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Socio- economic analysis of migratory *Gujjars* of Himachal Pradesh

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Abstract

Average family size of *Gujjars* was 6.26. Nuclear family system becoming more popular. Elders had full control on day to day affairs of the family. About 50 percent of males and 82 percent of females were illiterate. Caste factor was the most important factor taken into consideration for marriage followed by economic / income status. Males migrated with herd was noticed higher compared to females. Least inclination of children towards their traditional profession was observed due to non-dignified and tough nature of the profession. Farming was of subsistence nature. *Chari* and *bajra* accounted for maximum production in *kharif* and wheat in *rabi* season. It was observed that investment on livestock accounted for 95 per cent of the total farm investment. Among different live stocks the highest investment was made on buffaloes. Average per annum total income of *Gujjars* was Rs. 101133 out of which 98.96 per cent was contributed only by buffalo rearing. The contribution of agricultural to the total income was only 1.64 per cent. It was suggested that efforts should be made to educate the new generation so that they can live healthy and hygienic life. Educational status has improved over the years. This is mainly due to increased awareness of the parents towards education of their wards. The state Government has launched various welfare programmes to promote education among the Gujjars community. It was further suggested that high yielder buffalo should be provided to the Gujjars so that they can increase their income.

Key words: Socio- economic status, migration system, professional attitude, resources, livestock nvestment, attributes, scientific rearing.

Introduction

The livestock rearing is an integral part of the State's economy, providing source of livelihood to most of the people. Livestock rearing so far has been treated as rural occupation and ancillary to crop farming. In Himachal Pradesh, the cold and dry zone in the state have extensive pastures and provide nutritive and luxuriant grazing facilities to the animals. The *Gujjar* tribes travel from temperate to sub-tropical hill areas during winter and from topical to temperate regions during summer every year, thus remaining on the move round the year in search of quality fodder (Verma, 1999). During these transitional phases, they earn their livelihoods from their herds and maintain their families. Their economic status is only adjudged from the livestock strength being kept by them (Gooch, 1992). Though these pastoral tribes are less in numbers, yet their importance in development and preservation of unique breeds of animals cannot be undermined. Unfortunately there has so far been no systematic study dealing with life style of *Gujjar* community in Himachal Pradesh with reference to their socio-economic conditions. It is, therefore, considered appropriate to study the socio-economic and cultural aspect in this unexplored field. It is hoped that this study will help to understand the problems of *Gujjar* tribes, the environment in which these nomads live and suggest various strategies for improving their socio-economic conditions.

Methodology

The present study has been planned to study the socio economic conditions, culture and constraints to the *Gujjar* communities in the state. Multi stage stratified random sampling design was employed to select the sample for this study. In the first stage of sampling three districts, viz,. Chamba, Kangra and Sirmour were selected purposively. In the second stage of sampling one tehsil where higher concentration of these migratory *Gujjar* community found was selected from each districts. In the third stage of sampling villages were randomly selected and from each village the respondents were selected using proportionately proportion to size technique. The sample households were categorized in to two categories viz, marginal ($\leq$ 8 buffaloes) and small ($\geq$ 8 buffalo). A sample of 70 *Gujjar* households which consists of 24 marginal and 46 small were selected for the study.

Analytical framework: Both tabular and mathematical techniques were employed for analysis and interpretation of data. Mathematical/ statistical means used are:

$$\text{Sex ratio (per 1000 males)} = \frac{\text{Total population of females}}{\text{Total population of males}} \times 1000$$

$$\text{Cropping intensity} = \frac{\text{Total cultivated area}}{\text{Net cultivated area}} \times 100$$

$$\text{Population growth (human/animal)} \; (P_t) = P_0 \left(1 + \frac{r}{100}\right)^t$$

Where,

P_t = Population in the years t

P_0 = Population in initial years

r = Growth rate, and t = Time

Results and Discussion

District-wise population of Gujjar

Table 1 shows the population of Gujjar in Himachal Pradesh. The total population of Gujjar in the state ranged betweens.20,634 in 1971 to 43,723 in 2001. The population of Gujjar in Chamba district was found maximum followed by Sirmour (17.81%). It was noted from the table that Chamba district has registered maximum population which was followed by Bilaspur, Mandi and Sirmour district during different census.More than 50 per cent of Gujjar migrate to Kangra during winter season. The sex ratio was noticed highest in Chamba district followed by Mandi.. The sex ratio was not in order in Bilaspur and Shimla, indicating an alarming situation. The sex ratio was noticed higher than state average in Sirmour and Mandi. The sex ratio of Chamba, Bilaspur and Solan varied between 965 to 969 during 2001. The sex ratio of Gujjar communities in Shimla district was observed very low (667) indicating an adverse direction.

