APPENDIX 5: CONSUMERS

STUDY TO IDENTIFY VIABLE BUSINESS PROPOSITIONS FOR THE DAIRY INDUSTRY TARGETING LOWER INCOME CONSUMERS

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

This study was commissioned by SNV to identify business propositions for the dairy industry targeting lower income consumers in Kenya. The consumer survey specifically studied consumer preferences and buying habits for Kenya's urban lower income groups and identified main drivers for buying processed milk and milk products, with a view to understanding the consumer side of dairy products. The study exclusively interviewed people who had recently consumed raw milk as well as processed milk to provide maximum insight into the choice between the two. This focus comes at the cost of an overestimation of the milk potential in the market as a whole and, specifically, the processed milk market.

Chapter 1 provides brief background information about survey, including the survey objectives, area of study, methodology, sample size and data analysis methods. Chapter 2 focuses on the demographics, patterns and drivers of milk consumption, raw and processed. Chapter 3 explores value added dairy products. Chapter 4 takes a look at dairy related technology and product innovation at the BoP. Conclusions and propositions are listed in Chapter 5.

The key findings are as follows:

Raw milk is popular and, given a trusted source, nutritious, healthy, affordable, convenient and of good quality. However, most of this milk is collected, transported and distributed outside the cold chain and gets adulterated on the way. Yet, our outlet mapping showed that many outlets that do not stock raw milk at this time are considering doing so in the future. Raw milk is cheaper than processed milk and profit margins are generally higher.

Processed milk triggers conflicting messages on availability, quality, trust and more. This points at a wide divergence of experiences with processed milk. Packaging is mentioned as a source of problems as well as a source of quality. Also, processing is considered to reduce the nutritional value by one in five respondents.

Hawkers, milk bars and dukas are the most important vehicles to convert consumption from raw milk to processed milk, or at least to safer (i.e. more hygienic) milk. Each of them has strengths in trust, distribution and price that need to be taken into account when working with them.

Most milk is consumed as tea whitener. The willingness to explore other dairy products is present, but not underpinned with actual trial usage. In other words, curiosity is reported, but is not likely to translate to significant sales, should the product be offered.

Milk consumption already takes a large share of our respondent's monthly spending (8% of the total spending, 20% of the food budget). It will be difficult to push higher priced products in that context.

One opening to increase dairy spending is to exploit the fact that for lunch and dinner, milk is perceived as an additive to food or even a meal in itself. The same holds for value added products, especially flavoured yoghurt and mala. Products perceived to be nutritious, full of energy and that have a solid consistency might be accepted as meals and therefore poach from other food expenditure.

500ml are by far the most popular package sizes for processed milk, followed by 200ml. Most of these are consumed in full once opened. Raw milk is usually bought 'just in time' for the intended

use. An opening for larger packets is the popularity of milk during gatherings, such as birthdays, funerals and “chama” meetings. For these, larger packs of up to 2 litres are bought. Bulk supply is less popular, since an opened volume of milk is not often stored.

Milk powder and UHT milk have some traction in the market, in contrast to cerelac (baby food). However, they are seen as second best options when raw milk or processed milk is not available due to shortages or lack of storage.

Overall, there are opportunities in the market, but no low hanging fruit. The consumer is hesitant to change.

1. INTRODUCTION

BACKGROUND

Research Solutions Africa - in collaboration with SNV - undertook a study to identify viable business propositions for the dairy industry targeting lower income consumers in Kenya. Part of the study involved consumers and institutional surveys. Both the consumer survey with low income consumers and institutional consumers, have contributed to an understanding of the low income dairy consumers markets. This report focuses on the findings of the consumer survey.

THE OVERALL BOP STUDY OBJECTIVES

- To get a deep insight and understanding of the Kenyan milk market (formal and informal) and the business models that supply the lower income groups
- To benchmark this with BoP models in other sub-sectors in the Kenyan food and beverage industry for learning and borrowing
- To benchmark this with successful BoP models and products in internal dairy markets for learning and borrowing
- To Identify viable business propositions for reaching the lower and income groups
- To give recommendation for sector and project support under KMDP for the government of conducive policies and business propositions

THE CONSUMER SURVEY SPECIFIC OBJECTIVES

- To study dairy related consumer preferences and buying habits for Kenya's urban lower income groups.
- We were specifically interested to learn about switching patterns between raw milk and processed milk consumption.
- To identify main drivers for the consumption of processed milk and milk products.
- To identify viable business propositions for dairy products among the lower income groups.

The exact content and target of the survey was decided upon after a review of existing surveys in the dairy sector. This overview is attached as Appendix 1 at the end of this report.

SURVEY AREA

The survey was carried out in eight areas in Nairobi. Madaraka, Embakasi, Westlands, Kamukunji, Starehe, Kasarani, Langata and Dagoretti.

SAMPLING METHOD AND DATA COLLECTION

The sample frame was spread into residential areas within the eight counties in Nairobi. Sampling within the areas was randomised (left-hand rule, every 20th household approached for interview).

Respondents were selected using a screener questionnaire and the Living Standard Measure (LSM). They had to be over 18 years and the household's main decision maker in terms of food acquisition, budgeting and consumption.

The respondent's had to have consumed both processed milk and raw milk within a period of four weeks before survey time. This last requirement ensured that our respondents could provide information on the boundaries between raw milk and processed milk. We found this aspect to be under-researched in existing consumer surveys.

SAMPLE SIZE

A total of 304 households were interviewed. This sample size is within the range recommended *by Mullins et al. (1994) for dairy products consumption surveys.* Such a sample size allows for some basic insights, but is restricted in terms of disaggregating the information, for example by gender, age or income bracket. The survey was carried out between September 2012 and December 2012 using a pre-tested questionnaire.

S.No	Sampled areas	No. of interviews
1	Embakasi	41
2	Makadara	40
3	Westlands	40
4	Kamukunji	32
5	Starehe	31
6	Kasarani	41
7	Langata	39
8	Dagoretti	40
Total		304

TABLE 1: GEOGRAPHICAL SAMPLE DISTRIBUTION

DEFINITION OF SOCIO ECONOMIC CLASSES

Kenya's population is divided into bottom, middle and upper classes. The Economic Survey 2011 (Kenya National Bureau of Statistics, 2011) found that 72% of the Kenyan population belongs to the lower class 24.1% to the middle and 3.6% to the upper class.

Class	Share of population
Lower class	72%
Middle class	24.1%
Upper class	3.6%

TABLE 2: ROUGH SOCIO-ECONOMIC CLASSIFICATION OF THE KENYAN POPULATION. SOURCE: ECONOMIC SURVEY 2011

Because income information is often misreported by respondents, market researchers across Africa use the Living Standards Measure (LSM) to categorise and screen respondents. LSM refers to a household's consumption habits as measured by the ability to purchase and consume a variety of goods and services. Each good (e.g. a television or a car) gains a predefined number of points. Depending on the total number of points, respondents are classified as one of 17 LSM categories. Appendix 2 to this report is the LSM used during the survey.

Marketing managers generally divide the lower class into three different classes: C2, D and E.
C2 corresponds to LSM segments 6 to 8, the most affluent segment of our sample. D corresponds to LSM segments 3 to 5 (middle segment), and E corresponds to LSM segments 1 and 2, the poorest segment of our sample. Anyone scoring above LSM 8 was excluded from our sample. The following describes a number of key parameters for each of the classes:

- ***C2 Class:*** This segment is characterised by unqualified traders/professions and skilled manual workers who mostly live in houses with 1-2 bedrooms, small flats in urban areas with a kitchen, but not necessarily a private toilet. They don't usually drive but may have a TV, and/or radio. C2

consumers use charcoal as source of fuel or may have gas cookers. They live on a fixed income (salary), but don't have much disposable income for leisure.

- ***D Class:*** This segment is characterised by apprentices/trainees of skilled trades (mechanics, carpenters, electricians, etc). They mostly live in single roomed houses in poor neighbourhoods without separate kitchen, sharing toilets and bathrooms. D consumers live on limited income. Most of them don't have permanent employment. Most of them do not have electricity in their houses. They use charcoal or kerosene for fuel.
- ***E Class:*** This segment is characterised by unskilled workers. They live in semi-permanent houses with no kitchen, toilet and bathroom. E consumers live from hand to mouth, they could be squatters. They generally use charcoal or firewood for fuel.

FACE-TO-FACE INTERVIEWS WITH LOW INCOME CONSUMERS

Research assistants had a study specific briefing on the objectives and methodologies of the survey. Structured face-to-face interviews using pen and paper were administered on the respondents. Before being sent to the field to undertake the interviews, the team was taken through a pre-testing session in a randomly picked area with characteristics similar to the ones inhabited by the actual target respondents.

DATA ANALYSIS AND REPORTING

After capture, the field data was collapsed to develop unique codes for the completed field questionnaires. The coded data was then double entered by the clerks under close supervision by the data processing manager and supervisor. The latter two then cleaned the full survey data to come up with the final clean data set ready for analysis. Data was analyzed using the Statistical Procedures for Social Sciences (SPSS).

2. SOCIO-ECONOMIC PROFILE OF SAMPLED HOUSEHOLDS

Our sample covered the socio-economic classes C2, D and E. Respondents outside these classes were not interviewed. Since all respondents had to have consumed processed milk as well as raw milk in the recent past, we observe a relative under-representation of poorer consumers. They will rarely consume processed milk due to cost constraints. A pure random sample without the raw/processed milk consumption requirement would result in a large group of E consumers, followed by D consumers, followed by the more affluent C2 consumers. Because of the low sample size for the E class consumer, we combine E and D levels for most of the analysis in this report, resulting in a poorer D/E group and a richer C2 group.

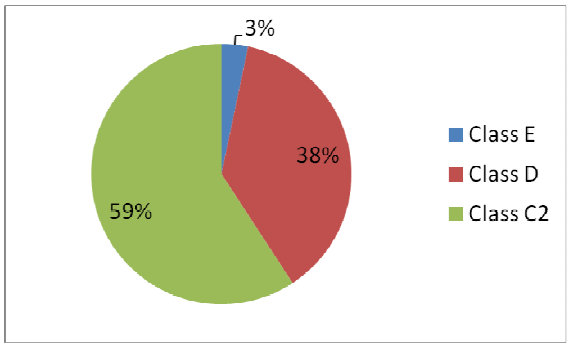


FIGURE 1: SOCIO-ECONOMIC DISTRIBUTION OF THE SAMPLE (N=304)

Men head slightly more than two thirds of the sampled households (69%). Women head the remaining 31%. We found no statistically significant gender based differences between lower and higher income households within our sample frame.

