

## Livestock Trade in Rural Markets of Aligarh District

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### ABSTRACT

Livestock husbandry, a form of agriculture, is considered as a secondary source of income and provides good opportunity for employment and income generation. Livestock trade and their marketing is very old traditional activity in India. It is practiced in various forms. Researchers attempted to find out the marketing behavior of livestock particularly the spatial behavior of livestock marketing and livestock transactions through various marketing agencies in study area Aligarh.

The transaction of livestock varies according to their purpose i.e. whether it is meat animal or milk animal. The share of meat animals is highest due to the existence of three slaughter houses as also the facilities of transport and export. The more local consumption of meat is another determinant of higher transaction of livestock. The milch animals follow the numbers of meat animals. The transaction of livestock in villages is reverse. Most of the transaction is for the purpose of milk rather than meat. Among them the highest share is again of buffalo.

**Key Words:** Livestock, Transaction, Buffalo, Marketing agencies

### 1. INTRODUCTION

Since agies the livestock has been an important source for many purposes particularly for milk, meat, wool, egg, leather, draught power, companionship, entertainment, research experimentation, sports, security etc. Livestock constituted the oldest wealth resource of mankind and was taken as symbol of economic status in the society. Presently also livestock sector is playing a crucial role in rural economy and generation of livelihood. This is one sector from where poor is deriving benefits from the growth directly. (11<sup>th</sup> five year plan).

Livestock has been practiced as an auxiliary activity in the process of production of different foods since long time. The farm animals such as the cattle, the buffalo, the goat, the sheep, the pig, the hen etc. were always reared as domestic and subsistence animals. Many traditional practices were applied in the process of their rearing like mixed farming, nomadic herding and commercial grazing. Commercial form of livestock husbandry rarely existed during colonial period in Asian countries (Khan et al, 2008). In some cases, cattle and buffalo were reared in a very few regions and were used mainly for the work in agriculture as draught animals.

The demand of livestock products, however, rose up tremendously at global level as a sequel to increasing urbanization, burgeoning population growth as also improved income levels, changing lifestyles and consumption of high calorie food. (Delgado *et al* 1999, Rollefson, 2001 ; P.Chindola and J. Otte 2006, Brithal and Taneza, 2006, 2007 ). Such a transformation in demand and production of

livestock and their products has been described as Animal Revolution by International Food Policy Research Institute analysts (Conroy, 2004). The revolution has been accelerated after liberalization of agri-business and increasing demand of livestock and its products in global markets due to favourable prices in tropical monsoon developing countries (Padamkumar, 2007).

Accordingly, the livestock products from tropical countries are in great demand, both in Asian as well as in European markets. Livestock husbandry is well developed in India since long times, although in traditional form. This sector got a fillip after opening of the national economy to the international market. (Khan, 2006). This efforts certainly pushed India's export of livestock and its products to newer heights. Previously India was a major importer of livestock products but now the situation is reverse as she is one of the major exporters of livestock products. The increased global demand offered a good opportunity to India for further exports the livestock products.

### *1.1 OBJECTIVES*

The increasing demand of livestock products at international, national, regional as well as local level there is greater need to understand the trade of livestock at grassroots level. In the present paper, an effort is made to understand the following objective

1. The spatial behavior of livestock marketing in study area and
2. To show the livestock transaction through various marketing agencies

### *1.2 RESEARCH METHODOLOGY AND DATA COLLECTION*

Agriculturally, one of the developed districts of western Uttar Pradesh, Aligarh, has been chosen for study area. The present work, being a micro level study is based both on primary and secondary sources of data. The primary data were collected through field survey while the secondary data were sourced from different official documents and reports. The information regarding arrival of the livestock and livestock transaction has been collected from the field survey and government offices of sampled markets. One livestock market as well as one village has been chosen from each development blocks and for the study and from each village 50% households were surveyed. The stratified random sampling technique was followed for the purpose.

## **2 DISCUSSION**

### *2.1 SPATIAL BEHAVIOUR OF LIVESTOCK ARRIVALS*

Data collected from the sampled rural livestock markets during different market days indicated that on an average 4524 heads of livestock on one market days were brought for the transaction. Of these, goat, buffalo, cattle and sheep accounted for 1642 heads (36.29 %), 1607 (35.53%), 1014 (22.42 %), and 261 (5.76 %) respectively. They showed a great spatial variation in study area (Table 2). Their number varied between 1234 heads in Kwarsi to 90 heads in Mehrawal. Market to market variation is also shown in the composition of livestock arrived in the markets. The buffalo constituted largest share in Pengeri (58.44 %) while lowest in Naruna (22.20 %). All the markets had more than 30 % buffalo arrivals, except at Narauna. (Table 2).

