CropMatrix
International Journal of
Conscious Business Management Studies
International Publication
ISSN: 3139-874X

Service Quality of Dairy Cooperatives and Member Satisfaction: A Conceptual Framework for Trust and Member Loyalty

[1]Sneha Gurudas Patil
MBA, Finance, Savitribai Phule Pune University, Maharashtra, India
Email: sgp808032@gmail.com, **Contact no:** +91 85540 72033, **ORCID:** 0009-0000-3557-6075

Abstract

Dairy cooperatives serve a significant function by linking milk producers to organised markets and by delivering services that underpin their economic activities. For members of a cooperative, the, the connection to a dairy cooperative extends beyond the collection of milk and the issuing of payments. Members' assessment of the organisation, their confidence in its processes, and their sustained commitment over time can all be shaped by the quality of services the cooperative delivers. This paper investigates the association between the service quality of dairy cooperatives and member satisfaction, employing a conceptual approach grounded in the literature. The study undertakes a review of literature pertaining to cooperative service quality, payment systems, transparency, trust, satisfaction and member loyalty. The theoretical basis integrates the SERVQUAL Model, Cooperative Theory and Social Exchange Theory. The review reveals that reliability, responsiveness, prompt payment, transparent milk testing and payment procedures, and member support constitute significant service-related determinants within the cooperative-member relationship. The literature further suggests that trust may function as a crucial mechanism linking cooperative practices to member satisfaction. Satisfaction, in turn, may foster enduring member commitment and loyalty. Drawing on these observations, the paper advances a conceptual framework wherein reliability, responsiveness, payment timeliness, transparency and member support shape cooperative trust, which subsequently shapes member satisfaction and loyalty. Five theoretical propositions are formulated to guide future empirical testing. The paper additionally identifies a research gap: prior dairy research has frequently focused on production, prices, participation or individual services without adequately integrating service quality, trust, satisfaction and long-term loyalty into a single framework. The paper closes by discussing managerial implications for dairy cooperatives and proposing future empirical comparison between cooperative and private dairy channels.

Keywords— Dairy Cooperatives, Service Quality, Member Satisfaction, Cooperative Trust, Transparency, Payment Timeliness, Member Loyalty

1 Introduction

Dairy farming constitutes a significant component of the agricultural economy, since it generates income for farming households and sustains regular economic activity within rural areas. Dairy farmers, and small-scale producers in particular, frequently rely on organised systems of milk collection and marketing, as selling milk on an individual basis may entail difficulties concerning market access, transportation, price information and dependable buyers. One mechanism by which farmers are able to organise milk procurement collectively and gain access to markets is the dairy cooperative. Within a cooperative arrangement, members are not merely suppliers in the conventional commercial sense. They are additionally linked to the cooperative through their membership and their participation in it. Consequently, the quality of the relationship between the cooperative and its members may influence how members perceive the cooperative and whether they continue to make use of its services. The role of dairy cooperatives has conventionally been examined with reference to milk procurement, marketing, prices, production support and access to services. These domains remain significant; however, the member's experience of the cooperative is also contingent upon the manner in which services are delivered. A farmer may obtain a reasonable price and yet remain dissatisfied if payments are delayed, if milk testing is not clearly explained, if accounts are difficult to comprehend, if staff are unresponsive, or if complaints are not properly addressed. Likewise, regular payment on its own may fail to generate strong trust where members perceive that information regarding testing, deductions or payment calculations is not transparent. Service quality must therefore be regarded as a broader element of the cooperative–member relationship.

The significance of member satisfaction is corroborated by research on dairy cooperatives. Liebrand and Ling investigated member satisfaction by means of four surveys of dairy cooperative membership and determined that matters pertaining to the quality of a cooperative's management, together with factors influencing the prices paid to members, were important to member satisfaction [1]. Satisfaction among members of dairy cooperatives has likewise been investigated in research conducted in India. Wani et al. determined that members' satisfaction was associated with a number of cooperative activities, among them the weighing and testing of milk, the maintenance of individual accounts, dealings with cooperative employees and the provision of technical services [2]. These findings indicate that the member's evaluation is shaped by considerations extending beyond the final price obtained for milk. Service quality offers a useful means of examining these experiences. The SERVQUAL Model, developed by Parasuraman, Zeithaml and Berry, offers a widely recognised approach for investigating perceived service quality by means of dimensions including reliability, responsiveness, assurance, empathy and tangibles [3]. Despite having been developed for service organisations, the model has likewise been applied within cooperative settings. Research on dairy cooperatives in Izmir, for instance, employed SERVQUAL to evaluate member satisfaction and identified gaps between members' expectations and their perceptions of service quality [4]. This indicates that service quality may be tailored to the particular character of dairy cooperatives, instead of treating cooperative members in the same manner as ordinary customers.

