

Analysis of Marketing Issues of Beef in Shikarpur District

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Abstract: *The current research investigates the ANALYSIS OF MARKETING ISSUES OF BEEF IN SHIKARPUR DISTRICT. Data were collected from 30 farms from Shikarpur and their vicinity. Data were Analysis by using SPSS-21 version. It was revealed that revealed that out of 50 farmers, 33 percent were literate and 67 percent were illiterate. The producer earned the net margin of Rs.3000 for each buffalo and Rs.3400 for each cattle after incurring the total expenditure of Rs.2300 for buffalo and Rs.2500 for cattle. The marketing agencies involved in the trade were identified as trader, middleman and final seller. While the middleman incurred Rs.116.40 for buffalo and Rs.100.70 for cattle, final seller incurred Rs.129.25 for buffalo and Rs.97.50 on cattle. The price spread between producer and trader, trader and middleman, middleman and final seller was Rs.372.93, Rs.937.80 and Rs.1150.00 for buffalo and Rs.711.03, Rs.901.40 and Rs.925.00 for cattle respectively. Marketing margin for trader, middleman and final seller was 1.96, 4.72 and 4.10 percent for buffalo and 4.62, 4.95 and 4.85 percent for cattle respectively. The maximum markup was 4.95 and 5.21 percent earned by middleman for the sale of buffalo and cattle respectively, while the minimum percentage received by trader was 1.80 percent from the sale of buffalo and 4.18 from the sale of cattle. The price paid by consumer on buffalo was shared as 89.58 percent by producer, 1.80 percent by trader, 4.52 percent by middleman, and 4.10 percent by final seller, whereas, in case of cattle it was shared as 86.27 percent (producer), 4.18 percent (trader), 4.7 percent (middleman), 4.85 percent (final seller).*

Key Word: *Analysis, Marketing Issues, Beef, Shikarpur, District*

Introduction: The marketing of meat plays a pivotal role in the beef enterprise, however, no systematic attempt has been made to study the marketing practices of meat at various district of Sindh. Therefore, an investigation on marketing of beef in the district of Nawabshah was designed to study and assess the beef animal production patterns and their marketing in Shikarpur district. The nutritional value of food comes from its protein, vitamins, minerals and fat contents. Meat is essentially of a high biological value. Major contribution of meat of the diet is on account of its high quality protein content including fatty acids, B-complex, vitamins and minerals. In Pakistan meat production comes from cattle, buffaloes, sheep, goat and in some areas from camels, (Ahmed and Alvi, 1988). The country produced 1.6 million metric tons of meat in 1991-92 of which 47.6 percent from cattle and buffaloes while rest (52.4 percent) from sheep, goat etc. (anonymous, 1992). These animals are sold in primary rural markets and are purchased according to visually appraised weight. Meat animals are brought by middlemen, who only estimate the weight of an animal from its appearance. The middlemen resell the purchased animals in the city at cattle market to butcher for slaughter purpose (Umrani 1993).

The marketing of meat starts from the slaughtering of animals. Thus livestock slaughtering is an important part of the marketing of beef and its by products and are sold through various channels from slaughter house to consumer (Isani, 1992).

II- REVIEW OF LITERATURE

Averin (1981) described that the economic legal and organizational aspects of the system of insuring farm animals came into effect in 1.1.1779 in U.S.S.R. much space was given to the method of establishing damage and of calculating insurance benefits. The main part of the study dealt with the insurance of livestock in Kelkhozy and Sovkhozy, but insurance of privately owned livestock as well as those in other types of state and collective farms.

+ Buccola (1981) estimated that Bermoulian decision theory was used to characterize a firm willingness to purchase or sell the goods under contract. Contract supply and demand functions were then specified in which willingness to contract was related to contract-pricing provisions, to decision maker risk aversion, to open market opportunities and to other factors. On the basis of these relations, a theory of exchange was proposed which incorporated decision making

under risk. Implications of the analysis differed by contract type, cost-plus, and fixed price forwarded deliverable contracts were emphasized.

