

## Biodemographic Studies Among the Hindu and Muslim Gujjars of Northwestern India

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**KEY WORDS** Biodemography, Hindu Gujjars, Muslim Gujjars, Population Diversity, Northwestern India.

**ABSTRACT** Biodemographic studies among the Hindu and Muslim Gujjars of Northwestern India were carried out covering 93 households in the former and 101 households in the latter, respectively. The Muslim Gujjars differ from their counterparts Hindu Gujjars in the age and sex composition, family size, dependency ratio, sex ratio, age at marriage, marriage pattern and civil (marital) conditions. The implications of the population diversity among the Gujjars have been evaluated with reference to current population trends in India.

The genetic heterogeneity of the present day population of Northwestern India, which is an amalgamation of many streams of ethnic elements from Central and Southwestern Asia, poses many interesting problems to population geneticists. The diffusion in this part of the country has occurred to such an extent that it is difficult to differentiate the populations purely on ethnic grounds. However, the biodemographic structures of the populations provide strong basis for population and genetic studies.

The influx and penetration of Muslim invaders not only forcibly converted the massive Hindu population in Northwestern India to Islam, but also broke it up into fission groups (Balgir, 1983). These Muslim converts due to breeding isolation, hybridization with the Muslims, migration, different modes of subsistences and biosocial hybrid traditions, became distinct endogamous groups from their counterpart Hindu populations with the passage of time (Balgir and Sharma, 1986, 1988; Balgir, 1989). As a result of this, today, we come across not only the Muslim converts in Northwestern part of India who were bifurcated from

a common genetic pool, but also the rudiments of Hindu populations.

The Gujjars of Northwestern India constitute one of such populations who became the victim of forcible proselytism of their religion by the invading Muslims since 7th century to 17th century A.D. Both the Hindu and Muslim Gujjars are encountered these days in Northwestern part of India, whereas the Hindu Gujjars are in the Sub-Himalayan region (foothills of Shivaliks) and adjoining plains practicing sedentary agriculture and semi-pastoralism; the Muslim Gujjars are found exclusively in the Himalayan regions leading a pastoral, semi-nomadic, semi-agricultural life in transhumance. Both the Hindu and Muslim Gujjars live in a complete biosocial and geographical isolation. The Muslim Gujjars practice polygyny in addition to monogamy and also consanguinity, the Hindu Gujjars although observe clan exogamy, the practices of fraternal polyandry, in addition to monogamy and exchange marriages, are also prevalent (Balgir, 1983).

The present comparative study has been focussed on the bio-demographic structures of the Hindu and Muslim Gujjars of Sub-Himalayan and Himalayan regions, respectively. It would be interesting to study the changes occurred in the population structures after their conversion to

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Islam about 1000 years ago.

### MATERIAL AND METHODS

The present study deals with the Hindu and Muslim Gujjars of Panjab and Himachal Pradesh, respectively from the Northwestern part of India. Interest has been focussed on them not only because of their simple economic status but also because of the fact that the Hindu and Muslim Gujjars have been living in these regions in complete biosocial and geographic isolation ever since some of them got converted to Islam.

The data for Hindu Gujjars have been collected from the Majrian village in Ropar District of Punjab (Fig. 1). The Census figures for the Hindu Gujjars in Punjab are not available either districtwise or in the State as a whole because they have been declared as Backward Community very recently (September, 1979) by the Government of Punjab\* and no separate records have been maintained for backward communities other

than the Scheduled Castes/Tribes in the Census Reports:

The Muslim Gujjars mostly confine themselves to the Himalayan regions in Jammu and Kashmir, and Himachal Pradesh. In Himachal Pradesh, the Gujjars constitute a considerable part of the population. They have been declared as Scheduled Tribe in the State since 1956. According to 1971 Census, the Gujjars constituted 20,634 persons with 10,627 males and 10,007 females in Himachal Pradesh. They formed 14.6% of the total Tribal population and 0.6% of the total population of Himachal Pradesh. About 32% of the total population of Gujjars were living in Chamba District according to 1971 Census. In Chamba Tehsil where the present study has been conducted the Gujjars constituted 62% of the Total Gujjar population of Chamba District, 19.6% of the Total Population of Gujjars in the State and 2.9% of the Tribal Population of Himachal Pradesh.

