CHAPTER TWO

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2.1 STATEMENT OF THE PROBLEM
The emergence of the organized sector has been growing force in the modernization of the dairy industry. It has brought huge range of milk products into the urban homes, through improved quality processing and production, new techniques of selling, packaging, distribution channels and advertisements. This trend is getting an added momentum through growing urbanization and consumerism. The changing life-style is also fuelling the fast-food revolution.

Dairy marketing companies need to develop capabilities of making the marketing function a more market/consumer oriented, which will help them to bridge the gap between strategic change and market complexity/instability.

The purpose of marketing strategy is to facilitate a business achieve and sustain a competitive advantage in the marketplace.

2.2 MAIN OBJECTIVES OF THE STUDY
On the basis of the aspects explored under the research topic the following objectives were formulated:

1. To study the knowledge companies have about customer and competition in dairy industry.

2. To study marketing strategies adopted by companies and its impact on the market effectiveness and profitability using multiple regression.

3. To study the measures adopted by companies for gaining competitive advantage.

At the beginning of this chapter, the researcher has tried to mention the problem area and has defined objectives, so in this section, the researcher makes an attempt to present the literature review of the relevant research work done by various researchers in the area of dairy development, dairy marketing and allied subjects. The literature review is presented national and international research papers. This chapter concludes with a summary of the entire review.
2.3 RESEARCH PAPERS

2.3.1 Dairy Co-operatives and Milk Marketing in India: Constraints and Opportunities by \([1]\) K. Rajendran and Samarendu Mohanty published in the Journal of Food Distribution Research 35(2) July 2004

Operation Flood and dairy co-operatives emerged in India as the largest rural employment scheme, enabling the modernization of the dairy sector to a level from where it can take off to meet not only the country’s demand for milk and milk products but can also exploit global market opportunities. This study reviews the existing status of milk marketing and dairy co-operatives in India and provides recommendations to meet future challenges.

The results of the study indicate that 80 percent of the milk produced by the rural producer is handled by an unorganized sector and the remaining 20 percent is handled by an organized sector. It is found that the dairy co-operatives play a vital role in alleviating rural poverty by augmenting rural milk production and marketing. Involvement of intermediaries; lack of bargaining power by the producers; and lack of infrastructure facilities for collection, storage, transportation, and processing are the major constraints which affect the prices received by producers in milk marketing. Milk quality, product development, infrastructure support development, and global marketing are found to be future challenges of India’s milk marketing.

2.3.2 Market-Oriented Smallholder Dairying Research – Working Document III by \([2]\) Mohammad A. Jabbar, Emmanuel Tambi and Gary Mullins of International Livestock Research Institute (ILRI), Nairobi, Kenya, March 1997

The dairy industry in the developing countries has a number of specific features which distinguish it from the other sectors of agriculture and have particular implications for marketing (Jaffee, 1995; Schelhaas, 1995).

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\([1]\) K. Rajendran and Samarendu Mohanty published in the Journal of Food Distribution Research 35(2) July 2004

\([2]\) Mohammad A. Jabbar, Emmanuel Tambi and Gary Mullins of International Livestock Research Institute (ILRI), Nairobi, Kenya, March 1997

First, milk consists of over 85% water, and produced daily. Consequently, high costs of transportation are incurred per unit of output marketed. Also, milk being highly perishable, it needs to be used within a short period or processed and transformed
into a more stable, longer-storable form. The quality of milk depends on farm management practices, and milk is potentially subject to adulteration, so strict and comprehensive quality regulations may be necessary when marketing involves more than direct delivery by producers to consumers.

Second, the vast majority of the dairy farmers are small-scale producers, who produce milk as a source of regular cash income. Dairy production is a labour-intensive enterprise, and dairy marketing activities often provide substantial employment. However, because of asset fixity (high percentage of fixed costs), dairy enterprises often respond to market changes and incentives in a limited and gradual way.

Third, milk can be used to make a wide range of high quality palatable and nutritious products, which often imply substantial value added over the cost of the raw material. When production and consumption points are far apart and demand increase rapidly, processing of dairy products becomes very important.

Fourth, as a consequence of the above features of milk and the market vulnerability of its producers, cooperatives may assume a strong position in milk processing. A survey by the International Dairy Federation in 1984 revealed that in 21 developed countries together accounting for 55% of the world’s milk supply, producer cooperatives marketed 86% of total sales of milk from farm to the first handler (quoted in [3] Schelhaas, 1995).

In some of these countries, cooperatives also handled 80-90% of the total processing activity. It may be noted that the history of development of dairy cooperatives in these countries are not always similar.

However, in most developing countries, dairy producer cooperatives and cooperative processing are either non-existent or very weak.


The need for cooperatives in these countries is driven by the need to capture some economies of scale in transportation and processing where numerous small producers are scattered far away from the consumption centers. In many countries, this gap has been filled by establishment of parastatal dairy enterprises for collection
and processing of milk to promote domestic dairy production. In most cases, these enterprises ended up processing subsidized imported dairy products, neglecting the rural dairy sector.

The monopolistic character of these enterprises often led to inefficiency thus they failed to serve the interests of domestic producers and consumers (Brokken and Seyoum, 1992; Staal, 1995).

That’s why, market-oriented dairy is an important focus of research at ILRI because it is considered to have a good potential for contribution to the process of economic development in the developing countries in several ways: through increased domestic production of dairy products to meet increased demand and reduce dependence on imports; through increased employment, income generation and food security among the poor.

Realization of this potential will require an adequate understanding of the history and processes of dairy development in the developing countries, identification of facilitating factors where development occurred and constraints or inhibiting factors where it did not occur or occurred inadequately, and also find potential solutions to identified constraints.


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The dairy sector is an important food segment in Brazil and has experienced an accelerated consumption increase since the economic stabilization in the middle of the 1990s. Moreover, together with retailing development and competition among companies; market concentration both on manufacture and retail has increased, and
businesses have tended to develop new marketing strategies (i.e. channel management) in order to obtain competitive advantage.

This paper focuses on the case of a leading multinational company in the yogurt market, called here company A, which was searching for solutions to improve its distribution in retail channels and planning to implement a door-to-door channel strategy. The comparative analysis here focuses on two major competitors with previous expertise at implementing this kind of channel strategy. These competitors are also multinational companies. Company B is one of the largest food companies in Brazil, which also has yogurt in its portfolio. Company C is a traditional dairy company that was the pioneer in door-to-door distribution in this segment.


The study reveals that the majority of households in Chania, stock at least two types of milk simultaneously. The preferred milk is concentrated milk because of its long lifetime, its availability and low price. However, the majority of interviewees consider fresh pasteurized milk (which has substantially increased its market share, especially whole milk, during the last few years) to be healthier and more nutritious as well as of better taste and odour than concentrated milk. Both fresh pasteurized and concentrated milk are characterized as multi-usage milks since they are mainly used for pastry, creams and cooking.

Moreover, the supermarket is the place where most respondents prefer to buy milk, indicating the erosion of the traditional ways of buying. The consumption of fresh pasteurized milk is significantly correlated to the economic status and age of respondents and people who preferred fresh pasteurized milk (white) are also heavy users of it.


In contrast, consumers of fresh pasteurized milk with cocoa are not heavy users and most of them buy it (mainly in kiosks) less frequently than once a month.

It is noted that the choice of fresh pasteurized milk with cocoa is a “momentary” decision and its consumption has a rather common purchasing behavior with soft
drinks consumption than other types of milk. Regarding the consumers that do not drink fresh pasteurized milk, the habit and its short expiry date are the main reasons for not consuming it. An advertising campaign could be addressed directly at these people since, first, they have been strongly affected by the advertising of concentrated milk in previous years, and, second, their attitude (most of them), concerning nutrition, taste and odour towards fresh pasteurized milk is better than their attitude towards concentrated milk.

Generic advertisements could increase the consumption of fresh pasteurized milk for health reasons such as increasing the calcium intake by the middle-aged and other adults, as the Greek population becomes steadily older, reducing hypertension, regulating blood pressure, decreasing colon cancer and providing protection from stomach ulcers (the present survey in Chania confirms this trend). Low-fat milks in Europe are widely consumed but their consumption is still low in Greece (as revealed in the survey, in Chania as well) so a strategy to develop new low-fat milks favorable to consumers or to promote the existing ones by creating niche markets is needed.

Finally, the dairies have to improve the whole distribution system (transportation, local representatives) although technical problems exist owing mainly to the perishability of fresh pasteurized milk because, first, the users are not becoming exclusive customers for fresh pasteurized milk and also buy competitive products, and, second, the non-users cannot be attracted to become consumers of fresh pasteurized milk if it is not readily available.

2.3.5 INDIA’S DAIRY SECTOR IN THE EMERGING TRADE ORDER by [7] Brajesh Jha of Institute of Economic Growth, Delhi-110007 (India)

The growth of dairy sector during the last three decades has been impressive. A set of government policy which created suitable price environment for domestic milk production, is believed to be the key behind this impressive growth; the price-based supports are however untenable in the new trade order. [7]

In the spate of trade liberalization India has also replaced non-tariff-barriers in imports of milk products with moderate tariff and tariff rate quotas. There is now pressure for further reduction of import tariff, while distortions in world dairy market continue.
With trade liberalization decreasing trend in real price of milk is already evident; this may have different implications for major constituents of the dairy sector. Implications would also vary across regions since a disaggregate analysis of the dairy sector presents considerable disparity in its growth.

Present study by adopting the economic surplus approach assesses effect of import liberalization for the state of Haryana, Uttar Pradesh, West Bengal, Maharashtra, and Tamilnadu. The effect of import liberalization depends on the world price of milk products, world prices are generally low in the Oceania countries and imports at such a low price has increased consumers' benefits, increase in consumers' benefits is significantly higher than the losses to the producers causing increase in the aggregate benefits.

The study further quantifies the loss in employment because of free imports of milk products at low price. The study found that the effect of import liberalization has been significantly higher for the coastal states as compared to the land-locked states of the country. The study finally discusses some ways to protect the long run interest of India’s dairy sector without falling foul of the WTO.

2.3.6 Managing Place-Your Distribution Channel by [8] John Lawn Oct 1, 2004

Customers will often perceive Place as convenience. As far as possible, your goal should be for them to perceive foodservice as available wherever and whenever it is wanted.

