



Routes Adopted by *Bakarwals* during Migration of Livestock and its Constraints

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ABSTRACT

The present study was undertaken to identify various routes adopted by *Bakarwals* and constraints perceived by them during migration of livestock in Jammu and Kashmir region. Districts Anantnag and Ganderbal were adopted under the course of study in order to identify various migration routes followed by this community for seasonal migration. A total of 200 respondents were selected using grab sampling technique and an interview schedule was designed related to breeding, feeding, marketing and infrastructure in order to point out the constraints faced by the *Bakarwals*. The results revealed five major constraints faced by the *Bakarwals* in Jammu and Kashmir region and included colic management, lack of facilities, high cost of feed and fodder, lack of insurance etc.

Key Words: Bakarwals, Constraints, Colic, Migration, Routes

INTRODUCTION

The tribal communities namely Gujjars and Bakarwals have been ranked as third largest community in Jammu and Kashmir forming about 11.9 percent of the total population of the union territory. Bakarwals are nomadic pastoralists whose livelihood depends upon rearing of livestock such as sheep, goats, equines etc. This section of society is poor and usually depends on naturally occurring resources for their economic sustainability. The climatic conditions in Jammu and Kashmir force these nomads for seasonal migration, so that they can utilize pasture lands for nourishing their livestock. Migration is dependent on horses which are used to carry their load. Onset of summer season marks the start of migration journey of Bakarwals from plains towards upper reaches of Himalaya's where

they feed their livestock on natural pastures. During winters they travel back to plains to complete their migration cycle. Usually Bakarwals spend six months in each plain and on highland pastures of mountains. In winter they reside in plains and in summers they live in around Kathua, Doda, Udhampur which is mountainous part of Jammu region or in around pastures in Ganderbal, Daksum, Uri, Sonmarg, Anantnagetc which lie in Kashmir. Many of the Bakarwals also reside in and around Poonch and Rajouri. There are two main routes (Pir Panjal and Banihal route) and various sub routes which are followed to complete the journey as depicted in Fig1. This seasonal migration has various starting points like Rajouri, Poonch, Reasi, Udhampur, Thanamandi, Jajerkotlietc and majority of the undertaken routes pass through

Part of MVSc Thesis of 1st author

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different regions of Pir Panjal range. *Bakarwals* are constantly challenged with various difficulties especially regarding rearing these animals during migration. Thus, the present study was planned to identify various routes and constraints faced by *Bakarwals* in Jammu and Kashmir.

MATERIALS AND METHODS

Seasonal migration by Bakarwals is commenced through different routes, which takes about 45 to 55d to complete the journey. Every year after crossing Pir Panjal Bakarwals make their way towards a particular region which has numerous pastures. A certain route to a particular pasture is followed by different clans, and they usually stick to their traditional route. The migration route is only changed if there is a bad weather or the terrain is blocked due some natural calamity. Different clans cross through different mountain pass routes. Daily journey depends upon the number of hours they trek each day and whether to halt at a particular place during migration. Usually they travel for about 6 to 8 hr each day. Sometimes halts are taken due to harsh environmental conditions so that casualties are minimized. These emergency halts are taken for about 2 to 3d till environmental conditions are normal.

Due to shortage of time, resources and scattered presence of Bakarwals to different districts of Kashmir, only district Anantnag and Ganderbal were analyzed. The study was conducted in Pahalgam and Sonmarg falling in above mentioned districtsof Jammu and Kashmir, with the aim to explore different routes undertaken during seasonal migration and the constraints faced by Bakarwals. For the purpose of collecting data regarding various routes followed and the constraints faced, different areas in and around Sonmarg and Pahalgam which includes Thajwas valley, Baltal & Lidderwas in Sonmarg and Aru valley, Kothepathri, Poshpathri Lidderwat and Chandanwari in Pahalgam were covered. A total of 200 respondents were selected using grab sampling technique, which included 80 respondents from Pahalgam and 120 respondents from Sonmarg. An interview schedule was designed related to breeding, feeding, marketing and infrastructure in order to identify various constraints and the respondents were asked to rank the constraints in order of their preference. Regionwise ranking of constraints was done using Garret's ranking technique (GRT).

RESULTS AND DISCUSSION

Routes under taken for livestock migration

In the present study, it was found that various mountain passes which *Bakarwals* usually crossed to reach Sonmarg & adjoining pastures like Baltal, Thajwas etc. were Pir Panjal, Rupari pass and Budhil pass. Similarly to reach Pahalgam & allied areas like Aru, Kothepathri etc. theycrossed Zojimarg and Banihal pass.(Fig.1).On arrival to their routine pasture kutcha shelters or Dheras are set to protect themselves from harsh weather. Most of the times Dheras set up during last migration are used after a minor repairment, if damaged by extreme climate.



Fig 1. Map showing different routes taken to reach Sonmarg and Pahalgam

Routes Adopted by Bakarwals

Table 1. Ranking of constraints by Garret's ranking technique.