Table 1. Population of *Gujjar* communities in different districts of (H. P)

Districts	Total Population			Sex Ratio			Decadal growth		
	1971	1991	2001	1971	1991	2001	1971-81	1981-91	1991-01
Chamba	6504	10741	15344	913	973	968	15.58	42.89	42.85
Mandi	4560	7291	7894	1001	924	974	47.68	8.27	8.27
L&S	-	-	-	-	-	-	-	-100	-
Bilaspur	4911	7707	9104	1017	960	965	31.44	19.40	18.13
Shimla	2151	-	10	832	-	667	-48.12	-100	100
Sirmour	2506	5674	6745	874	958	975	90.10	19.10	18.88
Kinnaur	2	29	-	-	706	-	300	262.50	-100
Hamirpur	-	-	-	-	-	-	-	-	-
Kangra	-	-	-	-	-	-	100	-100	-
Kullu	-	-	-	-	-	-	100	-100	-
Solan	-	1626	4626	-	803	969	100	8.33	184.50
Una	-	-	-	-	-	-	-	-	-
H. P.	20634	33068	43723	942	947	970	36.27	17.61	32.22

Literacy level

The education level of *Gujjar* community for different districts have been given in Table 2. It was noticed from the table that literacy level of male and female during 1971 varied between 5.47 to 50 and 0.03 to 7 per cent, respectively for different district of the state. The literacy level of both male and female increased over different census. During 2001 the literacy level varied 46.11 to 49 and 21.65 to 36.66 per cent for male and female, respectively. The higher rate of increase in the literacy level of this community may be due to settled Hindu *Gujjar*. They are not migratory and paid more attention to education. Economic status of migratory *Gujjar* community can be increased by giving more stress to their education.

Socio-economic profile of sample farmers

Age-wise distribution of sample farmers: The age factor has special social and economic importance and decides the limits to the availability of working labour force for different types of work. The age-wise distribution of families has been depicted in Table 3. The perusal of this table indicates that the population up- to age of 15 years accounted for about 55 per cent and 38 per cent for males and females, respectively. However, the active working force fall in the age group of 15-60 years which constituted of about 45 and 61 per cent for males and females, respectively.

Table 2. District-wise literacy of *Gujjars* in Himachal Pradesh (Per cent)

Year	1971		1991		2001	
Districts	Male	Female	Male	Female	Male	Female
Bilaspur	26.82	5.49	46.11	22.92	58.57	35.66
Chamba	5.47	0.03	29.90	10.35	46.95	21.65
Hamirpur						
Kangra						
Kinnaur	50.00		47.06	25.00	60.36	36.72
Kullu						
Lahaul & Spiti						
Mandi	26.85	6.80	48.10	20.02	57..23	34.56
Shimla/	21.04	3.58	36.64	11.60	52.67	28.00
Mahasu						
Sirmour	21.02	4.79	41..27	19.38	54.07	29.79
Solan			48.78	21.96	58.28	31.99
Una	18.70	3.83	44.16	21.58	56.63	32.05.

Table 3. Age- wise distribution of sample *Gujjar* households (per cent)

Farm size	0-5 (yrs)		6- 15(yrs)		16-40 (yrs)		41-60 (yrs)		Above 60 (yrs)	
	M	F	M	F	M	F	M	F	M	F
Marginal	20.00	23.44	41.55	18.75	33.85	48.44	4.60	9.37	-	-
Small	16.03	8.20	35.88	27.05	42.75	50.82	5.34	12.30	-	1.64
Overall	17.35	13.44	37.98	24.19	39.80	50.00	4.87	11.29	-	1.08

Size structure and literacy level of a family

The average family size of family was found to be 6.26. Table 4 presents comparative picture of demographic features of sample households. The study also revealed that joint family system among sampled households is loosing its ground on account of environmental and developmental objectives of a family. Thus, the proportion of nuclear families was the highest (67.14 %) as compared to joint families (32.86%). The average family size on both the farm groups was, by and large, the same. It was observed that about 50 per cent males and about 82 per cent females were illiterate. It was noticed that literacy rate of sample households was low (Vira, *1993).* It is, therefore, suggested that efforts should be made to educate the new generation so that they can live healthy and hygienic life. The state Government has launched various welfare programmes to promote education among the community. The *Gujjar* community should make best use of Govt. facilities to increase educational level of their wards. It can be inferred that elders had full control on the day to day affairs of the family as reported by about 96 per cent of sample households. Similar pattern was observed among the different categories of households.

