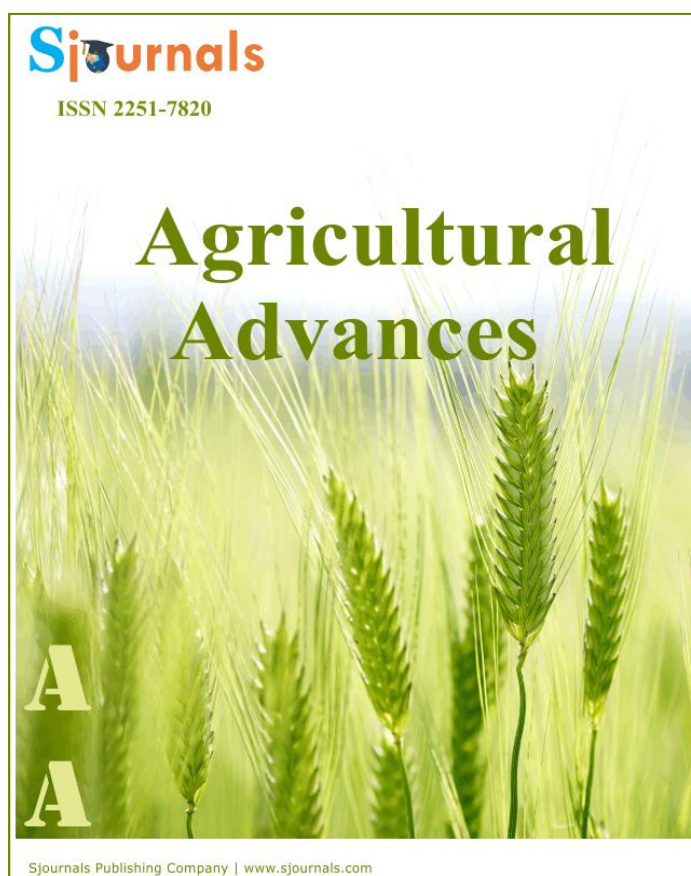


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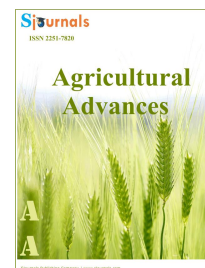
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Original article

The status and constraints of primary dairy cooperatives in Selale dairy cooperative union, Oromia special zone, Ethiopia

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ABSTRACT

The study was conducted in the selected 6 Primary Dairy Cooperatives of Selale Dairy Cooperative Union (SDCU) aimed with to study the status and roles of primary dairy cooperatives in service delivery, market linkages and their major constraints. SDCU was purposively selected because of its large number of primary dairy cooperatives and the high potential of dairy production in the area. The primary dairy cooperatives were stratified into three strata: (high milk supplier- 400 liters), medium milk suppliers (200-400 liters) and lower milk suppliers (<200 liters) based on their daily milk supply potential. In proportion to the size of primary dairy cooperatives, one (1) primary dairy cooperative from higher suppliers, one (1) from medium suppliers and four (4) primary dairy cooperatives from lower suppliers were randomly selected. Accordingly, 115 dairy producers were selected by probability proportionate to size of members of the selected cooperatives. The required data were collected by using semi-structured questionnaire from the respondents and supported by focused group discussion and key informants interview. All the data collected were analyzed using SPSS (Version 20). About 86.43% of the milk produced by the respondents was delivered to the prevailing market from which the major market share belongs to the Dairy Cooperative Union; because it allows

them to get reliable milk markets with fair price including fasting periods. Absence of reliable market for processed milk, lack of milk collection center around the members, inability of the dairy cooperative union to collect all the milk supplied by members were among the constraints of milk marketing in the SDCU. SDCU was provided service delivery such as concentrate feed supply, training and advisory service, marketing, artificial insemination and veterinary services for the members. However, it was constrained by inadequate provision of dairy inputs, lack of enough materials like refrigerators to preserve milk and milk products; lack of commitment and abuse of finance by the management; weak linkage of the dairy cooperatives with service providing actors. It could be concluded that the service provision is substandard and also there are poor linkages among the dairy cooperatives and other actors in the milk value chain. Though the overall financial status, number of primary dairy cooperatives and number of members of the dairy cooperatives are increasing, the profit, the trust of members on the management and sense of ownership were declining. Thus, there is an urgent need for the dairy cooperative union management staffs to ensure transparency and develop sense of ownership among members by encouraging them in planning and execution, strengthen the linkages among dairy cooperatives and with different actors involved in milk value chain by organizing stakeholders' forum.

