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THE DEMOGRAPHY OF TRIBAL POPULATION IN WESTERN INDIA

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In view of scattered inhabitation of tribal population in far flung areas on the slopes of the hills, very little is known about the demographic situation of this population. Main source of livelihood of the tribal population is farming, collecting forest products and working as labourer in the forest or on road construction. Sex is very casual among them and pre-marital relations are very common. Many researchers believe that the tribal populations are likely to have high fertility, high mortality and low level of contraception irrespective of their place of stay. The present paper is an attempt to explore whether the commonly believed notion holds good among the tribal population located in three different districts of Gujarat.

This study was conducted in three tribal districts of Gujarat viz. Bharuch, Panchmahal and Dangs, located in western India. A sample of 2000 households each from Bharuch and Panchmahal and 3000 households from the Dangs were covered under two studies conducted by Population Research Centre, Baroda. All the women in the reproductive age group 15-44 of the sampled households were considered for the purpose of analyses of this paper.

The study reveals that the fertility, mortality and contraceptive prevalence varied from district to district. Three different patterns of these rates emerged in spite of the fact that the predominant tribes in all the three districts happened to be Bhils:

- The fertility and mortality among the tribal population of Bharuch was lowest
- Both the fertility and mortality amongst the tribal population of Panchmahal was high and
- The fertility among the Dang tribals was highest but mortality was low.

Thus, the levels of fertility and mortality of the same clan of tribal population even within the same state could be different and are area specific. It would therefore be wrong to believe that tribal populations are likely to behave uniformly in terms of their levels of fertility, mortality and contraception.

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Based on 1981 census of India, it has been observed that about eight percent of the country's population consists of aboriginals located in the central uplands of the Indian peninsula. A bulk (about fifty two percent) of them reside in the western India (constituted by four major states viz. Gujarat, Madhya Pradesh, Maharashtra and Rajasthan). They are inhabited in the forest clad mountains of Aravali, Vindhya, Sahyadris and the Satpudas. Among the tribals in this region, ten percent of them are inhabited in Gujarat, 23 percent in Madhya Pradesh, 11 percent in Maharashtra and 8 percent in Rajasthan. Majority of these aboriginals live in the south eastern border of Gujarat with the states of Maharashtra, Madhya Pradesh and Rajasthan. Since there is a tendency among the tribals to live on the borders of these four states, it is quite likely that they may be having some commonality in terms of their beliefs and values for marriage, fertility, child and maternal care and contraception. However, differences in the level of fertility, mortality and contraceptive prevalence between different tribal groups even within the same state cannot be ruled out. An attempt is therefore made in this paper to study such differentials, if they exist, among the tribal groups located in the three districts, viz. Bharuch, Panchmahal and the Dangs, of Gujarat. These districts lie in the south-eastern border of Gujarat with the adjoining states as seen in the Map of Gujarat.

About one third (34 percent) of the tribal population in Gujarat is reported to be inhabited in these three districts. The distribution of such a population, however, varied from 92 percent in the Dangs to 45 percent in Bharuch and 42 percent in Panchmahal.

