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Popular Article

Importance of Goat and Sheep Rearing in the Rising Indian Economy

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Introduction:

As India's economy grows and consumer preferences shift, livestock sectors like goat and sheep rearing are increasingly essential to support both rural livelihoods and national economic objectives. These small ruminants, often overlooked compared to larger livestock like cattle and buffalo, provide significant economic, nutritional, and therapeutic benefits, particularly through milk and meat production. Goat and sheep rearing is an ideal enterprise for smallholder farmers, helping to drive rural development and meet the demand for sustainable, nutritious food.

Contribution of Goats and Sheep to Indian Economy:

India leads globally in goat milk production, producing approximately 7.59 million tonnes annually, with top-producing states such as Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat, and Maharashtra contributing around 79.5% of this total. Goats, being the third largest milk-contributing species in India, contribute to 3.36% of the country's milk production (BAHS, 2024). Together, goats and sheep add over an estimated ₹31,449 crores annually to the national economy, with products such as meat and milk holding substantial market value (Kumar and Roy, 2013).

The economic impact of these animals is also felt through exports. In 2022-23, India exported 9,592.31 metric tonnes of goat and sheep meat, valued at ₹537.18 crores, primarily to Gulf countries (Raj et al., 2023). However, growing domestic demand limits further exports, indicating significant potential to cater to Indian consumers. Goats and sheep contribute an estimated 8–10% to India's GDP, accounting for around 27% of the total meat production in the country (BAHS, 2024), highlighting their role in food security and economic stability.

Health and Nutritional Benefits of Goat and Sheep Milk:

One of the primary reasons behind the increasing popularity of goat and sheep rearing is the nutritional richness of their milk, which is known for its digestibility and health benefits. Goat milk contains short and medium-chain fatty acids, making it easier to digest than cow milk, and provides bioactive components beneficial for health. Rich in selenium, conjugated fatty acids, calcium, zinc, and vitamins, goat milk supports immunity and is considered a functional food with therapeutic benefits.

Goat milk also caters to consumers with allergies or digestive issues as it has smaller fat globules and lower allergenicity than cow milk (Clark and Garcia, 2017). Emerging research highlights the role of goat milk in reducing the risk of cardiovascular diseases, managing blood pressure, and providing anti-inflammatory properties (ALKaisy et al., 2023). Sheep milk, though less common in India, offers similar benefits and is rich in linoleic acid, a compound associated with cancer and diabetes prevention (Flis and Molik., 2021). Sheep milk's unique nutritional profile includes proteins, peptides, oligosaccharides, and growth factors, making it suitable for therapeutic uses in skincare, bone health and anti-aging products.

Goat breeds like Jamunapari, Beetal, Jhakhrana, Surti and Mehsana are milch-type goat breeds, while Sonadi and Patanwadi are sheep breeds that can give substantial milk, besides wool and meat.



Mozarella cheese



Flavoured milk

(from sheep milk)



Paneer



Kulfi



Peda

(Image credits: ICAR-CSWRI, Avikanagar, Rajasthan)

Market Growth and Commercialization of Goat and Sheep Milk Products:

The market for goat milk products in India is expanding rapidly, driven by awareness of its health benefits and the potential for value-added products. Goat milk's unique composition allows for the production of various nutraceutical and medicinal products, such as probiotic yogurt, cheeses, ice cream, bioactive peptides, and immunity boosters. This opens up commercial avenues for smallholder farmers to tap into high-value markets.

Growing demand for health-conscious products, particularly among urban consumers, has led to increased consumption of goat milk products like cheese, flavored milk, and milk powder. Goat milk has found applications in Ayurvedic and pharmaceutical preparations, creating a niche market that provides employment opportunities and supports sustainable income generation in rural areas. This commercialization aligns well with India's goal of rural development, providing smallholders with diverse income streams and contributing to local economies.

Goat and Sheep Rearing as a Livelihood Strategy:

For small and marginal farmers, goat and sheep rearing offers a viable livelihood strategy, especially in ecologically diverse and drought-prone regions. Known as the "poor man's cow," goats, in particular, provide a reliable source of income with low maintenance costs. Goat rearing is resilient in areas facing agricultural challenges like crop

failure, offering a safeguard during droughts and a source of self-employment for rural households.

