods excepting 1941-1951.

It is clear from Table 1 that the female population has been declining steadily since 1901 in India as a whole and in most of the states. States deviating from this trend are (i) Punjab with a steady fall in the excess of male after an initial jump between 1901-1911, (ii) Kerala with an increasing excess of females prior to the 1971 Census and (iii) Andhra Pradesh, Gujarat and Rajasthan, where the trend is fluctuating.

In India, international migration is negligible and hence the factors which could give rise to inequality in the sex ratio are (i) sex ratio at birth and (ii) differentials in mortality by sex.

It is fairly clear from Table 2 that the low proportion of females in the

TABLE 1—SEK RATIOS (MALES PER 1000 FEMALES) OF THE ENUMERATED POPULATION OF INDIA AND CONSTITUENT STATES, UNION TERRITORIES AND OTHER AREAS ; 1901-1971

Census Year / *Area*	*1901*	*1911*	*1921*	*1931*	*1941*	*1951*	*1961*	*1971*
India	1029*	1038**	1047**	1053*	1058*	1057*	1063	1075
1. Andhra	1015	1009	1007	1014	1020	1015	1019	1024
2. Assam	1072	1079	1101	1129	1129	1141	1141	1115
3. Bihar	948	958	985	1007	1004	1010	1006	1049
4. Gujarat	1048	1057	1059	1058	1063	1051	1064	1070
5. Haryana								1154
6. Himachal Pradesh	1130	1106	1109	1104	1115	1093 -	1084	J043
7 Jammu and Kashmir	1134	1142	1149	1156	1151	NA	1140	1139
8 Kerala	996	992	989	979	974	973	979	984
9 Madhya Pradesh	1010	1015	1027	1027	1031	1034	1050	1062
10 Maharashtra	1022	1035	1053	1056	1054	1063	1068	1075
11 Manipur	964	972	960	939	948	965	985	1020
12 Meghalaya			• »					1062
13 Mysore	1017	1019	1032	1036	1042	1035	1043	1045
14 Nagaland	1028	1007	1008	1003	979	1001	1072	1149
15 Orissa	964	947	921	937	950	978	999	1013
16 Punjab	1179	1240	1219	1205	1176	1165	1157	1156
17 Rajasthan	1105	1101	1116	1103	1104	1186	1101	1098
18 Madras	958	960	972	973	988	993	1008	1022
19 Tripura	1144	1130	1130	1130	1129	1106	1075	1061

20.	Uttar Pradesh	1067	1093	1100	1107	1102	1099	1100	1138
21.	West Bengal	1058	1081	1105	1123	1174	1157	1139	1123
Union Territories and other Areas									
1.	Andaman and Nicobar Islands	3140	2841	3304	2018	1743	1599	1621	1552
2.	Arunachal Pradesh		. .	. .		. .	. .		1162
3.	Chandigarh	. .	. .		. .				1335
4.	Dadra and Nagar Haveii	1041	1034	1064	1097	1081	1057	1038	993
5.	Delhi	1160	1261	1364	1385	1399	1302	1274	1248
6.	Goa, Daman and Diu	927	912	901	929	933	897	935	1011
7.	Laccadive, Minicoy and Atninidivi Islands	940	1013	974	1006	982	959	980	1022
8.	North-East Frontier Agency	NA	NA	NA	NA	NA	NA	1119	
9.	Pondicherry	NA	945	950	NA	NA	971	987	1011
10.	Sikkim	1092	1052	1031	1034	1087	1103	1106	

*Excluding North East Frontier Agency and Pondicherry **
Excluding North East Frontier Agency
NA Refers to the Non-availability of the data.

SOURCE : Census of India, 1961, Vol. 1, Monograph, 10, Office of the Registrar-General, India, for years 1901 to 1961. The figures for 1971 are calculated from Census of India, 1971, Series I, Paper 1 of 1972.

population relative to males is to a large extent due to mortality differentials in sexes.