Table 4. Average family size and structure on sample *Gujjar* households (per cent)

Particulars	Marginal	Small	Overall
1 Family size (No)	6.16	6.30	6.26
2 Family structure			
a) Nuclear	70.83	65.22	67.14
b) Joint	29.17	34.78	32.86
Total	100	100	100
3 Literacy rate			
Male	50.94	49.06	49.68
Female	12.00	20.35	17.80
4 Changes in family set-up			
Like presence of elders in the family	100	100	100
Full control of elders on day to day family affairs	100	93.48	95.71

Marriage

Marriage is another social institution which tie of various *Gujjar* families. Economic status, caste, education, health and ownership of land are some of the important factors which are given due consideration for solemnizing a marriage in *Gujjar* families. The responses of farmers on these considerations have been presented in Table 5. It can be seen that majority of the farmers (about 70 per cent) took into consideration caste factors in their mind at the time of marriage. This indeed, was the main factor among *Gujjar*s as reported by about 83 and 65 per cent on marginal and small farms, respectively. The other important factor reported by about 29 per cent of the sample households was income status

Table 5. Major considerations for marriage among *Gujjar* households (per cent)

Particulars	Marginal	Small	Overall
1. Income status	17.24	33.33	28.57
2. Caste*	82.76	65.22	70.41
3. Education	-	-	-
4. Health	-	1.45	1.02
5. Ownership of land	-	-	-

* Caste structure within *Gujjar* community

Migration system

Gujjars generally migrate with their herd and the extent of their migration has been presented in Table 6. It can be observed that males migrated (92) more as compared to females (76) on average farm situation. It has been found that both males and females joined the migration camps. However, higher number of females stayed at home as against the number of males. Similar trend was found on marginal as well as small farms. Migration system followed by Gujjars was also reported by Rawat (1993).

Table 6. Migration of sample *Gujjar* households

Farm Size	At home		Out- side village	
	Male	Female	Male	Female
Marginal	37 (35.58)	38 (34.55)	28 (30.43)	26 (34.21)
Small	67 (64.42)	72 (65.45)	64 (69.57)	50 (65.79)
Over all	104 (100)	110 (100)	92 (100)	76 (100)

Figures in parenthesis are percentages

Inclination of children towards migratory profession

Table 7 depicts the opinion of parents regarding inclination of children towards this traditional profession. About 72 per cent of the parents reported that the negative inclination of children towards this profession. This may be due to the fact that children of *Gujjar*s were getting educated and liked to opt for white collar jobs instead of non dignified and tough profession. The larger proportion of respondents also did not appreciate involvement of their children in continuing ancestral profession.

Table 7. Contribution/involvement of children in their parents profession (per cent)

Particulars	Significant	Negative/low
Marginal	35.45	64.55
Small	14.71	85.29
Overall	28.45	71.55

Land resource utilization of sampled Gujjars

The size of holding was also considered to be important factor influencing the adoption of technology. Average land holding of sample farms in the study area worked out to 0.04 hectare. All the operational holdings were rain-fed. Incidentally, no system of leased-in and leased-out land was reported on any of the sample households. Most of the Gujjar tribes were noticed landless and depend on buffaloes rearing (Rizvi, 1993). The comparison across the marginal and small categories of farm households revealed that the average size of holding was higher in case of marginal (0.12 ha) as against the small (0.06 ha) farmers.

Investment on livestock and farm equipments

Table 8 represents the investment on livestock, farm equipments and farm machinery. It was observed that among different live stocks the highest investment was made on buffaloes by all categories of sample households. The investment on buffaloes was found to be Rs. 35,020 on overall farm situation. Among different categories investment regarding various livestock was relatively more for small farms as compared to marginal farms. Small amount was invested on horses and cattle i.e. Rs 5911 and 3468 per farm, respectively, while fairly a little amount was invested for sheep and goats. In overall farm situation investment on farm equipments and farm machinery was 3.91 and 1.09 per cent of the total investment. The livestock alone accounted for 95 per cent of the total investment on livestock followed by , farm equipment and machinery.

