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RESEARCH ARTICLE

STUDY ON PRODUCTION AND MARKETING OF BEEF IN QUETTA DISTRICT PAKISTAN

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Abstract:

In order to assess the production and marketing of beef in district Quetta, an investigation was carried out by conducting personal interviews to the farmers at cattle and buffalo farms in Quetta, Kuchlak and Punjpai tahsils during the year 2004-2005. A total of 162 respondents, which included 54 cattle/buffalo producers, 54 wholesalers/middlemen and 54 retailers were surveyed.

The study revealed that the feed cost paid by the cattle/buffalo farmer was Rs. 16,500/animal while the cost on purchase of calves averaged Rs. 4050/calf. In a herd size of 24, an average animal consumed 4200 kg feed, while the ceiling of total recurring costs was Rs. 24734.16 which included feeding Rs. 16500, medication and vaccination charges Rs. 521, labour charges Rs. 2940, marketing charges Rs. 65, transportation charges Rs. 493 and Rs. 122 as miscellaneous charges. The gross revenue realized by the beef producer was Rs. 27068, which included Rs.26755.55 from sale of average animal and Rs. 312.50 from manure; that accumulated to reach an input: output ratio of 1:1.09 and after subtraction of recurring costs, the large ruminant producer earned a net income of Rs. 2333.89 resulting cost benefit ratio of 1:0.09. The ceiling of marketing costs of wholesaler, middleman and retailer was Rs. 794.62, 369.47 and 746.78/animal, respectively indicating an total price spread of Rs. 3632.00 shared by Rs. 1504.79 (41.43%) between beef producer to wholesaler, 648.35 (17.85%) between wholesaler and middleman and 1478.86 (40.71%) between middleman to retailer (butcher). The ceiling of marketing margins was 5.26, 2.21 and 4.81%; while net margins were Rs. 710.17, 278.87 and 732.07 for wholesaler, middleman and retailer, respectively. The wholesaler, middleman and retailer earned markup on their price paid were 5.56, 2.26 and 5.06%, which resulted a cost: benefit ratio of 1:0.89, 1:0.75 and 1:0.98, respectively against 1:0.09 cost: benefit ratio for the beef producer. Although, the amount of net margin of beef producer was relatively higher than the marketing agents, but due to his yearlong production cost, the benefit ratio over costs remained lower. The average beef price/kg was Rs.120 in almost all the tehsil of Quetta district under study. The overall average number of slaughtered animals in the district was 336 with mean production of 81384 kg. Average price per kilogram of beef remained 120 while the weight of beef per animal remained 242.33 kilograms.

Keywords: Production status,Marketing, beef, price, wholesaler, middleman and retailer.

Introduction

Livestock is a renewable natural resource and plays a vital role in the economy of Pakistan. Next to agriculture, animal husbandry is the most important economic activity in rural areas. Livestock produce a number of vital products and services. These can be classified into three broad groups: Energy, Food and Raw materials. Rapid economic development is resulting in considerable pressure on the livestock sector to increase its output, as demand for meat and milk is increasing rapidly. The role of livestock in rural economy may be realized from the fact that 30-35 million rural population is engaged in livestock raising. National herd consists of 27.335 million buffalos, 29.559 million cattle, 53.787 million goats and 26.488 million sheep. The quality and the existing productivity level of local livestock is low as compared with those of advanced countries and potential exists easily to improve the situation remarkably (GOP, 2007).