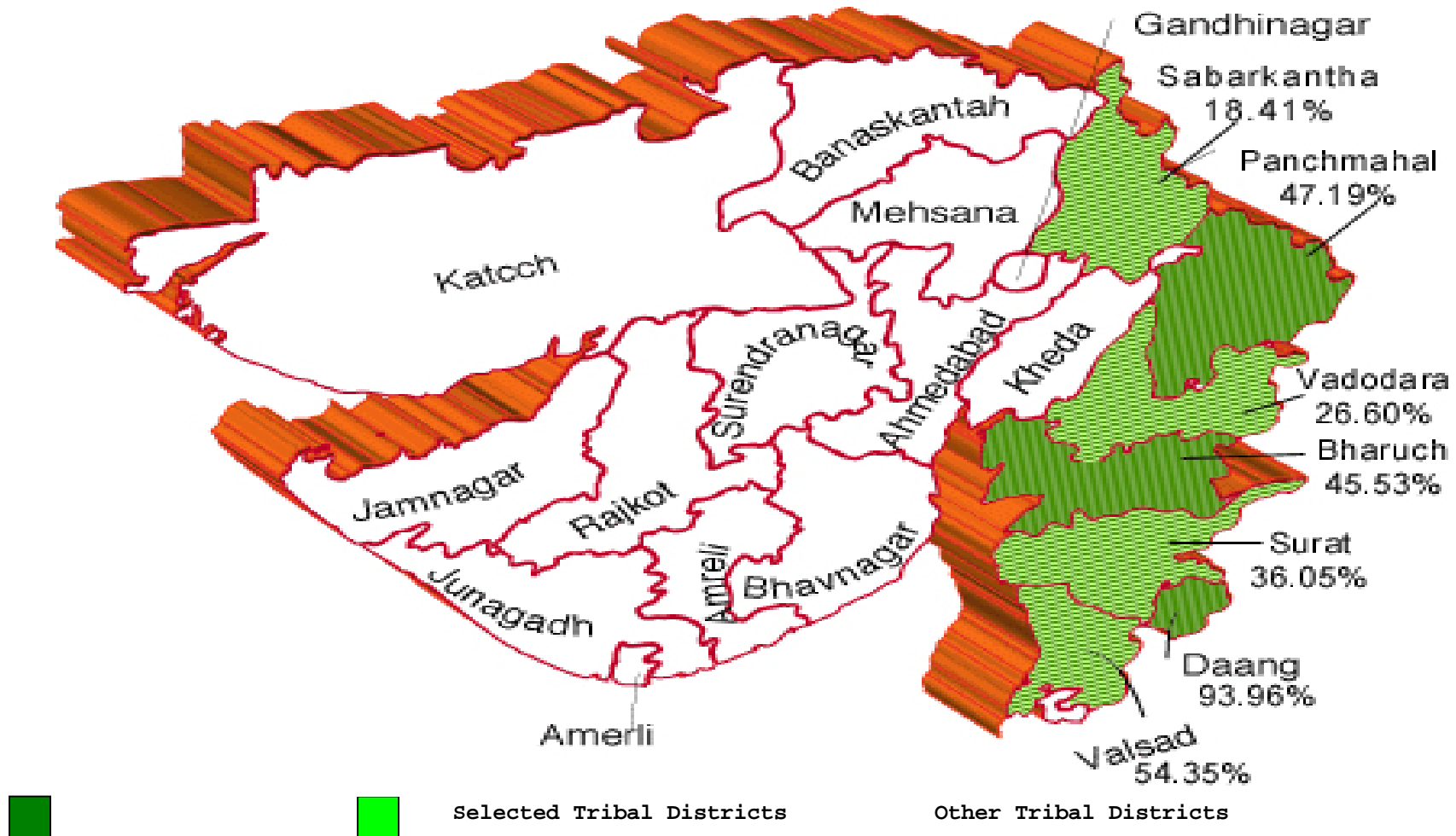
SOME FEATURES OF TRIBAL POPULATIONS

As seen in the Table-1, a substantial proportion of the tribal population in each of the three studied districts are Bhils. While 26 percent of the Dangs tribal population belong to this tribe, the corresponding percentage of this population in Panchmahal and Bharuch is as high as 74 and 79 respectively. In Bharuch; Dhanka, Tadvi, Valvi and Dubla, Talavia, Halpati are the other major tribes in existence. On the other hand, a good proportion of Nayaka, Naikada, Patelia, Rathwa and Koli are the other tribes, besides Bhils, that are inhabited in Panchmahal. The aboriginals settled in the Dangs are Bhils, Kunbis, Kukanas and Warlis. Further, a small proportion of other tribes, who are different than that described above, are also found in each of these districts.