+ Bottcher (1981) conducted study on the role of the marketing system in the development process. It was observed that there were links through the flow of capital, the integration of agriculture with the rest of the economy and agricultural marketing as a sub-system of the economy. The effects of price and marketing arrangements and of the lack of skilled manpower, management, physical and institutional infra-structures were also examined, in particular: how marketing was influenced by government price policies. Proposals for improvement included greater participation of groups involved at all levels, the strengthening of cooperation, especially at village level, the training of skilled manpower and the revision of price policies.

Davis and Weisenborn (1981) discussed the practical experience of designing a market development programme in El-Salvador and the implications, it had for directly helping the small producer and indirectly, the smaller consumer. The experience offered some valuable lessons in the design of small farmer development programmes for LDCs. It was concluded that an effective programme must go beyond the construction of market facilities to include a price stabilization policy, a working capital fund, a regional storage network and institutional support.

Rao (1981) reported that the availability of weekly markets (locational aspects of the channels of marketing) to farmers and traders was examined for the pre-irrigation stage in Karnataka, India. He indicated that the weekly markets in the district, which were located in highly, populated settlements, function in the way they were expected to. These should be made into secondary markets, while at the taluka head-quarters wholesale (regulated) markets should be further strengthened. He suggested that a strong network of weekly markets would provide economic stability for farmers.

Span (1981) reported the susceptibility to predation, the small size of goats and sheep and some great advantages in the small scale operations of most villages.

With small units there was much greater financial flexibility and less risk in sales and purchases and adjustment of the pressures on pasture resources was easier than with cattle. The goat appeared to have developed and remarkably comprehensive range of mechanisms which enable it to utilize, more fully than most livestock, the wide range of resources in the African rangelands. So far these attributes had enabled goats to maintain (or decrease the rate of decline in) the output of animal products from deteriorating rangelands.

Sabrani and Siregar (1981) indicated that the place of small ruminants in farm family employment, crop use, production and food cash production was clearly important in farming in improvement programme. Family size appeared to be a factor, acreage was highly and positively correlated in perennial cropping system, but not in seasonal crop production systems. Small ruminants were adaptable to small scale farming system and readily marketable, they also form an increasing proportion of total meat provision as beef supply went into long run decline. In addition to their compatibility with small scale farming system would allow small ruminants to play a part in adaptation processes. Capital provision and the investment climate would need improvement, as it would help the development of farmer's skills and of relevant institutional support system.

Riordan (1982) observed that the gross margins earned by sheep production on the lowlands were 70 percent above than those from barley and from beef in 1980. Less capital was needed to finance sheep production than many other agricultural enterprises notably beef in Ireland. There was ample scope for growth in output because, the EC sheep meat regime provided a market where prices upto 1985 would at least be maintained relative to other products and where Ireland's exports only provided, hill lambs could be fed and managed to make them for more valuable as they sell for less than half of the price of lambs from the lowland flocks.

The attraction of producing sheep on the lowland, could be increased by greater productivity of both grass land and ewes, the work of shepherding could be reduced by the development and use of easy care system, dealing with the problem of dogs worrying sheep. Sheep provided exports worth IR pound 55 mill in 1981. Sheep were a major product of the disadvantaged area including all the countries west of the Shannon. Farmers in these courtiers producing sheep were more dependent on sheep and had lower levels of total output and income than most of the other farmers in Ireland. Aids given

to hill sheep producers in the disadvantaged areas had added notably to the profitability of hill sheep and there had been growth in number of hill ewes. There was now scope for raising the value of each lamb produced by hill ewes.

Olafsson (1984) studied 120 family farms in Iceland and classified them into three groups, dairy, mixed (sheep and dairy) and sheep. Family income for all farms averaged 481 and 171 Kr. The dairy farms were largest in size (809 sheep equivalents), and had on average a family income of 559 and 395 kr. And the mixed farms had an average family income of 406 and 429 kg. The sheep farms (9366 sheep, equivalents) which were smaller in size than the mixed farms (492 sheep equivalents), had an average family income of 364 and 106 kr.

