STUDY ON PRODUCTION AND MARKETING PATTERNS OF MILK SUPPLY IN MUZAFFARABAD CITY, AZAD JAMMU AND KASHMIR

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ABSTRACT

In order to assess the production and marketing patterns of milk in Muzaffarabad city, the capital of Azad Jammu and Kashmir, an investigation was undertaken by randomly interviewing the farmers in three zones of the area. For this purpose, a total of 569 farmers (producers), 86 middlemen and 45 retailers were interviewed and information was recorded. It was observed that out of 569 farmers 333 (58.52 percent) were literate and 236 (41.48 percent) were illiterate. During survey it was observed that in three zones of the area all types of dairy animals; buffaloes, cows and goats were kept. In zone II and III, bullocks were kept in addition to buffaloes, cows and goats for land ploughing. The results of the study indicated that middlemen earned more profit than the producers and retailers. Middlemen earned Rs 0.63/liter in zone I, Rs. 2.23/liter in zone II and Rs. 2.64/liter of milk in zone III. The retailer earned equal amount from three zones i.e. Rs. 1.67/liter of milk because of the retailer stationed in the city. Whereas the producers who invested for enterprise earned Rs 3.44/liter in zone I, Rs. 1.44/liter in zone II and Rs. 0.44/liter of milk in zone III. The statistical analysis showed that there were non-significant difference among the net margins of the producers, middlemen and retailers.

Key words: Marketing pattern, net margins, retailers, survey.

INTRODUCTION

Pakistan is blessed with a good genetic potential for dairy development. Buffalo, being the principal source of milk, produces about 64.7 percent while cows contribute 34.5 per cent, and other animals 0.8 per cent. Overall milk production increased up to 35.6 percent in 2006 over 1996 (Anonymous 2007). Despite good genetic potential among animals, low production is due to poor nutrition, mis-management, failure to control diseases, and lack of proper marketing of this highly perishable commodity. In urban and peri-urban areas, the cost of milk production is high. Production in rural area is untapped on account of the perishable nature of milk, poor transportation, and unorganized producers. Buffalo is the main dairy animal in the study area. The average yield per lactation has been estimated from 1800 to 2500 litres, while few specimens can produce up to 6,000 litres in 305 days. (Qureshi *et al.,* 2000). Due to the non - availability of milk cooling system and poor transport means, the supply of milk from villages to the urban market is quite a difficult task. There are numerous agencies and middlemen involved in the collection, transportation and distribution of milk (Haq, 1998). In Muzaffarabad city, the capital of Azad Kashmir, few studies have been completed (Tanner 1978 and Cheema 1996) but these were limited in their scope and analysis. This city spreads up to 6 km around its center with 14988 households and with about 100,000 human populations. The present study was planned to investigate the production and marketing patterns of milk in Muzaffarabad city Azad Jammu and Kashmir.

MATERIALS AND METHODS

Milk production area was divided into three zones

Zone I	urban area up to six km (city limits)
Zone II	peri-urban area, six to twelve km
Zone III	rural area twelve km and above

For collection of data a questionnaire was developed duly divided into several parts. The data included size and structure of animal sheds, herd size, fixed cost, recurring cost and sale value of milk including socio-economic conditions of the farmers in the milk production area. There were three distinctive marketing channels involved in the flow of the fluid milk from producer to consumers. These three channels were milk producers, milk collectors (middlemen) and milk retailers. A total number of 569 milk producers, 86 milk collectors and 45 milk retailers were interviewed. The data thus collected were statistically analyzed through one way analysis of varieance technique (Steel *et al*., 1997).

RESULTS AND DISCUSSION

During the survey it was evident that most of the milk marketed in Muzaffarabad was produced by small landholders (89%) or landless (6.2%) people. It was

observed that out of 569 farmers 333 (58.52%) were literate while 236 (41.48%) ere illiterate. The farmers, whose principal occupation was agriculture, keep a few dairy animals for milk production either for their home consumption or as a supplementary source of income or both. The same was reported by Haq (1998). Milk was marketed to the consumers from three different agencies i.e., producer, middle man and retailer. Similar pattern of milk marketing was observed by Isani (1992). In three zones of the area, 569 farmers produced 5652 liters of fresh milk daily. From 5652 liters of milk they consumed 579 liters for their family whereas, sold 1442 liters directly and 3631 liters of milk through middlemen. Some (13%) of the farmers (producers) working in the city, carry the milk daily with them to sell either to households, hotels, or retailers on monthly bases. In Muzaffarabad city 45 retailers were involved in the milk marketing. They purchased 1430 liters of milk daily and sold it either processed or boiled/cooled. The farmers away from the city with worst approach roads or having no approach roads to the city prefer to make butter and ghee from milk due to their longer shelf life as also reported by Tanner (1978) and Cheema (1996).

During survey it was observed that high prices of concentrates, non-availability of green fodder during summer, technical support like treatment, breeding and vaccination etc. were main constraints in milk production. The milk was collected in containers formerly used for oil and chemicals. Milk was frequently adulterated by unhygienic ponds and stream water, sodium bi carbonate, formaline, urea fertilizer, vegetable oil, etc. These results were in line with the findings of Acharya *et al*. (1987) who found similar adulteration practices in India.

In Muzaffarabad city there is no concept of milk market as grain market, vegetable market etc. Similar findings were reported by Tanner (1978). During survey it was observed that the farmers in three zones of the area had all types of dairy animals; buffalos/cows mixed or only buffaloes alongwith 1-3 goats. In public sector at Livestock Development Research Center (LDRC), maximum number of buffaloes were 10–20 & cows 15-25. In private sector 3-6 buffaloes alongwith 1-2 Friesian or crossbred cows were maintained. At the selling points there were 10 –15 buffaloes for sale. In the rural areas farmers kept one or two bullocks for ploughing land with 1-3 buffaloes.

It was also observed that milk was collected in empty oil cans and transported for marketing by middlemen or producers to the city on foot or by busses, Suzuki vans on payment on the basis of distance and weight of milk canes. On the way to the city, milk was adulterated with unhygienic water to make three categories of milk with three rates; Rs. 14 /lit. , Rs 16/lit and Rs 18/lit according to the percentage of water added. Consumers in the city are price conscious but not quality conscious. Similar consumer's beahviour was observed in Peshawar city by Khan (1996). Livestock Development Center is also supplying about 3000 liters of fresh milk of both cows and buffaloes to the officers' colonies daily at the rate of 17.50 / liter on the basis of monthly payments.

The zone wise transportation and miscellaneous charges incurred were Rs. 0.35 per liter, Rs 0.45 per liter and Rs. 1.03 per liter of milk in Zone I, II and III, respectively.

The production cost per liter of milk calculated on the basis of data collected came out to be Rs. 14.56. In zone I of the area, farmer (producer) earned Rs. 3.44/liter, in zone II Rs. 1.44/liter and in zone III Rs. 0.44/liter of milk. Whereas the middleman earned Rs. 0.65, 2.23 and 2.64/liter of milk in Zone I, II and III, respectively. The retailer earned equal amount from three zones i.e. Rs. 1.67/liter of milk because of the retailer stationed in the city didn't have to pay any additional cost regarding to the transportation of milk from different zones. The statistical analysis showed that there were non-significant differences ($P>0.05$) among the net margins of the producers, middlemen and retailers.

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