



## SWOT Analysis of Small Ruminants Rearing of Bakarwal Tribe in District Rajouri of Jammu and Kashmir

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### ABSTRACT

Small ruminants play an important role in the rural economy of Jammu and Kashmir, as they are primarily reared by resource poor and under-privileged rural population. Every rural household is associated with livestock. Small ruminants rearing in the upper reaches of Jammu and Kashmir is a basic livelihood for Bakarwals who migrate with the livestock to green pastures. The present study conducted in District Rajouri of Jammu and Kashmir State was an endeavour to know about the livestock profile of the respondents, the strengths, weaknesses, opportunities and threats faced by bakarwals while rearing the small ruminants. Thus, the main objective of this study is to make a SWOT analysis based on the evaluation of some important parameters of sustainability of small ruminants in the farm conditions.

**Keywords:** SWOT, bakarwal, Rajouri district, sheep, goat

District Rajouri is ideally suited for rearing of sheep and goats owing to its agro-climatic and geo-physical conditions. Rearing of Small ruminants is a traditional vocation and the tribals viz., Bakarwal/Gujjars have developed perfect professionalism in Sheep & Goat rearing. The word Bakarwal is derived from two terms with different meanings 'Bakar' means 'goat', and 'Wal' connoting 'one who takes care of'. In general, the name 'Bakarwal' signifies 'high-altitude goatherds or shepherds'. Small ruminants make a valuable contribution to the livelihood of the economically weaker sections of the society especially in the mountainous areas by its multifaceted utility of producing wool, meat, hides and manure etc. Conducive agro climatic conditions, pastures and other natural endowments provide enormous scope and potential for rearing of sheep and goats in the District.

Sheep and goat rearing is the core activity of rural masses and plays a vital role in the economic upliftment of most of the under privileged communities and farmers. It is admittedly a profitable venture as the activity is capital oriented not labour intensive. District Rajouri with the

land area of 2,50,408 ha supports the sheep and goat population of 5.53 lacs and 3.98 lacs respectively. During the year 2015-16, mutton and wool production was 4751.2 and 1144.3 tonnes respectively. Among tribals, Sheep and goat are the preponderant and the most interactive species, subsisting on crop residues and contributing meat, wool, hair and manure. SWOT stands for "strengths, weaknesses, opportunities and threats" and SWOT analysis identifies the strengths and weaknesses of the farms, in support of the identification to future actions, able to achieve the optimal use of the opportunities and the control of the threats (Marta Costa, 2011) Furthermore, SWOT (strengths, weaknesses, opportunities and threats) analysis has proved to be an effective tool and has constituted a suitable baseline to diagnose current problems and to sketch future action lines (Terrados *et al.*, 2007). Further for the improvement of the current situation of smallholder livestock production, chain collaboration is necessary. GOs, authorities, NGOs, financial institutions, and the private sector have to cooperate and develop adequate measures to assist smallholder livestock producers in the most important issues for development:

credit obtainment, availability of adequate extension and training, infrastructure development, creation of quality awareness, and the establishment of producer cooperatives (Burkart, 2011). Thus, strength, weakness, opportunity and threat (SWOT) analysis brings out hidden strengths and weaknesses of India's science and technology capability and also provides insights into the policy options available to enhance future effectiveness (Govindarajulu, 1990).

## MATERIALS AND METHODS

### Study Site

The present study was conducted in Rajouri District of Jammu and Kashmir state. The district has diverse climatic conditions ranging from subtropical to intermediate to temperate situations. Rajouri is located between 72° 16' and 72° 30' E longitude and 34° 34' and 39° 30' N Latitude in the northern hill zone of India. The annual rainfall of the district is about 1200 mm.

### Sampling procedure

Multi stage sampling was employed for conducting the study. From the district the block Budhal was selected, from the block eight Panchayats and from each Panchayat two villages were selected. Thus total of sixteen villages were selected from eight Panchayats of the block Budhal of the District. Fifteen respondents were selected from each Panchayat on the basis of proportional allocation of number of households in each village. In this way a total of 120 Livestock farmers were selected and interviewed by face to face contact interview method.

### Data collection and analysis

The data were collected by using a predesigned interview schedule with key informants developed for the purpose. The questionnaire was designed to capture information pertaining to small ruminant rearing by Bakarwal tribe. Following the tabulation and necessary sorting, statistical analysis viz. frequency, percent were used to draw the inferences.

## RESULTS AND DISCUSSION

The livestock subsector of agriculture plays important

roles in human food and nutritional security, livelihood, regional balance, gender mainstreaming, and rural poverty alleviation (ILO, 2004). SWOT analysis is a strategic planning method used to evaluate the strengths, weakness/limitations, opportunities, and threats involved in a business venture. It involves specifying the objectives of the business venture and identifying the internal and external factors that are favorable and unfavorable to achieve that objective.

