

## Review on the Role, Challenges and Prospects of Dairy Cooperatives in Ethiopia

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### Abstract

Dairy Cooperatives in Ethiopia are playing an active role in the fields of banking, input and output marketing, agro-processing, and many other social and economic activities; inherent advantages in tackling the problems of poverty alleviation, food security and job creation. Despite their many potential advantages, dairy cooperatives, however, are prone to face a number of important challenges, such as lack of awareness, lack of differentiated products, poor productivity of the dairy sector, lack of milk processing facilities, inadequate access to credit service, and inadequate support and weak regulation and supervision of the government are the main one. Moreover, the role of dairy cooperatives on the farmers' livelihoods which can be used as an instrument for policy formulation in the dairy cooperative (breeding, marketing, innovation and other segments of the sector) have not been reviewed earlier and well- documented. Therefore, the driving force for initiating this study is that very little is known about the current status of Dairy cooperatives in Ethiopia on the one hand and the recognition of dairy cooperatives plays in the socio-economic development on the other. Hence, this paper reviews the current status and challenges of dairy cooperatives in Ethiopia and its implication for the growth and sustainability.

**Keywords:** Challenges; Dairy Cooperative; Ethiopia; Prospect

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### Introduction

Agriculture is the foundation for Ethiopian economy, and the overall economic growth of the country is highly linked to the success of the agriculture sector. Accordingly, agriculture accounts for about 43% of the country's Gross Domestic Product (GDP), 90% of export, and 85% of employment [21]. As agriculture continues to be an important sector to the Ethiopian economy, the cooperative sub-sector providing vital support services and play a crucial role for the transformation of the agriculture sector. It is visible at all stages of the agricultural production, chain- production, processing, marketing and credit. It play an active role in the fields of banking, input provision, agro-processing, storage, in facilitating input and output marketing, dairy, and many other social and economic activities. Cooperative can also play an important role in the provision financial intermediation (saving and credit services) in areas where both the state and the private sector have failed [17].

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Of different types of Agricultural Cooperatives, Dairy Cooperatives have played a significant role towards achieving the growth and poverty reduction strategy by promoting income generating activities and improving access to banking services to rural and urban households. One of Dairy Cooperatives' derivative features is to improve smallholder farmers' productivity and income by leveraging a cooperative sector; hence the promotion of dairy cooperative movement is going with the national strategy. Moreover, in the Growth and Transformation Plan (GTP) due emphasis was given for the cooperative sector as the driving force for savings mobilization. However, there is little understanding of what the current status and challenges of dairy cooperatives in Ethiopia. Moreover, the role of dairy cooperatives on the farmers' livelihoods which can be used as an instrument for policy formulation in the dairy cooperative (breeding, marketing, innovation and other segments of the sector) have not been reviewed earlier and well- documented. Therefore, the driving force for initiating this study is that very little is known about the current status of cooperatives in Ethiopia on the one hand and the recognition of cooperatives plays in the socio-economic development on the other. Hence, this paper reviews the current status and challenges of dairy cooperatives in Ethiopia and its implication for the growth and sustainability.

### The Dairy Sector

For many people, dairy production is the most important income generator. Dairying provides a regular income to farmers in different parts of Ethiopia. Different authors confirmed that the smallholders' dairy package production system is a powerful means of raising farm incomes and welfare [3,27]. The marketing and management of dairy, knowledge and awareness are vital. Given the considerable potential for smallholder income and employment generation from high-value dairy products [24], development of the dairy sector in Ethiopia can contribute significantly to poverty alleviation [20,22]. Reported the average intake of milk of Ethiopia is 19 lt per capita, which is below an estimated standard for African 40 lt per capita and well below the world average of 105 liters per capita consumption. In fact, the existing excess demand for dairy products in the country is expected to induce rapid growth in the dairy sector. Factors contributing to this excess demand include the rapid population growth, increased urbanization and expected growth incomes [20]. According to [24], dairy co-operatives have typically been formed in response to a fundamental farmer problem: the inconvenience of small quantities of milk to market. Milk is perishable which requires special handling to insure quality and shelf life. Holding milk where infrastructure may be lacking can be costly and risky. Conversely, the rapid delivery of small quantities of milk to market may not be practical or economic; some smallholder producers may market no more than 1 to 2 L of milk in a given day. The practical collection and transport of milk to market therefore usually requires some bulking, and the need for speed and reliability requires good organization of that bulking. Consequently, there is strong incentive for smallholder producers to try to form collective organizations to meet these needs, which are dairy cooperatives.