The cooperative context additionally gives rise to a significant distinction. Members maintain both an economic and an organisational connection with their cooperative. They supply milk, obtain payments and services, and may additionally take part in cooperative decision-making. This renders trust especially pertinent. Members must be able to believe that milk is tested equitably, payments are computed accurately, information is shared appropriately, and cooperative representatives treat members fairly. Recent investigations of Indian dairy cooperatives have demonstrated the significance of information disclosure

and transparency within the context of incentive payments. Rao and Shenoy examined Indian dairy cooperatives and discovered that the manner in which information concerning incentive contracts and payments was disclosed influenced managerial decisions and the operation of incentives [5]. The study does not demonstrate that transparency automatically generates trust or satisfaction, yet it illustrates why information and disclosure constitute important matters in cooperative management. Payment systems represent a further significant component of the relationship. Dairy farmers generally rely on regular milk sales for their cash flow. Consequently, the timeliness of payments may carry direct practical significance for members. Research into dairy cooperative service delivery in Maharashtra discovered that farmers regarded the marketing services of the Gokul dairy cooperative as largely timely and reported satisfaction with the payment system [6]. Such findings suggest that payment practices can constitute a significant element of the service experience. Simultaneously, satisfaction and loyalty ought not to be regarded as identical concepts. Satisfaction pertains to the member's assessment of the services and the relationship with the cooperative, whereas loyalty relates more to the intention or willingness to sustain the relationship. A member may be satisfied with a single service yet still contemplate other selling channels should the overall relationship prove weak. Trust may thus furnish a significant link between service quality and satisfaction, while satisfaction may contribute to longer-term loyalty. The present study concentrates on this relationship. It examines dairy-cooperative service quality is assessed via five practice-oriented dimensions: reliability, responsiveness, payment timeliness, transparency and member support. Subsequently, cooperative trust is examined as a key linking mechanism between service quality and member satisfaction, and thereafter member loyalty.

1.1 Research Problem

Prior investigations into dairy cooperatives have addressed matters including production, pricing, participation, service provision and member satisfaction. Nevertheless, such domains tend to be investigated in isolation from one another. A more integrated conceptual framework is required, one that accounts for the ways in which the quality of cooperative services may shape trust, satisfaction and enduring member loyalty.

1.2 Research Objectives

The aims of the present investigation are as follows:

To investigate the quality of services provided by dairy cooperatives.

To assess reliability, transparency, and systems of payment.

To examine trust and the satisfaction of members.

To put forward a framework for retaining members.

1.3 Research Questions

This investigation is guided by the following research questions:

RQ1: Which service offerings are instrumental in determining the satisfaction of dairy cooperative members?

RQ2: In what ways does transparency affect the level of trust?

RQ3: Does trust in the cooperative contribute to heightened member loyalty?

1.4 Significance of the Study

This study carries significance for both academia and management. In academic terms, it integrates service quality, trust, satisfaction, and loyalty into a single conceptual framework within the context of dairy cooperatives. From a managerial standpoint, it directs attention toward concrete service processes, including timely payments, milk testing, information sharing, responsiveness, and member support. These are domains over which cooperative managers can exert direct influence. The study is likewise pertinent to the Indian setting, given that relationships within dairy cooperatives involve a substantial number of producers spread across rural areas. Indian-based research has already

demonstrated that the services offered by dairy cooperatives can influence member participation and satisfaction [2]. The proposed framework advances this discussion by incorporating trust and loyalty into the same conceptual relationship.

2 LITERATURE REVIEW

2.1 Cooperative Service Quality

Service quality is generally conceptualised as the process through which customers or users evaluate a service's performance relative to the expectations they hold. SERVQUAL was developed by Parasuraman, Zeithaml and Berry as a multi-item scale intended to measure consumer perceptions of service quality [3]. The original study identified dimensions that help explain how customers evaluate the delivery of a service. In the context of a dairy cooperative, The, service quality needs to be interpreted in relation to the member's overall relationship with the organisation. Members may interact with the cooperative through various activities, such as milk collection, weighing, testing, payment, account maintenance, and employee. communication, technical services and grievance handling. Accordingly, service quality is not confined to physical facilities or staff. Scholarship on dairy cooperatives lends support to this broader conceptualisation. Wani et al. investigated member satisfaction in dairy cooperative societies in Jammu and Kashmir, taking into account indicators including accurate weighing and testing of milk, maintenance of individual accounts, interactions with employees, elections, and technical inputs and services [2]. Their study found that members reported varying levels of satisfaction across these activities. This is valuable because it demonstrates that members assess cooperative performance through multiple points of interaction. Rathod et al. likewise investigated farmers' perceptions of livestock marketing services delivered through Gokul dairy cooperatives in Maharashtra. Their study took into account the timely availability of services, payment, and farmer satisfaction [6]. The findings indicated that many farmers perceived the services as timely and the payment system as regular. This reinforces the significance of service delivery within the cooperative relationship. Research conducted outside India offers comparable support. Malkoc and Yercan employed SERVQUAL to assess member satisfaction in dairy cooperatives in Izmir Province and identified discrepancies between members' expectations and perceptions across service-quality dimensions [4]. Their findings further suggest that SERVQUAL may require adaptation to the specific service context rather than being applied without modification. Consequently, the present study concentrates on dimensions that are especially pertinent to dairy members: reliability, responsiveness, payment timeliness, transparency and member support. These dimensions constitute practical components of the cooperative experience.