The income levels recorded were concentrated in the range from Kshs 5,000 to Kshs 20,000 per month. This range covered 86% or our respondents with a slight skew towards the lower income intervals. Not surprisingly, there is a significant correlation between the socio economic class (SEC) and the income level. However, even a person with a very low income can enjoy a C2 lifestyle if they live within a richer network (e.g. richer family members). Experience shows that the SEC says more about actual consumption patterns than the income level.

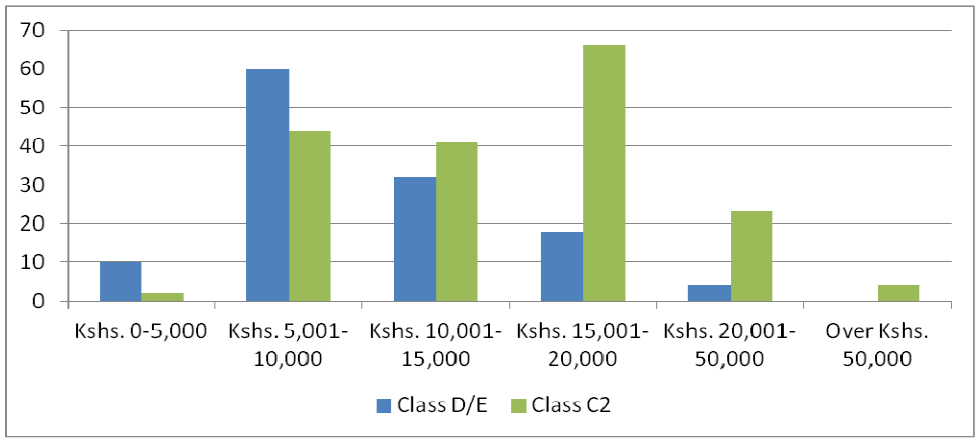


FIGURE 2: MONTHLY INCOME LEVELS WITHIN OUR SAMPLE PER SEC (%, N=304)

The sampled household sizes varied from 1 (23.4% of the sampled households) to 8 (0.7%). Household sizes 1 through 4 together covered close to 93% of our sample.

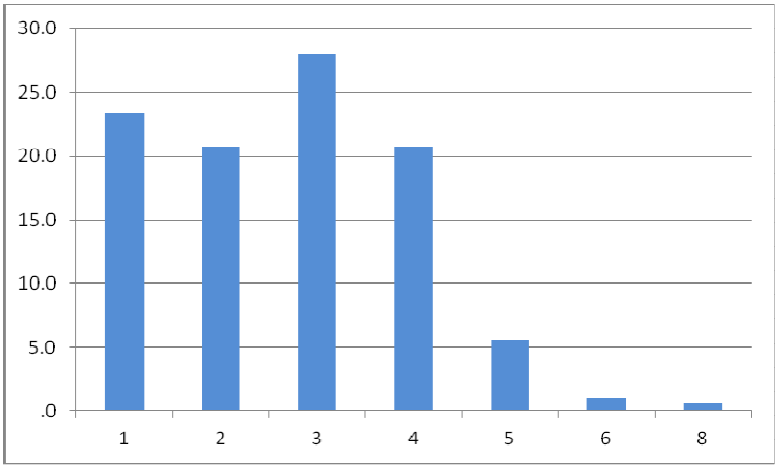


FIGURE 3: HOUSEHOLD SIZE IN THE SAMPLE (%, N=304)

EDUCATION LEVELS

The education level is part of the LSM calculation. It is therefore not surprising that there is a clear positive correlation between SEC and education level.

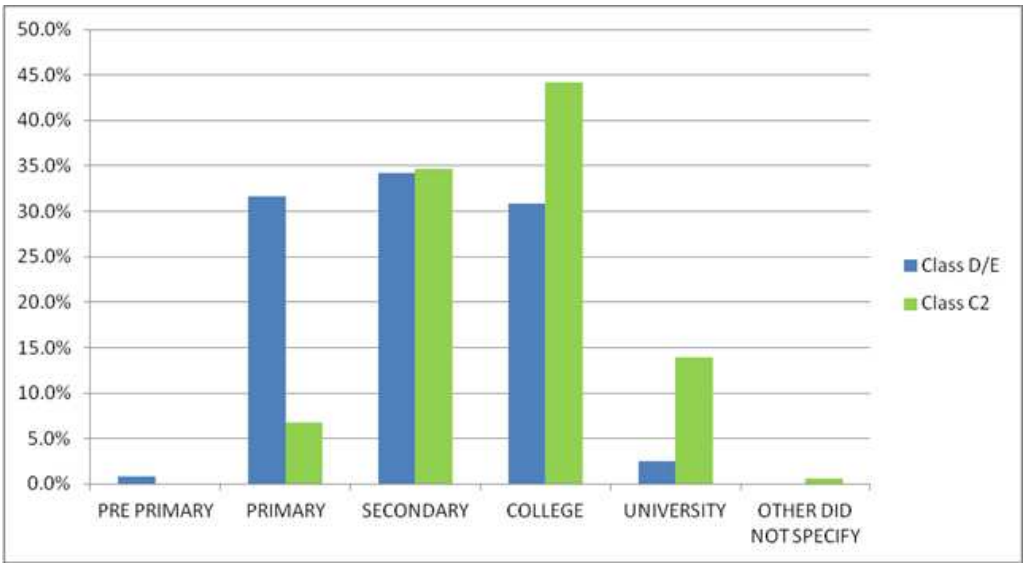


FIGURE 4: EDUCATION LEVELS OF OUR RESPONDENTS PER SOCIO ECONOMIC CLASS (SEC).

RELIGION

We found close to 5% of our sample to be Muslim. This distribution does not allow for any comparisons between religions, because the sample size for Muslim respondents is too small.

Religion	Count	%
Christian	289	95.1
Muslim	15	4.9
Total	304	100.0

TABLE 3: RELIGIOUS DIVERSITY OF OUR SAMPLE

Even from the simple demographics of the survey it is evident that milk is an aspiring product and that uptake of dairy products increases significantly with income. This is shown by the skewed SEC shares in the sample, the inverse of what a representative sample would have delivered. Skewing

factor was the screening question that excluded any respondents who had not consumed raw milk as well as processed milk in the recent past. This implies that one of the most effective ways to increase milk consumption is to increase general income levels.

EXPENDITURE PATTERNS

In order to better understand expenditures among our respondents, we asked them to provide us with an overview of their monthly overall expenditures. Food consumed at home, rent, school fees and other expenditures top the table. Our respondents spend about 40% of their income on food consumed at home. Adding food consumed out of home to this brings the total food expenditures to about 50% (48% for C2 and 52% for D/E consumers). Rent and 'other expenditures' exhibit the biggest jump in expenditure from D/E to C2, reflecting the typical profile of an aspiring consumer.

The fact that lower class respondents (D/E) pay more for school fees than class C2 consumers is due to very few outliers with exceptionally high school fees and should not be interpreted as representative. The outliers pay for expensive boarding schools and beyond their means of income. This might stem from family support or be a case of over-reporting. For the medical bills, we have found no similar cause. It might just be the case that class E consumers are more exposed to health risks and therefore have to spend more on treatments to stay healthy.

	Class D/E (n=124)	**Class C2 (n=180)**
Food consumed at home	3808 (41%)	4766 (38%)
Rent	1808	3232
Others	1877	3075
School fees	2510	1999
Transportation	983	1402
Food consumed out of home	1010	1273
Energy	450	610
Medical	680	607
Total	**9295**	**12459**

TABLE 4: AVERAGE MONTHLY EXPENDITURE PER CATEGORY PER HOUSEHOLD IN KSHS.

The following table further details the food budget for food consumed at home. Dairy products take the largest chunk of the food budget with an average value of 20%. Dairy products and, to a lesser extent, beef stand out as aspirational products the consumption of which grows with wealth. They exhibit the biggest jumps in consumption. Also noteworthy is the shift from maize in the lower SEC to rice in the higher SEC.

It should be noted that we excluded respondents who did not consume both, raw and processed, milk in the recent past. This also excludes people who consume no milk at all. This causes an overestimation of the dairy related expenditures per household. Representative values among the general population would be lower.

The expenditure patterns confirm our initial suggestion. Increasing incomes might be one of the most effective ways to increase milk consumption and to accelerate the shift from raw milk to processed milk. Increasing the wallet share dedicated to dairy products seems less promising, given that dairy products already take a significant chunk out of our respondents' wallets. Customers could only consume more milk at the expense of other, rather basic expenditures, such as rent and school fees. This seems undesirable.

	Class D/E	Class C2	% Change
Dairy products	693 (17%)	1242 (22%)	79%
Vegetables and fruits	752	1065	41%
Wheat and wheat products	553	774	40%
Maize and maize products	809	769	-5%
Rice	470	630	34%
Beef	408	612	50%
Others	455	541	19%
Sugar	386	525	36%
Total	**3975**	**5608**	**41%**

TABLE 5: SPLIT OUT OF THE MONTHLY FOOD BUDGET (CONSUMED AT HOME) PER FOOD CATEGORY PER SEC IN KSHS.

3. MILK CONSUMPTION PATTERNS AND DRIVERS

3.1 CONSUMPTION OF LIQUID FRESH MILK

POINTS OF PURCHASE

The points of purchase differ significantly between raw milk and processed milk. Hawkers and milk bars are the main source for raw milk. Dukas are the main source for processed milk. For raw milk, hawkers, milk bars and dukas combined represent more than 85% of the points of purchase. For processed milk, dukas and kiosks combined cover a similar share. With an increase in value added, we also see an increase of formal points of purchase. For example, supermarkets are the preferred point of purchase for UHT milk (34%), milk powder (63%) and almost all cerelac (baby food). It is possible that respondents over-report formal outlets to raise their status with the interviewer.

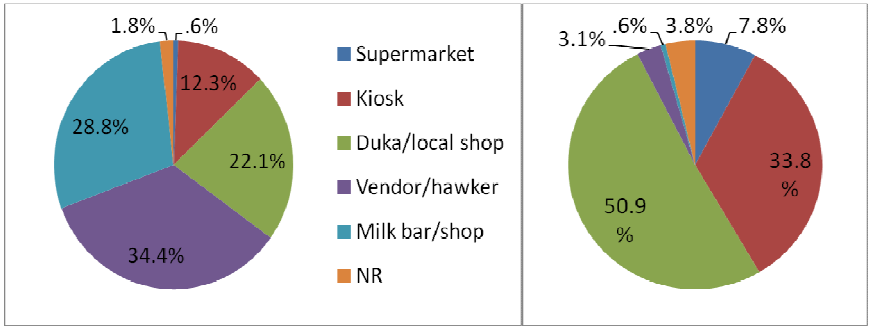


FIGURE 5: POINTS OF PURCHASE FOR RAW MILK (LEFT) AND PROCESSED MILK (RIGHT)

The popularity of hawkers as a source of raw milk cuts across all socio-economic classes and is explained by three factors:

- The convenience of delivery to the door step.
- Hawkers with regular customers are able to extend credit.
- The quality control with a regular hawker is immediate. Hawkers who cannot accept the returns of poor quality milk will not stay in business for long.