Factors/ Constraints	Kashmir (N=41)		Factors/	Jammu (N=159)	
	Av. score	Final rank	Constraints	Av. Score	Final rank
Difficulty in colic management	61.71	1	Difficulty in colic management	61.19	1
Vaccination	61.32	2	Poor accessibility to veterinary services	60.93	2
Poor accessibility to veterinary services	61.15	3	Govt. apathy and poor credit facilities	59.00	3
Govt. apathy and poor credit facilities	59.24	4	High cost of feed and fodder	58.39	4
Lack of Animal insurance	58.59	5	Lack of vet care dur- ing migration	58.14	5
Middle man in rate fixation	57.27	6	Middle man in rate fixation	57.04	6
High cost of feed and fodder	57.07	7	Lack of Animal insurance	56.61	7
Lack of government initiative.	56.10	8	Problem due to unbalanced feeding	47.72	8
Lack of vet care during migration	52.51	9	Unhygienic conditions	46.70	9
Problem due to unbalanced feeding	50.88	10	Vaccination	46.13	10
Unhygienic conditions	48.29	11	Lack of government initiative.	44.44	11
Lack of marketing	44.10	12	Lack of marketing	41.80	12

Sonmarg

Sonmarg is a hill station in the state of Jammu and Kashmir located at about 80 km North-East of Srinagarat an elevation of about 2,800 m (9,200 ft.)in district Ganderbal. According to the 19th livestock census 2012 (Anon, 2012) total livestock population of Ganderbal is 4.044 lakh (2.521% of total livestock population of J&K). *Bakarwals* visit different pastures located in the district during migration in summer. Most of these pastures are located around Sonmarg. Interview revealed that different routes / sub routes were being utilized to

reach the district and most common routes which were noted are as under:

- R.S Pura (ChakRoi)- Banihal (Jammu-Srinagar road)-Ganerbal-Sonmarg
- 2. Reasi Bodal- PirPanjal Shopian- Srinagar-Kangan- Sonmarg
- 3. Rajouri-Thanamandi-Mohra-Shopian-Wayil-Sonmarg
- 4. Poonch Shopian-Wayil- Kangan Sonmarg
- 5. Nagrota-Kalakot- Shopian- Kangan-Sonmarg

- 6. Katra Reasi- Rajouri-Shopian- Ganderbal-Sonmarg
- 7. Rajouri Thanamarg-Sathri- Pampore-Shalimar- Ganderbal- Sonmarg

Pahalgam

Pahalgam is located 90 km from Srinagar on the banks of Lidder river at an altitude of 7,200 feet (2,200 m). According to 19th livestock census 2012 total livestock population of Anantnag is 3.17 lakh. Nomadic population of *Bakarwals* visits this area and travel to upper reaches in search of fresh pasture lands. *Bakarwals* found in these areas belonged to different districts of Jammu region and had managed to reach these places through different routes. Most common routes undertaken which were noted are as under:

Rajouri-Thanamandi-Shopian-Anantnag-Pahalgam Reasi –kalakot-Rajouri-Shopian-Pahalgam Nagrota –Galai-Rajouri-Shopian-Pahalgam Udhampur-Patnitop-Banihal-Anantnag – Pahalgam Reasi-Katra-Udhampur-Ramban-Banihal-Anantnag-Pahalgam

Udhampur-Doda-Kishtwar-Kokernag-Anantnag-Pahalgam

Katra – Ramban-Verinag-Anantnag- Pahalgam

Constraints Perceived

Yearly migration brings in lot of hardships to *Bakarwals* which includes facing bad weather, blocked routes due to changed geography in a particular area, disease outbreaks, scarcity of food etc. Apart from these problems livestock rearing in such situation is also very difficult and many constraints are faced by *Bakarwals*. To get idea about those constraints Garrets ranking was used and ranking of constraints by Garret's ranking techniqueis presented in Table 1. The results revealed that five major constraints in Kashmir region were lack of colic management, followed by lack of animal insurance, poor accessibility to veterinary service, government apathy and poor credit facilities and lack of vaccination. Similarly in Jammu region

it was seen that five major constraints were lack of colic management, followed by poor accessibility to veterinary service, government apathy and poor credit facilities, cost of feed and fodder and lack of veterinary care during migration. Similar findings were reported by Meena et al (2008) with that major constraints being deficiency of quality feed and fodder, unhygienic housing, poor management of disease and lack of knowledge regarding vaccination. Another study conducted by Biffa and Woldemeskel (2006) revealed that feed shortage and disease are major constraints to productivity and performance of equines. While as in contrary Pal and Legha (2008) reported that lack of grazing land availability and low libido in equines was among major problems faced by equine rearers.

CONCLUSION

Bakarwals take up yearly migration in order to reach various pastures in Kashmir valley. Our study indicated that both hill stations, Sonmarg and Pahalgam receive huge number of Bakarwals every year. These nomads take different routes to reach Kashmir among which two are prominent i.e Mughal road (Shopian) and Banihal road. After reaching to said destination they travel to pastures which are situated on upper reaches like Thajwas valley, Baltal, Lidderwatetc in Sonmarg and Aru valley, Lidderwas valley, Kothpathrietc in Phalgam. Bakarwals face lot of challenges in terms of bad weather; change in previous routes, and also in rearing of these livestock species during this migration journey. Major constraints which were perceived during this migration include colic management, lack of facilities, High cost of feed and fodder, lack of insurance etc.

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Received on 23/03/2020

Accepted on 15/05/2020