2.2 Payment Systems

Payment constitutes one of the most significant economic linkages between dairy farmers and cooperatives. Milk is delivered on a regular basis, frequently daily, and payment is therefore tied to the farmer's routine cash flow. A payment system may be regarded as satisfactory not merely when the amount is acceptable, but also when payment is timely, accurately calculated, and clearly explained. Research conducted by Liebrand and Ling on member satisfaction in dairy cooperatives identified issues concerning pay prices as among the strong factors associated with satisfaction [1]. This indicates that the financial dimension of the cooperative relationship continues to be central to how members evaluate the cooperative. The timeliness of payment carries a distinct importance. A cooperative may apply a reasonable method of payment calculation, yet delays may generate uncertainty for members. From the member's standpoint, the timing of payment may influence the capacity to manage household expenses, purchase feed, cover farming costs, and plan future production. Consequently, payment timeliness may form part of perceived reliability. Research by Rathod et al. in Maharashtra reported that farmers regarded the Gokul cooperative's

payment system as regular and satisfactory [6]. Although this constituted an empirical study of one particular cooperative and cannot be generalised to all dairy cooperatives, it illustrates the practical significance of payment regularity. Payment systems are likewise linked to transparency. A member may wish to know how the quantity of milk, fat content, quality measures, price, and deductions were taken into account when the final payment was calculated. Where the process is clear, the member has a greater opportunity to comprehend the transaction. Where it is unclear, even an accurate payment may be regarded with doubt. The research of Rao and Shenoy on Indian dairy cooperatives is pertinent in this regard, as it examined transparency in connection with incentive payments. In their research, the disclosure of payment information was varied, being provided either only to managers or also to cooperative members [5]. The findings indicate that the disclosure of information can influence organisational behaviour and the operation of incentive arrangements. This lends support to the need to treat transparency as a distinct component of cooperative service quality.

2.3 Transparency

Transparency denotes the extent to which information pertinent to members is available and comprehensible. Within a dairy cooperative, such information might encompass details on milk testing, quality assessments, payment computations, deductions, incentive programmes, cooperative resolutions, and member accounts. Transparency matters because members of a cooperative are often unable to observe each stage of the process directly. Although a farmer delivers milk to a collection centre, that farmer may remain unaware of how the final payment is determined unless the cooperative furnishes explicit information. As the information gap widens, the significance of clear communication increases accordingly. Wani et al. discovered that numerous dairy cooperative members in Jammu and Kashmir did not review the proceedings of official cooperative records, and the study observed that certain members regarded the cooperative primarily as a milk collection centre [2]. This result bears relevance for the present study, since member satisfaction concerns not merely the transaction but also member participation and access to information. Rao and Shenoy offer additional evidence drawn from Indian dairy cooperatives. Their investigation analysed how managers reacted when information concerning incentive payments was disseminated more broadly [5]. The study underscores that transparency may produce intricate effects. Accordingly, the present research does not presuppose that any form of disclosure will inevitably enhance cooperative performance. Rather, transparency is conceptualised as a factor capable of fostering trust when members obtain pertinent information in a clear and equitable manner. For dairy cooperatives, transparency should therefore encompass practical information that members are able to comprehend. It ought not to be confined to the publication of formal documents. Members require information that enables them to understand their own transactions and the decisions that affect them.

2.4 Trust

Trust occupies a central position in long-term relationships in which one party relies on another for information, services, or outcomes that cannot always be directly observed. Social Exchange Theory offers a valuable basis for comprehending this relationship. Blau's scholarship on social exchange conceptualises exchange as entailing relationships in which individuals supply resources and anticipate suitable returns [7]. Within a cooperative, members contribute milk and take part in the organisation while anticipating equitable treatment, dependable services, and economic advantages. The relationship is therefore considerably more than a mere one-off transaction. Repeated interactions are capable of fostering trust when members encounter consistency and fairness. Members' trust in a dairy cooperative may emerge when they believe that milk testing is accurate, that payments are timely, that

information is transparent, and that cooperative employees respond appropriately to their concerns. Conversely, recurrent delays, unclear deductions, or inadequate communication may erode trust. Scholarship on dairy supply chains likewise indicates a relationship between trust and loyalty. Research conducted by Gyau et al. investigated trust, loyalty, and performance within the dairy milk supply chain and identified relationships involving communication, price satisfaction, and trust [8]. Although that study relied on primary data and a different supply-chain context, it lends support to the broader contention that trust can be significant in long-term dairy relationships. Trust can therefore be regarded as a connecting mechanism. Dependable services on their own may enhance a member's immediate experience, yet when members repeatedly receive dependable services, they may develop greater confidence in the cooperative. Such confidence can shape satisfaction and continued participation.

2.5 Satisfaction and Loyalty

Member satisfaction constitutes the comprehensive assessment that a member forms following their experience of the services and the relationship extended by the cooperative. Satisfaction may encompass payment, milk collection, testing, staff conduct, communication, technical support, and overall management. Liebrand and Ling determined that the effective operation of a cooperative rests in part upon the delivery of services that satisfy members [1]. Their results likewise point to the significance of management and payment-related factors. Additional evidence is furnished by research conducted in India. Wani et al. documented moderate satisfaction among the majority of dairy cooperative members surveyed and pinpointed satisfaction with activities including milk testing, account maintenance, and dealings with employees [2]. This implies that routine operational processes are capable of shaping member satisfaction.

Loyalty constitutes a longer-term consequence. A member who is loyal is more inclined to sustain the cooperative relationship and to identify with the cooperative. An investigation of member commitment in agricultural cooperatives revealed that satisfaction with cooperative performance ranked among the factors linked to member loyalty and commitment [9].

This lends support to the proposed sequence:

Service Quality → Trust → Satisfaction → Loyalty

This relationship ought not to be construed as automatic or universal. Members may have multiple reasons for remaining in or departing from a cooperative, among them prices, distance, alternative buyers, production conditions, and local relationships. Thus, service quality and satisfaction can constitute a significant element of this decision.