The province of Balochistan possess approximately 1.34 million heads of cattle and 0.16 million of buffalos. Balochistan is area-wise biggest province of Pakistan and spread over 347190 square kilometers. Most of the people in Balochistan province have their economic association with livestock raising. As per 2003 livestock census, 43.37 percent of the total livestock population comprised of sheep and 21.15 percent are goats. Balochistan has been the center of livestock business since ancient times and even still when global business trends are in big change; the people of this area find their livelihood in business of livestock and its byproducts, the sheep and goats (GOB, 2005). There are various routes from where the animals are coming to Quetta markets such as: large animals are smuggled in from India, adopt the route from Tharparkar to Rohri and then to Quetta market. Beef animals (cattle/buffalo) from interior Balochistan and Sindh come to Quetta markets via Quetta-Sibi route, from Khuzdar, Kalat and Lasbella districts enter in Quetta district through Luck pass route. All the animals access the Quetta markets due to the fact that Quetta market has become an international market and from here, the animals are smuggled out to Afghanistan, Iran, Gulf and Central Asia, particularly because of huge differences in the price of beef which is Rs. 200/kg in Afghanistan, Rs. 280/kg in Iran as compared to local price of Rs. 110 to 120/kg (GOB, 2005).The livestock markets are scattered in the district at various places such as Bakra piri, Eastern Bypass, Almo chowk, Subzal road, Kuchlak, Punjpai and at various small places in the district. The production and marketing system of meat in Balochistan province is lacking modern age practices. The scientific and unhygienic condition of meat production affects the marketing, which results in low production and thus less benefit to the meat producer. This also affects overall demand of our country as a whole. It is therefore, thought worth to investigate lacking systematic production and marketing system of meat, with particular reference to beef. The present investigation has thus, been carried out to study the production and marketing patterns of beef in Quetta district of Balochistan, keeping in view the following major objectives:

1. To study the production patterns of beef in Quetta District.
2. To study the marketing patterns of beef in Quetta District.
3. To apprehend the traditional marketing systems of beef.
4. To study the present status of beef marketing in the Quetta District.
5. To diagnose the problems confronting the producers, marketing agencies and consumers.
6. To suggest the measures for solving the problems as well as reorganization of beef marketing.

Material and Methods

The research involved the task of figuring out research plans, selection of samples, data collection, tabulation and analysis of data and interpretation of results. Survey method has been proved successful in finding out generalization in the field of livestock management; thus this method was employed to perform the study. In order to plan better production and marketing, it was imperative to explore and assess the present situation of beef production and marketing in the study for the sake of assessment that it is extremely important rather demanding that an exploratory research study is designed to compose the clear picture of the present beef production and marketing system in various tahsils of Quetta district.The facts and figures were gathered from the cattle and buffalo farms existed in three tahsils of Quetta district, i.e. Quetta, Kuchlak and Punjpai. For collection of data, a uniform, comprehensive questionnaire was developed duly divided into several parts. The data included Socio-economic conditions, structure and size of farms, herd size, fixed cost, recurring cost and sale value of animals and beef. There were three distinctive marketing channels involved in the marketing of beef from producers to potential consumers; the channels include:

(i) Farmer/ producer
(ii) Middleman (agent/wholesaler)
(iii) Beef retailer.

Table–1 Details of sampling pattern from different tahsils of district Quetta

S. No.	Area	Sample Size		
		Producers/ Farmers	Agents	Retailers
1.	Quetta Tehsil	18	18	18
2.	Kuchlak Tehsil	18	18	18
3.	Punjpai Tehsil	18	18	18
Total		54	54	54

A sample size of 162 was selected and the respondents were interviewed personally, i.e. 18 farmers, 18 middlemen (wholesalers/agents), 18 retailers each from Quetta, Kuchlak and Punjpai tahsils. The respondents were selected in such a way to represent three agencies i.e. beef producer (farmer), wholesaler or middlemen and retailers (butchers), and they were interviewed on a pretested questionnaire. Out of total sample of 162 respondents, 54 were farmers/producers, 22 wholesalers, 32 middlemen (commission agents) and 54 were retailers (Table-2).

Table–2 Details regarding agents involved in production and marketing of beef in district Quetta.

Tehsil	Farmers	Marketing Agencies			Grand Total
		Wholesalers	Middlemen / Com. Agents	Final Sellers	
Quetta	18	4	14	18	54
Kuchlak	18	6	12	18	54
Punjpai	18	12	6	18	54
Total	54	22	32	54	162

Method of Analysis

The following formulae were employed to compute some parameters related to market efficiencies.

