



Animal Resources In Tribal Food Habits: An Ethnozoological Study With Special Reference To Chhattisgarh

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Abstract

Tribal societies of Chhattisgarh have traditionally relied on locally available animal resources to fulfill their nutritional requirements. These animal-based food sources play a vital role in providing high-quality proteins, essential amino acids, fats, vitamins, and micronutrients necessary for growth, immunity, and overall health. In remote tribal regions, where access to market-based food systems is limited, traditional dietary practices ensure food security and resilience. The present study explores the diversity of animal resources consumed in tribal areas of Chhattisgarh, their zoological classification, and nutritional significance. The study is based on a synthesis of secondary data, published ethnozoological literature, and observational analysis. Findings indicate that animal resources significantly contribute to the prevention of protein-energy malnutrition and micronutrient deficiencies. The study emphasizes the need to preserve indigenous food knowledge and integrate it into sustainable nutrition and development strategies.

Keywords: Tribal nutrition, Ethnozoology, Animal-based food, Chhattisgarh, Nutritional security

Introduction

Chhattisgarh, located in central India, is recognized for its rich biological diversity and substantial tribal population. A large proportion of the state's inhabitants belong to Scheduled Tribes and reside in forested and rural landscapes. Despite abundant natural resources, tribal communities often face nutritional challenges due to economic constraints, geographical isolation, and limited healthcare infrastructure. Nevertheless, indigenous food systems rooted in traditional ecological knowledge have historically supported survival and health.

Animal-derived foods constitute an important component of tribal diets in Chhattisgarh. Rivers, ponds, and wetlands supply fish and other aquatic organisms, while forests and village ecosystems support domesticated animals such as goats, pigs, poultry, and ducks. Seasonal consumption of molluscs, crustaceans, and edible insects further enhances dietary diversity. These foods are culturally accepted, nutritionally dense, and adapted to local ecological conditions.

Ethnozoology examines the interaction between human societies and animal resources, particularly in the context of subsistence and culture. Documenting such relationships is essential not only for academic understanding but also for designing culturally sensitive nutrition policies. Under the framework of NEP-2020 and Value Added Courses, the relevance of such studies has increased considerably.

Objective of the Study

1. To identify animal resources commonly consumed in tribal regions of Chhattisgarh.
2. To document the zoological nomenclature and taxonomic classification of these animals.
3. To evaluate the nutritional contribution of animal-based foods in tribal diets.
4. To highlight the importance of traditional knowledge in achieving nutritional security.
5. To highlight tribal traditional diet and reintroduce them in the modern dietary store.

Study Area: Chhattisgarh

Chhattisgarh is characterized by extensive forest cover, plateau regions, and an intricate network of rivers such as the Mahanadi, Hasdeo, and Indravati. The climatic conditions and diverse habitats support a wide range of fauna. Tribal livelihoods are closely associated with agriculture, forest produce collection, fishing, and small-scale animal husbandry. Seasonal availability of animal resources strongly influences dietary patterns in these communities.

Materials and Method

The study follows a descriptive and analytical approach based on secondary data. Information was gathered from peer-reviewed journals, books on ethnozoology and tribal studies, government publications, and reports related to nutrition and public health. Zoological identification was carried out using standard taxonomic literature. Nutritional values were compiled from authoritative sources such as ICMR and FAO food composition databases. The collected information was systematically analyzed to understand the role of animal resources in tribal nutrition.

Review of Literature

Several studies have documented the importance of traditional food systems among Indian tribes. Early ethnozoological researches have highlighted that animal resources form an essential part of tribal subsistence strategies. Studies from Central India indicate that tribal communities consume a wide variety of animal species based on seasonal availability and cultural preferences.

Research on tribal nutrition has consistently reported a positive association between animal food consumption and improved nutritional status. Fish and meat consumption has been linked with reduced prevalence of anemia and protein deficiency. Edible insects, though often neglected, have been recognized as nutrient-dense foods rich in protein, fat, and micronutrients.