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1. Introduction

The rural small-holder dairy production system produces the largest share of total milk produced; contributing 98% of the milk supplies (Land O'Lakes, 2010; CSA, 2017); however, they lack the required technological, organizational as well as institutional capacities (Yilma et al., 2011). They are focal points of the extension services provided by various development partners that include extension agents, non-governmental and international partners, cooperatives, research and higher education institutions. Market oriented smallholder dairy development in Ethiopia offers a great opportunity to improve food security and livelihood for the rural majority, including for the poor and women. However, the sought transformation of the subsistence oriented dairy production systems to that of productive, market oriented and dynamic systems calls for sustainable market for the dairy products and organized service delivery.

In Ethiopia, dairy production system is not market oriented and milk produced by smallholders is primarily used for household consumption purpose. The surplus milk is processed in to butter, ghee, cheese and sour milk and sold through informal market (Redda, 2001). The primary reason among others seems to be the inefficient dairy and dairy products marketing characterized by high margins and poor marketing facilities and services. Regardless of the challenges outlined above, market-oriented dairy production is still one of the promising avenues to improve food security and livelihood of rural households in Ethiopia. The opportunity for increasing income, employment, and improving food and nutritional security of rural households through smallholder commercial dairy development arises from many factors: the expected increase in demand for milk and milk products in the country with increasing population, increasing urbanization, and expected increase in consumers income; it is estimated that 50% of households in the highlands own cattle of which 56% are dairy cattle (Ahmed et al., 2004).

In the study area, although there are many advantages in organizing farmers in dairy cooperatives over individual farming, information on whether dairy cooperatives are progressing or decreasing, their input delivery system and associated constraints are not well known. Moreover, primary dairy cooperatives themselves are

facing institutional, technical, management and marketing related constraints. Hence, it is with this context that this study was aimed to address the following objectives:

- ✍ To evaluate the status of primary dairy cooperatives in Selale Dairy Cooperative Union (SDCU)
- ✍ To study the role of primary dairy cooperatives in service delivery and their major constraints in SDCU
- ✍ To assess market linkage of primary dairy cooperatives and its associated constraints in the study dairy cooperative union

2. Materials and methods

2.1. An overview of Selale dairy cooperative union

Selale dairy cooperative union was established in June 2001 with 9 primary dairy cooperatives, 512 members, and 39,000 birr capital and with the capacity to supply 98 liters per day in Sululta district. It is found at 40km north of Addis Ababa (capital city of the country) and is very close to the other major urban centers like Sululta town. As compared to many other cooperatives unions in Ethiopia, Selale dairy cooperatives union has large number of primary dairy cooperatives and the area has high potential in dairy production and its own milk and feed processing plants; and supplies its products to the market. The population in Addis Ababa, Sululta, Chancho and Gohatsion towns create a large market for most dairy products, which is an opportunity for this dairy cooperative union development.



Fig. 1. Previous Oromiya Region North Shewa Weredas.

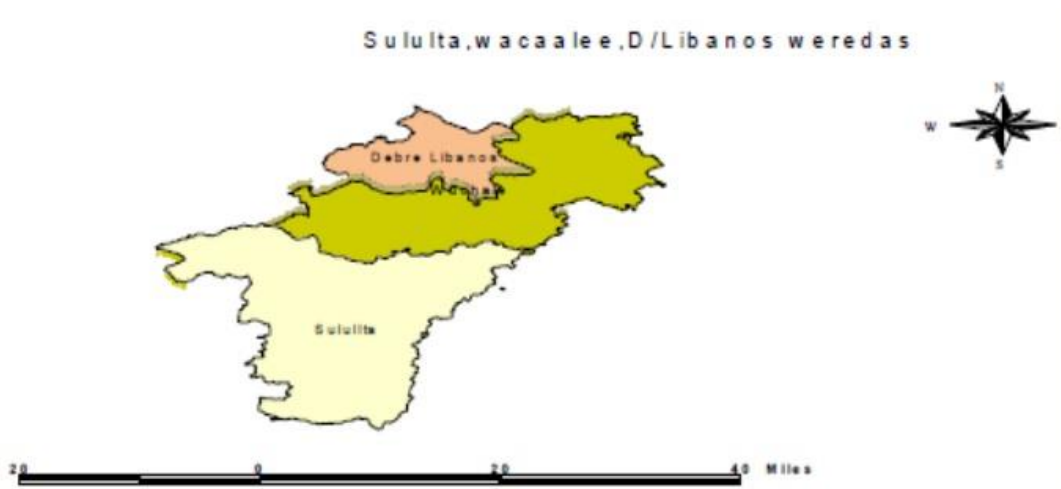


Fig. 2. Map of the study area, Sululta, Wuchale and Debre - Libanos districts.

