

The Role of Milk Collecting Centers in Socio-Economic Situation of Dairy Animal Keepers

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ABSTRACT

Most of the poor people in developing countries live in rural areas. Experience shows that in many countries animal husbandry development and increasing investment specially is a way to challenge the poverty in rural areas. This is obvious that, small producers have key role in dairy markets and dairy development but they have no power to bargain and negotiate for higher prices, access to the marketing, and up to date their knowledge and skills. They have few animals with low milk production and low quality. In these situations, cooperatives are best choice to organizing smallholder milk producers. With such organization smallholder milk producers are able to increase their competition power. Milk collecting centers as a place to implementing this purpose can play a big role. These centers in the production stage can help smallholder milk producers to have access to the dairy animals with high quality, feeds, veterinary and other supplies. This centers in the marketing stage, with adopting politics for example punishment and rewards politics, and preparing training courses help to improve milk quality and to reduce milk microbial. This article investigates the role of milk collecting center to improve smallholder milk producer's situation, and their conditions in the Esfahan area.

Keywords: Cooperative; Milk collecting centers; Smallholder milk producer.

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INTRODUCTION

Dairy product especially milk have effective role in rural poverty reduction and livelihood improve that is in result of high output for land and labor inputs. Milk sale from rural to cities is significant factor for capital transmission from city to poor rural areas. One of the benefits of supporting dairy development is that there are fewer economies of scale involved in production than in other livestock systems. Studies have empirically shown that smallholder dairy producers remain competitive in many areas in developing countries (Morgan, 2009).

Development of an efficient, feasible and affordable system for milk collection, transport, processing and marketing is of highest priority, and helps keep the price at an affordable level for consumers. The best motivation for farmers to diversify and invest in dairying is the presence of a safe and profitable market outlet, leaving the smallest possible risk for the farmer. The most efficient way to exploit a location's potential for milk production is to open a milk collection centre and invite farmers to participate. According to an Asian Development Bank report an estimated 15–20 percent of the total milk production in some areas is lost due to the unavailability of cold storage (FAO, 2006). The construction of milking stations directly benefits dairy cow raisers by not only reducing labor requirements but ensuring the availability of a stable market and technical training for dairy cow raisers. The dairy product processing enterprises benefit from a stable source of high quality raw milk, limiting opportunities for milk adulteration. The quality of animals is critical in determining its milk productivity and hence overall production. Currently, low productivity per animal hinders development of the dairy sector. Livestock assets are likely to be better where organizations serving the area are involved in dairy development activities (Punjabi, 2009).

While many bovine diseases are prevalent in the areas of current and potential dairy production, there are well-documented health management practices for minimizing the risk of infection and productivity loss (Ranaweera, 2009). The challenge for dairy development is a complex. Animal health is one case of dairy development but animal health services are poorly equipped and unreliable in rural communities that is one case of successful keys for dairy development (Henriksen, 2009).

Experience shows in some developing countries such as Bangladesh and India that cooperatives can effective in dairy development. For example in India the cooperatives also set a benchmark for prices paid by other buyers, such as local vendors and private dairies, who tend to pay 50 paise or 1 rupee (\$.02) more than that paid by the Cooperatives. Thus, if the farm gate price paid by the cooperative is low, other players also pay a low price (Punjabi, 2009). Other obvious example in Thailand show that a number of dairy cooperatives followed, set up as milk collecting centers to deliver raw milk to the processors that contributed to socioeconomic improvements in the rural areas, bringing dairy farmers a regular income and reducing the migration of workers to cities (Chungsiriwat, 2009).

Milk industry in Iran take into account the best of animal processing industry whereas in 2006, milk production increased with 200 thousand ton and arrived to 7.6 million tons, Further Iran known, fifteen of milk producer country in the world (FAO, 2006). The major purpose of present article was to examine the role of milk collecting centers in improving smallholder milk producer's situation.

MATERIALS AND METHODS

This article is the kind of applied type research with descriptive-correlation method. The total population for the study consisted of 160 dairy animal keeping who were member of cooperatives and 20 person(expert) who had working in milk collection station belong to Shahin city Rural Cooperative Association. The sample population were selected through random sampling and based on Morgan table. The primary data collected from the questionnaire and interview.. For examining of questionnaire reliability, using from pretest and SPSS software and estimated 81% .In SPSS software used Spearman correlation and regression analysis

RESULTS AND DISCUSSION

In 1998, Shahin shahr Rural Cooperative Association along with Pegah Dairy Enterprise decided to establish a station to collect the milk from producers. This association currently has two stations and 160 active members.

The results of the study show that 60 percent of members were working as traditional dairy producers and majority deliver their milk twice a day to the stations. It was reported that those producers who were active before establishing stations, indicated that the cost of delivering milk have reduced and process of marketing have been facilitated. Members believed that providing information about access to inputs and controlling diseases had significant impact on quality of milk.

The results of regression analysis show that controlling diseases explained 45 percent of changes on dependent variable. It was also reported that controlling diseases explained 22 percent of changes on milk production and 33 percent of fat and protein contained in the milk.

Table1: Regression analysis about the role of providing information about disease control on microbial rate

Independent variable	B	Beta	t	Sig t	R	R ²	Adjusted R ²	F
constant	0.752	-	1.743	0.098	-	-	-	-
Information about disease control	0.457	0.674	3.872	0.001	0.674	0.454	0.424	14.989

Table2: analysis about the role of providing information about disease control on milk quantity

Independent variable	B	Beta	t	Sig t	R	R ²	Adjusted R ²	F
constant	1.957	-	3.339	0.0004	-	-	-	-
Information about disease control	0.370	0.478	2.309	0.033	0.478	0.228	0.186	5.330

Table3: analysis about the role of providing information about disease control on milk protein and fat variable

Independent variable	B	Beta	t	Sig t	R	R ²	Adjusted R ²	F
constant	1.200	-	1.993	0.062	-	-	-	-
Information about disease control	0.500	0.582	3.040	0.007	0.582	0.339	0.303	9.241

CONCLUSION

Experience shows that dairy cooperatives in developing countries can have effective role in dairy promotion. Most of the small dairy cooperatives scope their activity in collecting milk from the members, quality control and delivering raw milk to the processing plant. The result shows that knowledge and skill promotion of members is important. Promotion of smallholder dairy animal keepers situation have key role in dairy development and cooperative can have a critical role in this regard.

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