Bhils are considered to be amongst the oldest settlers in the country. They derive their name from the Dravidian word called Billu, which means bow. Bhils are, thus, seen with bow and arrow. They live in isolation, go for hunting, fishing, practice shifting cultivation and have escaped to a large

extent the influence of Brahmania (upper caste) culture. This tribe was able to maintain political independence to a great extent (Robert, 1985) and it remained the most turbulent amongst all the tribes. The Bhils are fond of hard wine. Basically, they are lazy and so they are not very progressive in farming (Chitle, 1978).

MAP OF GUJARAT STATE



Kunbis/Kukna/Konkana/Konkni consists of the tribe that migrated from Konkan in South India and settled down in the Dangs. They occupied higher positions of Administrators in the Bhil kingdoms. They were gifted land by Bhil kings for their services. Kunbis are progressive agriculturists and often orthodox Hindus. They are relatively good looking, hard working and economically better off people. They occupy important posts within the tribal groups and are more cultured than the Bhils. They are Sun worshipers. Varlis came to Dangs along with Kunbis but they were not able to establish independent status like Kunbis. This community is a buffer between Bhils and Kunbis. Like Kunbis they are good in looks and are progressive farmers.

Table 1: Percentage Distribution of the Population of Different Tribes in the Three Districts of Gujarat, 1981

Tribe	Percentage Distribution of Population		
	Bharuch	Panchmahal	The Dangs
Bhil	79.0	73.5	25.8
Dhanka, Tadvi & Valvi	10.1	-	-
Dubla, Talavia & Halpati	7.9	-	-
Koli, Dhor, Tokre Koli	-	2.6	-
Nayaka, Naikada	-	10.2	-
Patelia	-	7.0	-
Rathwa	-	5.8	-
Konkana, Konkni & Kukna	-	-	17.4
Kunbis	-	-	33.6
Varlis	-	-	14.7
Others	3.0	0.9	8.5
Total Tribal Population	5,77,393	9,69,523	1,04,918

The tribe that took shelter in the field and fed themselves on Dhan (uncooked grain) were called Dhanka. This word Dhanka is also derived from Sanskrit word called Dhanushyakas, meaning holders of bows. They are fighting clan. Their main occupation is agriculture or forest labour. They gather forest products like gum or honey or collect leaves of trees for biddies (traditional cigarette) but the income from these sources is quite meager. This tribe had three divisions called Tadvi, Valvi and Tetaria and they do not inter-marry with each other.

Dubla is a corrupt form of Durbala or weakling, a name given to them by Aryan invaders who came in contact with them. This word is also interpreted as Durvala meaning difficult to bend or difficult to change opinion (Shah, 1958). This tribe thus consisted of strong willed and obstinate people. The word Nayaka (Naikda) is derived from the Sanskrit word meaning a leader or a protector. They mostly did the job of headmen of the king as administrator or protector. Patelias were also ranked at the

top among the tribes as those engaged in the progressive agriculture and were often orthodox Hindus.

Though the different tribal group differs from one another to some extent, they however have common ethos out of which a common personality of the tribal population has been evolved. This personality is characterised by a typical mode of thinking, feeling and believing common beliefs and attitudes, sentiments and ideals. Women in tribal society enjoyed a relatively lower but generally more secure position as the economic and social equality of women is existing, in their set up, right from their childhood (Shah, 1964).

The houses in the tribal area are built on the slopes of hills just besides their fields (Dave, 1960). A cluster of two or three houses is quite a common feature as married son often establishes his house next to his father (Doshi, 1969). Land is divided soon after the wedding of a son as the young couple's first ambition is to establish its own household. The whole economy is based on small units.

The bride price among the tribal population is not a shameful practice but a rule. This society is egalitarian and decentralised in essence. The position of women here is not compatible with the role of complete submission demanded by Hindu ideals. A young tribal youth is expected to be brave, strong and good in singing and dancing while a girl is expected to be beautiful, healthy and hard working. They do not attach any importance to virginity of the girl. She must be able to do the domestic and agricultural work (Naik, 1925). Elopement is a recognised form of marriage. The parents agree about the bride price and nothing else would be necessary (Dave, 1960).