### Definition and Concept of Cooperatives

On the world different authors and organizations define cooperatives in different ways. Accordingly, [15] defined cooperative as 'an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise'. On the other hand, [9] defined cooperative as a private business organization that is owned and controlled by the people who use its products, supplies or services. Although cooperatives vary in type and membership size, all were formed to meet the specific objectives of members, and are structured to adapt to members changing needs. Besides, [18] also defined a cooperative as a member-controlled association for producing goods and services in which the participating members, individual farmers or households, share the risks and profits of a jointly established and owned economic enterprise. According to this definition a cooperative is established by farmers in response to unfavorable market conditions, which is a shared problem. This could be a problem related to the marketing of produce resulting in low farm-gate prices, to the supply of good-quality and reasonably priced farm inputs, such as seed and fertilizer, or to the supply of sufficient and cheap credit.

### The Role of Dairy Cooperatives in improving the livelihoods of Smallholder farmers

The theory of cooperative organization provides several reasons why farmers join the cooperatives. Cooperatives provide quality supplies and service to the farmers at a reasonable cost. By purchasing supplies as a group, the farmers offset the market power advantage of other private firms providing those supplies. The farmers can gain access to volume discounts and negotiate from a position of

greater strength for better delivery terms, credit terms, and other arrangements. Suppliers will also be more willing to discuss customizing products and services to meet farmers' specifications if the cooperative provides them sufficient volume to justify the extra time and expense Schroeder 1992 cited by [10].

Increased farmers bargaining power in the market places is the other advantage of the dairy cooperative. Marketing on a cooperative basis permits farmers to combine their strength and gain more income. The farmers can lower distribution costs, conduct joint product promotion, and develop the ability to deliver their products in the amounts and types that will attract better offers from purchasers [10].

According to [11], having a businesses owned and controlled on a cooperative basis helps farmers' entire community. Dairy cooperatives generate jobs and business earnings for local residents. They pay taxes that help to finance schools, hospitals, and other community services.

Farmers may have several specific reasons for starting an agricultural cooperative: to mobilize more resources than they can individually supply, to create attractive alternatives for purchasing goods and services, to operate a business more efficiently than can be done on an individual basis, because they recognize that the benefits outweigh the duties of membership and because they recognize that as members of a cooperative they are part owners and not only clients. By becoming a member of a cooperative, each farmer can make use of the advantages of the cooperative: a good market price for their product and access to other goods, services, markets and credit [11].

Cooperatives play a significant role in ensuring sustainable supply of raw milk to the dairy industry by coordinating the flow of milk from their members and assisting them by supplying the required dairy farm inputs.

There are 180 cooperatives engaged in milk production and marketing operating in different parts of the country [25,19].

### **a. The role of cooperatives in providing market oriented training and vehicle for disseminating dairy technology to members**

Agricultural cooperatives may have a major role in enhancing efficiency and productivity of processes at the farm level, as shown for example by [1] for Ethiopia. Collective action might be a major force of knowledge dissemination and technological transfer, due to the spillover effects of the collective use of a particular knowledge or technology, but also due to the fact that collective endeavors facilitate innovation and learning by members of the group. In addition, cooperatives may enhance the access to and provision of agricultural inputs, by means of creating economies of scale or due to special privileges provided to them by governments or other entities.

