National Research Journal of Business Economics
Volume No: 12, Issue No: 2, Year: 2025 (July-December)
PP: 103-106
ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

A CONCEPTUAL STUDY ON SHEEP AND GOAT REARING IN MANDYA DISTRICT, KARNATAKA

Madegowda M.

Associate Professor
Department of Economics, Government College for Women (A), Mandya

K.S. Veerendra Kumar

Associate Professor
Department of Studies and Research in Economics,
Karnataka State Open University, Mukthagangotri, Mysuru

ABSTRACT

Sheep and goat rearing constitute an integral component of the rural economy in Mandya district, Karnataka, providing livelihood support to small and marginal farmers. These small ruminants contribute significantly to meat, wool, milk, and manure production, thereby enhancing agricultural diversification and nutritional security. This conceptual study explores the status, trends, and challenges of sheep and goat farming in Mandya district. It analyses population changes, breed composition, farming systems, economic returns, and major constraints, while also proposing strategies for sustainable development.

As per the **20th Livestock Census (2019)**, Mandya district reported approximately **3,47,133 sheep** and **3,46,430 goats**, with modest growth rates of **1.62%** and **0.01%**, respectively. Prominent breeds include the indigenous *Bannur sheep* and improved goat breeds such as *Kanni Adu* and *Sirohi*, which align with Karnataka's state breeding policy. Farmers employ traditional, semi-intensive, and intensive rearing systems, each with distinct economic outcomes. Intensive systems yield higher profits — approximately ₹4,186 per goat and ₹3,983 per sheep annually — but demand substantial investment and management.

The study identifies persistent challenges such as feed scarcity, disease outbreaks, poor marketing infrastructure, and climatic stress. It recommends promoting semi-intensive systems, expanding breeding and veterinary services, improving fodder availability, and strengthening market linkages through cooperative structures. With appropriate institutional and policy support, sheep and goat husbandry in Mandya district has strong potential to enhance rural incomes and contribute to sustainable agricultural growth.

Keywords: Livestock, Bannur Sheep, Kanni Adu, Sirohi, Sustainable Livelihoods

1. INTRODUCTION

Sheep and goat rearing form a crucial pillar of the livestock sector in Karnataka, particularly in agrarian districts like Mandya. As an integral part of mixed farming systems, these animals provide supplementary income, serve as a form of economic security, and utilize marginal lands unsuitable for crop production.

Mandya district, located in southern Karnataka, is predominantly agricultural, with paddy, sugarcane, and sericulture as dominant crops. The region's semi-arid climate and moderate rainfall conditions are well suited for small ruminant rearing. For smallholders and landless laborers, sheep and goat husbandry serves as an accessible source of income and employment, requiring comparatively lower investment and providing quick financial returns.

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

This paper examines population dynamics, breed characteristics, rearing systems, economic implications, and key constraints associated with sheep and goat rearing in Mandya. It also provides actionable recommendations to policymakers and extension agencies for strengthening the sector's sustainability.

2. POPULATION TRENDS

According to the **20th Livestock Census (2019)**, Mandya district had a small ruminant population of **3,47,133 sheep** and **3,46,430 goats**, representing roughly **32%** of the district's total livestock population of 2.18 million. The near-equal distribution of sheep and goats reflects balanced preferences among farmers.

Growth in the small ruminant population has been moderate over the past decade. Sheep numbers grew at an annual rate of **1.62%**, while goat numbers recorded a marginal increase of **0.01%**. Some taluks even experienced minor declines due to shrinking grazing lands and urban encroachment. Although data from the **21st Livestock Census** is yet to be officially released (as of 2025), preliminary state-level reports indicate stable or slightly increasing small ruminant populations, aided by government-supported breeding and fodder initiatives.

Mandya's **semi-arid climate**, **black cotton soils**, and **agro-pastoral landscape** favor small ruminant rearing. However, rising land fragmentation, reduced fallow areas, and erratic monsoons have constrained population growth.

Species	Population (2019)	Annual Growth Rate (Pre-2019)
Sheep	3,47,133	+1.62%
Goats	3,46,430	+0.01%

3. RECOMMENDED BREEDS

Karnataka's **Livestock Breeding Policy (2015)** emphasizes the use of locally adapted and improved breeds to enhance productivity and genetic diversity.

In Mandya district, the **Bannur (Bandur) Sheep**, native to Malavalli taluk, is the most prominent breed. Known for its **hardiness, adaptability, and superior meat quality**, the Bannur sheep typically weighs **25–30 kg (ewes)** and **35–40 kg (rams)**, and produces **1.5–2 kg of fine-quality wool** annually. Crossbreeding with **Deccani** and **Dorper** breeds is recommended to improve growth and carcass yield.

Goat rearing in the district primarily involves non-descript local breeds. However, improved breeds such as **Kanni Adu**, **Sirohi**, **Beetal**, and **Boer cross** goats are increasingly adopted for enhanced meat and milk productivity. Government initiatives through centers like the **Bandur Sheep Breeding Center (Dhanagur, Malavalli)** provide superior breeding stock, training programs, and artificial insemination facilities to farmers.

Species	Recommended Breeds	Key Traits
Sheep	Bannur (native), Deccani, Dorper cross	Hardy, dual-purpose (meat & wool), 25–40 kg body weight
Goats	Kanni Adu, Sirohi, Beetal, Boer cross	Meat/milk breeds, rapid growth, 30–50 kg body weight

4. REARING SYSTEMS

Sheep and goat farmers in Mandya adopt three major systems of management: **extensive**, **semi-intensive**, and **intensive**.