TABLE 2—SEX RATIO (MALE DEATHS PER THOUSAND FEMALE DEATHS) BY AGE AT DEATH, RURAL, 1968 AND 1969

Year	Age group								All ages
	0-4	5-14	15-24	25-34	35-44	45-54	55 +	15-49	
1968	°48	959	568	537	1083	1467	1146	833	985
1969	883	927	614	648	1201	1409	1160	917	962

SOURCE : Sex composition in India, 1972, Office of the Registrar-General, India.

The increase in sex-ratio over time indicates that the risk to female lives has not improved in relation to the risk to male lives.

Sex-ratio by age reveals that a large proportion of boys than girls seems to be born in India compared to western countries. A large proportion of girls than boys dies in the first few years of life lending support to the belief that perhaps girls suffer from greater neglect than boys. A large number of females die during reproductive ages, especially during ages 15-34 suggesting thereby the inadequacy of pre-natal and post-natal care of the mother.

The mortality pattern in rural India which could be observable from Table 2 shows that mortality for females in the reproductive periods is more than the corresponding mortality for males in the age group (15-49). The overall death rate also reveals a higher mortality for females. The sex-ratio at death by age group indicates that more female deaths occur relative to males in the early child-bearing period (15-34). This may partly be due to high maternal deaths. The estimated maternal deaths in rural India are of the order 573 per 100,000 live births. The maternal mortality in USA is 32 (1965) and in U.K. 25 (1970). Thus compared to other developed countries, maternal mortality in India is quite high which can be seen from Table 3, where maternal mortality rates in some countries are given.

Since fertility is high in India and women frequently give birth to children, the continuous strain of child-bearing is likely to have an adverse effect on the health of mothers. When the level of fertility is brought down, simultaneously the maternal mortality will also be reduced. The high incidence of maternal

mortality as already stated is one of the contributing factors for the decline in the proportion of women relative to males. The success in reducing maternal mortality in India to a level consistent with that of the advanced countries has to be achieved not only by family planning programmes but also by providing more health and welfare services. The way to reduce the gap between the two sexes seems to be to take quick measures for controlling maternal mortality and curtailing fertility for the generation to come.

TABLE 3—MATERNAL MORTALITY RATE (PER 100,000 LIVE BIRTHS) IN DIFFERENT COUNTRIES

	Country	*Year*	*Maternal mortality*
I.	U.S.A. [3]	1965	32
		1964	33
2.	United Kingdom [8]	1970	25
		1969	27
		1968	29
3.	Singapore*	1966	50
4.	Hong Kong*	1966	44
5.	Taiwan*	1966	72
6.	Malayasia*	1965	200
7.	Phillippines*	1964	210
8.	Srilanka*	1962	300
9.	India (Rural)	1968	573

*Statistics on Children and Youth, U.N. Publication, 1968. **4.**

Age Structure

As is the case of the developing countries, India also has an age structure with a very broad base and a tapering top. Table 4 gives the percentage distribution of the Indian population by age group as per the 1951, 1961 and 1971 Censuses. It shows that in 1971 nearly 42 percent of the population is below the age of 15, about 42 percent between the ages 15 and 44 and about 16 percent above age 44.

While there is a gradual increase in the percentage of females in the age

group 0-14 over the period from 1951 to 1971, the percentages in the group 15-44, shows gradual decrease during the period and the percentage in the group 45 and over is fluctuating i.e., after a gradual decrease in 1961, it increased slightly in 1971. More females are added now in the group 0-14 and the number in the reproductive age group is decreasing.

