

Full Length Research Paper

Measuring the determinants of brand preference in a dairy product market

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Branding is increasingly being used as a strategy for managing markets in developed countries while developing countries still lag behind. The objective of this study was to assess the level of brand awareness and factors underlying brand preference of dairy brands in Chitungwiza and Harare urban markets in Zimbabwe. A total of 90 respondents who included individual and institutional consumers were selected using judgmental and simple random sampling respectively. Primary data was collected using structured interview schedules developed for each category of consumers. Consumer product awareness indices, cluster analysis and factor analysis were the main tools used in the analysis. The findings of the study showed that 52% of the respondent consumers were aware of ARDA dairy brands despite having come across few ARDA DDP advertisements. Four factors were identified as key determinants of dairy product choice namely promotion, price and availability of product, attractive packaging and product quality. There is need for agricultural marketers to incorporate these findings in the formulation of responsive marketing strategies.

Key words: Brand awareness, brand preference, urban, dairy products, Zimbabwe.

Background and problem

The dairy industry in Zimbabwe's economic vista

The dairy industry has conventionally been one of the most important sub-sectors in agriculture with its products contributing in improvement of nutritional value of the human diet in Zimbabwe. Since the country's attainment of independence, this sector has been instrumental in the generation of foreign currency and raw materials for other industries and in the creation of employment thus in enhancing of the standard of living of dairy farmers (Titterton, 2000).

In recent years the dairy sector has been facing major challenges that have seen milk output declining from a peak of 256 million litres in 1996 to approximately 97 million litres of milk in 2005 and reducing its visibility in terms of economic development (DZL, 2005). Plummet-ing milk productivity is mainly attributed to the structural

changes in the agrarian sector, which ushered in more smallholder farmers who generally operate under resource-constrained conditions and an inimical macro-economic environment. It is also linked successive droughts that reduced the national dairy herd from 104 483 in 1994 to only 35 000 in 2005. This scenario has resulted in milk supply bottlenecks necessitating national efforts to revamp the sector.

Various economic initiatives have been started under a broad policy program termed the National Economic Development Priority Program (NEDPP) and these include the Agricultural Sector Production Enhancement Facility (ASPEF) under the Reserve Bank of Zimbabwe whose priority is to import dairy cows and the Build Operate Transfer (BOT) model under Dairiboard of Zim-babwe Limited, a private company spearheading milk production and processing in the country. The BOT pro-gramme entails rebuilding dairies, transfer of dairy management skills to small scale dairy farmers, incre-asing the size of the dairy herd through importation of heifers and access to the ASPEF funds.

The government of Zimbabwe has also crafted policy initiatives through the Agricultural Rural Development

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Authority (ARDA) . Agricultural and Rural Development Authority (ARDA) Dairy Development Programme (DDP) is a department under ARDA, whose mandate is to stimulate milk production, processing and marketing within the farming community of Zimbabwe (including A1 and A2 farmers). To date, ARDA DDP operates at least 30 projects countrywide, which are involved in milk collection, processing and marketing. Nyarungu Dairy is one of ARDA DDP's projects, domiciled at the ARDA DDP Head Office west of Harare, some 20 km along the New Chitungwiza Road. The organization is involved in milk production, processing and marketing of raw fresh, pasteurized fresh, cultured milk and yoghurt. Most of the dairy products are consumed in the Chitungwiza market. Other DDP projects (farmer-managed) supplying milk and milk products into the Chitungwiza and Harare markets (mainly Glen View, Glen Norah and Highfield) include Nharira/Lancashire, Sangano, Wedza, Chikwaka and Mhondoro dairies. The dairy brands used by DDP projects are Delite (for cup yoghurt), Joy (for sachet yoghurt), Amasi (for cultured milk), Hodzeko (for naturally soured milk) and Super Fresh (for pasteurized fresh milk).

