

STUDY OF THE U.S MILK MARKETING MODEL: IT'S SCOPE IN PAKISTAN

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ABSTRACT: *The study examines the milk marketing patterns of the United States in the context to seek knowledge to improve the milk marketing system in Sindh, Pakistan. The key milk marketing factors were selected such as Criteria of Setting Quality Standards of Milk (CQSM), Mechanism of Setting the Price of Milk (MSPM) at different marketing channels, Milk Transport System (MTS), Milk Preservation Facility at Farm (MPF), Dairy Farm Institutional Support (DFIS) to Dairy Farmer, Dairy Farmers Union (DFU), Farmer's Profitability (FPR), Farm Productivity (FP). The primary and secondary data were collected from the American farmers of the Muncie area of Indiana, State, Indiana Dairy Council, Indiana Dairy Farmers Association, the U.S Department of Agriculture, and farmers of Hyderabad, a region of Sindh province in Pakistan. It is concluded that the milk marketing system in Pakistan is in meager conditions. There is no any facility available to the farmer to sale milk in the potential market, whereas in the United States farmers and buyer work under set agreed on rules of sale and purchase of milk, hence there is no conflict of interest between buyer and seller, U.S farmers has milk preservation and transport facility. Thus, the U.S dairy farmer earns a high profit. Therefore, to remove chronic issues of milk marketing in Sindh, it is suggested that the U.S milk marketing model may be applied in Pakistan that enables the farmer to sell milk at standard price, remove the conflict of interest between farmer and wholesaler, and eliminate milk quality issues. That will enable farmers to earn profit and grow their dairy enterprise.*

Keywords: US-Pakistan Milk Marketing Model, Farm Profitability, Milk Price, Milk Quality

INTRODUCTION

Dairy farming is mainly a family-owned enterprise in rural areas of Pakistan, so most of the household members take part in rearing buffalo, cow, and other milking animals like sheep, goat, and camel. Agriculture contributes about 21.5% towards national economy whilst the share of dairy farming is around 11.9% (PES-2018) which become half of total national earning. This fact makes dairy farming as the leading sector of livelihood of about 45% of inhabitants (PES-2019) which make it the country's key employment sector for both men and women and a viable tool of economic growth. Only in Sindh province, about 18.6 million people are engaged in milk selling activity [1] that makes it the country's key employment sector for both men and women. Geographically, the Sindh and Punjab provinces of Pakistan are highly affluent in dairy resources and produce 32 million tons of milk per/annum which become 80% of total national milk production [2,3, 4] are considered as idyllic dairy milking breeds of Pakistan and they perform as a pivotal source to fulfill the demand of milk of about 220 million populations nationwide[5]. In general, each farmer about rear 01 to 07 animals [6]. This phenomenon of dairy farming illustrates the importance of the dairy sector in different domains like it is a basic source of nutrition for the whole nation, economic resource, maintain public health, and source of income generation for a larger part of the community, however, in a country where milk production is high and huge number of population is engaged in dairy farming but the selling of milk, getting standardized wholesale milk price is a severe problem in Sindh province of

Pakistan [7]. For a long time farmer is suffering due to poor milk marketing patterns in the county. The most of farmers want to sale milk in cities but they have an issue of transporting milk to the city from rural site, the other problems farmers suffer are fixing of milk price at different marketing channels, setting milk quality rules, finding a potential buyer who purchases milk from them on a regular basis, and pay on time[8]. So, in this situation, most of the time milk is sold at a low price or the other issue is that middlemen buy milk from a farmer at a low price. Besides, farmers are almost poor, so cannot establish their own milk selling /collection point (retail shop) in the city [9]. So they sell milk to the farmer at a low price. Besides, farmers are almost poor so cannot establish their own milk selling/collection point (retail shop) in the city. So they sell milk to a middleman, wholesaler, or on a low piece in the local rural market that shrinkage their profitability [10].