3 Theoretical Foundations

3.1 SERVQUAL Model

Parasuraman, Zeithaml and Berry devised SERVQUAL as a systematic instrument intended to measure perceived service quality [3]. Through this model, key dimensions are identified by which customers assess services. For the present study, its significance rests on offering a foundation for the systematic examination of service delivery. Adaptation is necessary within the dairy cooperative setting. Members cannot be regarded as ordinary customers, given that they simultaneously act as suppliers and owners of the cooperative. Consequently, the service dimensions must be aligned with their lived experiences. Reliability is pertinent, as members anticipate consistent milk collection, precise testing and trustworthy payments. Responsiveness is pertinent, as members require cooperative staff to address their questions and complaints. Transparency is pertinent, as members require comprehensible information concerning testing and payments. Member support is pertinent, as cooperatives may extend technical or other services that go beyond milk collection. Investigations conducted in dairy cooperatives have demonstrated the utility of SERVQUAL while simultaneously pointing to the necessity of contextual adaptation. Malkoc and Yercan identified substantial discrepancies between expectations

and perceptions across service-quality dimensions among members of dairy cooperatives [4]. Accordingly, SERVQUAL underpins the service-quality component of the conceptual framework advanced in this study.

3.2 Cooperative Theory

The organisational basis of the study is supplied by Cooperative Theory. Cooperatives emerge from shared economic interests and the participation of their members. In contrast to a strictly commercial buyer-seller exchange, members sustain an ongoing relationship with the organisation. This carries a significant consequence for the quality of service. A cooperative delivering inadequate services may do more than generate customer dissatisfaction; it may also erode the relationship between the organisation and its own members. Members may call into question whether the cooperative is fulfilling its purpose. Research on member satisfaction lends support to this position. Wani et al. determined that participation and satisfaction constituted significant dimensions of members' relationship with dairy cooperative societies [2].) The cooperative should therefore be regarded as an organisation that must generate value for its members through activities that are both economic and service-related.

3.3 Social Exchange Theory

The relationship perspective is supplied by Social Exchange Theory. Blau's work characterizes social exchange as encompassing exchanges among individuals together with expectations of returns arising from those exchanges [7]. Within the dairy cooperative setting, farmers supply milk and engage cooperatively with the organisation. In exchange, they anticipate payment, access to markets, services and equitable treatment. Relationships can be reinforced through repeated positive exchanges. Trust assumes significance since members must depend on the cooperative for accurate information, payments and services. Complementary explanations are offered by the three theories. The quality of service is explained by the SERVQUAL Model. The member-centred organisational relationship is explained by Cooperative Theory. How repeated and fair exchanges can contribute to trust and continued relationships is explained by Social Exchange Theory. The proposed conceptual model is supported by these theories collectively.

4 Research Methodology

4.1 Research Design

The present study adopts a qualitative conceptual research design grounded in the literature. Rather than statistically testing relationships, the aim is to review existing literature and formulate a conceptual account of the ways in which dairy cooperative service quality may affect member satisfaction and loyalty. Such an approach aligns with the overarching methodology of the reference paper provided for this study, which relies on literature review, thematic analysis and the development of a conceptual framework instead of primary survey data.

4.2 Research Approach

The research employs thematic analysis to examine academic literature. Scholarship concerning service quality, payment systems, transparency, trust, satisfaction, and loyalty in dairy cooperatives is reviewed and organized according to shared themes. Rather than estimating an aggregate statistical effect, the analysis is directed toward identifying recurring concepts and their interrelations.

4.3 Sources of Literature

This review gives precedence to peer-reviewed journal articles, academic research reports, and recognised institutional sources. The relevant literature was located through academic and research databases as well as institutional repositories. Sources concerning dairy cooperatives in India and other agricultural cooperative settings were taken into account where they offered valuable theoretical or empirical insight. The literature encompasses studies on dairy cooperative service delivery in Maharashtra [6], member satisfaction in Jammu and Kashmir [2], dairy cooperative service quality employing SERVQUAL [4], dairy cooperative member satisfaction [1], transparency and incentives in

Indian dairy cooperatives [5], and trust and loyalty within dairy supply relationships [8].

4.4 Inclusion and Exclusion Criteria

The study prioritizes literature that bears a direct relationship to dairy cooperatives or to agricultural cooperatives. Addresses service quality, satisfaction, trust, transparency, payments, or loyalty. Offers theoretical grounding for the framework that is proposed. Appears in an academic journal, a research report, or a recognized institutional source. Supplies adequate information for comprehending the research context and its findings. Literature was excluded where it bore no relation to the research questions, repeated another source, or did not possess adequate academic or institutional credibility.

4.5 Thematic Analysis

Following an examination of the literature, the studies were grouped into five principal themes: Cooperative service quality, Payment systems, Transparency, Trust, Satisfaction and loyalty. A comparison of these themes was subsequently undertaken in order to determine potential relationships. This analysis gave rise to the proposed sequence whereby service-related factors affect trust, trust affects satisfaction, and satisfaction may in turn contribute to loyalty.

4.6 Conceptual Synthesis

Subsequently, the study integrates the results with the three theoretical foundations. The SERVQUAL Model underpins the dimensions of service quality, Cooperative Theory underpins the member-centred relationship, and Social Exchange Theory underpins the function of trust and repeated exchange. The framework that emerges is conceptual in nature and calls for empirical testing in subsequent research.