Branding as a strategic tool for enhancing growth in ARDA DDP

During the past two decades it has become evident that brands are among a company's most important assets (Nijssen, 1999). Davis (2002) states that the most powerful corporations in the world have all had success related to their strong brands. A dichotomy can be drawn between firms in developed countries and those in the developing world. Whereas, the earlier are largely operate under the societal marketing concept, whose main tenets are satisfying customer needs and wants using environmentally friendly methods, the latter operate either under the product and production concepts. Therefore firms in these countries mostly produce goods and services usually without incorporating consumer needs, wants and aspirations. The need for DDP projects to establish their brand positioning and brand preference is critical if they are to successfully compete in the current volatile and competitive business markets. Successful brands are known to create and articulate the sustainable differential advantage of the underlying product (Ward, 2004). The concept of "branding" a product began as early as the sixteenth century. Since those early times, building and maintaining strong brands have been the hallmark of all successful companies. Building the right relationship between the brand and its customers creates successful brands. Brands with the greatest equity are the most profitable because their customers are generally more loyal and willing to pay higher prices for the product, and have a closer relationship with the brand (VNU Marketing Information Services, 2003). Branding

clearly has advantages for the manufacturer and the retailer, since it helps to differentiate the product from the competitor's product. Economies of scale and scope are attributed to branding, and a brand with high sales will generate production economies. Studies in some sectors have shown that customers who are 'most loyal' to a brand will pay as much as a 20% premium before they will switch to a different company's product. A clear understanding of the factors affecting brand preference is also critical to ensure that branding efforts by the company are synchronized with the needs of local consumers of dairy products. Extant literature shows that consumers are influenced by various factors when choosing among alternative brands. These factors include relative advantage, perceived risk, complexity, compatibility, observability, image, price and trialability (Rogers, 1995; Tornasky and Klein, 1982; Mason, 1990; Charlotte, 1999).

Given the government's thrust to improve the performance of parastatals, the need to transform DDP projects into business-oriented, market-driven and efficient entities, capable of operating profitably and competitively using value-added and branded milk and milk products has become an issue of paramount importance. ARDA DDP brands have not been very competitive in the urban markets in recent years. These developments have therefore, prompted an investigation to assess ARDA DDP brands in terms of how well consumers recognize and accept them (brand familiarity) and the real (such as lower cost and superior quality) or intangible (such as company reputation) competitive advantages which they possess and ascertain the underlying influencers in dairy brand choice. This study was commissioned at a time when dairy brands were widely available in local market to negatively affect brand awareness. The objectives were: 1. To assess the level of brand awareness and loyalty of ARDA DDP brands amongst Harare and Chitungwiza urban consumers and 2. To establish brand attributes which are most important to the consumers of dairy brands.

Literature review

Brand and branding defined

It is widely acknowledged amongst both practitioners and academics that branding has become a tool of strategic importance. Various definitions of branding appear in literature.

The American Marketing Association (1994) defines a brand as a "name, term, sign, symbol or design, or a combination of them intended to encourage prospective customers to differentiate a producer's product (s) from those of competitors". A primary function of the brand is to provide convenience and clarity in decision making by

providing a guarantee of performance and communicating a set of expectations thereby offering certainty and facilitating the buying process. On the emotional side, the function of a brand is to evoke a set of associations and furthermore symbolize the consumer's persona through brand imagery. However, this and other definitions of a brand fail to capture the essence of what branding involves or achieves (Marketing in a Global Economy Proceedings, 2000). In order to be successful, images and symbols must relate to and indeed exploit the needs, values and lifestyles of consumers in such a way that the meanings involved give added values, and differentiate the brand from other brands (Broadbent and Cooper, 1987). In its totality, a brand can be described as a "trademark that communicates a promise (Phillips, 1988). This promise involves a set of symbolic and functional attributes that the market place associates with the brand. Symbolic attributes are those that fulfill internally generated needs for self-enhancement, role position, group membership or ego identification (Park et al., 1996) whereas functional brand attributes solve an externally generated consumption related problem.

Ambler and Styles (1996) describe two different views of defining a brand. The first is the product plus view, when the brand is seen as an addition to the product, and in this view a brand is also called an identifier. The second is the holistic view that communicates the focus on the brand itself that is considered to be much more than just the product. The brand is said to be the sum total of all elements of the marketing mix. Brands can also be explained based on their elements—"those trademarkable devices that serve to identify and differentiate the brand (ego, brand names, logos, symbols, characters, slogans, jingles and packages (Keller, 2002).

DeChernatony and MacDonald (1998) in an attempt to emphasize the increased value that accrues to the consumer by buying the established brand rather than a generic or commodity product, offer the following definition of a brand: "A successful brand is an identifiable product, service, person or place, augmented in such a way that the buyer or user perceives relevant, unique added values which match their needs most closely. Furthermore, its success results from being able to sustain those added values in the face of competition".

