



Constraints of Nomadic Tribes of Jammu and Kashmir in Livestock Rearing

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Gujjar and Bakarwal constitute the two major nomadic tribal groups of Jammu and Kashmir. Both these tribal groups have livestock rearing as the prime vocation. Whereas, Gujjars possess large herds of buffaloes, Bakarwals are associated with goat and sheep rearing. Both these tribal groups play a crucial role in meeting the requirement of milk and meat for the cities and towns and hence contribute significantly to the livestock sector of the state. Traditionally both these tribes are nomadic in nature. They have seasonal migration from the plains of Jammu region to the upper reaches of Kashmir valley i.e. Pir Panchal, Seoj Dhar etc. Moreover, before snow-fall starts in the upper reaches they migrate back to the plains of Jammu. It takes more than one month for these tribes to cover this distance during which they face a number of problems and travel through a tough terrain. These tribal groups are following this seasonal migration since time immemorial.

The migratory grazer, who forms an insignificant proportion of the Gujjar population of the area, still practise the age old migration to subalpine and alpine pastures during summer. During winter they stay in the Shiwaliks, i.e., the lower most hills adjoining plains and do not go beyond the boundaries of the state as their ancestors used to do. The migration starts from Jammu by the middle of February and the flocks reach Udhampur by end of February when the Gujjars of Udhampur also start upward migration. The migratory route is almost parallel to the Jammu-Srinagar national highway; however, up to Ramban they adopt a shorter route avoiding the traffic hazards on the highway where they are often confronted with multitude of constraints.

Keeping in view the importance of livestock for providing meat, milk and wool to the mankind and inherent involvement of tribes of Jammu and Kashmir in animal production the present study was planned to be undertaken with the objective to study constraints encountered by the nomadic tribes of Jammu and Kashmir in rearing livestock.

METHODOLOGY

Present investigation was carried out in Jammu Division of Jammu and Kashmir state. Jammu division comprises of 10 districts of which districts of Jammu and Kathua were purposively selected for the present investigation as these contain majority of the nomadic tribes involved in livestock rearing. From these two districts 6 *kurus* (group of nomadic tribes) each of Gujjar and Bakarwal tribe were randomly selected. From each selected *kuru* of Gujjars, 5 Gujjar families were randomly selected thereby constituting 30 Gujjar families. The head of the family was selected as the respondent for the purpose of study. Likewise from the *kurus* of Bakarwals, 5 Bakarwal families were randomly selected constituting 30 Bakarwal families. Similarly head of the family was selected as respondent for the study. Thus the study sample consisted of 30 Gujjar tribes and 30 Bakarwal tribes (60 Total). Data for

the purpose of study was collected by the investigator himself on a comprehensively designed interview schedule specifically designed and pre-tested for the purpose of the present investigation. The data so collected were subjected to suitable statistical analysis and collated accordingly.

FINDINGS AND DISCUSSION

a) Constraints encountered by the nomadic tribes of Jammu and Kashmir in rearing cattle:

Constraints encountered by the Gujjars and Bakarwals has been studied under the different heads i.e. Technical constraints, economic constraints, social constraints managerial constraints and input supply constraints

i) Technical constraints encountered by the nomadic tribes in rearing cattle:

Data presented in table 1 reveal that both the category of respondents belonging to the nomadic tribe of Jammu and Kashmir had lack of knowledge about improved breeds of cattle as the most severe problem encountered in the production and rearing of cattle and thereby had been ranked 1st by in the hierarchy of technical constraints with MPS 85.55. This was followed by non-availability proper health care practices during the period of their migration as the 11 most severe constraint faced by the tribes with MPS 76.66. Besides, lack of awareness about selection and breeding of animals (MPS 75), lack of knowledge about veterinary pharmaceuticals (MPS 69.44) had been found to affect severely the Gujjar and Bakarwal tribes. In addition to it, lack of knowledge about improved house keeping practices (MPS 31.66), lack of knowledge about improved feeding practices, and lack of knowledge vaccination for deadly diseases of cattle (MPS 22.21) has also been found to put shackles to the tribes but to less degree.

Table 1: Technical constraints encountered by the nomadic tribes in rearing cattle

S. No.	Technical constraints	Gujjar tribe		Bakarwal tribe		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1.	Lack of knowledge about improved breed of animals	87.77	I	83.33	I	85.55	I
2.	Lack of awareness about selection and breeding of animals for breed improvement	74.44	IV	75.56	III	75.00	III
3.	Lack of knowledge about vaccination for deadly diseases	18.87	VII	25.55	V	22.21	VII
4.	Lack of knowledge about improve house keeping for cattle	51.11	V	12.22	VII	31.66	V

5.	Lack of knowledge about improved feeding practices	26.66	VI	18.88	VI	22.77	VI
6.	Lack of knowledge about veterinary pharmaceuticals	86.66	II	52.22	IV	69.44	IV
7.	Non-availability of proper health care practices during the period of migration	77.77	III	75.55	II	76.66	II