After the Product, the Marketing “P” most often discussed next is Price, but I like to put that off until the end. Food is so easily commoditized in the customer’s mind that I prefer to focus instead on the parts of the marketing mix that have to do with adding value and the perception of value.


That takes us to “Place,” the P in the marketing mix that is most often misunderstood. In traditional theory, it describes the marketing channels a manufacturer employs to sell or deliver its products to end users.

In foodservice, those channels involve the use of distributors to stock and deliver product locally; and brokers and manufacturers’ agents, who act as the
manufacturers' regional sales representatives. Of more significance to FM readers’ marketing plans are the ways their own departments deliver products and services to their customers. In fact, almost all readers of this magazine are large-volume foodservice operators.

As such, they operate much like small manufacturers, sourcing ingredients, assembling them into meals, and distributing those meals or meal components to their customers.

One way to think of Place is to consider it as the point at which your customers and your products and services “touch.” That interfacing occurs over and over again in many parts of your operation: when a customer places an order; when he or she is served a meal; makes an impulse buying decision at a grab-and-go display cooler; and even at a vending machine, which acts as a delivery channel when manual foodservice is not a practical option.

Another way to think of Place is in terms of your own product delivery logistics: the flow of product from your kitchen to your serving line; or convenience retailing options, like vending or c-stores, that provide alternate points of service. If you have cook-chill production, consider the flow of product into storage and then out to point of sale (or, if you also produce food for satellite operations, to those points of service).

In the same way, if you mass produce sandwiches and other items that are sold in multiple locations, Place involve your systems for delivering, stocking and rotating such items. Finally, it includes other delivery services you may provide for such products and services as pizza, catering, or takeout.

Finally, Place also includes the systems you have in place that allow customers to pay for their meals. Cashier lines, P.O.S. systems, debit card accounts and so on are as much a part of your product delivery service as they are a part of your pricing. Managing Place is much like managing your own in-house distribution channel. Customers do not perceive it as distribution, however. More likely, they will perceive it as convenience. If you are satisfying their wants and needs, they will see you as a provider who makes foodservice available whenever and wherever it is wanted.
Another measure is more subtle, appropriateness. For a special occasion, that may mean a fine dining service option, with an ambience to match; for a time of celebration, it may mean a casual, party atmosphere, again with an ambience to match. Service level can also play an important role; in some cases, self-service options might not only be appropriate, but preferred by customers. At other times, a perception of full service may be critical, offered as meal customization options on a serving line or as consultative services such as those offered for catered event planning.

The point is, how you deliver your product to your customers can be just as important—even more important—than the product itself in terms of how it is perceived.

Even if you provide the right products and services at the right times and places, your marketing mix may fail if customers are not aware of them or do not perceive them in the way you want them to. Adequately informing your customers about your services and finding ways to manage their perceptions is the role of Promotion, the P we will consider next month.

2.3.7 WMMB reorganizes its channel management structure by [9] RON JOHNSON, DAIRY EDITOR, Thursday, January 27, 2011

“Channel management” refers to all the food distribution routes that take dairy products to consumers.


Since de-regulation of the UK dairy market in November 1995, the UK dairy industry has lurched from one crisis to another, as milk prices initially rose to levels that were
unsustainable for all but the largest processors and then fell to levels at which even the largest and most efficient dairy farmers are struggling to survive.

Considerable emphasis has been placed in recent years on cutting costs in the dairy supply chain, yet little attention has been given to the scope for adding value, particularly for the benefit of dairy farmers.

Against this background, the Milk Development Council commissioned a research project, from which this paper is drawn, to explore the scope for adding value to liquid milk. The results of the comprehensive consumer research undertaken provide clear evidence that opportunities exist for differentiating the liquid milk market.

The research also underlines the strategic importance of consumer research in an increasingly competitive market environment.


The Indian dairy industry has acquired substantial growth from the Eighth Plan onwards, achieving an annual output of over 104.8 million tonnes (provisional) of milk at the end of 2007-08. India’s milk output has not only placed the industry first in world, but also represents sustained growth in the availability of milk & milk products. The Government is implementing following schemes for the development of dairy sector during 2008-09.


The study has analyzed the value chains of milk and milk products in the co-operative and private dairy plants in the Salem district of Tamil Nadu based on the data collected from one co-operative plant, one private plant, five milk transportation routes, ten co-operative societies, ten private milk collection centers and six chilling centers for the year 2007-08.
The overall average procurement cost per litre of milk has been found higher for the co-operative dairy plant than the private plant due to increased cost on milk transportation, chilling and reception.

The co-operative plant has been revealed more efficient in the manufacture of toned milk, standardized milk, full cream milk and ghee whereas the private plant has an edge over co-operative dairy plant in the manufacture of butter and SMP (skimmed milk powder).

The marketing cost of toned milk, standardized milk, full cream milk and SMP has been found lower for private dairy plant and of butter and ghee for the co-operative dairy plant.

The products which could earn a higher value after passing through the value chain are milk pedha, khoa and SMP in the co-operative plant; and ice cream, Mysorepa and ghee in the private plant.

The marketing margins and marketing efficiency have been found higher in toned milk, standardized milk and butter for the private plant and in full cream milk, ghee and SMP for the co-operative plant.


Current dynamics in world dairy markets and the potential for global and domestic trade policy reform are bringing the U.S. dairy sector to a new crossroads as it faces competitive forces from outside its borders. Those forces—demand for new products by consumers in industrialized countries, changes in technology, rapid economic growth in emerging developing countries, particularly in Asia, and the increasing role
of multinational firms in domestic and global dairy markets—are leading to increased
dairy consumption, more opportunities for dairy product trade, and foreign direct
investment benefiting both U.S. consumers and producers.

As global demand for milk and new dairy products expands, the roles of policies that
support prices are diminishing, while the roles of flexibility and innovation aimed at
improving competitiveness are growing.

2.3.12 Tips on Maximizing Milk Sales by [14] Dan Mueller, eHow Contributor
updated: November 23, 2010
Dairy farmers should work together to increase sales. Selling milk may seem like a
simple process, but these days, it is a market of fierce competition. For the most part,
a small handful of large dairy farms seem to own the market in their local area, with a
handful of brands being regularly stocked by most chain grocery stores.

Although it may seem intuitive to attempt to negotiate with these large chains, it often
can prove to be an exercise in futility. Milk is a healthy product with a wholesome
reputation, making it quite easy to pitch as long as you alter your strategy to which
you are attempting to sell it.

[13] Don Blayney, Mark Gehlhar, Chris Hilda Bolling, Keithly Jones, Suchada Langley,
Mary Anne Normile, and Agapi Somwaru, Economic Research Report Number 28
November 2006, ERR-28, Economic Research Service/USDA

2.3.13 The vegan dairy [15] Helen Lightowler and Jill Davies, Nutrition & Food
Science, Number 3, May/June 1998, pp. 153–157, MCB University Press · ISSN
0034-6659
Discusses the non-dairy alternatives to milk and dairy products. Looks at a range of
products suitable for the “vegan dairy” and compares the nutrient profiles with those
of traditional milk and dairy products.

The paper concludes that vegans should choose non-dairy alternative products
which have been fortified. The way forward is to expand the range of fortified “vegan
dairy” products, to increase the availability of these foods and, in time, to reduce their
price.
The purpose of this paper is to investigate the relationship between pricing and ethics in two industrial service contexts. In particular, the pricing practices that lead to non-ethical pricing behavior along with the factors that could reduce such behavior are examined. Moreover, the extent is addressed to which companies that do perceive that pricing decisions entail ethical considerations are differentiated from those companies that do not hold such a perception in terms of the pricing objectives that they pursue in order to set their prices. The main pricing practices that were perceived as being non-ethical by respondents are related to determination of prices that lead to excessive profits, take advantage of a customer's needs and are below cost.

Regarding the factors that could reduce such behavior, the study concluded that a corporate culture that facilitates a customer orientation towards pricing decisions, the market's own mechanisms and the agreements between companies are more effective than governmental intervention.

Furthermore, companies that do perceive that pricing decisions are related to ethical considerations tend to follow a more balanced approach when setting prices by pursuing both customer- and competition-oriented pricing objectives, without, however, overlooking financial objectives.

The practical implications of the findings refer to the fact that managers might have a lot to gain by avoiding pricing practices that raise ethical considerations and endeavoring to understand the potential ethical implications of these practices.
The significance of these findings notwithstanding, the context of the study is the most important caveat since it limits the ability to generalize the results in other sectors and countries.

The contribution of the paper lies in the fact that it presents the first attempt to empirically examine the relationship between pricing and ethics in an industrial service context.

2.3.15 The price schedule required to smooth seasonal milk supply by [17] Seamus McErlean of The Queen’s University of Belfast, Belfast, Northern Ireland, British Food Journal, Vol. 101 No. 10, 1999, pp. 785-796. # MCB University Press, 0007-070X

Develops a method for estimating the monthly milk price schedule needed to counter the effects of seasonality, which is an enduring feature of milk production in the UK. The issue of seasonality has been mostly ignored in studies estimating milk supply functions.


In this paper milk supply functions which explicitly take account of seasonality are estimated for Northern Ireland and Scotland. Pre-testing of monthly milk price and milk supply time-series, using an extended HEGY test and an ADF test, indicated the presence of deterministic seasonality. Empirical milk supply models incorporating seasonal dummy variables to account for deterministic seasonality were estimated in the two regions of study.

The results of these models were used to calculate the monthly producer milk price schedule required to encourage dairy farmers to produce an even monthly milk supply pattern. These calculations indicated that, in the long run, a peak-to-trough seasonal price differential of around 8 pence per litre would be required to produce an even pattern of milk supply in Scotland, and 11 pence per litre would be required in Northern Ireland.
The increasing internationalization and globalization of business has forced many firms to reconsider what contributes to their competitive advantage. Despite the importance of packaging it is rather anonymous and has received little or marginal research. The purpose of this paper is to study how packaging can contribute to competitive advantage.

Aspects of the packing industry and market are reviewed. Five case studies covering different packages in the supply chain are presented and analyzed. Structural changes within the European food industry are reinforcing a need for competitiveness where packaging can make the difference for many consumer products.