Factors affecting brand preference

Brand adoption or preference has been receiving increased attention in extant literature. Cooper (1993) noted that most new innovations come with high risks as most of them failed in the marketplace creating the need for marketers to have a clear understanding of success factors in brand adoption. Theories of adoption have often been used to explain how consumers form preferences for various goods and services (Rogers, 1995; Tornasky and Klein, 1982; Mason, 1990; Charlotte, 1999). Generally, these theories emphasize on the impor-

tance of complexity, compatibility, observability, triability, relative advantage, risk, cost, communicability, divisibility, profitability, social approval, and product characteristics in brand preference (Wee, 2003). The relative importance of each factor depends on the nature of industry under consideration, location and social characteristics of the consumers of the different brands. Consumer choice behaviour has also been studied using the five- step process step (need-information search-evaluation of alternatives-purchase-post-purchase evaluation) problem solving paradigm or through the progression of consumer choice from a product class to brand choice (Dorsch et al., 2000). Discrete choice models (Chintagunta, 1999; Bockenholt and Dillon, 2000) or neural networks to model selection decisions (Papatla et al., 2002) have also been used in brand choice research. Wee (2003) conducted a study to identify the factors affecting adoption of new product innovations in the consumer electronic industry of Singapore using qualitative (focus group discussions) and quantitative research techniques (survey with 151 respondents in the 16 - 35 year age group). The researcher considered two brands, the Mini Disc and the MP3 Portable player. Using factor analysis, seven factors were identified as critical in effecting adoption of a player: relative advantage, perceived risk, complexity, compatibility, observability, image and trialability. Of these factors, relative advantage conferred by the player was the most important factor that consumers valued in their adoption decisions. Li and Houston (1999) employed a sample of 1200 consumers in Taiwan to determine factors underlying choice of market innovations. Price level, product variety and marketing communications factors were identified as promoters of choice. The promotional (marketing communications) mix has various elements – advertising, sales promotion, direct marketing, exhibitions, sponsorship, personal selling, word of mouth, merchandising, public relations, relationship marketing, corporate image and reputation etc. Karjaluoto et al. (2005) investigated the consumer choice in the context of the mobile phone industry in Finland using a sample of 196 respondents. Twenty-four questions were used to assess consumer motivations in mobile phone choice. Seven estimated factors influencing mobile phone choice were Innovative services, multimedia, design, brand and basic properties, outside influence, price, and reliability explain and these accounted for about 70% of the total variance. Some of the important product decisions in any marketing context are product, variety, product performance, product features, product design, product presentation, sizes etc (Doyle, 2002). Consumer surveys often reveal that quality is one of the most important decision factors for consumers, if not the most important (Keller, 2000). Product quality stands for the ability of a product to perform its functions (Kotler, 2003). Given that literature on brand choice in the dairy products is relatively sparse, the relevant research hypotheses were guided by the above studies. We hypothesize that choice or prefe-

rence of a dairy brand is influenced by:

1. Price of brand
2. Product quality
3. Brand design (packaging)

Research methodology

Research sites

The research was carried out in Chitungwiza (St. Mary's, Zengeza and Makoni suburbs) and Harare (Glen Norah and Highfield suburbs), urban sites. The study areas cover high-density areas, where the dairy products are mainly sold. Harare is the largest city in Zimbabwe, whilst Chitungwiza is the third largest. Chitungwiza town lies 25 km to the south of Harare. These sites were chosen since they constitute the main market areas for ARDA DDP Nyarungu. Data collection was conducted in May 2006 in the respective study sites. During the time in which the research was conducted, commodities including dairy brands were widely available in various retail outlets making it possible to assess choice in the dairy product market.

Sampling frame

The sampling frame consists of all members or elements of a given population (Higson-Smith, 1995). In this analysis, the sampling frame consisted of all consumers in the two cities since they represent the target market for dairy products. The consumer segments comprise institutional (schools, supermarkets, retail shops and hospitals) and individual consumers in Chitungwiza and Harare. Each of the two sites has a population of over a million residents, based on the 2002 Census (Central Statistics Office, 2002).

Sample size determination

In general the larger the sample size, the more likely the responses will reflect the true picture of the population under study according to the Central Limit Theorem. A small sample, however, can often provide highly reliable findings depending on the sampling procedures adopted (Schiffman and Kanuk, 2000). A sample size of 20 in each target market was anticipated individual consumers whilst 7 institutional consumers were used. However, a final sample of 90 respondents was reached and this was related to the existing resources for the exercise.