The Gujjars in Himachal Pradesh are mostly

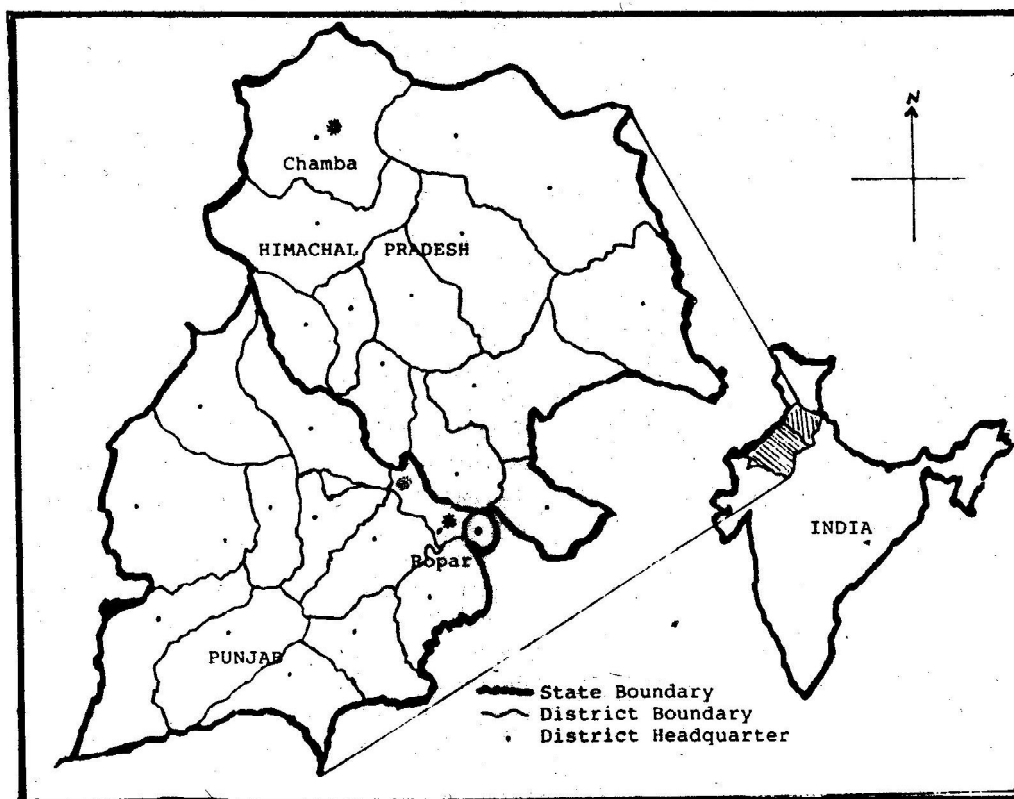


Fig. 1. Map of India showing Study Areas

\* News item, The Tribune, Chandigarh, September, 12, 1979

Muslims and belong to sunni sect of Islam. The Gujjars of Chamba Tehsil, according to Census 1971 formed 28.4% of the Total Muslims of Chamba District and 8% of the Total Muslim Population of the State.

The data for Muslim Gujjars have been collected from five villages (Sahoo area of Peer Punjal Range of Himalayas): Padda, Proatha, Sra, Qureel and Rajindu in Chamba District, Himachal Pradesh (Fig. 1).

A door-to-door survey of two Populations of Gujjars was carried out during the field work from February to April, 1979. The demographic data were collected from 93 households of the Hindu Gujjars and 101 households of the Muslim Gujjars. The information was recorded from the head of family. For selection of households the random sampling procedure was adopted. The analysis of the data was carried out primarily following the guidelines of Thompson and Lewis (1965) and Cox (1976).

RESULTS AND DISCUSSION

The demographic variables acting sometimes side by side with the biological factors may inflate or reduce the magnitude of an effect apparently due to biological causes. Both micro- and macro- variations brought about by the demographic constraints markedly affect the genetic structure of a population. The genetic variations between the Hindu and Muslim Gujjars apparent from our earlier studies (Balgir and

Sharma, 1986, 1988; Balgir, 1989) may be attributed to the diversity of bio-demographic structures of the two populations under study.

Age Structure

The violent fluctuations in both birth and death rates bring about oscillations in the age and sex composition of a population. The populations of both groups of Gujjars are characterised by the typical features of backward and under developed communities of India. As we move from younger to older age groups, the number of individuals decreases indicating young age of the Gujjars and growing trend of the populations (Table 1).

The age structure of both the Hindu and Muslim Gujjars as a whole differs from one another. The infants (age 0-4 years) constitute about 10% of the Hindu Gujjars and about 18% of the Muslim Gujjars (Table 1). The high proportion of infants among the Muslim Gujjars is an indication of higher fertility and/or lower mortality as compared to the Hindu Gujjars.