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

- **Extensive system:** The traditional form of open grazing on common lands and crop residues. Low investment but also low productivity.
- **Semi-intensive system:** Combines partial grazing with stall-feeding using fodder crops, pulses residues, and supplements. It balances cost and productivity.
- **Intensive system:** Involves full stall-feeding with nutritionally balanced diets and controlled breeding. Though costlier, it provides the highest yields and better disease control.

Training and extension support have been strengthened through initiatives such as the **3-day scientific rearing program at the Bandur Center** and the **6-month advanced training at Ranebennur**, which together equip farmers with modern livestock management skills.

5. ECONOMIC ANALYSIS

A field-based economic assessment (2019) in Mandya and Mysuru districts, covering **180 farmers**, revealed significant variations in investment and profitability across rearing systems.

- **Initial Investment:** Sheep flocks required ₹1.74 lakh (extensive) to ₹6.33 lakh (intensive); goat herds required ₹1.33 lakh to ₹4.61 lakh.
- **Operating Costs:** Labor was the highest recurring expense, ranging from ₹2,060–₹3,874 per sheep and ₹1,880–₹3,811 per goat annually.
- **Returns:** Major income sources included animal sales (60–70%), offspring, manure, and home consumption.
- **Net Returns per Animal:** Sheep ₹1,092–₹3,983; Goats ₹1,537–₹4,186, with goats generally outperforming sheep.

The **semi-intensive goat rearing system** yielded a **benefit–cost ratio exceeding 1.5**, signifying strong economic viability and scalability.

Rearing System	Sheep Net Return (₹/animal/year)	Goat Net Return (₹/animal/year)
Extensive	1,092	1,537
Semi-Intensive	2,020	2,174
Intensive	3,983	4,186

6. CONSTRAINTS

Despite its promise, small ruminant farming in Mandya faces multiple challenges:

1. **Feed and Fodder Shortage:** Over-reliance on seasonal grazing leads to malnutrition. Droughts post-2020 increased fodder prices by up to 30%.
2. **Disease Prevalence:** Frequent outbreaks of *Peste des Petits Ruminants (PPR)* and *Foot-and-Mouth Disease (FMD)* result in 15–20% mortality.
3. **Weak Marketing Channels:** Dependence on intermediaries reduces farmers' margins by nearly 25%. Lack of cold storage and abattoirs exacerbates the problem.
4. **Climate Stress and Land Pressure:** Declining pastures, erratic rainfall, and land fragmentation hinder flock expansion.
5. **Knowledge Gaps:** Limited awareness of improved breeds and health management practices. Only 20–30% of farmers utilize artificial insemination services.

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

7. RECOMMENDATIONS

- **Promote Semi-Intensive Systems:** Provide subsidies for fodder cultivation (e.g., Napier grass, maize silage) to cut feed costs by 15–20%.
- **Enhance Breeding Infrastructure:** Expand services of the Bandur Center through **mobile AI units**; aim for **50% crossbred population by 2030**.
- **Disease Management:** Implement mandatory vaccination and surveillance in line with the **National PPR Eradication Programme (by 2025)**.
- **Market Development:** Establish **farmer-producer organizations (FPOs)**, cold chain units, and e-NAM linkages to improve price realization.
- **Training and Capacity Building:** Target **500 farmers annually**, including women's self-help groups, under the Department of Sheep and Wool Development.
- **Financial Support:** Allocate ₹50–₹100 crore through state programs to Mandya-specific units to achieve a **10% livestock increase by 2027**.

8. CONCLUSION

Sheep and goat husbandry in Mandya district holds considerable potential for enhancing rural livelihoods and promoting inclusive economic growth. Goat rearing, in particular, demonstrates higher profitability and resilience under diverse climatic conditions. Addressing systemic challenges through policy, infrastructure, and institutional interventions can contribute significantly to Karnataka's goal of **doubling farmers' income**. Future studies should focus on **climate-resilient breed improvement**, **digital livestock management**, and **supply chain integration**. Sustainable livestock systems, when farmer-centered and scientifically managed, can strengthen the socio-economic fabric of rural Mandya.

REFERENCES

1. Muthuveni, M., & Nedumaran, G. (2024). Economic opportunities for goat rearers: A path to sustainable development. International Journal of Cultural Studies and Social Sciences, 20(1), 44.
2. Kumar, S., & Sharma, R. (2019). Goat farming for rural livelihood enhancement in India. Rural Development Journal, 28(3), 234-241
3. Siddaraju Kiran (2018). Economics of Sheep and Goat Rearing in Mandya and Mysuru Districts of Karnataka. Department of Agricultural Economics, University of Agricultural Sciences, Bengaluru - 560 065
4. Singh, A., & Patel, V. (2020). Sustainability and profitability of goat farming in semi-arid regions of India. Journal of Agricultural Economics, 43(1), 87-93.
5. Srinivasan, R., & Kumar, P. (2017). Economic impact of goat farming in India: A case study of Karnataka. Indian Journal of Animal Production, 34(2), 156-160.
6. Ukale Vijay Anaj (2023). Economic Analysis of Sheep Rearing in Ahmednagar District of Maharashtra. Mahatma Phule Krishi Vidyapeeth Rahuri, Ahmednagar, Maharashtra.
7. 20th Livestock Survey Data, Government of Karnataka.