



A STUDY ON LIVESTOCK HOLDINGS OF RURAL HOUSEHOLD IN KORANG AND SIDO VILLAGE OF EAST SIANG DISTRICT, ARUNACHAL PRADESH.

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Abstract: *The study aims to explore the patterns of livestock holdings among rural households, their economic and social impacts, and the challenges faced in maintaining sustainable livestock production in korang and sido village of East Siang district of Arunachal Pradesh.. This study will contribute to a better understanding of the role of livestock in rural development.*

Livestock plays a major role in socio-economic development of rural households in India. Livestock are commonly defined as domesticated animals reared in an agricultural setting to produce commodities such as meat, milk, eggs. Increasing per capita expenditure on quality food products and growing demand for livestock and poultry products are characteristic and this region is full of business opportunities. This study adopts a descriptive design to examine livestock holdings among rural households. The research focuses on understanding patterns of livestock ownership, socio-economic determinants, and the impact of livestock on rural livelihoods.

Keywords: *Livestock, Korang, Sido, East Siang District.*

Introduction

Livestock plays a crucial role in the livelihoods of rural households across the world. It serves as a primary source of income, nutrition, agricultural support and social security. In many rural communities, livestock is not only an economic asset but also a cultural symbol of wealth and status. Rural households depend on livestock for multiple purposes including milk, meat, wool and manure which is used as fertilizers. Additionally, draft animals such as oxen and buffaloes contribute to agricultural productivity by assisting in ploughing. Animals like goats and sheep as well as poultry serve as quick income sources due to their shorter production cycles. India has been an agrarian economy and it is true even today. But there have been marked changes in agriculture and especially in the allied sector. There is an observable shift towards livestock sectors seen in the increasing share of the livestock sector in agricultural GDP. In India, livestock ownership is common, with a substantial portion of rural households owning cattle, buffalo, poultry, sheep, and goat. While livestock

ownership is widespread, there are variations in the types and quantities of animals held by different households, influenced by factors like land size, income, and access to resources. Studies

Rural households rear different types of livestock including cattle, buffaloes ,goats ,sheep, and poultry, depending on regional agro-climatic conditions and socio-economic factors. The primary purposes of livestock rearing include milk and meat production and manure for organic farming. Livestock ownership also provides financial security, as animal serve liquid assets that can be sold in times of economic distress.

The sale of livestock holdings varies across regions, influenced by factors such as land availability, climatic conditions, households' income levels and market access. Small scale farmers typically rear cattle, goats, poultry, pigs for subsistence and commercial purposes. On the other hand, there are also challenges or problems faced during the livestock holdings such as the maintenance cost and also there are no veterinary doctor available nearby for the livestock.

Despite its importance, livestock farming in rural areas faces several challenges, such as limited access to veterinary care, scarcity of fodder, disease outbreaks. There is also limited availability of quality fodder and pastureland.

OBJECTIVES

- To estimate the extent of dependence of rural households on livestock activities.
- To examine the problems in rearing livestock and marketing the products in the study area.

RESEARCH QUESTIONS

- What types of livestock are commonly kept by rural households?
- What are the primary purposes of keepin g livestock (e.g income, subsistence, labor, cultural reasons)?
- What role does livestock play in the overall income of rural households?
- How do households manage their livestock holdings, and what challenges do they face?

REVIEW OF LITERATURE :

Roy & Singh (2008) in their article “The fodder situation in rural India : Future outlook”, conducted a study and found that almost 73 percent of rural households keep animals of one kind or another and livestock play a special role in household security, particularly in smallholder farming systems. In areas with high livestock populations, income from livestock accounts for 30-50 percent of total farm income. The study observes a general increase in livestock numbers, with a notable rise in small ruminants. This trend is expected to intensify pressure on natural fodder sources, including forests and grazing land.

Philip (2010) in his article, “Livestock production; recent trends, Future prospects,” found that the livestock sector in developing nation has been rapidly expanding, driven by increasing demand for animal products due to population growth, rising incomes, and urbanization .The study provides comprehensive analysis of the past and present trends in global livestock production, highlighting its significance in food security, economic development and environmental sustainability.

Khan, Rehman, and Salman (2019) in their study, “Impact of Livestock Rearing on the socio-Economic development in North India,” analysed how livestock ownership influences the socio-economic status of rural households. Their findings suggest that livestock rearing contributes significantly to income generation, employment opportunities, and overall socio-economic development in rural communities. The study found that

livestock rearing serves as a significant source of income for rural families and in enhancing the socio-economic fabric of rural North India.

Kumar and Chand (1999) in their article “Goat Rearing in India”, observed that goat is unique among other ruminants by virtue of its small size. They found that forty percent of rural population especially the economically and socially backward classes, maintain goat for assured income. Therefore it provides security to the weaker section of rural population. The goat enterprise is primarily in the hands of weaker sections of rural population.