5 Thematic Analysis And Findings

5.1 Service Reliability and Member Satisfaction

Reliability denotes the capacity of the cooperative to deliver services in a consistent and accurate manner. Within dairy cooperatives, this may encompass routine milk collection, precise weighing, accurate milk testing, proper upkeep of accounts and reliable payment procedures. The literature suggests that such routine activities are of consequence to members. Wani et al. identified accurate weighing and testing, maintenance of individual accounts and interactions with cooperative employees as among the activities through which members assessed the cooperative [2]. This suggests that service reliability is encountered through everyday interactions and not solely through significant cooperative decisions. Rathod et al. likewise reported that farmers utilizing Gokul cooperative services indicated that marketing services were for the most part available on time and that the payment system was regular [6]. The implication is that reliability may exert an influence on satisfaction, given that members rely on the cooperative for repeated transactions. A single inaccurate milk test may be regarded as an isolated issue, yet repeated problems can undermine confidence in the cooperative. Consequently, reliability is likely to carry greater importance in a repeated relationship than in a single transaction. This lends support to P1: Service reliability positively influences member satisfaction.

5.2 Payment Timeliness and Trust

The punctuality of payments is intimately linked to reliability; nevertheless, owing to the financial significance of milk sales for farming households, it warrants distinct consideration. Scholarship indicates that factors pertaining to payment hold significance for satisfaction with dairy cooperatives. Liebrand and Ling determined that concerns surrounding the prices paid to members constituted potent correlates of satisfaction [1]. Positive perceptions concerning the regularity of cooperative payments were likewise documented in research conducted in Maharashtra [6]. Prompt payment is capable of fostering trust, inasmuch as it engenders predictability. Where a cooperative consistently remits payment in accordance with a schedule that members understand, those members are able to develop expectations regarding future transactions. Should payments be delayed with frequency and without clear

communication, confidence may well diminish. Payment timeliness ought therefore to be regarded not solely as a financial matter but also as an element of the relationship obtaining between the cooperative and its members. This lends support to P2: payment timeliness exerts a positive influence upon cooperative trust.

5.3 Transparency and Trust

Transparency holds particular significance in settings where members are unable to observe directly the entire process underlying a transaction. Testing of milk quality constitutes one such instance. Although the farmer supplies the milk, the payment ultimately received may be contingent upon measurements performed by the cooperative. Well-defined testing protocols and payment information that is easy to comprehend can diminish uncertainty.Rao and Shenoy's research on Indian dairy cooperatives illustrates the significance of information disclosure within cooperative incentive structures [5]. Their findings indicate that transparency may shape organisational decisions and incentives, even though such effects are neither invariably straightforward nor uniformly beneficial. In their investigation of dairy cooperatives in Jammu and Kashmir, Wani et al. likewise documented that members had only limited access to official cooperative records [2].This indicates that member participation and access to information may continue to be areas requiring improvement.Transparency So comprises two dimensions. First, members require access to pertinent information. Second, the information ought to be conveyed in a format that members are able to comprehend. Making information available in a merely technical sense may prove insufficient.

This lends support to P3: Transparency exerts a positive influence on cooperative trust.

5.4 Member Support, Trust and Satisfaction

Member support encompasses the assistance a cooperative extends beyond the routine purchase of milk. According to the specific cooperative, such support may encompass technical guidance, animal health services, feed or input services, communication, and help with resolving problems. Wani et al. found that technical inputs and services constituted an area of dissatisfaction among the dairy cooperative members examined in Jammu and Kashmir [2]. This implies that members may assess the cooperative on the basis of the broader support they receive. Member support can exert a direct influence on satisfaction, since it delivers additional value. It can likewise foster trust when members perceive that the cooperative attends to their longer-term interests rather than merely collecting milk. Viewed through the lens of Cooperative Theory, this matters because members expect the cooperative to serve member interests. From the standpoint of Social Exchange Theory, support can reinforce the perception of a balanced relationship in which members obtain meaningful benefits in exchange for their continued participation.

5.5 Trust and Member Satisfaction

Trust is posited as a linking mechanism that connects service quality with satisfaction. A member who experiences dependable services may develop greater confidence in the cooperative. A member who is provided with transparent information may be more inclined to accept the decisions of the cooperative. A member who receives payments in a timely manner may perceive the cooperative as reliable. This does not imply that trust is generated by a single positive transaction. Trust is built up through repeated experiences. Social Exchange Theory lends support to this interpretation, given that repeated exchanges can generate expectations regarding how the relationship will function [7]. Investigations of dairy supply relationships have likewise considered trust in conjunction with price satisfaction and communication [8].

Accordingly, the current study puts forward the following:

P4: Trust in the cooperative exerts a positive influence on member satisfaction.

5.6 Satisfaction and Member Loyalty

Satisfaction denotes the member's assessment of the cooperative relationship, whereas loyalty denotes a longer-term readiness to maintain a connection with the cooperative. The literature provides support for a relationship between satisfaction and member commitment. Investigations of agricultural cooperatives have shown that satisfaction with cooperative performance was linked to member loyalty and identification [9]. This relationship holds particular relevance for dairy cooperatives, given that members may have access to alternative buyers or private channels. Where members repeatedly encounter poor services, ambiguous payments, or weak communication, they may possess fewer reasons to maintain a strong connection to the cooperative.

Satisfaction may therefore be regarded as a significant intermediate outcome that precedes long-term loyalty.

This provides support for:

P5: Member satisfaction exerts a positive influence on member loyalty.

6 Proposed Conceptual Framework

The literature examined in this study provides support for the conceptual framework outlined below:

The service experience is represented by the first set of variables. Reliability and responsiveness are drawn from the service-quality perspective, whereas payment timeliness, transparency and member support are incorporated owing to their particular relevance to members of dairy cooperatives.