The findings from the case studies and the literature review underscore the importance of packaging and packaging design for fulfilling multi-functions in relation to logistics and marketing in the supply chain from filler to end consumer. New demands due to changes in consumption patterns and habits are requiring innovative packaging solutions in retail outlets.

The main implications for management is to understand and take advantage of packaging as a strategic weapon and marketing tool for the entire business, especially within a highly competitive food industry. This is important in every stage of the supply chain either for the transport packaging or as a consumer package in the supermarket. This paper fulfils an identified need for recognizing the importance of packaging in business strategy.

2.3.17 The importance of personal norms for purchasing organic milk by [19] Christian A. Klo¨ckner and Silvia Ohms, British Food Journal, Vol. 111 No. 11,
The purpose of this paper is to apply a structured approach to understand the importance of personal ecological norms in purchasing organic food. The norm-activation-model by Schwartz is used to predict self-reported and observed purchase behavior of organic milk. The paper reports the results of a field study with 63 customers of a German supermarket. A combination of covert observation and in-store interviews was applied to obtain reliable data on actual shopping behavior and its predictors.

The results show that the self-reported and the observed purchase of organic milk is predicted by personal ecological norms, social norms, and perceived behavioral control. Personal norms are activated by awareness of need, awareness of consequences, perceived behavioral control, and social norms.

People with strong personal norms use "organic production", the “EU-BIO-Label” and "ingredients" as additional criteria during their decision process. For people with strong ecological norms the price difference between organic and conventional milk, the lack of knowledge about organic milk, and convenience are less important constraints.

Finally, people with strong personal norms react more sensitively to proposed norm-centered interventions.

The study offers insight into the processes of motivating behavior and can therefore be used to design intervention strategies. Suggestions are developed in the closing part of the paper.

The study applies for the first time the norm-activation-model to the domain of purchasing organic milk and underlines the importance of normative influences for this decision.

For analysts, there are implications about using alternative techniques to estimate market and trade effects relevant to the Chinese milk and dairy products sectors. For milk and dairy product producers, there are implications for market opportunities within China as well as trade opportunities from the perspective of potential exporters from China as well as exporters to China.

From the perspective of Chinese policy-makers, there are implications for internal agricultural economic development, consumer food availability, and trade.

[20] Huiyuan Zou and Andrew M. Novakovic, Presented at the Conference of the International Agricultural Trade Research Consortium Beijing, China June 2007

2.3.19 Strategies for Sustainable Dairy Production in India [21] (Indian Dairyman 2006)

“The industry’s major contribution in providing newer avenues for employment, both direct and indirect, and its role in improving the nutritional standards of our people also add to the importance that needs to be attached to this sector during the 21st century.”

The contribution of dairy animal is widely recognized. Our country is blessed with vast dairy resource. Dairy farming involves a group of interaction of many factors that influence production & reproduction, environment and management. Dairy cooperatives cover about 60,000 villages all over India and only 12-14 per cent of total milk production is canalized through organized sector. Concerted efforts should, therefore be directed towards unorganized dairy farmers by providing necessary inputs and make them to adopt newer milk production technologies. India has become the world’s largest milk producer but its share in the world milk trade is very minimum.
An attempt to identify problems of the farmers and to resolve the same for improving the export earning and higher returns to dairy farmers is discussed in this paper. Various tips have also been given for efficient identification and formulation of dairy husbandry.


Shelf-life of cultured milk products is longer than milk but it is still limited. Shelf-life of cultured milk products could be enhanced by adopting various techniques.

The purpose of this paper is to describe how the longer shelf-life thus attained would extend the market reach and would be economically beneficial to both producers and consumers.

[21] (Indian Dairyman 2006)


Attempt has been made to enlighten the various techniques such as bacteriocin (nisin, MicrogardTM, natamycin, etc.), lactoperoxidase-thiocyanate-hydrogen peroxide system (LP-system), high pressure treatment, post-production heat-treatment (thermization, microwave heating), ultra-violet (UV) irradiation, carbonization, etc.

Application of more than one bacteriocin may be advantageous to minimize the possibility of survival of micro flora resistant to a particular bacteriocin. Pasteurization, being more detrimental to dietetic properties of cultured milk products than thermization, its application is not suggested as a method of preservation.

Microwave heating may be better than conventional pasteurization. Conjugated application of various techniques would be more efficacious in extending the shelf-life of cultured milk products. Extension in shelf-life of cultured milk products would be economically beneficial for producers and consumers.

in Support of Rural Livelihoods under the WTO” Can Indian Dairy Cooperatives Survive in the New Economic Order? By [23] Bhaskar Goswami, Forum for Biotechnology & Food Security, New Delhi, India, Emergence of the Cooperative Movement in Dairying

The positive role that dairying could play in providing income and employment opportunity was clear to policy-makers long time back and a set of measures were put in place to develop and protect the dairy industry.

Immediately after India gained independence, the Milk Control Board was set up which controlled the supply and distribution chains. This however led to emergence of a set of middlemen and the share of producers in the sales declined. With processing units set up in cities, it became difficult to procure and transport milk from the centers of production which were in the rural areas. As a result, the yield of milk declined and imports of milk powder went up.

[23] Presentation by Bhaskar Goswami, Forum for Biotechnology & Food Security, New Delhi, India, Emergence of the Cooperative Movement in Dairying


Between 1970 and 2009, India has overcome many infrastructural, market, and institutional challenges to transition from a dairy importing nation to the top producer in the world of both buffalo and goat milk, as well as the sixth largest producer of cow milk.

In India, at least 100 million households are involved in farming and 70 million have dairy cattle.

In India, dairy production is important for employment, income levels, and the nutritional quality of diets. Milk production in India is dominated by smallholder farmers including landless agricultural workers. For example, 80 percent of milk comes from farms with only two to five cows.

A well-known smallholder dairy production initiative, Operation Flood, laid the foundation for a dairy cooperative movement that presently ensures returns on dairy investments to 13 million members.
Operation Flood also advanced infrastructural improvements to enable the procurement, processing, marketing, and production of milk and to link India’s major metropolitan cities with dairy cooperatives nationwide.

This intervention transformed the policy environment, brought significant technological advancements into the rural milk sector, established many village cooperatives, and oriented the dairy industry toward markets.


Intensive smallholder dairy cattle production is a major source of milk and income for resource poor households in Soroti district, Uganda. The realization of potential economic benefits, however, is impeded by inadequate feeds during the dry season leading to low animal productivity.

Participatory on-farm trials were conducted on 30 smallholder dairy farms from 2007 to 2009 to demonstrate the effect of improved forage technologies (maize-cowpeas or lablab, sorghum-lablab or cow pea intercrop, Chloris gayana-Desmodium intortum and siratro mixture and Napier grass-Desmodium intortum mixture) on dairy cattle enterprise. Results were compared to the local feeding method (Napier grass fodder and crop residues).

This paper presents results of profitability of dairy cattle enterprises using improved forage technologies (IFT) and factors affecting the use of improved forage technologies among smallholder dairy farmers in Soroti district.
Results indicated that farmers using IFT had significantly larger gross margin per season (Uganda Shillings 279,526) with lower cost of production (Ug. Shs. 59,217) than those using sole Napier grass feeding system (Ug.shs. 53,178 and Ug. Shs. 86,419, respectively). Regression results indicated that profitability of IFT alone did not influence the decision to use IFT, but it did so when combined with improved cattle breeds. This implies that profitability and improved cattle breed had complementary effects on the decision to use IFT.

The number of cows kept, input costs, age of the household head and distance to the market were key factors differentiating the profitability levels obtained by farmers using IFT and those not using IFT.


The major implications from the study findings are that use of IFT is labor saving and profitable. This suggests that policies targeting efficient dissemination of improved forage technologies are urgently needed.


Dairy producers have at their disposal several financial tools available for managing their milk price risk. These risk management tools are introduced here. Not one of these tools may be the best risk management strategy for all producers or for all times. Producers may consider different tools under different market situations or expectations. Some producers may use a combination of these tools. And then there may be some producers who choose to not use any of these tools. The ability of producers to withstand price risk varies. For example, producers having little or no debt are likely to be able to weather price risks better than producers who are highly leveraged. At times, risk management tools may not offer an opportunity to achieve personal or business goals or adequately cover costs of production objectives.

1. Increase dairy producer’s basic knowledge of risk management terminology and alternative tools for managing the risk from changing milk prices.

2. Prepare dairy producers for the application of these alternative risk management tools to their dairy farm operation

This article aims to focus on the issue of privatization movement in the agro-food sector, in the light of the Turkish Dairy Industry Enterprises (TSEK) case, and the effects on the sector following privatization.


In order to make an appropriate evaluation, the background of the privatization movement and the general structure of the dairy sector in Turkey are examined first.

After a brief evaluation, the privatization process of TSEK and its effects on the sector are discussed in the light of the results of empirical data that obtain from the ANOVA model. It has been concluded that the liberalization process has been adopted without the setting up of market regulatory policies, thus, the price balance in the dairy sector has changed to the disadvantage of both producers and consumers, while market concentration has increased and regional differentials have become more apparent.

This article may be relevant for other countries where privatization or liberalization movement in the agro-food sector is in process.


The structure-performance paradigm has played a major role in studying the determinants of performance across a wide range of industries in the postwar period. The relevant empirical studies regress profitability on structural and conduct variables measured as averages at the industry level. Scholars now are less inclined to see market structure as the dominant influence on performance. Regressions of average
industry profits on industry structure and conduct variables receive less attention than formerly.

Although market structure still remains part of the key to identifying and solving the problem of monopoly profits, it is more than clear that the strategies of large firms are becoming increasingly different from the medium- and small sized firms of the industry they principally operate in. Given this, it is natural for the new empirical studies of the market performance to direct attention at firm level with a special reference to the strategies applied by firms belonging to different groups.

Dissatisfaction with the definition of industries has led a number of researchers to use the theory of strategic groups (e.g. Caves and Porter, 1977; Ornstein, 1987; Porter, 1979) that better explains industry performance (Tremblay, 1985). The importance of strategic group analysis is that the driving forces in an industry and the key success factors may differ by strategic group (Mason and Ezell, 1993).