Devesh and Rawal (2008) conducted a study on “Livestock Holdings of Rural households in contemporary India”, found that households in the rural areas were largely found to rear cow, bullocks and buffaloes. Majority of the households owned and operated small land sizes of upto 5 acres, unlike land, bovine animals holdings were quite widespread among households in the village. 69.9 percent of the total households and in absolute numbers 93 households out of 133 households owned bovine animals. The two villages Bhatsana and Badheri, for which data was collected, showed both similarity and differences in pattern of relationship between social and economic status of the households and bovine holdings depending on their different geographical areas. In both villages average net income from animal rearing was about Rs 88 thousand per annum and in both the villages per animal output and return were higher for buffalo than for cow. Per animal income earned within these two villages was higher in Bhatsana (Rs 58454 per animal) as compared to Badheri (Rs 54034 per animal).

Singh and Pratap (2014), carried out their study on “Livestock Farming, Agro-climatic zones, integrated planning, Farming systems in Himachal Pradesh” and found that in Himachal Pradesh total livestock population was 46.24 lakh in 1972, which has increased to 50.93 lakh in 1992. The annual growth rate during this period was 0.59 percent. They also suggested that improvement in the bovine will have positive impact on growth in milk production.

RESEARCH METHODOLOGY

Primary data was collected using interview, surveys and focus group discussion. The methodology section outlines the research design, data collection methods and analytical approaches used to study livestock holdings among rural households. This research employs a mixed-methods approach, combining both qualitative and quantitative data to provide a comprehensive understanding of the factors influencing livestock ownership, its economic significance, and the challenges faced by rural households.

The research focuses on understanding patterns of livestock ownership, socio-economic determinants, and the impact of livestock on rural livelihoods. The source of data will be the primary source.

The study will be conducted in selected rural areas, chosen based on livestock dependence and agricultural significance. A stratified random sampling technique is used to select households for surveys.

This methodological approach will enable a comprehensive analysis of livestock holdings in rural households, providing valuable insights into their economic and social significance. This approach will also enable to understand the problems and challenges faced by farmers during livestock rearing.

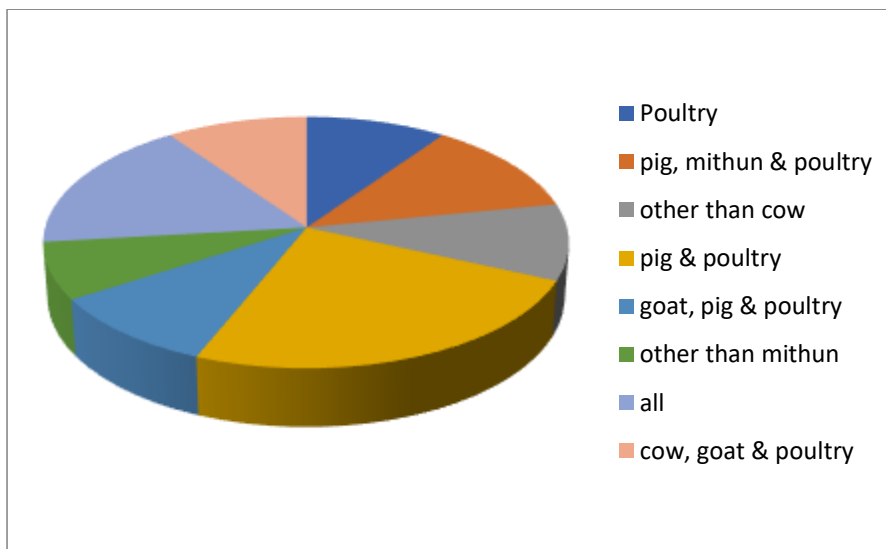
RESULTS AND FINDINGS

The major findings of the enquiry of ownership of livestock.

A) Livestock holdings in the surveyed villages

In the surveyed villages of Korang and Sido, majority of the household reared livestock such as poultry and cattle like pigs.

Fig 1: Types of livestock owned by the household.



Source: Field survey 2025

Table 1: Types of livestock owned by the households

Types of livestock	No. of household	In percent
Cow, goat & poultry	4	10%
Pig, Mithun & poultry	5	12%
Other than cow	4	10%
Pig & poultry	10	24%
Goat, pig & poultry	4	10%
Other than Mithun	3	7%
All	7	17%
Cow, Goat & Poultry	4	10%

Source: Field survey 2025

The above graph shows the different types of livestock owned by the surveyed villages. During the survey it was found that poultry holdings is the common and the easiest type of livestock for rearing. The households keep poultry for the purpose of self-consumption while only some of the household keep it for income generation. And secondly, the cattle rearing of pig holdings are very common, but the main challenge they face is the fodder for the said cattle. Other livestock like Goat, Cow and Mithun are held in less number as compare to the Pigs and poultrys.

B)DEPENDENCE OF RURAL HOUSEHOLDS ON LIVESTOCK ACTIVITIES.

During the survey it was found that most of the households reared livestock for household consumption and only few of the household uses it for the income generation. The village households are mostly interested in rearing pigs, poultrys and sold the livestock only in the village vicinity.