Sampling methodology

Mall intercept interviewing was used whereby shoppers were intercepted in the public areas of shopping outlets and interviewed in the outlets. A combination of Judgmental (Purposive) and Simple Random Sampling techniques were employed. Both probability (Simple Random Sampling) and non-probability (Judgmental/Purposive) sampling techniques were used in this study. According to Zikmund (1991) non-probability sampling is "a sampling technique in which units of the sample are selected on the basis of personal judgment or convenience; the probability of any member of the population being chosen is unknown" whereas probability sampling is "a sampling technique in which every member of the population will have a known non-zero probability of selection". In this study institutional outlets where DDP dairy products are sold, are few that random selection could be executed. Instead judgmental (purposive) sampling was used which is defined by Dil-

lon (1994) as "Studies in which respondents are selected because it is expected that they are representatives of the population of interest and/or meet the specific needs of research study". However, in the case of individual consumers a Simple Random Sampling technique was used to give each consumer an equal chance of being included in the sample.

Data collection

Primary data

The primary instrument for data collection in this research was semi-structured questionnaires, which contained a mixture of closed ended and open-ended questions. Two sets of questionnaires were used, one for individual consumers and the other for institutional consumers.

According Boyd et al. (2004) the questionnaire method has advantages in terms of versatility of the method as well as speed and cost. However, it may have disadvantages as a result of unwillingness of respondents to provide information, inability of respondents to provide information and influence of the questioning process.

A Likert scale is a common type of attitude scale that was used in this research. Respondents were presented with a list of brands or attributes for which they were asked to indicate their relative feelings or evaluations. Researchers employed a four-point Likert scale ranging from 1-extremely important, 2-important, 3-slightly important and 4-not important.

Pre-testing of the questionnaires was done by conducting a small pilot survey in St. Mary's, one of the survey areas, to pick any questionnaire administration problems using 25% of the target main survey sample size (that is, five individual consumers) for individual consumers and one institutional consumer.

Data analysis

Primary data (mainly quantitative) generated by the study were cleaned to ensure consistency and transcribed in coded form (pre- and post-coded) into the computer using the Statistical Package for Social Scientists (SPSS).

Analytical framework

A consumer product awareness index was developed on the basis of awareness by consumers in the various markets of the different ARDA dairy brands. The index took a highest possible value of 5, in this case where the consumer was aware of all brands of the company and 0, if the consumer was not aware of any product. On the basis of the mean score, consumers were sub-divided into those with high and low product awareness of ARDA brands.

Using cluster analysis the study established the socio-economic characteristics of consumers with relatively high brand awareness in the survey. Cluster analysis entails partitioning data into sub groups when information about their composition is unknown (Frailey and Raftery, 1998). Explicitly this approach combines observations on consumers into clusters by minimizing the within group variance in each cluster. This is expressed as follows: Chi-squared tests were also used to determine statistical significance of attributes that consumers considered important across the different dairy brands

Exploratory factor analysis

Factor analysis was used to identify the factors that local consumer

Table 1. Consumer awareness of ARDA DDP brands

Brand	Gender (% of consumers aware)			
	Male		Female	
	Number	%	Number	%
Delite yoghurt	29	46%	34	54
Joy yoghurt	28	43	37	57
Super Fresh	35	47	40	53
Amasi	38	48	41	52
Hodzeko	37	47	41	53

Overall Hypothesis that consumers are not aware of ARDA DDP products tested using hypothesis testing ($p < 0.05$).

consider in choosing between alternative dairy brands. According to Cunningham and Maloney (1999), factor analysis is

$$W = \left(\frac{\sum_{k=1}^G \sum_{j=1}^M \sum_{i=1}^{n_k} x_{ijk}^2}{\sum_{j=1}^M \sum_{i=1}^{n_k} x_{ijk}^2} \right)^2$$

Where: \bar{x}_{jk} is the mean value of the variable j in cluster k .
 x_{ijk} is the value of an observation assigned to cluster k .
 n_k is the number of observations in cluster k .
 M is number of variables.
 G is the number of clusters.

concerned with finding a small number of common factors that linearly reconstruct a large number of variables such that:

$$Z_{ij} = \sum_{p=1}^h F_{pi} a_{pj} + e_{ij}$$

Where Z_{ij} is the value of the i^{th} observation, F_{pi} is the set of linear coefficients or factor loadings; e_{ij} is the variable's unique factor or residual. The extracted factors are linear combinations of variables such that:

$$F_{pi} = \sum_{j=1}^k q_{pj} z_{ji}$$

Where F_{pi} is the value of factor p , for individual i for each of the n individuals with observations on k variables and q is the weighting of the p^{th} factor in variable j (Cunningham and Maloney, 1999). A rotated Varimax factor solution was used to interpret results. Following Norusis (1990), small factor loadings of less than 0.5 in absolute value were omitted from the factor analysis solution. The Cronbach Alpha coefficient was used to test the reliability of the importance rating scale.