Infant marriage, which is wide spread among the Hindus, is a custom unknown to the tribals. Most marriages in the tribal groups takes place between the ages of 16 to 21 (Ahuja, 1966). The timing of the marriage depends on the ability of the couple to institute an independent economic unit. This is further confirmed by the boy's anxiety to separate from the father's house soon after the wedding and the building of a new house in the neighbourhood (Aurora, 1972).

There is a certain amount of freedom of contact between the sexes. The boys and girls meet on the grazing field when incharge of cattle. They also meet during dances on festivals or marriage. This leads to a kind of pre-marriage sexual mixing. The attitude of indifference to the sexual behaviour of the unmarried youths and girls is shared by the parents of adolescent and grown up daughters (Lal, 1978). Extra marital relationship is also quite common among the tribal population. A tribal family is essentially a patrilineal and patrilocal. The property is inherited from a father to his sons. However in the absence of a son, the property of the

father goes to his daughter. But in such cases, the daughter along with her husband has to come to live in the village of her father.

DATA

It is rather difficult to obtain demographic data about the tribal population in view of their scattered inhabitation in far flung areas on the slopes or top of the hills. The requisite data for this paper was obtained from two studies viz. 'Base Line Survey in Gujarat' conducted in Bharuch and Panchmahal districts of Gujarat and 'Fertility, Mortality and Contraceptive Prevalence in Dangs District'. The former study was jointly conducted by the Population Research Centre, Baroda and International Institute for Population Sciences, Bombay in 1983 covering thereby a sample of 2000 households each from Bharuch and Panchmahal district respectively. This study included the requisite sample of tribal and non-tribal households and interviewed all the women in the age group 15-44 in the selected sample. Multi-stage stratified design was used to draw the required sample.

On the other hand, the second study was conducted in the district of the Dangs under the auspicious of Population Research Centre, Baroda in 1986. Here again a multi-stage stratified design was used to select a sample of 3000 households from the district of the Dangs. All women in the reproductive age group, 15-44, were covered in this sample.

FERTILITY

(a) Birth Rate (Current Fertility)

Data on the number of births that occurred to the women, belonging to the 2000 households each, from rural Bharuch and Panchmahal districts, during the period 1981-83, was obtained and the population for the mid-year period was estimated. In the case of the Dangs, this data was obtained for the period 1985-86 from the 3000 households. The birth rates were then estimated for the tribal and non-tribal population of Bharuch and Panchmahal. Since in Dangs more than ninety two percent of the population is tribal, the estimate of Birth Rate was obtained for the tribal population only.

It is obvious from Table-2 that while the birth rate of the entire population in Bharuch was the least (26.3 per thousand population), it was as high as 36.1 in Panchmahal and still higher (48.1 per thousand population) in the Dangs. Further, the birth rate in the tribal population was relatively higher than that among the non-tribal population in each district. The gap in the birth rates between tribal and non-tribal population

ranged between 5 units in Bharuch to 9 units in Panchmahal district. It was observed that though the fertility of tribal population in both the districts was higher than that of the non-tribals, the fertility differentials between these two groups in the same district was not that high. In other words, if the tribal population in a certain district had high fertility, the non-tribal population also had high fertility and vice versa.

Table 2: Birth Rates in the Tribal and Non-Tribal Rural Population of Bharuch, Panchmahal and Tribal Population of Dangs district of Gujarat

District	Birth Rate		
	Tribal	Non-Tribal	Total
Bharuch (1981-83) ⁺	28.0	23.3	26.3
Panchmahal (1981-83) ⁺	40.9	31.7	36.1
The Dangs (1985-86) ⁺	48.1	-	48.1

+ Figures in the parentheses refer to the year for which Birth Rate was estimated.