MATERIALS AND METHODS

The questionnaire-based primary and secondary data were collected from Pakistan and the USA. The qualitative and quantitative methods were used to examine different marketing channels such as middleman and transporter[11]. In essence, Sindh has almost supply chain unavailable people sale vertically and horizontally milk means in the village and city and often they bring on their own from village to city. However, every day they take milk in the open market, so the open market is included in data collection. Besides, 100 milk consumers were selected from district Hyderabad, Sindh, Pakistan, and the Muncie area of, Indiana, USA. The Secondary data were gathered through, review of the literature of Indiana Dairy Farmers

Association, Indiana dairy council, and the United States Department of Agriculture (USDA).

The other main parameters of this study were institutions involve in regulating milk prices and setting milk quality standards in the United States and Pakistan. So from the United States, dairy cooperatives were selected and Pakistan farmer, middleman, wholesaler, and retailer were selected [12]. Besides milk preservation facility, government support in selling of milk, subsidy for farmers, and consumers, financial support to farmers, farmer's profitability in the USA and Pakistan. After data collection, it was organized in tabulation form and assigned coding, and prepared for analysis whereas numerous statistical tests were applied such as categorical analysis and on the basis of that analysis, the results were obtained through SPSS 1.6 software.

Table# 01: Farm Data of USA and Pakistan- Area I.

S.#	FRMM	Muncie USA	Hyderabad Pakistan
1	COSM	1	4
2	MSMP	1	3
3	MTS	2	4
4	MPF	1	4
5	DFU	1	3
6	FPR	2	3
7	FP	1	4

Source: U.S –Pakistan Milk Marketing Survey.
FRMM=Factors of Milk Marketing

The Table # 01is highlighting report of farms with regard to different behaviors such as in Muncie farmer's sale of milk on set quality standards of milk means buyer and seller are agreeing on already set standards but in Sindh farmers and buyer does not agree and shows that most of important milk marketing decisions are taken by a middleman in Pakistan and farmers has no right to set price, supply chain model, quality standards, and other supply decisions. Hence,

Table# 02: Farm Data of USA and Pakistan- Area II

S.#	FRMM	Muncie USA	Hyderabad Pakistan
1.	COSM	1	4
2.	MSMP	1	3
3.	MTS	2	4
4.	MPF	1	4
5.	DFU	1	3
6.	FPR	2	3
7.	FP	1	4
8.	MDM	3	2
9.	RDF	3	3
10.	DFIS	1	4

Table # 02 also highlights almost the same result the data in table 02 are taken from the Muncie area the dairy farms of Muncie, Indiana, and Hyderabad, Sindh was divided into three different segments and 03 tables were made like Table 01, 02, and 03. As it is seen that was divided in three middlemen (wholesaler) set all factors that provide him benefits.

Table# 03: Farm Data of USA and Pakistan Area III.

S.#	FRMM	Muncie USA	Hyderabad Pakistan
1	COSM	2	4
2	MSMP	1	3
3	MTS	2	3
4	MPF	1	4
5	DFU	1	3
6	FPR	2	4
7	FP	1	3

Source: U.S –Pakistan Milk Marketing Survey.

RESULT AND DISCUSSION

The overall analysis of milk marketing decision-making in the USA and Pakistan is almost the same. Table # 1, 2, and 03 shows that U.S milk marketing is organized.

Source: Data Analysis

In figure# 01 the two categories are shown; 0 highlights the negative trend and 1 highlights the positive trend. According to the

data set up, the trend of the line is towards 0 sides this means there are very few rights and opportunities to farmers in Sindh to sell milk in the potential market. This illustrates that negative elements in the milk marketing chain are high in

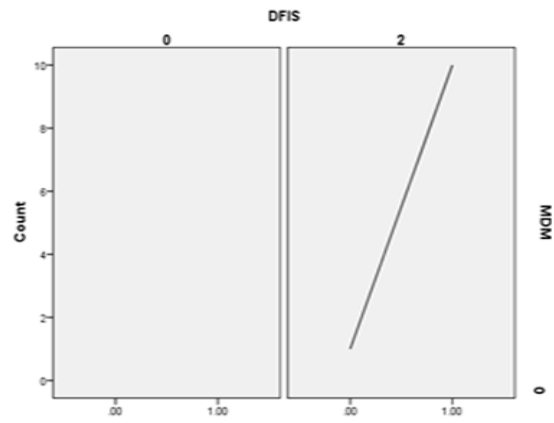


Figure 1: Analysis Farm Factors.

various areas of Sindh like a low price, no right of decision making to farmers, unavailability of transport, financial support or subsidy, training, and chiller plant. As well as, the upward trend of the graph shows that farmers have no suitable income, hence they cannot grow their business.