The number of individuals who come under the prepuberty group (age 5-14 years) is more among the Muslim Gujjars than the Hindu Gujjars (Table 1) which shows higher reproductive potential in the coming years.

The adult individuals who belong to fertile reproductive age group (15-49 years) constitute the maximum population in both the populations, thereby showing high reproduction. However,

Table 1: Distribution of Gujjars in major age groups and sex ratio

Major Group	Hindu Gujjars					Muslim Gujjars				
	Males		Females		Sex Ratio	Males		Females		Sex Ratio
	No.	Per cent	No.	Per cent		No.	Per cent	No.	Per cent	
Infancy (0-4)	42	6.37	25	3.79	595	74	8.92	72	8.67	973
Pre-Puberty Age (5-14)	76	11.53	73	11.08	960	126	15.18	125	15.06	992
Fertile Reproductive Age (15-49)	195	29.59	126	19.12	646	181	21.81	187	22.53	1033
Old Age (50 +)	77	11.68	45	6.83	584	39	4.70	26	3.13	667
Total	390	59.18	269	40.82	690	420	50.60	410	49.40	976

among the Hindu Gujjars, the distribution of sexes is unequal, showing less number of mating couples and consequently less fertility is expected due to non-availability of life partners especially the females.

In the higher age group (50 years and above) the number of individuals among the Hindu Gujjars (18.5%) is more than two times greater than the Muslim Gujjars (7.8%). This shows the longevity of life in a settled habitat among the Hindu Gujjars than the semi-nomadic and transhumant Muslim Gujjars of the Himalayan regions. The less number of Gujjars in the higher age group (50 years and above) is also indicative of poor health conditions, especially of the females who generally die after menopause due to urino-genital infectious diseases (Balgir, 1983).

#### Dependency Ratio

The dependency ratio of population is based on the fact that every member of a society is a consumer and only some members are producers (Thompson and Lewis, 1965). For the present study, the age group 15-59 years has been considered as economically active part of the Gujjar population which is based for calculating the dependency ratios (Table 2).

Table 2: Distribution of Gujjars in productive (earning) and non-productive (non-earning) age groups

Age Groups	Hindu Gujjars		Muslim Gujjars	
	No.	Per cent	No.	Per cent
Infancy and Childhood (0-14)	216	32.78	397	47.83
Productive age (15-59)	375	56.90	398	47.95
Old age (60 +)	68	10.32	35	4.22
All ages	659	100.00	830	100.00

The youth dependency ratio among the Muslim Gujjars is approximately double the ratio among the Hindu Gujjars (Muslim = 99.75; Hindu = 57.60) and the reverse is true in case

of aged dependency ratio (Muslim = 8.79; Hindu = 18.13). The total dependency ratio is higher among the Muslim Gujjars (108.54) as compared to the Hindu Gujjars (75.70). Contrary to the present study, the youth and aged dependency ratios 78.4 and 20.8, respectively have been reported among the Hindu Gujjars of Delhi-U.P. border by Prabha et al. (1981). The corresponding figures for all India population are: 73 and 5, respectively for youth and aged dependency ratios (Jones, 1974). Thus, among the Gujjars of the present study, the youth as well as aged dependency ratios are on higher side of the average of India. This means on an average one earning member takes the burden of providing maintenance to at least one among the Hindu Gujjars and more than one idle members among the Muslim Gujjars. Low proportion of effective working people results in lesser income in the family which leads to low standard of living. In Muslim Gujjars although all members contribute to the economy, but due to large size of the family and the less resources available to them on the hilly tract, all savings are diverted towards consumption.

#### Sex Ratio

The sex composition is an important indicator of fertility trends, family structure, marriage patterns, and so on. The sex ratio, i.e. the number of females per 1000 males among both the Hindu (690) and Muslim Gujjars (976) shows the preponderance of males over females which is in accordance to the general population trends in India (935) according to 1981 census. The Muslim Gujjars exhibit a higher sex ratio as compared to the Hindu Gujjars (Table 1). The Sex ratio is comparatively lower among the Hindu Gujjars for all the age intervals, i.e. 0-4, 5-14, 15-49, and 50 & above (Table 1) and also for first born child (548) as compared to the Muslim Gujjars (741). This disproportionate distribution of sexes in Gujjar populations could have resulted the practice of fraternal polyandry among the Hindu Gujjars and polygyny among the Muslim

Gujjars. Contrary to the present study, a very high (1004) sex ratio has been reported among the Hindu Gujjars of Delhi-U.P. border (Prabhu et al., 1981). The sex ratio in Muslim Gujjars (976) is lower as compared to the sex ratio of Himachal Pradesh (988) and higher than the average of India (935) according to the census report of 1981.