The group is defined by the commonality of the strategies followed by firms in setting key decision variables – advertising intensity, diversification, investment levels, etc. Not only do groups have different market strategies, they are, in part because of these different strategies, differentially protected from the market. One of the implications of this theory is that effectiveness of strategies associated with market structure and conduct would differ between groups.

The relevant literature notes that strategic changes are difficult and firms cannot move easily from one group to another due to mobility barriers – often created by the initial strategic investment choices of the firms – which impede movement, playing a role analogous to the role of entry barriers in industry analysis (Oster, 1982).

Many empirical studies tested for the existence of strategic groups by using cross sectional data for samples, including firms from a wide range of different industries. There are two serious shortcomings in cross-sectional studies between strategies and structural variables and profitability across different industries.
First, it is unrealistic to expect the same relationship between performance and strategies to hold across all industries and second, it is unlikely that the structural and conduct variables published by census correspond to measures for relevant economic markets. To remedy these problems, it was suggested that the studies must focus on a firm level analysis in a single industry in order to study the performance changes over time. By focusing on single-industry firms’ responses to changing conditions one can assess strategies directly by estimating their effects on firm performance \( ^{33} \) (Bresnahan, 1989; Carlton and Perloff, 1994; Scherer and Ross, 1990).

\[ ^{29} \) (Caves and Porter, 1977; Ornstein, 1987; Porter, 1979), \[ ^{30} \) Tremblay, 1985, \[ ^{31} \) Mason and Ezell, 1993, \[ ^{32} \) Oster, 1982

\[ ^{33} \) (Bresnahan, 1989; Carlton and Perloff, 1994; Scherer and Ross, 1990)

Such studies, however, require detailed annual data at the firm level that are not easily available in most countries. Fortunately, time series data for individual firms operating in the Greek dairy industry are available for this work. This allows us to examine whether structure, conduct and financial differences can explain the variation, if any, in price-cost margins between the advertised and the unadvertised Greek dairy firms for the period 1990-94.

2.3.27 The Mexico City milk supply system: Structure, Function and Sustainability by \[ ^{34} \) Hermenegildo Losada, Richard Bennett, Jose Cortes, Jorge Vieyra and Ramon Soriano, Agriculture and Human Values 18: 305-317, 2001, Kluwer Academic Publishers.

This paper examines the present supply of milk to the urban inhabitants of Mexico City, paying particular attention to current themes of market liberalization, sustainable development and democratization. This is facilitated by an infrastructure within and without metropolitan zone and coexists with a large importation of milk from international market, much being sold at low prices to low income groups. Reduced state quality regulation has enabled the use of these imports in industrialized milk products.

Given the integration of international and national sources in milk supply, simply increasing Mexican production will not reduce imports and the NAFTA trade pact is unlikely to address the resources exploitation problems faced by national production.

The purpose of this paper is to study how packaging and packaging design can contribute to competitive advantage for marketing a consumer product.

This paper addresses the question of trade-offs in supply chains by exploring the roles of packaging in distribution networks. Taking a starting point in the logistical role of packaging and the potential trade-offs with its marketing and environmental roles, the paper illustrates some difficulties with integrated systems. The paper discusses the concept of packaging as an integrated system and presents a case study of a transport package, a roll-rack, for distribution of fresh milk.

The analysis shows that although it fulfils well all its three roles for milk, the roll-rack’s efficiency is decreasing as continuously larger volumes of products for which it was not designed, are distributed through the network. Because it is so integrated in the milk-chain and adaptations have developed between the roll-rack and other resources such as vehicles, terminals and display facilities in the stores, it is difficult to use for other products. As similar adaptations have developed within the other package/product chains, it is also difficult to replace other transport packages with the roll-rack.

The paper contributes to the understanding of use and development of logistics resources, trade-offs between adaptation and adaptability, integration and standardization.

2.3.30 Is traditional milk marketing and processing viable and efficient?

Integrated food supply chains serving urban areas are the fastest growing and most visible market phenomenon. Yet small scale milk market agents and chains supplying fresh milk and traditionally processed dairy products still play a very large role in most of the developing countries. This study estimates the costs and returns of milk marketing and processing. Identifies the drivers for participation in high value milk processing and value addition and estimates the cost efficiency and its determinants in the traditional milk sector in Assam. The study observed that raw
milk trading and processing offers good opportunities for income generation to small scale milk traders and processors. The raw milk marketing and trading is reasonably efficient and has the potential for continued dominance in spite of emerging integrated food supply chains.

2.3.31 Organized milk retailing set to grow significantly, [38] Sandip Das, Source: Internet Posted: Saturday, Apr 12, 2008 at 2238 hrs IST

With India’s milk production already surpassing 100 million tonne last year, the organized dairy industry is also witnessing a significant growth in the decade.

The organized dairy sector players such as Amul, Mother Dairy, Parag and other regional brand which at present occupy only 18% of the total milk produced in the country, is expected to capture more than 30% of the organized markets. “With increasing awareness about hygiene and value added products coming into market, the organized players are definitely going to play a critical role in growth of the sector,” Sharad Gupta, editor, Dairy India year book, told FE.

According the Karnal based National Dairy Research Institute (NDRI): India’s milk production is rising at 4% annually. “Output growth is seen driven by increasing demand for value-added milk products and extensive dairy development programmes initiated by government,” Sushil Kumar, director, NDRI said.

However, despite growth in the organized sector players, the private suppliers and unorganized sector players would still play crucial role in milk production and supply chain. Despite rising production, the per capita availability of milk is low at about 220 Gms. a day.

According to Sharad Gupta, the level of integration of the country’s dairy sector with the global economy is relatively low and there is huge opportunity for the dairy sector to expand in the country. The domestic market is largely isolated from global market influences, unlike other sectors such as edible oil. “There are no commodity futures in milk powder or value added products, whereas the leading commodity exchanges
as MCX and NCDEX trade in jeera, pepper and other spices and cereals,” Gupta said.

India has remained as the world’s single largest producer of milk since mid 1990s followed by United States. Thanks to cooperative movements initiated in the early 1970s.

However, the packaging of the milk products will play crucial role in expanding the organized sector share in the milk production. “We have not invested heavily in the adopting modern technology in milk packaging,” D P Tripathi, senior advisor, Aseptic Processing & Packaging Association of India said.

This article considers consumer attitudes and motivation towards organic food, and milk specifically. This is then linked to the resulting purchase behavior. Based on a combination of secondary and primary research, the results indicate the dynamics between these concepts.

The resulting discussion highlights the importance of the associated internal and external factors within this area, and their impact for marketing managers.

2.3.33 Opportunities and Challenges in the Indian Dairy Industry, [40] Dr K.G. Karmakar and Dr G.D. Banerjee, T E C H N I C A L DIGEST –ISSUE 9, 2006 For Private circulation only
Dairy industry is of crucial importance to India. The country is the world’s largest milk producer, accounting for more than 13% of world's total milk production. It is the world’s largest consumer of dairy products, consuming almost 100% of its own milk production.

Dairy products are a major source of cheap and nutritious food to millions of people in India and the only acceptable source of animal protein for large vegetarian segment of Indian population, particularly among the landless, small and marginal farmers and women. Dairying has been considered as one of the activities aimed at alleviating the poverty and unemployment especially in the rural areas in the rain-fed and drought-prone regions.
In India, about three-fourth of the population live in rural areas and about 38% of them are poor. In 1986-87, about 73% of rural households own livestock. Small and marginal farmers account for three-quarters of these households owning livestock, raising 56% of the bovine and 66% of the sheep population.

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According to the National Sample Survey of 1993-94, livestock sector produces regular employment to about 9.8 million persons in principal status and 8.6 million in subsidiary status, which constitute about 5% of the total workforce.

The progress in this sector will result in a more balanced development of the rural economy.

2.3.34 Kurien moots revamp of national milk grid by Vinod Mathew, Business Line- THE HINDU group of publications, Wednesday, August 22, 2001

CAN India consider channelizing its surplus milk from Amritsar in Punjab to Lahore or even Rawalpindi in Pakistan? For that matter how about outsourcing milk from the southern States like Kerala, which currently is facing a serious problem of surplus milk, to a destination such as Colombo in Sri Lanka? It can be and should be done, says one man...one who ought to know what he is talking about.

The man who ushered in the white revolution in the country, Dr Varghese Kurien, is convinced that the future for Indian surplus milk may lie in these directions, the scope for value-added products notwithstanding. To that extent, it may be time to revamp the national milk grid and look at new permutation combinations, he feels.

``The price of milk anywhere in Pakistan is about Rs 25 per litre and that in Punjab is Rs 10 per litre. The potential here is quite obvious, provided a milk train is allowed to run to Pakistan. There is a similar scope in exporting surplus milk from Kerala (some 35,000 litres per day) to Sri Lanka as would be borne by the prices of milk in the two regions. This would raise the question whether the Tamil Nadu milk cannot be sent to Kolkata, instead of the existing network where it is sent from Anand," Dr Kurien said.
At present, one rake of 60 wagons each ply milk between Anand and destinations such as Delhi, Calcutta and Guwahati each week. To that extent, the national milk grid exists and it connects all the four metros and about 500 towns that come in between, the nerve centre being Anand in Gujarat.

The milk procurement by the 12 district member unions of the Gujarat Co-operative Milk Marketing Federation Ltd (GCMMF) stood at 44.19 lakh litres per day in 2000-01.

The Food and Agriculture Organization (FAO) has predicted India’s output for 2001-02 at 81 million tonnes, up two million tonnes from last year’s milk production of 79 million tonnes. Evidently India has begun to pull away from the rest of the pack, the difference with the US, the second single largest milk producing country, being three million tonnes and the gap is expected to widen by another two million tonnes this year.

Clearly, the time may have come for India to look at a wider market for its constantly increasing production of liquid milk. As the grid connects production centres with the ultimate markets, then the prospect of a standard price may also not be too far off.

The import duties likely to be imposed in the neighboring countries may be another matter altogether. But then, the ruling milk prices are loaded heavily in favor of the Indian farmers for once, at least, in this instance.