An interesting result that emerged from this table is that there had been a vast differential in the level of birth rate even among the tribal population of the three districts under study. It varied from 28.0 per thousand population in Bharuch to 40.9 in Panchmahal and to 48.1 in the Dangs. The variation between the tribal birth rate in Bharuch and Panchmahal was of the order of 13 units whereas that between Bharuch and the Dangs, it was about 20 units. This illustrates that the fertility of a tribal group is not only a function of the tribal characteristic of that group but also other factors, responsible in affecting their norms and values in the area where this group inhabits.

(b) Mean Number of Live Births By Age of the Women (Period Fertility):

The mean number of children ever born in Bharuch, Panchmahal and the Dangs districts were 2.06, 2.59 and 3.17 respectively. Since the average number of children ever born is a function of the age distribution of the women, the average number of children ever born in the tribal, non-tribal and total population of Bharuch and Panchmahal and tribal population of the Dangs districts was standardised using the combined age distribution of women in Bharuch and Panchmahal as standard. The standardised average number of live births in Bharuch, Panchmahal and the Dangs were then estimated to be 2.11, 2.55 and 3.02 respectively. This illustrates that the over-all fertility of the population in Panchmahal has a clear cut edge over the fertility in Bharuch. Further, the existing fertility in the Dangs is on an average, about one child higher than that in the district of Bharuch. The over-all fertility, thus, was the highest in the Dangs followed by Panchmahal and Bharuch in that order.

The standardised average number of live births among the tribal and non-tribal population of Bharuch was 2.14 and 2.05 respectively while that in Panchmahal district, it was 2.68 and 2.43 respectively. This clearly

delineates that the fertility of tribal population, in both these districts, though have slight edge over the fertility among the respective non-tribal populations, the difference is not unduly large between these two groups in their respective district. However, the fertility of the tribal population in the Dangs was slightly higher than that in Panchmahal and Bharuch. To understand the fertility patterns of tribal population still in greater detail, an attempt was made to study mean number of live births by each age group of the women in these districts. The Table-3 indicates that there was a clear cut evidence that the average number of children ever born in each age group of women (15-19, 20-24, ...40-44) of the tribal population in the Dangs were higher than that of the corresponding age group of women in Panchmahal and Bharuch. This illustrates that the differentials in the level of fertility among the tribal population of these three districts probably could be explained more due to the impact of differential programme inputs coupled with the general environment effect in determining their value system in a particular area, rather than linked with their tribal status. It may be recalled that in all the three districts, the tribal group of Bhils is predominantly in existence but the differentials in fertility in these districts still appear to be a function of the area of their stay rather than the tribal community to which they belong. Such a differential holds good both for current as well as period fertility in these districts.

Table 3: Mean Number of Live Births by Age of Woman Among the Tribal and Non-Tribal Population in Rural Bharuch and Panchmahal and Tribal Population in the Dangs District of Gujarat

Age of the Woman	Total Women of Bharuch and Panchmahal	Bharuch		Panchmahal		Dangs
		Tribal	Non-Tribal	Tribal	Non-Tribal	Tribal
15-19	1162	0.15	0.07	0.28	0.18	0.64
20-24	1042	1.23	0.82	1.40	1.29	1.94
25-29	820	2.34	2.40	3.13	2.75	3.52
30-34	712	3.49	3.24	4.27	4.50	4.49
35-39	539	3.87	4.05	5.07	4.25	5.11
40-44	573	4.20	4.41	5.09	4.37	5.34
Total	4848	2.05	2.06	2.62	2.57	3.17
Standardised average no. of live births		2.14	2.05	2.68	2.43	3.02

MORTALITY

(a) Crude Death Rate

Data on the reference period births and deaths was obtained for the tribal and the non-tribal population of Bharuch and Panchmahal districts during the period 1981-83. Similar data for the tribal population of the