2.2. Sampling procedures

2.2.1. Selection of the study dairy cooperative union

Among the Ethiopian dairy cooperative unions found in Oromia special zone surrounding Finfine, Selale Dairy Cooperative Union was purposively selected based on strength in movement, huge in primary dairy cooperatives and potential of milk production. This is in fact, Selale dairy cooperative union has 27 primary dairy cooperatives in six districts with 3000 members, 20 million capital and 15,000 liters of daily milk supply (SDCU annual report, 2015) (unpublished).

2.2.2. Selection of primary dairy cooperatives

Selale Dairy Cooperative Union was selected to generate information on the status and constraints of dairy cooperatives in service delivery and market linkages. This was done by obtaining the list of the existing primary dairy cooperatives along with their milk supply potential. On the basis of daily milk supply potential, primary dairy cooperatives found in SDCU were stratified into three: high (> 400liters), medium (200-400litres) and lower (<200liters) milk supplier. Therefore, SDCU has three (3) high milk suppliers, five (5) medium milk suppliers and nineteen (19) lower milk suppliers. Accordingly, one (1) primary dairy cooperative from higher suppliers, one (1) from medium suppliers and four (4) from lower suppliers were randomly selected in proportion to the size of primary dairy cooperatives in each category. Thus a total of six primary dairy cooperatives which are located in three districts were considered in this study.

2.2.3. Determination of sample size

In each 6 selected primary dairy cooperatives, the total number of dairy cooperative members was obtained and the sample size was drawn by using Yemane (1967) sampling formula with 92% confidence level.

$$n = \frac{N}{1+N(e)^2}$$

Where,

- N – designates total number of members within the 6 primary dairy cooperatives
- e – designates level of precision or margin of error 8 % (0.08)
- 1 – designates the probability of the event occurring
- n – designates sample size

During the study period, Selale Dairy cooperatives Union has 439 total numbers of members (N). Hence,

$$n = \frac{439}{1+439(0.0064)} = 115$$

Thus 115 members of primary dairy cooperatives which constitute; 22, 56, 9, 9, 9 and 10 were selected randomly from Jitu Bira, Nano Chanco, Lelistu, Gudina Boru, Becho Derba and Nano Seyo primary dairy cooperatives, respectively and used for the study (Table 1).

Table 1
Selected primary dairy cooperatives with their location and sample size.

No	Selected primary dairy cooperatives	Categories from which they were selected	Location /district	Total of members	Sample size
1	Nano Chanco	Higher milk supplier	Sululta	215	56
2	Jitu Bira	Medium milk supplier	D/Libanos	84	22
3	Lelistu	Lower milk supplier	Sululta	35	9
4	Gudine Boru	Lower milk supplier	Wuchale	33	9
5	Becho Derba	Lower milk supplier	Sululta	33	9
6	Nano Seyo	Lower milk supplier	Sululta	39	10
Total				439	115

In addition, to obtain further information on constraints and other related issues, it was planned to find out those who have been members of the dairy cooperatives previously and dropped out currently.

2.3. Source of data and method of data collection

Both primary and secondary data sources were used to gather the information required for the study. Primary data were collected from the dairy cooperatives' members by using semi-structured questionnaires. Focused group discussion (FGD) (10-14), key informant interview (KII) (4-6) and field observation were also employed to support the data collected from the respondents. The status of dairy cooperatives was assessed through assessing the trends in numbers of primary dairy cooperatives, number of members, capital of the dairy cooperatives (from audit report), capacity of milk production and supply.

Secondary data relevant for this study were collected from the office of the Selale Dairy cooperative Union, the Districts' Livestock and Fishery Resource Development Office, the District Cooperative Office, the Federal and Regional Cooperative Bureaus, and other published and unpublished documents.

2.4. Method of data analysis

All the collected data were coded and entered in to MS-Excel computer software used for data managing and analyzed by using Statistical Package for Social Science (SPSS) software version 20.0. The results were summarized using frequency, percentages, mean and standard deviation and presented in the form of tables of graph.

3. Results and discussion

3.1. Historical development of Selale dairy cooperative union

Selale Dairy Cooperative Union was established in June 2001 with the objectives of supplying important dairy production inputs and introducing members with the latest dairy technology for the development of dairy production; improving the quality of dairy and dairy related products produced by the members, and providing reasonable price. Moreover, it was also proposed to provide services in introduction of more value addition in the dairy processing, providing education and training to members for sustainable dairy production and supplying artificial insemination, veterinary service and other related services. During the study period, the union contains 27 primary dairy cooperatives that is organized by a total of 1953 members and has the potential of supplying 3832 liters per day (Table 2).

Table 2

The name, number of members and daily milk supply potential of primary dairy cooperatives in SDCU.