2.3.35 IMPACT OF MILK COOPERATIVES ON MARKETED SURPLUS OF MILK IN MAHARASHTRA by Deepak Shah, Gokhale Institute of Politics and Economics, 05 July 2007 Online at http://mpra.ub.uni-muenchen.de/3855/, MPRA Paper No. 3855 posted 07. November 2007 / 03:30

In today’s scenario, the marketing strength of an organization spells the difference between success and failure. In the absence of a good marketing network, larger quantity of surplus milk produced in the village in a flush season is either consumed at home or is partly sold to milk vendors at unremunerative low price.
Thus, there is actual shrinkage in marketed surplus due to high propensity of consuming milk at the production point.


This has been established by various studies conducted in the past on marketed surplus of milk [43] (Dhaka, 1981; Bahadure et al., 1981; Singh and Singh, 1986; Shah and Sharma, 1993). Therefore, for the development of dairy industry in the country, improvement in the marketing mechanism of milk is a must. The stranglehold and vice like grip of milk vendors and halwais (traditional sweetmeat makers) on the milk marketing should be weakened by ensuring a more profitable dairying enterprise for the farmers [44] (Shah, 1996). In many areas and states this has been done by establishing and encouraging formation of milk producers’ cooperatives, affiliated to either Government or private institutions.

Further, for the process of economic development to become viable, it is necessary that the marketed surplus increases with increasing production volumes. This interalia lays emphasis on the need to adjust supply and demand through orderly marketing in order to avoid undue price fluctuations.

And, to achieve this goal, it is necessary to ascertain the determinants of marketed surplus of milk that would help policy makers in formulating policies for increasing the marketed surplus through establishment of efficient marketing systems. There is dearth of empirical evidence on the determinants of marketed surplus of milk.

The present study was, therefore, conducted to test the hypotheses that ‘organized institutions’ engaged in the marketing of milk have benefited the milk producers and contributed significantly towards increasing milk supply.


The following article is the second in a two-part report on a study of the pricing of milk on the basis of fat and skim milk. Milk pricing practices followed in the dairy industry
should depend on the association between milk composition-fat and nonfat solids-and the related values in utilization.

[44] (Shah, 1996)

Pricing of milk, therefore, requires besides the accurate measurement of the initial milk components—the measurement of the net value of milk in a given operation. As the raw milk changes in composition, information must be available about the relationship between milk composition and physical yields as well as product prices and processing costs.

The net value of 100 pounds of milk of a given composition in a given use can be determined. It is equal to the gross sales value of the resulting products minus the associated processing and marketing costs. Since specific standards have been established by state and federal governments for the fat, nonfat solids, and moisture content of nearly all dairy products, it is possible to estimate the product yields from 100 pounds of milk when reasonably accurate measurements of the raw milk components are available.

By employing the California relationship between nonfat solids and fat in whole milk—nonfat solids = 7.07 + .444 fat—to estimate nonfat solids content in 100 pounds of milk of a given fat test, product yields can be expressed as simple linear functions of the original fat test. Illustrations of the development of these yield equations and their application to pricing formula is given in the box on the bottom of this page.

The milk prices developed in this report are for the plant location, but farm prices can be determined by subtracting the transportation costs per 100 pounds of milk from the plant price schedule.

2.3.37 Milk output in India to touch record 121.5 mt in 2011

India’s milk output is expected to touch 121.5 million tonnes in the current year, translating into a growth of nearly 4% vis-à-vis the previous year, according to a US Department of Agriculture (USDA) report [46]. “India’s milk production in 2010 is estimated at 117 million tonnes and is forecast to increase approximately 4% to a
US Department of Agriculture (USDA) report- Milk output in India to touch record 121.5 mt in 2011

However, it later revised the estimate upward to 117 million tonnes on account of the good monsoon last year, which led to increased availability of fodder for cattle. “Liquid milk production in 2010 is revised to reflect greater than 4% growth over 2009 production due to a strong monsoon and related good fodder availability,” the report said.

In 2009, liquid milk production in the country stood at 112 million tonnes, despite poor monsoon rainfall. The milk production will go up due to the improved management practices adopted Indian dairies and efforts by the private and public sector to improve cattle genetics, besides good fodder availability, the USDA report said. India is the world’s largest producer of dairy products and home to the world’s largest dairy herd. However, the country still faces a production shortfall due to massive demand from the growing population.

2.3.38 [47] MILK MARKETING IN INDIA: A REVIEW PAPER ON THE ROLE AND PERFORMANCE OF INFORMAL SECTOR Indian Society of Agribusiness Professionals, Pro-Poor Livestock Policy Facility (South Asia Hub), Capitalization of Livestock Program Experiences in India (CALPI)

Market oriented smallholder dairying offers significant scope for diversification and augmenting income and employment generation for small and marginal farmers. Like any other enterprise, the profitability and sustainability of dairy production depends upon its cost structure and a remunerative price, for which a good marketing outlet is crucial.

Indian dairy sector has made remarkable progress over the last few decades. The co-operative movement, especially Operation Flood, has been an important driver of this progress and has played an important role in facilitating the participation of smallholders in this expanding sector.
[47] MILK MARKETING IN INDIA: A REVIEW PAPER ON THE ROLE AND PERFORMANCE OF INFORMAL SECTOR
Indian Society of Agribusiness Professionals, Pro-Poor Livestock Policy Facility (South Asia Hub), Capitalization of Livestock Program Experiences in India (CALPI)

Despite three decades of cooperative movement in India, however, a large proportion of milk and milk products in India continues to be marketed through the ‘informal or unorganized sector’. Although the share of organized market has steadily increased over the last three decades, the informal sector comprising middlemen, private milk traders and direct sale from producer to consumer, still accounts for nearly 80 percent of marketed milk and milk products in the country. Trends indicate that, the informal sector will continue to play its dominant role in milk marketing in the foreseeable future.

Further, nearly 85 percent of all the milk that enters the national exchange economy finds its way into the urban areas. It is therefore the urban demand that is the main source of cash for rural milk producers. It is estimated that of the 3700 cities and towns in India, only 778 are served by an organized milk distribution network. Only 15% of the milk marketed is packed, of which 94% is in pouches.

The informal market thrives on poor willingness of consumers to pay the extra costs of formal processing and packaging. The informal market usually does not incur those costs and hence the market margins between farmer and consumer could remain smaller. This also implies that the informal market agents can afford to offer higher prices to farmers and lower retail prices to consumers. Consumer preferences reveal that the market for value added milk products is small and most buyers and unwilling to pay for processing of any kind. Formal processes not only spend on quality control and packaging but also on trade taxes and are thus able to market to a niche segment only. Further, most consumers perceive fresh milk to be of superior quality and hence prefer to buy loose milk. Quality concerns such as bacteria levels in primary processed items like sweets and curd are often not attributed high priority and it is suggested that consumers are themselves not particularly worried about it.

Given the importance of an assured and steady market for milk and milk products and given that both organized and unorganized market agents are likely to continue to play critical roles in the marketing of milk, it is important to understand the micro-
dynamics of market behavior of various market agents so as to capitalize on their strengths for the benefit of poor rural producer. In the light of that background, CALPI commissioned a desk study to compile and review available published literature on marketing of milk in India with a focus on informal market intermediaries. Somewhat surprisingly, the exercise threw up very few published studies with generalizable implications. Most studies either had too narrow geographical and conceptual focus or simply lacked methodological rigor.

2.3.39 Milk demand lures more players into dairy sector: COS FROM UNRELATED BACKGROUND VENTURE INTO FARMS by [48] Jayashree Bhosale, PUNE

The Gurgaon-based Landmark Group has ventured into the dairy sector to set up large industrial farms in the next five years. The group that is into IT, BPO and real estate, is not the only one to venture into dairy business from an unrelated background. It is attracting entrepreneurs from varied backgrounds like real estate, mining, poultry and trading to set up large scale farms which are poised to bring another revolution in the Indian dairy sector.

The reason for dairy becoming the most sought after business is that there is a huge demand for milk in domestic as well as international markets. “Milk prices in the domestic market are growing at 20% per annum and the demand for milk is growing at 7%. Adulteration is such a big issue in front of the dairy sector in India, including the big brands, that this is huge market for good quality milk,” said Mr. Amit Kumar, promoter of landmark group.

Devendra Shah of the Parag Milk Foods, which owns Go cheese and Govardhan brands, said India will have to cater to a huge international market. “Dairy has become an unpopular business in Europe and leading dairy nations like New Zealand and Australia. India will have to meet the international milk demand.” He said dairy is the ideal sector to invest and it doesn’t require much marketing either.

Dr Abdul Samad, dean at Bombay Veterinary College, said: “The farm size and labour involved in dairy sector in Europe is declining, though their productivity is increasing. So the dairy industry from these countries will like to have cheaper milk from developing world”. Currently only Saudi Arabia has huge cattle farms of sizes between 5,000 and 25,000.

Nagpur-based Narayana dairy is promoted by the Nairsons Group which is into coal
handling. The Schreiber Dynamix dairy at Baramati near Pune is promoted by KM Goenka of the Dynamix Balwa Group, which works in real estate and hospitality sector.

Jayashree Bhosale, PUNE

At least 15 modern cow and buffalo farms of herd size 2,000 to 10,000 are being set up in nook and corner of the country. The new factory farms are going for full automation using technologies like the rotary parlors, which are sparingly adopted even in the leading dairy nations. The traditional system of collecting milk from farmers is prone to adulteration. Kolhapur-based Warna dairy has acquired 400 acres wants to set up a farm with a capacity of 5,000 cows. H Desai, chief executive officer, Warna Dairy and Agro said: “The cooperative network is weakening. Adulterated milk is affecting our brand image.”

While MNC’s like Nestle and others want non-adulterated milk for various milk-based products. This has generated demand for pure milk. “We want to add one cow farm every year so that within five years we get at least half of our milk consumption from our own farms,” said chairman of Dynamix dairy KM Goenka. The middle-class milk consumer is ready to pay more for quality milk, which has also attracted entrepreneurs to this sector. This why the IB group has set up a dairy farm of 4,000 livestock in the dry belt of Chhattisgarh. “As our milk is pure, we are selling it at higher price than that of top national brands,” said Mukesh Sharma, head of IB group’s dairy division.

The trend of privatization and centralization is considered good for the country’s dairy industry. Dr DK Gosain of National Dairy Research Institute, Karnal said: “The growth of organized cattle will facilitate more care, continuous monitoring and scientific feeding of the elite herd, which will result in improved productivity.”