The results of the table 1 revealed that “Traditional rearing of Sheep and Goat do not need high start up costs to establish a profitable business” was the main strength of Sheep and Goat rearing (90%). The other main strengths were Good source of income for economically backward Bakarwal tribe (85%), Market availability of sheep and Goat products (65%), Emergency source of income (55%) and Traditional Sheep and Goat rearing knowledge (45%).

**Table 1:** Strength Analysis of Sheep and Goat Rearing Practices of Bakarwal Tribe

Sl. No.	Strength	Score obtained	Mean Score	MPS	Rank
1	Traditional rearing of Sheep and Goat do not need high start up costs to establish a profitable business	108	0.90	90	I
2	Good source of income for economically backward Bakarwal tribe	102	0.85	85	II
3	Emergency source of income	66	0.55	55	IV
4	Traditional Sheep and Goat rearing Knowledge	55	0.45	45.83	V
5	Market availability of sheep and Goat Products	78	0.65	65	III

Similarly results in the table 2 indicated that the Lack of good management practices (86.66%) and Lack of awareness about diseases and technical knowhow (82.5%) were considered as the main weaknesses. Other weaknesses were Low education level of sheep and goat rearer (80%), Non availability of green and nutritive grasses throughout the year (73.33%), increased work load (63.33%) and Low yield (55%).

Sheep and Goat as a tool to alleviate poverty (97.50%), was the main opportunity to sheep and goat rearing.

**Table 2:** Weakness Analysis of Sheep and Goat Rearing Practices of Bakarwal Tribe

Sl. No.	Weakness	Score obtained	Mean Score	MPS	Rank
1	Lack of good management practices	104	0.86	86.66	I
2	Lack of awareness about diseases and technical knowhow.	99	0.82	82.50	II
3	Low yield	66	0.55	55	VI
4	Low education level of sheep and goat rearer	96	0.80	80	III
5	Non-availability of green & nutritive grasses throughout the year	88	0.73	73.33	IV
6	Increased work load	76	0.63	63.33	V

Other important opportunities were Self-employment and entrepreneurship development (81.6%) followed by fill the gap between production of demand and supply of mutton (80.83%), Marketing of mutton and wool (72.5%), Organization of camps (62.5%) and scope of plantation (60%) were revealed from the results of table 3.

**Table 3:** Opportunity Analysis of Sheep and Goat Rearing Practices of Bakarwal Tribe

Sl. No.	Opportunity	Score obtained	Mean Score	MPS	Rank
1	Organization of camps results in adoption of better management practices	75	0.62	62.50	V
2	Sheep and Goat as an tool to alleviate poverty	117	0.97	97.50	I
3	Fill the gap between production of demand and supply of mutton and wool	97	0.80	80.83	III
4	Self-employment and entrepreneurship development	98	0.81	81.6	II
5	Marketing of mutton and wool could be organized	87	0.72	72.5	IV
6	Plenty of scope for the plantation of the quality grasses and fodder plants	72	0.60	60	VI

The results from the study indicated in table 4 revealed that Decline in Grazing areas and difficulty to access was the main threat in sheep and goat rearing (94.16%), whereas Economic losses through hand shearing was considered as least threat (65%).

**Table 4:** Threat Analysis of Sheep and Goat Rearing Practices of Bakarwal Tribe

Sl. No.	Threat	Score obtained	Mean Score	MPS	Rank
1	Decline in Grazing areas and difficult to access	113	0.94	94.16	I
2	Low yield of mutton, wool and wool product	84	0.70	70	IV
3	Lack of good Management Practices	99	0.82	82.50	II
4	Malnutrition causes reproductive and economic losses	93	0.77	77.50	III
5	Economic losses through hand shearing	78	0.65	65	VI
6	Losses in natural calamity and harsh weather conditions	79	0.65	66.83	V

Thus study identifies and prioritizes the strengths, weakness, opportunities, and threats faced by Bhakarwal tribe regarding sheep and goat rearing practices. Another important characteristic is the small participation in training courses that would aggregate knowledge to the association and then reinforce group commitment to increase production and quality, including women’s participation in the rearing small ruminants. Because of the importance of strategically planning a rural activity, noted also that the importance of identifying strengths and weaknesses more clearly defined shape and provides a resource optimization, allowing the market to turn threats in to business opportunities (Omar Jorge Sabbag *et al.* 2015). The ultimate purpose is to meet the challenges of the future rural development in LFAs through the sustainable development of sheep and goat farming (Sossidou *et al.* 2013).

**CONCLUSION**

A participatory SWOT analysis subsequently appeared to be a useful tool to order and structure these listed aspects and to identify relevant issues for sustainable development.



Strengths and opportunities of smallholder production are e.g., cheaper product prices, the image of utilizing natural feeds, or higher connectivity with the consumer. Weaknesses and threats are e.g., low product quality, lack of transparency, insufficient formal quality control, or limited access to credit and training. Assisting smallholder producers to focus on the strengths and opportunities and to reduce the weaknesses and threats could help to satisfy consumer preferences (e.g., growing importance of quality) and respond to new market opportunities.

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