Goat and sheep farming is also well-suited for women, who often manage smaller flocks and contribute to family nutrition and income through the sale of milk, meat, and breeding stock. Flock sizes range from 2 to 600 animals, with smaller flocks managed by families for subsistence, while larger, commercial operations cater to meat production (NAP on Goat, 2022). This adaptability allows producers to scale operations according to available resources and local market demand, helping them maintain a stable income.

Addressing India's Meat and Protein Needs:

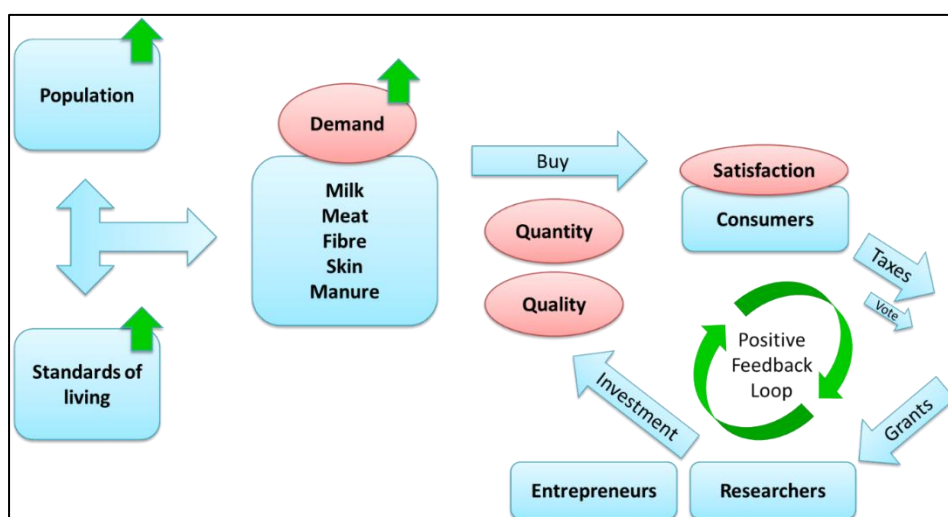
As India's population grows, the demand for animal protein continues to increase. Goat meat, or chevon, is highly sought after for its lower calorie and fat content compared to other meats, as well as its higher levels of iron and potassium. With India producing only 15g of meat per person per day, far below the recommended 30g by Indian Council of Medical Research (NAP on Goat, 2022), goat and sheep meat production offers an opportunity to bridge the protein gap. Additionally, goat meat's health benefits make it popular among health-conscious consumers.

To meet the projected demand, it is estimated that the goat population in India must grow to 216 million by 2050, with corresponding increases in meat and milk production (Hegde and Deo, 2017). Urbanization and rising income levels are expected to drive further growth in goat meat demand, with per capita consumption of goat meat steadily rising.

Sustainable Practices and Future Potential:

With the global trend toward clean and ethical animal products, Indian goat producers have opportunities to adopt husbandry practices that emphasize animal welfare and environmental sustainability. Small ruminants like goats and sheep can adapt to diverse climates and have a lower environmental impact than larger livestock, making them ideal for sustainable farming. For instance, goats are typically reared on crop residues and common property resources, minimizing competition for food with humans and reducing environmental strain.

To further optimize productivity, research and government initiatives are focusing on breed improvement, nutritional advancements, and enhanced management practices. Genetic improvements can boost milk and meat yield, while efficient feed strategies help meet production demands despite limited land and water resources. By supporting sustainable goat and sheep farming, India can advance rural prosperity, enhance national food security, and contribute to the global agricultural economy.



Conclusion:

Goat and sheep rearing has emerged as a valuable component of India's agricultural sector, contributing significantly to rural livelihoods, food security, and economic growth. The health benefits and market potential of goat and sheep milk products offer opportunities for smallholder farmers to diversify income and tap into high-value consumer markets. As India progresses, supporting small ruminant farming through policy, research, and market development will ensure the sector's sustainable growth, helping to meet the nutritional needs of an expanding population while empowering rural communities.

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