To assess the potential for development in the agro-food sector by investigating: consumer awareness of health-enhancing foods; key influences on their perceptions of and attitudes towards these foods; their relevant purchasing behavior in the context of the Northern Irish dairy products market.
To develop recommendations for future segmentation and positioning strategies for health-enhancing dairy foods. There is potential for the agro-food industry to expand further, particularly in the case of added-value food products, among which health-enhancing foods should be treated as an important subset. However, a pre-requisite is development of enhanced consumer segmentation and product positioning strategies.

The findings and conclusions derive from one study of one specialist product type in one small national market. Generalisation should be possible, at least informally, but comparative studies are indicated. The findings indicated a general lack of awareness of the health-enhancing food concept and the level of (largely proven) health benefits of such products, which is a barrier to their wider adoption of these products. The key aims goals for marketing planners in this context are thus awareness generation and consumer education. The crucial segments of the general target audience and the core message to be conveyed are both defined by the findings. This study provides a research-based foundation for a more proactive and informed marketing strategy in a particular context, potentially transferable to other market sectors and locations.
The questionnaire contained, besides general information such as yearly value of milk, number of animals and their diet, questions regarding marketing that included type of marketing. Order getting cost, product differentiations and differentiation cost, type of advertisement and cost and method of physical distribution and cost. It is found that there are miles to go in the direction of marketing. People are generally not aware of the fact that marketing can add to the performance. They have no marketing strategies.

Marketing variables are playing negative role in determination of value of output. The significant variable that emerges in such determination is the quantity of output.


The purpose of this paper is to provide an analysis of the problem of “quality failure” in China using as an illustration the recent case of melamine contaminated dairy products. This conceptual paper examines whether it is possible to anticipate the incidence of quality fade and, if so, what can be done to minimize the likelihood of such problems occurring. Drawing on theoretical frameworks of alternative transactions governance modes, the discussion highlights the interaction between environmental operating conditions and effective governance modes. The discussion suggests that it is possible to anticipate quality and safety problems and identifies the key environmental conditions in China that contribute to the problem of quality deterioration. Analysis of three primary transaction governance modes – contracts, hierarchy and trust – and local operating conditions reveals a dairy industry which, in contrast to many of the developed economies, is highly fragmented, politicized, ineffectively regulated and characterized by corrupt and opportunistic behavior. The dairy industry case provides a concrete application of recent conceptual analysis of quality and safety concerns in emerging markets. This case allows the derivation of recommendations on appropriate management practices for maintaining quality in the challenging business environment of China.
In recent years the National Dairy Development Board-initiated cooperative movement has led to a substantial increase in milk production in India.

The two main reasons for this increase are the efficient collection of milk and higher profit for the producers, both of which have to some degree been influenced by information technology. The appropriate information technology described in this paper helped to make information symmetric in the market, thereby minimizing problems of adverse selection and corruption.

Deregulation of the Australian dairy industry, and ensuing supermarket strategies are transforming the fresh milk supply chains. Factors such as increasing consumer awareness, concerns about food safety and environment, innovation, supply chain integration and rationalization of supply base are adding momentum to this transformation. Milk processors in response to changing market expectations are getting proactive in their relationship with retailers across all aspects of business, innovating to generate sufficient returns from proprietary brands and strategically orienting them to develop a mixed customer portfolio and appropriate management structures to service that portfolio. Milk producers are expanding businesses to achieve production and cost efficiencies and strengthening contractual relationships on input and output side for a greater security.
The research aims to investigate consumer decision-making strategies using quantitative and qualitative methods. Two decision theories are contrasted: neoclassical theory proposes compensatory and optimizing strategies with complete information, whilst bounded rationality theory suggests simplified and non-compensatory strategies.

The research assesses whether these theories will explain consumers’ decision-making strategies when completing a survey, and the extent to which qualitative and quantitative methods provide convergent validity of the explanations. Respondents left over one-fifth of the cards unopened. Interview findings confirmed that respondents generally did not obtain all available information and used simplified strategies.

The qualitative data were generally validated by the quantitative data and provided improved descriptions of decision strategies. The paper suggests that consumers may not use all available information when making choices. The neoclassical assumption of full information may therefore not hold. It also indicates that probing decision strategies with qualitative questioning provides accurate data and better details than could be obtained quantitatively.

2.3.46 U.S. Market Structure: The Dairy Industry in the 21st Century by Ken Bailey of Penn State University, Paper Presented at the 66th Annual Meeting of the International Association of Milk Control Agencies, Calgary, Alberta, Canada, July 14-17, 2002

The U.S. dairy industry is undergoing major structural changes due to the following factors:
• Farms are consolidating due to competition and opportunity,
• The milk supply continues to increase to meet consumer demand,
• Cheese demand may be leveling off, just as imports appear to be increasing,
• Milk can be transported longer distances,
• Some government programs are becoming more market oriented, others are not,
• Consumers want more selection, convenience and quality at affordable prices, and
• Processors and retailers are increasingly focusing on consumer needs.
2.3.47 RECENT CHANGES IN MILK MARKETING IN THE UK: THE FARMERS’ PERSPECTIVE by J R Franks, University of Newcastle, Department of Agriculture, King George VI Building, University of Newcastle upon Tyne, Newcastle upon Tyne NE1 7RU

In 1994 Milk Marketing Boards in the UK were disbanded, their role as milk purchasers was taken by more than 100 licensed organisations. It is shown that this change resulted in an increase in the variation between producers’ milk price. The majority of dairy farmers sold milk through the Milk Marketing Boards designated successor; a farmer owned co-operative called Milk Marque. In doing so they accepted a 1.5 ppl milk price penalty. It is shown farmers who adopted this strategy did so because of the perceived financial security of Milk Marque, goodwill and support for the principle of co-operative marketing and in an attempt to protect the milk price over the longer-term. The marketing environment changed once again in 2000 when Milk Marque was disbanded. Deductions drawn from the analyses of farmers’ behavior following the 1994 deregulation are used to inform consideration of possible developments in the marketing of milk in England and Wales.


The melamine milk scandal caused a crisis of confidence in food containing dairy products. The purpose of this paper is to explore the determinants of precautionary behavior to avoid food containing dairy products among Taiwanese college students.

[55] Ken Bailey of Penn State University, Paper Presented at the 66th Annual Meeting of the International Association of Milk Control Agencies, Calgary, Alberta, Canada, July 14-17, 2002
[56] J R Franks, University of Newcastle, Department of Agriculture, King George VI Building, University of Newcastle upon Tyne, Newcastle upon Tyne NE1 7RU
The survey results showed that subjective norms, attitude, perceived behavioral control, attention to news, and perceived credibility of information are significantly associated with the intention to take precautionary behavior.

The paper developed a modified theory of planned behavior (TPB) that focused on attention and perceived credibility of milk scandal-related information as additional determinants of precautionary behavior to avoid food containing dairy products. The inclusion of attention and perceived credibility of information constructs enabled a better model fit than that of the TPB model.


The purpose of this paper is to examine challenges and opportunities that occurred in the Polish ultra-high temperature (UHT) milk market after Poland entered the European Union.

Through an in-depth analysis of the Polish UHT market and by interpreting statistical data, this paper analyzes the retailing, production, and distribution channels, branding, and potential changes in the marketing perspective of the UHT market in Poland.

To understand the nature of the market, this paper employs a marketing science method, marketing persistence analysis, to explore the relationship of short-term marketing efforts and long-term market response in Polish UHT milk market.

Based on empirical testing of ten Polish brands, results show that the UHT milk market in Poland presents marketing persistence, which means that short-term marketing efforts can generate long-term revenue effects.

If marketing spending data are available, causality tests can be performed to see what are most effective marketing means (e.g. TV advertising or sale promotion) in Polish dairy markets. Combining the empirical findings with the facts that previous marketing activities in Poland are relatively low, and it is now a historic transition for Poland after joining the homogenous market of Europe, the authors suggest that existing marketers increase the marketing investment to strengthen brands, gain market share, and build long-term customer relationships.

International marketers also have good opportunities now to enter Polish UHT markets through intensive marketing campaigns.

This study is the first attempt to apply marketing science techniques to examine the Polish market and the findings enable both academic researchers and industrial practitioners to understand this market better and explore its potential business opportunities.

2.3.50 The Evolution of Milk Pricing and Government Intervention in Dairy Markets by [59] Eric M. Erba and Andrew M. Novakovic, A publication of the Cornell Program on Dairy Markets and Policy Department of Agricultural, Resource, and Managerial Economics, College of Agriculture and Life Sciences, Cornell University Ithaca, NY 14853-7801

A review of U.S. dairy policy from the early 1900s through the 1980s exposes the changing nature of regulation in dairy markets. While dairy policy was originally legislated to stabilize markets and increase milk prices at the farm level, its focus in the 1980s shifted to the apparently chronic problem of surplus dairy products.

This report reexamines the events during the 1900s that led to federal and state regulation of the dairy industry and describes the progression of dairy policy from the 1933 Agricultural Adjustment Act through the 1990 Food, Agriculture, Conservation and Trade Act.

[59] Eric M. Erba and Andrew M. Novakovic, A publication of the Cornell Program on Dairy Markets and Policy Department of Agricultural, Resource, and Managerial Economics, College of Agriculture and Life Sciences, Cornell University Ithaca, NY 14853-7801
The United States federal and state governments regulate many agricultural products, but none is more regulated than milk. The U. S. is not unusual in this respect; most governments in major milk-producing countries take an active role in the regulation of milk production and milk marketing. Prior to the Great Depression, federal and state governments were not directly involved in regulating the dairy industry. The economic collapse caused by the Depression led to the first piece of legislation that attempted to raise producer milk prices and stabilize the tumultuous market. Once involved in regulation of the dairy industry, political inertia effectively eliminated any possibility for a quick separation of the federal government from further commitments to the industry. This paper details the characteristics that led to governmental intervention, the manner and form of intervention throughout the past 60 years, and the impact of legislative attempts to direct and oversee the dairy industry.


People living in rural and urban areas experience different socioeconomic conditions, which should affect their consumer behavior. The purpose of this study is to examine the effects of these socio-economic differences on the consumption of milk, yoghurt, and cheese.