Average milk yield on all farms increased by 1.9 percent and lamb production per ewe increased by 2.3 percent. The maximum production policy per animal advocated by the advisory services for a number of years and followed by great number of farmers, particularly younger farmers, had proved to be the right policy for farmers, in general to increase the gross margin per sheep and dairy cow as well as per man-hour. Great disparity emerged between farms. The gross margin per sheep ranged from 600 to 3000 kr. While gross margin per dairy cow ranged from 12.000 to 5.000 kr.

Anonymous (1985) concluded that despite the ravages of drought and continued diversification of new south Wales primary producers into various cropping enterprises, the sheep industry remained as and most consistent rural earner of local and export income. In addition to the above. New South Wales Australian sheep producers earned upwards of 30 million per annum in the sale of live sheep for export for slaughter through South Australia, Victoria and Queensland.

Hamm. Et al. (1985) designed a study regarding buyers on computerized auctions to exhibit man of the characteristics expected in conventional auctions. They controlled the timing of bids and tried to assess the buying strength on the market for that particular auction. Bidding was anonymous and the anonymity feature appeared to increase the level of competition. Prices were higher because buyers continued to compete at the end of the auction, behavior which would not be expected in conventional auctions where bidding was not anonymous, computerized auctions featuring anonymous bidding might have the potential to increase competition in thin markets.

Futton (1989) stated that in 1987 beef cattle production accounted for approximately 34% of gross agricultural output and 31% of the 'regional farm' gross margin in N. Ireland. The value of beef exports was 215 million (at farm gate prices), representing 42% of the total value of agricultural exports. The report analyzed developments that have occurred within the processing sector during the 1980s. The changing pattern of cattle throughout in abattoirs were examined. Differences in seasonality of slaughtering, long-term trends in throughout and types of beef animals handled are quantified. The employment characteristics within the trends, especially in relation to cattle throughout were looked at. Market outlets for Northern Ireland beef were also focused. Intervention and non-intervention beef movements treated separately so that the changing situation with respect to these two distinct categories could be clearly identified.

Data Collection Methodology

Data were collected from Primary sources survey method on production and marketing patterns of beef animals in Shikarpur district. A detailed questionnaire (Appendix-I) was prepared and pretested before using it to collect primary data were surveyed. 50 farmers (producers) and 30 marketing agencies including Traders, middlemen and final salers were interviewed for the collection of data. The data were collected by interviewing them and information thus obtained was transferred to the primary tabulation, wherein data for earlier study area was classified, analyzed and interpreted to arrive at definite conclusions.

Table-I sampling pattern from different talukas and towns of Shikarpur District.

Taluka & Towns of Shikarpur District	Number of Large Ruminants	Markets Surveyed
	Farms Surveyed	
Shikarpur	18	2
Lakhi	12	2
Ghari yasin	10	2
Khan Pur	10	3
TOTAL	50	09

METHOD OF ANALYSIS:

The data so collected were subjected to analysis by using various formulae.

The following formulae were applied to compute the parameters related to market efficiencies.

1. Price spread: were computed after Acharya and Agarwal (1970).

- Ps** = $Pr - Pp$
Ps = Denotes price spread
Pr = Stands for price received
Pp = Symbolized price paid.

2. Estimation of marketing margins was done as suggested by Shepherd (1962).

- Mm** = $(Am \times 100) \div SP$
Mm = Denotes price margin
Am = Represents absolute margin
Sp = Represents setting margin
Iw = Shows percentage.

3. Net Margins were calculated according Qureshi (1974).

- Nm** = $Am - Mc$
Nm = Denotes net margin
Am = Shows absolute margins
Mp = Stands for marketing

4. Estimation of marketing margins was done as suggested by Shepherd (1962).

MP =	$(Am \times 100) \div Pp$
MP =	Shows markup
Am =	Stand for absolute margins
Pp =	Symbolizes price paid
100 =	Denotes percentage

5. Breakdown of Consumer's rupee was done according to Qureshi (1974).

Bdcr =	$Nm \div Pp$
Bdcr =	Denotes break down of consumer's rupee.
Nm =	Stand for net margins
Rp =	Shows retail price

6. Cost benefit ratio was computed by the method suggested by Siddique et al. (1983).

Cbr =	$Nr \div Tc$
Cbr =	Represents cost benefit Ratio
Nr =	Stands for net returns
Tc =	Denotes the cost

IV- RESULTS AND DISCUSSION

Production and marketing are closely related with each other, in the sense that, the production creates the things and making adds to them (Issni,1992). The present study was therefore, carried out to assess the production as well as marketing pattern of large ruminants in Shikarpur district.