Cooperative trust constitutes the second stage. Trust is regarded as a crucial mechanism of connection. A member who encounters dependable services, prompt payments and transparent processes is likely to develop stronger confidence in the cooperative.

Member satisfaction constitutes the third stage. The way members evaluate the overall relationship may be shaped by trust. A member who regards the cooperative as reliable and fair is likely to assess the services more positively.

Member loyalty constitutes the final stage. The willingness to maintain the cooperative relationship can be fostered by satisfaction. This is not to suggest that satisfaction alone determines loyalty. Member decisions may likewise be affected by prices, market alternatives, location, production conditions and personal relationships. Accordingly, the framework presents satisfaction as a significant, though not exclusive, factor.

The framework integrates the three theoretical foundations. The service-quality basis is supplied by SERVQUAL. Cooperative Theory accounts for the importance of service quality within a member-owned organisation. Social Exchange Theory accounts for how repeated and fair exchanges can sustain trust and longer-term relationships.

7 Proposed Theoretical Propositions

P1: The reliability of services exerts a positive effect on member satisfaction.

A reliable service implies that the cooperative carries out its important activities in a consistent and correct manner. Within a dairy cooperative, such reliability may encompass accurate weighing of milk, dependable testing, regular collection, proper maintenance of accounts, and dependable delivery of services. Studies conducted among members of dairy cooperatives have recognized these operational activities as significant components of member satisfaction [2]. SERVQUAL similarly regards reliability as a significant dimension of service quality [3]. The study posits that greater reliability ought to be linked with higher member satisfaction.

P2: The timeliness of payments exerts a positive effect on trust in the cooperative.

Payment constitutes a recurring element of the relationship within a dairy cooperative. When members are paid in accordance with an anticipated schedule, the cooperative becomes more predictable. Timely payment can thereby reinforce confidence in the cooperative's capacity to honour its commitments. Research conducted in Maharashtra has documented favourable farmer

perceptions regarding regular cooperative payments [6]. Drawing on Social Exchange Theory, the consistent fulfilment of expected returns is capable of strengthening the relationship. Therefore:

P2: The timeliness of payments exerts a positive effect on trust in the cooperative.

P3: Transparency exerts a positive effect on trust in the cooperative.

Transparency is able to diminish uncertainty by furnishing members with information about processes that they cannot observe directly. Within dairy cooperatives, this encompasses milk testing, quality measurement, payment calculations, and incentive arrangements. Research by Rao and Shenoy shows that the disclosure of information concerning cooperative payments can influence organisational incentives and decisions [5]. Thus, the study posits that transparent and comprehensible processes are able to foster trust.

P4: Trust in the cooperative exerts a positive effect on member satisfaction.

Trust is able to influence the manner in which members evaluate the cooperative relationship. When members perceive the cooperative as equitable, reliable, and attentive to their interests, their assessments of its services may become more favorable. Social Exchange Theory offers a foundation for comprehending this phenomenon, since trust is able to emerge through recurrent exchanges and the meeting of expectations [7]. Studies of relationships within dairy supply chains likewise link trust to factors connected with satisfaction [8]. Therefore:

P4: Trust in the cooperative exerts a positive effect on member satisfaction.

P5: Member satisfaction exerts a positive effect on member loyalty.

Members who are satisfied are more inclined to regard the cooperative relationship favorably. An investigation of member commitment in agricultural cooperatives revealed that satisfaction with cooperative performance was linked to loyalty and identification [9]. Within the dairy setting, this could entail sustained milk supply, continued membership, and a readiness to preserve the relationship. Therefore:

P5: Member satisfaction exerts a positive effect on member loyalty.

These propositions are theoretical in nature rather than hypotheses that have been statistically tested. They constitute proposed relationships that are drawn from the literature and theories reviewed. Subsequent primary research may test them by employing survey data gathered from members of dairy cooperatives.

8 Critical Discussion

The aim of the present investigation was to analyse the quality of services offered by dairy cooperatives and to link service provision with trust, satisfaction and loyalty. The reviewed literature shows that service quality within a dairy cooperative extends beyond the mere physical collection of milk. Members form their assessments of the cooperative through repeated operational encounters. Reliability constitutes the first key dimension. Weighing, testing and collection of milk, together with the maintenance of accounts, are routine operations; nevertheless, they carry considerable weight because members encounter them repeatedly. A study conducted in Jammu and Kashmir revealed that, when evaluating their cooperative, members took into account activities such as accurate weighing and testing, account maintenance and interactions with employees [2]. This finding justifies the incorporation of reliability into the framework.

Payment constitutes the second dimension. Dairy farmers rely on the cooperative not solely as a market outlet but also as a source of regular income. Consequently, the timeliness of payment may shape confidence in the cooperative. The literature does not claim that payment is the sole determinant of satisfaction; nonetheless, it clearly emerges as a significant component of the cooperative relationship. Liebrand and Ling found that issues relating to pay and price were strong determinants of member satisfaction [1]. Transparency constitutes the

third dimension. Transparency assumes particular significance in situations where members are unable to observe directly how the cooperative arrives at a decision. Milk testing provides an illustrative case. Where members do not grasp how milk quality is measured or how the outcome influences payment, uncertainty may emerge. Transparent communication can assist in reducing such uncertainty. Transparency should not, however, be construed merely as the public disclosure of every piece of information. Research by Rao and Shenoy demonstrates that information disclosure may generate complex organisational effects [5]. Accordingly, the managerial question concerns not only whether information is disclosed but also whether the appropriate information is disclosed clearly and in a manner that is useful. Trust constitutes the fourth dimension. The framework positions trust between service quality and satisfaction, since members must interpret their repeated experiences. Where the cooperative consistently delivers reliable services, makes timely payments and communicates clearly, members may come to develop confidence in its processes. Such confidence may influence how members evaluate the relationship as a whole.