1. Price spread: Price spread (Ps) is a term frequently been used to represent the combined margins of several types of dealers. Price spread analysis helps in examining price levels of particular commodity at various stages of marketing.Price spread consumption was made after Acharya and Agarwal (1987).Ps = Pr – Pp. Where Ps denotes price spread, Pr stands for price received and Pp symbolizes price paid.

2. Marketing margins: Marketing margins (Mm) refer to the difference between the values of physical quantity equivalent at different levels of marketing. It reveals the earning of some specific agencies related to saving. Estimation of marketing margins was done as suggested by Qureshi (1974).

Mm = (Am X 100) + Sp

Where Mm is marketing margin, Am stands for Absolute margin and Sp represents Selling price.

3. Net margins

The net margin as availed by any specific agencies is referred to net earnings, which it earned after incurring all marketing costs.Net margins were calculated according to Qureshi (1974).

Nm = Am – Mc

Where Nm shows Net margin, Am denotes Absolute margin and Mc stands for marketing costs.

4. Markup

The markup is the most popular concept used frequently by traders to express the levels of earning on basis of percent investment and markup is defined as absolute margin divided by price paid. Markup was estimated by the formulae used by Qureshi (1974).

Mp = (Am x 100) ÷ Pp

Mp = Shows markup

Am = Stands for absolute margins.

Pp = Symbolizes price paid.

Lw = Denotes percentage.

5. Breakdown of consumer's rupee

It signifies consumer's expense between producer and different marketing agencies. Breakdown of consumer rupee was done according to Qureshi (1974).

Bder = Nm ÷Rp
Bder = Denotes breakdown of consumer rupee.
Nm = Stands for net margin.
Rp = Shows retail price.

6. Cost benefit ratio

It is defined as the amount received in the shape of profit on the cost of one rupee is called as cost benefit ratio. Cost Benefit ratio was computed by the method adopted by Siddiqui *et al*. (1983).

Cbr = Nr ÷Tc
Cbr = Respondents cost benefit ratio.
Nr = Stands for net returns.
Tc = Denotes total cost.

The data so collected were analysed and interpreted on the basis of aforementioned formula.

RESULTS

The survey was conducted on a sample size of 162 respondents, of which 54 were in the category of beef producers (farmers), 22 wholesalers, 32 middlemen or commission agents and 54 retailers. Further analysis and interpretation of the data collected from the above agencies are reported in this chapter.

Educational level

The information collected regarding the educational level of the beef producers and other associated agents (Table-3).

Table-3: Educational level of the large ruminant producers and marketing

S. No.	Status	Producer / Farmer		Agent / Middleman		Retailer / Final Seller	
		No. of respondents	%	No. of respondents	%	No. of respondents	%
1.	Primary	14	25.92	20	37.03	16	29.60
2.	Middle	4	7.40	2	3.70	8	14.81
3.	Matriculation	1	1.85	8	14.81	5	9.25
4.	Intermediate	1	1.85	6	11.11	-	-
5.	Madrassa	10	18.51	-	-	-	-
6.	Illiterate	24	44.44	18	33.33	25	46.27
Total		54	100	54	100	54	100

Marital status

Table-4 Marital status of the large ruminant producers and intermediaries associated with beef marketing in district Quetta

S. No.	Status	Producer / Farmer		Agent / Middleman		Retailer/ Final Seller	
		No. of respondents	%	No. of respondents	%	No. of respondents	%
1.	Married	48	88.88	49	90.74	51	94.44
2.	Un-married	6	11.11	5	9.25	3	5.55
Total		54	100	54	100	54	100

Land holding and housing system

The average number of animals in all three tahsils of Quetta was 23.33 and the space available per animal was 39 square feet (Table-5).

Table-5: Land holding and housing system of the large ruminant producers in district Quetta.