PRODUCTION PATTERNS:

Large ruminants are found throughout Pakistan, but the production pattern of these differ from one area to another. In the present study this was studied by interviewing the farmers (producers) at different farms of Shikarpur district. The information so collected from them, is interpreted under the following heading.

GENERAL INFORMATION:

Education of farmers(producers)

A sound technical knowledge on production pattern, and marketing operation with new development introduction in it, is necessary for recovering proper benefits. This cannot be achieved, until farmers are not properly educated. The literacy rate of large ruminants owners was student at selected farms of Nawabshah district which below:

TABLE-2 LARGE RUMINANTS FARMS TYPES CATEGORIZED IN NAWABSHAH DISTRICT.

PLACE OF FARM	TYPE OF FARMS				Grand Total
	Buffalo Farms		Cattle Farms		
	No.	%	No.	%	
Shikarpur	12	66.66	6	33.33	14
Lakhi	12	71.43	4	28.57	12
Khan Pur	12	66.66	6	33.33	12
Ghari yasin	10	54.55	5	45.45	12
TOTAL	46	60.87	32	37.13	50

SIZE OF LARGE RUMINANTS FARMS

The information pertaining to size of large ruminant farms is displayed in the Table-8. It can be seen from the results that average area for buffalo farm was 1519.14 Sq. feet and 650 square feet were for cattle farm.

TABLE-11 MARKETING COST OF FARMERS (PRODUCERS) ON LARGE RUMINANTS IN SHIKARPUR DISTRICT.

Marketing Cost	Buffalo		Cattle	
	Rs.	Percent	Rs.	Percent
Munshina	10.00	8.70	10.00	10.10
Octroi Tax	5.00	4.35	5.00	5.05
Transportation	25.00	21.74	24.00	24.24
Miscellaneous	75.00	65.22	60.00	60.61
TOTAL	115.00	100.00	99.00	100.00

TOTAL EXPENDITURE OF FARMERS/PRODUCERS ON LARGE RUMINANTS:

The total per animal expenditure of a farmer (Producer) from farm to market calculated and is shown on Table-12. It may be observed that total expenditure on buffalo was Rs.17253.27 of which Rs.16869.57 incurred on fixed cost, Rs.268.70 was spent as recurring cost and Rs.115 as marketing cost. The fixed cost was the highest (97.98%) followed by recurring cost (1.56%) and the marketing cost (0.67%). However, cattle farmer incurred per animal Rs.13124.00 on total expenditure, which included fixed cost Rs.10500. (80.00%) recurring cost Rs.2525.00 (19.24%) and marketing cost Rs.99.00 (0.75%).

Conclusion

The current study highlighted the marketing margin that The farms were categorized as buffalo farms (64.87%) and cattle farms (37.95%), had an average area of 1519.14 sq.ft. and 650sq. feet respectively. The average number of animal were 23 buffalo and 12 cattle/farm. The producer incurred average fixed cost Rs.16869.57 per buffalo and Rs.105000 per cattle. The recurring cost was averagely Rs.2608.70 per Buffalo &Rs. 2525 per cattle. He had also to pay marketing cost, where his animals were processed for selling to market, which was Rs.115 for buffalo and Rs.99 for cattle. The total expenditure incurred on buffalo was Rs.17253.27 per buffalo and Rs.13124 per cattle. The sale process of producer were Rs.18907 for buffalo and Rs.14516.67 for cattle per year. The producer received net margin of Rs.1653.73 from sale of buffalo and Rs.1392.67 from sale of cattle respectively. On one rupee expenditure for buffalo, the middleman earned the highest benefit Rs.7.056, where the producer earns the lowest 0.096, the final saler Rs.6.758 and trader Rs.2.528. Whereas in case of cattle, the final saler received the maximum Rs.7.462 and the producer, the minimum 0.106, while trader and middleman earned Rs.6.958 and 6.514 respectively as compared to marketing cost Rs.1.00