In addition to hawkers, milk bars have become important channels for the distribution of raw milk across all SECs. Milk bars have penetrated in all the areas of the study for the different social classes. Again convenience was given as the main reason for this. The shops are conveniently situated on the respondents' way home or near their homes.

PURCHASE VOLUMES AND PRICES

Per week, the average consumer purchases close to 2 litres of raw milk and about 1.3 litres of processed milk. The volumes increase significantly with higher socio-economic class. While a class D consumer reports a 1 litre consumption of processed milk per week for his/her household, a class C2 consumer reports 1.5 litres. For raw milk, the respective values are 1.6 litres (D) and 2 litres (C2).
The consumption levels for E lack meaning due to the small sample size of 10 respondents.

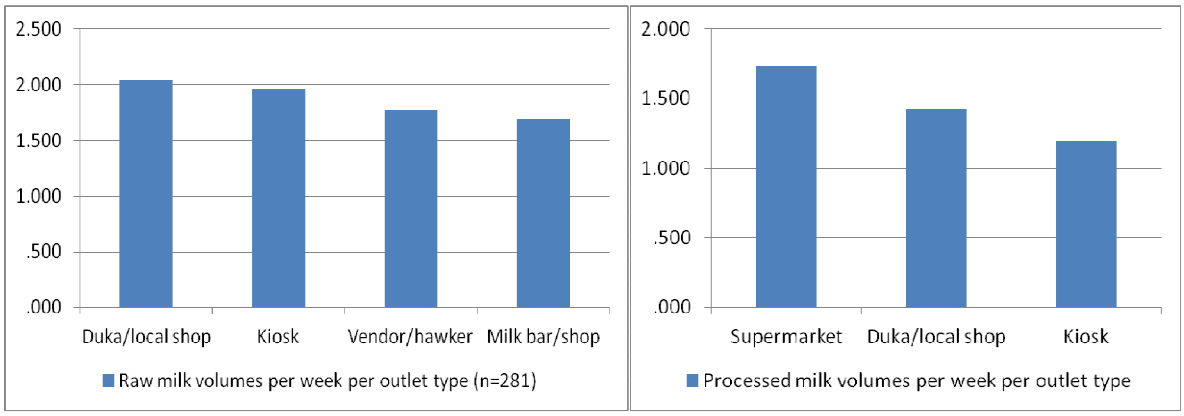


FIGURE 6: AVERAGE WEEKLY VOLUMES PURCHASED PER OUTLET TYPE PER HOUSEHOLD FOR RAW MILK (LEFT) AND PROCESSED MILK (RIGHT)

The figure above show that milk volumes bought per week increase with the formality of outlets. Sample sizes for supermarkets for raw milk, as well as for hawkers and milk bars for processed milk were too small to include. This should be expected since these channels are more likely to consist of mis-reporting by the respondents.

The prices for raw milk recorded during our survey were consistent across outlet types with a mean of close to Kshs 50 per litre. For processed milk, prices varied slightly more with average prices across channels between Kshs 72 and 79 per litre. Kiosks and supermarkets were most expensive, dukas the cheapest. We had four responses of processed milk being purchased at milk bars at Kshs 40, but our quality control team could not verify this observation. This is, however, likely to be milk that passed through batch pasteurisers or was boiled.

Hawkers and milk bars are prime potential vehicles for shifting from raw milk to processed milk. They reach all SECs and shift large volumes of milk. They reach their customers directly through personalised networks, so their way of distributing the milk has superior elements when compared to bigger, more static outlet types. They sell almost exclusively raw milk, but they are quality conscious, given the direct feedback from their customers. If they could source their milk at good value from processed sources, they might consider selling it instead of raw milk.

A warning from the outlet mapping (Appendix 4 to the main report) should be repeated here. We found more formal outlets that consider selling raw milk in addition to processed milk, than we found outlets that consider adding processed milk to their product range. We find some indications in our data that consumers are thinking along the same lines and might use more raw milk to save costs. Added to this, it has been observed that supply of pouches/packed pasteurised milk can be unreliable with some brands being in the market today. This is confirmed by the Supply Side and the Outlet Study.

USAGE OF MILK

There are wide discrepancies in milk consumption. More than 70% of all households sampled consume milk once a day. This ratio seems to be consistent for the non-household heading family members as well. For those where other household members do not consume tea with the same frequency, this is mainly due to budget constraints (47%). Another 23% of our respondents consume milk twice a day.

Remember, that we excluded those who had not consumed raw and processed milk in the recent past, which leads to an overestimate of these percentages. Among a random sample of the general population, these values would be lower.

Once per day	71%
Twice per day	23%
Three times per day	6%
More than three times per day	1%

TABLE 6: FREQUENCY OF MILK USAGE (%, N=304)

Milk is mostly used as a tea whitener. The concept of tea whitening refers to the traditional way of brewing water, tea leaves and milk. White tea has a higher status than black tea and is seen as more nourishing (more about that later). More than 90% of our respondents drink white tea and they do so very regularly, mostly daily. 45% of our respondents drink pure milk. Few respondents use milk for cooking (e.g. porridge) or for other beverages, such as coffee or Milo. The number of responses exceeds the number of respondents, because many respondents consume milk in more than one way. However, most of those who consume milk twice a day, will still use it added to tea (e.g. in the morning and in the afternoon).

We found only minor differences in usage patterns between raw milk and processed milk. Processed milk scores slightly lower on usage for cooking than raw milk (9% for processed milk versus 21% for raw milk) and slightly higher on usage for other beverages (14% for processed milk versus 6% for raw milk). Since the overall perception is that cooking makes milk safe, it is understandable that budget conscious consumers would tend to use raw milk to cook. Beverages other than tea are relatively expensive and therefore more likely to be consumed by those with higher incomes and therefore with higher consumption of processed milk.

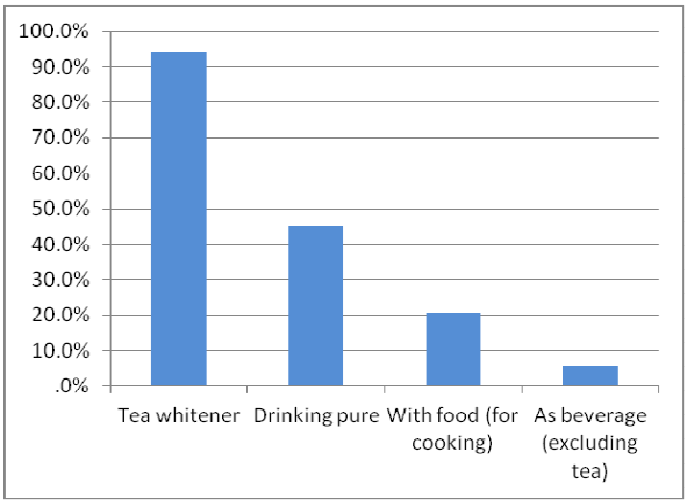


FIGURE 7: USE OF MILK AMONG OUR RESPONDENTS (N=512)

We asked respondents about any occasions when they would use milk as a tea whitener. Daily consumption of milk as a tea whitener is more common among C2, but still very much pervasive among D/E consumers. Beyond the regular use, visitors are an important occasion to serve milk in one form or another. Holidays and chama days (these are meetings of informal financial self-help groups) are other occasions for milk.

	Class D/E	Class C2	Average
Daily	76%	93%	86%
With visitors	44%	48%	46%
On birthdays	4%	4%	4%
Merry go round/chama days	15%	8%	11%
Holidays	14%	19%	17%
Jumuiya/prayer days	5%	4%	5%
Funeral/burials	6%	3%	4%
Weekends	5%	2%	3%
Other	0%	2%	1%

TABLE 7: OCCASIONS WHEN MILK IS USED AS A TEA WHITENER (N=304)

500ml packs are the most commonly used during all occasions, representing well above 50% of all packets reported by our respondents. 200ml packets follow at a distant second position. Per occasion, it is more common to use a full pack within a very short time rather than using parts of a packet and preserving the rest.

Birthdays, funerals and prayer days call for larger volumes of milk, which will usually be bought as many 1 litre packets rather than in bulk. Again, it seems that keeping an opened package is not popular, indicating awareness of hygienic risks.

Marketing milk for specific occasions, and specifically occasions that involve larger than usual spending, is an opportunity to increase milk consumption. Promoting drinking pure milk would be another opportunity since it is already widely accepted.

TIME OF THE DAY FOR MILK CONSUMPTION

66% of our respondents consume milk in the morning and 40% consume milk in the evening. The percentages in the table below add up to more than 100%, because many respondents consume milk more than once a day. The morning consumption mostly consists of tea whitening, while other types of milk consumption score higher in the afternoon and evening. After the morning tea, milk increasingly becomes a meal rather than a drink additive.

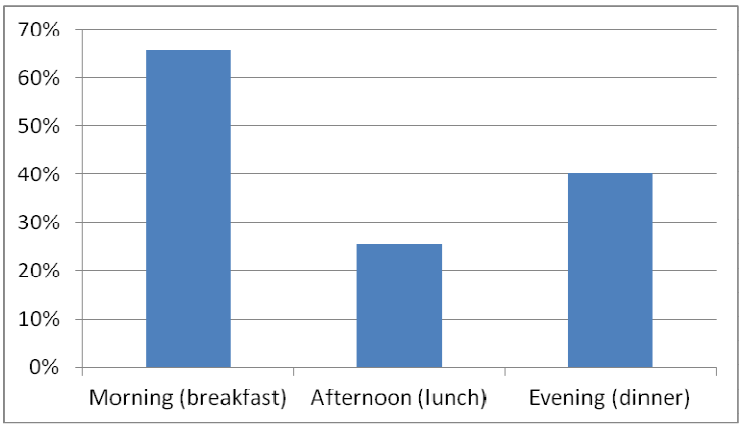


FIGURE 8: MILK CONSUMPTION PER TIME OF DAY.

The shift in milk consumption throughout the day becomes even more apparent when we take a look at the drivers for milk consumption.