TABLE 4—PERCENTAGE DISTRIBUTION OF TOTAL AND FEMALE POPULATION

Age group	Year					
	1951		*1961*		*1971*	
	Total	*Female*	*Total*	*Female*	*Total*	*Female*
0-14	38.34	38.53	41.02	41.16	41.80	41.80
15-44	44.85	44.79	43.05	43.22	41.85	42.32
45 and above	16.74	16.60	15.88	15.61	16.16	15.69
Age not stated	00.07	00.08	00.05	00.01	00.19	00.19
Total	100.00	100.00	100.00	100.00	100.00	100.00

5. Marital Status

Table 5 gives the number of females in the age group 15-44 distributed according to their civil condition. There is a significant increase in the percentage of unmarried females in 1971 from 1961, and the percentage of widowed, divorced and separated women has been decreasing from 1951. Even though an increase in the percentage of married females was observed in 1961 from 1951, there was decrease in 1971. The percentage of currently married women in the reproductive ages 15-44 to total population also shows a declining trend from 18% in 1961 to 17.2% in 1971.

6. Fertility

Data about the fertility of Indian women are still scanty and information for all India is not available. However, on the basis of available information, it may be said that a married Indian woman gives birth to an average of about 6.6 children by the time she stops reproduction and it is also seen that rural-urban difference in fertility is not marked. This suggests that such factors as urbanisation and modernisation, which tend to depress fertility, are not yet effective in India. National programmes aimed at reducing fertility have been implemented and the effectiveness of these programmes is yet to be evaluated.

TABLE 5—MARITAL STATUS OF FEMALES AGED 15-44 IN INDIA IN 1951, 1961 AND 1971

Year	*No. of females aged 15-44*	*No. of females never married*	*No. of females married*	*Percentages of currently married in ages 15-44 population*	*No. widowed or divorced women separated to total*
(/)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
1951*	7,577,523 (44.79)	662,697 (8.217)	6,274,964 (82.810)	17.97	679,862 (8.972)
1961	91,955,735 (43.22)	6,837,833 (7.436)	78,847,718 (85.745)	17.96	6,202,968 (6.745)
1971	111,327,600 (42.32)	12,242,700 (10.997)	94,040,000 (84.471)	17.24	4,998,900 (4.490)

*Sample population of 1951 Census.

i. The figures in brackets in column (2) are percentages of females aged 15-44 to total female population,

ii. The figures in brackets in columns (3), (4) and (6) are percentages of females in the respective columns to total female population aged 15-44.

iii. The percentages are calculated based on the Census Publication

The discussions on the effectiveness of the measures adopted for limiting the growth of the population have paved the way to a growing awareness in recent times to involve an ever larger target population in the programmes. But the participation of a sizeable proportion of the families in these programmes depends on a number of socio-economic factors. Of particular interest in this regard is the nature of the relation of fertility on women's education and occupation, and the implications these relations may have for future fertility reduction, particularly in the developing world.

The percentage of literate population in India to total population increased from 5.35 in 1901 to 29.46 in 1971 ; while the percentage of literate females to total female population increased only from 0.69 in 1901 to 18.72 in 1971. The growth of literacy in rural areas is very slow, which is lower still in the case of females. Progress of literacy from 1901 to 1971 is given in Table 6, [13].

TABLE 6-PROGRESS OF LITERACY IN INDIA, 1901-1971

Census year	*Percentage of literate population to total population*	*Percentage of literate males to total male population*	*Percentage oftiterate females to total female population*
(1)	*(2}*	*(3)*	*(4)*
1901*	5.35	9.83	0.69
1911*	5.92	10.56	1.05
1921*	7.16	12.21	1.81
1931*	9.50	15.59	2.93
1951**	16.67	24.95	7.93
1961	2402	34.44	12.95
1971	29.46	39.45	18.72

*For undivided India.
**ExcIudes Jammu and Kashmir.

In recent decades the number of females going in for higher education including technical/professional courses has been steadily increasing. When the percentage of females going in for general education in colleges in 1947-1948 was eleven,'in 1971-72 it increased to twenty six and the corresponding percentages of females in professional education are five and ten. Compared to 1947-1948, there was a twenty-eight fold increase in 1971-

72 in the number of female students for general education and there was twenty-three fold increase in the number of female students for professional education. Among all vocational education, the gain by women has been greatest in commerce. For instance, during 1947-48 to 1971-72, there has been a two hundred and sixteen fold increase in female enrolment in commerce course, and thirty fold increase in Teachers' Training course. For the Medicine course there was twelve fold increase and for the Engineering course the increase was seven-fold [20].