No	Name of the primary dairy cooperatives	Number of members			Daily milk supplied in Liters
		Male	Female	Total	
1	Chancho /sululta	160	55	215	599
2	Debretsige	170	134	304	500
3	Duber	47	8	55	435
4	Abdi Jiregna	72	30	102	397.5
5	Jate	67	30	97	283
6	Jitu Bira/ D/ libanos/	60	27	84	217
7	Fiche	62	27	89	260
8	Gudine Boru /Wuchale	27	6	33	173
9	Hunde Gudina	68	8	76	120
10	Heveno	61	26	87	189
11	Ekokidus Giorgis	25	15	40	83
12	BechoDerba /sululta/	23	10	33	90
13	Anokere	83	14	97	39
14	Sele	34	28	62	81
15	Muketuri	13	2	15	50
16	Goroharo	76	11	87	283

17	Burka Guda	3	35	38	55
18	Torba Ashe	61	19	80	83.5
19	GendeGuda	2	15	17	38
20	Ana Sosogo	15	10	25	55
21	Nano seyo/sululta/	36	3	39	80
22	AbdiLoni	26	8	34	31
23	Kasim	30	31	61	61
24	Kasolegedima	26	8	34	83
25	Egdu	30	22	52	64
26	Alidoro	27	35	62	41
27	Lelistu/sululta/	31	4	35	40

Source: Selale Dairy Cooperative Union Office (March, 2017).

3.2. Demographic characteristics of the respondents

Of the total respondents, about 37.4% were in the age group of 30-40, while about 38.3% were in the age group of 41-50 years, and the rest (24.3%) were >50 years. This revealed that the majority (75.7%) of respondents were found between the age of 30-50 years which is a productive age group and can participate in dairy cooperatives.

With respect to literacy, majority of the respondents (91.3%) were literate and the left (8.7%) were illiterate. Since education is important in modernization of dairy production and commercialization of dairy products by using technologies that requires a continuous training to enable the dairy productivity to move forward, therefore the farmers in the study were aware of dairy technology and advantage of organizing in dairy cooperatives.

Of the total respondents, majority (81.7%) were male, while the rest (18.3%) were female. This indicated that most members of the union were males, which disagreed with the report of Almaz (2008) in which most of the respondents (53%) were female in Tigray region.

3.3. Duration of membership and experience of the respondents in dairy cooperatives

As the current result revealed majority (80%) of the farmers have stayed more than four years as members in the dairy cooperatives, which was disagreed with the report of Almaz (2008) in Tigray region dairy cooperatives. During the study period, dairy producers were not joining in the dairy cooperatives because non-members are aware of the dissatisfaction of members on primary dairy cooperatives they were involved in. Fischer and Qaim (2012) and Nigusse et al. (2013) suggested that both relative very small scale and (more often) larger scale farmers hold a lower probability to join a cooperative compared to middle sized. A working hypothesis to explain this pattern is that collective action might be too costly for very small scale farmers (to high transaction cost) while its benefit may not surpass its cost among relative large scale farmers.

With respect to experience of the dairy cooperative members, most of the respondents (70%) have more than four years of experience in dairying indicating that, they have rich experiences regarding opportunities and challenges of dairy production, processing and marketing as well as organizing in cooperatives. They are able to produce more amounts of milk and as a result, expected to supply more amounts of milk to market and less risk. In the same way the overall supply of Selale Dairy Cooperative members' milk supply also increased.

3.4. Criteria of the dairy cooperatives

During the study, cooperative membership was open to every dairy producer at least with one cow and resided in towns and its surroundings, capable of paying a registration fee and buys at least one share. Registration fee and the value of one share are different according to the financial capacity of the dairy cooperatives. In addition to this, one member can't purchase more than 10% of the whole share.

The dairy cooperatives have a constitution or by-law which is the fundamental instrument of the cooperative that defines the duties and responsibilities of all shareholders and the various committee members. The by-law is also under continuous revision following the change in the organizational objectives of the dairy cooperatives. Discussion with focus group discussion revealed that it would have been the by-law of the cooperative which guides the dairy cooperatives and every member of the dairy cooperatives to be willing to implement his/her obligation and observe and respect the objectives and by-law of the Cooperatives.

Even if the by-law was the main guideline for all members of the dairy cooperatives, it is clearly observed that it is ignored by the previous management bodies; which is revealed by absence of payment for the members who supplied milk for about eight rounds to the dairy cooperative union. According to the respondents, each member of the dairy cooperative is given a quota of milk to supply which is set by the dairy cooperative union as the union is not in a position to collect all the milk supplied by the members. As a result of this, members are forced to sell the rest of their milk to other milk collectors or areas; refuse to supply milk to the dairy cooperative union regularly. But since the by-law of the cooperative states that if a member refuses to supply consecutively for one year, then that member will be terminated from its membership so that just to fulfill the criterion they irregularly supply milk to the dairy cooperative union.