3.2 KEY DRIVERS FOR USAGE OF MILK

There are three key reasons to use milk as a tea whitener. These reasons are consistent across SECs' though C2 consumers did name more reasons than D/E consumers:

- Make tea tasty (42%)
- Add nutrients (41%)
- Add quality (12%)

In the morning, tea whitener is used as part of a breakfast routine for oneself (35%) or for a child's breakfast (15%). However, the most important reason to consume milk in the morning is milk as a source of energy (34%). In the afternoon and evening, reported reasons for consuming milk are taking it as part of a meal (ugali/sweet potatoes) or as a desert after the meal (combined 40%) and feeding a baby or a child (22%). Milk as a source of energy drops to 4% of mentions.

Throughout the day, budget constraints are the main reason not to consume milk (about 40% of mentions). During the afternoon, not being at home is an additional reason (29%). Finally, during afternoon and evening, a preference for more solid food is reported as a reason not to consume milk by 19% in the afternoon and 31% in the evening.

The previous information was based on questions relating to overall milk consumption. Subsequently, we drilled deeper and asked about the different reasons for raw milk and processed milk consumption. There are few differences as to why people consume one or the other.

	Raw milk	Processed milk
As a meal (food)	50.0%	42.1%
For children	23.0%	23.0%
For nutrition	67.8%	63.5%
Peer pressure/others are using	6.3%	8.2%
For the sick (medical reason)	10.2%	13.5%
Tea whitener	24.0%	21.4%
Affordability	2.3%	.3%
Others (treat/clean body system/cooking vegetable)	1.6%	0%

TABLE 8: REASONS FOR CONSUMING RAW MILK AND PROCESSED MILK

However, when we compare the considerations that play a role when choosing raw milk or processed milk, we do find some marked differences, as the table below outlines:

	Raw milk	Processed milk
Access	58.2%	34.9%
Convenience	33.2%	20.7%
Package	32.6%	32.2%
Brands	45.7%	44.1%
Price	83.9%	51.0%
Intended use	24.7%	19.1%
As a treat	12.2%	10.9%
Peer pressure	8.9%	5.9%
Trusted source (hygiene, point of purchase)	48.4%	18.1%
Quality	65.1%	44.4%
Quantity	49.3%	5.9%
Occasion	14.5%	9.5%
Expiry date	.3%	.3%
Type of work	.3%	.3%

TABLE 9: DIFFERENCES IN CONSIDERATIONS WHEN CHOOSING FOR RAW MILK OR FOR PROCESSED MILK.

Raw milk significantly outperforms processed milk in terms of accessibility and quantity (two sides of the same coin), convenience and price, as well as perceived quality and trusted source.

A guarantee along the lines of 'fresh or money back' would help to promote processed milk. One could also imagine campaigns similar to the hand washing campaigns that visually highlight the presence of germs in raw milk (similar to unwashed hands). Packaging, brands and peer pressure play a significantly bigger role for C2 consumers than for D/E consumers. Beyond that, the differences between SECs were minor.

PURCHASE DRIVERS

Purchase drivers highlight aspects that influence the decision at the moment of making a choice to purchase from one of a number of outlet types. A household's choice of fluid milk sources was found to be significantly influenced by the number of children living in the household and education levels of the respondent. The more children the most likely the respondent is likely to purchase from a source that offers quantity, trust and relationships built over time. According to our respondents, hawkers score highest on price, milk bars on trust and kiosks and dukas on proximity.

It might seem counter-intuitive that hawkers score lower on proximity than static outlets. However, raw milk is usually purchased directly before use in the quantity appropriate for the intended use. When that moment occurs, a kiosk or duka will generally be nearer by than a hawker.

	Duka/Local shop	Kiosk	Milk Bar/ Shop	Vendor/ hawker
Proximity	56%	55%	14%	10%
Trusted source/high hygiene standards	5%	5%	32%	5%
Source is relatively cheap	10%	10%	14%	26%
Convenience/Delivery to doorstep		3%	2%	9%
Access to credit facilities	3%	3%	-	-
Reliability of the source	-	-	-	-
Loyalty	-	3%	-	-

TABLE 10: REASONS TO BUY RAW MILK PER OUTLET TYPE

For processed milk, the pattern of preferences is similar. Dukas and kiosks score on proximity, while supermarkets score on price. Supermarkets also score relatively well on reliability, quality and being a trusted source (40% combined).

	Duka	Kiosk	Supermarket
Proximity	44%	47%	8%
Trusted source/high hygiene standards	7%		12%
Source is relatively cheap	6%	7%	20%
Convenience/Delivery to doorstep	6%		
Brand	3%		4%
Source has refrigerator	3%		8%
Access to credit facilities		3%	
Reliability of the source		13%	16%
Quality		3%	12%

TABLE 11: REASONS TO BUY PROCESSED MILK PER OUTLET TYPE

The major barrier to consuming processed milk is affordability (58%). Respondents have very little disposable income and the price of food is a major concern. Processed milk is also perceived to be less nutritious as it is strongly believed that the processing takes away nutrients.

This could be a case for milk fortification with micro nutrients and vitamins to take away this perception and in fact turn it round.

The reasons not to buy processed milk are outlined in the figure below. Different quality issues dominate the worries of the consumer.

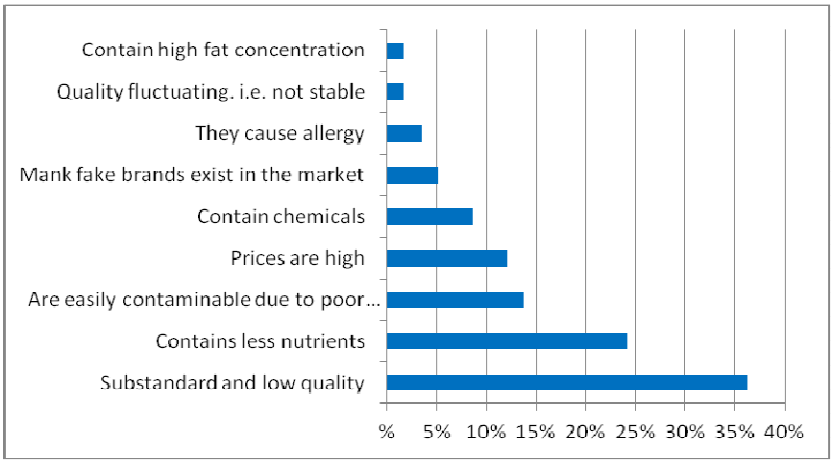


FIGURE 9: BARRIERS TO CONSUMING PROCESSED MILK (N=62)

MILK CONSUMPTION OUTSIDE THE HOME

Almost two thirds of our respondents consume milk outside their homes with a slightly higher value for C2 consumers compared to D/E consumers. Those who do not consume milk outside the home attribute it to budget constraints (71%) and poor quality available (42%). Convenience (14%) and accessibility (13%) are the next most mentioned constraints.

76 of our respondents (25%) do also consume value added milk products outside their home, most of whom consume yoghurt. Those who don't consume these products outside their home name budget constraints (50%) and lack of availability (28%) as the main reasons.

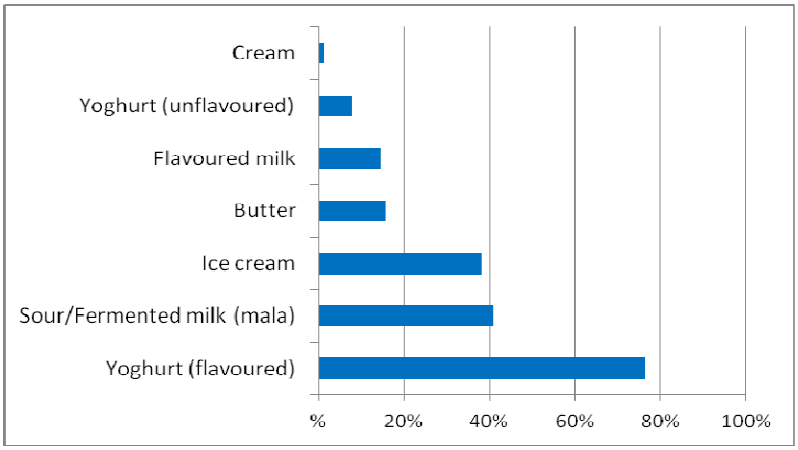


FIGURE 10: VALUE ADDED DAIRY PRODUCTS CONSUMED OUTSIDE THE HOME (N=76)

4. VALUE ADDED MILK PRODUCTS

AWARENESS

The study sought to ascertain awareness levels of value added products among low income dairy consumers. More than 60% of them were aware of mala (fermented milk, often with sugar) without being prompted and 60% are aware of flavoured yoghurt. Unprompted awareness of ice cream scored 46%. Awareness levels for other value added products are much lower, but still significant, reaching from 15% for ghee to 27% for butter. The awareness of flavoured yoghurt, mala and ice cream was significantly higher for C2 consumers than for D/E consumers. Beyond these, the differences between different SECs were relatively small.

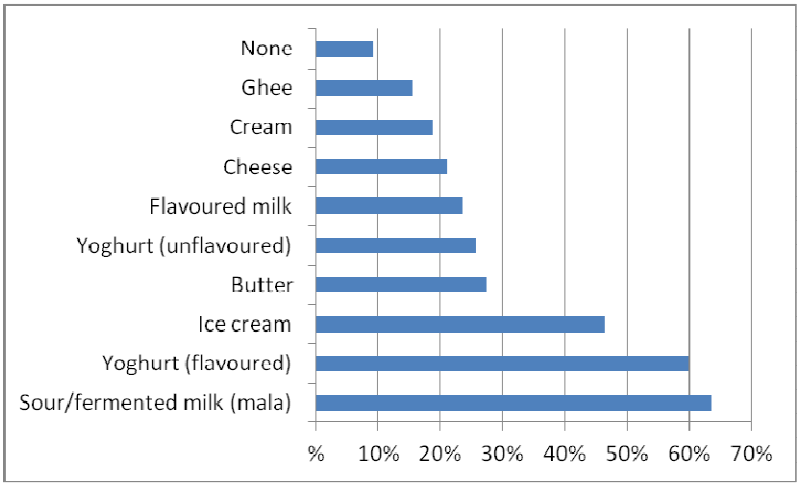


FIGURE 11: AWARENESS LEVELS OF VALUE ADDED PRODUCTS (N=945)

USAGE OF VALUE ADDED PRODUCTS

Consumers in our sample have experienced a surprisingly wide range of dairy products. However, the current range of products being consumed is much lower. Again, mala and yoghurt score relatively high in terms of current usage versus ever used, indicating regular consumption of both products throughout the sample. An example of the opposite is ice cream, which only 20% of those who have ever used it are currently using.