RESULTS

Consumer awareness of ARDA DDP brands

A consumer product awareness index, whose maximum and minimum possible values were 5 and 0 respectively, showed that most male consumers were in the low awareness bracket (52%) and were less aware of ARDA DDP products than their female counterparts.

Overall, 52% of the consumers were fully aware of ARDA DDP's brands (Table 1). We, therefore, reject the null hypothesis that consumers are not fully aware of ARDA DDP brands.

Awareness of ARDA promotional activities by consumers and outlets

Only 14% of the retail outlets were aware of ARDA related promotional activities to increase awareness of their products. All respondents felt that ARDA DDP brands are not adequately advertised.

Socio-economic characteristics underlying consumer brand awareness

Cluster analysis was used to identify the socio-economic characteristics of consumers who are highly aware of ARDA products and those who are not aware of the same products and the results are presented in Table 2. Consumers who are highly aware of ARDA products mainly come from Chitungwiza town (Makoni). They are predominantly male and are generally above 30 years of age and also married. The majority of consumers in this category indicated that they are satisfied with ARDA dairy brands although they have not really come across ARDA specific advertisements. On the other hand, consumers who are not really aware of ARDA products mainly come from High field urban area, are female, generally under 30 years of age, single, and are generally dissatisfied with the range of products being offered by ARDA. In addition, they have come across some advertisements from ARDA albeit ineffectual.

Preference for the different ARDA DDP Brands

Delite is mostly preferred due to availability, followed by good taste and attractive packaging whilst Joy is preferred due to attractive packaging, long shelf life and affordability. Super Fresh is preferred mainly because of attractive packaging, availability and long-life. Amasi is preferred owing to its good taste, availability and attractive packaging whilst Hodzeko is preferred due to its availability and long shelf life. Attractive packaging is the most significant factor in the preference for Delite, Joy and Super Fresh whereas availability is the most significant factor in the preference for Amasi and Hodzeko. These findings are shown in Table 3.

Table 2: Cluster analysis results.

Variable	Variable description	Cluster	
		1	2
Level of brand awareness by consumers	1-high 0-low	0 (low)	1 (High)
Location	1-Makoni, 2-Glen Norah, 3-St Marys, 4-Zengeza, 5-Highfield	5 (Highfield)	1 (Makoni)
Gender of consumer	1-Male, 2-Female	2 (Female)	1 (Male)
Marital status	1-married, 0-otherwise	0 (Otherwise)	1 (Married)
Overall rating of ARDA DDP products	0-not satisfied, 1-satisfied	0 (Not satisfied)	1 (Generally satisfied)
Consumer has come across ARDA specific promotional activities	0-Consumer has come across ARDA advert, 0-otherwisw	1	1
Age category of consumer (less than 30 years or more than 30 years)	0-less than 30 years of age, 1-more than 30 years of age	0	1

Factors influencing brand preference

Factor analysis was used to reduce 6 factors into 4 factors that consumers consider important when choosing among the different dairy product brands. The estimated four factors were promotion (32.6%), brand price and availability (25%), brand packaging (14.9%) and brand quality (taste) (11.6%) and these explained 85% of the total variance. The results of factor analysis are shown in Table 4. The most important determinant of choice was promotion of the brand that accounted for 32.6% of the total variation in choice. Of the four hypotheses posited in the study, only one concerning the brand name was rejected.

DISCUSSIONS

Awareness of ARDA DDP brands by consumers

Most male consumers were in the low awareness bracket (52%) and were less aware of ARDA DDP products than their female counterparts. Overall, 52% of the consumers were fully aware of the institution's product range. Consumers who are highly aware of ARDA products mainly came from Chitungwiza town (Makoni). They are predominantly male and are generally above 30 years of age and also married. The majority of consumers in this category indicated that they are satisfied with ARDA dairy brands although they have not really come across ARDA specific advertisements. On the other hand, consumers who are not really aware of ARDA products mainly come from Highfield urban area, are female, generally under 30 years of age, single, and are generally dissatisfied with the range of products being offered by ARDA. In addition, they have come across some advertisements from ARDA albeit ineffectual.