3.5. The status of Selale dairy cooperatives in market linkage

Members of the dairy cooperatives use different milk marketing channels to sell their milk during the study period is depicted in Table 3.

Table 3

Milk marketing channel of SDCU.

Milk marketing channel	Frequency	Percent
Dairy cooperatives	46	40
Local assemblers	35	30.4
Consumers	20	17.4
Traders in the district market	14	12.2
Total	115	100

3.6. The status of dairy cooperatives in market linkage

Of the total, about 60% of the members did not sell their milk to the dairy cooperatives due to the dairy union milk processing plant doesn't process milk with its full capacity and forced to set a quota and buy some of the milk supplied by the members of the dairy cooperatives. The price paid to a liter of milk by the Dairy Cooperatives Union was not encouraging in relation to other collectors and the union did not pay for about eight rounds of member's milk supplied (one round being two weeks). It is also indicated that each farmer has 10,000 to 80,000Birr which was expected to be back paid to the suppliers' /members/.

Forty percent (40%) of the respondents were supplying their milk to the dairy cooperatives union, which was not in agreement with Fikrineh et al. (2012) from the areas of Mid Rift Valley of Ethiopia who reported 21%. In the present study, dairy cooperative union members preferred to sell their milk to the dairy cooperatives because they were getting sustainable milk market and price including fasting periods.

Cooperatives are forming unions for better marketing capabilities and better bargaining power. Selale dairy cooperative union is among the unions established in the dairy sector with the objective of supplying sustainable market, important dairy production inputs for the development of dairy products, but as the group discussion showed the union didn't employ by an appropriate human resource; for example, marketing and salesman which resulted in the absence of sustainable and investigation based market with institutions. They were using drivers for selling milk. In addition, feed processing machine were not working for the last three years due to finance limitation, resulting in the dairy cooperative union could not supply concentrate feed for its members.

As the group discussion revealed, even though there is a slight ups and downs in price through time, during fasting of orthodox religion followers, the cooperatives have been collecting milk with ten Birr (10.00) per liter and other collectors pay (11.00) Birr which is by far lower than the price of milk sold in Addis Ababa forty kilometers apart from the union milk processing plant which is 22 Birr per liter.

Dairy cooperatives are supplying milk to different private collectors and processors. As it is known many cooperatives are established for marketing of raw milk of smallholders in the urban and per-urban areas. As the key informant interview revealed, even though Selale Dairy Cooperative Union milk processing plant has the capacity of processing 20,000 liters per day, now a days the union is processing only 500 liters of milk per day. From audit report, it was realized that the dairy cooperative union was in a negative balance and in a very serious financial constraints.

3.6.1. Small scale processors

As group discussion revealed, small scale processors are also found in the milk marketing channel of Selale Dairy Cooperative Union. These are those who are limited themselves to small scale niche market like certain type of cheese. Small scale processors are directly buying raw milk from union, cooperatives and individuals. SDCU were selling milk to small scale processors like Penguin (small scale processor) found in Addis Ababa.

3.6.2. Individual collectors

Individual collectors are those who are found around producers and collects milk from them and they are one of the actors found around SDCU competing with it for the raw milk. Key informants interview revealed that, individual collectors mainly supplying to households through door to door delivery and to cafes, institutions and restaurants in the area and in big adjacent towns and cities like Addis Ababa. The main end consumers of house delivery were infants and children. The delivery was often on a monthly contractual basis with minimum delivery size of half liter. Cafes and restaurants were choosing for unpasteurized raw milk mainly for bulk delivery and of the perception that they have better fat and nutrients content and test than the pasteurized one. Individual collectors were using their own transportation system in delivering the milk consistently.

Discussion held with members of the union revealed that the presence of those collectors around the area was very useful for them to sell their milk which is surplus from the quota set by the dairy cooperatives union. Even though SDCU was not in a position to buy all the milk produced by the dairy cooperative members, the existence of the union dairy processing plant in the area helped members to stabilize price of milk. However, it was stated that most of the time complains were raised regarding the quality of milk as there is no quality control on milk distributed at household level and adulteration is the common problem on this channel.

3.6.3. Cafes, restaurants and shops

The other marketing channels of SDCU were the presence of large number of cafes, kiosks and restaurants in all towns. As the key informant interview confirmed hot milk and macchiato (mix of coffee and milk) are the famous drinks which trigger the demand for milk by cafes and restaurants. Kiosks, shops and supermarkets were selling pasteurized packed milk to household buyers. Butter, cheese and yogurts are solely sold at supermarkets.