Studies specifically from Chhattisgarh reveal that tribes extensively use aquatic and terrestrial animal resources. However, most existing studies are localized and fragmented. A comprehensive review integrating ethnozoological knowledge with nutritional significance remains limited, highlighting the need for the present work.

Observation Table

Common Name of Animal	Zoological Name	Class	Nutritional Value
Rohu Fish	<i>Labeo rohita</i>	Actinopterygii	Rich in protein, omega-3 fatty acids, phosphorus
Country Chicken	<i>Gallus domesticus</i>	Aves	High-quality protein, iron, vitamin B12
Goat	<i>Capra hircus</i>	Mammalia	Easily digestible protein, zinc, iron
Pig	<i>Sus scrofa domesticus</i>	Mammalia	Energy-rich meat, fat, protein
Duck	<i>Anas platyrhynchos</i>	Aves	Protein, fat, fat-soluble vitamins
Crab	<i>Scylla serrata</i>	Crustacea	Calcium, zinc, protein
Snail	<i>Pila globosa</i>	Gastropoda	Iron-rich, moderate protein, low fat
Prawn	<i>Macrobrachium rosenbergii</i>	Crustacea	Protein, iodine, minerals
Termite	<i>Odontotermes obesus</i>	Insecta	Very high protein, fat, micronutrients
Field Rat	<i>Bandicota bengalensis</i>	Mammalia	Protein and caloric energy

Result

Analysis of the collected data reveals that tribal food systems in Chhattisgarh are nutritionally diverse and ecologically adapted. Animal resources consumed by tribal households represent multiple taxonomic classes, ensuring a balanced intake of macronutrients and micronutrients. Fish and poultry are the most frequently consumed due to their availability and ease of procurement. Goat and pig meat are generally consumed during social gatherings and festivals, while aquatic organisms and molluscs supplement mineral intake. Edible insects such as termites emerge as an important seasonal protein source.

A graphical analysis of protein contribution demonstrates that termites, poultry, and goat meat provide comparatively higher protein content, emphasizing their nutritional importance in tribal diets.

Discussion

The findings of the study underline the critical role of animal-based foods in addressing nutritional deficiencies among tribal populations of Chhattisgarh. Animal proteins possess high biological value and contain essential amino acids that are often limited in plant-based diets. Regular consumption of fish, meat, and eggs supports physical growth, cognitive development, and immune function, particularly among children and women.

Iron-rich animal foods help in reducing the prevalence of anemia, a common public health concern in tribal regions. The inclusion of aquatic organisms and molluscs contributes to calcium and mineral intake, supporting bone health. Edible insects, though undervalued in modern dietary discourse, offer a sustainable and nutrient-dense food source with minimal environmental impact. Traditional harvesting practices reflect an inherent understanding of ecological balance and sustainability.

However, modernization, habitat degradation, restrictive wildlife regulations, and changing food preferences pose significant challenges to the continuation of traditional dietary practices. There is a growing need to recognize indigenous food systems within public nutrition programs. Incorporating locally acceptable animal foods into schemes such as ICDS and school nutrition programs can improve effectiveness and community participation.

Conclusion

The present study concludes that edible animal resources are integral and indispensable part of the nutritional security and cultural identity of tribal communities in Chhattisgarh. Traditional ethnozoological knowledge has enabled these communities to utilize diverse animal foods in a sustainable and nutritionally efficient manner. Animal-based foods provide multifold benefits like essential nutrients that are critical for growth, immunity, and overall health, particularly among vulnerable groups such as children and women.

Preserving and promoting traditional animal foods is essential not only for improving tribal nutrition but also for conserving biodiversity and indigenous knowledge systems. Further researches in this area and their implementation at the policy level can significantly enhance their effectiveness and acceptance. Future research should focus on quantitative nutritional assessments and community involvement to ensure sustainable utilization of edible animal resources.

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