All respondents felt that ARDA DDP brands are not adequately advertised. Only 14% of the retail outlets were aware of ARDA related promotional activities to increase awareness of their products. However, alternative marketing outlets that retail outlet managers were aware of ARDA promotional activities, with 67% of the consumers being aware of Dairibord Zimbabwe Limited's promotional campaigns whilst 11 percent of the consumers were each aware of Anchor Aid, Kershelmar, Freshpro and Anchor Maid promotional activities. This finding is consistent with the view of Kotler (1994) that "the company must not only develop a clear positioning strategy; it must also communicate it effectively" and this clearly demonstrates the need by ARDA DDP to engage into promotional campaigns if its brands are to be visible in the market.

Attributes underlying preference for the different dairy brands

Four factors were identified as critical in brand choice, according to study findings: promotion, brand price and availability, packaging and product quality. However, promotion of dairy products was the most important determinant of brand choice. Mintel (1998), Kotler (2000), Schiffman and Kanuk (2000), Engel et al. (1995) highlight the importance of promotion in determining consumer behaviour. In an environment characterized by declining product supply, consumers may be mostly concerned with what and where to get the product. The price of brand and availability was critical in consumer choice of dairy brand. In line with most academic studies such as Mintel (1998), Euromonitor (1986), Karjaluoto et al. (2005), Li and Houston (1999) and Buzuzi (2006), the current study has proven the importance of price in determining consumer choice of dairy brands.

Table 3. Reasons for preferring ARDA dairy brands.

Brand	Reasons for preferring the brand	Percentage of respondents	Pearson Chi-Square value
Delite	Good taste	14	.074
	Affordability	-	-
	Availability	16	.003
	Long shelf-life	11	.009
	Attractive packaging	13	.002
Joy	Good taste	10	.259
	Affordability	11	.220
	Availability	1	.437
	Long shelf-life	11	.009
	Attractive packaging	12	.000
Super Fresh	Good taste	2	.106
	Affordability	6	.350
	Availability	10	.000
	Long shelf-life	8	.001
	Attractive packaging	13	.000
Amasi	Good taste	14	.006
	Affordability	1	.322
	Availability	9	.001
	Long shelf-life	4	.004
	Attractive packaging	9	.024
Hodzeko	Good taste	2	.516
	Affordability	1	.437
	Availability	10	.001
	Long shelf-life	6	.018
	Attractive packaging	-	-

Table 4. Results of factor analysis: factors affecting brand choice.

	Factor 1	Factor 2	Factor 3	Factor 4
Item				
Promotion of brand	0.883			
Price of brand		0.742		
Product availability		0.880		
Packaging			0.969	
Product quality				0.990
Percentage of variation	32.6	25.0	14.9	11.6

Price considerations in consumer choice of brands can also be linked to the hyper-inflationary environment that is currently characterizing the country. Research findings also indicated that although packaging and product quality were important aspects in choice of dairy brand, the two factors accounted for a lesser percentage of total variation. However, this is consistent with Paraguayan et al. (1985, 1988) and Doyle 2002 who noted the importance of product quality in consumer choice of goods and services. Keller (2002) also argued that successful brands are distinguished by their aesthetic appeal and this also embodies packaging and product quality.

Conclusions and management implications

This paper assessed the factors that influence consumers' choice of brands in the local dairy market and brand awareness of ARDA DDP products. In light of study findings, the choice of a given dairy product or brand can be explained in terms of four factors namely promotion, price and availability, packaging and product quality. There is need for marketers to take these factors into consideration when crafting product innovations in the dairy market. In terms of priorities, there is need to increase brand visibility through promotion and ensuring that brands are priced competitively. Promotional vehi-

Table 5. Total preference indexes

π_0	a_1	a_2	a_3
a_1	-	$(S_3, -0.42)$	$(S_0, 0)$
a_2	$(S_2, -0.1)$	-	$(S_0, 0)$
a_3	$(S_6, 0.4)$	$(S_7, -0.06)$	-

cles that could be used in this respect include radios, TVs, newspapers, road shows and also e-commerce. In addition, the program should focus on ensuring product availability at strategically located markets to increase convenience to local consumers.

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