On the basis of milk marketing functions shown in Table # 03 and in figure #01, hence the milk selling environment in Sindh is poor the figure shows that how milk reaches to market the most of the milk is produced in rural areas, there is no institutional support to the farmer, and the ratio of the margin of farmers on the selling of milk is very low that hampers farm production.

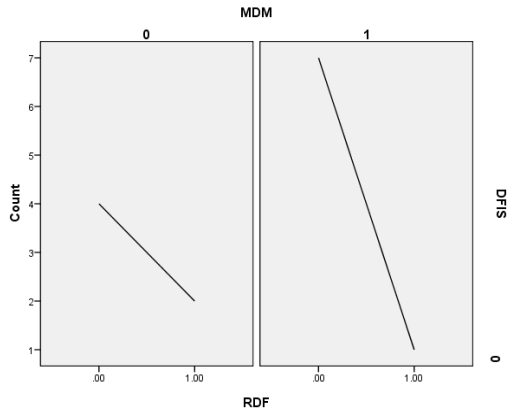


Figure: 02. Analysis of U. S milk marketing model

Figure #02 is a graphical representation. In this graph two categories are shown; 0 and 01. According to the data set up, the upward trend of the graph is towards 1 side. This means there are significant opportunities for US farmers to sell milk in the potential market. As the graph line is high at 1 point this illustrates that positive elements in the milk marketing chain prevail in the United States. That is a standardized milk price, right of decision making, availability of transport, financial support or subsidy, training, and chiller plant. As well as an upward trend of the graph on point 01-shows that US farmers earn satisfactory income from the dairy enterprise. Hence this trend grows their business and farm productivity. On the basis of milk marketing functions shown in Table # 1, 2 and 3 and their results shown in Graph #02, this is the cumulative result of whole data that illustrate how milk reaches to market and what is the behavior of institutions that are involved in the milk selling process. In this way, graph# 02 shows that US dairy farmers get sound and integrated support in milk selling. In this context, US farmers have compact institutional support from State Dairy Councils, US Department of State, and Dairy Cooperatives. The model illustrates that US dairy farmers are satisfied with farm earnings. Hence, this system enhances dairy production and farmer’s profitability. In contrast, figure#01 shows the cumulative results of milk marketing patterns taken from Table#1, 2, and 3 in Pakistan where farmers do not get support in milk marketing and they all depend upon the policy of buyers like a middleman, wholesaler, retailer, or somewhere consumer. A farmer in Pakistan has no knowledge of setting milk quality, facility of transport and milk preservation, price setting, and managing account of the farm enterprise. Hence, most of the time, they get very low profit and put very hard work into it. Low dairy farm earning in Sindh opens the door of miseries for the farmer that hamper enterprise. However, somewhere milk marketing functions in Sindh Pakistan do not work properly or absent such as dairy cooperatives and regulations on quality and price adjustment. Hence, the analysis shows that due to natural advantage about 80% of milk

is produced in rural areas of Pakistan and usually Milk buyer in the rural market is known as a middleman. The analysis shows the difference that in some areas in Pakistan the only middleman performs and regulate all milk marketing functions for example middleman set quality standards of milk which are mostly not acceptable to the farmer, and set the price of milk according to his set standards of quality, decide what quantity of milk is purchased, no matter if a farmer wants to sale 40 liters of milk but if middleman do not want to buy whole quantity then the farmer has to return remaining milk back to home and that is a total loss. Also, dairy farmers in Pakistan do not avail of the facility of the chiller plant, receive payment on time, and transport and receive any support from the government in milk marketing or for their welfare. Whereas, in the US, more than one institute performs the milk selling process that is dairy cooperatives. The study discovered that the only Middleman dominates and regulate all functions of milk marketing in Pakistan. On the other side, in the U.S this job is done by cooperatives hence there is no conflict of interest between the seller and buyer they define rules and regulations of milk selling with the mutual agreement of all stakeholders. Hence, US milk marketing system support to the farmer, that positively impact on cattle health, consumer rights, and so on, whereas in Pakistan milk marketing system is not according to the choice of the farmer that hamper farm productivity, growth of livestock, reduce the market value of milk, and in broader term create an overall loss for economy and reduce production in the country.