Cropping pattern

Cropping pattern of sample farmers has been presented in Table 9. It can be observed that only four crops maize, *chari*, wheat and potato were grown in the study area. The area available with the sample farmers was of marginal and unirrigated. Wheat accounted for maximum area in the total cropped area (49.32 %) followed by maize (39.29 %). Other two crops viz. *chari* and potato accounted 10.71 per cent and 0.68 per cent, respectively. Cropping pattern on different categories of farms showed by and large.

Table 8. Investment on livestock & farm equipments of *Gujjar* households (Rs.)

Particulars	Marginal	Small	Overall
A. Livestock			
Cattle	2118	4173	3468
Buffaloes	14385	45787	35020
Sheep	-	360	237
Goats	986	1905	1590
Horse	5136	6910	5911
Others	857	2720	2081
Sub total	23482 (93.24)	61855 (95.41)	48307 (95.00)
B. Farm equipments	1398 (5.55)	2296 (3.34)	1988 (3.91)
C. Farm machinery	304 (1.21)	683 (1.05)	553 (1.09)
Total	25184 (100)	64834 (100)	50848 (100)

Figures in the parentheses indicate percentages

Table 9. Cropping pattern on sampled *Gujjar* households (per cent)

Particulars	Marginal	Small	Over all
Maize	46.85	36.22	39.29
Chari	3.15	13.78	10.71
Wheat	50.00	49.04	49.32
Potato	-	0.96	0.68

Production and consumption pattern of sample farmers

Farming in the study area was observed to be of subsistence nature and the production of certain commodities was below the self sufficiency level due to which these were being purchased from the market. The pattern of production and consumption of different crops has been presented in Table 10. It was observed that *chari* bajra accounted for maximum production in *kharif* season and wheat in *rabi* season. In *kharif* season, production of maize was higher on marginal farms while *chari* bajra was higher on small farms. Marketable surplus was not found on marginal and small farms.

Table 10. Production & consumption pattern of crops of *Gujjar* households (q/farm)

Crops	Marginal			Small			Over all		
	Prod.	Home Consum.	Quantity Purch.	Prod.	Home Consum.	Quantity Purch.	Prod	Home Consum.	Quantity Purch.
Kharif									
Maize	1.18	1.10	0.18	0.75	0.73	0.08	0.89	0.85	0.11
Chari Bajra	0.92	0.92	0.00	3.72	3.72	0.00	2.76	2.76	0.00
Rabi									
Wheat	1.12	1.38	0.26	1.02	2.18	1.16	1.05	1.70	0.85
Potato	0.00	0.00	0.00	0.02	0.02	0.00	0.01	0.01	0.00

Prod. = Production, Purch. = Purchase, Consum. = Consumption

Pattern of occupation

The main occupation of the migratory *Gujjar* tribes in the state is rearing of buffaloes. It can be seen from Table 11 that on an average 57.63 per cent of adult male members and 42.45 per cent of adult female family members were engaged full time with migratory stock. The higher proportion of male and female population in case of small farms was engaged with migratory stock as compared to marginal farms. In case of small farmers, 21.67 per cent of males and 23.67 per cent of females were involved part time in agriculture. It can be concluded that 100 per cent of *Gujjar* males and females were engaged fully and partly in livestock rearing occupation in the study area.

Table 11. Occupation pattern on *Gujjar* households (per cent)

Particulars	Marginal				Small				Overall			
	Adult male		Adult female		Adult male		Adult female		Adult male		Adult female	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Agriculture	5.26	132	5.36	3.57	1.74	21.74	4.45	23.67	3.14	13.71	4.79	15.81
Stationary stock	9.21	5.26	8.93	5.36	18.70	9.56	40.00	6.67	15.84	7.85	28.08	6.16
Migratory stock	71.00	29.00	67.00	33.00	78.26	21.74	70.00	30.00	74.00	26.00	69.00	31.00

FT = Full Time, PT = Part Time

Income

The main occupation of *Gujjar*s in Himachal Pradesh is rearing buffaloes and this occupation is also the main source of income. Table 12 shows that average per annum total income of *Gujjar*s was Rs. 101133 out of which 98.96 per cent was contributed only by livestock or buffalo rearing in total income. The contribution of agricultural was only 1.64 per cent in total income. Similar pattern was found on both the farm categories. The *Gujjar*s were not engaged in any other activity like govt. service, business etc