Percentage of females of 5 years and over with educational standard up to matriculation increased considerably from 4.54 in 1961 to 10.78 in 1971. Even though the progress in educational level with matriculation and above has not been as significant as the progress observed in educational level up to matriculation, the percentage increased from 0.71 in 1961 to 2.04 in 1971 as could be seen from Table 7.

A negative association between fertility and educational level has been observed in several studies in India and abroad. The Mysore Population Study, [22], revealed that in Bangalore city the average number of children born to ever married illiterate women above the age of 45 years was about 5.4 while that for women with high school or college education was 3.9. Similar results were obtained from the National Sample Survey of 1960-1961, [7], conducted in urban areas. For women aged 47 years and over with unbroken marriages it was found that the number of live births to illiterate women and women with education upto the primary level only, was of the order of 6.6. Corresponding figures for women with middle and high school education were 5.0 and 4.6 respectively. For women with University education it was as low as 2.0. The importance of education of girls is clear from this. Education is a vital factor in the matter of achieving a small family norm.

The number of gainfully employed women has substantially increased, though the proportion of working women has remained more or less static. The percentage of women engaged in traditional occupation of agriculture are 79.58 in 1961 and 80.07 in 1971. While 9.18% of women were engaged in industrial activities in 1961, the percentage descreased to 7.01 in 1971. The percentage of women employed in other sectors—trade and commerce, transport, storage and communications and other services—remains almost the same during 1961 and 1971. Percentage distribution of workers in 1961 and 1971 are given in

TABLE 7-PERCENTAGE OF PERSONS AGED 5 AND OVER BY LEVEL OF EDUCATION, 1961 AND 1971

Level of Education	*All ages*				*Age 5 and over*			
	1961		*1971**		*1961*		*1971*	
	Total	*Females*	*Total*	*Females*	*Total*	*Females*	*Total*	*Females*
1. Literate with educational standard								
(i) Upto matriculation	308,57,781 (7.03)	8,158,196 (3.84)	784,123 - (14.37)	242,045 (9.20)	30,857,781 (8.28)	8,158,196 (4.54)	781,123 (16.79)	242,045 (10.78)
(ii) Matriculation and above	8,228,582 (1.88)	1,275,064 (0.59)	213,152 (3.91)	45,771 (1-74)	8,228,582 (2.20)	1,275,064 (0.71)	213,152 (4.56)	45,771 (2.04)
2. Total (literate and illiterate)	438,936,918 (100.00)	212,790,817 (100.00)	5,454,958 (100.00)	2,630,731 (100.03)	372,834,280 (100.00)	179,875,335 (100.00)	4,671,587 (100.00)	2,245,259 (100.00)

The percentages are given in brackets.

*1971 figures arc based on 1% sample.

Table 8. The percentage of women employed in professional and technical work is 15, that of women engaged as sales workers is 11 and about 2.5 per cent of women hold administrative, managerial and clerical positions [4], A comparison with other developing countries where one-fourth of the positions in administrative, managerial and clerical is hold by women, shows that the situation in India is very low. The status of women in industry, commerce and service is relatively unchanging.

TABLE 8—PERCENTAGE DISTRIBUTION OF WORKERS BY INDUSTRIAL CATEGORIES AND SEX, 1961 AND 1971

	1961		*1971*	
Category	*Males*	*Females*	*Males*	*Females*
Cultivators and Agricultural Labourers	64.88	79.58	67.49	80.07
Livestock, forestry, fishing, plantation and other allied activities ; Mining and quarrying	3.10	2.00	2.89	2.90
Manufacturing, Processing, Servicing and Repairs :				
(a) Household Industry	5.71	7.85	3.37	4.25
(6) Other than household Industry	5.56	1.33	6.61	2.76
Construction I	1.41	0.41	1.35	0.65
Trade and Commerce	5.29	1.37	6.36	1.78
Transpart, Storage and Communication	2.28	0.11	2.85	0.47
Other services	11.77	7.35	9.08	7.12
Total	100.00	100.00	100.00	100.00

The growing emphasis on women's education and occupation is likely to be a critical factor in influencing the status of women in society. The striving for better status is in turn directly related to family size norm and contraception. It is a universal phenomenon that status is significantly related with fertility and contraception.