Table 2: Primary purpose of keeping livestock

Primary purpose of keeping household	No. of household	In Percent
1. Meat and household consumption.	1	2%
2. Income generation and household consumption.	14	34%
3. Household consumption.	26	63%
4. Other	0	0%

Source : Field survey 2025

The above table shows the primary purpose of the household for keeping livestock. During the data collection, most of the household's purpose for keeping livestock was for household consumption. As from the above table it can be seen that the household consumption is in 63% as compared to others. The villagers are not very fond of selling the livestock rather they prefer it for their own consumption. The total house surveyed was 41 household out of which 2% of the household use it for meat and household consumption and 34% of the household keep it for income generation and household consumption and the 63% of the household keep it for the household consumption.

Table 3: Sale of livestock by the household

Do you sell livestock ?	No. of household	In percentage
1. Yes	14	34%
2. No	17	66%

Source : Field survey 2025

The above table shows the sale of livestock by the household number of households. We can see that the household who does not sell their livestock is 66% and the household who sell their livestock is 34%. The no. of household who sell their livestock is less because majority of the household keeps their livestock for household consumption.

Table 4: Percentage of income from livestock.

Income comes from livestock	No. of household	In percent
1. less than 25%	2	5%
2. 25%-30%	8	20%
3. 30%-50%	4	10%
4. 50%-75%	0	0%
5. More than 75%	0	0%

Source : Field survey 2025

The above table 4 shows the percentage of income earned due to rearing of livestock. Out of the total 41 household only 14 household keep livestock for income generation. As seen in the above table, the majority of the household keeps livestock for their own consumption rather than for economic purpose. Out of the 14 household, 2 household gets 5% less than 25% of the income from the livestock, 20% of the household gets 25%-

30% of the income from the livestock sale and 10% of the household gets 30%-50% of the income from the income generation.

CHALLENGES FACED BY REARING LIVESTOCK

Although livestock provides food and income for the household. Livestock rearing faces numerous challenges:

- Limited access to food, pasture is a common problem during the dry season.
- The spread of disease outbreaks can lead to significant losses and impact the animal welfare.
- Lack of veterinary services or delayed diagnosis can worsen the problem.
- Climate change including extreme weather events and changes in climate patterns, can negatively impact livestock production by affecting feed and water resources and animal health.
- Lack of access to credit, insurance, and other financial management, and lack of skilled labor can affect the productivity and profitability of livestock.
- Overgrazing, deforestation, and pollution can negatively impact the environment and the sustainability of livestock production.

As per M.K Jain committee report, livestock farmers face greater challenges in comparison to traditional agricultural farmers especially while accessing credit and livestock insurance.

SUGGESTIONS

Following are the suggestions for maximizing the benefits of livestock ownership for food security, income generation and overall rural development.

- **Promoting sustainable livestock practices:** Encouraging responsible land management, responsible grazing practices, and improved animal health and nutrition to ensure the long-term viability of livestock holdings.
- **Integrating livestock with other sectors:** Policies should be made to recognize the interlink ages between livestock and other sectors, such as agriculture, forestry and rural development, and promote synergies between them.
- **Addressing challenges of livestock ownership:** Policies should address challenges such as disease outbreaks, climate change impacts, and market volatility, which can significantly impact livestock holdings and livelihoods.
- **Developing Market Infrastructure:** Improving infrastructure (roads, markets) and creating cooperative frameworks can enable rural households to better commercialization of their livestock products, increasing incomes. Supporting the establishment of efficient marketing channels for livestock products, including cold chain facilities and market information systems, can improve incomes and reduce post-harvest losses.
- **Animal health and extension services:** Strengthening veterinary services, disease surveillance, and farmer extension programs can reduce livestock mortality, boost productivity and prevent zoonotic disease outbreaks.
- **Livestock as a Poverty Alleviation Tool:** Policies should support small-scale livestock ownership as a livelihood strategy. Access to microcredit, veterinary services, and livestock insurance can strengthen household resilience and food security.
- **Youth Employment and Agri - business development:** Promoting livestock related agribusiness can create jobs for rural youth. Training programs in animal husbandry, value addition and entrepreneurship should be supported.
- **Promoting Sustainable livestock products:** Encouraging responsible land management, responsible grazing practices, and improves health animal health and nutrition to ensure the long-term viability of livestock holdings.

CONCLUSION

In conclusion, livestock continues to be a vital asset for rural households, offering nutrition, income, and employment opportunities. Despite its significant role, rural livestock farming faces persistent challenges such as limited access to quality fodder, inadequate veterinary care, market barriers, and financial constraints. Addressing these issues through enhanced veterinary services, farmer training programs, organized sector development, and improved rural infrastructure is essential. Sustainable livestock development demands both strong government support and active community participation. With targeted interventions, livestock farming can become a powerful tool for poverty reduction, food security, and sustainable rural development.

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