Dairy Cooperative played a significant role to share dairy related information to its members in collaboration with different organizations. For instance, Ada'a Dairy cooperative in alliance with Debre-Zeit research center, IPMS project, SNV-BOAM, LAND O'LAKES and Eyerusalem Orphanage center were playing a significant role to provide the training that ranges from a minimum of three and a maximum of ten days. The contents of the training were on the health care of dairy animals and calves, proper ways of milking and hygiene, proper ways of feeding, milk handling and transportation, use and production of bio-gas from animal waste, sign of dairy cows readiness for insemination and dairy marketing [10].

By means of providing bulking and bargaining services, cooperatives may enhance market access and help farmers avoid the hazards associated with a perishable product with uncertain and variable demand. By means of pooling supply purchases and sales, dairy marketing cooperatives can contribute to decrease price risks and enhance bargaining power of dairy producers [14].

In addition, cooperatives can serve as a vehicle for the dissemination of dairy technologies and to gain access to a range of benefits derived from the action of agents outside the value chain, such as government subsidies, donor funds and outputs of research and development; moreover, many donor and non-governmental organizations organize their rural development and poverty reduction interventions through cooperatives and other farmers' organizations [7].

### **b. The role of the cooperative in providing Advisory services**

One of the mechanisms used by the cooperative in order to share dairy related information is through providing advisory services. The Dairy cooperative provided advisory services especially on dairy production and marketing in partnership with different government and non-government organizations [10,25,19].

### **c. Accessing members to new knowledge and information**

According to [10] and [12], dairy cooperatives provide information on dairy technologies for their members which may include: the use and importance of AI, the importance of crossbred cows towards increasing milk yield, the need for animal health care, quality milk production and milking, the use of concentrate feed, the use of aluminum can for milk handling and the possibility of getting quality processed products through the cooperative have changed their mind-set to apply and use dairy technologies and products.

### **d. Changing in attitude and culture of the communities**

Cooperatives have played a significant role in changing the attitudes of members towards dairy production and marketing. For example, women members of dairy cooperative in the country started to give value for milk and sale milk in an open market after they joined the cooperative.

### **e. Increasing incomes and saving**

The relatively stable income from dairy marketing via the cooperatives helped members to specialize in dairy. Central collection and processing of milk increased efficiency, and less milk is wasted. Through the cooperative, supply is more secure and quality can be better controlled [5]. With additional income obtained through the cooperative, more children are educated, there is increased consumption of consumer goods (such as clothing, household furniture, and medicine), improvement to dwellings, better nutrition, more labor hired, increased purchase of on-farm equipment and livestock, increased crop production, and more off-farm activities developed [2].

## **Challenges and prospects of dairy cooperatives**

### **Challenges**

Despite hasty growth the overall progress of dairy cooperative movement few years ago of its existence is not very impressive. According to different document analysis and findings results indicate that the dairy cooperative movement in Ethiopia is beset with several challenges related to dependence on government. The major challenges of dairy cooperatives include the followings:

#### **a. Lack of awareness**

People are not well informed about the objective of the cooperative, the contributions it can make in rebuilding the society and the rules and regulations of dairy cooperatives. Regrettably, no special efforts have been made in this direction. People look upon these organizations as means for obtaining facilities and concessions from the government. So long as people expect to get something from the government, they see to it that societies somehow continue to function [26,17].

#### **b. Lack of differentiated products**

At the beginning, the cooperatives principally established from local communities who have dairy cows and, few college-graduated youths, which are responsible for coordination and marketing of the inputs and outputs [19]. Besides, cooperatives have not yet provided demand driven products that could address the needs of their members in spite of their older age and better outreach to the grass roots level and unbanked community. It has been observed that there is no clearly articulated and defined product development and revision policy within. If it happens it is either by chance or arbitrarily; it is not done in a systematic organized manner and by experts but rather by interested individuals or group of people (professionals or otherwise) and does not follow the necessary steps. It arises simply from a felt need or a problem prevailing in cooperatives. In general, there are no planned and structured ways of developing new products or revising the existing [17].

