Consumer Buying Behaviour and Preference for Liquid and Powdered Milk

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EXECUTIVE SUMMARY

Milk has always been an integral part of consumption habits. In 2014, the total milk production in Sri Lanka was 333.9 million litres which was 44 percent of the total milk requirement in the country. The deficit is fulfilled by imports, mostly in the form of powdered milk (71 thousand mt in 2014), which costs an average of US $ 339 million (Rs.43 billion) per annum. The amount of milk collected by 13 main milk processors in the formal milk market in 2014 amounted to 215.9 million litres. The local dairy industry is highly influenced by the international milk prices since the adoption of liberal economic policy. Although fresh milk is considered to be a widely consumed beverage in the world, the level of milk consumption in Sri Lanka is considerably low with the per capita consumption of about 4.14 kg (total fresh milk LME + powdered milk) per year.

Having information on consumers' buying behaviour, preference and demand for dairy products are considered to be the key determinants for the efficiency of the dairy sector. Analyses of changes in consumption patterns and consumption trends are very important and applicable for policy modeling purposes. Having an in-depth analysis and good estimates of demand for dairy products helps projection of the future development of the dairy sector in Sri Lanka. In order to fill this knowledge gap, a survey has been conducted to understand consumer preference for liquid and powdered milk and consumption trends and their impact on determining dairy production and marketing opportunities. The overall objective of this study is to determine consumer buying behaviour and preferences for fluid milk and powdered milk with new market trends. The study was conducted in Colombo, Kandy and Matara districts which represented the highest household expenditure on milk and dairy products. A sample of 400 households were interviewed using structured and pre-tested questionnaire at household level.

The study reveals that in majority of the households, consumption priority is highest for imported powdered milk over local powdered milk. It is due to the special qualities of these powdered milk brands and high availability compared to local liquid/powdered milk. However, the actual preference priority is highest for fresh milk over imported powdered milk, followed by local powdered milk. Therefore, there is a good opportunity for the development of the marketing system of domestic milk production as well as reduction of dependency on imported powdered milk.

Even though consumer preference for domestic products is increasing, poor availability of safe, high-quality domestic products prompts households to purchase imported dairy products.

The monthly mean household consumption of milk is recorded as 3.05kg. In all three districts, the highest consumption was recorded in the urban sector, whereas the least consumption was recorded in the rural areas. The mean value of the monthly household expenditure on milk was recorded as Rs. 2,790. In all three districts, the highest expenditure was recorded in the urban areas, whereas the least expenditure was recorded in the rural areas.

There is a significant relationship between household monthly income and expenditure on milk. The study also emphasized that there is a significant relationship between demographic variables (family size, monthly income and having a child) and the quantity of consumption of milk products.

According to the preference of respondents towards food attributes of milk, using the Likert Scale technique revealed that the most important attribute is the taste, followed by of being local origin. Reliability of quality and safety were ranked third and fourth most important attributes.

Chi-square analysis of the relationship between product attributes on consumption of different milk products revealed that the consumers are concerned over the quality, safety and brand name of the products. This has resulted in an increasing number of consumers who require more valid, relevant and timely information on the quality, safety and brand name of the products. Therefore, these factors provide a novel focus for the government, food processing companies and international trade and standardizing bodies.

The dairy sector underwent a turbulent period in 2013 after the detection of DCD (dicyandiamide) in imported milk powder. This had a significant impact on consumer buying behaviour, their attitudes, needs and demand for dairy products. The study reported that the majority of the consumers (54 percent) stated that the contamination issue of DCD was influential when purchasing milk products. About 15 percent of the households in the sample reported that it was highly influential. About 68 percent of the households reported that the issue of DCD contamination has only affected that particular period and most of those households had changed the consumption from imported to local milk powder while the others had changed from one brand to another in the imported category. As about 28 percent of the consumers reported that they have changed the consumption behaviour after the contamination issue and of them the most reported that they have moved from imported brands to local brands, while the others have changed from one imported brand to another due to lack of awareness of the origin of such brands as they assumed those to be local.

This study emphasized the lack of availability, accessibility and quality of local fresh milk and locally processed milk based products are the main reasons for consumers to buy more imported powdered milk and other dairy products. The study also found that consumers are much willing to buy or switch to local products when those constraints are addressed.

It was observed that the consumers are extremely brand loyal when it comes to purchasing milk, even amid intense market competition.

The study recommends improving of the quality, availability and accessibility of locally produced milk products. Investing on customer preference for fresh milk, establishing milk distribution network with sales outlets across the country and milk parlours, expanding retail selling, distribution by mobile vehicles to the doorstep and ensuring availability in the locality can be implemented. It is important to introduce promotion programme for consumption of domestically produced dairy products. A media campaign could be launched to promote fresh milk drinking culture, domestically produced milk and milk products and discourage unhealthy and ill-formed food habits. A special promotional programme could be conducted to develop milk-drinking habits among school children. Furthermore, fresh milk consumption can be encouraged by reducing the price while increasing the quality.

In terms of the quality standards of locally available milk powder and liquid milk, assurance of the safety of those products is also important because the different brands show much variation in terms of quality (taste, thickness, texture, etc.). Consumers highlighted that the thickness of some of the local brands are high and it is difficult to use them when making milk tea. The sugar content of the available brands of the flavoured milk products are also high. Therefore, improving the production of local powdered milk and flavoured milk considering consumer preference for taste, texture and requirement would be much beneficial to promote local milk industry. It is also important to check the quality and safety of local liquid and powdered milk. A periodical testing system should be in place to ensure safety of imported brands.