S. NO.	Particulars	Total area of the farm	Total covered area of the farm	Number of animals	Space available / animal	Number of sheds
01	Quetta	75600	25200	720	35	25
02	Kuchlak	43200	14400	360	40	18
03	Punjpai	22680	7560	182	42	12
Total		141480	47160	1260	117	55
Mean		47160	15720	422	39	18.33

Structure of farms

The structures of the farms where the beef animals (cattle/buffalo) were housed were also studied in three talukas of district Quetta and results so obtained are reported in Table-6. Three categories of farm structures were found for housing the animals by the producer/farmers of the studied area. A total of 54 farms were visited to examine their structures. It was observed that majority of the cattle/buffalo farms (68.51%) had kacha structures, while 27.78 percent of the farms studied had semi pacca structures and 3.70 percent of 54 buffalo/cattle farms visited had pucca structures.

Table-6 Details regarding housing type for large ruminants established by producers in district Quetta.

S. NO.	Particulars	Housing type

		Kacha	%	Pucca	%	S. Pucca	%	Total
01	Quetta	6	33.33	2	11.11	10	72.28	18
02	Kuchlak	17	94.44	-	-	1	5.50	18
03	Punjpai	14	77.77	-	-	4	22.22	18
Total		37	205.44	2	11.11	15	100	54
Mean		12.32	-	0.66	-	5	-	18

Feeding cost

During study, the feeding cost of the animals (buffalo and cattle) at different farms in Quetta district of Balochistan was also obtained and is reported in Table-8. The results suggested that on an average the feed cost paid by the cattle/buffalo farmer per animal was Rs. 16500. The farmers in Quetta tahsil spent significantly more amount (Rs. 17100/animal) on feeding their beef animals, while farmers in Kuchlak and Punjpai spent Rs. 16020 and Rs. 16380/animal, respectively.

Table-8: Feedingcost on production of large ruminants for beef purpose in district Quetta.

S. No.	Particulars	No. of Animals	Quantity of feed					
			Monthly		Yearly		Per animal feed quantity/ annum	Amount of feed /animal/annum
			Monthly (kg)	Amount	Yearly (kg)	Amount		
01	Quetta	720	270000	1015200	3240000	12182400	4500	17100
02	Kuchlak	360	124200	475200	1490400	5702400	4140	16020
03	Punjpai	216	71280	291600	855360	3499200	3960	16380
Total		1296	465480	1782000	5585760	21384000	12600	49500
Mean		432	135160	594000	1861920	7128000	4200	16500

Herd size: In Kuchlak the herd size remained 20 animals, while in Punjpai, the number of animals in an average farm was 12 per herd (Table-9).

Table-9 Herd size managed by large ruminant producers in different areas of district Quetta

S. No.	Particulars	Number of farmers	Number of animals	Average herd size
01.	Quetta	18	720	40
02.	Kuchlak	18	360	20
03.	Punjpai	18	216	12
Total		54	1296	72
Mean		-	432	24

Recurring costs

The information on recurring costs on buffalo and cattle farms managed for beef production in Quetta district were worked out and results are reported in Table-13. It was observed that the average cost on feeding was Rs. 16500, medication and vaccination charges Rs. 521, labour charges Rs. 2940, marketing charges 65, transportation charges Rs. 493 and Rs. 170 as miscellaneous costs. The overall per animal recurring cost in the Quetta district remained Rs. 24734.16. Moreover, it was observed that in Quetta tahsil the recurring cost was Rs. 25105 per animal, in Kuchlak tahsil it was 24275 per animal and in Punjpai tahsil the total average recurring cost was Rs. 24263 per animal.
The results showed that in Quetta tahsil, the recurring costs were highest and significant differences were observed when compared with the costs incurred at beef producing farms in Kuchlak and Kashangui tahsils.