**Domicile Size**

The domicile size has been defined for the present purpose as the number of persons who were under a common roof and whose food was being catered through a single kitchen. The number of such domiciles included in the study was 93 for the Hindu Gujjars and 101 for the Muslim Gujjars, the number of persons included being 659 and 830, respectively. The mean domicile size was worked out to be 7.20 and 8.22 for Hindu and Muslim Gujjars, respectively. Thus, the domicile size among the Muslim Gujjars is slightly higher than the Hindu Gujjars.

The distribution of household size of Gujjars in different categories, i.e. small, medium, large and very large, according to the numbers (Table 3) reveals that both the Hindu and Muslim Gujjars, have maximum number of large sized households (7-10 members), followed by the medium sized households (4-6 members). This may be due to the fact that the Gujjars prefer to have joint as well as extended families in view of the economic and biosocial attributes. According to them the advantages of having large family are : support in old age, the family would be happier, financial advantage—more children will bring

more income, status and strength to the family/clan.

**Age at Marriage**

Among the Hindu Gujjars, the maximum marriages (36.5%) of males were performed in the age group of 20-24 years and, in case of females (50.3%) in the age group of 15-19 years whereas among the Muslim Gujjars, the maximum marriages have occurred in the age group of 15-19 years, irrespective of the sex (Table 4). The mean age at marriage worked out for the male Hindu Gujjars (22.69 years) was significantly higher than those of male Muslim Gujjars (19.89 years). However, the mean age at marriage for females was about 17 years in both populations (Table 5).

The average age at marriage in India was 22.5 and 17.1 years for boys and girls, respectively according to 1971 Census (Agarwala, 1977). The mean age at marriage among the Muslim Gujjars was slightly lower for both sexes as compared to the average for India. This may also increase the reproductive span and consequently leading to higher fertility among the Muslim Gujjars.

**Marital Status**

The civil (marital) conditions of the Gujjars at the time of survey have been recorded to know the practice of their customary laws in the society. The status report of all the persons included in the study has been given in table 6. Among the Muslim Gujjars, the unmarried persons outnumber the married individuals in both sexes,

Table 3: Distribution of Gujjars in different household categories

Size of Household	Hindu Gujjars				Muslim Gujjars			
	House-Holds		Population		House-Holds		Population	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Small (1-3)	18	19.35	39	5.92	8	7.92	21	2.53
Medium (4-6)	26	27.95	123	18.66	32	31.68	157	18.92
Large (7-10)	32	34.41	265	40.21	42	41.58	357	43.01
Very Large (11+)	17	18.28	232	35.20	19	18.81	295	35.54
Total	93	100.00	659	100.00	101	100.00	830	100.00

Table 4: Age at marriage among the Gujjars (in per cent)

Age at marriage	Hindu Gujjars		Muslim Gujjars	
	Males	Females	Males	Females
1-9	-	-	-	-
0-14	3.20	27.67	6.31	26.90
15-19	35.26	50.31	49.42	60.61
20-24	36.54	18.87	37.89	11.17
25-29	16.02	3.14	5.79	1.01
30+	8.97	-	1.58	0.51
Total	100.00	100.00	100.00	100.00

Table 5: Mean age at marriage among the Gujjars

Sex	Hindu Gujjars			Muslim Gujjars		
	No. of Marriages	Mean Age	S.D.	No. of Marriages	Mean Age	S.D.
Male	156	22.69	6.72	190	19.89	3.84
Female	159	17.37	3.85	197	16.89	3.37

The mean age between the Hindu and Muslim Gujjars for males is statistically significant ( $p < 0.001$ ).