Dangs district was available for the year 1985-86. Crude death rates (CDR) were then estimated for each of these districts for the respective years of reference. It was observed that while the death rate in the tribal population of Bharuch was 9 per thousand population, it was 8 per thousand population, in the non-tribal population of this district during the same period (Table 4). Similarly, the CDR in the tribal and non-tribal population of Panchmahal were 13 & 12, per thousand population, during the same reference period respectively. On the other hand, the crude death rate among the tribal population of the Dangs was only 10 per thousand population during the reference period of 1985-86. This illustrates that the crude death rates among the tribal populations of Bharuch and Panchmahal were slightly higher than that among the non-tribals in each of these districts. Further, the death rate among the tribals of Panchmahal was the highest (13 per thousand population) compared to the tribals of the Dangs (10 per thousand population) and Bharuch (9 per thousand population) illustrating thereby that the levels of mortality in the three tribal groups vary from one group to the other inspite of the fact that majority of the tribal population in each district belonged to the Bhil clan.

(b) Infant Mortality Rate

Since the data on infant deaths was available during the reference period, infant mortality rates for the tribal and non-tribal populations of each of these districts were also estimated. Direct method of estimation, based on reference period births and infant deaths, yielded an infant mortality rate of 85, 109 and 87, per thousand births, among the tribal populations of Bharuch, Panchmahal and the Dangs respectively, while the corresponding estimate for the non-tribal population of Bharuch and Panchmahal was 83 and 109, infant deaths per thousand live births, respectively (Table-4).

Further, the data on the number of live births and living children by age of the women were collected in both these studies. With the help of this data, estimates of the level of mortality (e^0) and subsequently the infant mortality of tribal and non-tribal population of Bharuch, Panchmahal and the Dangs districts was obtained by using Brass Technique (Brass, 1968). It may be noted that in the case of the Dangs, the study only covered tribal population, therefore it was possible to estimate IMR for only tribal population of this district. Indirect method of estimation yielded an IMR of 97, 157 and 101 among the tribal population of Bharuch, Panchmahal and the Dangs respectively, while the corresponding estimate among the non-tribal population was 88, per thousand live births, in Bharuch and 151 in Panchmahal district.

Table 4: Crude Death Rate and Infant Mortality Rate in the Tribal and Non-Tribal Population in Rural Bharuch and Panchmahal and Tribal Population in the Dangs District of Gujarat

Mortality	Bharuch (1981-83)		Panchmahal (1981-83)		The Dangs (1985-86)
	Tribal	Non-Tribal	Tribal	Non-Tribal	Tribal
Crude Death Rate (per 1000 population)	9	8	13	12	10
Infant Mortality Rate (Direct estimate)	85	83	109	109	87
IMR (Indirect estimate)	97	88	157	151	101

A comparison of direct and indirect methods of estimation of infant mortality for tribal as well as non-tribal population reveals that both the groups (tribal as well as non-tribal) had been under-reporting the number of infant deaths. This tendency, however, was found to be more marked among the tribal populations. The extent of under-reporting of infant deaths amongst the tribal population was the highest (30.6 percent) in Panchmahal followed by the Dangs (13.9 percent) and Bharuch (12.4 percent) in that order.

The above analysis reveals that clear cut differentials exist in the mortality levels between the tribal populations located in the three studied districts. However, these differentials, between the tribal and non-tribal group, within the same district were rather marginal. Another interesting result that emerged from the foregoing analysis was that it is not essential, as believed by some researchers, that the fertility as well as mortality of a tribal group should always be the highest or lowest. Infact three different sets of cases have emerged from the above analyses :

1. The tribals of Bharuch had low fertility and low mortality.
2. The tribals of Panchmahal had high fertility and high mortality and
3. The tribals of the Dangs had high fertility but low mortality.

Another observation that one can quickly make from the present analysis is that the fertility and mortality levels among the tribal and non-tribal populations within any district are quite close and that there are no vast difference between the two. Thus, the differentials in the fertility and mortality levels among the tribal populations in the three studied districts appear to be more of area specific in nature.