MPS: Mean Percent Score

A comparative analysis of the technical constraints encountered by both the categories of respondents separately reveal that non-availability of proper health care practices during the period as a constraint was assigned II rank in case of Bakarwal (MPS 75.55) and III in case of Gujjar respondents (MPS 77.77). Likewise, constraint associated with the lack of awareness selection and breeding animals for breed improvement was assigned IV rank in case of Gujjars (MPS 74.44) and III in case of Bakarwal tribes (MPS 75.56), lack of knowledge about vaccination for deadly diseases was assigned V rank by Gujjar (MPS 51.11) and VII rank by Bakarwals (MPS 12.22). Similarly, lack of knowledge about vaccination for deadly diseases was found to be constraints of VII order for Gujjar and V order for Bakarwal tribes.

ii) Economic constraints encountered by the nomadic tribes in rearing cattle:

Date incorporated in table 2 reveal that non-availability of loaning facility for the nomads came to be the most severe economic constraint encountered by the respondents with MPS 88.89 followed by fewer market prices for milk, meat and wool products (MPS 74.44). In addition to it, high cost of vaccines and veterinary pharmaceuticals (MPS 59.44) and high cost of green fodder and other concentrates (43.88) were also found to affect both the categories of respondents with varying degree of magnitude.

Table 2: Economic constraints encountered by the nomadic tribes in rearing cattle

S. No.	Economic constraints	Gujjar tribe		Bakarwal tribe		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1.	Low purchasing capacity of nomadic tribes	61.11	IV	73.33	II	67.22	III
2.	Non availability of loaning facility for nomads	86.66	I	91.11	I	88.89	I
3.	Less market price of the milk, wool and meat products	76.66	III	72.22	III	74.44	II
4.	High cost of green fodder and other concentrates	52.22	V	35.55	V	43.88	V
5.	High cost of vaccines and veterinary pharmaceuticals	72.22	II	46.66	IV	59.44	IV

MPS: Mean Percent Score

A further deep glance at the data presented in Table 6 reveal that high cost of vaccines and veterinary pharmaceuticals was found to be the constraint of II order for Gujjars and of IV order for Bakarwals. Besides, low purchasing capacity of nomadic tribes as economic constraint was assigned IV rank for Gujjars and II for Bakarwals.

iii) Social constraints encountered by the nomadic tribes in rearing cattle:

Data presented in Table 3 make it vivid that the threats from the militants during the period of their migration was found to be the most severe constraint affecting both categories of the respondents (MPS 89.99). This was followed by low living standard of nomads (MPS 83.33), disintegrated social set up of tribes because of nomadic nature (MPS 73.33) and lack of awareness about social welfare schemes (MPS 65.55) as the

prime social constraints faced by the respondents. Besides, low educational standard of tribes (MPS 64.99) also came to be the major constraint faced by the respondents. In addition to it, considering tribes belonging to low category came to very leastly affects the tribes followed by least purchasing of produce of tribes by people with MPS 21.66 and 12.77 respectively. This reflects a very cosmopolite social set up in Jammu and Kashmir.

Table 3: Social constraints encountered by the nomadic tribes in rearing cattle

S. No.	Social constraints	Gujjar tribe		Bakarwal tribe		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1.	People disregard tribes as low category of people	18.88	VI	24.44	VI	21.66	VI
2.	Milk and meat produced by nomads is least purchased by people as they consider it produced by tribes	16.66	VII	8.88	VII	12.77	VII
3.	Low educational standard of the tribes	61.11	V	68.88	IV	64.99	V
4.	Lack of awareness about social welfare schemes for the nomadic tribes	72.22	IV	58.88	V	65.55	IV
5.	Disintegrated social set up of tribes because of nomadic nature	74.44	III	72.22	III	73.33	III
6.	Low living standard of nomads	75.55	II	91.11	II	83.33	II
7.	Threats from militants during migration	87.77	I	92.22	I	89.99	I

MPS: Mean Percent Score

A comparative description of data presented inn Table 3 reveal that lack of awareness about social welfare schemes for nomadic tribes was found to be IV order constraint for Gujjars and of V order for Bakarwals. Contrarily, low educational standard of tribes as social constraint for tribes got V rank for Gujjars and IV rank by Bakarwals.

(iv) Managerial constraints encountered by the nomadic tribes in rearing cattle:

Data incorporated in Table 4 reveal that poor herd management during the period of their migration was the severe constraint faced by respondents with MPS 82.77. This was followed by fear and attack of wild animals (MPS 70.49), lack of risk taking ability among tribes (MPS 69.99) and poor managerial capability of tribes (MPS 55.55) as the major managerial constraints faced by tribes in animal rearing. Inability on part of the tribes to predict demand and supply of the produce was also perceived as constraint by the respondents but to comparatively less degree (MPS 35.55)

Table 4: Managerial constraints encountered by the nomadic tribes in rearing cattle

S. No.	Managerial constraints	Gujjar tribe		Bakarwal tribe		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1.	Poor managerial capability of tribes	53.33	IV	57.77	IV	55.55	IV
2.	Lack of risk taking ability	64.44	II	75.55	II	69.99	III
3.	Poor herd management during the period of migration	93.33	I	72.22	III	82.77	I
4.	Fear of attack of wild animals	62.22	III	78.77	I	70.49	II
5.	Inability to predict demand and supply of the produce	38.88	V	32.22	V	35.55	V

MPS: Mean Percent Score

Comparative analysis of data presented in table 4 reveal that poor herd management during the period of migration and

fear and attack of wild animals was perceived as constraint of I and III degree for Gujjars and of reciprocal degrees i.e. III and I in case of Bakarwals.