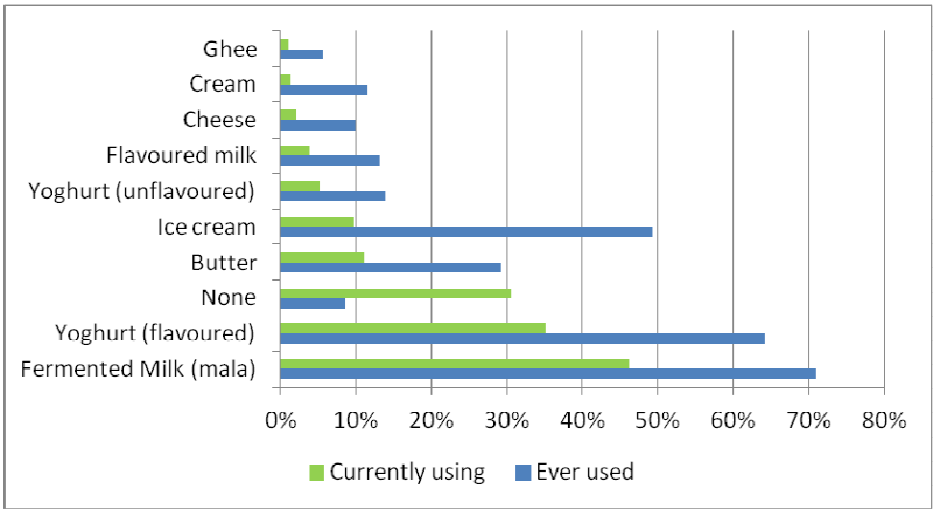


FIGURE 12: CURRENT USED VERSUS EVER USED VALUE ADDED PRODUCTS

Both values, ever used and currently used, are consistently higher for C2 consumers than for D/E consumers. Not surprisingly, richer consumers do consume a wider range of products. This gap is biggest for butter and ice cream with respect to 'ever used' and for flavoured yoghurt with respect to 'current use'. Each of the mentioned gaps is between 15 and 20 percentage points.

Only less than 11% of our respondents (probably much less, since multiple answers to this question were possible), consume value added products on a daily basis. Once again, flavoured yoghurt and mala score highest, followed by flavoured milk and butter.

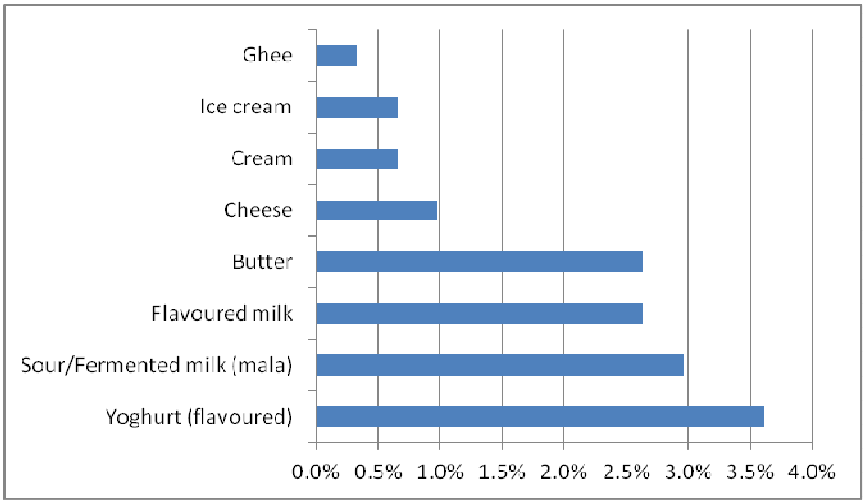


FIGURE 13: VALUE ADDED DAIRY PRODUCTS USED DAILY BY RESPONDENTS (N=33)

MOTIVATIONS FOR USAGE OF VALUE ADDED PRODUCTS

There are different and varied reasons for low income consumers to use value added products. For 80% of the households interviewed the most important reasons were the fact that the products can be a meal or be part of a meal. This is notably the case for yoghurt and mala. 67% are motivated by the fact that the products are nutritious. The motivations are as listed below:

- As part of a meal (80%)
- For nutrition (67%)
- For children (27%)
- For the sick (12%)
- Peer pressure (11%)
- Fun/leisure

The peer pressure is especially interesting, since it was reported exclusively by C2 respondents.

FUTURE CONSIDERATIONS OF VALUE ADDED PRODUCTS

A number of those who are not currently using a value added dairy product - or have never used it at all - are considering using it (again). The table below provides an overview of the products considered for future use. The products are sorted from top to bottom by the number of respondents considering future use. For each product the table provides the main reported reasons for considering use. The table should be interpreted with care since answers on consideration of use are among the least reliable in market research. In Kenya, respondents tend to overstate their willingness to consider a product. However, the reasons for considering provide some basic insights into possible marketing messages that might be successful for the same or similar products.

	Respondents considering	Reasons for considering	% Relevance of reason
Yoghurt (flavoured)	232	Nutritious/healthy	36%
		Sweetness/taste	33%
		Refreshing	15%
Fermented milk (mala)	228	Can be consumed with ugali	42%
Ice cream	187	Sweetness/taste	18%
		Refreshing	16%
		Suitable for children	16%
Flavoured milk	154	Sweetness/taste	63%
Butter	128	Adds good taste to bread	38%
		Nutritious/healthy	10%
Yoghurt (unflavoured)	125	Nutritious/healthy	41%
		Curiosity	16%
		Smoothness	14%
Cream	80	Use with vegetable	23%
		Use with tea	16%
		Suitable for children	16%
Cheese	43	Curiosity	37%
Ghee	35	Use with vegetable	26%
		Curiosity	14%

TABLE 12: FUTURE CONSIDERATIONS OF VALUE ADDED PRODUCTS

CONSIDERATIONS WHEN PURCHASING OTHER DAIRY PRODUCTS OTHER THAN MILK

The most important purchase factor considered is price (79%). The low income household also considers brands (44%) when purchasing other dairy products. A quality product at low cost, on time, every time would definitely meet the customer's needs and expectations. Affordability drives purchase in the outlets and hence the need to have an ideal price point. It is about an out of pocket economy which appeals to the low income segment.

Access and storageability are especially important considerations for C2 consumers. For D/E consumers, the intended use is relatively more important.

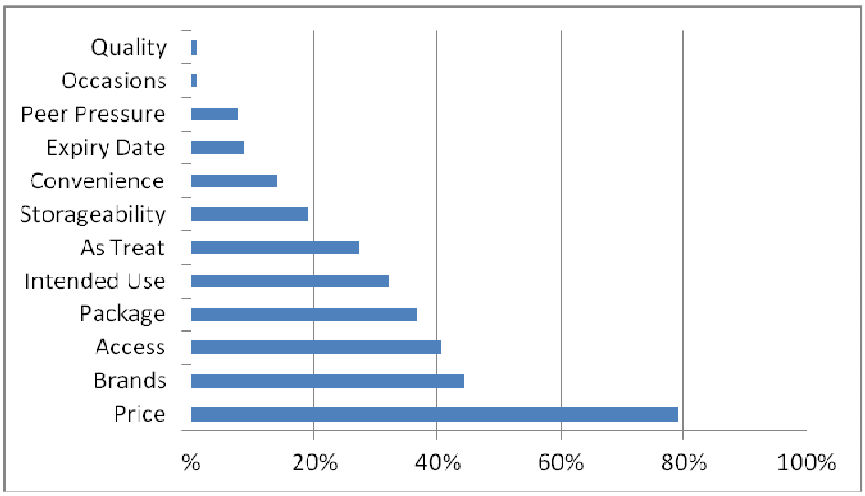


FIGURE 14: CONSIDERATIONS FOR PURCHASING OTHER DAIRY PRODUCTS (N=331)

OTHER MILK BASED PRODUCTS

Awareness levels (prompted) are above 50% for cerelac, UHT milk and milk powder. The values are probably overstated, but nevertheless significant. This is underlined by the fact that many respondents have used the respective products in the past. This usage pattern is consistent across the two SEC groups.

Current usage is much lower. UHT milk tops the three products at 19% current use among our respondents. For milk powder, this is especially due to low usage by the D/E consumers. Overall daily usage is limited to 15 of our 304 respondents for UHT milk and less than 10 respondents for cerelac and milk powder.

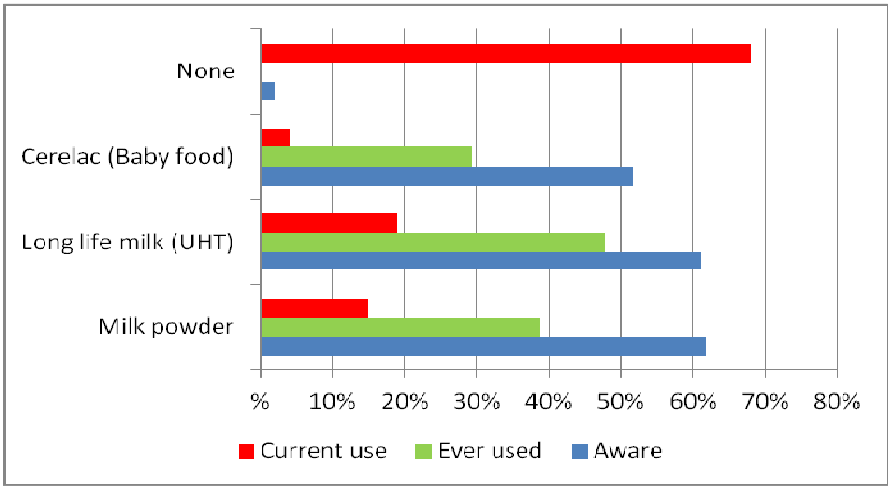


FIGURE 15: AWARENESS, PAST AND CURRENT USE OF MILK BASED PRODUCTS (N=183)

As far as future use is concerned, about one third of our respondents would consider using cerelac in the future, two thirds would consider using milk powder and three quarters would consider using UHT milk. As mentioned before, this willingness to consider is usually overstated and only a fraction of this value would translate into actual sales.

Products are especially considered, when they are cheap, long lasting, easy to use and/or nutritious. Long life milk (UHT) and powdered milk are considered because of shelf life. However, there are some perceptions towards advantages and disadvantages of certain products.