3.6.4. Households

During the study, household consumers were the middle and high income household, who could manage to pay for raw unpasteurized milk on a daily basis buying from the members of the dairy cooperatives, individual smallholders who were collected raw milk from members. Because of price, sustainable supply and the perception that pasteurized milk is something that certain milk cream are extracted, and also the price of unpasteurized milk is much better than the pasteurized one most household buyers are inclined to unpasteurized raw milk but in this marketing channel also, adulteration is the most challenging issue as the group discussion revealed.

3.6.5. Institutional buyers

These were big institutions, colleges, hospitals, military camps and big enterprises are also categorized under institutional buyers. Sometimes SDCU supplies pasteurized milk for Ethiopian Management Institute.

3.6.6. Commercial processors

Commercial processors are those implement modern technology with a majority of their output being pasteurized and packed with the size of 500ml. during the study period, there were about seven dairy processing companies working in Addis Ababa and nearby towns. One of the oldest state owned dairy processing enterprise formerly called DDE or Shola was privatized in the year 2008 and renamed as Lame Dairy Plc.

3.7. The status of Selale dairy cooperatives in service delivery

3.7.1. Concentrate feed provision

The bottlenecks regarding livestock feed were inadequacy of animal feed resources, lack of grazing land, poor pasture development and the ever increasing feed prices. One of the objectives of establishing the cooperatives was to supply/deliver/ different inputs and services. With this consent, farmers of the Selale Dairy Cooperatives supplement the feeding of their dairy cows with crop residues, hay, and farm by-products from their farms.

In some cases, during the dry season, these feedstuffs could be the only feeds available to the animals. Thus to address such problems in the area, SDCU was established feed processing plant and started providing concentrate feed for the members with fair price. However, for three years ago, the union feed processing plant couldn't process and supply concentrate feed to 69.6% of the dairy cooperative members. This might be due to financial scarcity (1st) which is the consequence of management and some staff members who abused finance which leads the dairy cooperative union to be in negative balance; and weak linkage with different animal feed suppliers (2nd) and hence only few members of the dairy cooperatives (4.3%) and (26.1%) were getting livestock feed supply whenever needed and sometimes, respectively (Figure 3).

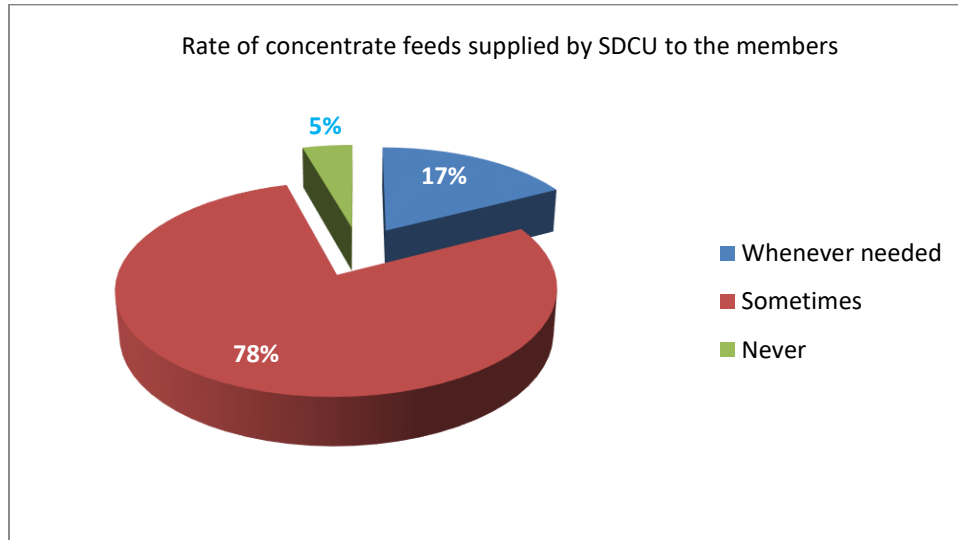


Fig. 3. Concentrate feed supply by SDCU to its members.



Fig. 4. Marketing service /buying and selling milk/.

3.7.2. Trainings and advisory service

Of the total, about 63.5% of the respondents have never got trainings during the last two years through the dairy cooperatives. In contrary to this result, Almaz (2008) reported as 20.7% the dairy cooperative members haven't got training in Tigray region dairy cooperatives. Only 36.5% of the respondents reported that they were

trained during the last two years. This might be due to the fact that, most members are accustomed to take training by receiving per diem, so that, when there is no payment for them, they do not want to attend the training. Moreover, the infrequent provision of trainings and advisory services might be because of weak linkage of the dairy cooperatives with actors involved in these activities.