Such variations of buffalo arrival were attributed to the size of markets, their proximity to town as well as the nature of livestock use in the region. The urban locations with good transport accessibility and large demand for livestock meat and milk were some of the causes for largest share of buffalo in all market days as Kwarsi market. Establishment of meat factory in the study area, the demand of buffalo meat by Muslim population in the surrounding area of the markets of Aligarh city caused the rapid increased in the arrival of buffalo. Contrary to this, the arrival of cattle was 45.55% in Mehrawal and 13.04 % in Kwarsi. The location of markets of higher arrival of cattle was usually the regions using oxen for draught purposes like ploughing the land and driving the carts. The increasing mechanization of agriculture has decreased the demand for cattle significantly in study area. The demand of cattle was also declined due to less milk production by the cows than buffalo in the study area. `

The maximum arrival of goat in the markets was attributed to the wide acceptability of mutton among all religious groups and increasing demand for mutton with increasing income levels of the population.

They were usually reared at household level by poor especially women in the study area. It has emerged as a new option for enhancing the economic power of women irrespective of any social class in rural areas of the district. The avocation is low capital intensive as animals are fed on some grasses and straw of crops grown.

However, the number of sheep arrival in the discussed markets is rather less owing to decline in their production in the region. Basically their rearing is controlled, traditionally by nomadic poor backwarded shepherd locally known as Gararia. Sheep rearing is ideally practiced in semi-arid and mountainous areas where grass/pastoral land are easily accessible for their grazing. Contrary to this, Aligarh district follows intensive commercial farming system in which field without crops is rarely found. These unsuitable conditions discouraged the sheep production and arrival in the markets. Besides, the availability of the cheaper synthetic wool has reduced the demand for sheep wool and diminished the tradition of sheep rearing in study area.

## 2.2 SPATIAL BEHAVIOUR OF LIVESTOCK TRANSACTION

Livestock transaction refers the number of animals sold which is rather less than the arrival generally. The proportion of arrived livestock varies from market to market in response to demand. The Proportion of different kinds of livestock transacted in sampled markets of the study area is shown in Table 3. Out of 4524 arrivals of livestock, 2997 (66.24 %) were traded in Aligarh district in one day through rural livestock markets. These traded livestock varied from market to market (table 4). Out of 12 markets, 9 markets traded more than 60 % livestock of their respective market arrival. Nanao recorded highest share (74.70 %) followed by Mehrawal ( 73.33 %), Khair (73.33 %) and Pengeri (70.48 %). All livestock markets transacted more than 50 % of arrived livestock.

The livestock species transacted also indicated marketwise variation in study area (table 3). The buffalo varied from 24.25 % in Narauna to 68.18% in Mehrawal (Table 3). Similarly, cattle, sheep and goat also showed spatial variation. This spatial variation was attributed mainly to the distance of markets from urban centers especially Aligarh city. Livestock markets located near urban centers transacted rather higher proportion of arrived livestock, especially buffalo and goat, while the markets having interior location transacted less number of livestock arrived.

Goat transaction exhibited greater demands in these livestock markets as evident from data. About 41.04 percent of total arrived goat in the markets of Aligarh transacted on an average. Their demands for mutton in urban centers as well as in rural areas have continuously increasing as well as the mutton is socially acceptable to all communities of Indian society. Goat demand is over the supply in the study area. On some occasions especially IEDUL AZHA, a religious festival of Muslims and on marriage seasons, demand is met by import of livestock from surrounding station like Rajasthan and Haryana.

Moreover, the cattle and sheep recorded lowest rate of transaction. Their proportions of sale to total animals were 15.61 percent and 3.53 percent in the discussed market while the sheep mutton is not preferred over goat mutton, so that their sale in the markets is generally declined.

## 3 Livestock Marketing

Livestock trade in India and especially in the study area mainly occurred at grassroots level market i.e. rural markets. Intra-village and inter-village trades is also taking place. The concentration of livestock transaction in these places is attributed to their bulky size and weight as well as difficulty of transportation of live animals. The agencies through which livestock in study area are traded, discussed below.

### 3.1 LIVESTOCK MARKETING THROUGH VARIOUS AGENCIES

Livestock marketing is one of the traditional and tertiary economic activities. Unlike marketing of livestock products, livestock marketing was not very prominent in the area. It varied with place and time. There were many transaction points of livestock like livestock market, rearing point (house), common shading point of livestock. Livestock market is a place of livestock transaction and it played a great role in selling and purchasing of livestock. These markets are held once a week, forming a periodic market for livestock. Sellers as well as purchasers visit these markets having travelled long

distance and from the nearby. They would carry the animals by small trolley from long distances while villagers near to market would carry them manually. The transaction also varied from point to point depending upon the category of ownership of the animals and type & size of livestock. It also depended on both sellers and purchasers.