	Milk powder	Long life milk (UHT) (n=163)	Cerelac (n=73)
Advantages	(n=143) • Economical (25%) • Long lasting (23%) • Easy to use (14%) • Convenient during liquid milk shortage (11%)	(n=163) • Convenient (19%) • Long lasting (18%)	(n=73) • Helps healthy growth for children (83%)
Disadvantages	(n=210) • Expensive (40%) • Low nutrients (19%) • Prefer raw milk (14%)	(n=120) • Not available (50%) • Expensive (25%) • Don't like it (13%)	(n=170) • Expensive (60%) • No children (28%) • Low nutrients, lack of awareness, prefer raw milk, product contains chemicals, not available (7-9%)

TABLE 13: MAIN REASONS FOR (NOT) CONSIDERING A MILK BASED PRODUCT

Price and availability are the major obstacles, where the lack of availability scores especially high for UHT milk. 60% of the sample considering UHT milk mentioned it as an obstacle. Milk powder is perceived as being of a lesser quality than UHT milk. Cerelac is considered for elites and therefore a paltry 19% considers it for the future. For those who would consider cerelac in the future the main reason is the fact that it is healthy for children's growth. When interpreting the numbers for cerelac, one should keep in mind that the product only makes sense if one is taking care of a baby. This is not the case for milk powder and UHT milk.

The main sources for the three milk based products are supermarkets. UHT and, to a lesser extent, milk powder, have a somewhat wider relevant outlet base, also including dukas and kiosks.

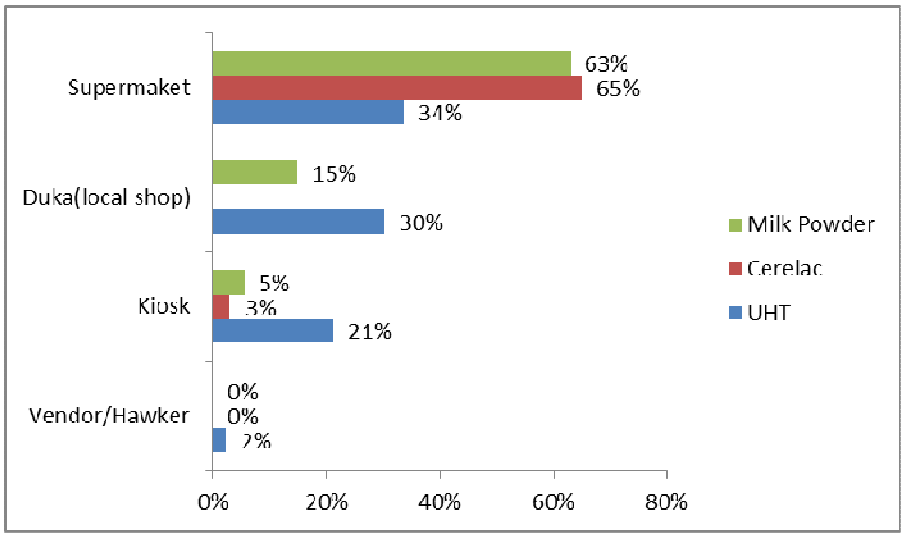


FIGURE 16: PURCHASE OF MILK BASED PRODUCTS BY SOURCE (N=143)

Among the respondents, two out of every three respondents consume value added products outside their homes. This is due to consumer trends whereby they are sold by restaurants, vendors etc.

Of those who consume value added products outside home, flavoured yoghurt is the most consumed by 76% of our respondents followed by fermented milk (mala) at 41%.

Overall, value adding milk based products do have difficulties to reach Deeper into the Pyramid. Budget constraints restrict demand. Any increase in volumes purchased at current price levels would require cutting spending elsewhere. Offering similar products at lower prices within the proximity of the target customers might open up a market, but consumers still need to be convinced of the added value. This concerns overcoming factual as well as emotional barriers.

5. INNOVATION AND BoP

MILK DISPENSING UNITS

One proposed solution to some of the issues mentioned in the previous section are milk dispensing units. For a detailed description of these units, see Appendix 3 to the main report, which covers the supply side, including new technologies.

Milk dispensing units are currently placed in supermarkets and shops, where customers can use their own bottles or reusable dedicated bottles, to tap milk from a large chilled tank at reduced prices. The dispensing units save packaging and transport costs, can receive bulk deliveries and, with some caveats, do offer improved hygienic conditions.

Out of our sample of 304 respondents, only 12% were aware of the existence of the technology. This sample size of 36 is very small when discussing the advantages and disadvantages of milk dispensing units.

However, the first lesson is evident: if consumers are not aware of the opportunity and its advantages, then the technology will be adopted relatively slow. This suggests that education is still needed in order to create awareness on new technologies, such as milk dispensing units, and the role they can play in delivering quality milk, handling of milk being one of the major concerns in terms of quality.

We received only a handful of replies discussing the advantages and disadvantages of the units. The mentioned disadvantages were a lack of access and a relatively high price. The lack of access is due to the fact that milk dispensing units were not yet common in our survey area. The relatively high price is therefore a guess by the respondents, who will assume that the milk must be more expensive than the nearest substitute, which for them will be raw milk from a trusted source.

The reported advantages included saving of time, improved hygiene and convenience. If the awareness for these tangible benefits could be increased, milk dispensing units will find it easier to enter the market. Advantages and disadvantages are further discussed in Appendix 3 to the main report. The conclusion at this point is that our respondents lacked awareness.

OPENNESS TO INNOVATION

We also queried our respondents on their openness to innovation. We used two test cases. The first test case was the willingness to consider a tea whitener partially based on vegetable fat. The second test case was to consider whey based products.

Asking consumers about non-existing products or products they are not familiar with at all does result in less reliable data than questions about actual products. Generally, people will overstate their likelihood to buy and overemphasise the positive aspects. This has two reasons. Firstly, respondents have very limited information on the products and therefore have to ‘complete’ the product in their minds. They usually do so positively. Secondly, respondents tend to agree when they are in doubt. Thinking something is a good idea is a way of agreeing. The results in this section should therefore not be over-interpreted.

VEGETABLE-BASED TEA WHITENER

The product would ideally be cheaper and more nutritious. The survey respondents were asked about their view to such milk based tea whitener. We asked the following question:

> *There are ideas about products developed from milk or milk by-products. These are nutritious products which are milk based. Example: In Kenya, most people use milk as a tea whitener. In some countries, however, there is a tea whitener which has more vegetable content than milk but is more nutritious to use, than a few drops of milk in water to whiten tea. How likely are you to purchase it if it was available today?*

Acceptability was high. 46% of respondents thought the idea is good or very good. 21% thought the idea of a vegetable based tea whitener isn't good at all. Even though the idea is largely accepted, a lot of work would have to be done in terms of convincing the 33% who thought the idea of a tea whitener is neither good nor bad.

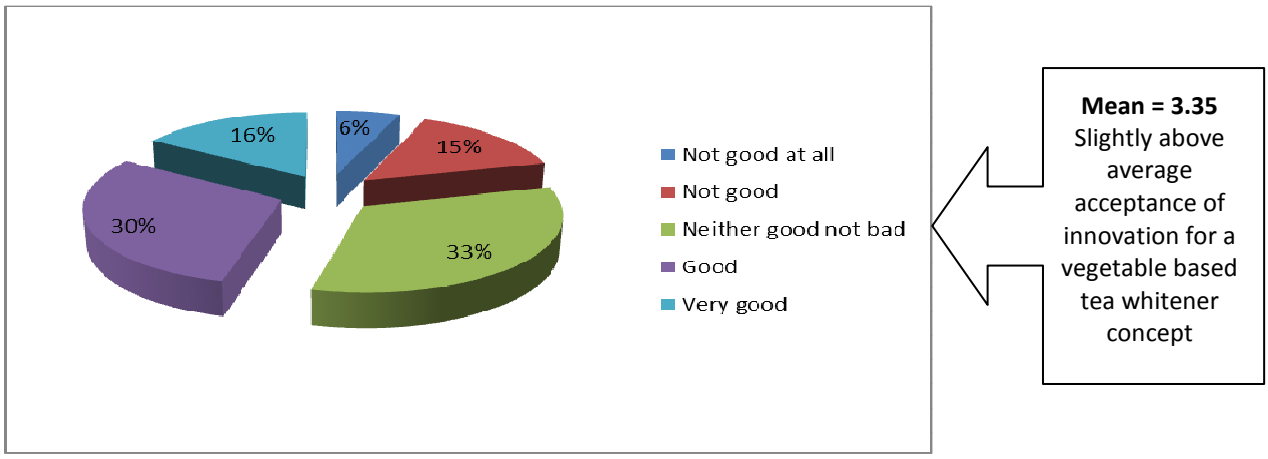


FIGURE 17: PERCEPTION OF A VEGETBLE BASED TEA WHITENER

With a mean of 3.67 the purchase intent is clearly very good, with above average of 57% of the respondents are likely to purchase such a product were it to be made available.

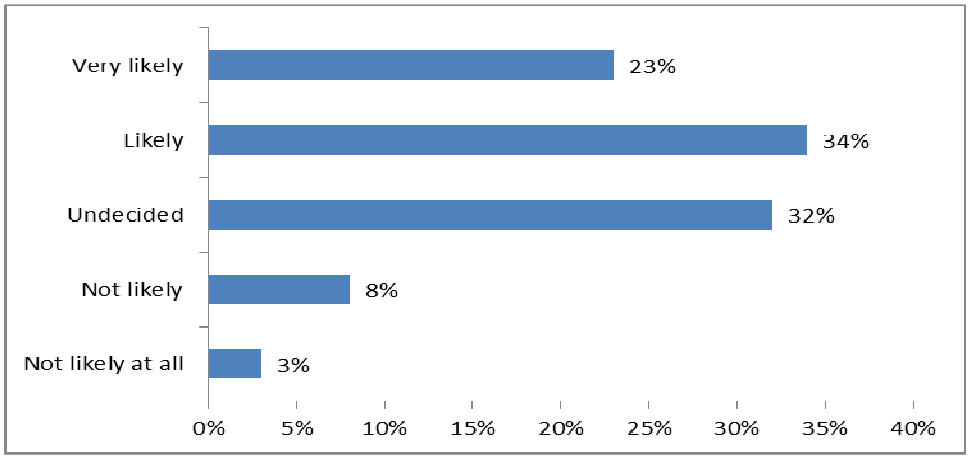


FIGURE 18: INTENTION TO BUY A VEGETABLE BASED TEA WHITENER

WHEY BASED DAIRY PRODUCTS

In this survey we again, sought to understand acceptability of whey based dairy products. The data seems to suggest that many respondents had no understanding of what a whey based product could be. We asked the following question:

Whey products: whey is a milk byproduct from cheese production. Whey is considered nutritious but so far not consumed in Kenya. Products such as juice can be developed from whey. How likely are you to purchase such products if they were to be made available today?

Reported acceptability was high at 45%. However, with 35% undecided respondents more efforts would be required for better acceptability.