3.7.3. Marketing services /buying and selling milk/

As depicted in figure (4), only 17.4% of the respondents were getting marketing service whenever needed. And 78.2% and 4.4% of the respondents were getting marketing service sometimes and never, respectively. This is resulting in low performance of the dairy processing plant which forced the dairy cooperative union to set quota system and buy limited amount of milk supplied by the members.

3.7.4. Provision of Artificial Insemination (AI)

The current study indicated that accessibility to AI and its efficiency was very low and only (8.7%) of the respondents were getting the service whenever needed and (65.2%) were sometimes. According to the dairy cooperatives committee members, the main problems in low performance of artificial insemination service was low in conception rate which resulted in absence of willingness of the AI technicians to inseminate the cows on time, lack of transportation, lack of effectiveness of the semen cows according to its importance.

3.7.5. Provision of veterinary service

Even though in dairy production, veterinary service is one of the major components for sustainable animal health, more than half (60.9%) of the respondents have sometimes got the service through dairy cooperatives. And 31.3 % of them have never got the service and only 7.8% got whenever needed. This might be mainly due to unaffordable price of veterinary drugs and inaccessibility of the service whenever needed, for these reasons; most members are inclined to cultural ways of treating their animals.

3.7.6. Reading the by-law of dairy cooperatives and its reason

More than three fourth (78.3%) of the sample members of the dairy cooperative didn't read the by-law of the cooperatives and only 21.7% who knows the by-law. The respondents were asked why they didn't read the by-law of the dairy cooperative when they join the dairy cooperatives, the majority of the respondents (71.3%) responded that the executive committees of the cooperative didn't tell them to read and know the by-law (Table 4).

Table 4

The response of the members of the dairy cooperatives about reading the by-law.

Parameters	Frequency	Percent
Have you read the by-laws of the dairy cooperatives?		
Yes	25	21.7
No	90	78.3
Total	115	100.0
The reason for not to read the by-law		
The executive committee of the cooperative didn't tell to know the by-law	82	71.3
I don't have information about the presence of the by- laws	33	28.7
Total	115	100

3.7.7. Milk production and distribution of the sample dairy cooperatives

In the present study, sample members of the selected cooperatives on average produced 18.06 liter of milk per day, which was less than that of Eshetu (2008) reported 23.49liter from Ad'a dairy cooperative. Of the total milk produced, 86% was sold as raw milk mainly to the dairy cooperative union and the rest 14%was consumed in the house hold (Table 5).

Table 5

Average milk produced, home consumed and sold (liter) per day by the primary dairy cooperative members.

Parameters	N	Minimum	Maximum	Mean	Std
Average milk yield	115	5	42	18.06	7.950
Home consumed milk	115	0	5	2.53	1.209
Milk sold	115	4	37	15.61	7.213

3.7.8. Members' perception towards the general trends of dairy cooperatives in Selale dairy cooperative union

According to this study, 76.5% of the respondents perceived that trends of the dairy cooperatives were decreasing, which was contrary to the earlier study conducted by Getnet and Anullo (2012) who reported that cooperatives in Ethiopia are growing in terms of number, type, membership size and capital. While about 23.5% of them believed that there were no changes in the status of the dairy cooperatives as shown in (Table 6).

Table 6

Members perception towards the trends of dairy cooperatives in Selale dairy cooperative union.

Trends of dairy cooperatives	Frequency	Percent
Decreasing	88	76.5
As they were	27	23.5
Increasing	-	-
Total	115	100

3.8. Major constraints of dairy cooperatives

3.8.1. Constraints in service delivery

With respect constraints in service delivery of SDCU, lack of commitments of the management committee (56.5%), lack of milk cooling facilities and refrigerators (17.4%) and lack of enough milk collection centers (8.7%) were among the major hindering factors ranked according to their importance (Table 7).

Table 7

Major constraints of dairy cooperatives in service delivery.

No	Constraints in service delivery	Frequency	Percent
1	Lack of having enough collection centers near to members home	10	8.7
2	Lack of providing adequate dairy inputs for members	20	17.4
3	Lack of having enough materials like milk cooling facilities and refrigerators to preserve milk and milk products	20	17.4
4	Lack of commitments by the management committee for the long term success of the cooperative.	65	56.5
Total		115	100

3.8.2. Managerial constraints

All the respondents (100%), focus group discussion and key informants interview clearly indicated that even though SDCU were previously started to give AI service, processed feed supply, improved breeds of cows and etc., now a day all these services have been declining due to lack of commitment, misuse of finance, weak market linkage, poor linkage among dairy cooperatives and service providing actors. They also revealed that during the establishment of the dairy cooperative union, the dairy union took high amount of money on the bases of loan from different credit organizations including Oromiya International Bank, which might be resulted in the member's lack of sense of ownership.