Table-13: Recurring costs incurred on large ruminant reared for beef production by the farmers indistrict Quetta

Particulars		Av: Herd size	Feeding cost (Rs)	Vaccination & Medication	Labour cost (Rs)	Marketing costs (Rs)	Transptn. Charges (Rs)	Misc. costs (Rs)	Total recurring costs (Rs)	Cost on calves (Rs)	Total costs (Rs)	Per animal recurring costs (Rs)
Quetta		40	676800	17760	120000	2640	20000	5000	842200	162000	1004200	25105
Kuchlak		20	316800	11380	60000	1320	10000	5000	404500	81000	485500	24275
Punjpai		12	194400	8440	31200	720	5500	2300	242560	48600	291160	24263
Total		72	1188000	37580	211200	4680	35500	12300	1489260	291600	1780860	73643
Per farm		24	396000	12526	70400	1560	11833	41000	496420	97200	-	-
Per animal		-	16500	521	2940	65	493	170	20689	-	24734.16	24734.16

Gross revenue

After gathering the information on various financial aspects, the gross revenue of the beef (buffalo/cattle) farmers was also worked out and the results so achieved are reported in Table-14.

Table–14 Gross revenue of the producer/farmer of large ruminants for beef purpose in district Quetta.

S. No.	Particulars	Herd size	Sale of animals (Rs.)		Sale of manure (Rs.)	Gross income (Rs.)	Per animal income (Rs.)
			Price per animal	Amount	Amount		
1.	Quetta	40	26800	1072000	8000	1080000	27000
2.	Kuchlak	20	26700	534000	7000	541000	27050
3.	Punjpai	12	26700	320400	7500	327900	27325
Total		72	80200	1926400	22500	1948900	81375
Per animal		1	-	26755.55	312.5	27068.00	27068

Net returns

Table-15 Net returns earned by the producer/farmer from large ruminants raised for beef production in District Quetta.

S.No.	Particular	Average herd size	Gross Revenue (Rs.) A	Total Expenditure (Rs.) B	Net return / herd (Rs.) A-B = C
1.	Quetta	40	1080000	1004200	75800
2.	Kuchlakk	20	541000	485500	55500
3.	Punjpai	12	327900	291160	36740
Total		72	1948900	1780860	168040
Per animal		1	27068	24734.16	2333.89

Middlemen

The results further showed that the marketing cost incurred by the middlemen in various tahsils of district Quetta (Table-21) incurred were Rs. 45.67, labour charges Rs. 28.31, transportation charges Rs. 107.35 and miscellaneous charges Rs. 188.12 per animal. In tahsil Quetta, the total marketing expenses were Rs. 355.00, in Kuchlak Rs. 374.00 and in Panjpai such expenses were to the value of Rs. 415.00. The overall marketing expenses in district Quetta remained Rs. 369.47 per animal (Table-21).

Table-21: Marketing costs (Rs) incurred by middlemen involved in beef

Sr.No.	Particular	Total animals marketed	Marketing charges	Labour charges	Transportn charges	Misc. charges	Total marketing charges	Per animal costs

1.	Quetta	1320	59400	39600	138600	231000	468600	355
2.	Kuchlak	840	41160	21000	84000	168000	314160	374
3.	Punjpai	336	13440	10080	45360	70560	139440	415
Total		2496	114000	70680	267960	467960	922200	1144
Mean		832	38000	23560	89320	156520	307400	-
Per Animal		-	45.67	28.31	107.35	188.12	369.47	369.47

Retailer

The data collected further exhibited that the marketing cost incurred by the retailer in various tahsils of district Quetta (Table-22) incurred were Rs. 205.35, labour charges Rs. 266.07, transportation charges Rs. 122.50 and miscellaneous charges Rs. 152.85 per animal. In tahsil Quetta, the total marketing expenses were Rs. 808.33, in Kuchlak Rs. 690.00 and in Panjpai such expenses were to the value of Rs. 718.33. The overall marketing expenses in district Quetta remained Rs. 746.78 per animal (Table-21).