Generally, landless, marginal and small farmers visit the livestock market while big and medium class farmers avoided going to these markets. The brokers as well as the servants of big and medium class farmers (having good social and economic status in the society) purchased and sold their animals.

There were different channels which might be followed to transact different kinds of livestock. In the study area, the marketing of livestock indicated that there were four selling points (agencies), viz, villages, rural markets, factory and others for transacting the livestock.

### *3.2 LIVESTOCK TRANSACTION IN THE VILLAGES*

Livestock marketing was very common in villages like agriculture commodities in study area. Farmers sold their livestock directly to buyers coming their door steps. The buyers were usually from the same village or from nearby villages. Some Dalal (Informal commission agents) were usually present at the time of transaction. In this type of transaction, marginal and small farmers played a major role compared to big farmers. Data revealed that trading of livestock in rural markets preceded the trading in village markets. Out of 840 households, 240 (28.57 %) traded their livestock in their own villages at their houses. The household participation of livestock rearers in village varied from 21.42 % in Iglas to 35.72 % in Dhanipur. This significant contribution of village trading is attributed to the dominance of marginal and small farmers in the villages, considering to save the time and money of the farmers and good understanding of the quality of concerned milch animals. Age, period of lactation, amount of milk and some other physical traits were considered for transaction.

The livestock usually transacted in villages were milch animals. But still goat and sheep were transacted mostly for meat purposes with the demand for meat increasing in rural as well urban areas. Goat, being not capital intensive, are considered as ATM of landless people and of women. The transaction of goat was also high for the reason that butchers wandered villages thorough in search of cheap animal available in the villages. Other cause was that women wanted to get ready money preferred to sell the animals at the household level.

### *3.3 LIVESTOCK TRANSACTION IN THE RURAL MARKETS*

Rural markets were the main places of transaction for livestock in the study area. All types of livestock, particularly buffalo, cattle, sheep and goat are sent to the rural markets from villages for their transaction. In each market, some commission agents played important role in the transaction of livestock. There were also government officials to record and register the transaction. The data indicated (table 5) that 57.14 % of surveyed households were involved in trading their livestock in rural markets. The share of households who transacted their livestock in rural market varied from block to block, ranging between 51.42 % in Khair to 61.14 % in Akrabad.

The transaction of livestock in rural markets depended on the nature and purpose of the livestock use. Study revealed that the proportion of milch animals of each type was low in all markets. It was attributed to the fact the milch livestock purchasers were not well informed about the breed, genetic history and quality of marketable livestock required for milk production. Therefore, animals for purposes of meat and draught showed a lion's share in trading in rural markets.

### *3.4 LIVESTOCK TRANSACTION IN THE FACTORY*

The presence of factory is also important for trading of livestock. Four meat processing units in the study area also determined the transaction of livestock for meat. Milch animals were not purchased in the markets except when they were declared for meat purpose. Buffalo were found to be sold in the factory for meat purposes. Cattle were not found to be sold in factory due to the prohibition of their slaughtering. Goat and sheep were also not found to be sold in the factory.

#### 4. CONCLUSION

Livestock markets played a significant role in transaction of livestock in study area. More than 50 % arrived livestock were transacted in rural markets. Among them goat and buffalo contributed a lion's share in both arrival and transactions followed by cattle and sheep. The large share of buffalo was attributed to the size of markets, their location near the town as well as the nature of use of livestock in the region. The urban locations with good accessibility and high demand for meat and milk, the demand of buffalo meat by Muslim population are one of the causes for more buffalo marketing in Kwarsi market.

The large share of goat is due the fact that they are widely acceptable in all ethnic groups unlike beef in study area. Goat is usually reared at household level by poor women in the study area. It has emerged as a new option for enhancing the economic power of women irrespective of any social class in rural areas of the district. It is low capital intensive and can be fed on grasses and straw of crops. Contrary to this prohibition of cow slaughter, the increasing mechanization of agriculture has decreased the demand of cattle at considerably in the study area. The demand of cattle for milk purposes is also declined due to less milk production by cows than buffalo in study area. The production of cheap synthetic wool has reduced the sheep rearing in study area. Accordingly, sheep arrivals and transactions were relatively less in the study region.