3.8.3. Limited access and high cost of dairy heifers/cows

The improved crossbred, grade and pure exotic dairy cattle were usually in short supply and when available, the high cost was a major problem. According to focused group discussion made, in previous years SDCU were tried to supply improved breeds of cows to its members, however, prices of crossbred cows and heifers are now unaffordable by the poor and the average smallholder dairy cooperative members that would have liked to expand in the dairy business.

3.9. Major constraints in market linkages

3.9.1. Governance challenge

The available evidence suggested that the dairy cooperative union governance and management systems and capacities were under development. The management of the dairy cooperative union didn't fulfill the necessary human resource needed for proper work. The union lack marketing personnel and salesman who could be responsible to explore market channel at different areas and sale the dairy and dairy products, so as to have sustainable market. There was no work done to promote the union resources and encourage moving forward, no experience sharing and professional personnel which enforced the cooperative union to have unsustainable marketing channel, scattered milk buyers with unknown duration. The other constraint were misuse of finance which resulted in scarcity of finance, in declining sense of ownership, lack of trust on management because of unpaid money for the milk collected from members.

3.9.2. Weak linkage among actors

Dairy cooperatives have a weak linkage with the district, regional and Federal levels cooperative agencies. This weak linkage might be the regional cooperative agency provided an audit service to the dairy cooperative union within two years gaps, which mainly exposed the dairy cooperative union to a great loss in its capital. The regional and district cooperative offices were expected to provide follow-up, technical support and advisory services especially for dairy cooperative management bodies that is why the other main problem of the previous management bodies were low-performance capacity and decision making ability according to discussion made with board committee members.

3.9.3. Lack of technical knowledge

This constraint notably manifested itself in the low rate of processing capacity utilization in SDCU. The discussion conducted with the board members revealed that because of inadequate capacity of technical skill in the dairy cooperatives managements, there were no promotional activities being carried out to have sustainable market, which agreed to the earlier study done by Simmons and Birchall (2008). Other constraints include lack of technical knowledge, and training in business and leadership skills; lack of access to markets beyond their locality; and lack of knowledge about opportunities for fair trade. These cooperatives are still held back by issues like over-regulation from governments and poor internal governance which can lead to lack of trust in their own elected officials.

4. Conclusion

It can be concluded that even though there were different milk collectors in the study area, the major share belongs to the dairy cooperative union; this was because selling to the dairy cooperative union enables them to get sustainable milk market price and sustainable milk market including fasting seasons. The presence of different collectors around the area was very useful for the members to sale their milk which is surplus from the quota that were set by the dairy cooperative union. Even if the dairy cooperative union didn't satisfy the market need of the members, the existence of the union processing plant in the area helped members to stabilize milk price. The dairy cooperatives provide training and advisory services, AI service, veterinary service and concentrate feed supply to their members through the service provisions are not that much satisfactory which could be attributed to poor linkages among the dairy cooperatives and other actors in the milk value chain. From the study, it was also understood that the dairy cooperatives in Selale Dairy Cooperative Union were declining in terms of capital, trust on the managements of the dairy cooperatives and sense of ownership. This is aggravated by lack of commitment,

lack of monitoring and evaluation systems by the government body (absence of regular auditing services and capacity building). Therefore, based on the above conclusion, the following recommendations are forwarded:

✎ Ensure transparency and increased participation of members in dairy cooperatives by involving them in planning and execution, which could develop sense of ownership mind and commitment.

✎ As the members of the dairy cooperatives in Selale dairy cooperative union prefer to sale their milk to the dairy cooperative union, the dairy processing plant should process in its full capacity working in collaboration with all the members, stakeholders, the concerned government body and nongovernmental organizations consequently be able to satisfy the market need of the member producers.

✎ The Cooperative Union should carried out promotion activities through media, organizing workshops and meetings, field visits, production of brochures, posters, leaflets, and information dissemination to strengthen its linkages with different actors and milk value chains.

✎ The cooperative agencies should plan and perform regular follow up, give training in capacity building to improve management skills and marketing, provide equal services to all cooperatives in terms of monitoring their activities, evaluating their performance and should carry out regular audit service at least once in a year.

✎ Further work and research is needed to undertake detail research about the union to develop effective and efficient dairy cooperative union in the area in collaboration of different stakeholders.

List of abbreviations

CSA: Central Statistical Authority
DDE: Dairy Development Enterprise
ml: milliliter
SDCU: Selale Dairy Cooperative Union

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