Results of the evaluations show that there are socio-economical differences between urban and rural populations in terms of age, education, occupation, and income, which affect their consumption behavior.

The rural consumers generally consume raw (unpasteurized, unpackaged) milk. These consumers tend to have low income and be illiterate. The urban consumers, on the other hand, consume pasteurized milk and have higher incomes compared with the rural consumers and have a mid-level to university education.

In the rural areas, consumers usually make their own yoghurt but those who purchase their yoghurt pay attention to its packaging the most. In the rural areas, consumers who make their own cheese have mid-level income and primary school education.

The paper analyses the current effects of socio-economic differences in rural and urban areas on the consumption behavior of milk, yoghurt, and cheese using the Multiple

2.3.52 DAIRY MARKETS and POLICY ISSUES AND OPTIONS


Today’s milk haulers complete the link between milk producers and milk processors by transporting raw milk in bulk tank trucks and tractor-trailer units from farms to processing facilities.

From the producers’ side, milk haulers often represent the only regular contact that they have with the organizations that market or buy their milk. In addition to transporting milk from farm to plant, haulers perform many important duties during milk assembly that add to the safety and, consequently, to the value of dairy products.


As global demand for milk and new dairy products expands, the roles of policies that support prices are diminishing while the roles of flexibility and innovation aimed at improving competitiveness are growing. In response to changing global markets, the U.S. dairy industry is positioning itself to compete worldwide through innovation, expansion and consolidation.


Not since the world food crisis of the 1970s, have agriculture and food issues been the subject of so many headlines, news articles and editorials. Food price inflation here at home, another food crisis in developing countries, the ethanol boom, and surging grain prices have recaptured the imaginations of news media, the public and policymakers.

In the meantime, a less-publicized but critical transformation has been underway in one of our most important and dynamic food sectors: the nation’s dairy industry. A quiet but steady revolution in production, processing and market development has turned what only 25 years ago was a government-dependent industry into a force in an increasingly global marketplace.

Sales of the dairy industry’s products here in the United States have grown thanks to the development and aggressive marketing of new high-value dairy products and food ingredients. Unsubsidized exports of U.S. dairy products surged recently as the U.S. dairy industry, for the first time, became a major player in international markets. And the nation’s productive dairy farms responded quickly to market signals and expanded production to meet growing global demand for products made from their milk.

The pace of change in the dairy industry has accelerated during the past five years, particularly as U.S. dairy products have gained greater access to global markets. Yet the industry’s potential to capitalize on the full range of 21st century opportunities and its ability to produce jobs will depend, in part, on how quickly federal policy is adjusted to coincide with the new market realities. For all of the industry’s dynamism, few sectors in U.S. agriculture have had to live with federal programs that are more outdated and counter-productive.


In 1994, after 61 years, the UK’s Milk Marketing Boards were disbanded.

One consequence, an increase in the variation of milk price paid to producers, is analyzed here. Initially most milk producers joined the farmer-owned co-operative Milk Marque, accepting lower milk prices (estimated here at about 1.5 ppl in the 1997 milk quota year).

A second analysis shows that these farmers accepted this lower milk price because of Milk Marque's perceived financial security, and to support the principle of co-operative marketing which they believed would protect milk prices in the long run. Milk Marque was dismantled in 2000 principally because of its planned enlargement of vertically integrated processing capacity.

This has left dairy farmers at another crossroads; their choices now will shape the development of the marketing of milk in England and Wales for the foreseeable future.

2.3.55 Development of methods for standardized HACCP assessment by [64]


Assessment of HACCP systems is a key element in assuring the effective management of food safety. However, there is no accepted approach or common methodology available to HACCP practitioners, auditors or regulatory bodies. This paper seeks to examine this situation.

This paper reviews previous approaches to HACCP audit and describes developments in audit and audit methods based on a long-term study of HACCP in a multinational organization.

The proposed audit tools provide a useful method for collection of data on the effectiveness of HACCP plans and their implementation.

The U.S. dairy industry, many segments of which supported dairy policy changes in the 1996 Federal Agriculture Improvement and Reform Act, is much different than it was 20 or even 10 years ago.

This report provides a historical overview of the industry, more detailed examinations of the fluid milk market and selected manufactured dairy product markets, a discussion of future prospects and trends in the industry, and some thoughts on the implications of those prospects and trends for dairy farmers and their organizations, processors, dairy product manufacturers, and retailers.

The livelihood of farmers, processors and others connected with the U.S. dairy industry will be determined to a great extent by the future structure of the industry. At the same time the investments made by farmers and processors will depend, in part, on the expected structure.
The intent of this publication is to collect and synthesize information on the changes that have taken place in the dairy industry, project the structure of the industry under the assumption that current trends continue, and then discuss the factors that might cause the industry to evolve differently from that suggested by current trends.

A general perspective on the industry is necessary to identify a logical procedure of analysis. Our general perspective on the dairy industry starts with the idea that consumers determine the demand for milk. This demand is influenced by efforts made to promote consumption of milk and milk products, the degree of competition provided by other beverages and substitutes for milk products and the efficiency with which the demands of consumers are transmitted to processors and farmers. But, in net, the amount of milk that farmers will be able to sell, and thus, need to produce, will be directly determined by what consumers are willing to buy.

The milk supply is determined by farmers. This is the result of the number of farms, number of cows per farm and the level of production per cow. The number and location of farms will depend upon the relationship between production costs and the price of milk. Since the dairy farm sector meets many of the conditions for a perfect market, farms can be expected to enter and leave milk production such that there are no profits above normal returns to all resources (including operator supplied labor, management and equity capital) used in production. Whenever the farm price received for milk moves outside the range that provides the minimum amount farmers are willing to accept for their inputs, farmers will enter (or expand) or leave the sector such that production will be increased or decreased.

The interaction of consumer demand and farmer supply is modified by the post farm-gate processing/manufacturing/retailing sector, through which all pricing signals characterizing supply and demand must flow.

The processing/manufacturing/retailing sector exerts its influence through plant location, product development and the pricing of dairy products. Cost control throughout this sector also influences the final cost of dairy products, and thus, the level of final demand products is very inelastic.

Thus, modest normal price changes in milk and milk products have little effect on the quantity of milk demanded by consumers. When this is combined with extreme resistance on the part of retailers to lower market prices, which they will likely have to
raise sometime in the near future, the price the consumer pays changes is relatively insensitive to changes in farm level prices, particularly in the short run. The normal perfect market assumption that excess supply reduces consumer prices so that consumers demand more, thereby assisting the adjustment of supply and demand, does not fit this market. Within this environment farm prices vary widely as they attempt to equate changing farm supply with relatively constant effective farm level demand. Small changes in supply result in large changes in farm level prices.

This variation in farm price is exacerbated by the processing/manufacturing/retailing sector’s efforts to improve efficiency by limiting inventories and moving to “just in time” deliveries. The resultant lower stocks provide smaller stocks to buffer changes in supply and demand. Adjustment within the sector occurs by farms exiting and other farms delaying expansions until demand increases sufficiently (primarily from increasing population) and farm prices recover to acceptable levels.

Imports and exports, although typically a small percent of U.S. milk use, change opportunistically to assist with short run excess or deficits in supply. Consistent with this general perspective, this publication is organized into three major sections.

These three sections deal with (1) the demand for milk, (2) the size and number of farms, and (3) the processing/manufacturing/retailing sector.

Each of the three sections contains three subsections that cover (1) recent national level trends and projections for 2020, (2) a discussion of factors that may influence those trends in the future, and (3) projections and discussion of factors influencing those trends at the New York State and Northeast levels.

Finally, we provide a short thought section to assist stakeholders in the process of contemplating actions or strategies for proactively shaping current trends that they may find unappealing.
Dairy cooperatives or more specifically milk marketing cooperatives are a major institution in the milk industry in the United States.

In 1992, 264 dairy cooperatives marketed producer milk in the U.S., and an estimated 82 percent of all producer milk was marketed through a cooperative in which the dairy farmer was a member-owner. The other 18 percent of producer milk was marketed by “independent” or “non-member” dairy farmers. In terms of dairy farm numbers, approximately 106,000 dairy farms of the 130,000 dairy farms defined as commercial dairy farms in the U.S. have a milk marketing cooperative affiliation.

A dramatic collapse in farm milk prices late in 2008, which resulted in severe financial stress for many dairy farmers, has generated congressional concerns about “dairy pricing” and the adverse effects of milk price volatility on farmers. Dairy pricing refers to the process of establishing the farm value of milk.

The federal government plays a prominent role in that process. Among the dairy pricing issues are how milk producers receive price signals under existing policy and how that affects their production decisions. Some market participants say that the system does not transmit price signals to milk producers quickly enough, which can delay the response of producers needed to correct market imbalances. Another issue is farm milk price variability and managing price risks, given declines in dairy price supports and increased dependence on exports over the years, which have contributed to greater price volatility.

[67] Robert Jacobson and Robert Cropp

Finally, some observers are concerned about the farm share of retail prices for dairy products and whether retail prices track changes in the farm milk price. The
difference between farm and retail prices has declined in recent months after increasing in late 2008.

Dairy pricing in the United States is a unique combination of market-based and administered (through public dairy programs) prices. Each influences the other to determine the overall price level and price movements to some extent. Two characteristics—perishability and production on a daily basis—create challenges for pricing and marketing milk (and the products made from it).

2.3.60 Dairy Marketing Strategy by an [69] eHow Contributor

Dairy marketing truly came into the public’s consciousness with the introduction of the “Got Milk” campaign in 1993. The basic dairy product became associated with a memorable and catchy slogan that helped drive sales. There are many other strategies, though, to market all types of dairy products. These include promotion of nutritional value, appeal to the organic market, use of social media networks and development of new dairy products.

The “Got milk?” campaign proved that you can re-invent a product with a powerful marketing campaign. No matter if you are selling milk, yogurt, butter, sour cream, or cheese, a truly original commercial or print ad can cause consumers to think of your product in a new light. Whether you are conceiving of the marketing yourself or hiring a top advertising agency, aim for outside-of-the-box thinking.

A catchy slogan, a memorable spokesperson or an emotionally powerful commercial can go a long way. Use viral marketing and social media to get your product to the masses without spending an enormous amount on advertising.