Table 6: Marital conditions of the Gujjars (in per cent)

Age Group	Males					Females					Both Sexes
	Un Mar.	Mar.	Wd.	D/S	Total	Un Mar.	Mar.	Wd.	D/S	Total	
<b>Hindu Gujjars</b>											
0-4	10.77	-	-	-	10.77	9.29	-	-	-	9.29	10.17
5-9	10.00	-	-	-	10.00	13.75	-	-	-	13.75	11.53
10-14	9.49	-	-	-	9.49	13.38	-	-	-	13.38	11.08
15-19	9.49	0.26	-	-	9.74	3.72	1.86	-	-	5.58	8.04
20-24	6.15	1.79	-	-	7.95	0.74	5.95	-	-	6.69	7.43
25-29	4.61	3.59	-	-	8.20	-	7.43	-	-	7.43	7.89
30-34	2.56	5.38	0.26	-	8.20	-	5.95	-	-	5.95	7.28
35-39	1.28	4.10	-	-	5.38	-	8.18	-	-	8.18	6.52
40-44	1.28	3.33	-	-	4.61	-	5.58	-	-	5.58	5.01
45-49	1.79	3.85	0.26	-	5.90	-	7.43	-	-	7.43	6.52
50-54	1.28	4.61	0.26	-	6.15	-	3.72	0.37	-	4.09	5.31
55-59	0.26	2.82	0.26	0.26	3.59	-	1.49	0.37	-	1.86	2.88
60+	1.02	5.90	3.08	-	10.00	-	5.95	4.83	-	10.78	10.78
Total	60.00	35.64	4.10	0.26	100.00	40.89	53.53	5.58	-	100.00	100.00
<b>Muslim Gujjars</b>											
0-4	17.62	-	-	-	17.62	17.56	-	-	-	17.56	17.59
5-9	15.71	-	-	-	15.71	18.29	-	-	-	18.29	16.99
10-14	14.05	0.24	-	-	14.28	10.97	1.22	-	-	12.19	13.25
15-19	5.71	3.33	-	-	9.05	4.88	6.83	-	-	11.71	10.36
20-24	1.67	9.57	0.24	-	11.43	-	8.29	-	-	8.29	9.88
25-29	-	4.76	-	0.24	5.00	0.24	7.32	0.24	0.24	8.05	6.51
30-34	-	5.24	-	0.24	5.48	-	6.34	-	-	6.34	5.90
35-39	-	5.71	-	-	5.71	-	4.15	-	-	4.15	4.94
40-44	-	3.09	-	-	3.09	-	2.68	-	-	2.68	2.89
45-49	-	3.09	0.24	-	3.33	-	4.15	0.24	-	4.39	3.85
50-54	-	3.09	-	0.24	3.33	-	0.97	-	-	0.97	2.17
55-59	-	1.43	-	-	1.43	-	0.97	0.49	-	1.46	1.44
60+	-	3.33	1.19	-	4.53	-	2.19	1.70	-	3.90	4.22
Total	54.76	42.86	1.67	0.71	100.00	51.95	45.12	2.68	0.24	100.00	100.00

Un Mar. = Unmarried; Mar. = Married; Wd. = Widowed; D/S = Divorced/Separated

whereas among the Hindu Gujjars, married women outnumber the unmarried ones. In both the populations of Gujjars the widows outnumber the widowers showing thereby high mortality among the males as noted by Cox (1976). The marital bond is unstable among the Gujjars whose customary laws have a provision for divorce and widow remarriage.

It is fascinating that among the Muslim Gujjars almost all the persons get themselves married irrespective of the sex upto the age of 24 years (Table 6). Among the Hindu Gujjars, all the women are married upto 24 years of age, whereas the men go on marrying even at old age. Moreover, the tradition of fraternal polyandry is prevalent among the Hindu Gujjars with apathy towards the age of partner.

The following reasons have been assigned to the practice of fraternal polyandry among the Hindu Gujjars : (i) The prevalence of exchange marriages which rest on the saying "Take thou my sister and give me thy sister". Disproportionality of sexes in the family forces some of the male (especially the younger ones) members to remain bachelors because they have no sister to exchange and the only alternative left for them to share the wife of elder brother who is generally married in exchange. (ii) There is a paucity of females among them as evidenced from the over-all sex ratio (Table 1) and also from the first born child. This disproportionate distribution of sexes may compel them to practise fraternal polyandry. The prevalence of fraternal polyandry is not directly evident among the Hindu Gujjars, but it is obvious from the fact that generally the eldest brother is married and the others remain bachelors and share the same woman. After the death of elder brother, the next to him become the legal husband after performing the levirate (krewa) ceremony. In case, the next (second) brother is married, then the bachelor brother who-so-ever he may be in the family and what-ever his age

may be, gets the opportunity to marry with the widow. The excess of females in a family is probably a windfall for choosing a wealthier partner. (iii) Economic benefits, i.e. joint system determines the strength of family/clan, free labour force, source of family income, and the most important thing is that the property remains united in the family.

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