Table 12. Income from different enterprises on *Gujjar* households (Rs/farm)

Particulars	Marginal	Small	Overall
Agriculture	1785 (3.14)	1588 (1.28)	1655 (1.64)
Livestock	54983 (96.86)	122693 (98.72)	99478 (98.36)
Total	56768 (100)	124281 (100)	101133 (100)

Association of profession with socio economic attributes

Gujjar profession was found to have varied degree of association with socio economic attributes. It can be visualized from the Table 13 that herd size of livestock was having strong positive association with family size and structure, but, negative association with education level (Rao and Casimir, 2003). The number of migratory days also decreased with education. However, the extent of migration showed positive association with age, family size and structure. The size of land holding did not reveal significant relation with Gujjar profession obviously as most of them were landless. It was found that investment on livestock was positively and significantly related to family structure and education. This clearly shows that large family and educated Gujjars would keep quality high yielding graded buffaloes. As expected, the young generation was not inclined towards this nomadic profession. With increase in

education level of children in *Gujjar* family, there is less and less involvement of young generation in this profession. From above, it is quite clear that to sustain this profession, *Gujjar* should be trained in scientific rearing of high yielding animals so as to make it more paying and respectable to attract educated and young generation in dairy farming.

Table 13. Correlation of profession with different socio- economic indicators

Particulars	Education level	Family size (No)	Age (Years)	Family structure
Herd size	-0.59*	0.56*	0.49*	0.65*
Number of migratory days	-0.54*	0.45*	0.52*	0.63*
Land Size	0.28	0.24	0.26	0.32
Investment on livestock	0.51*	0.36*	-0.42*	0.55*
Inclination of children towards their profession	-0.69*	-0.25	-0.20	-0.27

* significant at 5 per cent level

Experience in buffaloes rearing

Experience in buffaloes rearing of sample households has been given in Table14.

Table 14. Experience in buffalo rearing by sample households

Particulars	Marginal	Small	Overall
Experience of respondent in profession (years)	66	68	67
Literacy level (%)	32.45	35.60	33.80
Training in livestock management (%)	18	22	19
Settled routes (%)	94	96	95
Settled product market (%)	91	94	92

It was an age old profession of *Gujjar* and as such they are rearing buffaloes from their childhood.

More than 90 per cent of the sample households followed the settled migratory routes and also settled product market for sale of livestock products . It was observed that very few households had acquired training in livestock management. Therefore, it will bring remarkable improvement if scientific management rearing is blended with age old experience.

Conclusion

The average family size of *Gujjars* was 6.26. Highest percentage of males and females fall in the age group of 16-40 for different categories of farms. More illiterates were found on marginal farms as compared to small farms. Caste factor was the most important factor taken into consideration for marriage followed by economic / income status. Males migrated more with their herd as compared to females. Least inclination of children towards their traditional profession was observed. Farming was of subsistence nature. It was observed that investment on livestock accounted for 95 per cent of the total investment. About 99 per cent of total income was contributed by buffalo rearing. The contribution of agricultural was only 1.64 per cent. It was suggested that efforts should be made to educate the new generation of migratory *Gujjars* so that they can live healthy and hygienic life. It needs to be mentioned here that educational status, though low, but, has improved over the years. This is mainly due to increased awareness of the parents towards education of their wards. The state Government has launched various welfare programmes to promote education. But, stress should be given to migratory schools for pastoralists so that they provide education to their wards. It was also suggested that high yielder buffalo should be provided to the *Gujjars* so that they can increased their income. There is also need to improve the productivity of grazing lands with quality grasses.

References

Gooch P 1992. Transhumant pastoralism in Northern India: The *Gujjar* case. Nomadic Peoples **30**: 84-96.

Rawat AS 1993. Man and forests: the Khatta and *Gujjar* Settlements of Sub-Himalayan Tarai. **152**: 48.

Verma V 1999. *BAN-GUJARS: A Nomadic tribe in Himachal Pradesh.* B. R. Publishing Corporation, Delhi.

Rao A and Casimir MJ 2003. *Nomadism in South Asia.* Oxford University Press.

Rizvi BR 1993. Tribal Land and Changing Economies of Indian Tribes: An Overview. Administrator **38** (2): 1-10.

Vira S 1993. The *Gujjars* of Uttar Pradesh: 'Neglected victims of progress'. Issues paper Drylands Programme, International Institute for Environment and Development. No. **41**: 28.