The majority of consumers are familiar with the USDA's “food pyramid,” which recommends consuming two to three servings of dairy products per day. Use scientific-based guides and studies such as this to convince consumers to consume your dairy product. Associate your product with the study itself.

[69] E-how Contributor

Many studies are available for each dairy item that shows the health benefits (Research studies in medical journals such as the “Journal of the American Dietetic Association,” the “Journal of the American College of Nutrition” and the “Journal of
Consumer demand for organic milk continues to grow at an annual rate approaching 20 percent, according to the Agricultural Marketing Research Center. Many people are attracted to products that are free of chemicals and are manufactured naturally. Utilize the organic trend in your product line. Follow the official guidelines to get the USDA organic seal to include in your product advertising and packaging.

Offering consumers something they have never heard of is a sure-fire way to peak interest in a product. There were 448 total new dairy product launches in 2010, according to Dairy Foods.

Consider creative yogurt flavors such as Yoplait’s Apricot Mango and Dannon’s Banana Cream Pie. Try new flavors of milk, such as banana or black raspberry, or varieties of cheese that are not well-known in the American market. Consider dairy products with added dietary supplements, such as probiotics, acidophilus or bifidus cultures.

2.3.61 AGRICULTURAL COMMODITY MARKETING SYSTEM STUDY PROJECT, DAIRY MARKETING SYSTEM STUDY (FINAL REPORT) By: AKLILU WOLDU, December 2004 AMHARA NATIONAL REGIONAL STATE HEADS OF GOVERNMENT OFFICE, ANEX 1122

Results of the study clearly show that the marketing system, to be beset by several shortcomings. For instance, Most of the markets in the Region have not shown any transformation from their early roots.

These are still markets characterized by the involvement of too many intermediaries both licensed and unlicensed. There are no viable market information and quality grading and standard systems.

[70] AKLILU WOLDU, December 2004 AMHARA NATIONAL REGIONAL STATE HEADS OF GOVERNMENT OFFICE, ANEX 1122

Trading for the overwhelming majority of traders is based on personal trust rather than legal protection, and thus they have no recourse to courts. Besides too many small and informal traders who are plagued by lack of sufficient capital or credit resources dominate the markets. As a result, both producers and traders are forced
to bear higher risks; market exchanges fulfilled at high transaction costs in turn increase consumer prices; urban and rural markets still remain unstable and weakly integrated.

Finally the study presents a basic roadmap of recommendations for future interventions to improve dairy production and marketing in the region. First, with regard to achieving increased and sustainable dairy products supply, creating increased access to improved cows; promoting the availability of improved feeds; improving the delivery of vet, extension, and credit services to producers; and strengthening the capacity of producers have been recommended as strategic entry points. Similarly, proposals to achieve improved and efficient dairy marketing system calls for enhancing farmer to market linkages; improving the different market infrastructure; improving market competition; and building the capacity of all the participants in dairy markets.


Public policies dictated by food security and food self-sufficiency objectives have contributed to rapid increase in India’s milk output. However, domestic production cannot match increasing demand. The opposition to culling non-productive animals and constraints in feed and fodder production limit India’s capacity to expand milk output. Milk and dairy products are important in the Indian diet, and the social and cultural life of the predominantly Hindu population.

The socio-cultural features of India provide an interesting scenario – religious and cultural practices limit the capacity to increase domestic output but religious and cultural practices also contribute to increasing consumption.


The reduction in tariff barriers and changes to public policy strategies (on food-security and food self-sufficiency) provide significant market opportunities in the Indian dairy sector.
2.3.63 DAIRY INDUSTRY TRENDS AND OPPORTUNITIES, [72] John F. Smith & Michael J. Brouk, Extension Dairy Specialists, Kansas State University

The United States dairy industry has changed dramatically over time as the industry has adopted new technology and management strategies. The objective of this paper is to take a historic look at the dairy industry and to discuss opportunities and challenges facing dairy producers today and in the future.

2.3.64 Dairy Co-operative and Rural Development* (With Special Reference to Comparative Study between the Kaira District Co-operative Milk Producers’ Union Limited and the Himalayan Co-operative Milk Producers’ Union Limited) [73] MANOB KANTI BANDYOPADHYAY, FINANCE INDIA, Vol. X No. 2, June 1996, Pages—406–411

Maximum people of thickly populated India live in villages. Majority of them are involved in agriculture. The cattle animal is correlated with agriculture in India as the old method of cultivation is still vogue here. Rearing of cattle animal is also an additional source of income of the villagers in our country.

We get from our ancient history that the domestication of the cow and the buffalo dates back to nearly 4000 years. Scriptures of India refer to the wealth through the word ‘Godhan’. Maximum proportion of cows and buffaloes of the world are seen in India. But India produces only five percent of the total quantity of milk produced in the whole world. This amount is too inadequate to meet the country’s demand. The supply of milk in some parts of India is higher than the local demand. On the other hand, supply of milk in the rest of the country as well as in urban areas is much lower than the demand.

[72] John F. Smith & Michael J. Brouk, Extension Dairy Specialists, Kansas State University

2.3.65 Consumption pattern of milk and milk products in Ada’a woreda, East Shoa Zone, central Ethiopia by [74] Kassahun Melesse and Fekadu Beyene A doctoral thesis received 25 December 2008; Accepted 24 March 2009; Published 18 April 2009
A survey was carried out between August and November 2007 by using face to face interview to characterize the consumption pattern of milk and milk products and to identify determinants of consumption in Ada’a woreda. One hundred and thirty five households were selected based on their location and income group.

In the woreda wives had greater responsibility in managing the household budget. The mean monthly income for the overall households was 3553.2± 591.61 Birr. The mean consumer unit in the woreda was 5.04. Locally processed milk products were dominated in the study area; and the consumption of imported milk products was very low. Even if the majority of the households were consuming milk products frequently, it was observed that some households had zero consumption which was particularly severe for pasteurized milk, powdered milk, hard cheese and ice-cream.

Average consumption level of dairy products in the woreda was11.2gLME/head/day. In the majority of the studied households especially the medium and low income groups there was a decreasing trend of milk products consumption due to the increasing trend of the price of milk and milk products.

Insufficient household income coupled with religion was found to be the predominant constraints in the consumption of dairy products.

Consumption level was significantly correlated with household income, consumer unit (family size) education level of the food budget manager(FBM), age of the FBM, location of the household, ownership of dairy cattle, monthly expenditure on dairy products, average daily milk production per household and price of milk products.

[74] Kassahun Melesse and Fekadu Beyene- A doctoral thesis received 25 December 2008; Accepted 24 March 2009; Published 18 April 2009

An important consumer opinion of some food products relates to the perception of "home-made quality". This study examined consumer perception of this aspect in dairy ice cream along with product knowledge and consumption habits and influences.

All of the participants (n = 105) consumed dairy ice cream and 62 per cent named it as their most frequent type of ice cream, with sensory quality being the most important reason influencing choice.

Product knowledge was relatively high with 74 per cent of respondents claiming to know two out of three product characteristics. Consumer opinion was divided on a pre-stated preference for "home-made" or "commercial", with 56 per cent being in favor of the home-made form, which was valued because of an assumed superior taste, quality and a more intimate knowledge of ingredients.

Commercial quality also required "good taste", but its convenience value was very important.

On blind tasting, the degree of liking for both forms was usually high, but correct identification (home-made vs commercial) levels were low. Subjects with previous experience of home-made ice cream had a more positive attitude to it, and had more success in distinguishing it from the commercial form.

Generally, home-made quality was viewed as a desirable feature of dairy ice cream.


Discusses the restructuring of the food production, processing and retailing sectors in the USA. Describes different methods of vertical and horizontal integration that have
occurred. Goes on to discuss the consolidation of business in retailing in particular. Refers to the relationships that are being formed between the supermarket chains, for example Wal-Mart and Kroger, and dominant food-chain clusters. Considers whether or not smaller retail chains and wholesalers should feel threatened by this consolidation. Takes the dairy sector in the USA as a case study in the restructuring of the retailing and processing sectors.

2.3.68 SUPERMARKET FLUID MILK PRICING PRACTICES IN THE WESTERN UNITED STATES by Hoy F. Carman, Professor, Department of Agricultural and Resource Economics University of California, One Shields Avenue Davis, California, 95616 and Richard J. Sexton, Professor, Department of Agricultural and Resource Economics, University of California, One Shields Avenue Davis, California, 95616

This study analyzes retail milk pricing by supermarkets and marketing margin behavior for four fluid milk products in nine large metropolitan markets in the Western United States.

Three empirical measures provide significant evidence of noncompetitive price behavior in each of the markets. Correlations of retail price changes indicate considerable pricing independence among retailers across cities, while rankings of retail prices by milk product provide significant evidence that prices are not based primarily on costs, as would be true if pricing were competitive. Estimated retail price responses to farm price changes are consistent with monopoly pricing behavior for several of the milk products in several of the markets.


[77] Hoy F. Carman, Professor, Department of Agricultural and Resource Economics University of California, One Shields Avenue Davis, California, 95616 and Richard J. Sexton, Professor, Department of Agricultural and Resource Economics, University of California, One Shields Avenue Davis, California, 95616

SUMMARY

From the above review of literature, it can be found that the researchers in their respective research work have made attempts to analyse and various concerns of dairy development and dairy marketing in their own style and partially too. In other words, many researchers have argued considering prevailed conditions.
Secondly, various components of dairy marketing strategies are significant and this was studied by the researchers in piece meals, meaning thereby, if a particular researcher studies the aspect of dairy pricing and its importance; the other researcher claims that product portfolio is important. All of them have taken into account either one or two dimensions in piecemeal.

Thirdly, few of the empirical studies, which the present researcher has studied above are certainly pertains to one or the other dimensions of marketing strategies but not to all the aspects of it, which the researcher proposes and also those studies are general ones not of a particular cluster of dairy industry. As such the researcher observes that no such integrated empirical study to marketing practices of dairy industry has been made earlier.

Therefore, the researcher has perceived a gap where he aims to undertake a critical study on the present marketing practices and strategies adopted by dairy industry in the state of Maharashtra. Thus it is an empirical and critical study and which, at the end makes certain observations on the present marketing practices and strategies adopted by dairy industry in the state and conclude with an examination of the proposed hypothesis.

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