Table-22 Marketing cost (Rs) incurred by beef retailer/final seller in district Quetta

Sr. No.	Particulars	Total animals marketed	Rent of Shop	Labour charges	Transportn charges	Misc. charges	Total marketing charges	Per animal costs
1.	Quetta	432	90000	129600	64800	64800	349200	808.33
2.	Kuchlak	360	72000	90000	36000	50400	248400	690.00
03.	Punjpai	216	45000	48600	22680	38880	155160	718.33
Total		1008	207000	268200	123480	154080	752760	2216.66
Mean		336	69000	89400	41160	51360	250920	-
Per animal		1	205.35	266.07	122.50	152.85	746.78	746.78

Price spread

Price spread denotes the differences between the price paid by the consumer and price received by the producer. It involves not only the ascertainment of actual price at various stages of marketing channels, but the cost incurred in the processes of movement of the product from the farm to the consumer and margin of various intermediaries. The analysis of price spread as summarized in Table-23 revealed that the price received by producer in the marketing of beef (cattle-buffalo) was to the extent of Rs. 27068 per animal. Among them the spread of various agencies were calculated to 41.43% between producer and wholesaler, 17.85% between wholesaler and middlemen and between middlemen to retailer it was 40.71 percent. The gross price spread was Rs. 3632.00.

Table-23 Price spread (Rs) between various agencies involved in large ruminant production and marketing for beef purpose in district Quetta

Sr.		Average per Animal	Price Spread	Percent

No.	Particulars	Price paid (A)	Price received (B)	(A – B = C)	C ÷ Total x 100
1.	Beef Farmer / Producer	- - - - -	27068.00	- - - - -	- - - - -
2.	**AGENTS**	--			
	i. Wholesaler	27068.00	28572.79	1504.79	41.43
	ii. Middleman	28572.79	29221.14	648.35	17.85
3.	Retailer / Final seller	29221.14	30700.00	1478.86	40.71
Gross spread		- - - - -	- - - - -	3632.00	100%

Average beef production in district Quetta

The information collected for average beef production in district Quetta is reported in Table-30. The results indicated that average slaughtered animal were 432, 360 and 216 in Tehsil Quetta, Kuchlak and Panjpai, respectively. The average beef production recorded from slaughtered animals was 103680, 88200 and 52272 kg in Tehsil Quetta, Kuchlak and Panjpai, respectively. The average beef price/kg was Rs.120 in almost all the tahsils of Quetta district under study. Result further revealed that average beef weight recorded per animal was 240, 245 and 242 kg in Quetta, Kuchlak and Panjpai respectively. The overall average of slaughtered animals was 336, with mean production of 81384 kg. Average price per kilogram of beef remained 120 while the weight of beef per animal remained 242.33 kilograms in the area of study (Table-30).

Table-30 Average beef production in district Quetta

Sr. No.	Tehsil	No. of Butchers	Av: annual No. of animals slaughtered	Av: weight per animal (kg)	Av: annual Beef production (kg)	Price (Rs) per kg	Amount realized (Rs)
1	Quetta	18	432	240	103680	120	12441600
2	Kuchlak	18	360	245	88200	120	10584000
3	Punjpai	18	216	242	52272	120	6272640
Total		54	1008	727	244152	360	29298240
Over all average		18	336	242.33	81384	120	9766080

Discussion

Pakistanis an agriculture country and livestock is main sector of agriculture. In livestock, buffalos and cattle are the main source of meat production. In advanced countries of the world, meat production has become major industry and a most profitable business for the entrepreneurs. However, in Pakistan production is lacking proper hygiene and other quality criterion. The present study was carried out to investigate the production patterns and marketing of beef

in Quetta district of Balochistan province of Pakistan. It was noted that feed cost paid by the cattle/buffalo farmer was Rs. 16,500/animal while the cost on purchase of calves averaged Rs. 4050/calf. In a herd size of 24, an average animal consumed 4200 kg feed, while the ceiling of total recurring costs was Rs. 24734.16 which included feeding Rs. 16500, medication and vaccination charges Rs. 521, labour charges Rs. 2940, marketing charges Rs. 65, transportation charges Rs. 493 and Rs. 122 as miscellaneous charges. These results are in concurrence with those of Memon (2000), however, his studies were in Mirpurkhas district of Sindh province, and probably the costs may vary a little due to different socio-economic situation and trends of the people in these two specific study areas.