Loyalty constitutes the fifth element. Although member satisfaction may foster sustained participation, it ought not to be regarded as the sole determinant. A dairy farmer might continue with a cooperative owing to price, distance, transport, market access or the absence of alternatives, even where satisfaction is only moderate. Likewise, a member who is satisfied may nonetheless contemplate another buyer should that alternative present a markedly superior economic arrangement. Consequently, the satisfaction–loyalty relationship proposed here ought to be examined in subsequent research, with other factors taken into account.

The framework further underscores the merit of integrating the three theoretical foundations. SERVQUAL on its own cannot fully account for the cooperative relationship, since members are not conventional customers. Cooperative Theory accounts for the member-owned character of the organisation. Social Exchange Theory contributes an account of enduring relationships and trust. Jointly, these three perspectives furnish a more robust foundation for comprehending member satisfaction.For MBA managers, this carries a practical implication. Enhancing member satisfaction need not entail large-scale or costly modifications. Certain significant improvements may concern better processes: precise milk testing, transparent records, prompt payment, responsive staff, readily available information and adequate complaint handling. Such activities are capable of enhancing members' day-to-day experience.

9 Main Research Gap And Future Research Directions

The principal research gap that this study identifies concerns the tendency of dairy studies to concentrate on production and pricing, without sufficiently incorporating service quality, trust and long-term member loyalty. This is not to suggest that earlier researchers have disregarded member satisfaction or service quality. Evidence exists that addresses dairy cooperative services, satisfaction, participation and matters relating to payment. For instance, research conducted in Jammu and Kashmir investigated member satisfaction across various cooperative activities [2], whereas research in Maharashtra investigated farmers' perceptions of cooperative marketing services and payment systems [6]. Turkish research has likewise investigated dairy cooperative member satisfaction by means of SERVQUAL [4].

The gap is consequently more specific. The literature is distributed across disparate areas. One set of studies investigates service quality. Another set addresses prices or payments. Still others address participation or satisfaction. Trust and loyalty have likewise been examined within cooperative and agricultural supply relationships. What remains less developed is an integrated conceptual account that links these areas

specifically to the dairy cooperative-member relationship. The proposed framework responds to this gap by linking five service-related factors to trust, satisfaction and loyalty. It therefore redirects attention away from the question "What price does the farmer receive?" toward a broader question:

In what ways does the overall quality of the cooperative relationship shape the member's willingness to remain with the cooperative? This matters because the long-term strength of a cooperative rests not only on attracting milk but also on sustaining a positive relationship with its members.

Future Research

Subsequent studies should empirically test the five propositions by drawing on primary data from dairy cooperative members. A questionnaire could be used to measure service reliability, responsiveness, payment timeliness, transparency, member support, trust, satisfaction and loyalty. Researchers could additionally compare cooperative and private dairy channels. A comparison of this kind would be instrumental in establishing whether factors related to service quality exert a differential influence when farmers engage with cooperatives as opposed to private buyers. Comparisons conducted at the regional level may likewise prove beneficial. The structures and services of dairy cooperatives are liable to vary among Indian states; consequently, investigations undertaken in Maharashtra, Gujarat, Karnataka, Punjab, Rajasthan and other dairy-producing regions might yield divergent findings. An additional valuable avenue would be provided by longitudinal research. Since member loyalty constitutes a long-term outcome, a single survey may be insufficient to capture in full the manner in which trust and satisfaction evolve over time. Subsequent investigations could therefore examine members across several periods.

10 Managerial Implications

The framework put forward here carries a number of practical implications for those who manage dairy cooperatives.

1. Guarantee that payments are made on time

Payment schedules ought to be predictable. In the event of delays, members should be given clear information regarding the cause and the anticipated date of payment. Prompt payment is not merely a matter of accounting; it has the capacity to shape members' confidence in the cooperative.

2. Render milk testing transparent

Members ought to be in a position to comprehend how milk is tested and how the results of testing influence payment. Where feasible, cooperatives can set out testing procedures in straightforward communication in the local language. Unambiguous records are able to lessen uncertainty.

3. Enhance the information provided in accounts

Members ought to be able to comprehend their milk quantity, quality measures, price calculation, deductions and final payment. Straightforward statements or digital records can facilitate this process.

4. Encourage employees to be responsive

The collection centre frequently constitutes the principal point of contact between the cooperative and its members. Employees ought to respond to questions and complaints with respect. A member's experience with local staff is capable of shaping the overall perception of the cooperative.

5. Establish an effective system for handling complaints

Members ought to be provided with a straightforward channel through which they can report issues concerning weighing, testing, payment, or service delivery. Rather than being dealt with informally on each occasion, complaints ought to be documented and subsequently followed up.

6. Offer support that is genuinely useful to members

In cases where the cooperative supplies technical, veterinary, feed, or other forms of support, such services ought to be assessed in light of the actual needs of members. Studies have indicated that a shortage of technical inputs and services may constitute a cause of dissatisfaction [2].

7. Foster trust by means of consistent practices

Trust cannot be generated through communication alone. The cooperative must show its reliability by means of repeated actions. Timely payments, accurate testing and fair treatment are So trust-building practices.