Among marketing agencies of livestock transaction, rural marketing occupied leading position followed by village markets and the factory. Rural markets mostly traded meat animals irrespective of availability of meat and milch animal. Domination of marginal and small farmers in the village as, saving of time and money and consideration for the quality of milch animals encourage the livestock transaction in the village.

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### Location map of study area

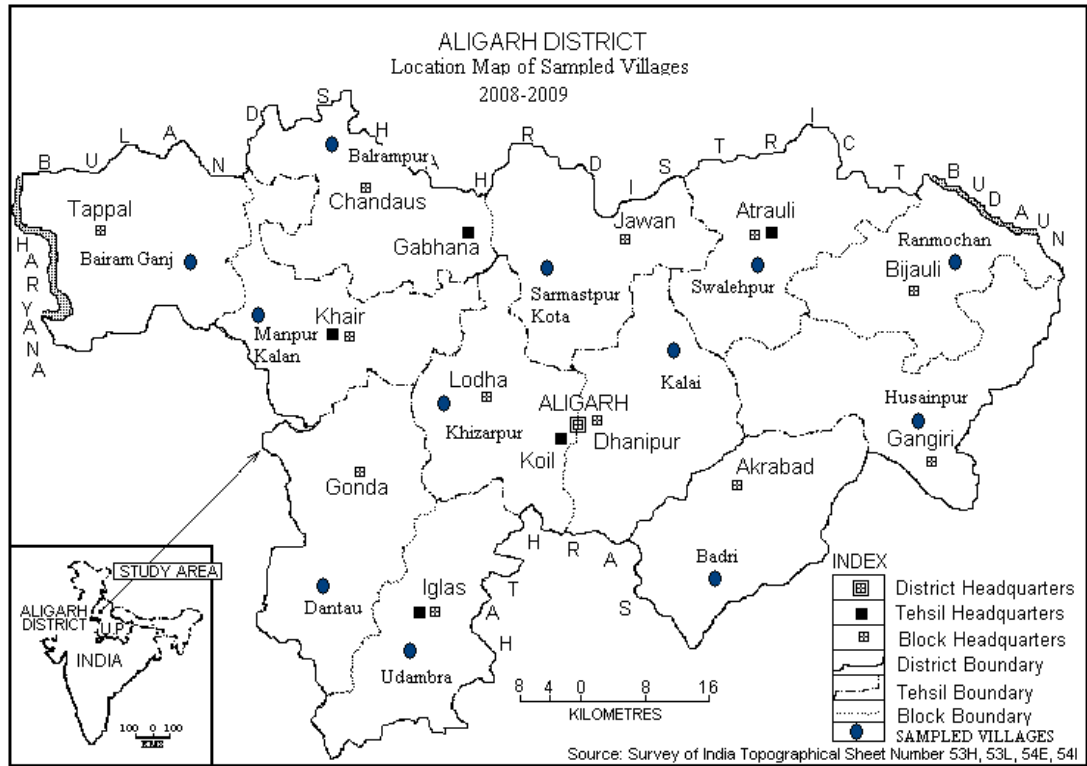


Photo 1: Buffalo transaction in livestock market





Photo 2 : Goat transaction in livestock market



Table 1: Sampled Villages and Livestock Markets in different blocks in the district

S.No.	Block	Name of the villages	Livestock Markets
1	Tappal	Bairam ganj	Takipur

2	Khair	Manpur Kalan	Khair
3	Chandaus	Balrampur	Somna
4	Jawan	Sarmastpurkota,	Talibnagar
5	Atrauli	Swalehpur	Narauna
6	Bijauli	Ran mochan	Dadon
7	Gangiri	Husainpur	Barlamor
8	Lodha	Khizarpur	Kwarsi
9	Dhanipur	Kalai	Mehrawal
10	Akrabad	Badri	Nanao
11	Gonda	Dantau	Pengeri
12	Iglas	Udambra	Ghanterbagh