(v) Input supply constraints encountered by the nomadic tribes in rearing cattle:

A perusal of data presented in Table 5 reveal that shrinking grazing land and pastures resulting into shortage of grazing pastures for the animals of nomadic tribes was the most severe constraint faced by the respondents in rearing cattle (MPS 87.21) followed by scarcity of green fodder (MPS 83.88) and timely non-availability of veterinary aid (MPS 70.55). Besides, non-availability of high quality milk and meat producing animals (MPS 43.32) and non-availability of quality veterinary pharmaceuticals (MPS 31.11) were also perceived as constraints by the respondents. Non-availability of concentrates was perceived as a constraint by the respondents to the least level (MPS 12.77)

Table 5: Input supply constraints encountered by the nomadic tribes in rearing cattle

S. No.	Input supply constraints	Gujjar tribe		Bakarwal tribe		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1.	Scarcity of green fodder	92.22	I	75.55	II	83.88	II
2.	Non availability of quality veterinary pharmaceuticals	35.55	IV	26.66	V	31.11	V
3.	Non availability of concentrates	25.55	VI	0.00	VI	12.77	VI
4.	Timely Non availability of veterinary aid	72.22	III	68.88	III	70.55	III
5.	Non availability of high quality milk and meat producing animals	27.77	V	58.88	IV	43.32	IV
6.	Shrinking grazing land and pastures	78.88	II	95.55	I	87.21	I

MPS: Mean Percent Score

A comparative analysis of the data presented for both the categories of the respondents separately reveal that shrinking grazing land and pastures was assigned I rank by Bakarwals (MPS 95.44) and II by the Gujjars (MPS 78.88). Likewise, Scarcity of green fodder was found to be constraint of I degree for Gujjars (MPS 92.22) and of II degree for Bakarwals (MPS 75.55). Similarly, non availability of quality veterinary pharmaceuticals and non availability of high quality milk and meat producing animals were perceived as the constraints of IV and V degree by Gujjars and of V and IV degree by Bakarwals.

vi) Overall constraints encountered by the Gujjar and Bakarwal in livestock production:

An overview of the data presented in Table 6 reveal that the Gujjar respondents were primarily confronted with the economic constraints which has been ranked 1st with MPS 69.77 followed by managerial constraints (MPS 62.44), technical

constraints (MPS 60.46), social constraints (MPS 58.09) and input supply constraints.

In case of Bakarwals, input supply constraints topped the list of constraints under study with MPS 65.10 followed by managerial constraints (MPS 63.30), social constraints (59.51), technical constraints (49.04) and economic constraints (45.55).

Table 6: Overall constraints encountered by the Gujjar and Bakarwal in livestock production

S. No.	Major category of constraints	Gujjar tribe		Bakarwal tribe		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1.	Technical constraints	60.46	III	49.04	IV	54.75	V
2.	Economic constraints	69.77	I	45.55	V	57.66	IV
3.	Social constraints	58.09	IV	59.51	III	58.80	III
4.	Managerial constraints	62.44	II	63.30	II	62.90	I
5.	Input supply constraints	55.36	V	65.10	I	60.23	II
TOTAL		61.22		56.50		58.86	

MPS: Mean Percent Score

The overall calculated constraints for both the categories of respondents came to be 58.86 which imply that such high degree of constraints was being encountered by them in animal rearing. Overall managerial constraints were perceived by both the categories of the respondents as the prime constraint in animal rearing with calculated MPS 62.90 followed by input supply constraints (MPS 60.23), social constraints (MPS 58.80), economic constraints (MPS 57.66) and technical constraints (MPS 54.75).

These findings confirm the findings of Sankhla, (2006) who reported that timely unavailability of breeding related services, high quality concentrate feed, high cost of cross bred animals and lack of credit facilities are most important constraints faced by respondents.

CONCLUSION

It can be concluded from the findings that Gujjar respondents were primarily confronted with the economic constraints followed by managerial constraints, technical constraints, social constraints and input supply constraints. Besides, Bakarwals had input supply constraints as the most severe followed by managerial constraints, social constraints, technical constraints and economic constraints. Overall, Lack of knowledge about improved breed of animals, Non availability of loaning facility for nomads, Threats from militants during migration, Fear of attack of wild animals and Shrinking grazing land and pastures came to be the major constraints confronted by the nomadic tribes of Jammu and Kashmir in livestock rearing.

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