CONTRACEPTIVE PREVALENCE

Among the tribal population in each of the three districts, about 53 percent in Bharuch, 82 percent in Panchmahal and 70 percent in the Dangs were reported to have never used any method of family planning (Table-5). On the other hand, 48 percent of the non-tribal couples in Bharuch and 72 percent in Panchmahal did not use any contraceptive. The non-use of family planning methods in the tribal population was thus marginally higher than that among the non-tribal population.

Between the tribal population groups in these three districts, the least use (18 percent) of family planning methods was found to be in Panchmahal followed by the Dangs (30 percent), while as high as 47 percent of the tribal couples in Bharuch had ever used any method of family planning. It was interesting to note that among those couples, irrespective of whether they were tribal or non-tribal, who were using any method of family planning, more than ninety percent of them had been using only terminal methods. Further, the use of female sterilisation was more prevalent among the non-tribal as compared to the tribal population of Bharuch as well as Panchmahal. Spacing methods were rarely accepted by any of these groups, however, non-tribal group still reported to have gone for it even though the extent was very small.

Table 5: Percentage Distribution of Couples Using Family Planning Methods in the Tribal and Non-Tribal Population in Rural Bharuch and Panchmahal and Tribal Population in the Dangs District of Gujarat

Method used	Percentage of couples				
	Bharuch (1983)		Panchmahal (1983)		The Dangs (1986)
	Tribal	Non-Tribal	Tribal	Non-Tribal	Tribal
Not used	52.9	47.6	82.0	71.7	70.1
Female sterilization	22.1	44.8	9.5	21.0	5.8
Male sterilization	24.2	4.7	7.7	6.0	21.5
Other conventional Methods	0.8	2.9	0.8	1.3	0.1
Indigenous	-	-	-	-	2.5

Mean Age of Wife at the Point of Contraception

The study reveals that the mean age of the wife at the time of adoption of a contraceptive by a tribal couple was 32.0 in Bharuch, 32.8 in Panchmahal and 33.0 in the Dangs district. On the other hand, the corresponding mean age of the wife among the non-tribal population of Bharuch and Panchmahal was 32.4 and 32.7 respectively.

Mean Number of Children at the point of Contraception

The mean number of living children at which the tribal couples adopted method of family planning were 3.6, 4.4 and 4.1 among the tribal population of Bharuch, Panchmahal and the Dangs respectively. In the case of non-tribal population the couples used a contraceptive when they had 3.7 and 4.0 living children in Bharuch and Panchmahal respectively.

This illustrates that the couples, whether from tribal or non-tribal clans, had used any method of family planning at the mean age ranging from 32 to 33 and after having had about 4 living children. This, in other words, means that the couples irrespective of whether they were tribal or non-tribal went for contraception only when they had completed their desired family size. The impact of such a pattern of contraception is, thus, likely to have relatively little impact on the level of overall fertility as the steps for restricting the size of family were taken at the later age of reproduction of the wife, when otherwise the secondary sterility might have already set-in.

CONCLUSIONS

Inspite of the fact that Bhil tribe, in majority, is prevalent in all the three studied districts, the level of fertility, mortality as well as the extent of use of contraceptives varied from district to district. These levels between the tribal and non-tribal populations within a district, however, were found to be quite close illustrating thereby that the differentials in fertility, mortality and contraceptive prevalence was area specific irrespective of whether it was a tribal or non-tribal population. Further, three different patterns of fertility, mortality and contraceptive use among the tribals have emerged :

1. Bharuch tribals had low fertility, low mortality and high use of contraceptives
2. Panchmahal tribals had high fertility, high mortality and low contraception; and
3. The tribals of the Dangs had highest fertility, relatively low mortality and medium extent of use of family planning methods.

Looking into the above patterns of tribal population, there is an urgent need to adopt a sectoral approach to restrict the level of fertility by adopting different area specific strategies of motivation for small family size norms.

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