Sources: Field Survey 2010

Table 2: Proportion of different kinds of livestock arrivals in sampled markets

Livestock Markets	Buffalo	Cattle	Goat	Sheep	Total
Kwarsi	394 (31.92)	161 (13.04)	529 (42.86)	150 (12.15)	1234 (100)
Barlamor	102 (33.44)	116 (38.03)	87 (28.52)	0 (0.00)	305 (100)
Nanao	175 (34.31)	95 (18.62)	216(42.35)	24 (4.70)	510 (100)
Narauna	111 (22.20)	134 (26.80)	218 (43.60)	37 (7.40)	500 (100)
Takipur	58 (38.66)	56 (37.33)	36 (24.00)	0 (0.00)	150 (100)
Khair	86 (30.17)	60 (21.05)	125 (43.85)	14 (4.91)	285 (100)
Talibnagar	68 (31.62)	49 (22.79)	98 (45.58)	0 (0.00)	215 (100)
Pengeri	301 (58.44)	111 (21.55)	84 (16.31)	19 (3.68)	515 (100)
Dadon	108 (37.24)	95 (32.75)	87 (30.00)	0 (0.00)	290 (100)
Ghanterbagh	98 (32.13)	58 (19.01)	132 (43.27)	17(5.57)	305 (100)
Mehrawal	49 (54.44)	41 (45.55)	0 (0.00)	0 (0.00)	90 (100)
Somna	57 (45.60)	38 (30.40)	30 (24.00)	0 (0.00)	125 (100)
Total	1607 (35.53)	1014 (22.42)	1642 (36.29)	261 (5.76)	4524 (100)

Sources: Field Survey 2010

Table 3: Proportion of different kinds of livestock transacted in sampled markets

Livestock Markets	Buffalo (NO. and Percentage)	Cattle	Goat	Sheep	Total
Kwarsi	339 (39.56)	77 (8.98)	375 (43.75)	66 (7.70)	857
Barlamor	61 (35.26)	55 (31.79)	57 (32.94)	0 (0.00)	173
Nanao	137 (35.95)	45 (11.81)	199 (52.23)	0 (0.00)	381
Narauna	81 (24.25)	67 (20.05)	167 (50.00)	19 (5.68)	334
Takipur	34 (43.58)	19 (24.35)	25 (32.05)	0 (0.00)	78
Khair	73 (34.92)	24 (11.48)	108 (51.67)	4 (1.91)	209
Talibnagar	48 (39.02)	17 (13.82)	58 (47.15)	0 (0.00)	123
Pengeri	221(60.88)	59 (16.25)	75 (20.66)	8 (2.20)	363
Dadon	63 (40.38)	41 (26.28)	52 (33.33)	0 (0.00)	156
Ghanterbagh	57 (30.00)	30 (15.78)	94 (49.47)	9 (4.73)	190
Mehrawal	45 (68.18)	21 (31.81)	0 (0.00)	0 (0.00)	66
Somna	34 (50.74)	13 (19.40)	20 (29.85)	0 (0.00)	67
Total	1193 (39.80)	468 (15.61)	1230 (41.04)	106 (3.53)	2997

Sources: Field Survey 2010

Table 4: Proportion of total livestock arrival and transacted in rural markets

Livestock Markets	Livestock Arrival	Livestock Transacted	Percentage of total livestock transacted
Kwarsi	1234	857	69.44
Barlamor	305	173	56.72
Nanao	510	381	74.70
Narauna	500	334	66.80
Takipur	150	78	52.00



Khair	285	209	73.33
Talibnagar	215	123	57.20
Pengeri	515	363	70.48
Dadon	290	156	53.79
Ghanterbagh	305	190	62.29
Mehrawal	90	66	73.33
Somna	125	67	53.60
Total	4524	2997	66.24

Sources: Field Survey 2010

Table 5: Proportion of surveyed household's participation in livestock trades in various agencies of livestock marketing in sampled villages of Aligarh district

Blocks	Villages	Rural Markets	Factory	Others	Total
Tappal	20 (28.57)	41(58.57)	2 (2.85)	7 (10.00)	70 (100)
Khair	21 (30.00)	36 (51.42)	2 (2.85)	11 (15.71)	70 (100)
Chandaus	21(30.00)	42 (60.00)	3 (4.28)	4 (5.71)	70 (100)
Jawan	23 (32.85)	41 (58.57)	4 (5.71)	2 (2.85)	70 (100)
Atrauli	21(30.00)	39 (55.71)	2 (2.85)	8 (11.42)	70 (100)
Bijauli	18 (25.71)	37 (52.85)	3 (4.28)	12 (17.14)	70 (100)
Gangiri	23 (32.85)	42 (60.00)	2 (2.85)	3 (4.28)	70 (100)
Lodha	20 (28.57)	42 (60.00)	2 (2.85)	6 (8.57)	70 (100)
Dhanipur	25 (35.71)	37 (52.85)	4 (5.71)	4 (5.71)	70 (100)
Akrabad	17 (24.28)	43 (61.42)	3 (4.28)	7 (10.00)	70 (100)
Gonda	16 (22.85)	41 (58.57)	4 (5.71)	9 (12.85)	70 (100)
Iglas	15 (21.42)	39 (55.71)	4 (5.71)	12 (17.14)	70 (100)
Total	240 (28.57)	480 (57.14)	35 (4.16)	85 (10.11)	840 (100)

Sources: Field Survey 2010

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