Educational and employment opportunities for women give them an alternative to early consummation of marriage and child-bearing. These two inputs are likely to raise the low social status presently assigned to women in India. A recent study showed that there are two groups of women who are psychologically almost ready to accept contraception: (1) those with a high

socio-economic status and particularly a high educational status, and (2) those who have already given birth to 4 or more children. So far as the first group is concerned, it is numerically too small to be of any significance from the point of view of the overall birth rate. Evidence is available to show that married women with a high level of education will adopt family planning on their own, in the absence of any organised programme, but that an effective organised programme is needed to reach the second group. Closely related to improvements in the social and economic status of women are health services aimed at reducing maternal mortality and morbidity.

The suggestion is sometimes made that a population's fertility rate can be reduced by increasing the rate of female labour force participation. Although there are several *a priori* reasons for believing that this might be effective, it cannot be accurately described being based on empirical evidence. One conclusion that can be drawn from a systematic review of the literature is that the negative relationship between female labour force status and fertility is very strong in economically developed countries, but in less developed countries it tends to be perceptibly weaker or even absent. Also in the less developed countries, the probability of observing a negative association is greater in urban than in rural areas.

There is increasing evidence to suggest, however, that the greater the incompatibility between the role of mother and worker, the greater is the differential fertility behaviour of workers and women not in the labour force. Also, it may not be labour force participation *per se,* but rather a series of other variables associated with labour force participation, such as later age at marriage and longer periods of schooling, which affect fertility levels.

It is suggested that governments trying to lower fertility rates should therefore make available as many opportunities as possible to enable women to obtain employment. In doing so, consideration must necessarily be given.not only to the creation of commercial, industrial jobs outside the home, but also to the close links between the volume of such jobs and the levels of urbanisation and education.

The National Sample Survey conducted in India has shown generally that fertility decreased with increase in per-capita household expenditure. However, a detailed study of couples with very low income showed that fertility tended to increase till a certain level of per-capita income was reached, whereafter it declined with an increase in the economic status. In Kerala State

where the educational level is high, there has not been any significant moderation of fertility; economic status and the limited scope of employment of women might be contributory factors [17].

A number of studies to determine the attitude of rural and urban women in India, towards family planning have been carried out. These studies show : (1) urban women are more favourably disposed towards contraception as compared to rural women, (2) with increase in the age and parity there is greater willingness to accept contraception and (3) education and economic status in urban areas have positive relation with desire for small family size norm and contraception. It is reported that mobility from an agricultural to non-agricultural occupation decreased fertility.

However, there is no adequate evidence to show that education and economic status of women influence fertility behaviour in rural India. The urbanised women with higher status and higher education desire smaller families, tend to marry late, and show greater use of contraceptives as compared to the rural, less educated women engaged in traditional occupations.

Social and cultural factors have tended to support an early age at marriage for females in India. Female marriage age in India is one of the lowest in the world. This is because of a large number of child-marriages. Before the passing of the child marriage Act in 1929, between 45 and 50 per cent of girls were married before the age of 15. In 1961 the proportion of such girls declined to about 20. Still two girls out of every ten are married below the legally prescribed minimum age for marriage. In 1961, the average age of female marriage in India was 16 years and of males 22 years. Certain large scale surveys, includidg the Mysore Population Study [22] and the National Sample Survey [6] have shown a higher age at marriage for urban women as compared with rural women. However, the difference in age at marriage between rural and urban females has not led to a differential pattern in fertility between the two groups of women as the age of both these is rather low. Several studies have found a positive relationship between the educational status and age at marriage of women. One of the findings of the Mysore Population Study [22], is that age at marriage increased systematically with educational level.