LITERATURE CITED

- Acharya, S.S and N.L Agarwal.1987. Importance of study of marketing agriculture marketing in India Oxford and IBH publishing Co., 66 Jan Path New Dehli 110001; 317
- Ahmed,W and A.S alvi 1988. "Goat meat production in Pakistan" Proc. Workshop on goat meat production in Asia, held at Tando Jam Pak. 13-18 March, 1988 pp-161.
- Anonymous. 1987. Reported in the FAO/Asia Development Bank Cooperative Programmed, Investment centre. Food and Agriculture Organization of United Nation Rome.18-20
- Anonymous. 1991. Demand for met in Japan. Meat Demand Trends. 91 (2): 3-10.
- Anonymous. 1991. The livestock and meat market. Agri. Review Europe. 33(1):101.
- Anonymous. 1989. Farm business date. Agri. Econ and Anagenert U.K. pp-95.
- Averin, V.S. 1981. Insurance of Farm livestock. World Agricultural Economics and Rural Sociology. Vol.24 No. 10 October. 1982:744.
- Blyth, N. 1980. The EEC sheep meat regime: arrangements and implications World Agricultural Economics and Rural Sociology. Vol.24 No.6. June 1982:345.
- Bottcher, D. 1981. Agricultural Marketing in the third world bottlenecks and problems-proposal for remedies. World Agricultural Economics and Rural Sociology. Vol 24 No.2, February 1982:93.
- Buccola, S.T 1981. The supply and demand of marketing contractor under risk. World Agricultural economics and rural Sociology. Vol.24 No.2, February 1982:90.
- Buccola, S.T 1982. Price trends at livestock auction world agriculture economics and rural sociology Vol124 No.6 Jun 1982:340
- Bullock,1985. Price risk management are future markets adequate. World agriculture Economics and Rural sociology. Vol 29 No:2, February 1987:100

- Bennardo, D., and G.Wang 1991 Real returns from beef production enter pareses in Oklahoma. Current farm Econ.64 (1) 3-17
- Colo, H.H. 1966 introduction to livestock production. IInd. Ed. With freeman and company san Farnsico, pp 37.
- Davis, L.H. and D.E. Weissnborn. 1981. Small farmer market development. The EL-Salvador experience. World Agricultural Economics and rural Sociology Vol24 No.2 February, 1982.
- Fultin, N.C. 1989. The economics of beef processing in Northern Ireland an analysis of industry structure and performance. Agri. Econ. & Food Econ. Statistics Division Dept. Agri. Belfast., pp-95.
- Grieve, R., and A. Peggs. 1990. Beef market prospect in North East Asia, Bunbury, Miscellaneous Publication. Western Australian Dept. Agri. 5(90): 34.
- Hamm, S.R., W.D. Purcell and M.A. Hudson, 1985. A frame work for analyzing the impact of anonymous bidding on price competition in computerized auction. World Agricultural Economics and Rural Sociology. Vol.28 No.1 January 1986:3.
- Hayes, D.T. 1990. The economics of feeding, processing, and marketing beef animals to the Pacific Region. Candian J. Agri. F.con.38 (4): 899-909.
- Herbon, D. 1984. Structural and functional aspects of a local market system. Case study of auroral marketing system in Bangladesh. World Agricultural Economics and Rural Sociology. Vol 26 No.10 October, 1984.
- Isani, G.B. 1992. Marketing of livestock and their products in Pakistan. Zeb Abadi Market Hyderabad Sindh.
- Khaskheli, M. 1983. Study on marketing of meat in Hyderabad city during 1979-80. M.Sc. University, Tandojam.
- Maloney, S.L.P 1983. Periodic markets, their functions and spatial patterns in Tamil Nadu, South India. World Agricultural Economics and rural Sociology. Vol24 No.11 November, 1983.
- Memon A.M., A.Y. Bhatti and S.H. Sipyo, 1990. Improved farming through agricultural extension. Modern Agriculture Vol.1 No.4 July 1990:26.
- Nelson, K.E., L.A. Duewer, and T.C. Crawford. 1989. Revealusetin of the beef carcass to retail Weight conversion factor. Agri.Econ. Report. Econ-Res-, U.S. Deptt. Washington, pp 623-633.
- Olafson, J. 1984. Farm survey 1984. World Agricultural Economics and Rural Sociology. Vol.28 No.5 May 1986.
- Olfson, J. 1985. Farm results, dairy farms, mixed sheep farms. World Agricultural Economics and rural Sociology. Vol.29 No.4. April, 1987; 265.
- Pickard, D.H 1982. How markets evolve. World Agricultural Economics and rural Sociology. Vol24 No.10 October, 1982: 805.
- Qureshi, M.T. 1974. Estimation of marketing margins and measurements of seasonal price variation of selected agriculture commodities in Sindh province of Pakistan. Final report. 11-16. Department of Agricultural Economics and Rural Sociology, Sindh Agriculture College, Tandojam, Pakistan.
- Rao, D.V.1981. Weekly markets help village economy, World Agricultural Economics and Rural Sociology. Vol24 No.3 March, 1982: 615.
- Riordan, B. 1982. Irelands Sheep production and trade. World Agricultural Economics and rural Sociology Vol24 No.10 10 October, 1982.
- Sabrani, M. and A.P. Siregar, 1981. The role of small ruminants in traditional. Indonesian Farming system. World Agricultural Economics and Rural Sociology. Vol 26 No.9 September 1984:720.