8. Concentrate on retaining members

Rather than regarding membership merely as a registration number, managers ought to monitor satisfaction. Feedback gathered on a regular basis can assist in detecting problems before they result in disengagement. A cooperative that grasps the reasons why members are satisfied or dissatisfied is able to take more targeted action.These recommendations are consistent with the central idea of the framework: service quality is an important part of the long-term cooperative-member relationship.

11 Conclusion

Dairy cooperatives maintain a significant relationship with their members, since members rely on these organisations for milk collection, market access, payments and various other services. This relationship extends well beyond a straightforward buying-and-selling transaction. The calibre of services the cooperative delivers may shape how members assess the organisation and whether they choose to maintain their relationship with it.This study analysed dairy cooperative service quality across the dimensions of reliability, responsiveness, payment timeliness, transparency and member support. The literature suggests that these dimensions are capable of shaping the member experience. Studies of dairy cooperative members have identified milk testing, account maintenance, employee dealings and technical services as pertinent aspects of satisfaction [2].Research conducted in Maharashtra has likewise emphasised the significance of timely marketing services and regular payment systems [6].The study posited that service quality may shape cooperative trust, and that trust in turn may shape member satisfaction. Satisfaction may subsequently foster member loyalty. Three theoretical perspectives underpin the framework. SERVQUAL furnishes the foundation for analysing service quality, Cooperative Theory accounts for the member-centred character of the relationship, and Social Exchange Theory accounts for how repeated and equitable exchanges can foster trust.

The principal research gap identified concerns the restricted integration of service quality, trust, satisfaction and long-term loyalty within dairy cooperative research. Extant studies offer valuable evidence on discrete issues such as prices, services, participation, payment and satisfaction, yet these strands can be consolidated into a more comprehensive conceptual framework.The proposed model accordingly positions reliability, responsiveness, payment timeliness, transparency and member support at the outset of the relationship, followed by cooperative trust, member satisfaction and member loyalty.The framework is not advanced as an empirically validated model. The five propositions call for verification through forthcoming primary research. Research of this kind can assist in establishing which service factors exert the greatest influence on member satisfaction and whether trust functions as a meaningful connecting factor.For managers of dairy cooperatives, the principal message is a practical one. Member satisfaction can be fostered through consistent service delivery, punctual payments, transparent testing and payment procedures, responsive staff and beneficial member support. These practices can assist in cultivating trust and may contribute to more robust long-term member relationships.Future research ought to test the framework with dairy cooperative members and compare cooperative with private dairy channels. Studies of this nature can yield a clearer grasp of whether service quality and trust confer on dairy cooperatives an advantage in retaining members over time.

12 Bibliography

[1] C. B. Liebrand and K. C. Ling, Member Satisfaction With Their Cooperatives: Insights From Dairy Farmers,

U.S. Department of Agriculture, Rural Development Research Report, 2014. (Agecon Search)

[2] S. A. Wani, G. Sankhala, L. Niketha, and A. Singh, "Participation and level of satisfaction of member farmers in dairy cooperative societies of Jammu & Kashmir," Indian Journal of Dairy Science, vol. 69, no. 6, 2016. (Indian Agricultural Research Journals)

[3] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality," Journal of Retailing, vol. 64, no. 1, pp. 12–40, 1988. (Zenodo)

[4] F. Malkoc and M. Yercan, "Evaluating member satisfaction in agricultural cooperatives: A case of dairy cooperatives in Izmir Province," Journal of Agricultural Sciences, 2018. (ResearchGate)

[5] M. Rao and A. Shenoy, "Got (clean) milk? Organization, incentives, and management in Indian dairy cooperatives," Journal of Economic Behavior & Organization, vol. 212, pp. 708–722, 2023, doi: 10.1016/j.jebo.2023.06.002. (ScienceDirect)

[6] P. Rathod, T. R. Nikam, S. Landge, and A. Hatey, "Farmers' perception towards livestock marketing service delivery by Gokul dairy cooperatives, Maharashtra," Indian Journal of Dairy Science, vol. 65, no. 3, 2012. (Indian Agricultural Research Journals)

[7] P. M. Blau, Exchange and Power in Social Life. New York, NY, USA: Wiley, 1964. (Google Books)

[8] G. Gyau, M. Franz, M. R. and related authors, "The empirical model of trust, loyalty, and business performance of the dairy milk supply chain," British Food Journal, vol. 119, no. 12, pp. 2765–2787, 2017, doi: 10.1108/BFJ-10-2016-0462. (ScienceDirect)

[9] "Member commitment in agricultural cooperatives: Evidence from Ethiopia," Cogent Business & Management, 2021. (Taylor & Francis Online)

[10] S. Oktavia and T. Karyani, "Pengaruh kualitas pelayanan terhadap kepuasan anggota KPKM (Koperasi Produsen Kopi Margamulya) di Kecamatan Pangalengan," Jurnal AGRISEP, vol. 16, no. 2, pp. 155–164. (Unib Journal)

[11] I. Shin and H. Yang, "Integrated member satisfaction measurement of the regional agricultural cooperative service," Korean Journal of Cooperative Studies, vol. 24, no. 1, pp. 49–77, 2006. (KCI)

[12] R. Mohana and A. Arulraj, "A conceptual analysis of members' satisfaction with the services provided by primary agricultural cooperative societies," International Journal of Economic Practices and Theories, 2026, doi: 10.52783/ijept.707. (IJAPT)