Table 9 gives the mean age at marriage in India and the different states in the country, 1891-1961. It is noted that the mean age had been rising bet-

TABBE 9 -MEAN AGE AT MARRIAGE OF FEMALES, INDIA AND STATES, 1891-1961

1.	States	*1891*	*1901*	*1911*	*1921*	*1931*	*1941*	*1951*	*1961*
	Andhra Pradesh	10.33	12.18	10.80	11.22	10.45	11.90	12.58	15.26
2.	Assam	14.59	14.92	14.86	15.30	14.26	16.33	17.02	18.54
3.	Bihar and Orissa	11.17	11.41	11.58	12.48	11.23	13.42	14.30	14.81
4.	Gujarat and Maharashtra	10.94	12.60	11.94	12.48	12.25	14.26	15.66	15.74
5.	Kerala	-	17.37	17.74	17.21	17.60	-	20.06	19.68
6.	Madhya Pradesh	12.67	12.97	11.60	12.06	10:71	13.85	14.24	13.87
7.	Madras	14.41	15.25	15.08	15.31	14.92	16.13	17.18	18.14
8.	Mysore	14.14	15.14	15.21	15.22	14.55	16.17	16.20	16.33
9.	Punjab	13.17	15.04	14.64	15.12	15.16	15.43	16.32	17.46
10.	Rajasthan	12.98	13.67	12.96	13.13	12.41	13.54	14.24	14.22
11.	Uttar Pradesh	12.28	12.27	12.23	12.42	11.69	13.08	13.76	14.43
12.	West Bengal	11.17	11.41	11.68	1227	10.71	13.24	14.66	15.86
	INDIA	12.54	13.14	13.16	13.67	12.69	14.69	15.59	15.83

(SOURCE : S. N. Agarwala : *Population,* 1967).

ween 1891 and 1921. The marked fall in the mean age at the 1931 Census, may be due to the passing of the Child Marriage Act in 1929. This bill was passed on September 1929 and was to take effect from April 1, 1930. The period between the passing of the Act and its actual enforcement was utilised by the public to perform child marriages on a large scale, resulting in the sharp decline in the age at marriage in 1931. After 1931, however, the female marriage age has tended to increase and is around 16 years (1961 Census). However, in five states of India—Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar and Orissa, it is still below the legally prescribed minimum age. The southern states of Kerala, Madras, Andhra Pradesh, Gujarat and Maharashtra have comparatively higher marriage age. Kerala tops the list in having the mean age at marriage for females as 19.68. From certain studies confined to particular areas it is known that a higher age at marriage tends to reduce fertility and bring down birth rate.

Fertility behaviour is affected by a variety of factors. A study carried out by the Registrar-General of India in 1961, on rural and urban samples in four selected States showed an association between postponement of marriage and reduction in the number of children born. The Mysore Population Study [22] and the study conducted in Central India [5] also corroborate the fact that women marrying at higher ages tend to have lower fertility. The increased age at marriage will no doubt give an opportunity for education and perhaps employment, resulting in greater maturity which will condition the decision to moderate fertility.

7. Women's Status and Role in Decision Making

Indian women find their major responsibilities in the preparation of food, the care of children and home. They do not have the necessary power and authority in all spheres of home-making. Contrary to this in certain states in India where matriarchal culture is prevailing, women are found to have a dominant role in decision making.

Though theoretically and legally women are recognised as the social equal to men, the major decision making role particularly in matters relating to family planning has been mostly the prerogative of the husband, especially in the rural areas. From studies carried out recently it is seen that women's role in decision-making in household affairs is positively correlated with the degree of awareness and knowledge of contraceptives and it is also positively

correlated with the adoption of family planning as well as fertility. In the early stages of family formation, the newly married wife may not have enough voice in decision making, but by the time she has quite a few children, she begins to make her voice felt in decision making with regard to domestic affairs. Because of a large number of pregnancies, she also tends to practise use of contraceptives. It is evident that women are no longer satisfied with the status and role assigned to them by the society so far. The traditional roles assigned to them—domestic duties including child-bearing and rearing—are being viewed by them with doubt and hesitancy.