### **c. Poor productivity of the dairy sector**

The dairy sector is characterized by small-scale, scattered, and unorganized milk-animal holders; low productivity; inadequate and inappropriate animal feeding and health care; lack of an assured year-round remunerative producer price for milk; an inadequate basic infrastructure for provision of production inputs and services; an inadequate basic infrastructure for procurement, transportation, processing and marketing of milk; and lack of professional management. Other important characteristics of the dairy sector are the predominance of mixed crop-livestock farms and the fact that most of the milk animals are fed on crop by-products and residues, which have very low opportunity costs. Similarly, differences in breed type, that is the cows kept by the farmers are less productive and even their exotic blood level is undefined/unknown that hinder incentives for intensification of dairying at the producers' end of supply chain support it [6,19].

### **d. Lack of milk processing facilities**

The major problems of dairy cooperative in the country includes lack of milk processing facilities and skills, insufficient production area, poor sanitation, unpredictable marketing system, lack of water and fencing materials for farm sites [19].

### **e. Inadequate access to credit service**

Availability of crossbred cows and accessibility of saving institutions were positively associated with farmer's likelihood to adopt dairy technology and level of adoption. Having access to formal (bank and microfinance) and informal (Iqub) saving institutions create a good opportunity for farmers to have an asset and to purchase different agricultural technologies including cross breed cows [23]. However, many farmers have difficulty accessing credit and face high interest rates, which prevent investment in profitable dairy technologies [4].

### **f. Inadequate support and weak regulation and supervision**

The capacity of FCA and regional cooperative promotion agency/bureaus to effectively promote, regulate and supervise dairy cooperatives is severely constrained for the following reasons:

- Absence of separate specialized units at the federal, regional and Woreda levels in charge of promoting, supervising and regulating different type of cooperatives; and
- Limited mobility of staff due to shortage of vehicles and motorbike and high costs associated.

### **Future Prospect/Proposed Intervention**

In order to improve sustainable developments of dairy cooperative in the country and not to repeat the problems encountered, the main solutions that should be undertaken are:

#### **a. Conduct dairy cooperatives education and regular training in well-organized approach**

As different literature reviews indicated there was no regular well organized dairy cooperative education and training program conducted yet, thus in the country the awareness of the people is very low; it is vital in designing and providing regular cooperatives education and training aimed at achievable learning objectives, the right method, the right duration, the right type, the right place of training, the right venue, the right time and length to promote dairy cooperatives.

#### **b. Looking for credit services sources and milk processing facilities**

A sound dairy cooperative sector needs an enable to access and gets credit service to purchase high producing dairy cows and dairy equipments. Thus, the sector planned and grants credit services for dairy cooperatives in collaboration with micro-financial institutions to enhance dairy cooperatives and thereby improve the livelihood of the members.

Presenting milk-processing technologies with practical based trainings should be expected from government bodies or any other NGOs, and then capable local cooperatives to process surplus milk into cheese/butter during fasting season that give a relief for the

local communities that are suffering from shortage of dairy products in terms of quality, quantity, and varieties during non-fasting season. Therefore, to satisfy the demand, the existing dairy cooperatives must be empowered through supporting and fulfilling their limitations.

### c. Expanding the capacity of milk collection centers

There is a shortage in milk supply to co-operatives because the quantity of milk collected is small as well as the membership base. This prevents further processing of milk since the demand for raw milk is far too high. There is a need to expand the capacity of milk collection centers by improving the membership base, increasing the price per liter of milk or providing price incentives considering that low price promotes free riding by farmers. With an increase in the number of milk collection centers, the volume of milk collected and processed will also increase. Co-operatives with very few members never achieve their goal of becoming a proficient tool for development.

### d. Policy recommendations

Co-operatives have a smaller membership base and they are not effective in promoting dairy production and marketing of small-holder farmers. Therefore, complementary institutions need to be designed to address the specific needs of the smallest farmers. This will motivate more farmers to join co-operatives and hence improve their membership base.

Smallholder farmers are receiving low prices for their products, which is attributed to the prevailing marketing system in the country. This discourages investments in milk production and quality improvement. Therefore, there is a need for a pricing policy improvement which will incentivise farmers to produce and sell more as well as invest in quality improvement.

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