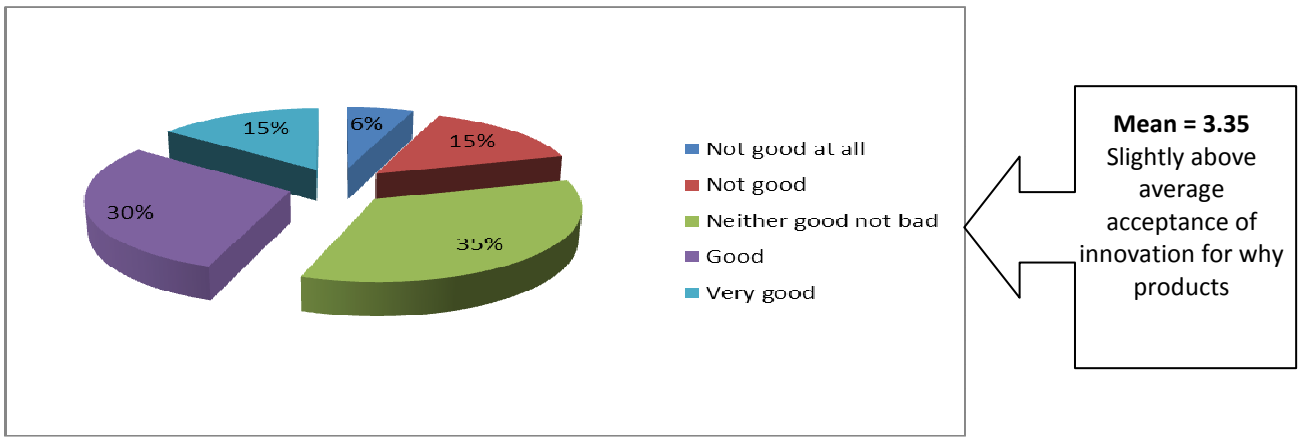


FIGURE 19: PERCEPTION OF WHEY PRODUCTS

With a mean of 3.67 again, purchase intent for whey based products is equally good with 56% of those interviewed indicated likelihood to purchase.

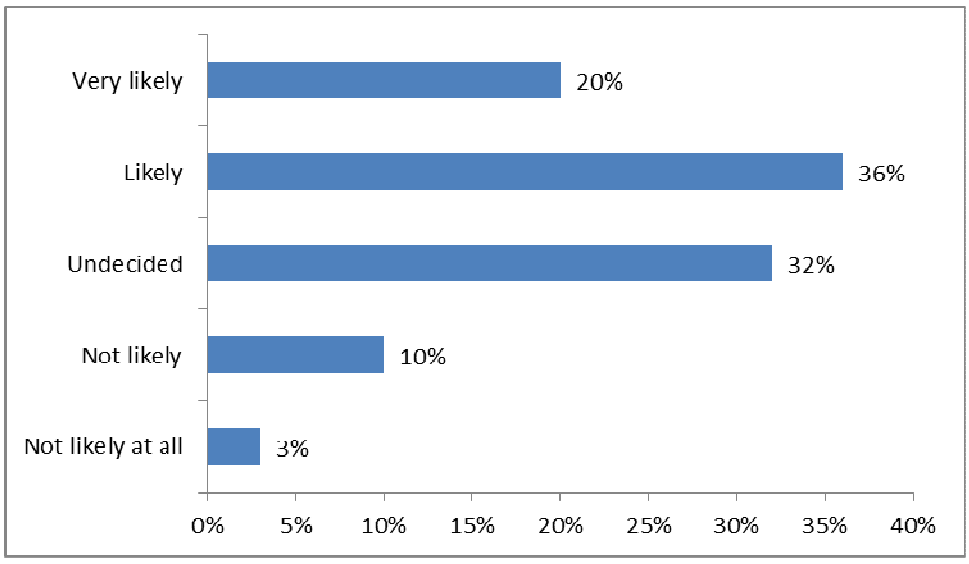


FIGURE 20: INTENTION TO BUY WHEY BASED PRODUCTS

6. CONCLUSIONS AND PROPOSITIONS

CONCLUSIONS

The purpose of this survey was to understand the choices of those consumers that consume both raw milk and processed milk. This focus has led to a better understanding of those consumers who are most likely to fully move to processed milk in the near future. However, this focus has come at the cost of generally over-estimating the potential in the dairy sector, as well as the size of the processed milk opportunity. We find that there are sufficient other sources to over this latter aspect (see Appendix 1 to this report for a short overview). From our survey, we can conclude:

- Dairy products are among the most relevant products for aspirational consumers. The average consumer sampled consumes about 2 litres of raw milk and 1.3 litres of processed milk per week. This is far below the Kenyan annual average of 115 litres. However, spending on both raw and on processed milk and value added dairy products, grows more than proportionally with increases in socio-economic class (SEC). Raw milk volumes consumed decrease with increasing SEC.
- Our respondents spend about 40% of their income on food, of which 20% on dairy products. In other words, 8% of all expenditures by our respondents are dairy-related. This share is slightly lower for lower incomes and slightly higher for higher incomes. This translates into average monthly dairy spend of Kshs 700 for a respondent with a household budget of Kshs 9,300 and Kshs 1,250 for a budget of Kshs 12,500.
- Virtually all respondents take milk with high regularity as a tea whitener. Other modes of consumption are less frequent, but increase with increasing SEC. Milk consumption also increases when visitors are around or during special occasions, such as birthdays and other group meetings.
- As for pouched milk, 500ml packs are strongest in the market, followed by 200ml packets (many for school children). Gatherings prefer multiple packs of 1 or 2 litres, rather than large bulk to avoid waste, since storage of a closed pack is more common than storage of an opened pack.
- Marketing channels for dairy products are clearly defined. Hawkers are the dominant source of raw milk with 34.4% purchase share among the sampled households. For the processed milk, dukas are the dominant point of purchase with 50.9% market share.
- However, it is worth noting that the dukas' biggest competitors are hawkers/vendors. Hawkers with known clients are able to extend credit and the quality control (organoleptic) with a regular hawker is immediate. Hawkers are popular across SECs. With respect to their strengths, the convenience of doorstep delivery is appreciated, but since raw milk is mostly purchased for immediate consumption, a 'just in time' delivery system (call a milk?) could compete with the current model.
- Facilities such as milk bars have become important channels for the distribution of raw milk. Milk bars have penetrated in all areas of the study for the different social classes.
- The key reasons for purchase of milk are: (i) make tea tasty (42%); (ii) add nutrients (41%); (iii) add quality (12%). Price, trust and proximity/convenience are the main drivers for choosing raw milk over processed milk.
- On the quality of processed milk we found mixed messages. Respondents experience sub-standard packaging, broken cool chains and impossible returns of spoilt milk. Nevertheless,

quality is a key driver to choose for processed milk. 30% of households interviewed in this survey are concerned about the standard and quality of processed milk.

- There is a thin line between milk quality and safety and it is difficult to separate the two. The low income consumer perceives raw milk as of good quality being high in nutritional value. As long as it is obtained from a trusted source (and/or boiled), the safety risk is considered to be low. Some of the respondents (19%) think that processing, on the other hand, takes away nutrients in milk.
- Flavoured yoghurt and fermented milk (mala) are the most promising value added products, scoring consistently high on awareness, usage and interest to use. Other products receive much less attention. The potential lies in the meal characteristic.
- Affordability is the main barrier to non-consumption of milk in households all the time. This budget constraint returns in answers to different questions with very high frequencies. Without a low price point processed milk or milk products are less marketable. Consumers are already spending 8% of their expenditures on dairy and are looking for ways to reduce that.
- The Kenyan dairy industry has not managed to drive milk consumption outside homes. In this survey, BoP consumers who do not consume milk outside their home stood at 64%, with the main reason being affordability.
- Long life milk (UHT) and milk powder have some acceptance and are seen as alternatives during milk shortages and the associated price hikes or when storageability is crucial. Increasing access to these products would help. Cerelac is a niche product and seems to have little traction.
- Milk dispensing units are promising, if they can be established as trusted sources of milk. Quality control is essential to launch the technology efficiently.
- Our respondents report to be open to new product innovations. However, the evidence to support this is weak and the underlying research can't conclude about the actual market potential resulting from reported above average willingness to buy a cheaper, vegetable based tea whitener and/or whey products.

PROPOSITIONS

From this study result a number of propositions that could be openings for processors to increase the consumption of safe dairy products:

- Hawkers and milk bars shift large volumes of raw milk and are popular across SECs. Dukas are considering to sell more raw milk (in addition to processed milk) to compete with the mobile vendors. All three outlet types offer potential for conversion from raw milk to processed milk, or at least to higher quality (i.e. more hygienic) milk. Without their collaboration, a large shift in the milk market from raw to processed is unlikely. Therefore, any programme to drive processed milk "down into the pyramid", should look into ways and means to utilise the strengths of the hawkers (price, convenience, prompt quality control and sometimes credit), milk bars (trusted sources) and dukas (proximity, credit, trust).
- Most milk is consumed in the morning. However, the perception of milk changes later in the day from a tea additive to a meal additive or a meal on its own. The meal aspect of milk could be strengthened. This also holds for mala and flavoured yoghurt. If the product is seen as rich in energy and nutrition, and has a more solid consistency, respondents will accept it as a meal and therefore be willing to spend more for it.

- Shelf life/storageability – and reliable supply – seem to be important drivers to increase purchase of processed milk. This is confirmed by other studies and reports that "new in the market" extended shelf life pouched milk of Daima, has gained large popularity amongst consumers, as it can be stored for up to 4 weeks outside a fridge if not opened, and is sold at almost the same price as conventional pasteurised liquid milk.
- On driving usage of milk outside homes: the industry may want to address the issue of costs and quality coupled with awareness, as these seem to be the main barriers to milk consumption outside home. Other issues mentioned included cultural reasons and the belief that milk is mainly for children, as such it is not appropriate to consume milk outside home. Respondents report some acceptability towards consuming a value added product such as fermented milk (mala) or yoghurt outside home but not raw milk.
- Developing a strong campaign/new products with a 'health and nutrition focus' could be an important driver to entrench usage of value added products further in the low income consumers segment. Reports have indicated that this segment of value added products is currently growing faster than the liquid milk segment. Developing campaign materials focusing on milk safety may also be helpful to drive milk usage outside homes, besides awareness creation on health benefits of milk vis-a-vis commonly accessed foods which are perceived to be more affordable. This may be a breaking point to driving consumption outside homes. Again packaging may mitigate issues of convenience and quality.
- This health and nutrition angle could be coupled with possibilities of fortification of ESL/UHT milk and other fast going milk products like yoghurt and mala. Openness to Innovation among Bop urban consumers presents an opportunity in availing future milk based products for consideration.