8. Relation between Vital Rates and Socio-economic Characteristics

In Table 10 are given correlation coefficients of the vital rates and selected socio-economic variables, namely per capita income, male and female literacy and non-agricultural activities. It would be seen that each of these variables

TABLE 10—CORRELATION COEFFICIENT **OF VITAL RATFS WITH** SOCIO-ECONOMIC VARIABLES BASED ON STATE **LEVEL DATA**

Vital Rates	*Per-capita income*	*Female literacy*	*Male literacy*	*Non-agricultural workers*
Birth rate	-0.1360	-0,5615*	-0.5198*	-0.608S*
Death rate	-0.5326*	-0.5521*	-0.4585	-0.6248*
Infant mortality rate	-0.2917	-0.4596	-0.3525	-0.6646**

*Significant at 5% level

**Significant at 1% level.

SOURCES • Data in respect of male and female literacy and non-agricultural workers for 15 states of India are taken from 1971 Census of India ; data in respect of per-capita income are taken from Reserve Bank of India Bulletin ; and birth rate, death rate and infant mortality rate are taken from Sample Registration Scheme.

has inverse relationship, which is significant at the 5% level only in the case of per capita income and death rate ; female literacy and birth and death rates ; male literacy and birth rate ; non-agricultural activities and birth and death rates. The relationship between the non-agricultural activities and infant mortality rate is significant even at 1% level. While both female literacy and non-agricultural activities do influence the birth and death rates, it is seen

that the impact of non-agricultural activities on birth and death rates is stronger than that of literacy. Also the impact is very strong in the case of non-agricultural activities on infant mortality. It may be noted in this context that 'non-agricultural workers' include educated men and women holding administrative, managerial, clerical, professional and technical positions. Similarly, the categorisation of 'literacy' is also too broad as to include all those who are with and without level of education. Apart from these, there may be rural-urban differences too. It is, therefore, necessary to sub-divide literates based on level of education with rural-urban break up. Similar sub-division in the case of non-agricultural workers has also to be done and the impact of each of these sub-divided variables on vital rates has to be studied in order to have a more clear picture of the exact relationship.

9. Conclusion

Some of the factors standing in the way of improvement in the status of women, are low standard of living, low level of literacy and education among women, economic dependence of women, ignorance of their own fundamental rights, low inter-spouse communication, the stronghold of tradition and so on. To the extent to which these constraints are mitigated, the programmes of family planning in the sense of control of the family size, will be more and more successful. The strategy in the family planning programme has not so far been guided by an understanding of the status and role of women.

The knowledge and practice of family planning is very limited in the rural areas where the need for improvement in the status of women is more urgent. If through appropriate action programme, rural women can perceive that having a large number of children is not necessarily a virtue by itself and that more direct means of attaining a better status are provided by education and economic independence as also through the adoption of family planning, the present situation can be changed in the desired direction. But this kind of social intervention can be rational only if there is a concurrent expansion of appropriate educational facilities and of job opportunities. Here we touch the sensitive core of the problem of development. A higher status of women, measured especially in terms of education and employment, is essential for family planning programmes to be fully effective. In a society which insists that the proper role for a woman is to stay home and raise a family, fertility will be higher.

To control population growth, increasing either the literacy rate of the population, or the number of jobs in agricultural, or industrial sectors alone, may not necessarily produce the desired effect. Increasing the level of education of women and providing more educated employment opportunities for them will jointly tend to raise the marriage age of women, these together will positively reduce fertility. National policies of family limitation if framed keeping this aspect in view, will no doubt, help in achieving the desired goal.

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