In Quetta district, the gross revenue realized by the beef producer was Rs. 27068, which included Rs.26755.55 from sale of average animal and Rs. 312.50 from manure; that accumulated to reach an input : output ratio of 1:1.09 and after subtraction of recurring costs, the large ruminant producer earned a net income of Rs. 2333.89 resulting cost benefit ratio of 1:0.09. The ceiling of marketing costs of wholesaler, middleman and retailer was Rs. 794.62, 369.47 and 746.78/animal, respectively indicating an total price spread of Rs. 3632.00 shared by Rs. 1504.79 (41.43%) between beef producer to wholesaler, 648.35 (17.85%) between wholesaler and middleman and 1478.86 (40.71%) between middleman to retailer (butcher). The above findings are fully supported by Memon (2002) who reported comparable figures regarding the total costs, expenditures, net margins, input : putput ratios and cost benefit rations. There was a little variation in figures, obviously that could have happened due to the change in trend of beef business in Quetta and Mirpurkhas districts. Moreover, the variation is also probably due to consumption demand of the areas and it has been found that the demand of beef in Quetta is far greater as compared to those in Mirpurkhas.

In Quetta district, the ceiling of marketing margins was 5.26, 2.21 and 4.81%; while net margins were Rs. 710.17, 278.87 and 732.07 for wholesaler, middleman and retailer, respectively. The wholesaler, middleman and retailer earned markup on their price paid were 5.56, 2.26 and 5.06%, which resulted a cost : benefit ratio of 1:0.89, 1:0.75 and 1:0.98, respectively against 1:0.09 cost : benefit ratio for the beef producer.Memon (2002) who reported that price paid by consumers on buffalo was shared as 93.38 percent by producer, 1.55 percent by trader, 2.74 percent by middleman and 2.34 percent by the final seller. In case of cattle he found the share as 86.94 percent producer, 4.01 percent trader, 4.87 percent middleman and 4.18 percent by the final seller of beef. Memon (2002) further argued with support of the present study and stated that on cost of one rupee in the trade, middleman earned the maximum benefit of Rs. 4.68, while producer received lowest Re. 0.11 and in case of cattle middleman also earned the highest benefit of Rs. 7.65 and producer had the lowest.

Conclusions

On the basis of present investigation, the following conclusions could be drawn:

1. In Quetta tahsil area, the investment and recurring costs were comparatively higher than the Kuchlak and Punjpai tahsils.

2. Among marketing agents, the retailers earned better cost : benefit ratio as compared to beef producer, wholesaler and middleman.

3. LocalCity Government should develop a system to monitor the marketing of animals in the district and should arrange trainings for the farming communities for sustainable development in the production and marketing of small ruminants (beef animals).

4. All functionaries i.e. producer / farmer, middlemen as well as retailer/final seller got better return from the business of beef farming animals in Quetta market as compared to Kuchlak and Panjpai markets.

5. This happened due to advantageous situation of Quetta due to higher consumer potential and reduced transportation costs. Further, it is concluded that among the various functionaries producer was ultimately the highest beneficiary, followed by retailer/final seller, middlemen and while the wholeseller remained a least beneficiary.

Suggestions

- If the large animals reaching at Quetta markets are retained and the complete smuggling to other countries is banned then a surplus of 131 large animals daily can be allowed to be traded outside Quetta district legally by issuing permits.

- Marketing system should be developed on systematic and scientific lines for proper trade of livestock.
- Proper facilities about feeding, watering and residence for livestock and live stockowners be provided with in the market premises on subsidized rate.
- Beef market committee may be designed for price fixation.
- Farm to market roads be constructed so as to provide easy approach to market for livestock farmers.

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