ANNEX 1 OVERVIEW OF EXISTING MILK SECTOR STUDIES

Various market studies and reports exist in the dairy industry today:

CONSUMER RELATED STUDIES

- Usership and Attitude Study by Tetra Pak
- Bottom of the Pyramid studies
- The Tetra Pak 2012 Dairy Index Report on Deeper in the Pyramid
- Gain/DSM quantitative study on milk fortification
- Cases on food fortification by BoP Inc.
- Access to Food and Improved Nutrition at the Bottom of the Pyramid by BoP Inc.

SCHOOL MILK STUDIES

- School Milk Study by Land O' Lakes

RETAIL AUDIT

- Retail Audit Report by AC Nielsen sponsored by Tetra Pak
- Retail Audit on Milk and Milk Related Products by USAID

ANALYSIS

- It is worth noting that most of these studies have been sponsored by the international agencies like USAID, IFDC, Land O' Lakes and GAIN and very few by the private sector. The other observation is that quite often there is a duplication of the studies covering the same topic.
- Looking closely at the reports there is a lot of information. Most of the studies go into the details on the basic white milk and not much on the value added products.
- The reports do not clearly identify and quantify the opportunities that exist for the dairy industry for example the BoP segment.
- The reports clearly show that an integrated value chain is a key success factor. For example, today milk production is weather dependent and any change has an impact on all the dynamics, price, consumption, distribution etc.

SUMMARY OF THE REPORTS

CONSUMPTION OF MILK AND MILK RELATED PRODUCTS

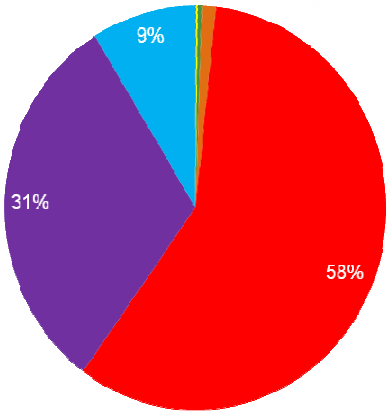
- The basic white milk still has the biggest opportunity with total consumption estimated at 1.9 billion litres (2012) but 80% of it is sold loose.
- About 50-60 % of the milk produced is marketed out of which 70-80 % is sold through the informal market mainly in raw form.
- Milk is part of the daily diet for almost all consumers. Other milk products taken regularly included mala and yoghurt, with mala consumed predominantly by the lower and middle income groups.
- The key drivers for purchase amongst the lower income groups include price, taste, smell and availability but motivators for the middle and upper income groups includes the above but, with packaging, storage, hygiene and company reputation (brand) mentioned as other motivators.
- Milk consumption moments & occasions are NOT well differentiated. Milk is still confined to a morning product across the market.
- Quality parameters are normally around consumers' perceptions of smell, taste, feel and color. For instance, milk should be a pure white, while butter should look creamy and yellowish and must be easy to spread. Real yoghurt should be heavy and fruity not "watery".

- Communication of the benefits of milk and milk products is still weak and very little investment goes to brand communication, especially at the point of purchase (POP), where respondents do not appear to be well versed with the products they are buying.
- The majority of households consider raw milk to be the most nutritious mainly because of its 'naturalness'. The fact that nothing would have been removed from it is an indication of its wholesomeness.
- Differences in the number of people who consider different milk brands to be nutritious are minimal and are most likely driven by the level of awareness.
- The prices of milk and valued added milk products are perceived to be too high and fluctuate depending on the availability of raw milk.
- Long-life milk is considered safe, hygienic and good for kids, although price and availability limit consumption.
- The majority of the consumers purchase their milk either in the morning or in the evening after work.
- The trusted brands are the same brands with high levels of awareness among consumers (in descending order): Unbranded raw milk, KCC Fresh whole, Tuzo, Brookside, Ilara, KCC Gold crown and Fresha, Zito.

RETAIL INFORMATION

- 70% of the total marketed milk goes through the traditional trade, kiosks, dukas and milk bars (Figure 1). These channels are crowded and quite often not easy and expensive to access. Most of these outlets are in the slums and sometimes security is an issue as they are controlled by gangs.[1]
- Affordability drives purchase in the outlets and hence the need to have an ideal price point. It is about out of pocket economy which appeals to the BoP segment.
- The small profit or trade margin is another critical issue ss factor to penetrating the traditional trade raw milk market with processed milk and milk products
- Currently, the route to market for milk to these outlets is long and expensive, sometimes leading to high consumer prices.

[1] Note that other sources in this report cite up to 80% of the milk being sold through the "traditional" or informal channels.



Modern Stores	2010
Hypermarket	51
Supermarket	231
Convenience Stores	531
Minimarket	1,851
Total	2,664

Traditional Stores	2010
Kiosks	91,063
Dukas	48,665
Table Tops	13,809
Total	153,557

FIGURE 21: RETAIL COVERAGE. SOURCE: ACNIELSEN 2010, KENYA RETAIL DATABASE

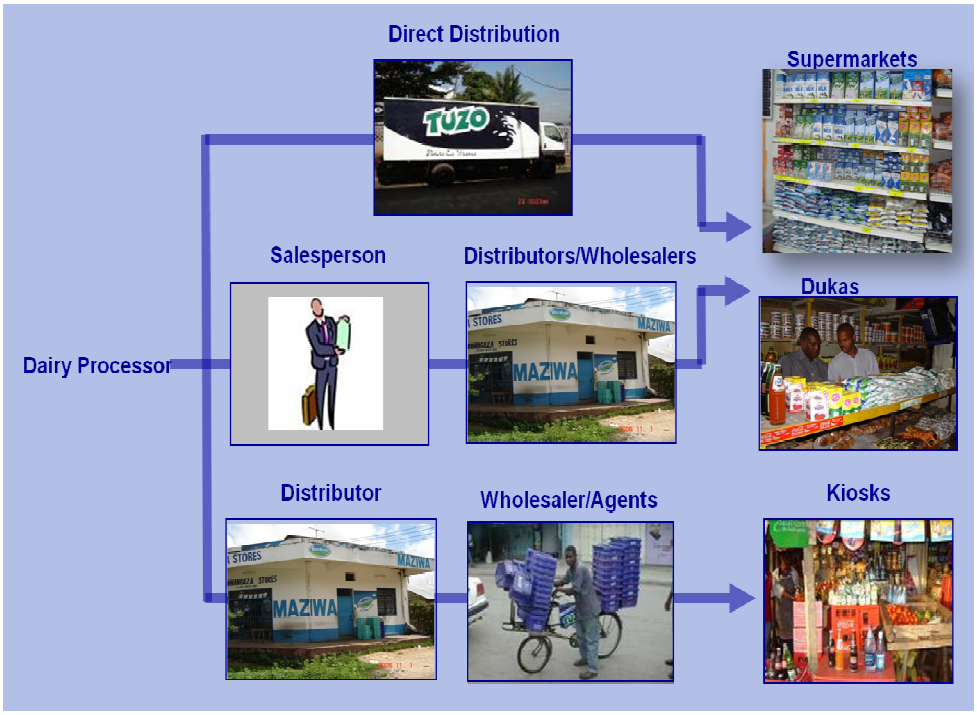


FIGURE 22: TYPICAL MILK DISTRIBUTION STRUCTURE: SOURCE MILK PROCESSORS

OPPORTUNITIES FOR MILK (-PRODUCTS) THAT THE STUDIES DO NOT COVER ADEQUATELY

- Most of the unprocessed milk is currently being consumed by lower income groups in urban areas in the slums in major cities of Kenya. This segment represents a great opportunity for bottom of the pyramid C&D classes, as illustrated in Figure 3:

Source: TNS-RI SEC classifications 2010 & Kenya Census Population 2009 Results

SEC	% Popn	Total Popn
AB	4%	1.6 mio
C1	11%	4.4 mio
C2	37%	14.8 mio
D	20%	8.0 Mio
E	28%	11.2 Mio

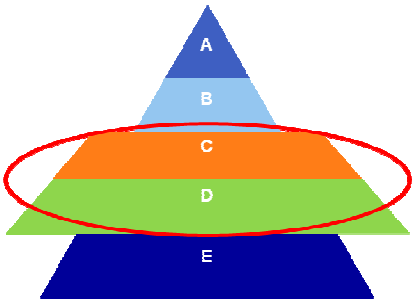


FIGURE 23: KENYA SOCIAL ECONOMIC STRUCTURE.

- Kids also present a big opportunity for the dairy segment. In Kenya it is estimated that more than 45% of the population is below the age of 15 years, but there are no brands or marketing efforts targeting this segment.
- In terms of the milk usage, most milk is used in tea as a tea whitener. There is an opportunity to increase the direct consumption of white milk by communicating milk benefits and by introducing school milk programmes.
- The consumption of other dairy products, like yoghurt and mala, is growing though from a small base. There is an opportunity to innovate in this category through small pack sizes to drive affordability, long-life solutions like long life yoghurts to extend the distribution reach.
- 500ml size is the most frequently purchased but there is an opportunity for smaller pack sizes, like 65ml, 100ml, 125ml, 150ml, 200ml etc.

ANNEX 2 LSM

Item or service title	STEP 1 – Score Circle all that apply
Do you have a Colour TV?	18
Did you access the Internet during the past 4 weeks?	49
Do you have a Satellite dish/ DSTV/Cable TV subscription?	34
Do you have a built in kitchen sink in your household?	31
Do you have a Microwave oven?	32
Did you read a newspaper in the last 7 days?	17
Do you have a video recorder?	18
Do you have a mobile / cell phone with a working line?	16
Do you have an electric iron?	17
Do you have a personal computer for your own personal use at home?	34
Do you have a fixed telephone line at home or an outstanding application for one?	14
Have you watched TV in the last 7 days?	17
Do you have access to e-mail?	41
Do you have washing machine?	32
Do you have refrigerator?	20
Do you have a Hi-Fi or music centre?	17
Do you have a Free Standing Deep Freezer?	19
Do you have a Video camera/camcorder?	35
Do you have an account with a Commercial Bank?	15
Do you live in a Brick house/ cluster house/ condominium/flat?	11
Do you have one or more cars in your household?	12
Have you Bought adult clothing in the past six months?	10
Add this every time (constant)?	32
Step 2: Add all circled scores including the constant?	

STEP 3 : Look up PAN AFRICAN 2004 LSM group				
If total score is			LSM Group	
Up to		37	1	
38	to	54	2	SCE E
55	to	70	3	
71	to	87	4	SCE D
88	to	103	5	
104	to	120	6	
121	to	153	7	SCE C2
154	to	186	8	
187	to	219	9	
220	to	252	10	
253	to	285	11	
286	to	318	12	
319	to	352	13	
353	to	385	14	
386	to	418	15	
419	to	451	16	
452	to 999		17	