- Sands, F.B. 1985. An economics analysis of farm level livestock marketing in eastern upper volta. World Agricultural Economics and Rural Sociology, Vol 28 No.8 August, 1986:574.
- Sempeho, G. 1985. Sheep and goat in Nigerian agriculture structure of small ruminant production in Nigeria and improvement possibilities. World Agricultural Economics and Rural Sociology. Vol26 No.6 June 1987: 385.
- Sial,M.1991. Livestock production in Pakistan potentials and challenges. Prog. Far. 11(1): 7-14.
- Senanayake, S.M.P. 1980. Period in rural markets in the Kurunegala district. World Agricultural Economics and Rural Sociology. Vol24 No.3 March: 196.
- Shah, R.M.A. and J. Davis, 1985. Structural features of the date market in Sindh-Pakistan. World Agricultural Economics and rural Sociology. Vol28 No.4 April, 1986:235.
- Siddiqui, S.A., N.N. Ansari and A.Q.Ansari, 1983 Economic analysis of small animals farming in Sindh Province of Pakistan Goat Farming:89.
- Span, 1981. Department of Animal Production. Faculty of Veterinary Medicine, Nairobi University. World Agricultural Economics and Rural Sociology. Vol24 No.3. March 1982: 220.
- Sugiyama, M., and C. Izek. 1989. Price analysis of dairy beef production and marketing at various stages a case study of dairy beef production in Aichi prefecture. Res. Bull Gifu Uni. 54:127-143.
- Socifflet, J.F. 1988. The beef cattle and meat sector, operation cattle and meat sector, operation and development during 1980. Prospects for 1990. M.S. Thesis. France., pp 25.
- Umrani, A.P. 1993. Animal production in Pakistan Modern Agri. 4(4): 37-40.
- Warren, R. 1985. Farmer marketing. World Agricultural Economics and Rural Sociology. Vol28 No.4 April 1986:238.
- Williams, T.O. 1990. Impact of livestock pricing policies on meat milk output in selected Sub-Saharan-african Countries working Document – Livestock Econ. Divi. International Livestock Centre for Africa. 13:111.
- Zyl, J.V., N. Vink and J. Van Zyl. 1989. Structural aspects of beef production on pastures in the seminar rainfall grain producing areas of South Africa. Agrekon. 28(3): 19-25.