CONCLUSIONS

The US milk marketing model is a farmer-friendly model that enhances and supports the whole dairy chain like animal health, farm productivity, farmer's earning, and growth of livestock in the country. On the other hands, milk marketing model in Pakistan is unfriendly for farmers that effects whole farm enterprise like cattle health, milk production, farm productivity, growth of livestock sector, and create a risk of a shortage of food, malnutrition and widespread of poverty[13]. The reason for such a dilemma is the functions of milk marketing in the United States are managed by dairy cooperatives that develop a mutual agreement between seller and buyer and on the other side various farm welfare programs work in the United States. But in Pakistan, all control of the purchase of milk is in hands of the buyer not the seller and that is totally against the interest of dairy farmers [14].

RECOMMENDATION

The milk marketing problem in Pakistan can be addressed by providing infrastructural support, the establishment of dairy cooperatives society, and giving some financial facility to dairy farmers. To reduce the role of middlemen farmers may be given finance to establish their own dairy retail shops in the city milk market or cooperatives establish milk retail shops that may be managed by directly farmer, or dairy cooperatives [15]. The scientific rules of setting quality standards and the price of milk may be adopted. In this context, it is suggested that the US milk marketing model in Pakistan may be applied that augment farm productivity, farmer’s welfare, milk quality, and income.

REFERENCES

- [1] Deloitte Development LLC,: Capitalizing on the shifting consumer food value equation(2015).
- [2] Deloitte Global Dairy Sector, Trends and opportunities (2017) .
- [3] Bernard L. Erv in the role of human resource management in dairy farms risk management, NPIDR management.USA (2008).
- [4] Bilal M Q and M S Sajid Meeting Milk Demand “The Only Way is to Modernize Dairy Farming” The Nation, May 29, P-2 Cooperatives in Dairy Industry, (2005)
- [5] United States Department of Agriculture Cooperative Information Report 1, (2005)
- [6] Datt (2001) ADT Planning in dairy business Dep’t of agri Economics; Journal of Agri Economic ADT (2001) Column 13, Page 1.Canada.
- [7] Economic Survey of Pakistan, 2017-18
- [8] Government of Pakistan (2011-12), “Pakistan Census of Livestock, Pakistan Report, Vol.1,”
- [9] H.M Spicer and L.A (1994) soured of dairy science “Alberta Dairy farm were surveyed response 1994 77:3460-3472 vol 77 No. 11, 1994.Canada.
- [10] M. Afzal (2006) Dairy Sector Pakistan Milk Marketing Chains Livestock and Dairy Development Board Islamabad.
- [11] M. Afzal Livestock Resources of Pakistan: Present Status and Future Trends, Quarterly Science Vision **9** (1-2) (2003) & 3-4 Animal Sciences Division, Pakistan, Agricultural Research Council, Islamabad (2004) .
- [12] National Sample Survey Organization “Land and Livestock Holding Survey: NSS 48th Round.” NSSO Report 408 Government of India (1992).
- [13] P. R.Gupta “Analysis of Consumer Expenditure Pattern in States with Special Reference to Milk and Milk Products.” National Information Network, NDDB (National Dairy Development Board) In press (1997).
- [14] Qamar and Khalida (2013) “Impact of Dairy Industry on Milk Market Value and Production: A Comparative Journal of Pakistan Vision, Pakistan Study Centre, University of Punjab **14**(2), (2013).
- [15] Solangi Asif & Qamar (2010) Milk Market Value in District Hyderabad, MBA thesis, Department of Management Sciences, Isra University Hyderabad, Sindh, Pakistan.